Financial System *and* Economic Development - *Pakistan*

Volume I: Banking and Financial System

Shakil Faruqi

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Lahore School of Economics

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Acronyms

ADB	Asian Development Bank
ADBP	Agriculture Development Bank of Pakistan
ADs	Authorized Dealers
ATMs	Automatic Teller Machines
CAMEL	Capital Adequacy, Asset Quality, Management Soundness, Earnings & Profitability, Liquidity, Sensitivity to Market Risk
CDC	Central Depository Company
CDNS	Central Directorate of National Savings
CDR	Cash Deposit Ratio
CIRC	Corporate and Industrial Restructuring Corporation
CRR	Cash Reserve Requirement
CRWA	Capital to Risk-weighted Assets
DFIs	Development Finance Institutions
ED&L	External Debt & Liabilities
ICP	Investment Corporation of Pakistan
ISE	Islamabad Stock Exchange
FEs	Foreign Exchange Circulars
FECs	Foreign Exchange Companies
FWBL	First Women Bank Limited
GoP	Government of Pakistan
HBFC	House Building Finance Corporation
HBL	Habib Bank Limited
HFCs	Housing Finance Companies
IMF	International Monetary Fund
KSE	Karachi Stock Exchange
LCs	Letter of Credits
LIBOR	London Inter-bank Offered Rate
LSE	Lahore Stock Exchange
MCB	Muslim Commercial Bank
MFIs	Microfinance Institutions
MoF	Ministry of Finance
MSDP	Microfinance Sector Development Program
MTBs	Market Treasury Bills
NAV	Net Asset Value
NBFIs	Non-bank Financial Institutions
NCBs	Nationalized Commercial Banks
NCCPL	National Clearing Company of Pakistan Limited
NCSS	National Clearing Settlement System
NDA	Net Domestic Assets

NGOs	Non-profit Government Organizations
NIFT	National Institutional Facilitation Technology
NIM	Net Interest Margin
NIT	National Investment Trust
NPLs	Non-performing Loans
NSS	National Savings Schemes
OMOs	Open Market Operations
PACRA	Pakistan Credit Rating Agency
PBA	Pakistan Banks Association
PDs	Primary Dealers
PIBs	Pakistan Investment Bonds
PICIC	Pakistan Industrial Credit and Investment Corporation
PPAF	Pakistan Poverty Alleviation Fund
PRGF	Poverty Reduction and Growth Facility
PSCBs	Public Sector Commercial Banks
PTCs	Participation Terms Certificates
RDFC	Regional Development Finance Corporation
RFCD	Resident Foreign Currency Deposits
RTGS	Real Time Gross Settlement System
SBFC	Small Business Finance Corporation
SBP	State Bank of Pakistan
SECP	Securities and Exchange Commission of Pakistan
SLR	Statutory Liquidity Requirement/Ratio
SME	Small and Medium Enterprises
SWIFT	Society for Worldwide Inter-bank Financial Telecom
T-bills	Treasury Bills
TFCs	Term Finance Certificates
UBL	United Bank Limited
WTO	World Trade Organization

.... *about this Book*

This study in two volumes is being published in its ***full text*** for circulation in Pakistan only. It is primarily intended as a reference, a text book for graduate level studies in banking, financial system and financial markets at academic institutions. It may also be helpful to professionals engaged in their pursuits concerning banking, financial markets or some niche of fast growing financial services industry in Pakistan. The primary objective of this text book is to enhance ***learning*** of what a financial system is, how it operates, and how these operations impact on the economy. The impact is to be seen in terms of how leading sectors in a developing country like Pakistan are affected by operations of financial system where banking system and financial markets are in various stages of development. We also have to contend with the issue how performance of financial system affects well being of various segments of society, though this is not strictly a part of analytical framework of financial system.

Both volumes of the book are being printed separately, given the size of manuscript but their Contents are attached. **Volume I,** this volume, concerns topics on ***Banking and Financial System*** as listed in the Contents, with focus on financial system structure and its components, mainly the banking system and non-bank financial institutions, interest rates, financial intermediation and its operations, mainly deposit mobilization and credit system, priority sector financing, Islamic finance, interlinks with economy of Pakistan, reforms and their impact, challenges of soundness solvency and stability of financial system. The main topics in **Volume II** consist of ***securities markets*** in Pakistan, their structure and operations; namely money markets, mainly markets for treasury bills; capital markets consisting of bond and stock markets, globalization and capital flows, or lack of it in Pakistan, and stability issues of financial markets.

At the outset let me clarify that this study is not to be perceived as an advisory brief for policy makers or regulatory authorities on how to manage financial system, replete with prescriptions and proposals, though it may be helpful to them in their endeavours. There is no dearth of advisory reports in Pakistan. Instead, this study is a qualitative assessment of financial system of Pakistan with an academic orientation which requires adequate coverage of

theoretical and conceptual framework, their elucidation and explanation as far as possible, together with analysis of operations of financial system and its mechanisms. This analysis is based on time series data spanning a full decade of financial reforms and transition in its final stages. It is a vast canvass and difficult to cover to full satisfaction of all types of audience.

Once this is accomplished, we could then dwell upon management of financial system, involving mechanisms and levers of control ensconced in financial regime and regulatory framework that governs operations of financial system. This is a tall order, because explanations of underlying principles and technocratic aspects of financial system analysis and evaluation is fairly complicated. This study, therefore, is both an academic and applied endeavour, devoted to enhance learning of principles and practices concerning financial system and its interface with the economy.

Let me also say that this study is a ***solo effort*** and can not be compared with similar reports prepared by leading institutions, domestic or foreign. Their reports are product of a number of competent and experienced professionals dedicated to the task at hand, with privileged access to information, data, views, impressions and hands on experience of those engaged in operations of financial system. All sorts of data and analysis is available to institutional group at their finger tips, literally, or is made available as a priority task of those responsible. Their parent institution holds enough command to ensure that all financial institutions within the country submit requisite information and analysis in rather obliging manner.

The same is the case when foreign institutions are involved where financial institutions and regulatory bodies have to submit to their needs and requirements when preparing a report on client countries. For institution based group reports, costs or funding a study like this is no constraint as such. Clearly, the ***soloist,*** and institutional group live and work in two different environment, nearly two different worlds of their own. I should know because I have been on both sides of aisle; I lived through both and traversed through both. There could not be any contrast, so compelling one. Yet, it is the power of ideas that eventually prevails, and it is ***learning*** process that makes the difference.

Acknowledgments

This text book on applied financial system has been under preparation for several years in bits and pieces, starting during my assignment at State bank of Pakistan as Advisor to Governor in early 2000s and subsequently at Lahore School of Economics since 2004 on assignment as Professor of Financial System. While training SBP officers and teaching courses on banking and financial system and financial markets at Lahore School of Economics, I realized how essential it is to develop an understanding of leading elements of banking and financial system and financial markets among trainees or students. This understanding of the subject matter is frequently taken for granted by those immersed in monitoring and analyzing financial systems on routine basis. In contrast, preparing a report on financial system with focus on recent developments or preparing advisories is a lot easier for those involved; including myself, since I have been doing those during my long tenure at the World Bank.

I am thankful to the support of Lahore School of Economics for providing me an academic environment to undertake this type of work. Dr Shahid Chaudhry, Rector of Lahore School, has been very supportive of this effort throughout. I prepared working drafts in between containing several pieces of my writing on various topics which were precursor of system wide review presented here. Some of this early material was written while I shuttled back and forth between USA and Pakistan; though much of it was written during my stay with Lahore School of Economics. Most of the revision and updating was done after data for fiscal year 2010 came on line at web site of State Bank of Pakistan. Without this data, this study would not have been possible. I have also learned and benefited from various reports of SBP. I must acknowledge all this with a word of gratitude.

When I look back to discern what propelled me to do this text book, I find that early impetus came from needs of training programs that I designed and conducted while at the World Bank in the business of banking and financial system in a number of countries, mainly Russia, and Central Asian States. I also designed and conducted policy level seminars in the field on comparative experiences of financial reforms of Latin American and East Asia countries. Those discussions are still relevant because issues of financial system seem to be enduring. In those days of early 1990s the issue was how to reform and replace the directed financial regime with a market based regime, cope with the transition, and maintain monetary stability.

In current times, the battle is for financial system stability. Several countries have succeeded at it; others are struggling. The issues are enduring because financial crisis still keep erupting for similar causes with similar consequences that are familiar by now; financial institutions still indulge in unsustainable lending and overexposure; and financial markets seem to have a mind of their own and refuse to be system analyzed or tamed. True, banking systems and financial markets follow a paradigm that diverges from country to country in degrees of its advancement and diversification but not in its fundamentals.

Subsequent to these experiences in the 1990s, the trainee officers at State Bank of Pakistan in early 2000s, and students at Lahore School of Economic since then have kept me on my toes, pushing the envelop of applied research on financial system of Pakistan. I owe them a recognition for this impetus, though unbeknownst to most of them at that time.

I circulated the trial printing draft to colleagues at Lahore School of Economics and to my friends for their review and comments. Among them I am thankful Dr Sohail Zafar, Dean of Business Faculty at Lahore School of Economics for his painstaking effort as reader and reviewer of the manuscript. I have benefited from his comments and editorials. Those have been incorporated here. During preparation of the book from draft stages through release for printing, Hira Akram provided research assistance, including assistance with text draft and data processing, a trial printing in March 2011, and thereafter several revisions that never seem to come to an end. I am thankful for her support and wish her the best in her career.

I am grateful to my wife, Shaheen, who endured my long absences and my being absorbed into this undertaking which appeared endless, almost. Finally, this book is done. I can not thank her enough for her understanding, patience and support that made it possible to continue with this book.

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December, 2011

Perspectives on Financial System Studies

A Preamble

Various perspectives bear upon applied studies of financial system. Salient ones among them are articulated in this ***preamble*** that have driven this study, together with leading issues, and the approach adopted to deal with them. A brief review of selected publications on financial reforms and comparative experiences is provided alongwith a summary discussion of relevant references, materials and data sources of this study.

Let us begin with a simple proposition: it is the ***power of ideas*** that spells difference between success or failure of an endeavour. The same holds true for efforts to develop institutional structures like a financial system. It is the power of ideas how to organize, structure and operate a financial system which is the key to success, where success is to be defined with regard to its main functions in an economy often articulated as mobilization and transfer of resources. The caveat is that if those ideas or institutions get compromised, financial system operations get compromised. Instead of serving larger interests of society, they become inimical to larger good of society, tarnishing its performance. Faltering financial system and institutions become a burden and are eventually discarded or restructured. This sums up Pakistan's experience with banking and financial system over the past decades.

One has to be careful with this clarion call. We must specify functions and objectives and distinguish between them carefully. The main function of financial system is to mobilize and transfer financial resources from group of savers, usually households, to group of users, usually investors, businesses and firms as efficiently as possible. The objectives of development of financial system are to promote economic growth, employment generation and poverty alleviation through mobilization and allocation of resources. These socio-economic objectives are well known and are staple of economic development studies. They do not need any further elaboration here.

How far financial system has been successful in achieving these objectives and how well it has served socio-economic goals in Pakistan is theme of this book. Pursuit of these objectives requires ensuring that mobilization and transfer of resources does not end up in enrichment of elite groups and an unfettered access of the privileged ones to financial system without accountability leading to willful defaults and loan write-offs. At the same time, doing the opposite; namely promoting ***access*** of disadvantaged groups to institutional finance, thereby helping their businesses to grow, enhancing income, creating employment and alleviating poverty. How far operations of financial system have achieved these socio-economic goals needs to be evaluated along the following lines.

In the post-reform era, overall, the performance of financial system has been good. Its custodian, SBP, has done very well in maintaining public's confidence in currency and banking system. Somehow the economy continues to perform though at rates lower than desired, buffeted as it is by adversities like an unremitting energy crisis, bad governance, corruption, ransom for 'security' amidst break down of law and order, fostering anti-business, anti-investment environment which has exacerbated in recent years. The low key performance may not be deemed satisfactory, but it shows resilience of the economy and financial system and the society at large amidst crisis like atmosphere.

This brings us to the central perception underlying this endeavour, articulated in a folkloric way instead of the dry text of finance. It is a society that refuses to fail, though often characterized as such. Pakistan refuses to fail because 180 million odd people of this country continue toiling away against all odds, regardless of what their government does or does not do; and regardless of the debris and dust twirling around them, both literally and metaphorically. The people of country have too much stake in succeeding; they have no other option; they can not escape to safe heavens; they have none. For them, rulers have failed at governing, but ***their society*** has not failed in providing bare sustenance with its informal safety net.

Look at it this way. Farmers keep farming, planting and harvesting, come democracy or dictatorship; unemployed groups of mechanics and daily wagers flock around street corners just in case someone comes by to hire them for day's work and pay for daily bread. Workers keep going to their workplaces in suffocating vans and buses, regardless of calls for *pahiya-jam hartals*. Pakistani workers overseas keep sending their remittances in ever increasing amounts, regardless of what foreign exchange reserves are; or what is the tax/GDP ratio this morning. Bankers keep banking against all

odds and frauds around them. Shopkeepers keep their shops open as best as they can, though heedful to shutter-down calls, often suffering stupendous losses and destruction visited upon them by suicidal terrorists, while their employees, the poorest of the lot, loose their bare sustenance if the business closes down even for a day. Opinion makers and assorted specialists gather around, with scorn for many but pasted smile on their faces, to do loud soul searching amidst ruminations as to whether Pakistani society is crumbling.

Far from failing, ordinary Pakistanis are trying to accomplish just the opposite. For them, ***their society*** is churning away, though under most trying conditions. For the rulers, there is much hand-wringing in anticipation of more spoils before ***their society*** goes into eclipse or the sun sets upon their rule. Most Pakistani businesses and enterprenures may not be much enterprenurial in Schumpeterian tradition; but the same ones when they go overseas, many turn out to be successful. An overwhelming majority of the youth aspire to join mainstream of modern societies rather than be left behind, only if they could find some opportunity to do so, or some promise of betterment, howsoever forlorn it may be.

Returning back to the theme, financial system is a vast mechanism of mobilization and transfer of resources; and it does perform this function admirably. Government is involved in between to help achieve societal objectives, looking after growth and welfare of poorer segments of society while promoting a more equitable distribution of income; the only rationale for state involvement. How mechanisms of financial system are deployed matters a great deal, because mechanisms are neutral to objectives of transfer of resources. They are mechanisms; they are like any piece of machinery which can be used for good purposes it was intended to; but if its use is compromised, it could be devastating.

At the dawn of independence, Pakistan did not have any machinery of state finance. It had no currency of its own; hardly any indigenous bank; no financial markets and no institutional mechanisms. The new state had no domestic or foreign debt either, and no shadows on its sovereignty. By the end of the decade of 2000s, Pakistan is now beholden to the hilt; burdened with public debt both domestic and foreign. By mid-2010, domestic debt was Rs 5443 billion; and foreign debt was about US$55.6 billion. This debt burden is estimated at Rs 367 thousand per Pakistani household of six persons as of June 2010. The annual debt service burden for same household of six is about Rs 32,100 and rising. This debt burden has grown owing to ***misuse*** of financial system mechanism as elaborated here in this book.

Ordinarily, public debt is outcome of fiscal operations, pursuant to borrowings of government to finance its deficits. This financing of deficit and its accumulation occurs via mechanisms of financial system as discussed here. This process involves fresh borrowings together with the roll over or refinancing of repayments into additional new borrowings. Government has always been in deficit, and currently it is in dire financial straits; it can not function without borrowing more and is piling up more debt, paid for by borrowings via financial system domestically and also overseas.

The mechanisms of financial system for debt financing and accumulation are not to be faulted for this outcome. The same mechanisms have served well many countries who started out with similar constraints and roughly similar resource base. In Pakistan, historically, financial system, did not perform at those levels mainly because it has undergone several upheavals as elaborated in Chapter 3 *(Game of Roulette)*. Starting from a non-existent currency and banking system to current times, every decade or so, financial system has been turned upside down at great costs to society that have not been analyzed and brought out in open.

After truncation of Pakistan in 1971, financial institutions lost a good deal of their assets overnight with all its myriad consequences and whatever of banking system survived, it was nationalized. Two decades later the same were being privatized by successors, but not before this sordid experiment had bankrupted itself in the process. The cost of nationalization and later on the burden of resurrection, both are being borne by public to this day via financial mechanisms. The resource transfer occurred through financial intermediation, the nationalized banking system; the system did perform its role; but the outcome was detrimental to the society at large.

Financial markets sprang to life around after reforms. Stock market took off with dizzying growth around 2004 then crashed in 2008 for which market mechanisms and regulatory framework were blamed. The perceptions were not keen enough to realize that markets are unpredictable; they can not be orchestrated or ordered to behave and interventions hardly succeed; they are not self-correcting nor self-regulating; they are imperfect in most of their manifestations. They are laden with asymmetries that can not be removed. There was not much realization that traditions of healthy banking practices, mercantile behaviour and attitudes towards market take a long time to be rooted, especially in a society hesitant towards transition from feudal, peasant–rural nexus to industrial-urban mercantile nexus.

Learning Financial System

This text book provides an understanding of basic principles and their application in applied context of Pakistan in an effort to enhance ***learning*** of financial system, its operations. and its interface with the economy. It is a textbook for academia, not an advisory brief for policy making, though it may be helpful to those engaged in the business of finance. The focus of policy advisory studies is on managing the monetary system and to maintain stability, taking for granted understanding of how financial system operates, together with knowledge of its linkages, levers of controls, their calibrations, and their impact. Policy advisory studies are difficult for beginners to comprehend, given their cryptic text punctuated by unfamiliar acronyms and cryptic explanations. Their use in class rooms needs substantial input from teachers well versed in technocratic densities of such reports.

Currently, ***financial system*** as a self-standing course of study in the curriculum of universities and colleges is rare even in advanced countries. Standard courses are routinely offered in money, banking and portfolio investment; but these courses are focused on theoretical aspects of financial management at ***institutional level***; not on operations of banking system or financial markets at ***system level*** in a developing country context. There are a few text books that cover ***financial system*** but as part of money, banking and monetary economics. Most of these are of US origin and their focus is on US financial system with focus on the role of Federal Reserve. These discussions have educational value of their own but a limited one for non-US audience, since banking system and markets in developing countries have long ways to go to reach sophistication and depth found in advanced financial systems like that of the US or European countries.

The first step, therefore, is to ensure sufficient understanding of concepts and theoretical framework relevant to analysis of financial system; with focus on ***financial intermediation*** on one side, and operations of ***financial markets*** on the other side. This is to be followed by elucidation of financial system mechanisms in applied setting. In parallel, familiarity with ***financial regime*** is needed that governs financial system, together with legal and regulatory framework and its infrastructure. Often the perception is that each segment of financial system requires a financial regime of its own, tailor made to its needs; but this is not the case.

This understanding of how financial system operates is a pre-requisite to sort out how to manage a financial system in a fast moving environment buffeted by cross currents of domestic and global economic and financial

trends. Once grasp of these basics is there, one could then dwell upon management of financial system involving mechanisms and levers of control trailing a financial regime. The pre-requisite to manage is to understand strengths and weaknesses of financial system and an appreciation of how strong it is to withstand market shocks. Managing stability requires judgment calls rather than simple technocratic tinkering of levers of control.

Generally, financial system studies are more powerful at establishing operational interlinks, because they have a better grip on mechanisms of adjustments and levers of controls, ensconced as they are in parameters of financial regime and regulatory framework that governs operations of financial system in any country, developing or advanced. Much intervention ends up running through the gamut of financial system impacting upon system level credit based financing and liquidity. Since financial flows are well documented and are verifiable, financial mechanisms of control are preferred when interventions are called for. Whenever financial flows are altered because of interventions, those can be traced back because they are channeled through some mechanism of financial system that can be traversed though. How this traversing is done is an interesting interlude in learning about financial system.

In applied setting, the challenge is to unravel the chain of transfer of resources, starting from origination to its allocation and use via banking credit or financial market operations. We need to distinguish between resource transfer that occurs through banking system operations versus those they occur through operations of financial markets. This requires time series data for banking system and financial markets, internally consistent and accurate enough to ensure that it fits together and matches well to identify the links underlying operations of banking credit system, money markets, particularly the treasury bills and interbank funds markets. How their operations impact on banking system liquidity, and how these markets determine short term rates of interest needs to be analyzed.

There are differences between mechanisms of resource transfer used by public and private sector. Public sector relies on treasury bills for short term borrowings through money markets. Private borrowers do not access money markets; instead they rely on banking credit for short term loan financing and if feasible, capital markets for long term debt or equity financing. Hence, analysis of banking credit, bonds and stock market operations has to focus on how these market support business growth. There overlaps can not be separately treated because they do not operate in isolation; they are part of financial system operations and can not be compartmentalized.

The Antecedents - *Historical*

We also need to look into how financial systems of have performed in comparator countries; what challenges did they face; how did they cope with financial stress or crises in the past. There is a great deal of comparative literature on financial system as cited in ***References*** mostly published over the past decade. A comparison of the path followed by financial system development is instructive. These comparative experiences are encompassed in country case studies of a number of leading Latin American and East Asian countries, well documented and analyzed. It is an engrossing reading for those interested. References to these comparative experiences have been made here, but in a limited manner because this study is not a comparative exercise. Instead, the main purpose is to examine in what ways financial system of Pakistan could have been more effective in promoting economic growth, the litmus test of performance of any financial system, given that its reforms and restructuring followed broadly a similar path as traversed by comparator countries.

Applied studies of financial system are a recent phenomenon. A few decades ago, there were very few of them; now, a number of country specific case studies are available. A selected number of studies is listed in ***References*** and briefly annotated in the next section. A great deal of research work has been done on comparative experiences with reforms and management of financial system. Notable among these are studies on East Asian and Latin American countries. These studies are valuable, but for audience not well versed with financial system, these studies remain obscure to most.

The preoccupation with financial system began owing to recurrence of financial crises in the 1970s and 1980s in Chile, Mexico, Turkey, Korea and other countries, which threatened solvency of global financial framework that was primarily designed and put in place to handle postwar system of international payments and settlements between major reserve currency blocks of that time period. Concern with developing countries was not on the horizon though it was tail end of colonial era. This system of international payments and settlements as monitored and supported by IMF pursuant to Bretton Wood concord came under stress with abolition of residues of gold standard, namely withdrawl of US guarantee of dollar-gold parity in 1971, moving away from fixed parities to floating exchange rate between leading reserve currencies that was being maintained until that time. This was shift harbored deep rooted implications for world payments system.

The capacity of this postwar system was weakened and its fragilities became apparent with emergence of global oil crises about the same time in the early 1970s on the steps of demise of gold standard. Both these events, together with floating exchange rates, burgeoning international trade and accompanying global financial flows put severe stress on an already fragile system of international finance, reserves, payments and settlements. A good number of developing countries found it difficult to realign their financial system and their economies to new paradigm, which required profound structural changes that many countries could not afford to undertake for reasons that would need another chapter to explain.

At the same time, there was a shift in outlook among advanced countries, particularly in the US and UK with ascendancy of conservative governments whose approach coincided with the thrust of Chicago school of thought that government ought to scale back its role in the economy, and retreat from its pervasive presence and activist role via state owned enterprises. Strategic thinking shifted to the point where financial crises in large measure were seen to have been spawned by state ownership and control. This discussion often ended up in ideological overtones. Weaknesses of interventionist regime of state and its implications for financial system got lost into rather arcane nuances of this debate. Gone was euphoria of 1950s and 1960s that economic development could be bootstrapped by state, pursuing some variant of state planned model of growth which many developing countries were pursuing in those times.

In stark contrast to this paradigm shift in advanced countries, Pakistan opted for a different route and traversed in opposite direction. It reinforced the autarchic model of growth that it had pursued since the mid 1950s, the era of five year plans, a replica of socialist typed planned growth. The government of Pakistan, not content with nationalization of private other non-bank financial institutions, whatever was left of them after war of 1971; even educational institutions. While nationalization was in full swing in Pakistan, about the same time, East Asian and Latin American countries were moving in opposite direction. They were slowly peeling away at nationalized regime. They embarked upon a reversal of nationalized financial system towards market based system. Interestingly enough, India followed the same route as Pakistan around the same time period.

The concerns with operations of financial system emerged because of implications of resource allocation as judged by standards of economic or financial efficiency defined in terms of returns to recipients or cost to users. A major concern was spawned by emergence of periodic financial crises that

erupted during 1980s and onwards in the wake of financial liberalization, removal of barriers on international trade, massive global capital flows, direct investment and foreign portfolio investment. These crises catalyzed bankers and financiers facing a calamitous outcome, galvanized policy makers since solvency of financial system was at stake. Slowly, realization began to seep through that there are no recipes to deal with financial crises; that much of conventional wisdom does not provide answers as to why financial crises emerge and how to cope with their consequences.

Coping with crises and managing their consequences were confined to a group of policy makers, central bankers, regulators, international financial institutions, money center banks, together with those engaged in securities markets and currency markets; almost everyone. These crises forced policy makers to arrange safety net at tremendous costs to ex-chequer which ended up being a bailout bonanza for bankers and financiers. It started with Brady Plan to rescue Latin American countries in the late 1980s; subsequently for Mexico in mid-1990s; and for East Asian countries in late 1990s, and eventually in 2008 whose rescue plans surpassed all previous ones.

These developments showed that large financial institutions could undertake risky ventures beyond prudent levels, and if the ventures go sour, governments will bail out. Thus institutional failure sowed the seeds of financial distress which aggravated owing to contagion, and transformed itself into market failure not contemplated before, ended up as financial crises. Large bailout packages were organised to rescue financial institutions who had indulged beyond norms of prudential banking, saving them from insolvency and financial failure; while public was left holding the bag; the cost of rescue packages.

The same transpired in Pakistan, but via a different route during nationalized banking. To understand this, we need to analyze the role of financial system in resource transfer from households to the government; that is, how government liabilities emerged and how they were paid off via transfer through financial system. As a mechanism that is what financial system does; it finds ways of transfer of resources from public to government, not only to pay for rescue liabilities; it ends up paying for money siphoned away; or for schemes like *roti, kapra, makan* or *watan* cards, replete with slogans but of not much substance to ordinary Pakistanis. What financial system does is laudable. As a mechanism it serves well and it is neutral to the ends being pursued. It is the abuse of the mechanism that has caused Pakistan to end up being beholden to the hilt to its creditors.

Data, Materials and the Literature - *A Review*

This volume of the book, **Volume I,** covers financial system and its structure in Pakistan as it currently prevails. Here the focus is on financial intermediation and its operational performance over the decade of 2000s, the post-reform era, involving banking system, as well as development finance and Islamic banking institutions, and non-bank financial institutions, NBFIs. **Volume II** of the book covers analysis and evaluation of development and performance of financial markets of Pakistan including money markets, primarily treasury bills, repo markets, and currency markets; together with capital markets for both long term debt and equity market.

Both volumes provide a long term review of developments in financial system of Pakistan over the decade of 2000s, immersed in a transformation from a nationalized system to a privatized and market based system. This is a structural transformation, with significant implications for financial system the way it operates and performs. The book does not dwell on recent developments, though short run monitoring is critical to manage banking and financial system with focus on market liquidity and money market operations, together with managing levels of interest rates and exchange rates to prevent build up of financial stress that may jeopardize stability, and compromise solvency of financial system.

Adverse monetary and financial trends have a way of bursting over the scene without warning or much advance notice. Such adverse turns require a quick response from monetary authority, the central bank, and needs even quicker adjustments by those engaged in financial activities, be they banks or NBFIs, private investors or other participants. In times like these, they do not have luxury of awaiting research results to appear before taking corrective actions needed. This is particularly true of money markets that keep monetary authorities on their toes all the time, ready to intervene, and intervene they must with corrective response without delay to prevent any further deterioration of already a difficult situation.

A long term review of the type undertaken here poses a challenge in that underlying perspectives are different; so are responses of stakeholders, their actions and outcome. Short term prognosis may call for a set of actions relevant to immediate needs with an eye on short term outcome, but a long term prognosis may call for a different approach, and a different set of actions, whose impact may be different from those emerging from short term

perspectives. Averaging these trends over a long period is not meaningful because it glosses over developments of short term financial markets which evoke monetary control and stabilization efforts in the firs place.

Data problems are a legend in applied studies. Sometimes a whole chapter is devoted to discuss data base, its peculiarities or shortcomings. Data accuracy; incompatible definitions; inconsistent identities; disjointed or overlapping time series; and a slew of problems like these can not always be resolved. Applied realm of financial system simply refuses to obey statistical precision the way it does for studies in natural sciences or physical sciences; yet it is superior to the data base at the disposal of other social sciences and far more accurate.

For this text book, reliance has been placed on the data series published by State Bank of Pakistan, SBP. Without SBP data, this work could not be undertaken. There is a treasure trove of well analyzed and well presented data in publications of SBP. It is as good as any to be found elsewhere. There are some reporting problems, but those are unavoidable. There is hardly any series on national accounts, financial or monetary accounts, public finance, domestic and external debt, trade and balance of payments accounts that would be accurate and consistent all across these accounts. For example, one would think that when it comes to reporting debt and debt-like liabilities of borrowing countries, lenders and financial institutions would accurately keep track of balances outstanding in whatever currencies these obligations were incurred in, net of a stream of repayments made until default like problems arose. That does not happen as shown by difficulties of matching liabilities at the time of debt rescheduling. The liabilities on the book of creditors does not square with entries in borrowers own book of liabilities, leading to protracted negotiations on the amounts owed, invariably requiring accuracy checks. Creditor and borrowers are forced to engage high powered accounting firms to sort out these liabilities paid by debtor country seeking relief through rescheduling proceedings.

In addition to its annual and quarterly reports, SBP launched a series of ***Financial Sector Assessment (FSA)*** studies in early 2000s, and in parallel ***Banking System Reviews,*** later on replaced by ***quarterly reviews.*** These reports were indispensable for preparation of this text book. These publications represent a breakthrough for SBP in the analysis, assessment and evaluation of banking and financial system. SBP's long standing ***Annual Report*** series provides excellent coverage of core activity of SBP as monetary authority, with focus on recent monetary developments and its management together with managing stability of interest rates and exchange rate. The

annual reports include coverage of banking system operations; government's fiscal operations and debt profile, both domestic and foreign, and debt service burden. There is an exhaustive coverage of Pakistan's balance of payments; exchange rate changes and foreign exchange reserves. All these are based on a wealth of profiled data on money, banking, capital flows, money markets, SBP's operations, essential for study of financial system.

Financial Sector Assessment (FSA) studies of SBP are exhaustive in their coverage. They provide insights into operations of financial system backed by well analyzed data. Often these annual reviews are slanted on a major component of financial system like financial markets, Islamic banking, SME financing, non-bank financial institutions like insurance and others. The first FSA report of 20000 was path-breaking, dated though it is now. It provided an overview of pre-reform structure that prevailed during 1990s; saw the start of reforms, opening up, liberalization and privatization of financial system – in short a process of historical proportion which casts its shadows even today.

Thereafter, FSA reports became annual events and tapered off into updating exercises with focus on stress testing of financial system, with emphasis on issues of soundness, solvency and stability of financial system. IMF routinely undertakes evaluation of its own concerning financial system of various countries, and these country studies are valuable as case studies and also for cross country comparisons. A handbook, ***Financial Sector Assessment*** was published jointly by IMF and World Bank in 2005. This is a state of the art manual on financial system studies, slanted though it is towards stress testing of financial system.

The FSA-SBP studies of Pakistan's financial system draw heavily from these IMF studies regarding the analysis and technocracy of evaluation of financial system and its stability. This re-orientation of FSA studies has replaced its earlier mode of imparting an understanding of what financial system does to a diagnostic format which is not easy to follow. A great deal of analysis is crammed in, making the format of these reports rather dense, and it is difficult get insights into issues, fathom their causes and impact.

Besides, SBP publishes a monthly series on ***Banking Statistics*** and its annual compendium which provide a wealth of data on macrofinancial aggregates in the format of consolidated accounts of all banks at system level, as well on individual banks at institutional level. This annualized time series contrasts with fiscal year based data which is the staple of SBP's annual reports. A similar annualized series on financial market operations is

available; its coverage of money market operations is comprehensive, so is the coverage of NSS operations and government's access to bond market, together with their interest rate structure.

Mostly, end fiscal year data has been used here. It represents ***stock*** position of a given market instrument lodged with the originators, traders or investors at the time of transaction; be it in credit market, deposit market, money and capital market. This position may be different from holdings during a fiscal year given revolving maturities of money market instruments. Therefore, drawing conclusions on snapshot of ***stock balances*** outstanding, say, the last day of fiscal year, may be misleading if concentration of holdings is clustered around some other time of the year. An alternative would be weighted averages but that would require a great deal of recasting vast amounts of financial market data; an exercise well beyond this endeavor.

Comparative Experiences

In early phases of drive for financial system reforms, realization has begun to seep in among central banks, the frontline institution in the superstructure of financial intermediation, that managing market based system has some built in limitations if not contradictions in policy objectives. The central banks had their hands full reforming banking system. They had to re-charter and rewrite rules of bank based financing. In the process, central bankers of Chile, Malaysia and other frontline emerging market countries had discovered on their own in the early 1990s that pursuing monetary stability is not so straightforward as it appears; instead there are trade-offs which define limits of intervention. *(see Nicholas Ezaguirre, Financial Crisis, Reforms, and Stabilization: the Chilean Experience; Caprio, Hansen, et el., Financial Reforms, Lessons and Strategies; Reference item 40, 1992)*

There are a number of comparative studies published as collaborative endeavour between Federal Reserve Bank of Chicago, Brookings Institution, IMF and World Bank. Among the early ones, Cambridge University Press publication, ***Financial Reform, Theory and Experience, 1994,*** is a good collection of papers edited by Gerard Caprio, Izak Attiyas, and James Hansen, colleagues at the World Bank who participated in seminars held in Chile and Indonesia, including Millard Long and Andrew Sheng who did pioneering work in this field during the late 1980s.

There are several themes that emerge from these reviews of early 1990s across the board in the emerging economies who were ahead in financial reforms, liberalization and ushering in market based systems. They harbored varied types of fragilities in the early stages and did not have sufficient depth in resources or countermeasure to withstand a determined onslaught in credit or currency markets, or were unable to cope with herd behavior and ***contagion*** owing to open systems, thereby quickly ending up in financial crises. The regulatory mechanism were not strong enough to deal with financial stresses and could not contain destabilizing forces. The causes of crises were deep rooted and difficult to deal with their consequences.

Towards late 1990s, World Bank/EDI and Federal Reserve Chicago publication ***Preventing Bank Crises: Lessons form Recent Global Bank Failures, 1998, Gerard Caprio et-el.,*** contains seminar proceedings which are full of insights across the board in the operations of financial system, mostly the banking system, in advanced and emerging market economies and their comparative experiences. The patterns of financial system growth and their fragilities were no match to the crises that erupted.

In addition to these cross-country comparative studies, there were a few country case studies done. Among these, ***India, A Financial Sector for the Twenty First Century***, edited by James Hansen and Sanjay Kathuria, and published jointly by Oxford University Press, Delhi and World Bank, 1999 is illuminating what transpired in one of the most hide-bound financial systems.. This publication contains a number of papers on India's financial system in transition, including an analysis of the impact of first round of reforms undertaken in the early 1990s under Narasimha Rao, concerning India's banking system which are instructive how reforms were enacted and implemented in a system. This was a reversal of state ownership; it signaled a turnabout of a deeply entrenched mind-set of controls and regulations dubbed as the ***License Raj*** in India, mentioned earlier.

Some papers deal with lessons from this first round of reforms with focus on enhancing liberalization financial markets and how it would cope with further opening up of capital account, visualizing its impact on financial system and the economy of India in the future years. Today's financial system of India bears no resemblance to what it was before reforms. It has retained some of the features that concern distributive implications of resource transfer and has discarded the albatross around its neck.

Subsequently, nearly a decade and half later, the bust of dot com boom in the US coinciding with the East Asian Crisis in the late 1990s, the weaknesses of liberalized financial regimes began to surface and slowly a view developed that the rush to liberalization and crossing over to unfettered reliance on markets is likely to end up compromising some of the salient objectives of stabilization. In particular, focusing on domestic price level stability via a combination of monetary controls is likely to compromise if not aggravate stability of external sector. There was much debate in those years as to how far reform process can proceed before it lets loose forces that would be difficult to control.

A great deal has transpired since those early times of financial crises, the decades of 1990s and 2000s, but fundamental causes and consequences of financial system crises remain the same. A number of case studies and seminar series proceedings have been published over past years listed in ***References,*** detailing comparative experiences of financial crises that occurred over the past decades; most celebrated one among them being 2008 crises whose post mortem will continue for a long time to come. There was a mulling over the consequences of globalization that followed in the wake of open capital accounts, free floating exchange rates, massive flows of capital. Liberalized financial markets seemed to have a mind of their own, without much regard to socio-economic implications that transcended the realm of financial system.

The concern with financial system fragilities and with the specter of financial crises never abated among this vanguard group of thinkers and specialist who continued their deliberations. The Brookings Institute publication ***Financial Crises, Lessons from the Past, Preparation for Future, 2005*** begins with a prophetic observation *the calm before storm….*, and contains several papers, which foreshadowed global financial crisis that unraveled a few years later, but without an inkling of impending disaster. The papers in these publications provide invaluable insights into functioning of liberalized financial systems, their strengths and weaknesses in post-hoc fashion, together with a comprehensive analysis of causes of crises that emerged before. Among these, paper James Hansen's paper, *Postcrisis Challenges in East Asia and Latin America, Where Do They Go from Here?'* referring to the crises of East Asia in 1997, Brazil, 1998, Russia and other countries identifies common strands of these crises and the difficult if not conflicting choices faced by central banks in devising policy response. The crisis were triggered by capital flight in anticipation of depreciating exchange rate. The central banks were faced with rather difficult choices of propping

up exchange rate by selling part of their foreign reserves or partially accept some depreciation of the exchange rate, or put a squeeze on liquidity at a time when the opposite was needed to support a few ailing banks facing imminent bank run in the wake of capital flight. At the same time the financial rescue needed government support which could be arranged only by raising by more borrowings from the banking system. This led to a significant increase in government debt, but it had to be done to protect depositors at least for those few banks who could not withstand the onslaught of massive withdrawls and capital flight. Some of the countries like Korea recovered fast, but others like Indonesia and Philippines had a more difficult time recovering from the crises.

These episodes led to a more critical view towards global capital flows and their implications of domestic stability and growth, should a sudden reversal were to materialize out of blue. In parallel, on larger canvass issues began to be raised about the rush towards globalization of economies not strong to withstand such crises. Among these, Joseph Stiglitz book ***Globalization and its Discontents*** stands tall in its exposition of impact of globalization, financial crises and role of IMF, World Bank, US Treasury in coping with the crises and their aftermath. Being an insider to the US government policy making as well as to World Bank, Joseph Stiglitz' work brings out a perspective that is missing in other publications on comparative experiences of financial system reforms and their aftermath in developing countries, arising from premature and mis-sequenced liberalization of capital accounts before their economies were ready to cope with unfettered financial flows. Similarly, opening up of Pakistan's capital account has been premature, though Pakistan escaped the vagaries of inflows and outflows on the same scale as experienced in other developing countries.

By the middle of the previous decade, comparative experiences with the emergence of financial market bubbles and consequent market failure had become all too familiar; so were their causes. In common perception, speculative investing was seen as the leading factor, but lying underneath was the overexposure of the banks or quasi-banking institutions into a few sectors of the economy with questionable lending practices. This was particularly true of real estate bubbles that emerged in East Asian countries, dot com bubble of IT sector in the US during the past couple of decades. The point is that bubbles emerge not out of blue, rather they begin their cycle with expansion of credit culminating into an overhang of factors that germinate a financial crisis.

Just before the 2008 crisis struck financial markets of the US, Alan Greenspan, who was Chairman of Federal Reserve during 1987-2006, amplified on his perspectives garnered during his tenure in his book ***The Age of Turbulence***, Penguin Books, 2007-08 written in a lucid style for specialists and laymen alike. These perspectives range around the banking system of the US and role of Federal Reserve in maintaining its stability, and provides rare insight into how economies and financial systems are steered through in times of stress. He did not warn of impending disaster ahead, but he did amplify on how to read the "Delphic Future" in times when asset values have transgressed way beyond productivity growth which in turn depends on technological growth at its cutting edge. The book dwells upon structural factors that underlie growth of stock prices, but does not dwell upon how to contain market behaviour, in good part funded by banking system.

There has been a torrent of literature on post-2008 global market crash. Among these, the most authoritative work is The ***Financial Crisis Inquiry Report*** of the National Commission on the ***Causes of the Financial and Economic Crisis,*** published by Public Affairs, Perseus Books Group, New York, January 2011. This is a massive study, focusing on the boom and bust of sub-prime lending and overexposure of the US banking system. The overexposure occurred mainly due to a systemic disregard for ***due diligence*** in mortgage lending that went unnoticed by regulators. It occurred after deregulation which allowed bank holding companies mega mergers and ever increasing size of financial institutions. Investment bankers aggressively pursued mega mergers and takeovers, without due regard to business base of banks being merged because their concern was with their hefty fees, rather than with the banking business practices of merged institutions.

This was regarded as consolidation of banking industry, but in the process, it diluted the role of commercial banks to the point there was not much difference left between them and investment banks as per findings of ***Inquiry Report.*** The rules of securitisation speeded up this cross-over, while at the same time banks adopted a lax attitude towards real estate lending which traditionally was the most staid type of lending operation in contrast to the cutting edge operations involving exotic instruments and deal making that was the purview of investment banking. When sub-prime lending began to go sour, and losses began to mount, the sheer weight of these losses dragged down financial institutions that were regarded too big to fail.

This theme, ***"too big to fail"***, is further explored by Andrew Sorkin in his book of the same title, published by Penguin in 2009 for general audience like Alan Greenspan's book, not only for a select group of bankers, managers,

specialists or analysts of financial system. The book provides a detailed view of how this complacent attitude developed and permeated practices of bankers, financiers, stock analysts, market specialists, and eventually to investors at large. The mind set was poles apart from the general profile of cautious, stodgy bankers and financiers poring over and sorting out winners from losers before committing to financing, no matter how attractive they appear to be otherwise. Both these books are enlightening reading into what other factors must be borne in mind in parallel to cold financial data in the evaluation of performance of entities within financial system.

Among the recent publications on this theme, we need to have a look at Barry Ritholtz's book ***'Bailout Nation'*** published by John Wiley, 2009, written for general audience in the same style of books by Alan Greenspan, Andrew Sorkin and others mentioned above, rather than a stodgy review of bail outs that occurred during earlier in pre-world war era and during reforms, the crisis prone years of 1971-1995, and subsequently, in times of ***'irrational exuberance'***, an iconic phrase coined by Alan Greenspan, characterizing the dot com boom of 1996-1999 followed by a bust of NASDAQ market, which dragged down the stock market along with it. The book provides a panoramic view of how the pattern of bail outs took root among bankers and financiers drawing from the same epitaph, 'too big to fail' mentioned earlier. If one were to take a long sweep of history, there seems to be a pattern underlying the bail-outs in the aftermath of financial crises following on the heels of weaknesses such as unbridled faith in self-regulating or self-correcting markets. We are likely to see more of this search in years to come.

There is a great deal of anecdotal evidence that markets can not be left alone to their devices, and market regulations in place in most countries is no match to inventive ways that participants find to circumvent regulations. This tug of war can not be won by regulators, no matter how many directives are issued in post-hoc manner. It is not a level playing field. Some new paradigm has to be discovered that would circle around this ever expanding cycle of ineffective regulatory framework. Reintroducing state ownership of financial institutions is not a solution either, and there is opposition to a re-entry of government into ownership of financial institutions.

For those keen on financial system growth and its management, a glimpse of these controversies surrounding the main issues would be worthwhile, though for general audience not well versed in the arcane world of financial system these studies remain obscure to many. The same is true

of academia, more or less. They need exposure to principles and practices of financial system operations and management; and also to the theoretical and applied aspects of performance evaluation howsoever limited it may be. The system level applied analysis remains peripheral; the theoretical exposition of various parts remain in vogue but mostly at institutional level.

Mention needs to be made about ***'Singapore Story'*** the memoirs of Lee Kuwan, Marshall Cavendish Edition, 1999 and its sequel ***'From Third World to First'*** published by Harper Collins, 2000. Both publications do not have much to do with financial system, but a retrospection is likely to reveal the opposite. Here is a city state, bereft of any natural resources except its people, not even drinking water of its own in early days; but it set out to establish a financial services industry that is envy of all. The city state succeeded against all odds. One wonders what were the ingredients of this success, and those are to be found in the innovative genius of Chinese enterpenures. How could a small city state achieve status of financial hub without a corporate base is amplified in these publications.

The contrasts are too much to contemplate. Here in Pakistan, we have reasonable amount of known resources, but we can not seem to agree how it would be shared between provinces, developers and rest of the country. One would think such concerns are outside the realm of financial system development; but there can not be much growth or depth in financial market or banking system unless it is accompanied by investment both in public and private sectors and strong corporate growth. Evidently, Pakistan can not emulate Singapore, but it could strive to achieve success, if success is to be defined in these terms.

As regards the current state of financial systems in many developing countries including Pakistan, they have come long ways over the past three decades, but they are still struggling with aftermath of reforms and have a good deal of catching up to do. Parts of their financial system are as developed as one could find in comparator countries; while most other are still in their early stages of development. Their financial system are not an amalgam of disparate financial institutions, operating independently of rest of the system without direction or adequate guidance or supervision.

The learning curve has been steep. There has been leapfrogging in several key segments of financial system. In particular, sophistication of their mainstream banking system is at par with those found anywhere. Among financial market, money and equity markets are fairly well established, though bond markets and markets for derivatives are slowly taking root.

Those trudging on the cutting edge of the markets can not wait to see the day options trading, swaps, forwards and futures are operating at full speed ahead. These frontline segments are hobbled in several ways, primarily because of relatively underdeveloped mercantile sector struggling with weak corporate sector; which in turn is hampered by fledgling industrial base, and its competitiveness overseas.

A good number of views and inferences expressed in the text book are based on evidence from time series ***data sets*** on Pakistan's financial system, or cross section data sets of countries that are designated as comparator countries. The inferences are drawn from systems linkages of causality, pervasive in applied context of financial system, the economy, and the country at large. What makes these inferences powerful is evidence from contemporary experiences or their antecedents in comparative setting. Once these inferences are combined with observations, they seem to be opinions rather than analytical results. In real life situation we are accustomed to seeking 'second opinion' from those at cutting edge of medical sciences or legal matters. No objections are raised by anyone that these are what after all they are; ***just opinions,*** and no more.

گاہ مری نگاہ تیز ، چیر گئی دل وجود
گاہ الجھ کے رہ گئی ، مرے توہمات میں

اقبال

often, my sharp insight, pierced thru
... .heart (mysteries) of my existence

often, got entangled in (the web of)
..... my (own) superstitions

Iqbal

Chapter 1: Financial System
Structure, Role and Functions

Thematics

Financial System; Direct and Indirect Finance

Indirect Finance: Financial Intermediation
Role of Banking System, NBFIs

Direct Finance: Financial Markets
Role of Financial markets
Financial System Attributes

Role of Financial System

Financial Resources; Mobilization and Allocation
Transfer of Financial Resources
Mechanisms and Operations
Impact on the Economy
Issues of Financial System Solvency and Stability

Financial Regime

Financial Intermediation, Banking System;
Monetary Mgt and Regulatory Controls; SBP
Regulations of Financial Markets; SECP

Financial System and the Economy

Financial System Development
Reforms, Liberalization, Globalization
Contribution to Economic Development – Pakistan
Comparative Experiences
Issues of Growth Revisited

Chapter 1: Financial System
Structure, Role and Functions

Section 1: What is a Financial System

1. Financial system of any country consists of a vast number of institutions and mechanism for the ***mobilization***, ***transfer*** and ***allocation*** of financial resources between their suppliers and users. Since financial resources represent command over ***real goods and services*** at a price level prevailing in the economy in any time period, therefore, mobilization, transfer and allocation occurs with regard to real resources of an economy. Hence, this process of mobilization, transfer and allocation of resources at ***system level*** is of immense significance to all sectors of an economy, and therefore, for all segments of society.

2. Typically, suppliers of financial resources are households as savers, while users are mainly investors, businesses and firms whose activities lead to economic growth, depending on how successful they are in their ventures in the first place, and how efficient financial system is in helping them to do so in the second place. This simplistic description becomes murky rather quickly when we introduce government, not so much with regard to origination of resources, rather as user of resources via mechanisms of financial system. Households are primarily suppliers of resources, but they operate on either side of the aisle. As suppliers, households are depositors of savings; as users they are borrowers of the banking system, where banks are financial intermediaries. Financial markets perform the function of direct transfer of financial resources between suppliers and users. In their simplest rendition, these are salient mechanisms of financial system.

3. In applied realm and in real world situation, since a typical country is open to foreign trade and capital flows, foreigners as private investors, business firms, NGO entities, and foreign governments also participate in operations of financial system either as suppliers or users of financial resources at the international level through globalized financial markets, multinational money center banks, and international financial institutions (IFIs). These foreign participants engage in resource transfer and also in resource use in their own currencies depending on the type of their business

or financing activities, except that IFIs are not involved at the end of resource use. Their participation introduces another layer of complexity to this central act of transfer of financial resources via financial system, not to speak of operations of international currency markets and their proceedings.

4. There are two major structures within a financial system and both are of strategic significance. One structure is devoted to the system of ***indirect finance*** conducted through commercial banks and non-bank financial institutions (NBFIs), all engaged in financial intermediation between users of financial resources, namely the borrowers, whether operating in public sector or private sector, and suppliers of financial resources, the savers, mainly households. Suppliers of finance are not lenders themselves; rather lenders are financial intermediaries who assume risks inherent in lending. Therefore, evaluation of financial intermediation activities grapples with only one half of the financial system; the subject matter of **Volume I.**

5. The second structure of financial system is ***direct finance*** through operations of securities markets where investors purchase debt instruments like bills and bonds issued by government or corporations; or stocks of listed companies, thus providing equity finance. The sellers of these securities are users of funds. The difference is that unlike banking credit, debt instruments such as bonds and stocks or shares are bought and sold in capital markets, where each one of these instruments have their own risk and return profiles facing the investors, who may be institutional investors or households.

6. Structure of a financial system may be articulated on the basis of *de-jure* classification of financial entities regardless of their functions. Alternatively, structure may be constructed on the basis of their functions and operations. The, ***operational structure*** of financial system is more meaningful and this will be evident as we proceed. In its simplest version the operational structure consists of:

- financial intermediaries of all variety -- system of *indirect finance*;
- financial markets and institutions -- system of *direct finance;*
- regulatory structure and its mechanisms, the legal framework constituting *governance* of financial system.

7. In the category of ***indirect finance***, there are a variety of financial institutions classified into various categories; each one of them chartered, established and organized under legislative acts, laws, rules, and regulations according to their mainline functions. These institutions are engaged in financial intermediation but there are overlaps and inter-links in their

functions all across various types of operations. For example, mobilization of financial resources boils down to deposit mobilization; while channeling these resources to borrowers and investors occurs through credit system and financial markets. Likewise, in the category of ***direct finance,*** there are a variety of financial markets, classified in different ways. These are: money markets, treasury bills market and inter-bank funds market; currency markets; capital markets including debt markets consisting of government and private bond markets; and stock markets. This classifications overlaps with maturity-based classification, namely, short-term and long-term.

Financial System
or Financial Sector

8. Unlike a typical sector of economy confined to a line of productive activity, financial system transcends sectoral boundaries. Its operations are spread all over, touching every sector in a profound way. In that sense financial system is not confined to any sector and it is not a ***sector*** as such in the routine, rather its operations and mechanisms encompass all sectors of the economy via both systems of direct and indirect transfer, though this distinction is not followed strictly.

9. The convention in the literature is a mixed one. ***Financial system*** is frequently called ***financial sector*** given focus on financial intermediation activities. Such studies are usually undertaken by a central bank whose preoccupation is with monetary management and its implications for banking system liquidity via money market operations. Beyond this, analysis these studies taper off, though analysis of financial markets is equally needed. Hence we will stay with the term financial system encompassing a composite structure of both system of ***direct and indirect*** transfer.

10. As for structure and operations, we are confronted with four types of finance and their counterparts: viz, *banking finance, corporate finance, household finance,* and *government finance*, also called public finance owing to its inroads in financial system operations. Apart from their operational structure, each of these four are a discipline of learning, complete with their own analytical framework, and are taught as a self standing course at university level. Their focus is on ***institutional level*** operations of a corporate or a financial entity, not a collectivity at the ***system level.*** Therefore, these components need to be analyzed to unravel interlinks amongst them. This can be achieved only at the ***system level*** which is well beyond the scope of institutional level studies of any variety of finance.

11. In the early days, financial system was labeled ***financial sector*** of the same veneer as other sectors of the economy albeit in financial category, hence ***non-producing,*** in contrast to sectors producing real output. This label has stuck thus far. The older perceptions were stereotyped to the extent that whatever 'financial' it may be, it did not need to be taken seriously because it was all about financial flows of one kind or the other, grinding out with machine like fidelity and precision in the hands of competent financial mangers, seasoned bankers and market savvy investors, all performing under watchful eyes of a benevolent patron, the government, or its regulatory agencies. Therefore, there was not much that could go wrong. All this changed over the past couple of decades.

Institutional Level or System Level

12. A few words are in order here about the distinction between system level versus institutional level concerns – a distinction whose subtleties often get lost in the intricacies of issues involved, or get blurred because of pre-occupation with day-to-day business of banking and financial markets given concerns of liquidity which is overwhelming at times. Paramount among institutional level concerns is their performance such as profitability of a financial institution as a going concern which may get elevated to system level concern, but not necessarily; it depends how pervasive it is.

13. Financial system is a collectivity no doubt, but not a straightforward aggregation of its constituent parts. For instance, at times, profits of banking system may be exceptionally high as they have been in Pakistan over the past decade, and leading financial institutions may appear to be rock solid; but it takes financial distress or imminent insolvency of only a few financial entities in an obscure segment of financial system to derail its stability and plunge it into a crisis. These institutions, perched on the fringes and operating as inconsequential appendages of financial system outside of routine regulatory surveillance, have succeeded in undermining public's confidence in the entire monetary system, threatening a systemic bank-run as happened on several occasions, notably in late 1990s in East Asian countries.

14. In Thailand overexposure of these companies to exchange rate and credit risk led to domino like failure, plunging financial system into crisis. It began as a localized liquidity crunch, but ended up as a crisis at system level, even though a good part of the system was solvent and trouble free. Almost same happened in Pakistan and in India way back in early 1980s but not on

noticeable level owing to nationalized system. This is controversial; but it demonstrates fragility of financial system originating from segments that are not in the mainstream. In situations like these, central bank does not have much option but to step in with massive amounts of liquidity at a great cost to itself or to the government to forestall an imminent bank run. Such has been comparative experience of the past.

Historical Perceptions

15. The preoccupation with what is financial system and how it operates began in earnest owing to recurrence of financial crises as far back as in the 1970s and 1980s on unprecedented scale that potentially threatened solvency of global financial system. The framework of global finance was designed primarily to handle postwar system of international payments and settlements between major reserve currency blocks of that time period. This system came under stress with abolition of residues of gold standard with the withdrawl of US guarantee of dollar-gold parity in early 1970s, moving away from fixed to floating exchange rates between leading currencies that was being maintained until that time under the purview of IMF. A great deal has been written about its role in the post -war era through early 1980s during the days of controlled and state-directed trade and exchange regime.

16. Thereafter, dawned the era of market based and liberalized trade and exchange regimes which emerged after financial reforms were undertaken on unprecedented scale both in advanced and developing countries. The literature on this era is vast and growing. These two periods are distinct, but the objective here is not to review this historical process that has unfolded at global level; instead, the purpose is to outline how financial systems behave in open market based regime in current times, though their historical antecedents can not be brushed aside.

17. During early 1970s, capacity of this post war system was compromised with the advent of global oil crises that occurred on the heels of demise of gold standard, exposing its fragility. Both these events, together with dirty floating exchange rates, burgeoning international trade and accompanying global financial flows put severe stress on an already fragile system of international finance. A good number of developing countries found it difficult to realign their financial system and their economies to the new paradigm that had emerged in early 1970s through early 1980s, requiring profound structural changes that many countries could not afford to initiate for a host of reasons that need more explaining.

18. At the same time there was a major shift in outlook among advanced countries, with ascendancy of conservative governments in the US and UK, greatly influenced by Chicago school of thought that governments ought to scale back their role, and should retreat from interventionist practices, allowing nearly unrestrained freedom to private sector. The pendulum had swung against public sector activism. In the arena of financial system, a thinking emerged that governments should reform directed credit system, withdraw from systems of administered interest rates, foreign exchange rate and trade regimes, lower the barriers to capital flows and remove restrictions on capital accounts and water down controls on foreign financial inflows together with their concomitant outflows.

19. Subsequent experience showed that the shift from controlled regime to market-based regime must be carefully sequenced and orchestrated in a fashion that does not create lopsided economic and financial structures. Otherwise, these elements of policy and incentive regime could spawn economic and financial crises as happened among emerging economies, like Korea, Chile, and Mexico during early periods of financial reforms. It was a coincidence of immense significance for decades to come.

20. Thereafter, preoccupation with financial system intensified, notably among leading developing countries. This was the time that saw demise of development finance institutions, removal or reduction of subsidized interest rates, elimination of layered system of credit control and planned allocations of credits via credit plans in many developing countries; all undertaken as part of financial system reforms. This period saw a paradigm shift in the structure of financial system across several countries and it provides an engrossing reading. A few selected ones among these are listed in Reference. Pakistan's turn had to await until mid-1990s, but with some significantly different features of its own concerning financial reform process. In case of Pakistan, the discussion is focused on what transpired in the financial system as it evolved pursuant to reforms that were undertaken during late 1980s through early 2000s. It is a study of post-reform era covering the past decade. Understanding process of reforms undertaken and what transpired during transition years is central to figure out how the current system operates.

21. In the aftermath of financial crises, specially East Asian crisis of late 1990s and even more momentous crises of 2008 in the US and European countries, there has been a great deal of soul searching as to what went wrong. It is not possible to summarize it here; that would be rather presumptuous. In outline, root causes of crises are seen to lie in overexposure of investors, leading to rising prices of assets like real estate, causing bubbles,

financed by even the hard-nosed bankers in much disregard of sound banking practices and well established norms of lending. This was made possible by ill-sequenced reforms and liberalization of capital accounts, without sufficient regulatory controls and safeguards on the operations of credit and currency markets. This lacunae permitted speculative attacks on currency and credit systems.

22. In other words, reforms were carried without regard to limits of market-based liberalization, apart from ideological persuasions and naïve faith that markets are self correcting; and that there is a harmony between private interests and social interest that prevents abuses of open market-based system. This faith in free markets of pristine variety has been as much flawed as faith in state socialism or nationalized financial system. The enthusiasm has dwindled in recent years because free markets do not promote social good as much as they promote private good. They have a tendency to spawn cartels and monopolies if left to their devices. Just observe the recent experiences of Pakistan's Competition Commission.

23. The pendulum is swinging back and calls for state intervention are being made after the massive costs of bailout efforts funded by public money. The realization is seeping through that self-regulation mechanism does not self-actuate; instead it compounds financial distress with various degrees of contagion so severe that it is no longer possible to leave segments of financial system to their own devices. In European countries, there is talk of bringing back limited state ownership of key financial institutions that are critical to its operations. The faith in markets to be self correcting and to keep ensuing crises from spreading has dwindled.

Section 2: Resource Mobilization and Transfer

1. Operations of financial system involves mobilization of financial savings to begin with; where banking system deposits are the central part of resources amounting to slightly more than one half of all financial savings in a country. That is the origination point of financial resources There are other deposit-like assets representing modes of non-banking deposits mobilized by various types of non-bank financial institutions; but those savings remain on the fringes of total supply of financial resources. In this sense, financial savings originate primarily from households, not from corporations or government. Business corporations are not known to set aside part of their income in savings or deposits as such.

2. Corporations operate their business mostly on revolving credit, and whatever spare liquidity they may have can not be classified as 'surplus' in the sense households deposits are classified. So do governments because they are almost always in deficit funded by revolving credit which is not much different from corporate revolving credit, though the mechanisms are different. In Pakistan, governments for decades have been in deficit; never in surplus. Therefore, domestic financial savings have originated only from households. These domestic household savings have been supplemented by foreign savings though on the margin. Foreign savings originate from household surpluses, the same way, though in their country of origin.

3. Hence, for financial system as a whole, surplus financial resources are with households to be mobilized for use by deficit units. This mobilization is primarily undertaken by financial intermediaries, the banks, who constitute system of indirect finance. After savings have been mobilized as deposits by banking system, these financial resources may then be transformed and allocated by either banks themselves as banking credit; or may be invested in financial markets. The part of household savings which is not placed as deposits may be invested by households into financial assets via securities markets or into various types of non-financial or real assets. Thus, financial resource mobilization is the start of flow of resources as shown in Chart-1 down below. The transfer occurs afterwards, followed by allocation to various sectors of the economy through financial markets or through financial intermediation.

4. There are two modes of transfer: ***direct transfer*** through operations of financial markets; and ***indirect transfer*** through operations of financial intermediaries. Both these modes of transfer of financial resources, their operating procedures and practices are governed by rules, laws and regulations in any country concerning operations of various layers of financial system. Therefore, we need to unravel financial system layer by layer, functionally at institutional level; and thereafter as their collectivity at macrofinancial level. This has to be done for each layer or component of financial system in line with the legal and regulatory framework, namely the financial regime which governs operations of financial system.

5. For the moment, let us keep issues of regulatory framework aside, and focus on operations of financial system to sort out salient elements of resource transfer and its mechanisms represented by a circular flow of funds occurring within financial system. This circular flow is not the same as ***flow of funds,*** because flow of funds represent a structure of supply and uses between various sectors of an economy along the lines that shadow national

accounting identities. Financial system flows have a different set of accounting identities. One could argue that in substance it refers to the same phenomenon, after all. In introspective manner it does; but the way these macrofinancial aggregates are arrived at is quite different form the way flow funds aggregates are arrived at, and they are far different from the way macrofinancial aggregates are arrived at.

6. All transactions of resource transfer occur in monetary magnitudes represented by nominal values as dated events recorded in the financial statements of parties to the transfer involved. Underneath this monetary transfer, there is *transfer of real goods and* services at its own price structure, the set of real prices, or their interpretation, opportunity costs. That is, underneath the transfer of financial resources lies a ***shift in command*** over real goods and services at any moment of time from suppliers of funds to users of funds. Thus, in operational realm, exchange of nominal values between groups is a conduit to changes in structure of ownership of resources based on nominal prices at any moment of market transaction.

7. Eventually, who ends up using resources is all that matters. Analysis of resource transfer through operations of financial system, has to contend not only with price structure prevailing in nominal terms, that is, in the realm of money economy, but also with prices of real goods and service prevailing in the realm of real economy to arrive at meaningful insights with regard to ultimate use of resources and its impact on output, employment and growth. This bifurcation of realms, *nominal* and *real* has to be dealt with. While most economists are pre-occupied with *real* economic trends, financial economists have to traverse back and forth between financial and real magnitudes where nominal values take precedence, while *real* magnitudes mostly concerns *real money balances, real interest rates, real prices, and real variables* when it comes to analyzing aggregate tends at macrofinancial level.

Transfer Mechanism
Surplus or Deficit Units

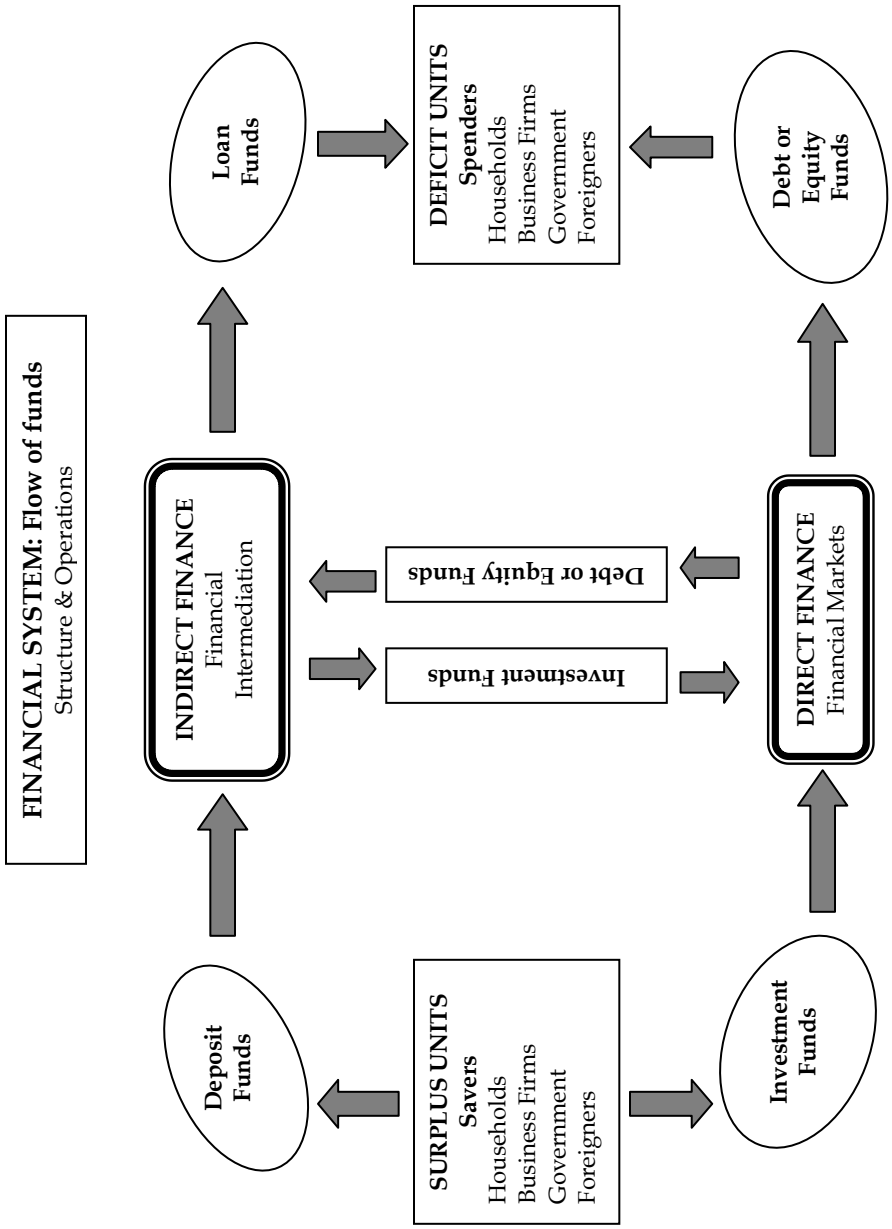
8. Parties to transfer of financial resources are households, corporations and businesses, government and its entities, and their counterpart overseas, the foreigners active in the external sector. These parties may operate on either side of the ledger – namely as suppliers or users, savers or investors, lenders or borrowers. In financial market transactions, the parties are investors in securities, who are lenders if bonds are involved, and their counterparts, the borrowers are issuers of bonds. In an open economy,

operations of external sector could be broken down into counterparts of domestic participants, namely foreign households, firms, and governments. The outcome of participants' financial activities is captured in macrofinancial aggregates. In between, there is a variety of financial institutions acting either as intermediaries on behalf of their clients, or as agent brokers facilitating private investors, or portfolio investors like contractual savings institutions, or as asset managers for their client investors, the mutual funds.

9. This outline of transfer mechanism at system level needs to be elaborated. Conceptually, the best way to disentangle this vast network would be to outline flows of financial resources, their constituent elements, and their interlinks as given in Chart-1 on next page. In its simplest version, financial flows originate from savers, mostly households, called ***surplus units*** for the reason that they have a surplus left from their current incomes after current expenditures on consumption. This group of surplus units could include business firms and governments. In operational terms households are main surplus units.

10. In practice, business firms and governments are net users of resources, rather than net suppliers. They are not surplus units. The reason is that business firms do not generate deposits except as temporary cash holdings. Instead, businesses always operate on wafer thin margin of cash surplus which can not be classified savings as such. There are hardly any corporate savings lodged with banking system. As going concerns, usually they are net borrower of funds; hence they are net users of funds for their working capital or investment needs. Likewise, governments are big spenders, not savers in most countries. They are mostly running budget deficits; hence they are net borrowers; hence, they are net users of financial resources. Thus, business firms and governments both are ***deficit units*** in the economy. Some households may also be net users of financial flows; therefore they are classified as deficit units; but typically, households are net supplier of funds in any country; and their savings are the largest part of the pool of surplus funds available for transfer. *Foreigners* are net supplier of financial resources to most developing countries, and also to some developed countries.

11. In an open economy, both surplus units and deficits units include foreign firms, governments and households, though foreign households typically are originators of foreign savings, a net supplier of foreign financial resources, much the same way as domestic households are; whereas businesses and governments are net users of financial resources. There is a key difference though regarding flows of foreign funds from advanced countries to developing countries. Here, ***roles are reversed;*** namely, inflows



SaF Chart: January 2011

of FDIs originate from business firms overseas as foreign investment, whereas FPIs originated from household as well as institutional investors and foreign assistance inflows occur partly from governments and partly from international financial institutions.

12. Among these the largest inflows of foreign resources from advanced to developing countries, particularly to emerging economies occurred via FDIs and FPIs as discussed in Chapter 11 of Volume II. This is was a massive transfer of financial savings. That Pakistan was not a receipient of these inflows is a different matter. The amount of these resource transfer was staggering over the past three decades. *(see Data Set 6.7, Volume II)* As for mechanisms of transfers; most commonly deployed mechanism is transfer through banking system, though in case of FPIs, the destination may have been investment in capital market and in case of FDIs the destination may have been the indigenous corporate sector. In case of both FDIs and FPIs, the conduit is the banking system, regardless of how they originate and wherefrom. Banks act as financial intermediaries between foreign investors and their counterparts in receipient country in both types of transfer.

13. There is substantial amount of transfer of resources from governments of advanced countries to developing countries on bilateral basis even though they may be running their own budget deficits. Here, again the roles get reversed. The government in advanced countries is net user of resources; but it becomes suppliers of resources to receipient developing countries. To complete this picture, there are international financial institutions who are net suppliers of financial resources to developing countries originating from advance countries mostly as borrowings and a notable part as concessional assistance which is a budgetary transfer in a different guise.

14. From this perspective, foreign governments and foreign business firms may be seen to reverse their traditional roles from net users of resources to suppliers of resources across countries. They may be part of deficit unit in their own country as net users, but they become part of surplus unit in the recipient country and are identified as such in the chart attached, if there is a net foreign inflow in the destination country. These transfers could occur through system of indirect finance through banks as part of financial intermediation; or through system of direct finance through financial markets, where these incoming resources are identified as foreign portfolio investment in local securities markets. The issue is not which group among deficit units is more important; rather the concern is with basics of resource transfer across borders.

15. Once financial resources are transferred from surplus to deficit units, that is, once the cycle is halfway complete, a ***reverse flow*** occurs from deficit units back to surplus units, tracing back second half of the cycle, in the form of incomes, wages and salaries and profits, filtering down to households. Some would argue that circular flow begins at deficit units; but it does not. It re-starts there. Deficit units, mostly business firms obtain these resources via financial intermediation as revolving credit or working capital finance; or obtain it via financial markets through long term debt instruments like bonds to invest in new businesses, thereby generating employment, income and wages for households, and profits to enterprises from business operations, thus completing the cycle. The initial flow from surplus units enables firms to undertake new investments in business assets which would not have occurred otherwise. These investment activities of business firms generates employment, hence wages and salaries; and also generates profits which eventually end up with households, thus completing the cycle.

16. In parallel, when governments receive financial flows from households through taxes or borrowings, it enables them to undertake expenditures for a variety of activities that create business opportunities for business firms that would not have been possible otherwise. Operationally however, fiscal activities of tax variety are independent of financial system; but government borrowing operations represent flow of resources from surplus units to government as deficit financing in their budgetary cycle.

Direct Transfer
Financial Markets

17. The transfer of resources from savers to users could be direct through financial markets, or could be indirect, undertaken through financial intermediaries. This distinction is fundamental to operational side of financial system. ***Direct transfer*** involves purchase or sale of assets in financial markets; namely, short term funds in money markets and long term funds in bond or stock markets. The transaction is between supplier of funds and user of funds, where supplier of funds is lender and the user of funds is borrower. There are no intermediaries to undertake risk transformation between lenders and borrowers of funds which banks perform. In direct finance, funds are transferred directly from suppliers to users. For example, in case of bills or bonds, the purchaser is lender and seller is the borrower. In equity market transactions, suppliers of funds are investors; while users of funds are companies who sell their shares to raise equity finance.

18. This is too simplistic and perhaps inadequate description of direct finance and needs elaboration. Briefly, ***system of direct finance*** consists of a vast array of financial markets both short term and long term, where primary function of markets is to facilitate conversion of financial surpluses, namely savings into investments through a variety of instruments, though full array of these instruments are not accessible to all investors. For households, their access is limited to equity or bond markets; whereas financial institutions monopolize money markets. In both the cases, household savings are being transformed into investments, though investment of financial institutions is to be seen as reprocessing of household savings from their deposit portfolio to credit or investment portfolio. The deposits could be extended as credit, and thus become part of ***system of indirect transfer***; or could be channeled into investment which becomes part of direct transfer even though financial intermediaries, banks, are involved in between.

19. In most developing countries, governments engage in massive borrowing operations through money and bond markets. Their borrowings represent first half of the cycle of flows from surplus units. Returns on invested instruments represent reverse flow from deficit unit to surplus unit, thereby closing the circuit. Governments are not alone in accessing financial markets. A good part of resource flows is destined for financial markets as investment in various types of securities. If these securities are interest bearing like bonds, interest payments to investors are counterpart flows back to where investment originated from. If investment is done in dividend bearing stocks, dividend incomes are counterpart flows back to their investors. These dividend incomes are additions to household income that generate yet another round of savings once transfer is completed. The reverse cycle however does not involve any financial intermediation or any financial market operation the way initial round does.

Indirect Transfer
Financial Intermediation

20. Indirect transfer of funds from savers to borrowers occurs mainly through banking institutions. Its mechanism is financial intermediation – a term synonymous to indirect transfer, where banks act as intermediaries between surplus units and deficit units. A good part of household savings are lodged primarily with banks, who onlend these surplus funds to users as banking credit. The largest group of users of banking credit are business firms; next are governments; while households as a group are a small user of

banking credit, a distant third group. This pattern of transfer is typical among developing countries. In advanced countries, this pattern is reversed; households rank the largest borrowers of banking credit through mortgage loans, credit cards and personal credit; next are business corporations, and then governments as borrowers from everyone, but mainly financial institutions including banks. Foreign central banks and foreign financial institutions are major lenders to government.

21. These intermediation activities of banks are straightforward in that banks collect deposits and lend to borrowers. In the process they earn banking margin based on lending rates which include cost of funds, mainly deposits and supposedly various types of premia, mainly risk premium inherent in lending operations. Return to bankers from financial intermediation once deposit base has been secured, depends on how good they are at the business of lending and managing risks involved. These returns are essentially interest margin which is the differential between interest rates paid to depositors and lending rates charged to the borrowers. To muddy the waters, banking spread, which is most often quoted, is a re-designation of interest margin, in so far as it is interpreted as the differential between average interest rates paid to the depositors and average interest rate charged to borrowers.

22. But financial intermediation in not limited to banks only. Instead, there are a number of non-bank financial institutions (NBFIs) who perform similar functions but occupy a smaller place, a market niche of their own to provide financial resources to deficit units from their own funding base, mostly deposits, contractual cash flows, or borrowed funds. These NBFIs consist of investment companies and banks or finance companies engaged in raising deposits and lending to borrowers under their own protocols, though these NBFIs are not supposed to be deposit taking institutions the way deposit money banks are.

23. There are contractual savings institutions who are not supposed to be mobilizing household savings as deposits, nonetheless, in interpretive sense contractual savings institutions like insurance companies collect retail savings as premium, while pension funds collect provident fund contributions. These streams of contractual cash flows thus mobilized are invested in financial assets through operations of securities markets, or real assets depending on portfolio objectives and strategies of contractual savings institutions in combination with risk and return profiles of various types of financial assets.

24. At financial system level all activities of indirect transfer, no matter how sophisticated they happen to be, and regardless of where they originate from and who originates it, boil down to collecting savings of households, and making it available to investors or those engaged in asset management on behalf of their clients, thereby recycling savings into assets of various types. Part of surplus flows get transferred to government via investments of banks in treasury bills or bond markets. This is over and above fiscal operations of the government involving tax revenue collections.

25. Thus financial intermediaries operate on both sides of the aisle. As lenders, they engage in indirect transfer; as investors, they operate in financial markets, facilitating direct transfer, though essence of their operations is the same. They facilitate recycling of household savings, regardless of the type of financial institution they are. Therefore, analysis of financial system operations has to be activity-based, rather than institution-based. Among developing countries, system of indirect finance - financial intermediation is the dominant mechanism of flow of financial resources from surplus units to deficits units for the simple reason that system of direct finance is still in early stages of its development.

Transfer Price – *Interest Rates*

26. Essentially, transfer of financial resources occurs at a price – mainly interest rate, or a price derived from interest rates, set largely by market parameters depending on the instrument of transfer, its maturity, and the type of market. How interest rates are determined has occupied attention of many and a great deal has been written about it. This literature is very rich and controversial. Operationally, there is a wide ranging consensus that interest rates are determined mainly by supply and demand of financial resources, namely the size and availability of loanable funds funneled through a variety of financial markets.

27. Among these, money markets are sensitive to even minute changes in rate of interest and react almost instantaneously. In credit markets, demand and supply of loanable funds determines interest rates on borrowings. Bond markets are highly sensitive to changes in interest rate; stock markets likewise also react strongly to interest rate changes or to anticipation of change, significantly affecting trend in stock prices. Hence, no matter what market or which segment of a market one is looking at, terms of transfer of financial resources from savers to users are rooted in interest rate structure, pivotal to operations of financial system.

28. There are various interpretations of interest rate as discussed in Chapter 4. In conceptual and theoretical realm it boils down to demand and supply of money, unique to levels savings and investment for a give level of aggregate output and income in an economy prevailing at a point of time. In Islamic finance, interest is prohibited, though there is no consensus among scholars of *different* religious persuasions as to what is the nature of banking interest and why it is prohibited as discussed in Chapter 9. In practice, in lieu of interest rate there are various rates of profit prevailing in ***Islamic banking*** laced with various premia depending on mode of financing.

29. In contrast, in applied realm there is a remarkable consensus on what is interest rate and how it arises, though there is no unique interest rate as such. There is a structure of interest rates whose sources and origins are rooted in market based forces of supply and demand for funds. Interest rates are not fixed as such; their structure is variable making it difficult to keep tract of these changes, not to speak of their underlying interlinks. In real world situation, market participants are attuned to variations in rate structure, both domestically and abroad. In short, there is no simple way of explaining cost or price of resource transfer, making it difficult to interpret implications associated with the transfer. This is attempted below.

Implications of Resource Transfer – *Allocation*

30. There are implications of functions and operations of financial system concerning efficiency of transfer of financial resources between suppliers and users and its impact on economic growth. How well this transfer occurs and on what terms and how efficiently it is performed by the financial system is of significance to every segment of economy; be they households, businesses, or the government. The efficiency of transfer mechanism impacts economic growth; so does orientation of financial regime. These elements are intertwined and need to be analyzed in applied context as outlined below and in Chapter 3. In between is the issue of ***access to financial system***. During the nationalized regime in Pakistan, it was a moot issue; for there were no private enterprises to speak of, except for a vast number of distributive trade shops, small engineering workshops; repair shops and service outfits; artisans, craftsmen. They have survived all the upheavals over decades. In short, access of this vast group of small enterprises was always at the tail end of financial chain, both during nationalized era from early 1970s to late 1990s and also in the post reform privatized era thereafter.

31. In the nationalized era, the system of subsidized credit or allocated credit through development finance institutions did ameliorate deficiencies of access to financial system but mainly of large enterprises, large borrowers, not small or medium borrowers. They have always been on the fringes, if not shut out of the system of lending. Similar deficiencies prevail today with marginal improvements. The official version in Pakistan is that banking system is catering to SME needs. It is responsive to needs of new exporters, be they large or SME; it has begun to provide housing finance. Their access, however, is a small proportion of banking system credit, discussed in Chapter 8 on priority sector financing.

32. To foster efficiency of resource allocation and its impact on economic growth, operations of financial system of Pakistan could have been more effective over the past decades within its resource and capability constraints. Financial system was not strong enough, nor robust enough to give a boost that it could have provided otherwise. In the past, during period of nationalized financial system together with a repressive financial regime, fragilities of financial system structure stymied economic growth for the period of nationalized regime and beyond. Privatized financial system emerged from shadows of nationalized system in the late 1990s and began to take root during 2000s; but the impact of privatized banking system and securities market is now fairly evident.

33. In current times, it is too early to tell the outcome given preoccupations of economic stabilization and IMF standby conditionalities amidst high inflation and periodic devaluations of Pakistani rupee, drying up of foreign investment, a widespread energy crisis, and issues of and bad governance. These socio-economic concerns can be laid at the doorstep of financial system; but in circumstances like these, similar to past episodes, it is difficult to foresee what financial system can achieve on its own without a parallel effort in managing the economy to bolster prospects of sustained growth.

34. As regards distributive implications of resource allocation, there has been a distorted distribution of resources between various segments of society resulting in part from operations of financial system, thereby further aggravating income distribution patterns that are already stacked against the poor. This happened because of misuse of mechanisms of resource transfer. The mechanisms are neutral to social implications of transfer, embedded as they are in the financial regime; the outcome is not neutral. There is nothing wrong with mechanisms as such. Those are time tested in a number of countries. It is the abuse of mechanisms that causes distortions in patterns of resource transfer, thereby worsening income distribution in the country.

Witness the cycle of imprudent lending mostly to well to do and influential borrowers; rise of non-performing loans owing to default, willful or otherwise; followed by rounds of loan write-offs over the past four decades, mostly for large borrowers. The point is that size of write-offs represents a transfer from depositors and tax payers to defaulters of banking system.

35. Financial system history of various countries over the past four decades bears testimony to this proposition. In countries where transfer mechanisms were deployed to mobilize and use financial resources to promote growth even in directed or administered regimes, the outcome was a transformation of industrial base, technology transfer and fast growth year after year. In countries where these mechanisms were abused as they were in Pakistan, financial system did not support growth and diversification of economy to the extent it could have done. In contrast, growth performance of countries where transfer mechanisms were not compromised, the outcome was different. Their growth over the past three decades has been salutary, to the point that it has paved the way for a re-alignment of international financial system from its post-war era structure. Their combined financial strength on the international scene as exhibited by accumulated foreign currency reserves has reached a stage that will eventually end up in a re-ordered system of international finance, starting with dilution of reserve currency status of US dollar. This is not likely to happen soon, but the process has already begun.

36. We are not discussing here issues of realignment of reserve currencies; our main concern for the moment is allocation of financial resources. Economic literature is replete with treatises on issues of allocation. The mechanisms of mobilization, transfer of ownership and use of resources are firmly embedded in financial system operations, and are carried out without much notice by the public. For example, government guaranteed debt if gone sour, regardless of mechanisms of guarantee, transfers liability of debt from its beneficiaries to the public at large; that is, from those who obtained and used financial resources to those groups, like ordinary households, to those who had nothing to do with incurring such a liability in the first place; yet they have to bear the burden via a process beyond comprehension of many.

37. Often it occurs through process of debt reschedulings, like Paris Club protocols, whose main pre-occupation is resolution of technical defaults and to forestall formal defaults so as to restore creditworthiness of countries in dire financial straits – Pakistan being a veteran of Paris Club reschedulings. There is no other recource. In the process, private short term liabilities end up

being sovereign liabilities including penalties of non-payments and enormous front-end costs of debt resolutions, that otherwise would have no chance of repayments. This is simply postponing enlargement of liabilities if economy does not recover during the time period the reprieve is available under rescheduling protocols. Then another round of reschedulings begin, and the cycle continues, unless debtor country finds ways to get out of this trap; some find it, others don't.

….. *In Pakistan*

38. In many developing countries including Pakistan, the alarming rise of per capita ***public debt*** over the past three decades is an inter-group and inter-generational transfer of financial burden. This debt burden is acute in Pakistan since a large part of the debt was incurred for current expenditures mostly of government and also of private sector, rather than investment or enhancement of productive capacity of the economy. Pakistan was truly an independent state at its birth; the liabilities of partition notwithstanding. At that time, the populace was prepared to do any sacrifice called for. The newly born state had little financial resources of its own. It had no financial system to speak of, and it had no currency and no banks of its own. There were no financial markets as such; and above all there were no institutional mechanism to run financial affairs of newborn state. More to the point, the newly born state had no debts; no obligations outstanding; neither domestic, nor foreign and no shadows either on its financial sovereignty.

39. As discussed in Chapter 10, at end of the decade of 2000s, Pakistan state finds itself overburdened with debt, with hardly any room to maneuver except to undergo further belt tightening under stringent standby agreements with the IMF in facsimile repetition of decade of 1990s. The economy is straining under a large burden of debt, both domestic and foreign. By June 2010, total public debt stood at about Rs 10,200 billion; of this, domestic public debt was Rs 5,443 billion; and foreign public debt was about US$ 57 billion or Rs 4743 billion and rising. When translated into ***debt burden*** for ordinary citizens, it amounts to roughly Rs 367,000 for each household of six, while annual debt service burden amounts to Rs 32,150 per household. Most household are unaware of how they got saddled with this obligation which is siphoning away their meager earnings and livelihood amidst calls for more belt tightening.

40. How did this debt burden arise? During nationalized financial regime which prevailed in Pakistan for nearly three decades, 1970s, 1980s and 1990s, major financial institutions extended loans to PSEs and influential borrowers who defaulted on their obligations, thereby causing immense losses to lending institutions and to its owner, the state. These borrowers obtained banking credit from government owned institutions and left behind bad debts to be dealt with by successive governments who had no choice but to finance these obligations through borrowings via banking system. Over the past years, bad debts have been in the limelight, but general public is not conscious of how it alters structure of ownership and use of resources in the economy, and in what ways the burden is shifted through transfer mechanisms of financial system as outlined here.

41. The government frequently ended up replenishing equity base of financial institutions, absorbed their losses in the budget, sold off or closed down these institutions. In this process of financial intermediation, banking system ended up being effectively used as conduit of transfer of resources from depositors, the general public to a privileged group of defaulters. Eventually, the tax paying segment of the public ended up absorbing these losses through enhanced tax burden. Those segments of society not in the tax net, the lower income groups, ended up absorbing it through a myriad of implicit taxation on the economy like inflation tax.

42. In effect, household depositors financed bad loans from their savings entrusted to banks to start with; they are now repaying public debt incurred for equity replenishment and losses of privatization. Thus, financial burden is currently being shouldered by those who had nothing to do with these operations of banking system and did not benefit from banking credit in the past. At culmination of this process, households ended up with this burden because of the way financial system mechanisms were deployed. They are the only surplus unit, and thus originators or suppliers of financial resources in the economy, but without any control on its allocation or use. There have been repeated calls for accountability, but not much has been transpired. The mechanisms of financial system did perform their assigned role; namely to mobilize and transfer financial resources from surplus units to deficit units; but misuse of financial system mechanisms are at center of this transfer.

43. Apart from funding public debt and its servicing burden, the public also ends up paying via tax system for bloated establishment; for income support schemes of *roti, kapra, makan;* for whatever health and education public sector can offer and a myriad of public expenditure items. At the

same time government has to pay for development expenditures like infrastructure and its maintenance. The private sector has to mobilize its own resources for investment in new businesses. It is the main avenue of new jobs and incomes, not the public sector, because public sector cannot absorb those unemployed since it finds itself financially in dire straits. Government can not meet its mandatory obligations without borrowing more and piling up more debt not to speak of providing for jobs and needs of social sectors.

44. There is a growing awareness among public how financial system has been abused with severe consequences for rest of the country. Nearly three decades ago in late 1980s, caretaker government of that time published list of bank defaulters, their names, defaulted amounts and banks involved. Successive governments over the next 11 years managed to sweep away the issue of defaults but defaulters piled up more debt obligations thereby pushing the country near to insolvency, barely staved off by a dozen or so standby facilities of IMF during 1990s. The process is still ongoing.

45. There are some redeeming features in post privatization era. In a turnabout from past practices of nationalized banks, in current times of market based banking, privatized banks had to adopt strict lending policies and procedures to ensure that loan defaults and loan losses are kept to a minimum to protect equity of the bank. Loan defaults are no longer a pass-on procedure to government budget as they were during nationalized banking. Now, when defaults occur, they are sole liability of lending bank and their owners. This is a significant reversal in patterns of lending.

Section 4: Financial Regime

1. Operations of financial system are governed by ***financial regime***, consisting of a wide spectrum of laws, rules, regulations and procedures governing institutional finance, mainly banking finance, and operations of financial markets under legal and regulatory framework. This framework is stipulated by the central bank, SBP in Pakistan, for financial operations of each category of institutions, and by securities and exchange commission, SECP in Pakistan, for operations of financial markets. These two regulatory authorities are responsible for oversight, regulation and supervision of financial institutions and markets.

2. Briefly, for ***indirect finance*** involving financial intermediation, financial regime is focused on the following:

- chartering, licensing, and establishment,
- terms and conditions of financial intermediation,
- deposit taking activities, borrowing operations
- the system of credit and operations of credit markets,
- the structure of interest rates both on the deposits, credits,
- compliance with operational rules, regulations,
- financial disclosure and reporting.

3. On the side of ***direct finance*** involving financial markets, focus of financial regime is on the following:

- terms and conditions of market participation both in the primary and secondary markets by issuers of securities, sellers, buyers, brokers and underwriters,
- system of trading, listings, rules, regulations and practices,
- reporting and disclosure, corporate governance,
- structure of interest rates; their determination and impact on operations of financial markets.

4. At the system level, these elements of financial regime determine mobilization and supply of financial resources; availability and allocation of financial resources among end-users; and in between, financial regime determines process of financial intermediation, costs and returns associated with the use and supply of financial resources. These laws, rules, regulations and directives, *namely the financial regime,* as stipulated by various layers of regulatory authorities affect operations of financial institutions right from their inception and establishment, all the way down to their sale or merger, demise or closure at the time a financial institution is in its death throes.

5. The most powerful instrument of financial regime is ***monetary policy*** of the central bank and its implementation, affecting interest rate structure and banking system credit and liquidity. The orientation of monetary policy profoundly affects supply and availability of banking credit, the central element of financial intermediation. Interest rates and system liquidity also impact operations of financial markets. Thus scope and range of financial regime is pervasive in regulating and controlling a diverse group of financial institutions and their activities. There are various types of instruments of control of financial intermediation activities. In parallel, there are rules and

regulations covering business activities of banks as financial institutions. These two parts of financial regime represent a unified framework of financial control, and therefore, are part and parcel of financial system. Financial regime that governs financial intermediation has been covered in relevant chapters of this volume. Financial regime governing operations of securities markets is discussed in Volume II. The combined impact of financial regime on operations of financial system is discussed in the last two chapters of this volume.

Financial Regime - Orientation

6. At system level, orientation of financial regime could be ***open*** and ***liberal,*** thereby encouraging wider participation, greater mobilization and availability of financial resources at market determined cost and pricing structure determined at a level playing field for most participants, if not all. Or this orientation could be ***repressive*** stemming from a range of financial policy controls and regulations, thereby constraining vibrancy of financial system; it may even jeopardize its financial health and solvency. At institutional level, financial regime critically affects outcome of financial intermediation activities thereby affects profitability, soundness and solvency of financial institutions.

7. In the context of financial intermediation, open and liberal policy regime is a precondition for efficient and competitive business of banks and other financial institutions. The open and liberal policy regime, by and large, provides funding to businesses and households as per their creditworthiness and at market costs, thereby ensuring transfer of resources from savers to users. In the context of financial markets, open and liberal policy regime is a precondition to foster a competitive market, conducive to enhancing the size of financial resource generation and their transfer through a variety of securities and their own markets.

8. This requires a balanced system of regulatory framework governing operations of financial system, without being intrusive or repressive in its impact, the way it was in the days of nationalized regime. After reforms, the current regulatory system is elaborate and is backed by a legal structure providing recourse to jurisprudence that helps to ensure fidelity of financial contracts without which financial institutions and markets would not be able to operate properly, much less foster availability and growth of various types of finance in the economy.

Financial System Attributes

9. Whatever the orientation of financial regime may be, it has a great deal of impact on ***attributes*** of financial system. First among these, a financial system is considered ***efficient*** if it optimizes financial resource mobilization from suppliers and its allocation across different categories of users at market determined costs. This feature in turn helps to optimize overall returns. Such a system is characterized by market-determined interest rates both on the deposit side and lending side; a process of financial intermediation guided by market determined returns; and a credit system largely free of interventions thus ensuring optimal use of credit. Efficiency of financial system is gauged by costs of financial intermediation, provided these costs are market based and are minimized relative to size and level of financial resources mobilized and allocated.

10. A ***healthy financial system*** is a prerequisite to efficiency of operations. A financial system is healthy if a large number of financial institutions holding the bulk of assets are sufficiently strong in financial terms. That is, their capital base is strong and they satisfy prudential and regulatory norms with respect to capital adequacy and loan provisioning; they have sufficient amounts of reserves, both statutory and prudential reserves; their balance sheets have tolerable levels of risky assets; their client base is financially strong to ride out cyclical adversities.

11. A financial system is considered ***liberal*** if it is relatively free of government interventions and controls, thereby allowing market forces to determine pricing and allocation of financial resources, which in turn is likely to result into healthier and stronger institutions. This will happen if interest rate structure and credit allocation are not subjected to administrative rules in contravention of market trends. A liberal financial system is opposite of ***repressed*** financial system where intervention and controls are rampant, preventing financial institutions to undertake activities that may be superior to those permissible.

12. A liberalized financial system is likely to be more ***open*** because of lenient entry or exit rules and a level playing field, thereby enabling new institutions to join and permitting those with endemic weaknesses to close down operations. In open financial system, new institutions are not prevented entry by an outright ban or through a restrictive system of licensing, ownership and chartering, or through prohibitive capital requirements. A financial system may be partly open, allowing domestic owned intuitions to be chartered and established, but may be closed to

foreign owned institutions through outright ban, or through layers of restrictions applicable only to foreign owned financial institutions, through special procedures for approval, licensing and chartering. Under liberalized financial system, ***size of operations*** is likely to be larger because of level playing field and open business opportunities to all participants rather than a favored few. A liberal system provides greater freedom to innovate and expand the scope of financial services being offered, and therefore permits introduction of a wider variety of financial products and services. A liberal financial system encourages competition among institutions, thus ***enhancing efficiency*** of financial services. Among all these attributes, ***solvency*** of financial system is critical as discussed in chapters 12 and 13 ahead. It is interpreted as strong asset and income base, which translates into capital adequacy, manageable loan portfolio risk exposure within tolerable levels of NPLs, burden of provisioning and loan losses.

Section 5: The Role of Financial System *in a Developing Economy*

1. Financial system of an economy in its simplest form is manifest image of ***real*** economy; ***real*** in the sense that whatever transpires in productive sectors, gets captured through financial transactions at one stage or another. Hence, ***real*** macroeconomic magnitudes such as real GDP, real production, real wages and so forth have their counterparts known as macrofinancial variables and are derived by deflating the nominal values of these macroeconomic aggregates. Since transactions involve nominal prices, they are a bridge between macrofinancial variables in nominal terms and *real* macroeconomic variables. This counterpart imagery ends here.

2. In real world situation financial magnitudes are encountered first, and their real value counterparts are arrived at by manipulating nominal values of economic or financial variables subsequently. For example, in any real sector market, nominal prices rule the behaviour of producers, suppliers, sellers, intermediaries of all kinds and eventually behaviour of the final users of the products of real sector. Likewise, all policy and control mechanisms operate via financial magnitudes, that is, via financial system; not the other way round. More importantly, nearly all policy and control instruments are calibrated in monetary terms, not in real terms; interest rates, tax rates, prices of vital commodities they are all quoted in nominal terms not in real terms.

3. Therefore, whatever happens to the financial system has an immediate and direct impact on the productive sectors; the real sectors of the economy; not the other way around. For this reason alone how the financial system operates, how well it does and whatever transpires within the financial system, is vital for the understanding of the real economy, namely its productive sectors; in particular, how they behave and how they are affected by the operations of financial system. For example, changes in banking liquidity levels and flows of credit are mirrored into operations of corporate and business sector, regardless of their level of operations, namely large or medium and small enterprises, and regardless whether they belong to private sector or to public sector. Access to banking liquidity and timeliness of banking credit could spell the difference between survival or demise of business, specially those operation on short strings. Just observe the feverish activities to contain the spread of financial crisis among the weaker members of European Union.

4. The central role of financial system in developing countries, is to support economic development, employment generation and poverty alleviation through an efficient resource transfer; so it is in Pakistan. ***Learning*** about these processes is essential and more rewarding than glossing over the chronology of economic growth in any country context Economic development and poverty alleviation are perennial issues, and will remain here for a long time to come. These issues were somewhat mitigated during the first half of the decade, in part owing to extraordinary confluence of good economic management, governance of integrity and development in the wake of 9/11 events. This confluence of favourable events, random as it was, expired towards middle of the decade, and the same issues of rising inflation, anemic growth, huge current account deficits, devaluations, and a phenomenal rise of public debt have returned. Poverty has not been alleviated in Pakistan; if anything, ***relative poverty*** of lowest income groups is rising in current times.

5. For sustained economic growth, ***investment*** is critical among other factors. Most often investment is interpreted as accumulation of ***physical capital*** stock like infrastructure facilities, notably energy and transport, investment in production capacity of existing plants together with investment in machinery and facilities in new industries. Much attention is devoted to this type of investment, and not enough attention is given to investment in ***human capital***. In modern times, accumulation of physical capital is no guarantee for sustained growth unless it is accompanies by investment in education and training. Highly skilled and trained manpower is critical for growth in modern times for internalizing technological transfer

and growth. Investment in human capital has been long neglected in Pakistan whose consequences are beginning to have a telling impact on prospects of future growth. Additionally, Pakistan has suffered relatively more from brain drain because of migration of its highly educated and skilled people drawn from a relatively small group to begin with for historical reasons.

6. It is ironic that a developing country hobbled with shortages of skilled manpower ends up subsidizing advanced countries by exporting its educated and trained people abroad. Pakistan has incurred large amounts of costs of education and training on this outward bound group, while ignoring universal primary education, specially girls' education, and allowing a slide in educational standards because of lack of trained and capable teachers and facilities. A neglect of investment in human capital of this type is a binding constraint to future growth. This discussion will take us too far away from the theme of this book.

7. Returning back, the issue is how financial system can promote investment. For infrastructure and industrial units, it is easier to figure this out; but not for investment in human capital. That is, banks are not about to start lending to students to complete their education. Educational loans are difficult to extend in advanced countries without some sort of parallel guarantees or collateral, not to speak of a developing country like Pakistan, regardless of how much evidence is piled up for life time increase in earning capacity of educated and trained manpower vis-à-vis those left out of educational stream. Investment in new plants and machinery is credited with much of the growth of more successful developing economies, but they also invested heavily in human capital to enhance skill base of their labor force.

8. Whatever development role of private or public sector one could think of in the post-reform era, it involves mobilization and allocation of resources at the first layer, which brings us back to the role of financial system. A layer below, financial strength, soundness and solvency of the financial system is essential, since financial system is the conduit of lifeblood of any economy. Contrary to perception that whatever financial institutions and financial markets do, those better be left to bankers accountants and brokers since those are their preoccupations; but their performance is critical since it affects financial well-being of everyone in profound ways.

9. This is not widely appreciated. Instead, every so often financial system of Pakistan has been turned upside down, with an astounding disregard to how inimical the transformation could be to the economy. Just witness the

upheavals brought about by nationalization of financial system during the 1970s, and further upheavals in the process of undoing the nationalization over the past two decades. Privatization of public sector companies is still ongoing, but it has not restored operational capabilities of several units which was anticipated at the time of their sale to private sector.

10. The issues and implications emerging from this overview can be summarized into two concerns; first, how to promote a healthy growth of financial system, and second, how to ensure its stability. Both these concerns take us back to central role of financial system; resource mobilization, and resource transfer and allocation and their mechanisms. By and large the transfer of financial resources between suppliers and users within the economy has improved after privatization of financial system, but terms of allocation remain an issue. How financial system goes about these processes is significant to all; be they households, government and its entities, corporate businesses or SMEs. Income distribution has been aggravated, not because mechanisms of financial system are flawed; but because allocative mechanisms of financial resources has weaknesses that need to be rectified. This is elaborated in the chapters on credit system ahead.

Chapter 2: Basics – Concepts, Definitions Macrofinancial Analysis

Thematics

Money and Price Level

Money and Value: Nominal vs Real
Monetary Aggregates; *M1, M2, Reserve Mon*ey
Money, Currency: how it is created, *Seignorage*
Money Supply – Pakistan, a Primer
Inflation and Price Level

Macrofinancial Analysis

Approach: Interdisciplinary,
Macroeconomics, Financial Management,
Accounting, Systems Analysis

Macrofinancial Aggregates, Accounts
System of Aggregation – Stocks versus Flows
National Accounts; Flow of Funds Accounts; Financial Accounts
Banking System: Assets/Liabilities, Financial Statements, Portfolios
Financial Market Aggregates; Capitalization

Analytical Structure – Indirect Finance, Financial Intermediation
Supply and Demand of Funds (suppliers, users)
Banking System Operations, Savings mobilization, Lending
Market clearing mechanisms; interest rates
Central Banks' role; interest rate and exchange rate interventions

Analytical Structure – Direct Finance
Securities markets; bills, funds, bonds, stocks
Money & credit markets; funds markets, market participants
Market processes & participants; market clearing mechanisms
Markets: Stock Exchanges, OTCs, Market Capitalization

Open Economy Linkages; International Finance and Markets
Capital flows, foreign investment, external accounts
Short term inflows; Impact on Banking Liquidity

Chapter 2: Basic Concepts
Definitions, Macrofinancial Analysis

Section1: Money

"We Musalmans in general and young men in particular do not know the value of money. A paisa saved today is two paisas tomorrow, four paisa after that and so on and so forth. Because of our addiction to living beyond means and borrowing money we lost our sovereignty over this Sub-Continent…"
…….Muhammad Ali Jinnah in Ziarat, Balochistan, 1948

1. ***In classic sense,*** money is defined as a measure of value, a medium of exchange and a store of value. While this definition holds true, it is insufficient for several reasons. For example, cash is held for anticipated needs over short periods; this temporary holding of cash is to meet liquidity needs, foreseen or unforeseen. Beyond immediate transactional needs, cash is not normally used to store value since it is a poor medium of storing value which erodes away over time with inflation. Besides, keeping cash is hazardous and there are superior instruments of short term savings available than cash savings. How long cash is held as savings balances depends on time -based needs of households, businesses and government.

2. ***In economic sense*** and in applied context, cash or ***nominal money*** is a unit of account and it does not have any intrinsic value of its own being ***fiat money***; but its counterpart, ***real money,*** represents purchasing power of money, hence command over real goods and services, where real money is nominal money adjusted for inflation over time. At the start of a given time period, nominal money balances and real money balances are the same; but as general price level increases over a period of time, real money balances decrease by the rate of inflation during this period; meaning, purchasing power of nominal money decreases. Consequently, the same basket of goods and services that was purchased in the starting period can no longer be purchased with same amount of nominal money. This is as basic as one can get to explain what money is, though the distinction between ***real*** and ***nominal*** remains to be clarified.

3. Briefly, aggregate of ***real money balances*** is one of the key variables arrived at by adjusting ***nominal money balances*** with a deflator for changes in ***general price level***, usually the consumer price index, CPI. In so far as real money balances reflect command over resources, namely goods and services, there are costs and returns associated with holding of real money balances. The implicit cost of holding real money balances is the erosion in real value of money because of increase in general price level over a given time period. General price level is always rising as measured by rate of inflation. Its movements are always upwards; hardly downwards. *(see Real vs Nominal)*

4. The size of nominal money balances held by cash holders, mainly the households, depends on their income level and other factors, notably upon their inter-temporal time preferences for consumption or savings. If consumption is postponed at a give level of current income and money is held as balances of savings, this preference entails a loss of value over time owing to inflation. Unless return on savings balances via interest rate earned on deposit instruments is the same as erosion in its value through price increases, savers suffer a loss in the real value of money balances held as deposits of banking system. Beyond deposits, money balances could be deployed as investment into financial assets of various types through operations of securities market; or money balances could be used for acquisition of non-financial assets like real estate, property or gold. In cases like these, we slide into another realm where considerations of real versus nominal money balances take a back seat, replaced by considerations of risks and returns on investments. Hence, classic definition of money is insufficient characterization of money unless real value of money is referenced with time line, inclusive of changes in the price level. This is one component affecting ***time value of money;*** the other component is return on money or near money held as short term asset.

5. ***In financial sense***, money, near money, or cash is a short term liquid asset. Money commands a premium and has a return if held as deposits or if held as near-liquid financial asset. These returns, howsoever small or large they may be, are like returns on any other financial asset. For those seeking cash for temporary liquidity, this liquid asset, money, has a cost of acquisition in money market. If cash is obtained by discounting treasury bills, its cost is the amount of discount applied for remaining maturity period of treasury bills. If cash is bought in the inter-bank call money market, it is a very expensive type of institutional cash loan, where interest rate is often higher than prime rate of interest in times of tight liquidity.

6. No matter how money is interpreted, money consists of currency and banking deposits, which defines ***money supply***, popularly known as M_1 or narrow money; or as M_2, broad money. Whenever the term ***money*** is evoked in common parlance, almost invariably it means only cash or currency, not banking deposits, which ironically are the largest part of money or money supply; while currency is only a part and a much smaller one at that. This tilted and partial focus in daily routine is source of much confusion; and that is why money is dismissed as simply a 'piece of paper', implying something worthless which it is not, otherwise why anyone would nurse a wad of notes. The contradiction escapes notice of many including those well educated.

7. In money markets, money is traded like any other asset, except that it is usually for short time. For those trading call money funds or interbank money funds, money is not a worthless 'piece of paper'. For the traders in funds market, ***money is liquidity*** whose shortage at the close of business of day could mean a cost to financial institutions who find themselves at the short end of liquidity levels required in daily operations. A good deal of trading in money market for liquidity involves treasury bills, bought and sold on discount basis for maturities of 90 days or less. For those trading first class commercial papers, like bills of exchange, bankers' acceptances, treasury notes of short maturities and the like, much of trading for liquid funds is on discount basis, depending upon the depth of money market and availability of tradable short term instruments.

8. In Pakistan this myth of ***paper money*** persists, especially among proponents of Islamic banking in a literalist interpretation of what money is, though there is no consensus on this issue. Ironically, Islamic banks are not immune to vagaries of liquidity levels, and they also routinely access short term funds markets at its own terms, namely call money rates or interbank rates prevailing in the market. In the times of liquidity shortages, money is no longer 'paper money' for Islamic banks. Money balances held as deposits in profit and loss accounts are liabilities of Islamic banks, much the same way as they are for all other banks. The counterpart of these liabilities are assets that are generated by use of these deposits to onlend through various financing modes; or through operations of money markets where near liquid assets are acquired, or through investments in securities markets, or through acquisition of various types of tangible assets. This transformation function of liquid money balances held by Islamic banks in essence is the same as performed by mainstream banks. There hardly is any difference.

Nominal *vs* Real - *A Primer*
Value of Money

9. In its simplest form, the distinction between *nominal* versus *real* money balances is the same as described above. In applied studies of financial system, we deal with nominal values of macrofinancial variables dealing with aggregates like deposits, credit, investment and borrowings built upon institutional level operations at micro level. For macrofinancial analysis, we move away from micro level financial magnitudes of individual institutions to their aggregates at macro level. These aggregates in their simplest form are manifest image of magnitudes underlying the ***real economy,*** the productive sectors, at any given point of time**,** because whatever transpires in productive sectors eventually gets captured in financial magnitudes whenever transactions occur in product markets or factors markets. To understand these interlinks between financial system and the economy, it is essential to comprehend how various components of economy function; how the economy operates on a day to day basis; how these operations are captured in financial flows at firm level or institutional level, and how they get aggregated to analyze their composite behaviour at macrofinancial level. These interlinks are fairly complex and need to be explained as attempted here in outline.

10. In macroeconomic studies, we routinely deal with aggregates like GDP consisting of quantities of output of goods and services, GNP, national income, disposable income, savings, and investment. All of these real magnitudes get captured first in ***nominal values***, or ***financial values*** based on trading and transactions that occur all the time in markets; whether product markets or input markets. As transactions occur in productive sectors like agriculture, industry, energy or other sectors, those get translated into financial flows which are traceable. Some of these flows may get lodged in one or the other corner of financial system. Subsequently, for purposes of analysis of economic trends over a given time period, nominal values of production and their aggregates, the ***nominal variables,*** are adjusted by a price deflator, a price index, to arrive at their counterpart ***real variables***, which are interpreted as quantity magnitudes. Prices prevailing in the economy act like a bridge between these two realms; viz, nominal and real. This counterpart imagery of ***real*** and ***nominal*** always exists and needs to be brought out in open. Implications of this imagery are known but are not widely discerned.

11. For a given time period, magnitudes of productive sectors, the real economy, are expressed as quantities; for example, so many tons of wheat or rice, or so many tons of steel. These quantities have their counterparts in financial magnitudes. These financial magnitudes are governed by ***nominal prices*** rather than real prices, where nominal prices and financial flows rule behaviour of producers, suppliers, sellers and intermediaries of all kinds. Eventually, nominal prices also govern behavior of final users of these products and services in an economy. Behaviour of producers and users are captured in financial flows of various types; but producers and users operate within their own pricing regimes, and have their own markets, be they product markets or input or factors markets.

12. Whenever economic or financial policy interventions occur, their mechanisms operate through financial magnitudes not real magnitudes. All policy and control instruments and policy parameters are calibrated in monetary terms, not in real terms. Price level, interest rates, or tax rates are all quoted in nominal terms, not in real terms. Policy interventions cause changes in nominal levels first; thereafter, their impact filters down to operations of productive sectors or real sectors of the economy. The regulatory mechanisms deployed operate in financial magnitudes, not in real magnitudes. The mechanisms of intervention operate mostly through financial system and its markets; be they any segment of money markets, loan markets, deposit markets, or market for securities and stocks or their derivatives. Underlying financial markets are flows of nominal money balances; whose counterpart are real money balances, or the real economy, which defines constraint or opportunities for market operations.

13. Therefore, whatever happens to financial system owing to controls or regulation has an impact on productive sectors of the economy. Hence, how financial system operates and how well it does and whatever transpires within the financial system, is vital for understanding the impact of control parameters on real economy. For example, changes in interest rates, banking liquidity, and flow of banking credit are mirrored into operations of businesses and corporate sector, regardless of their level of operations in any sector of the economy they operate in, and regardless of whether they belong to private sector or public sector. Access to credit market for liquidity and its timeliness could spell the difference between success or failure of a business concerned, specially those operating on short strings. Businesses and individuals operate in the realm of ***nominal values.*** That is all that concerns when it comes to an understanding of what markets do, be they product markets, factor markets or financial markets. What happens to ***real values*** is not the main preoccupation.

14. Take the case of a household. Start with a nominal money balance of say Rs 100,000 held as cash by this household at *end* of the year, y_1. Further, assume that these holdings of nominal money balances remain the same at end of the year y_2. That is, there is no increase in household savings. The price level is represented by CPI index of 100 *at end* of the year y_1, but because of inflation of during y_2, CPI index has increased to 124 at end of the year y_2, meaning an increase in general price level of 24 percent.

	end of year y_1	end of year y_2
Nominal money balances	Rs 100,000	Rs 100,000
CPI index	100	124
Real Money balances *if i = 0*	Rs 100,000	Rs 80,645

15. Given these parameters, let us work out *real money balance* at the end of y_2. Note that nominal money balances and real money balances are the same for initial period y_1, but real money balances have gone down a year later in y_2 because of increase in general price level, namely inflation. A decline in real money balances is to be interpreted as a decline in time value of money owing to increase of general price level, which is not compensated for by rate of interest, since it is zero in this illustration. This represents simplest relationship between money and price level.

16. Now, introduce rate of interest. Suppose nominal balances of Rs 100,000 are held as deposits, but the interest rate on deposits is zero, then the holdings of *nominal* money balances of Rs 100,000 remain unchanged at end of year y_2. If rate of interest on deposits is 5 percent, then nominal money balance at the end of y_2 will be Rs 105,000, and given that rate of inflation is the same 24 percent during y_2 as before, then value of real money balances will be Rs 84,677 at end of the year y_2. Real money balance have decreased but not by full 24 percent because of rate of interest of 5 percent.

	end of year y_1	end of year y_2
Nominal money balances	Rs 100,000	Rs 105,000
if i = 5 %, that is, nominal RR is 5%		
CPI index	100	124
Real money balances	Rs 100,000	Rs 84,677
Real Rate of Return (RRR) = -19.4 %		

17. Note that if inflation and interest rates are positive, the time value of real money balances changes by nominal interest rate adjusted for inflation by the CPI index, though nominal balances change by the rate of interest

prevailing during the same time period. This adjustment factor is *negative,* meaning that real rate of interest is negative by 19.4% in this simplified case. Therefore implications of negative real rates of interest are significant for investors' behavior.

18. The above results obtain in a closed economy. If the economy is open to foreign trade entailing large inflows and outflows of financial balances in foreign currencies at free floating exchange rates, unrestricted services payments and open capital accounts, as is the real world situation, then money, prices and interest rates are strongly affected by these international financial flows. Nonetheless, the underlying relationships between these elements affecting nominal and real money balances remain the same in their fundamentals; they just become more complicated presenting a challenge to a central bank for monetary management. The outcome of corrective measures opted by the central bank becomes more uncertain in an economy open to foreign financial flows with consequences for economic and financial stability. The concern remains with value of money over time and is affected by domestic and foreign price level trends.

19. No topic has been so thoroughly debated as *value of money*. There is no way to present a summary of this debate, though it is needed to figure out what transpires in applied realm. In routine transactions or in financial operations, money is treated as a financial asset. Hence, money has a cost and return like any other asset associated with it over time. In its basic version, this cost or return reflect market valuation of money balances as liquid assets and are interpreted as *time value of money.* The closest proxy to time value of money is to be found in rates of interest operative in wholesale money market which affects the entire structure of interest rates prevailing in the economy. Therefore, we need to have a grip on the concept of ***time value of money,*** arising from the premium for shifts in command over real resources over different time slices, as exemplified by maturity structure of market interest rates. For operational purposes, that is sufficient.

20. Next issue is how value of money can be protected from erosion both domestically and abroad by central bank operating under a liberalized and market based banking and financial system. In the past, this was the preoccupation of those entrusted the task of preserving gold standard, namely the sovereign. In modern times, central banks are entrusted this function as custodian of public confidence in the value of money. Domestically, maintaining value of money boils down to stability of the price level; while maintaining value of money abroad means ensuring stability of exchange rate.

Money: Fables and Folklore
A Digression

At this juncture it may be refreshing to move out of a priori constructs, the theoretical formulations, and take a peek at the opposite end of it, the folkloric perception of what money is and what it represents.

In a folkloric sense, money as commonly understood is currency and coins held by individuals, households, banks, businesses and companies, hardly more. Whenever the 'government' wants to increase money supply, the common perception is that 'government' simply prints more notes or mints more coins and circulates it in the public. Who in the government does it or how it is done is not the concern. Given that money supply consists of currency plus banking system deposits, where currency is about 20 percent of money supply and much of it is issued by the central bank, how the central bank goes about issuing currency is rarely well known. Likewise, given that banking deposits constitute an overwhelming 80 per cent of money supply, what if any thing banks do concerning supply of money is vaguely known outside the circle of bankers and monetary managers.

The folkloric analogy alluded to above quickly breaks down when it comes to corrective actions government needs to undertake to safeguard value of money. For example, in times of inflation, there is a fervent call to reduce money supply because 'too much money is chasing too few goods', , but how it is to be done and who will do it remains obscure. For, if money supply is to be lowered at times of rising prices and high inflation, it would mean lowering banking deposits in the literal sense because that is what most of money supply is. Does this mean asking households to withdraw their deposits from the banking system or desist from depositing more funds into their accounts kept with the banks. Or does it mean a banker will refuse to accept deposits because money supply needs to be reduced to control inflation. Of course, this does not happen. Similarly if money supply is to be increased, in literal sense it would mean enhancing deposits four times faster than printing notes at the press. That also does not happen. Money supply is simply not amenable to prevailing folkloric sense of what money is.

In the same vein, a common perception is that all the 'government' does is to print new notes and somehow dump it on the public. Lucky are the ones upon whom currency notes are thus showered, if indeed it so happens. That is why the popular belief that increases in general price level, inflation, occurs because there is 'too much money chasing too few goods'. Hence, all the 'government' needs

to do is to stop printing notes, and everything will be fine. Fractional reserve system is seldom heard of in these conversations, and what a central bank or banking system does or does not do is not widely known. A few curious may be vaguely aware that currency they are carrying in their valet is not issued by the government rather it is issued by central bank; it is a promissory note of central bank and not much more. Public at large is not aware of these nuances.

Likewise, there is a myth commonly believed by many that currency is convertible into gold because it is backed by gold. The popular notion is that if someone is holding currency notes and were to ask for its conversion into gold, the 'government' will oblige. Who in the government will do or how it can be done remains mysterious. Does it happen? Certainly it is never heard of. The myth of convertibility of currency into gold is powerful and it continues. The fact that gold is no more than four to six percent of total currency reserves, held by any central bank to backup the notes printed, is not known. If the general public were to find out that a number of central banks no longer consider their vast gold treasures precious enough for holding as assets for currency backing, it is likely to cause a price decline of major proportions.

At the opposite pole, there is a perception that currency is simply paper money, which does not have any value of its own as such; after all it is only a piece of paper. For most of those in this group, the view is that paper money is what it is, just a piece of paper with a blurred distinction between fiat money and paper money. Their debate about the nature of paper currency has gone on for a long time without a satisfactory resolution among themselves of what money is and how its value is derived at. Much of the discussion in Islamic finance revolves around this attribute of paper money.

Given this perception that paper currency is not worthwhile, the edict is drawn that asking more money over time in exchange for some initial amount of money; that is, asking interest to be paid on money is forbidden and ought to be prohibited. The irony of modern industrial organisation and mercantile based society is that money derives its value form financing of production and trade and is thus tainted with interest rate; but that is permissible and acceptable. The way of resolving this issue has been to relabel interest like charge as profits as discussed in Chapter 9.

Monetary Aggregates

Reserve Money: consists of currency in circulation, cash in bank tills and deposits of banks at central bank, the largest item of reserves.

High-Powered Money, or Monetary Base: is the same as reserve money plus currency or coins issued by the Treasury, the ***legal tender*** whether held by public or financial institutions.

Narrow Money (M_1): is currency in circulation plus demand deposits which is a part of ***money supply.***

Broad Money (M_2): is narrow money plus time deposits; hence broad money is the same as M_2 and it is ***money supply***. In practice M_2 is the standard term for money supply, interpreted as total of currency in circulation, demand deposits, time deposits and foreign currency deposits of residents lodged with the banking system**.**

M_3 : is ***M_2*** plus time deposits liabilities of non-bank institutions. ***M_3*** is also interpreted as broad money, though it is larger than M_2. How *broad* is broad money depends on items covered, including: liabilities of central bank namely reserve money, plus deposit liabilities of banking system, plus deposits and deposit like liabilities of non-bank financial institutions provided these are like term deposits of banking system.

Real Money: at macro-financial level, it is stock of money adjusted by price level; this aggregate represents real money balances reflecting command over real goods and services in a given time period.

Fiat Money: is currency notes or coins issued by Treasury as legal tender; or currency note issued by central bank which is like legal tender since it is widely accepted by all as a medium of exchange or used for payment of debts and obligations; but it is a promissory note not convertible into gold though it is backed in part by gold, but mostly by foreign exchange reserves and government securities. It is called *fiat* money because value of paper used in printing the currency or minting the coins is negligible compared to their face value.

Paper Money: it is fiat money if not backed by central bank's assets pledged for currency issue including foreign exchange, government securities and gold.

Reserve Money

21. Reserve money consists of currency in circulation plus cash held by banks for routine business needs called 'cash in tills of banks' constituting ***total currency*** circulating in the economy at any given time, plus deposits of banking system kept with central bank as reserves. The larger part of these reserves are *required reserves*. A modest amount of *prudential reserves* are also maintained by banks over and above required reserves to ensure sufficient liquidity for clearing and settlement purposes. The total amount of these reserves is the operational base of the banking system; and it is the prime control mechanisms concerning monetary expansion. Reserve money also includes foreign currency deposits of residents with the central bank but excludes deposits of government and non-residents. All these items of reserve money are liabilities of central bank. Therefore reserve money is *larger* than banking reserves only, maintained as deposits with central bank. ***Reserve money*** and ***banking reserves*** are two different magnitudes and should be dealt with separately.

22. The size of banking system reserves depends on required reserve ratio known as statutory reserve ration or cash reserve ratio, CRR, imposed by the central bank as per its regulatory function. In Pakistan, SBP requires different ratios of reserves to demand and time deposits; however, the average for ***all*** deposits of banking system was 5 percent during most of 2000-04, and then it began to rise. In middle of the decade it was 7 percent, and for 2008-10 period, it has been 9 percent. In addition, the statutory liquidity ratio, SLR, has been around 15 percent during the first half of decade and has been raised to around 18 percent in recent years. These two statutory requirements are powerful tools of monetary management and control since they impose a binding constraint on banking credit, hence on expansion of money supply.

23. Banking system reserves are held in interest free account with central bank; that is, SBP does not pay any interest on these deposits while banks have to pay some interest to their depositors though interest on deposits are fairly low. Interest income foregone on reserves is costly to banks concerned. Further, though the ratio of reserves to deposit base has been fairly low, it represents amount of liquidity no longer available to banks for lending. If they need more liquidity, they have to raise it at cost from money market or inter-bank borrowings.

Money - *How it is Created*

24. How money is created needs elaboration though it is one of those topics whose understanding is taken for granted. Since money supply consists of currency, about 20 percent, and banking deposits, about 80 percent, intuitively it seems that money creation must revolve around deposit creation primarily; both demand deposits and time deposits, followed by currency creation. How currency is created is discussed below, because the mechanisms of currency creation are different from that of deposit creation through banking system operations.

25. There is a good deal of discussion concerning *multiple deposit creation* in most monetary text books explaining how an initial increase in deposits leads to a multiple of original amount of deposits through lending where each successive round of deposit creation is smaller and eventually it tapers off. This is the liability side of banking operations. Hence, if money supply is to be enhanced, increase the deposit base initially, then process of multiple deposit creation will take over and money supply will increase which is monetary expansion. In practice, mechanism of monetary expansion works through credit extension which is asset side of the banking system, while deposits are liability side of the banking system. For increase in banking credit, banking system reserves have to be increased first. These reserves are part of reserve money which is at the center of expansion of money supply. An increase in banking reserves leads to expansion in banking credit, hence in banking deposits and thus an increase in money supply.

26. Banking reserves are of two types; borrowed reserves and non-borrowed reserves. Borrowed reserves are discount window borrowings of banks from the central bank for temporary liquidity purposes by pledging government securities for a very short period and buying it back, which in effect is the 3-day *repo* facility of SBP. At the time of transaction, SBP credits amount thus obtained by banks, and are debited after *repo* transaction is completed. Hence there is no net increase in banking reserves deposited with SBP. Increase in reserves occurs only when central bank buys back securities from banks and injects liquidity in the banking system as part of its open market operations (OMO). At the time of purchase, central bank credits reserve accounts of selling banks. These are non-borrowed reserves of commercial banks.

27. Therefore, when monetary expansion is called for, central bank buys back securities from banks thereby injecting fresh liquidity into the banking system. Since these additional reserves are non-borrowed reserves, they

enable banks to enhance their credit base, and eventually their deposit base. Note that when banks obtain currency from central bank for their daily business window operations, once again, these amounts are debited from bank's accounts at central bank, reducing its reserves. Therefore, obtaining currency at discount window operations of central bank does not enable banks to enhance their credit operations.

28. Growth of *reserve money* leads to the growth of money supply which typically is some multiple of *reserve money*, the money multiplier, the ratio of reserve money to M2. In Pakistan, money multiplier was 3 at the start of decade; it slightly increased to 3.4 in the later years of decade but has remained fairly stable. This means that a one rupee increase in *reserve money* will lead to three and half times increase in money supply. After the dust has cleared, the ratio of banking system credit to deposit base at the macro-financial level returns to its stable level of around 75 percent. That is why banking credit is somehow always three fourth of deposit base of the banking system - *multiple deposit creation* notwithstanding.

Currency – *how it is created*

29. As discussed earlier, currency has two components; one, the legal tender which is no more than a few percent of total currency in circulation at any time, and is issued by the ***sovereign***, the government. The other part of currency in circulation and much larger one, comprises of currency notes issued by the central bank, in Pakistan the SBP. Currency notes issued by SBP are of several denominations, sizes and colors, mainly held by public at large and some of it by the banking system.

30. The currency note issued by SBP however, is a ***promissory note***. It says so, on the face of currency note. The statement literally promises that SBP will pay on demand the holder of the note, but what will SBP repay remains obscure and says in a language that is difficult to decipher. Will SBP redeem its promissory note for equivalent worth in gold or foreign exchange; or, will it exchange a note with another note; a piece of paper exchanged for another piece of paper? In the past, this purported promise of SBP was expressed in an excruciating language, incomprehensible to many, for the reason that it remains an impractical promise to repay regardless of what nomenclature is used. In practice, in an interpretive manner, a central bank like SBP does make good on the promise, in spite of all the odds stacked against it. How it is done, needs elaboration given below.

31. The promise is redeemed in an entirely different way; by maintaining value of currency over time; the real purchasing power of the piece of paper, the note issued by SBP. That is all that counts; and that is the reason why SBP note is unquestionably a medium of exchange, acceptable to all for discharge of monetary obligations. Purchasing power of the note is a cornerstone of public's confidence in currency. The day this confidence wavers; that is, the time public comes to believe that the piece of paper they are holding is worthless, it will cease to be medium of exchange, and monetary system will collapse. In its wake, economy will collapse. This is the interpretation of central bank being the custodian of public's confidence in currency. This custodial function is redemption of the promise.

32. No such promise is etched on the ***legal tender,*** the rupee note of yester years, no longer to be found, as it was replaced by rupee coin of today issued by the sovereign, the Government of Pakistan. This is the crucial difference between legal tender and promissory note, utterly sanctimonious of its fidelity or invincibility over time. The coin or note issued by a sovereign has its own legitimacy, it always had throughout history. The legal tender is *sikka-e rae-jul-waqt;* literally it means the coin of times. The sovereign's *sikka*, the coin, does not require any legitimacy. It never did, neither in historical times nor now; it does not need any backing by gold or silver, nor any promise to repay whatever that may come to mean. It is the *currency* of sovereign; period.

33. Currency issued by a central bank, SBP in Pakistan, is the liability of SBP much the same way as any note or IOU issued by a bank is its liability. These liabilities are lodged in the balance sheet of SBP as part of overall liabilities of SBP. These liabilities must be covered by counterpart assets which are gold coins and bullion, foreign exchange reserves and government securities. These assets and liabilities are lodged in the balance sheet of Issues Department of SBP. Therefore, SBP can not just print notes and dump it in the country as commonly believed; it has to provide for assets in full value of currency notes issued. Among assets, gold bullion is a small part, ranging between 8-9 percent for most of the years over the past decade. *(Data Set 4.0)* Lately, this proportion has risen to around 12 -14 percent, not because more quantities of gold have been acquire by SBP as reserves; but largely owing to swift increase in prices of gold at the heels of global financial crises of 2008. In contrast, share of foreign exchange reserves in these assets has been volatile over these years. The share was high during FY03-07, ranging between 72-88 percent. After that, it declined to around 28 percent by FY10.

34. Likewise, share of government securities in assets has also been volatile during FY00-10, compensating for changes in shares of foreing exchange in total assets. These government securities are borrowings of government form SBP, and are a staple of money and debt markets consisting of treasury bills and government bonds. While issuing these securities, government and SBP both have to be cognizant of limitations of securities markets, while coping with outcome of budgetary operations and the needs of deficit financing in any given year. Given this composition of assets backing currency, SBP can not print notes unless it provides backing for new currency issue, in foreign exchange reserves in substantial amounts, government securities and gold reserves; in that order. The government can indulge in deficit financing, but there are limits to deficit financing imposed by composition of assets backing the currency.

35. Similarly, to assert that paper money is no more than what it is, just a piece of paper, is inappropriate for the reason that promissory notes issued by SBP is fully backed by assets as mentioned above. The government does not issue paper currency any more; it issues only coins in various denominations of five rupees or less. This legal tender is not backed by assets; these are coins minted and issued by sovereign, and it is stated unambiguously. This is *sikka-e rae-jul-waqt*, stated in legal documents at marriages as *meher*. Without this *meher,* the promissory note of the groom, signed and witnessed, no marriage stands solemnized or has any legal status. Now, that indeed is *sikka-e rae-jul-waqt*.

Seignorage

36. Perhaps these misconceptions have their origin in the power of sovereign to mint coins in old times, or to create currency in modern times, known as ***seignorage***. In the old days, seignorage involved issuing coins whose face value was higher than their intrinsic value based on the content of the gold or silver in the coin. Whenever an emperor or king defeated his opponents, the conqueror issued new coins with his skull image on the coin. It was not only a declaration of new sovereign; it meant collecting seignorage proceedings. New coins were not strewn in a public square; they were not showered upon newly conquered subjects as medieval paintings would suggest. New coins were used to buy goods and services, or were required as payments from peasantry while collecting rent from land or other levies imposed on the conquered subjects. It seems that emperors understood seignorage better than many do today.

37. In modern times, seignorage is the power of the government to acquire financial resources, and thus obtain resources through issue of currency, backed by gold reserves foreign exchange reserves and government securities. If currency issue is in excess of increase in total output of goods and services, such creation of money, a version of deficit financing, leads to inflation and consequent decline in the real value of currency, and hence in the real value of money, thereby creating a ***value differential*** accruing to the issuer government. This value differential is ***seignorage.*** The consequence of excessive creation of money beyond reserves or output is a decline in its real value. This is reason for assertion that paper money is not just paper money.

38. In international finance and monetary system, given rapid financial globalization, seignorage is accruing to those few countries whose currencies are strong and convertible, and are being held by central banks as foreign exchange reserves. These currencies, called ***reserve currencies***, mainly the US dollar, are used for international payments and settlements and also serve as the unit of account. These currencies are much sought after by the public for international transactions, liquidity or safeguards.

39. This reserve currency status confers a seignorage premium to US Treasury because, issuance of US dollar is anchored into its counterpart assets, mostly US Treasury securities, its general obligation to pay back in its own currency. The US dollar does not need any backing in gold, though its value was pegged to gold prior to 1971. Nor does it need any foreign exchange reserve as such, since it is reserve currency. Hence, US government can issue any amount of its securities without any limitation of gold or foreing currency reserves, limitations that are binding on issuance of currencies in many developing countries, including Pakistan. What this will do to US Federal debt, and what its consequences could be for the international value of US dollars is a different matter.

Money Supply: Pakistan - *a primer*

40. The following analysis is a summary of trends of monetary aggregates, M_1 and M_2 , the money supply, its structure and growth over the past decade. The discussion of monetary management and issues of monetary policy formulation and implementation in the context of maintaining interest rate and price stability is given in Chapter 14.

41. A long term view of these monetary aggregates is the staple of macro-financial analysis and has been undertaken here to ascertain their structural composition and long term trends, together with analysis of interrelationship between components of these aggregates. Both for regulatory purposes of monetary management and for operational purposes of money and currency markets, the focus is on short term movements in monetary magnitudes, because money and currency markets spin around fast, requiring close monitoring and quick fine-tuning response by monetary authority, the central bank. These market exigencies can not await reviews, much less a review undertaken for ***learning*** purposes. \1

42. Money supply in Pakistan, M_2, increased from an estimated Rs 1400 billion in 2000 to Rs 5777 billion in 2010 at an average annual rate of 15.2 percent. The rate of growth in first half of the decade, was slightly higher at 16.2 percent, but it slowed down to 14.3 percent during second half of the decade. *(see Data Set 4.0)* The long term monetary growth seems to present a serene picture but it is rather misleading because there has been a great deal of volatility in growth of M_2 during second half of the decade.

43. The largest component of M_2 is M_1, but M_1 series for the whole decade is difficult to construct because time deposits of 6 months tenor or less were reclassified as demand deposits in July 2006. Demand deposits are being reported in consolidated accounts of banking system and those are included here in *Data Set 4.0.* Currency in circulation constitutes close to 24 percent of M_2, and demand deposits another 34 percent of M_2. Thus currency and demand deposits, M_1, constitutes, roughly 58 percent of M_2, the money supply. This proportion has stayed stable throughout the decade even though M_1 has grown slightly faster than M_2 at about 16 percent per year. Much of growth in money supply occurred because of a fast growth in banking system deposits rather than currency. Deposit growth occurred in the face of declining nominal rates and substantially negative real rates of interest on deposits.

\1. Note there are data consistency problems arising from calendar year (CY) vs fiscal year (FY) reporting formats. As a rule, FY series has been used but if FY series is not available, interpolations of CY data has been used and duly noted. Occasionally, an aggregate may contain components which are a hybrid of these two reporting formats. This violates basic consistency rules, but since it does not jeopardize ***estimates*** *of long term growth or proportionate shares, it does not lead to erroneous assessment. Only intensity of changes modulate and those are noted as well. We have to live with such anomalies in applied studies.*

44. Currency has been a fairly stable proportion at around one fourth of total money supply during the entire decade. Likewise, demand and time deposits has also remained fairly stable over long periods at nearly three fourths of money supply. There have been annual variations in these proportions, but because of disjointed data series of M_1, it would be inappropriate to put forth analysis of changes involving middle years. Since M_2 represents liabilities of central bank and banking system, the deposit liabilities must be covered by assets of banking system and currency liabilities of central bank have to be covered with its counterpart assets.

45. Hence, analysis of components of banking system liabilities is needed to comprehend trends in money supply and consequences of monetary growth. This involves analysis of growth of banking system deposit since deposits constitute three fourth of money supply. Besides, we need to look into its long term trends of reserve money since it is the base for growth of money supply. Reserve money increased from Rs 498 billion in 2000 to Rs 1679 billion in 2010 at average annual rate of about 13 percent. *(Data Set 4.0)* This growth was volatile; for example, in 2008, the growth was 22.3 percent; next year there was a decline of 1.9 percent, all within 12 month period.

46. Therefore the 15.2 percent growth of money supply per year over the decade has to be taken with caution. Annual growth has not been stable. The reasons for volatility are to be found in monetary management that has been pursued by SBP in various time slices, in response to leading monetary trends. We have to rely on short term analysis of monetary magnitudes. For hat we have to go back to monthly or quarterly trends as they prevailed over the past decade with regard to changes in net domestic assets, NDA, and net foreign assets, NFA and their short term trends.

Inflation

47. ***Inflation*** is a persistent increase in the price level, thus enhancing expensiveness; commonly referred to in Pakistan as *ifrat-e-zar*, a misleading expression. It is measured by the consumer price index (CPI), the wholesale price index (WPI), or the general price index (GPI). The increase in general price level results in a corresponding decrease in the *real value* of a unit of money, and thus a decrease in real purchasing power of income, salaries, and wages. Inflation also causes a decrease in the real net worth of financial assets such as money balances and deposits with the banking system, and inexorably distorts consumption and savings patterns in an economy with consequences that may take years to ameliorate or to overcome.

48. Inflation is of various types. It may be ***cost-push*** inflation, stemming from rising prices of raw materials, indexed wages, or increase in energy costs; or it may be ***demand pull*** inflation, if domestic supply of goods and services is inadequate to meet the demand; or it may be ***imported inflation*** if import prices rise as happens in the wake of devaluations, provided imports are a substantial portion of domestic supplies and are critical to the economy, such as oil imports. Thus, inflation may emerge from various sources.

49. The root cause of inflation is excess of aggregate demand over aggregate supply; where excess demand is excess of expenditures, financed from borrowings, domestic or foreign. The excess demand may originate in the private sector or public sector, or both. For the private sector, there are limitations on excess consumption expenditures since ability to spend depends on income levels of households and costs of borrowings; whereas investment expenditures depend on private asset base, mostly equity, and expectations of profitability on investment undertaken. For public sector these limitations are not binding, because public sector can incur persistent fiscal deficits and and can finance its excess expenditures from domestic and foreign borrowings. If deficits of public sector is financed by borrowings from the central bank, it involves excessive issue of currency, hence creation of money and expansion of money supply. If issue of currency is backed by government securities without sufficient backing of gold and foreign exchange reserves, the increase in money supply could be large.

50. This excessive money supply is *ifrat-e-zar* in proper sense of this term. It is described as 'too much money chasing too few goods' and it is a critical link in the chain of inflationary consequences but not the basic cause of inflation nor its originating point. The basic cause remains excess demand. If excess demand of public sector is financed from borrowings form banking system or from public, the inflationary impact will not be the same as in the first case, though it will result in expansion of the banking credit and money supply all the same and cause inflation.

51. Inflation at moderate levels is a common feature though there is no consensus as to what is a moderate level. For countries like Pakistan, moderate inflation may mean price of 5-7 percent; but for other countries inflation of 2 to 3 percent is regarded very high, deserving strong anti-inflationary measures. Persistently higher rates of inflation cause economic chaos, a rapid erosion of purchasing power, and a redistribution of real income against fixed income group who suffer a major loss in their real income. Hence, inflation is seen as a regressive tax which affects fixed income and lower income groups much harshly than others.

Section 2: Macrofinancial Analysis

1. ***Macrofinance*** is study of financial system and its operations at aggregate level. It has its own analytical framework consisting of a set of tools and methods involving macrofinancial aggregates which occupy center stage in study of financial systems. Analysis is carried out in *nominal values* of aggregates of stocks or flows such as financial savings, deposits with banking system or NBFIs, banking credit, borrowings, investments in various types of securities or monetary instruments. The focus of analysis is their behavioral interrelationship, shaped by prevailing structure of interest rates or rates of return concerning financial intermediation activities or with reference to returns of financial assets, their market values and their trends prevailing in financial markets over a given period of time. A great deal of effort is made in estimation of macrofinancial aggregates because there are estimation problems owing to cross cutting classification; varying procedures and practices of financial disclosure.

2. Macrofinance is not corporate or banking finance, nor financial management of corporate variety, though it heavily draws upon them using standards accounting methods and procedures. In applied realm, it is a multi-disciplinary field of study, drawing upon economics, financial management, accounting, and systems analysis. Sometimes this filed of study is called ***financial economics*** since it draws heavily upon monetary economics, but monetary system operations and management is one of the mainline concerns in the study of financial systems; others are operations of banking system and financial markets.

3. The main objective is to enhance ***learning*** of how operations of financial system promote economic growth, and once this is sorted out, the next concern in almost all countries is how these operations impact on solvency, financial strength and stability of financial system. In current times, the US and European countries are struggling to ensure that financial crises they are facing does not degenerate further. There are ominous warnings of worsening trends in times ahead. We are not concerned with those issues immediately. Instead the focus of this study is on the essentials; that is how financial systems operate and with what results in the light of experiences of comparator countries which sheds a different light than stand alone studies do. The theory as well as empirical evidence of past four decades has established that operations of financial system could promote or retard economic development depending how their operations are oriented and what type of financial regime prevails.

4. This analysis of impact on economic development is conducted at system level with reference to leading macroeconomic and financial system trends, issues, policy and incentive regime. A great deal of attention is devoted to interventions of monetary and regulatory authority, the central bank which occupies a prominent role in the financial system, given its overarching objective of maintaining soundness and solvency of banking and financial system. The technocracy involves instruments and levers of control and their operational mechanisms; the tweaking of regulatory framework to re-orient operations of various segments of financial system; and their impact on stability and growth of financial system.

5. Financial system studies focus a great deal on the central bank, its levers of control on banking operations; banking regulation and supervision; structure of interest rates both on deposit side and on lending side; operations and mechanisms of banking system and other components of financial system such as nonbank financial institutions; currency market operations, system of foreign exchange, its control and mechanisms; institutional aspects such as legal infrastructure, system of entry and exit of financial institutions; and operations of financial markets.

6. Macrofinancial analysis at system level or in its disaggregated components, covers the following elements; objective being assessment and evaluation of operations and performance of various segments of financial system and their impact involving:

- financial system and its twin subsystems, namely financial intermediation or financial markets; their performance and trends; respective size and shares and changes therein.
- central bank and financial intermediaries; mainly banking system; role of central bank and its operations at managing financial intermediation.
- non-bank financial institutions; their operations and performance as a group, or subgroup; their role or contribution at system level; their trends, size, relative shares and changes therein.
- financial markets such as money and capital markets including long term debt markets and stock markets.

7. With regard to evaluation of performance, assessment of financial strength, solvency and stability of financial system, analyses are carried out at macrofinancial level with a greater degree of precision than is possible in case of macroeconomic aggregates whether in nominal or in real terms. The parameters of soundness and strength of financial system can be estimated at

any level of dis-aggregation and traced downwards to accounts of all financial institutions in the country, thus building a solid track of where the soundness or strength of financial system is arising from or where it is being compromised. This is a powerful system of analysis, time tested in applied context in various countries, both developing or advanced.

8. A similar type of analysis is conducted concerning financial markets with focus on implications for resource mobilization, allocation and transfer. Among these, operations of money and capital markets are reported with a great degree of accuracy and are analyzed at macrofinancial level. This is done to determine how these markets perform the function of transforming financial savings through investment into financial assets, the process of transformation, and effectiveness of market mechanisms. Subsequently, a good part of investment in financial assets of private sector eventually gets transformed into physical assets through equity and bond financing. The same can not be asserted for investment in government securities because much of financing is used for covering budget deficits. These operations are intertwined and need to be analyzed to determine their impact on financial markets, transfer and allocation of resources and their outcome in terms of economic growth.

9. Among these long term capital markets, operations of equity markets are significant. These are routinely reported and analyzed with various degrees of sophistication and depth, providing insights into the role of equity markets. How good are how effective these macrofinancial analyses are is a separate issue; the point is that there is a well specified analytical framework at system level that can be deployed to assess and evaluate functions and operations of financial markets, short of predicting market prices and their outcome. Recently, in the aftermath of stock market crises serious reservations have emerged why such analyses failed at identifying and warning impending weaknesses of financial markets that led to the crises. This debate is illuminating as discussed in Chapter 9 of **Volume II.**

10. Macrofinancial analysis has been around for a long time but remains an obscure branch somewhat even today, though it is gaining attention because it deals with the lifeblood of an economy. It came into vogue in the 1970s on the heels of financial crises in several countries that occurred with disturbing frequency in the aftermath of financial globalization, pursuant to demise of remnants of gold standard in 1971. These crises were invariably followed by massive financial rescue packages and foreign debt reschedulings. In this sense, financial system studies and macrofinancial analysis had a turbulent birth. This was followed by a de-linking of major currencies with fixed exchange parities backed in good part by gold, and the dawn of free floating

market exchange rates. In parallel, there occurred liberalization of foreign currency markets and foreign trade; start of global financial capital flows on unprecedented scale whose momentum has diminished in current times; and consequent scramble by money center banks for their presence in major financial markets globally and a realignment of system of foreign finance.

11. The analysis of financial system must build bridges with real economy and cross over to macroeconomic aggregates, because the end result of financial operations is increase in savings, investment and economic growth. Therefore, macrofinancial analysis has to contend with price structure prevailing in money economy, as well as with the prices of real goods and service prevailing in real economy, to arrive at meaningful conclusions with regard to usage of resources and its impact on output, employment and growth. While most economists are pre-occupied with real economic trends, financial economists have to traverse back and forth between the financial as well as real economic trends. Sometimes this distinction has been carried too far. Some economists think of money only as a veil, where only real magnitudes matter such as *real output, real money balances, real interest rates, real prices,* and other real variables when analyzing aggregate tends at macroeconomic level.

12. This feature of macrofinancial analysis, traversing between the realms of real economy and money economy, confers a powerful edge upon it. For example, consider analysis of savings in macroeconomics, the origination point of investment activity hence economic growth. In ex-post sense, savings and investment are an identity, and that is it. Savings are treated as a residual once marginal propensity to consume has been estimated and thus aggregate consumption. Theories like liquidity preference, or hypotheses like permanent income and life-cycle, explain aggregate consumption and savings, but they remain behavioral hypothesis of consumption and savings at macroeconomic level, tried and tested over time. That is the end of the line in figuring out where savings originate from. How savings end up into investment is not explored any further. In macroeconomic analysis, there is no mechanism of tracing down of savings and investment at micro level to figure out what is transpiring with regard to origination of savings; and how it is being transferred into various assets through financial intermediation and through operations of financial markets.

13. In macrofinancial analysis this is the starting point. That is, what are financial savings and how they originate; how these savings are mobilized by deposit money banks from household savers, the depositors at micro level. Having done that, one could identify deposits held by a single bank

and its aggregation at the level of banking system provided care is taken to keep track of stock and flow variables as done in Chapter 5. Deposits of banking system are reported as stock figures with great deal of accuracy. One could also identify savings mobilized by non-bank financial institutions and other deposit taking institutions. To these aggregates once currency is added, the domestic part of financial savings is arrived at. This is the traversing from micro level to macrofinancial level, and it is traceable at each level of aggregation, unlike savings estimated in national accounts as a residual of consumption from disposable income based on parameters like marginal propensity to save in an economy over a given time period.

14. A reverse traversing can be done from aggregate level; that is, from macrofinancial level down to household level which is even more revealing. In case of financial savings it is rather startling to trace down a single household saver, starting from macrofinancial aggregate down to some corner of banking system in the country, identifying the bank and its branch location where the deposit account is maintained. This is the traversing from macrofinancial level down to the micro level with well defined points of entry and exit for the simple reason that macro balances are built upwards from the micro level.

15. Correspondingly, uses of savings at macrofinancial level could be identified and decomposed into macrofinancial aggregates like system level credit or borrowings and investment and traced back to their origins in savings held as deposits by banking system. Among these, aggregate of banking credit are ***flows*** at macrofinancial level, reported by banking system on quarterly, half yearly or annual basis, or could be reported as ***stock*** of credit outstanding over a time period. Banking credit could further be decomposed in its uses by borrower categories or by sectoral destinations, or for the purposes it was extended, though not strictly consumption or investment in economic sense. This is traversing downwards with regard to allocation of financial resources.

16. As regards allocation of financial savings by the banking system, the largest part is banking credit held as loan portfolio, and a small but not insignificant part is invested into financial assets, mostly government securities held in investment portfolio, both at institutional level or their aggregates at macrofinancial level. Since a large part of banking credit is borrowed by corporate firms or businesses for their working capital needs, while some credit is for investment finance, and a smaller part may be for consumption needs as well, the usages could be identified at institutional level or its aggregation at macrofinancial level. That is, the aggregate of

banking system credit can be traced down the chain to a single bank, and eventually to a single borrower, who may turn out to be saver as well on other side of the ledger. Whatever part of financial savings is not used up by credit system, it gets invested into assets, traded in a variety of financial markets; mainly money markets, long term debt markets and equity markets.

17. This *traversing* between micro level and macrofinancial level is significant. That is, identification of banking credit flows at client level, or at institutional level and their aggregates at system level, enables identification of intervention points up down the chain on both sides of same phenomenon namely savings, credit or investment in financial terms which is not possible otherwise. The intervention is via ***pricing***, captured in the structure of rate of interest both on the deposit side and on lending side which gives a powerful handle to monetary managers to tweak the real economy in desired direction.

18. The real economy is very much around, namely the productive sectors, corporate businesses and firms, financial or non-financial, whose borrowing or investing is object of all the tweaking being done, but control operations and interventions regarding credit and investment are in financial realm. Macrofinancial analysis provides this confluence in a way no other discipline does and it confers a powerful edge which to those equipped with the technocracy of this discipline which is not available elsewhere.

19. The implications for resource mobilization, allocation, and transfer are immense since these are built into the structure of financial system and the way it operates. Implications for resource transfer from a society's perspective, rather than an individual's perspective, are far reaching and need to be identified and adequately addressed, apart from pure technocratic aspects of financial operations which seem to occupy much of attention of analysts as well as policy maker.

20. For system of ***Indirect Finance*** concerning financial intermediation, macrofinancial analysis involves evaluation of trends in macrofinancial aggregates and causes of changes therein, such as: deposits, credits, reserves and liquidity of banking system; borrowings of public sector and private sector from banking system; borrowings by the banking system to supplement its resources; structure of interest deposit and lending rates, and their movements in response to economic and financial trends and monetary management stance. At component level, macrofinancial analysis of ***Indirect Finance*** involves a number of items. Foremost, it concerns operations of banking system and non-bank financial institutions, NBFIs, concerning deposit mobilization and lending; analysis of banking credit; size, flows, sectoral

composition and financing of priority sectors. With regard to regulatory control or monetary management, macrofinancial analysis concerns with interventions of central bank and controls which impact on interest rates thereby affecting cost and usage of banking credit. With regard to banking liquidity levels, it concerns central banks money market operations together with operations of interbank markets undertaken to augment liquidity levels.

21. As regards financial regime, a major part of macrofinancial analysis is focused on structure of interest rates both on the deposit side and the lending side; operations and mechanisms of banking system and nonbank financial institutions; operations and control mechanisms of central bank and evaluation of regulatory mechanism; the system of entry and exit of financial institutions and institutional aspects; legal infrastructure; operations of supportive infrastructure like payment and settlement system. There is far more to it as we proceed with the applied analysis of the financial system, but in a nutshell, this is the outline of subject matter and main elements of macrofinancial analysis.

22. For ***system of direct finance***, macrofinancial analysis involves evaluations and assessments of operations of financial markets; analysis of trends and benchmarks; impact of changes in the interest rates and exchange rate on money, currency, bonds and stock markets. This analysis can be further extended using macrofinancial aggregates to uncover interlinks between money markets, specially market for treasury bills and repo market operations. The analysis also provides an assessment of size, structure, depth and trends of capital markets and its major components like bond and stock markets and levels of market capitalization.

23. Given open capital accounts and inflows and outflows of massive size of international finance, some analysis of size, structure foreign portfolio investments and its impact, or foreign direct investment and corresponding capital inflows has to be given. This is done in Chapter 11 of Volume II. A discussion of trading mechanisms is needed with focus on stock exchanges, over-the-counter and futures markets exchanges; analysis of activities of market participants and major investors; rules and regulations governing market operations and trading mechanisms.

24. In parallel, an assessment has to be done about the state of financial infrastructure supportive of investment operations via financial markets, such as rating agencies assigning values to relative creditworthiness of financial institutions as borrowers. There also has to be an evaluation of payments,

settlement and clearing mechanisms and institutions that are supportive of financial market transactions and their operations, together with evaluation of mechanisms of recording of tracking transactions of securities like bonds and stocks, their transfer upon settlement, backed by safekeeping of certificates of securities by institutional depositories.

Section 3: System of Accounts

1. Macrofinancial analysis relies on three systems of accounts: national accounts, flow of funds accounts, and financial accounts at institutional level and their aggregates at the system level. Among these, financial accounts and national accounts are most frequently used both in the theoretical and applied arena, while flow of funds may be deployed to show the status of financial flows, their origination and destination at the system level mostly for analytical or illustrative purposes rather than operational purposes. All these accounts provide a system of aggregation which are treated as *estimates* of the variables concerned because of data deficiencies, reporting problems or inaccuracies, conceptual or definitional conflicts in compilation of data in applied contexts. These measurement problems have occupied a great deal of attention of those concerned, but the body of financial system data reported is quite accurate and provides a solid basis for most analytical purposes.

2. A few clarifications are needed that cut across all three accounting systems. In the flow of funds accounts and financial accounts, analysis is done on the basis of nominal values, whereas analysis of most macroeconomic variables and some macrofinancial variables, is conducted in nominal and real values and these are extensively deployed in evaluation of performance and trends. The nominal values of financial or economic variables are measured in current prices, while their real values are estimated on the basis of constant prices which are price indices used as deflators of nominal values. How good is the real value depends on how accurate is the deflator in capturing price trends applicable to the financial or economic variables concerned.

3. The distinction between ***flow*** and ***stock*** variables has to be carefully noted since it is a source of confusion in applied context. The national accounts variables such as GNP or GNY and their components are flow

variables over a defined reporting period. Similarly foreign account entities reported in balance of payments are flow variables. Financial account entities are mostly stock variables, outstanding at the end of a reporting period, interspersed with flow variables. For example, income is a flow variable no matter which account is being used, but money supply is usually a stock variable. Savings is a flow variable in national accounts, but it is both stock variable and flow variable in financial accounts based on the aggregates of its components currency, banking deposits as discussed in Chapter 5. Stock and flow variables have been identified as such as far as possible.

4. The period of reporting or recording has to be specified since this is vital to applied analysis. Fiscal accounts are reported on fiscal year basis or parts thereof; while output, income, revenues and others could be reported on ***calendar year*** basis or ***fiscal year*** basis. Financial accounts are reported on financial year basis which mayor may not coincide with either of the two, but their aggregates are mostly reported on calendar year basis. A critical factor in financial accounts is the period of accrual of items like income or payment and is different from the period when income is paid or a payment is received in cash. The established convention of reporting of financial accounts is ***accrual basis*** rather than ***cash basis*** and their ***market values*** instead original ***book values*** as discussed below. This is even more pertinent in case of stock portfolios of banks, part of which have to be reported on ***mark to market*** basis as per regulatory requirements.

National Accounts – *basics*

5. The system of national accounts extensively used in *economics* provides estimates of macroeconomic variables like GDP, GNP, or GNY and their components such as consumption, savings, investment, government and foreign and further broken down in fiscal, monetary, and balance of payments accounts with their own components. These accounts and their entities are extensively used in macrofinancial analysis as listed below for both analytical and illustrative purposes. A discussion of national accounts, its underlying concepts and mathematical formulation is available in text books on macroeconomics or mathematical economics and are recommended to students and readers.

6. National account identities used in macrofinancial analysis are:

GDP, GNP, from production side

GDP(f) at factor cost = value of sectoral output; agriculture, industry, services, others
GDP(f) *plus* indirect taxes *less* subsidies = GDP(m) at market prices, or Q
GDP(m) *plus* net factor income from abroad = GNP(m) at market prices

GNP from expenditure side

GDP(m) *plus* net factor income from abroad = GNP(m) at market prices,

GNP(m) *less* indirect taxes *plus* subsidies = GNP(f) at factor cost,
GNP = pQ = Y = consumption + investment + government + exports and nfs, *less* imports and nfs (non-factor services)

GNP(f) *less* depreciation = NNP, or NY, net national income

therefore, National Income, or Y = wages and salaries + rental income + factor income + business incomes or corporate profits + net interest income.

7. Notice that GDP at market prices is the same both on production side and on expenditure side, but the national income earned denoted by Y is not the same as Q, the total output of goods and service valued at market prices because of the items deducted or added as shown above. Further, income earned by households in a given period is different from their *disposable income*, the income received and available for spending by the households or for saving. This is because of income tax withholdings, transfer payments received by households, earnings retained by businesses and corporate taxes paid, though included in Y as such.

8. Households also receive transfer payments from government such as pensions, interest on national debt, safety net payments like compensation for unemployment or welfare payments. Hence, personal income, Yp = Y, national income, *less* corporate taxes, retained earnings *plus* government transfers. Therefore, disposable income, Yd, is equal to Yp less income tax and is equal to household consumption plus savings. For applied analysis it is disposable income of households that matters, estimated as above through national accounts, since it is available for consumption expenditures and savings, where savings can be traced in up down fashion on macrofinancial side. However, savings thus estimated from national accounts do not match with savings estimated in macrofinancial analysis.

Flow of Funds Accounts

9. Flow of funds accounts determines sources of funds and their uses in an economy at aggregate level. These are financial accounts in nominal values for a given period. The account is a matrix that shows sources of funds and their uses within a sector as well as between major sectors of the economy grouped as households, business or corporate sector, government, financial institutions, and foreign sector labeled as ***rest of the world.*** Among these, households and corporate sectors constitute private nonfinancial sector; financial sector consist of the monetary authority, banking system, and non-bank financial institutions. Foreign sector includes summary of transactions conducted with the rest of the world.

10. The construction of flow of funds accounts begins at the sub-sectoral or sectoral level from income statement and balance sheets of businesses, institutions or organizations in a given sector or a sub-sector for inclusion in the flow of funds matrix. This is an aggregation process of financial values in nominal terms compiled from income statements and balance sheets, aggregated at sub-sectoral or sectoral level, and eventually at the level of economy. Sources and uses of funds within sectors or between sectors or their sub-sectors are inter-sectoral transactions constructed from balance sheets and income statements. Since income statements consist of flow variables over a defined period, while balance sheets consist of stock variables, balance sheet items have to be converted into flow variables for inclusion in flow of funds accounts by taking the difference of a variable between its value in the current period and its value in the previous period.

11. Flow of funds accounts are essentially a double entry system of account like a balance sheet, where sources of funds are the same as uses of funds for *all sectors* of the economy, much the same way as assets must equal liabilities of a balance sheet. Some sectors are in surplus, like the households, and this surplus is their savings, while other sectors may be in deficit like government or businesses who borrows those surpluses from households, or may borrow from the rest of the world, which they do. Therefore, while sources and uses of funds are the same, savings and investment for each sector is not the same for all sectors. Further, the transactions as recorded in the flow of funds account, show how the surplus is used by the sectors of origin; or the same, how the deficit is financed by those borrowing these surpluses. Hence, total borrowings and total lending in aggregate for every sector are the same because for every borrowing or debt, there is a counterpart entry of a credit of the same amount both at sectoral level and aggregate level.

12. Analytically, sources of funds for sectors may be grouped in following four categories:

- finances received, by sectors such as wages or salaries received by households, interest income, tax revenues of government, sales revenues of businesses;
- borrowings, recorded as increase in liabilities in balance sheets;
- real assets, sold and recorded as decreases in real assets shown in the sheets such as sale of a property, machinery or equipment;
- financial assets, such as sale of government securities, or withdrawl of deposits from banks, shown as a decrease in financial assets of the balance sheet.

13. Similarly, uses of funds which in some sense are the *counter flow* of above sources and these may be grouped in the following four categories:

- payments for current expenditures on goods and services, recorded as flow of expenses incurred by four sectors over the year,
- decrease in liability of balance sheet items; like repayment of debt,
- increase in real assets of balance sheet through fixed investment,
- and, increase in financial assets of balance sheet through portfolio investment of a sector or through lending of financial institutions.

14. These transactions involve financial intermediation or financial markets. If the government or business sector borrows domestically or from overseas, these borrowings are done through financial institutions who collect deposits domestically or overseas from households, the originators of surplus funds, and lend it to the borrowers, the users financing their deficits. This is indirect financing through financial intermediation. If the borrowers issue securities in the financial markets as government or corporate borrowers do, the households invest in these securities from their savings; or financial institutions invest in these securities from funds collected as household's deposits. This is direct financing through financial markets.

15. Flow of funds account culminate into estimation of financial saving at the sectoral level and then at the economy level, where saving is defined as the difference between receipts and expenditures. At the macroeconomic level and for the economy as a whole, flow of funds accounts show that saving is always equal to investment, though for the individual sectors this is not true because some sectors have surplus savings while others are in deficit. In its sectoral details, flow of funds account shows who generates

savings and how these savings are deployed in the economy; or the same thing, how much is used for investment and how much is used to finance deficits by each sector.

16. Flow of funds analysis thus helps to identify the point of intervention to correct imbalances observed, though in operational realm instruments and mechanisms of intervention and corrective actions are identified on the basis of macrofinancial analysis using financial accounts supplemented by national accounts rather than flow of funds accounts. Thus flow of funds account is a powerful presentation since it captures entire spectrum of operational activities of financial system and presents them for the economy as a whole. It could be as detailed as needed obtained from decomposition of main sectors of the economy, or it could be a simplified aggregated summary in a few lines of flow of funds matrix.

Financial Accounts - *Essentials*

17. Financial accounts consist of various financial statements, principally income statement and balance sheet as prepared by businesses and financial institutions. This is done in compliance of rules and regulations concerning disclosure requirements in adherence to established accounting conventions and standards and procedures. These conventions and standards include accounting concepts, principles and methodologies such as International Accounting Standards Board, or accounting conventions like Generally Accepted Accounting Principles, GAAP, adopted by accountants to maintain books of accounts, recording of financial transactions, preparation of financial statements, their verification and disclosure. In addition, there are accounting and auditing requirements stipulated by regulatory authorities for preparing and reporting financial statements and maintaining books of accounts, aimed at standardizing financial accountability and performance evaluation of businesses and financial institutions.

18. Financial accounts are reported on ***accrual basis,*** an established convention, though cash accounts are also prepared and regularly monitored. The accrual basis is a system of accounting where receipts and payments are entered into accounts at the time of transaction, rather than at the time cash settlement takes place. For example, revenues are recognized and entered into accounts when the goods or services are sold, independent of actual cash inflows or cash receipts for sale; likewise, expenses are recorded at the time expense is incurred, instead of the time of actual cash

payment. This is in contrast to cash basis of accounting, where transactions are recorded on basis of receipts and payments or actual cash inflows and outflows which may change the financial position for the accounting period concerned. The accrual basis of accounting is widely used in financial reporting and is part of GAAP.

19. The system of accounting is a vast apparatus of collecting, classifying, maintaining and reproducing financial information; hence, only salient elements of financial accounts are noted as deployed in macrofinancial analysis which are the building block of sectoral or aggregate financial accounts at the economy level. These are ***consolidated accounts*** of banking and financial institutions which are routinely prepared and reported such as the consolidated balance sheet of banking system, income, profit and loss accounts, expenditure accounts, portfolio accounts specially deposit and loan portfolios, investment portfolios, liquidity and foreign currency reserves. Consolidated accounts of financial institutions have been extensively used in the forthcoming chapters of this book, and various sets of performance indicators have been estimated, vital to analysis conducted here. A great deal of care has been taken to define and stay with basic concepts which occupy a central place in the analytical framework adopted here.

	Data Set 4.0	Monetary Survey					*Rs billions End Period*					
		2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
5	**Narrow Money, M1 \1**	**739**	**761**	**877**	**1106**	**1371**	**1618**	**1831**	**2173**	**2521**	**2894**	**3292**
6	Currency in Circulation	346	375	434	495	578	666	740	840	982	1152	1295
7	Deposits with SBP	8	11	14	4	2	3	49	7	4	5	7
8	Demand deposits \ 1	375	375	429	608	790	949	1086	1326	1535	1737	1990
9	**Broad Money M2 , Money Supply** \ 2	**1400**	**1526**	**1761**	**2078**	**2486**	**2961**	**3407**	**4065**	**4689**	**5137**	**5777**
10	Resident Foreign Curr Deposits, RFCDs	113	154	158	126	146	180	196	207	263	280	345
11	Time Deposits \ 3	549	611	727	846	969	1162	1380	1685	1905	1963	2140
12	**M3** = M2+ NSS Deposits	**2115**	**2288**	**2608**	**3236**	**3596**	**3987**	**4343**	**5069**	**5783**	**6498**	**7362**
13	***NSS Deposits, FY***	*715*	*762*	*847*	*1158*	*1110*	*1026*	*936*	*1004*	*1094*	*1361*	*1585*
14	**Reserve Money \ 4**	**498**	**533**	**585**	**670**	**773**	**909**	**1001**	**1210**	**1480**	**1508**	**1679**
15	Banking System Reserves	114	127	110	141	157	196	208	305	425	274	290
16	Total Currency	355	394	460	525	614	710	788	898	1051	1229	1383
17	*Money Multiplier (M2 / Reserve M)*	*2.8*	*2.9*	*3.0*	*3.1*	*3.2*	*3.3*	*3.4*	*3.4*	*3.2*	*3.4*	*3.4*
18	***Banking System Deposits, FY \ 5***	***1140***	***1276***	***1421***	***1682***	***2002***	***2428***	***2817***	***3373***	***3812***	***4138***	***4693***
19						**Ratios**						
20	Currency / M2	25.4	25.8	26.1	25.3	24.7	24.0	23.1	22.1	22.4	23.9	23.9
21	Demand Deposits / M2	26.8	24.6	24.4	29.3	31.8	32.0	31.9	32.6	32.7	33.8	34.4
22	Time Deposits / M3	39.2	40.0	41.3	40.7	39.0	39.2	40.5	41.5	40.6	38.2	37.0
23	Reserve Money / M2	35.6	34.9	33.2	32.2	31.1	30.7	29.4	29.8	31.6	29.4	29.1
24	Currency / GDP	9.2	9.1	9.8	10.0	10.0	9.9	9.5	9.5	9.4	8.8	7.7
25	M2 / GDP, *financial deepening*	37.4	37.1	39.8	41.8	43.1	44.1	43.8	45.8	45.1	39.3	34.5
26												
27	***SBP Policy / Discount Rate / BR \ 6***	*11.0*	*11.0-14.0*	*13.0-9.0*	*9.0-7.5*	*7.5*	*7.5-9.0*	*9.0*	*9.0-9.5*	*9.5-10-12*	*12.0-14.0*	*14.0*
28	*Cash Reserve Ratio, CRR, %*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*7.0*	*9.0*	*9.0*	*9.0*
29	*Statutory Liquidity Ratio, SLR, %*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*18.0*	*19.0*	*19.0*	*19.0*
30	*Banking Deposits (DD + TD) \ 5*	*924*	*986*	*1156*	*1454*	*1759*	*2111*	*2466*	*3011*	*3440*	*3700*	*4130*
31	***GDP (at MP, nominal)***	***3746***	***4108***	***4425***	***4974***	***5766***	***6716***	***7773***	***8881***	***10400***	***13082***	***16743***
32	SaF Data Set		Source: SBP Annual Reports data as cited below.									
33	\ 1 This is CY data; for 2000-06, **M1** data taken from AR04-07; for 2007-10, M1 is estimated, as SBP is no longer eporting it.											
34	\ 2 Broad Money data for 2000-06 from Table 5.1 of AnReports of 2004,2007, for 07-10 from 5.4 of AR of FY10.											
35	\ 3 Time Deposits estimated as = M2 less M1 Less RFCD deposits to maintain consistency with M2 levels reported by SBP prior to re-classification in July 2006..											
36												
37												

Data Set 4.0a **Monetary Survey** ***Rs billions, End of Period***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Currency - *Liability of SBP*	**374**	**393**	**458**	**523**	**612**	**706**	**784**	**893**	**1046**	**1232**	**1377**
Assets, of which: Gold	31	36	39	41	48	54	76	81	131	164	220
Foreign Exchange	60	111	245	459	514	484	567	698	451	344	479
Govt Securities	264	243	170	19	46	163	139	112	461	718	671
Shares, *% of Assets: Gold*	*8.3*	*9.1*	*8.6*	*7.9*	*7.8*	*7.6*	*9.7*	*9.1*	*12.5*	*13.3*	*16.0*
Foreign Exchange	*17.4*	*29.6*	*56.5*	*92.7*	*88.9*	*72.7*	*76.7*	*83.1*	*29.4*	*19.8*	*24.1*
Govt Securities	*76.4*	*64.9*	*39.3*	*3.8*	*7.9*	*24.4*	*18.7*	*13.3*	*30.0*	*41.4*	*33.7*
					Annual growth rates						
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Narrow Money, **M1**		3.0	15.2	26.1	24.0	18.0	13.2	18.7	16.0	14.8	13.8
Broad Money, M2, **Money Supply**		**9.0**	**15.4**	**18.0**	**19.6**	**19.1**	**15.1**	**19.3**	**15.4**	**9.6**	**12.5**
Reserve Money		**7.0**	**9.8**	**14.5**	**15.4**	**17.6**	**10.1**	**20.9**	**22.3**	**1.9**	**11.3**
Currency in Circulation		8.4	15.7	14.1	16.8	15.2	11.1	13.5	82.7	13.2	14.6
Banking Deposits		**6.7**	**17.2**	**25.8**	**21.0**	**20.0**	**16.8**	**22.1**	**14.2**	**7.6**	**11.6**
Demand Deposits		0.0	14.4	41.7	29.9	20.1	14.4	22.1	15.8	13.2	14.6
Time Deposits		11.3	19.0	16.4	14.5	19.9	18.8	22.1	13.1	3.0	9.0
		Average Annual Growth Rates							*Average Annual Growth Rates*		
		2000-10	**2000-05**	**2005-10**					**2000-10**	**2000-05**	**2005-10**
Narrow Money , M1		**16.1%**	**17.0%**	**15.3%**			**Reserve Money**		**12.9%**	**12.8%**	**13.1%**
Currency		14.1%	14.0%	14.2%			Banking System Reserv		9.8%	11.4%	8.2%
Demand Deposits		18.2%	20.4%	16.0%							
Broad Money, M2, Money Supply		**15.2%**	**16.2%**	**14.3%**							
Time Deposits		14.6%	16.2%	13.0%							

Note: For 2000-06, CY, DD data taken from AR 07; for 2007-10, CY, Demand D = current D + call D + fixed deposits of tenor of < 6 months as in Table 6.1 of AR10.

\ 4 Reserve Money data taken from various ARs; not sum of componenets.

\ 5 Banking Deposits reported on FY basis; it is different from annualized CY data

\ 6 SBP policy rate / discount rate / Bank Rate, all the same; it is 3-day (reverse) repo rate of SBP facility

Chapter 3: Financial System Structure Generic and Applied – *Pakistan*

Thematics

Financial System Structure

System of Indirect Finance
Central Bank, SBP
Financial Intermediation:
Banking System, NBFIs

System of Direct Finance
Money Markets, Forex Markets
Capital Markets --- Bond Markets, Stock Markets

Legal System: Financial Regime
Laws, Rules and Regulations, Legal Infrastructure
Regulatory System for Banking System, Financial Markets

Evolution of Financial System – *Pakistan*
Nationalization, Reforms, Privatization
Banking System, Securities Markets
Growth and Changes in the Structure
Operational Implications

Financial Intermediation
At Institutional Level: Commercial Banks, and NBFIs
At System Level as a Collectivity: all participants
Banks, Financial Intermediaries; institution level, system level
Parties to Fin Intermediation – Depositors, Lenders, Borrowers
Operational Contrasts and Behavioral Responses
Transformation of System ***– Pakistan***
Historic Episodes
Consequences for the Future

Chapter 3: Financial System Structure Generic and Applied – *Pakistan*

Section 1: Financial System Structure

1. Modern financial system covers a large array of financial institutions and other business entities engaged in a vast and diverse range of activities of ***indirect finance*** through financial intermediation; and equally vast and diverse range of activities of ***direct finance*** through a gamut of financial markets. Together, both groups of activities cover a range of financial business conducted with large and diverse group of clientele spread in every conceivable segment of the economy. These financial institutions operate within laws, rules and regulations which are enacted, implemented, and monitored by regulatory authority, the central bank.

2. Such a complex mosaic of institutions, their business activities, clientele and regulatory edifice defies a simplistic rendition. It poses a challenge to those trying to comprehend in outline how and where these pieces fit together; or why it is important to have some idea of what their business operations are; how these operations are conducted, and in what ways these operations impact on businesses and firms and eventually on the economy. Intuitively, most people understand that operations of financial system affect businesses and households alike, but complexity of this mosaic and its mechanisms is not easy to wade through. This is attempted here.

3. The structure of financial system could be viewed from two different perspectives: ***regulatory perspective,*** or ***operational perspective,*** and there are two ways to classify the structure. One way to classify financial institutions and companies is on the basis of their ***legal status***, their licensing and registration, specified by rules and regulations of ***regulatory authority.*** For financial intermediation, regulatory authority is central bank; for securities market operations it is securities and exchange commission, regardless of ownership of financial institutions which could be private or public. For example, banks may be grouped together as per their license or charter issued such as commercial banking, investment banking, specialized banking, and the like by authorities concerned, typically the central bank or the government.

4. Likewise, finance companies, investment companies or banks, leasing or insurance companies may be classified according to the type of license or registration they hold from relevant department of government or ministry of commerce. Similarly, securities market institutions like mutual funds, investment unit trusts, brokerage houses and other financial units engaged in securities business operations may be grouped together according to their licenses or permits issued to them and supervised by securities and exchange commission or the government department concerned. Most regulators and their functionaries are apt to look at this motley collection of financial institutions, businesses or companies from jurisdictional angle, rather than their operational angle.

5. This way of looking at the structure of financial system in terms of ***legal status*** of institutions is a regulators' perspective. For their purposes, this ***de-jure classification*** is quite suitable, but it is not suited to operational analysis because business of various types of financial institutions overlaps irrespective of their legal antecedents or procedures of incorporation. Nor it is very useful for regulatory purposes because supervision of institutions causes jurisdictional difficulties.

6. An alternative way to look at financial institutions is with regard to their mainline business operations and they may be classified and grouped accordingly, be it financial intermediation or investment operations in financial markets. In operational realm, markets, instruments, institutions, companies and clients are largely known and referred to by the type of business they conduct, not by the type of license or registration they hold. For example, financial institutions engaged in the business of collecting deposits from public and onlending these funds are deemed to be engaged in the business of banking, i.e., financial intermediation, regardless of brand of banking they may practice under any label displayed. These institutions, therefore, should be classified as ***quasi-banking*** outfits, or bank-like institution, though this may not be possible always and may not strictly follow conventions of classification.

7. It would be more meaningful to follow ***activity-based*** classification of structure of financial system rather than ***institution-based*** classification as given in the Charts A, B and C given on the next page, showing the system of ***direct*** and ***indirect*** finance. This classification can not be strictly adhered to in all cases because overlaps across various categories are unavoidable. This chapter is devoted to elucidation and analysis of the financial system structure as embodied in these charts together with their overlaps with reference to the system prevailing in Pakistan.

Financial System Structure

Chart 4A: System of Indirect Finance
Financial Intermediation

F.1 Central Bank

F.2 Banking Institutions

Commercial Banks
Investment Banks (Merchant Banks)
Savings Banks, Cooperatives Banks

F.3 Development (Specialized) Finance Institutions

Agriculture Development Bank
Industrial Development Bank
Infrastructure Development Bank
Housing Development Bank

F.4 Non-Bank Financial Institutions

Finance Companies
Investment Companies, Leasing Companies
Credit Cooperatives, Postal Savings
Other Deposit Institutions

F.5 Contractual Saving Institutions

Insurance Companies

Pension Funds, Provident Funds, Social Security Funds

F.6 Payment System

Overnight Settlement and Clearing
Real Time Gross Settlement

F.7 Safety Net System and Institutions

Deposit Insurance

F.8 Informal Finance

Money Lenders, Kerb Market

Chit-funds, Committee Savings

Chart 4B: Legal System and Regulatory Framework

L.1 Acts and Laws

Central Bank Act, Currency Act, Foreign Exchange Act
Commercial Bank Act, Specialized Institutions Acts
Companies Act, Charters, *finance companies*
Insurance, Pension Funds, Mutual Funds

L.2 Rules and Regulations

System of Banking Supervision and Regulation
Entry or Chartering Rules and Regulations
Banking Operations Rules, Regulations, Directives, Circulars
Foreign Currency Rules, Regulations, Directives
System of Accounting and Auditing; Rules, Regulations,
Exit, Liquidation or Bankruptcy Rules and Regulations

L.3 Legal Infrastructure

Banking Courts, Jurisdiction
Access, Costs, Effectiveness
Legal Recourse; Laws, Rules, Procedures
Resolution of Financial Disputes

L.4 Oversight Commissions and Regulatory Bodies

Securities and Exchange Commission
Banking commission
Self Regulation; Regulatory Bodies
Industry Associations, Banks, Insurance, Leasing

Chart 4C: System of Direct Finance: *Financial Markets*

M.1 Money Markets (Short –Term)

Treasury Bills and Government Papers
Commercial Bills, Papers, Certificate of Deposits
Interbank Money Markets
Foreign Exchange Markets, Interbank and Forex Dealers Markets

M. 2 Capital Markets (Long-Term)

Debt Markets, Primary and Secondary (M & LT)
Bond Markets, Government and Corporate
Securitized Mortgages and Asset Backed Securities
Equities Markets, Primary and Secondary

8. The ***legal framework*** is shown separately since it spans both these systems. At first sight, laws, rules and regulations governing financial intermediation appear to be common with those to the legal framework of financial markets, but actually they are separate from those enacted to govern operations of financial markets. They are not the same; because legal system is a hybrid. It is both activity-based and institution- based. In practice, laws, rules and regulations enacted for governance of institutions operating as financial intermediaries are different from those governing financial market, though there are overlaps between the two, owing to the type of business conducted.

9. Within the system of direct finance, common to all types of financial markets i.e., money and capital markets and their institutions, is ***financial infrastructure***, consisting of facilities such as payments, settlement and clearing system; rating agencies; certificate registries and records. The infrastructure also serves banks, non-bank financial institutions and allied sectors. In parallel, there is financial media, the business dailies. The media consists of a large number of media business companies engaged in monitoring, reporting and analysis of finance industry and markets, their trends, often focusing on business activities of leading institutions.

10. No water tight distinction is intended though, because financial institutions may cross boundaries and they do. Banks, for example, are primarily in the business of banking, namely deposit mobilization and

lending, but they may cross over and provide investment services to their clients like an investment bank does; or may provide brokerage services just like a brokerage house does. In other words, banks may operate in the mode of ***universal banking*** instead of confining their operations to financial intermediation activities only. Banking industry is no longer strictly in lending business; instead, it is now perceived as a service industry. There is a range of instruments and mechanisms of operations of banks and financial markets, but those are not ***institution specific*** and may not be confined to one or the other category of institutions. Instead, they are ***function specific***, or activity specific, equally applicable to all institutions across the categories, banks and non-banks alike.

Section 2: Financial System Structure – *Pakistan*
Evolution, Size and Growth

1. Following the classification given in Charts A, B and C, discussion of structure of financial system in Pakistan is presented in ***two parts.*** The first part is covered here in this **Volume I** concerning ***system of indirect finance*** and its structure in Pakistan. It begins with the discussion of the apex institution, the central bank, namely State Bank of Pakistan, its role and functions, followed by discussions of banking system and non-bank financial institutions, their regulatory and legal infrastructure, and payments system. The second part is covered in **Volume II** and is devoted to the ***system of direct finance*** and its structure, covering financial markets, mainly money and capital markets and stock exchanges; their legal infrastructure and regulatory framework as devised and implemented by Securities and Exchange Commission of Pakistan. This analysis is ***across*** the system level; the next one is within a sub-system of indirect finance.

2. Within financial system, the structure of ***indirect finance*** or financial intermediation consists of central bank, commercial banks, and non-bank financial institutions, NBFIs, though central bank is an apex body, clearly distinguished as monetary and regulatory authority rather than a financial intermediary. Central bank does not engage in financial intermediation activities, even though it is lender of resort to banks and to the government, but operationally it belongs to the system of indirect finance. Commercial banks and some NBFIs not all, are engaged in business of financial intermediation. These institutions and their operations are core of financial intermediation, constituting system of indirect finance.

3. In applied context, financial system of Pakistan is dominated by banking system which harbors implications for state of financial system and its future growth, a subject that will occupy us a great deal in the chapters ahead. This dominance of financial system by the banking system is characterized by macrofinancial structure of assets as evidenced by the analysis given below for the decade of 2000s.

Structural Changes vs *Annual Variations*

4. Analysis of financial system is focused on its structure and changes therein, based on long term data series so as to identify structural shifts in the financial system which started in the late 1980s as part of financial reforms. These reforms are now over by and large; this is post-reform era. Understanding structural changes in the wake of reforms is important rather than chasing annual variations. We need to clarify what is meant by ***long term structural shifts*** in the financial system rather than ***short term variations*** since these terms appear over and over in the literature; and then proceed to analyze and elucidate as best as possible.

5. Structural changes occur over medium to long term in response to a sustained direction of changes in economic and financial conditions, or far reaching changes in the policy and incentive regime that represent a break from a regime that prevailed before. In contrast, annual variations occur within a given policy regime but with different parameters which are adjusted frequently to affect operations of banking and financial system including financial markets, in an effort to counter adverse movements; anticipated or otherwise.

6. It is not easy to cover both structural changes and recent trends. Periodic reporting and analysis of financial or economic trends are focused on recent developments. These are the staple of most economic or financial reports issued annually or quarterly. These reports are very useful in understanding current trends, if one can go past the unfamiliar jargon and acronyms used, but are not much helpful for discerning structural changes over time. The description of changes is rather mind-numbing: this went-up over this period, and that went down. If these occurrences happen over the same period, their causative factors are traceable; but most changes occur over discrete time slices, hence their causative interlinks are not so obvious. This happens because real world does not oblige those writing about it, and certainly not over the time frame devised by report formats.

7. This discussion of recent trends, the ups downs of leading economic and financial indicators given in these periodic reports is needed to devise corrective actions and response by authorities concerned, mainly the central bank. In these reports, recent developments are explained in a way for sure, but are difficult to follow for those unfamiliar with contents and figure out what has transpired, much less capture the nuances embedded in the analysis. If explanations are offered in the reports, those are with reference to yet another escalator running up-down in parallel somewhere else, using unfamiliar analytical format and an array of acronyms, so many of them, that one wonders how their authors keep track of them.

Analysis of Structure - asset based

8. The analysis of structure of a financial system can be conducted in terms of assets, liabilities or investments which are stock variables; or the analysis could be conducted in flow variables like turnover, income, profits; or any combination thereof. We have selected assets as the basis for structure analysis, a convention followed for a variety of reasons, the main one being that long term growth and structural change are best exhibited by assets both at institutional level as well in their aggregation at macrofinancial level. Asset aggregation is done for both systems of direct and indirect finance; viz, aggregate of assets of all financial institutions belonging to system of indirect finance. Likewise, an aggregate is estimated about size of financial markets constituting system of direct finance.

9. Intuitively this sounds reasonable, but in applied context, there are serious aggregation problems. Such an aggregation is not feasible unless we adhere to a system of classification that is common across both systems of direct and indirect finance. A full aggregation is usually not attempted in financial system studies owing to issues of estimation. In the analysis carried out here, we will stay with two separate aggregations; one for assets of financial intermediation; the other for securities markets. We could then move on to issues like how large is the financial system of Pakistan; how fast it has grown over past years; why financial system has behaved the way it did; what was its performance, and how good this performance has been over the years. Among these, estimates of system level aggregates of assets of financial intermediaries are fairly straightforward, based as they are upon balance sheet statements of banks and non-bank financial institutions. For system of ***direct finance***, we will rely upon its narrowed version designated as ***securities markets*** as per configuration outlined below.

10. This scheme of classification and analysis best captures structure of financial system of Pakistan as it prevails in current times. Once the two sets of assets aggregates are built up, the sum of the two would enable us to arrive at estimates of overall size of financial system. This is not easy owing to overlaps among various categories across the spectrum of financial system. On intermediation side, estimates of assets of ***indirect finance*** are easier to build up based on assets of financial institution, brick by brick so to say, provided consistency of estimation is meticulously pursued.

11. The aggregates of assets of ***direct finance*** are problematic unless financial markets are narrowed down to a subset of securities markets consisting of treasury bills, bonds and stock markets, because after all treasury bills, bonds and stocks are assets held by their investors. Since investors in these three markets are financial institutions, households, and non-financial businesses and corporations, and since investment of financial institutions in securities markets is known, the ***residual*** could be ascribed to households and others, though this residual turns out to be the largest segment of assets of securities markets. Among these, the largest part of investments of banks and NBFIs are in securities held in investment portfolio, namely, T-bills, bonds and stock. These are already accounted for into assets of financial institutions on indirect finance side. Those investments are also a significant part of financial market operations on the direct finance side; hence it would be erroneous to add up assets of indirect and direct finance to arrive at financial system aggregate of assets. We have to avoid this double counting. We could arrive at aggregate of assets of financial system, notional though the estimates remain in their substance. These refinements need to be done in the detailed analysis, component by component.

12. Most of the analysis however revolves around estimates of the direct and indirect systems of finance on parallel tracks. Their size estimation is easier, though not straightforward, as it is built up on institutional data in the base tier, followed by successive levels of aggregation leading to the cone of the pyramid of financial system structure. The estimates of component were built up first, and their constituent elements analyzed at sub-group level though with some caveats; the important one being that these estimates do not capture all assets, neither on financial intermediation side, nor on financial market side. Some elements are invariably left out of the estimates; but these fringe items or residues do not materially affect integrity of analysis or alter conclusions presented here, because major elements of both sides are well accounted for and they constitute almost all of financial system.

…… in Pakistan

13. During the past decade, total assets of system of ***indirect finance,*** including assets of SBP together with assets of banking system and NBFIs, has grown rapidly from an estimated Rs 2984 billion in FY00 to Rs 10779 billion in FY10, nearly three and half times more than what they were at the start of the decade. *(line 7 of Data Set 3.0)* This may be taken as a first ***proxy*** for growth of system of indirect finance, though on the high side, because assets of some institutions who are not financial intermediaries are included here. This is the aggregate of assets of ***financial institutions*** in the mainstream of indirect finance; but assets of financial intermediaries is a subset of this aggregate and it is the largest sub-set, consisting of assets of commercial banks plus a few NBFIs who are engaged in quasi-banking activities classified as ***scheduled banks.***

14. Note that SBP is not a financial intermediary; likewise, a few large NBFIs like insurance companies, pension funds and mutual funds are not financial intermediaries, though their assets are included in the aggregate of ***financial institutions*** referred to above. That being so, the average annual growth of assets of indirect finance system was 13.7 per cent during the decade (*Data Set 3.0b)*. This rate of growth was slower during first half of the decade and was about 12 per cent per year; but during second half, the rate of growth was fairly high at about 16 per cent per year. The issue we need to contend with is where did this growth come from, what were the underlying factors, and what was their impact on the economy of Pakistan?

15. In parallel, total assets of the system of ***direct finance*** in its narrowed down version had even more remarkable growth during the past decade. The size of ***securities markets*** in Pakistan as defined here, consisting of treasury bills, bonds and stock markets, is estimated to have grown from Rs 891 billion in FY00 to Rs 8614 billion in FY10, nearly ten times of what it was at the start of the decade. *(Data Set 3.0)* Their average annual rate of growth over the ten year period was nearly 26 percent, market crash and all as shown in Data Set 3.0b, line 101. This growth was much higher during the first half of the decade at about 31 percent per year owing to boom of stock market in Pakistan; later on moderating to 20 percent during the second half of the decade in spite of stock market crash of 2008. Since then stock market has recovered some of the lost ground, though its capitalization level is unlikely to reach rupees four trillion that it had reached by mid-2007.

16. One could argue that a narrowed version of financial markets is inadequate to capture long term trends; but securities markets thus defined constitute the spine of financial markets on which its structure rests upon. There are components of money markets like repo markets or funds markets, but those are turnover of one main line instrument, namely treasury bills. In the same vein, options and derivatives markets are based upon size of tradable equities which are fairly limited in Pakistan. Size of securities markets thus defined is what matters most for financial markets in Pakistan.

17. Now we can make a try to reach the pinnacle of ***financial system*** consisting of system indirect and direct finance no matter how tentative it may be, together with caveats referred to above. We have two estimates; one for financial institutions, the other for securities markets. If we take their aggregate after removing investments of financial institutions because it is already accounted for under securities markets, we arrive at the grand total of assets of both direct and indirect systems of finance given in line 34 of Data Set 3.0 which can be interpreted as ***assets of financial system*** of Pakistan. These assets were an estimated Rs 2906 billion in FY00, rising to Rs 15983 billion in FY10, growing at an average annual rate of 18.6 percent during the decade as a whole as shown in line 97 of Data Set 3.0b. This aggregate represents the full spectrum of financial system of Pakistan, caveats and all, assiduously sought after and build up with great deal of effort; step by step and category by category of myriad of financial institutions and securities markets.

18. This effort is undertaken to find out how far ***financial system*** have percolated down in the economy of Pakistan. This is gauged by the ratio of financial system assets to GDP, a broad indicator of financial deepening rather than the ratio of M2 to GDP, where M2 consists of liabilities of central bank and banking system. The estimates show that assets of ***financial system*** ranged between 74 to 85 percent of GDP during FY00-02, then this proportion began to rise and was about 133 percent of GDP in FY07 at the time of stock market boom, sliding back to about the size of GDP in FY09. Clearly, financial system of Pakistan has yet to travel long ways to make greater inroads in the economy than it has done so far.

19. The proportion of assets of financial institution of system of indirect finance rose from 54 percent of GDP in early years, rising to 63 percent in FY07, then slid back to about 50 percent of GDP at the close of the decade. In contrast the proportion of assets of securities market to GDP was around 25 percent in early years; thereafter it rose to about 55 percent at the height of

stock market boom. *(Data Set 3.0b)* This shows that financial markets have gained ground relative to credit system in the economy; a pattern observed in other developing countries at similar stages of their financial system development. This is a significant development and its implications would be evident from the analysis of credit system given in Chapter 8.

20. Turning back to the structure, we find that banking system assets constitute nearly 60-65 percent of total assets ***financial institutions*** engaged in the system of indirect finance. These assets were about 60 percent of assets of indirect finance at start of this decade and increased to about 65 percent in FY07, sliding back to 63 percent by end of the decade. Next are assets of SBP which have remained about one third of these assets, more or less throughout the decade. It may appear that growth of assets of banking system was at the expense of growth of SBP assets. It is a *prima facie* observation, because relative size of SBP's assets have fluctuated widely, dipping to about 27 percent in middle years and rising back to about 32 percent of total assets at the end of the decade. The fast growth of banking system assets was bound to happen given the transformation that banking system has gone through from nationalized to privatized banks, even though banking credit growth was orchestrated through *credit plans* by SBP upto half of this decade after reform era was well over.

21. Financial assets of NBFIs have always been a smaller proportion of assets of indirect system of finance and this proportion has been declining. In FY00, NBFIs assets was 9.6 percent of assets of financial institutions. Since then it has declined to around 5 percent over the last few years. This is in contrast to the perception that finance companies, leasing companies, mutual funds, insurance companies or *takafuls*, have a fairly large presence in Pakistan. They have been growing fast, but they do not amount to much at system level assets, equity, deposits, credit, or investment. With regard to financial intermediation, the concern is what has been the size of operations, though many NBFIs are not in the business of lending as banks are, like insurance companies and pension funds and mutual funds. Their main business is mobilizing savings, contractual or otherwise, and invest them in securities markets. A gradual marginalization of NBFIs in financial system of Pakistan has continued throughout the decade. That does not mean that NBFIs are not needed, or they do not contribute to financial resource mobilization and allocation. They have a role, though relegated to niche markets and specialized activities. Their size may be small; but their role is significant in operations of financial system.

22. The same pattern prevails concerning ***equity*** of financial institutions at system level. Their total equity at system level increased from an *estimated* Rs 197 billion in FY00 to Rs 959 billion in FY10, representing nearly seven fold increase over the decade at a rate of about 24 percent per year, higher than asset growth. *(Data Set 3.0)* The average rate of growth of banking system equity has been very high throughout the decade at 27 per cent per year. This phenomenal increase in equity occurred in large measure because of regulatory requirements placed on banks to enhance their equity base. This regulatory move was taken to ensure conformity with Basil accord standards that Pakistan adopted in late 1990s as part of reforms of the banking system.

23. Banks have obliged. They have been replenishing their equity base, gradually raising to levels as stipulated by SBP. These increases in equity of banks had a significant impact not only at institutional level, but also at system level, enhancing financial strength and soundness of banks in Pakistan. It has resulted in significant increase in relative share of banking system in the equity structure of financial system. The process is not over yet. There are more rounds of equity replenishment to be implemented over the next few years, significantly raising capital of banks when the process is over.

24. In parallel, government of Pakistan did not have to enhance its contribution to share capital of SBP as its owner or replenish its equity base as it did for other state-owned banks. Yet, there was a phenomenal growth in SBP's equity from Rs 25 billion in FY00 to Rs 177 billion in FY10, largely because of unrealized gain in the market value of gold held in its asset portfolio. *(Data Set 3.0)* In spite of such hefty growth in SBP's equity, proportion of banking system equity in total equity of financial system has been very high relative to the proportion of SBP or NBFIs. Equity of NBFIs was Rs 38 billion in FY00; since then it increased to Rs 114 billion by FY10; but it share has dwindled from19.3 percent in FY00 to about 12 percent in FY10 in total equity of financial system. *(Data Set 3.4)*

25. Much burden of replenishment of equity base of banks has been borne by private sector, not government, given that there are only four surviving public sector commercial banks out of 36 commercial banks in all. Two of them are nearly moribund, having lost much of their equity owing to loan losses. Attempts are being made to revive them; the first step being restoration of their balance sheet through removal of loan losses, followed by replenishment of their equity base. As for private commercial banks, in spite of massive increase in equity required from about 500 million rupees around 2001 per bank to nearly Rs 8 billion per bank at the end of the decade, private

sector still finds it worthwhile to invest in banking business. The issue is did increase in equity occur because banking business found new avenues of profitability that did not exist before; or is it simply because of large banking spread in lending to corporate sector. We need to look into how this transformation occurred from perennial losses to profitability and at times of economic and financial stresses as seen in recent years. The analysis of this transformation would be quite revealing.

26. Besides signaling a shift in its structure, the success or failure of financial intermediation, can be gauged by trends in the mobilization of savings, mainly deposits and financial system credit. Financial intermediation at any given time is beholden to financial savings mobilized as deposits mainly by banks and NBFIs and that is all for financial system as a whole because there is hardly any other notable deposit mechanism within financial system. The total amount of deposits mobilized by banks and NBFIs was Rs 1186 billion in FY00; rising to Rs 4803 billion by FY10, at an average annual rate of nearly 15 percent per year. Banking system deposits constituted a large part of these deposits throughout the decade and this situation is unlikely to change.

27. In Pakistan deposits are also mobilized by NSS outside of financial system. If we add NSS deposits to financial system deposits the picture changes, but those are not to be counted here for the reason that NSS deposits are borrowing operations of the government as discussed in Chapter 5. These deposits are not raised to be funneled back via the financial intermediation or via financial market operations, rather they are used for financing fiscal operations of the government, though NSS operations impact on deposit mobilization by financial system.

28. Briefly, banking system in Pakistan has enlarged its share relative to NSS whose share declined from nearly one-third to one-fifth of ***total deposits*** mobilized in the country. This shift occurred because of narrowing differential in deposit rates of NSS relative to deposit rates of banking system during the first half of the decade. Since then the differential has re-emerged.

29. The largest component of assets of ***indirect finance*** is banking credit. Since banks and a few NBFIs provide all of credit financing in to final users anywhere, including Pakistan, therefore, banking credit is all that matters. In Pakistan, SBP also extends credit to banks and NBFIs as refinancing facility for priority sector lending. This SBP credit is added on to arrive at ***total financial system credit*** which is the upper-end estimate, though there is

some double counting in system level credit as discussed in Chapter 8; not in system level assets being analyzed here. Those data problems aside, financial system credit in Pakistan was an estimated Rs 1105 billion in FY00, rising to Rs 3602 billion by FY10. *(Data Set 3.0)* Among this, credit extended by banking system was Rs 797 billion in FY00, growing to Rs 3175 billion by FY10, at an average annual rate of about 15 percent during the decade

30. Credit extended by SBP and NBFIs had different growth dynamics. During early years, SBP's credit to banks and NBFIs declined from Rs 196 billion in FY00 to Rs 158 billion in FY03; thereafter it began to rise and stood at Rs 310 billion in FY10, though much of this growth occurred during the last couple of years of the decade. Since there was not much growth in SBP's credit to banks and NBFIs during most years of the decade, its share in total financial system credit declined from18 percent at the start of decade to just about 9 percent at close of the decade.

31. Nearly all of SBP's credit via subsidized refinancing schemes of priority sectors is extended to banks, but it is fairly small in overall picture. The share of NBFIs credit in total financial system credit dwindled from 10 percent in FY00 to 3 percent by FY10; hence NBFIs' credit is also out of picture. The source of change in financial system credit was growth of banking system credit whose proportion increased from 78 percent in FY00 to nearly 88 percent in FY10. For these reasons, change in structure of financial system assets originated primarily from a change in banking credit structure.

32. These in nutshell have been patterns of growth of financial system of Pakistan, both on financial intermediation side and financial markets side. This completes system level review. There may be reservations with regard to asset-based analysis of structural dimensions of financial system, but such perception are misplaced because asset growth can not occur without business growth. This growth may be expressed in dimensions other than assets, but the end result is asset growth of businesses, enterprises, corporations or financial institutions which translates into expansion of financial system structure at macrofinancial level.

Section 3: The Central Bank, SBP

1. This analysis pertains to major categories ***within*** indirect finance. The first one concerns central bank. A Central bank is an apex institution of financial system in any country, so is SBP in Pakistan. Traditionally, its functions are described as banker to banks, lender of resort, banker or agent to the government, and issuer of the currency notes, among others. This characterization holds true practically in all countries. In modern times, from the perspective of management of banking and financial system, central bank is deemed primarily as a ***monetary authority*** and a ***regulatory authority,*** subsuming other functions mentioned above. That sheds a different perspective on what a central bank is and what it does. The classic functions remain immutable; but maintaining stability of financial system assumes the central role. This is articulated below; namely role of a central bank as monetary authority and as a regulatory authority.

2. As ***monetary authority*** and as a ***custodian of public confidence*** in currency and its value both domestically and abroad, the main function of SBP is to maintain price stability and exchange rate stability. For price stability, SBP articulates and implements monetary policy; that is, it manages supply of money through changes in banking credit, conducts open market operations and thus affects liquidity of banking system and sets discount rate which serves as peg rate for short term interest rates in money markets. Central bank issues its own currency, though it is not legal tender; hence, it is backed by gold and reserves under a fractional reserve system. As banker to the government, central bank provides credit to government and manages government's borrowings operations, domestically and abroad. All these actions of a central bank, affect availability of credit and interest rates, which in turn have an impact on aggregate demand and eventually general price level or rate of inflation in the country.

3. These standard roles of a central bank are frequently cited. Most often maintaining the exchange rate, that is keeping value of Pakistani rupee stable vis-à-vis foreign currencies steals the limelight. This is because maintaining exchange rates is seen significant for domestic price of imports in a reversed causation, that is, it is seen as the leading cause of domestic inflation, whereas a necessary condition for stabilizing exchange rates is to stabilize domestic price level, and keep inflation in control relative to inflation among its major trading partners. Domestic price level can be kept stable if aggregate effective demand is kept in balance in nominal terms. Thus,

domestic price stability serves both the purposes. Beyond this, there is precious little SBP can do to prevent devaluations as long as foreign currency markets are open and rupee is free floating, more or less. SBP can not intervene in the market to bring a desired level of exchange rate, because the size of international currency market is enormous.

4. In the past, a few central banks intervened in international currency market to bring about a desired level of exchange rate, but they had to withdraw rather quickly after suffering massive losses which demonstrates futility of such interventions. SBP does not have anywhere near the amount of foreign currency reserves needed to intervene; it's reserves are barely sufficient to ensure that short term foreign liquidity needs are manageable, without causing recourse to emergency borrowings in foreign which could be very expensive, if feasible. Therefore, SBP's role is to manage foreign currency and exchange system with limited open trading of foreign exchange as it does to bolster its foreign currency reserves, only marginally affecting exchange rate.

5. As ***regulatory authority*** and as ***custodian of public confidence*** in banking and financial system, SBP operates an elaborate system of banking supervision and regulation and takes appropriate actions to ensure financial strength, soundness and solvency of the banking system. As banker to banks, SBP is lender of last resort to banks in financial distress and takes actions based on its early warning system well before their financial distress degenerate into wide-spread banking crisis or insolvency of concerned banks. On their part, banks are required to follow the rules, regulations and guidelines stipulated by SBP concerning capital adequacy, liquidity, risk management, defaults and non-performing loans in their portfolio and have to make mandatory provisions for bad loans as classified under these rules and guidelines. These stipulations impact on the quality of the portfolio and profitability of banks as well other financial institutions whose supervision is entrusted to the central bank.

6. The thrust of regulatory function is to ensure financial strength and solvency of banking system, prevent emergence of financial distress, intervene well before a 'run on a bank' develops for *en-masse* withdrawl of deposits which no bank can sustain. At the same time keep a watchful eye on finance companies and other NBFIs to prevent excesses in their business risk exposure, and ensure that their financial weaknesses or insolvency does not harm public's confidence in banking system. This is a tall order for any central bank. The problem of maintaining solvency is compounded if NBFIs

are not under central bank's supervision and regulatory control as is the case in Pakistan in current times. The supervision of NBFIs is the responsibility of SECP limited to regulation compliance, not financial soundness, strength and solvency. If SECP supervision were to spot these weaknesses, there is no via media or resources are available to SECP to ameliorate financial weaknesses of the companies being supervised.

7. In early years of the decade, thoughts were being given by government to turn SBP into a monetary authority on the model of city states like Hong Kong or a few other countries. This strand of thinking emerged from an unbridled faith in self-regulation of privatized banks who could possibly not do anything wrong that would compromise soundness and solvency of financial system. There was hardly any realization that Pakistan has just emerged from shadows of nationalization and that the banking system needs a full ledged central bank not a truncated version of it as a monetary authority. Nor there was mush appreciation that if the model of central banking followed by rest of the world both in developed or developing countries, is that of a full fledged central bank, there must be then some universal wisdom underlying this paradigm. Proponents of monetary authority model of central bank nearly succeeded in their views of what central bank should be, and backed off when they encountered opposition from their leading financiers.

8. SBP like any central bank is the primary conduit for ***deficit financing*** by the government. The extra-budgetary finance, the deficit financing, is secured through domestic borrowing typically from the central bank or from the banking system, usually at market costs through short-term instruments such as treasury bills or long-term instruments such as governments bonds. Deficit financing is the major source of increase in money supply and inflation. The central bank as banker to the government, extends credit to provide liquidity and fill in financing gaps. Since these credits are assets on the balance sheet of the central bank, these assets provide backing for bank notes, prompting the central bank to issue more currency. The currency issued by the central bank, however, is the liability of the central bank, though it is also legal tender in operational sense.

9. For this reason, deficit financing is interpreted as printing money with inflationary consequences. If government borrowing is done from banking system against treasury bills or bonds, or advance credit to government, deficit financing may not be inflationary, since it depends on how credit system absorbs such deficit financing.

10. As a financial institution, a central bank is a premiere bank, with a very strong financial position of its own as exhibited by its asset liability structure; so is SBP. The assets and liabilities are divided into two balance sheets; one for Issues Department, responsible for issue of its promissory notes, the banknote, the currency of the country; the other one is for Banking Department, responsible for banking operations. Overall, assets and liabilities of Issues Department are roughly 40 percent of total SBP assets and liabilities and 60 percent are assets and liabilities of Banking Department balance sheet. *(See Data Set 3.6)* The balance sheet of Issues Department has been analyzed in Chapter 2 in Money section. Briefly, the assets of Issues Department balance sheet are gold, foreign currency reserves and investments in GoP securities. The only liability shown is currency notes issued by SBP, and it is fully covered by its own assets, independent of assets shown in the balance sheet of Banking Department.

11. The asset liability structure of Banking Department balance sheet is more elaborate. On the asset side there are three major items; foreign currency reserves, investments in government securities, loans and advances to banks and NBFIs. Together, these three assets constitute nearly all of assets, as they are around 95 percent of total assets. On the liability side, the largest item is deposits of financial institutions, which are often dislodged by the liability of amounts payable to IMF. These liabilities of Banking Department balance sheets deducted from total assets to arrive at net assets, which are represented by SBP's equity, consisting of reserves, retained profits, and unrealized gains from revaluation of gold reserves.

12. The revaluation of gold reserves is highly volatile item, causing significant changes in the structure of assets. In some years these unrealized gains from revaluation have outstripped all other items in equity of SBP. That does not mean that SBP has large quantities of gold bullion. These are accounting entries since SBP is not about to sell off its gold reserves. The original share capital of Rs 100 million has remained unchanged since its inception; currently it is a tiny amount, almost negligible in total equity of SBP because of phenomenal increase in other items of equity as evident from balance sheet figures of the second half of past decade.

13. There has been a sustained growth of assets of SBP from an estimated Rs 966 billion in FY00 to Rs 3437 billion in FTY10 at the growth rate of 14 percent per year. *(Data Set 3.6)* This growth of assets has been volatile. During the first half of the decade, the growth of assets was about 8 per cent per year; during the second half of the decade it was nearly 20 percent per year largely because of stupendous growth of government securities in the

assets of SBP. The equity base is defined as capital and reserves, and it has grown much faster, from Rs 25 billion in FY00 to Rs 177 billion in FY10 at about 22 percent per year during the past decade largely because of growth of foreign currency reserves which are the largest proportion of SBP reserves kept as backing for currency issued. Their counterparts are cash balances held overseas in the balance sheet of Banking Department and these cash balances are also counted as part of foreign exchange reserves; and they have grown at 50 percent per year, a very high growth rate which helps explain rise of forex reserves from abysmal levels of about US$1.0 billion in 2000 to about US$ 15.0 billion by June 2010.

14. In principle, a central bank is not supposed to make profits, since it is not a profit making institution by its objectives and charter. In practice it does, and rather handsomely. So does SBP. Likewise, government is not supposed to make use of central bank as a source of income, but it does, specially if central bank is nationalized as is SBP. In Pakistan, GoP garners profits of SBP in part or in full. Regardless of the status of autonomy or ownership, central banks are strongest financial institution in any country, so is SBP; and they better be, given that currency issued by them is as good as legal tender and serves as anchor for entire system of finance in the country, though technically it is their liability in the hands of public.

15. Most income of SBP is from its repo operations, amounting to about two thirds of all gross income in a fiscal year. Net profits of SBP are fairly high since there are hardly much contingent loss making charges. SBP does not enter into risky ventures simply to earn income and profits. SBP is the only public sector institution in Pakistan whose share capital has remained unchanged at Rs 100 million over the past decades, but it has returned immense amount of profits, rising from a ***modest*** amount of Rs 200 million in FY03 to Rs 6 billion in FY04.

16. As a financial institution, SBP is very strong bank as shown by ratios of profitability on share capital of Rs 100 million. Net profits of SBP during second half of the decade have been unusually large; the highest being Rs 202 billion in FY09 and all of it was paid to Federal government. In the past four years, during FY07-10, SBP profits averaged Rs 133 billion per year. These are unusual profits because of exceptionally high volume of government borrowings from SBP. In contrast, during FY01-05, SBP profits averaged Rs 16 billion per year, with a good deal of volatility in between. *(Data Set 3.6)* These profits have been returned to government as part of general revenues. These borrowings require roll over of existing liabilities of government

securities held by SBP as assets in its investment portfolio, together with net issues of treasury bills and Pakistan Investment Bonds, PIBs. Beyond profitability, ***seignorage*** underlying the authority to issue its own currency, complemented with SBP's position as monetary authority and regulatory authority, ensures that SBP remains a powerful institution. Profitability adds another dimension. Indeed, SBP's strength is further bolstered from its own financial position which is enviable in Pakistan given that most public institutions are struggling to cope with their precarious finances.

17. A central bank is established under its own law or act to enable it to carryout these functions as an autonomous body largely free from government directives or pressures in its main role as monetary authority or regulatory authority. In several countries including Pakistan, however, central bank is a nationalized institution where its ownership resides with the government. Ownership aside, issue of autonomy of SBP has been simmering for nearly two decades, though belatedly it has been resolved; the autonomy has been restored. Throughout the reform period, key decisions of SBP regarding its operations and monetary management were conducted with varying degrees of autonomy, but with consent of GoP where major issues of policy making were involved. Operational reality was somewhere in between with overlaps in authority to look after financial system.

18. Since reforms of financial system started in early 1990s, there was a gradual shift from control of SBP by GoP to its autonomy. The magnitude of the task and its complexities warranted a *unified line of command*, to borrow a phrase from lexicon of governance in Pakistan. The reasons for SBP's autonomy became more pressing as banking system was cut from apron strings of state and became more independent in its operation. Banks discovered that they needed quick and professional decision making in era of fast moving markets which meant that SBP had to be autonomous in directing what banking system does.

19. The latest round of this long drawn process of restoration of autonomy culminated into approval of Banking Companies Amendment Bill 2010 by Parliament in February 2011. This Bill goes a long way to restore SBP's regulatory authority that was usurped by Banking Council during the days of nationalized financial system. The 2010 Bill authorizes SBP to take drastic steps against banks who have are in dire financial straits owing to losses owing to nonperforming loans that must be offset from equity base, the shareholders capital.

20. These provisions go well beyond enforcing statutory reserve and liquidity requirements, the first line of regulatory control over banking operations. If financial situation has deteriorated beyond acceptable levels, SBP can take control of such banks, change its management and restructure its banking operations. If banking operations have deteriorated to the point that a distressed bank is unable to meet depositor's obligations, it may be ordered to ***cease and desist*** from routine business activities until compliance is ensured. The impact of these provisions will be to enhance financial strength and soundness of privatized and market based banking system.

21. In the past, interlocking ownership of financial companies including banks has been the source of ownership concentration within banking system together with group ownership of other finance companies or industries, thereby conferring near monopoly or cartelized ownership structure. Belatedly, under 2010 bill provisions have been put in place to limit ownership whereby individual owners are restricted to five percent of shareholdings with approval of SBP, and if the share were to exceed this limit, the shareholder will be required to divest or transfer the excess shareholdings. This provision is being criticized from the angle of abuse of authority not uncommon in Pakistan.

Financial Intermediation

Core Elements of Indirect Finance

22. The elements of financial system structure presented above is as far as we could proceed without delving into details of operational side of financial system. Among these, the core element of indirect finance is ***financial intermediation*** in any country including Pakistan, where ***main parties*** are banks and their clients, and also NBFIs. The central bank, SBP, is the regulator rather than a financial intermediary itself. The ***clients*** are savers and depositors; the supplier of funds are households and borrowers are businesses, corporations, investors and government. Currently in Pakistan, ***mechanisms*** and ***operations*** of financial intermediation are market–based, not controlled or administered by government that prevailed in Pakistan during nationalization period. These mechanisms and operations consist mainly of ***deposit system*** on resource mobilization side, and ***credit system*** on resource allocation side.

23. The central element of financial intermediation concerns with ***size*** of financial resources generated, mainly as deposits, their ***transfer*** from suppliers to users via the credit system, and subsequently their ***allocation*** among various categories of users of credit within an economy. How well this transfer occurs and on what terms and how efficiently it is performed by the banking system is of considerable significance to everyone though it is not widely recognized, be they households, large corporate or SME businesses, or the government and public sector entities.

24. Financial intermediation provides the mechanism for ***distribution of resources*** between various segments of the country and it occurs as a by-product of the operations of banking system. In any country, be a developing country or advanced, efficiency of deposit mobilization and lending determines how good the banking system is in what it does. This is represented by cost of credit because it subsumes costs of deposits and loanable funds; while efficiency of transfer is gauged by intermediation costs and lending spreads. In applied context, these are central elements of analysis and evaluation of performance of financial intermediation, but that is not a complete picture. These aspects of financial intermediation are presented in their thematics as follows.

Financial Intermediation - Operations

Financial Savings, Deposits
Households and Institutions as depositors
Deposit collection mechanisms, banks, NSS, NBFIs
Lending; Borrowers, Govt, businesses and households
Credit mechanism, Operations, Recent Trends – Pakistan

Interest Rate Structure

Deposit Rates, Lending Rates, *nominal, real*
Role of SBP, Financial Markets, Recent Trends - Pakistan

Governance of Intermediation

The Financial Regime and SBP
Laws, Rules, Regulations Governing Banking Operations
The Regulatory System and Banking Operations -- A Primer

25. As regards ***allocation of resources,*** financial intermediation provides mechanisms for its ***distribution*** between various segments of the economy, or between various user groups in the society. The allocation occurs as a byproduct of operations of banking system. That is, mechanisms of resource

transfer embedded as they are in financial system operations, they are neutral to the social implications of the transfer. They are mechanisms; they can be used or misused; but their outcome is not neutral to those participating in operations.

26. On the credit side, since banking system favors prime borrowers and does not cater to small borrowers as is the case in Pakistan, it compromises both social and economic objectives. The ***size of resource transfer*** through financial intermediation is gauged by the amount of credit extended by all institutions. The amount of credit in turn depends on availability of loanable funds, primarily thru savings and partly from borrowings by lending institutions in financial markets. Typically, lending receives greater attention in analysis of financial intermediation, but analysis of deposit mobilization and borrowing also has to be given due emphasis.

27. The operations of financial intermediation are conducted within a price structure; namely ***interest rates*** on supply side and demand side, both; including ***deposit rates,*** and ***lending rates*** prevailing at any given time. The structure of rate of interests is largely ***market determined,*** not by fiat, but by market forces of supply and demand and market valuation of assets underlying financial intermediation. However, interest rates are powerfully affected by interventions of monetary authority to ensure that financial system remains stable and viable.

28. The structure of rate of interest determines ***costs and returns*** both on the deposit mobilization side and lending side. How accurately this structure reflects economic and financial conditions is critical to the profitability and strength of financial institutions engaged in financial intermediation activities, along with those engaged in financial market operations. The combine outcome of these two processes determines production, employment and income levels in the economy.

29. At the system level, once operational side of financial intermediation is sorted out, and key elements begin to function reasonably well, and are responsive to market signals, rigidities and all, the next concern is how to maintain ***solvency*** and ***stability*** of banking system as well as those of NBFIs, because if any financial institution goes belly up, that is, it ends up illiquid and insolvent, the central bank has to ensure that damage is contained and does not spread and thus undermine public's confidence in the banking system at large. Ensuring solvency and striving to maintain stability is not easy in market based system, open to all kinds of financial and economic pressures in modern times.

30. Finally, as for g***overnance*** of financial system, it sustains the edifice of financial intermediation and financial markets. In part, mechanisms of governance are rooted in ***financial regime,*** administered by regulatory authority, the SBP. Besides, financial institutions operate under their own ***internal guidelines*** and procedures in conformity to financial regime with their focus on financial strength and profitability.

31. These in nutshell are the main strands of analysis that we will pursue from here onwards. In applied studies, it is hard to build watertight sections of analysis because the same phenomenon is viewed from different perspectives. The fundamentals remain intact; the difference is in the perception of fundamentals, further layered by vested interests involved in the outcome, if attempts are made to come to terms with the fundamentals or to nudge them in the desired directions driven by exigencies of economic and financial trends that affect these fundamentals.

32. For example, take liquidity squeeze. It has several implications, all different from each other. It depends on whether one is a central banker, a commercial banker, a borrower, a securities trader, or a currency trader; or any other type of participant in financial markets or financial intermediation. Reality of liquidity squeeze is the same; but the perceptions and concerns are different. Those perceptions derive from the implications of liquidity shortage to the segment of financial concerned and its impact. The impact is felt differently by different segments; hence the antidotes or remedies sought are also different, often conflicting; depends from what angle one is looking at. Liquidity shortage is what it is; it needs explaining.

Section 4: Banking System
Structural Shifts and Growth

1. The business of banks and some NBFIs boils down to mobilizing deposits and lending. If deposit base turns out to be insufficient, they borrow from financial markets for their funding needs as feasible, given their financial profile. For this, there must be funds lying around in some nook or cranny of financial system to facilitate their trade in funds market. Who generates these funds and how it is done is equally significant than simply focusing on deposit base. The core function of financial intermediation in Pakistan, however, remains with commercial banks, not NBFIs, as it is

among most developing countries, and this pattern will persist in the future. NBFIs are not going to replace banking system. The size of financial intermediation by banking system is relatively very large in contrast to NBFIs and Islamic finance institutions. This can be gauged by deposits mobilized and credit extended at banking system level.

2. The dynamics of growth of banking system ensures that its expansion will continue to outstrip its rivals and its relative position will continue to strengthen over the future. This paramountcy of banking system's role in mobilizing savings, extending credit and allocating it between various categories of borrowers is well recognized. Equally pertinent is the issue how good has been this performance; what has been underlying structure deposit mobilization and lending and on what rates of interests; or what is the same, what have been returns to depositors and costs of borrowing? How far interest rates have been market determined in liberalized markets; and how they have affected savings or deposits and banking credit in the economy?

3. A discussion of size of resources without reference to rates of interests and their impact on both sides of financial intermediation is not meaningful. We have to see how interventions of SBP have impacted upon structure of interest rate and with what results on financial intermediation. Next, how financial intermediation performance has been affected in terms of profitability and financial strength over a long period, beyond the short term routine of coping with interest rate changes in money markets. In what ways it has enhanced or weakened banking system's ability to withstand shocks regardless of their origination point.

4. There has been a structural shift in banking system in modes of ownership and business of financing, owing to financial reforms. As regards ownership, banking system and NBFIs both have made the transition from state owned to private ownership and this transition is over. Modes of financing have undergone a structural shift, but the process is incomplete for the reason that it is not easy to make a complete about turn from default culture to market based norms of credit liabilities. Recent trends of rapid rise in non-performing loans of banking system reconfirm persistence of defaults. The infrastructure to support shift modes of financing is still weak and its mechanisms are not strong enough to prevail.

5. The reason is that corporate sector is still grappling with the vestiges of transition from state ownership to private ownership. Its financial resources, managerial and enterprenurial capabilities are over-extended given fast changing market conditions amidst sagging infrastructure, energy shortages,

and an *inimical* investment climate in the country. The investment climate has degenerated to the point where foreign investors have fled or have stayed away, except for a few gulf investors active in buying up state enterprises. It is easier though expensive to swap ownership to private sector given costs of restructuring of asset-depleted enterprises after a prolonged period of nationalization. It is more difficult to develop an indigenous corporate sector that would withstand tests of creditworthiness, performance, and financial fidelity needed for banking credit operations.

6. That does not leave many options to banking system for lending except to seek other avenues of risk and returns, beyond a narrow group of prime borrowers. This post reform experience shows that it is not enough to privatize banking system, the necessary condition for its growth in market based environment. The sufficient condition is existence of a group of healthy banking clientele. Without a group of healthy clientele, banking system can not prosper no matter how good it is; and how strong and diversified its financial structure is. This remains to be analyzed further.

7. Such being current state of corporate sector of Pakistan, let us turn to banking system structure. Within banking system, commercial banks occupy an overwhelmingly position; hence as a group they constitute what is known as *banking system*.. Besides commercial banks, there are various types of financial institutions who are also engaged in financial intermediation activities, but they are organised and chartered as NBFIs. Their business orientations and operations are different from those of commercial banks.

8. In Pakistan banking system consists mainly of commercial banks but also includes specialized financial institutions, like ZTBL because these are chartered as *scheduled bank,* even though the banking they do bears no resemblance to the business of commercial banks. Their role is to provide development finance to designated sectors on terms and conditions quite different from those of commercial banks. Their main activity is to extend long term credit for investment purposes and working capital. Thus specialized financial institutions are synonymous to development finance institutions, the DFIs. Operationally, both perform same functions, and both are different form commercial banks, but by virtue of their *de jure* position, they got lumped together with banking system.

9. At the start of the decade, in June 2000, there were 8 state owned commercial banks; 19 foreign commercial banks; and 12 private banks. There were 12 specialized institutions like ZTBL and these were classified as

development finance institutions and were listed under the group of NBFIs, not the banking system. The number of foreign banks operating in Pakistan was very large, almost the same a domestic banks, both government and private owned. This increase in foreign banks during 1990s occurred after licensing rules and regulations concerning foreign ownership of financial institutions were relaxed together with modest capital requirements.

10. At close of the decade, ***banking system*** consists of 40 institutions, licensed and registered as ***scheduled banks,*** a term that has endured, though it causes an overlap between the core banking system and specialized institutions; some moribund, others surviving. This group of ***scheduled banks*** is alternately referred to as ***All Banks***. This classification is central to the analysis presented in this book. Among these 40 institutions, 25 are local private commercial banks the largest group, four state-owned commercial banks, and seven foreign commercial banks. This is the core group. Besides, there are four specialized banks, the largest being *Zarai Traqiati Bank Ltd,* ZTBL, which has survived as a live and functioning institution; others have ceased operations. In addition there are seven microfinance banks, raising the number of banking institutions to 47.

11. The term ***banking system*** includes all scheduled banks in Pakistan as listed above. The size of banking system is characterized by assets at institutional level, rising into system level aggregates. This aggregate of assets consists of financial system credit and investment, primarily. These are balance sheet assets and should be easily traceable. Data in balance sheet reporting format is available mostly for calendar year (CY) for ***All Banks.*** We have taken calendar year (CY) series and interpolated it to arrive at fiscal year (FY) estimates shown in Data Sets 3.0 and 3.2, the standard time frame deployed in this text book. This interpolation does not affect decade long trends and their results; it does affect annual growth rates.

12. ***Banking system assets*** were an estimated Rs 1731 billion in FY00; they increased to an estimated Rs 6782 billion by FY10. *(Data Set 3.2)* This rate of growth was very high during middle years, FY05-07, at around 20 percent per year, but after the stock market crash of 2008, it slowed down considerably to about half of the rate that prevailed during middle years. The largest component of assets has been banking system credit, ranging between 44 to 46 percent during first half of the decade; subsequently rising to about 50 percent during the second half of the decade; annual variations aside.

13. In FY00, ***banking system credit*** was Rs 797 billion; by FY10, it had grown four times to Rs 3175 billion. *(Data Set 3.2)* These are stock magnitudes as reported by SBP. The proportion of banking credit to total banking assets was about half, lower than those prevailing among comparator countries. Does this imply banking system is not providing enough credit to its clients; business and corporate sector of Pakistan? That remains to be analyzed further, but it is not such a cut and dried matter. The demand for credit is always there; the issue is at what costs to the clients, and at what risks and returns to banking institutions and how these two considerations are accommodated in a market based environment.

14. Banking system investment are second largest component of total assets. These investments were Rs 311 billion in FY00 and have risen more than six times to Rs 1950 billion by FY10 at an average annual rate of 20 percent during the past decade. *(Data Set 3.2)* This is a very fast growth with implications for financial intermediation and growth of banking credit observed earlier. Most of these investments of banking system are in government securities. The main feature is that banks have all of the treasury bills market to themselves, and an overwhelming part of government bonds market as well. The reason is a fairly high and rising treasury bills rate during most part of the decade that has sustained except for a few middle years, encouraging banks to park their liquidity in risk free instruments like treasury bills and government bonds. Banks would not prefer to face lending risks in a narrow corporate credit market, if they can earn higher returns with minimum risks in the market for government securities.

15. Next item of assets is cash and interbank deposit balances of banks, amounting to about 12 percent of total assets in early years, declining to about 7 percent over the last few years of the decade. It is a high proportion by banking standards elsewhere. These deposit balances are kept mainly at treasury banks and are part of asset liability management to ensure they do not fall short of statutory reserve ratio and liquidity ratio, while at the same time be able to earn some variant of market based interbank rates of interest. These cash and interbank balances were an estimated Rs 204 billion in FY00. They have grown to Rs 493 billion by end of FY10. Their growth has been volatile, reflecting banking system liquidity and changes in their requirements, SBP's interventions, state of money markets for interbank funds, and turnover in these markets. *(Data Set 3.2)*

16. There has been a similar growth in the liabilities of banking system at the same rate as growth of assets, as it ought to be. The size of banking system liabilities increased from Rs 1597 billion in FY00 to Rs 6114 billion in

FY10. *(Data Set 3.2)* The difference between aggregate liabilities and assets is financial system equity as estimated here and discussed below. The largest item of liabilities are ***banking deposits,*** which are 78 percent of total liabilities. Banking deposits have grown at 15 percent per year over the past decade, slightly faster than their counterpart asset growth. These annual averages, however, mask considerable volatility from year to year, which can not be attributed to changes in the structure of interest rates prevailing on deposit side. There has been a shift in the structure of liabilities towards deposit base of banking system; and deposits have grown significantly in spite of inimical economic and financial trends and negative real rates of interest.

17. ***Banking system borrowings,*** the next major item in liability structure, have been relatively modest all along. The total amount of banking system borrowings were Rs 161 billion in FY00, and increased at average annual rate of 13 percent to Rs 542 billion by FY10. In spite of a fast growth, the proportion of borrowings in total funding of banking system has been fairly steady at around 9 percent throughout past decade except in a few years, reaffirming deposits as prime source of loanable funds. This explains why new and old banks alike engaged in a dogged pursuit for new depositors, even if real rates of interests facing depositors are negative.

18. There are two staple sources of bank borrowings; one is SBP, the main source of borrowed funds for banks, and the other is money market or interbank funds market. Banks borrow from SBP in proportionately higher amounts; but much of this borrowing is refinancing of priority sector credit on concessional terms. The total amount of these borrowings of the banking system were Rs 153 billion in FY00, increasing to Rs 297 billion by FY10 at an average annual rate or 3.5 percent during FY00-05 and a faster growth of 10.3 percent during FY05-10. *(Data Set 3.7, Chapter 8)* This implies that for banks, sectoral financing facility of SBP is an important source of refinancing their credit base and this is not widely known. This would also suggest that were relying on SBP for borrowed financing; but that is not the case. In FY00, bank borrowings from SBP were 88 percent of total amount borrowed; by FY10, this proportion was down to 61 percent of all borrowings; that is, the largest source of bank borrowings is SBP, though they have begun to diversify their source of borrowings.

19. A third source of borrowings is long term debt market through issue of bonds or bond like instruments such as *sukuks*, which are bonds of Islamic finance. Thus far, there have been only couple of *sukuk* issues of fairly large size relative to average amount of bond issue by corporate sector in Pakistan.

Overall, amounts borrowed form long term debt market are fairly small at system level, though these are substantial for a single bank at institutional level. Most of bank borrowings are from short term interbank funds market or repo market driven by liquidity needs arising from exigencies of asset liability management. These short term interbank borrowings have their own structure of interest rates tied to maturity of funds borrowed, ranging from a few days to six months, clustering around couple of weeks at the most.

20. Given this long term profile of asset and liability structure of banking system, the net assets have grown substantially from Rs 134 billion in FY00 to Rs 668 billion in FY10 at an average annual rate of nearly 28 percent. This is very high rate of growth indeed. *(Data Set 3.2, Data Set 3.0)* Since net asses are the same as equity of banks, there has been a rapid growth of equity base. This is in contrast to trends during preceding decades of nationalized banking in Pakistan. This growth of banking system equity represents the structural shift that has occurred from state funded to private sector funded equity. Much of this increase in equity occurred from increases in owners' share capital in fulfillment of minimum capital requirements pursuant to adoption of Basel standards mentioned earlier. These capital requirements have come under criticism in view of their impact on banking systems all around, just not in developing countries like Pakistan. The pendulum seems to have swung too far.

21. Like any business corporation, and banks are none other, there are four components in the equity base of a typical bank; share capital or paid up capital; reserves; retained earning and surplus or deficits on revaluation of assets whenever such revaluation is carried out, not necessarily on the last day of the banking year. Among these, most important is share capital, paid up by owners and reserves kept with treasury banks to meet statutory reserve ratio; while retained earnings depend on profit or loss in a given year. When there are loan losses, their first impact is on retained earnings. After retained earnings are exhausted, losses spill over to reserves and share capital; and in that order.

22. Revaluation of assets does not have much of an impact from year to year because typically banks hold physical assets like real estate, office buildings and the like, not gold as central bank does. Their prices and market values are fairly steady and do not fluctuate in a significant manner from year to year. Hence, main component of equity for banks are paid up capital and reserves. The data for these two items is meticulously recorded and presented here from consolidated statement of all scheduled banks prepared and reported by SBP.

23. In early years of the decade, note that capital and reserves are slightly below total net assets, and this is because of deficit on revaluation of assets which got charged to capital and reserves in estimation of net assets, or equity base. These were early times of establishment of new private banks or transition of nationalized banks to privatized banks. In the process of cleaning up of their balance sheets, physical assets being carried by these banks on their books had to be verified and had to be revalued. Subsequently, once issue of revaluation was settled, there was a significant increase in unappropriated profits or retained earnings over the years, which together with repeated replenishment of owner's capital led to a significant increase in net assets of banking system.

Non-bank Financial Institutions *(NBFIs)*

24. The group of ***NBFIs*** includes a variety of financial institutions. The group consists of investment banks, modaraba companies or finance companies who operate like a bank, but their operations are not the same as those of main line banking institutions; hence they are called ***quasi-banking*** institutions. The group also includes leasing companies; contractual savings institutions like insurance companies and pension funds and mutual funds. These institutions do not engage in financial intermediation. As regards development finance institutions, DFIs, they belong to ***NBFIs.*** The reason is that they are not deposit money banks; and their lending business is unlike lending business of commercial banks. DFIs' lending is specialized to sectors or groups of borrowers eligible for priority sector financing. Hence, DFIs should be classified as ***NBFIs,*** but in Pakistan since they were chartered as scheduled banks, they got lumped together with commercial banks.

25. Keeping SBP system of classification of financial institutions intact, let us proceed with the analysis of structure of NBFIs, regardless whether DFIs are to be lumped in the banking system or not. It is inconsequential to the profile of banking system. Likewise, it does not make much difference to results of analysis, because their size of operations is very small when viewed from macrofinancial level. The data provides only orders of magnitudes in an interpretive sense; not a tight fit to accurately pinpoint size of business operations.

26. The number of ***NBFIs*** is much larger but it is in a state of flux. As of June 2010 as per SBP listing, there were 7 DFIs; 9 leasing companies down from 20 in early 2000s; 26 modaraba companies; nine investment banks; two

housing finance companies; and 121 mutual funds. The number of mutual funds is rising fast and a large number of them have been floated in recent years. Further, there were 34 non-life insurance companies including 30 domestic private owned, one state owned, and two foreign owned companies. In addition there were eight life insurance companies, including SLIC the largest; five Takafuls or Islamic insurance companies; three venture capital companies, and more than 400 brokers. Recently, SBP and SECP have significantly increased capital requirements, enhanced eligibility standards, tightened entry rules, registration, documentation and reporting requirements. Entry of new NBFIs has subsided. Their numbers are declining mainly owing to closures, mergers and buy-outs of those NBFIs which are reasonably profitable, have a good market share and a dependable client base in the business they are engaged in.

27. Several NBFIs, however, have a weak financial base. Their financial assets and capital base are limited. Their outreach to respond to business opportunities are mostly localized and geared to a niche of the market where they are most active. Many of them, except mutual funds, were established in 1980s or 1990s to reap short term returns or to garner ***regulatory arbitrage***, rather than to start genuine financial business for the long-haul. Regulatory arbitrage refers to opportunities of substantial profits created by regulations to benefit targeted groups or individuals. It happens routinely in Pakistan, engineered through regulations that over-ride mainstream regulation, leaving open a wide space for interpretation, allowing regulation based 'rent-seeking', a euphemism for corruption commonly prevalent.

28. Since the time NBFIs were transferred to SECP for supervision, SECP has moved to establish a system of monitoring these companies. It has issued regulations pertinent to core businesses of various segments of NBFIs and tightened requirements of business conduct and financial reporting. These regulatory steps aside, total assets of NBFIs during early 2000s remained around Rs 270 – 320 billion, and then began to rise owing to the boom in stock market which led to a large increase in the networth of many NBFIs like mutual funds. *(Data Set 3.4)* By FY07, assets of NBFIs stood at Rs 648 billion, the highest they have ever been. By close of the decade their total assets were about Rs 560 billion; but if we look at decade long growth of asset, it is fairly reasonable at close to 7 percent per year.

29. At system level, ***total assets of NBFIs*** are about 5 percent of total assets of financial system, down from 9 percent at the start of the decade. It is concentrated among insurance companies and DFIs who constitute 73 percent of total assets of NBFIs in current times, up from 66 percent at the

start of the decade. Further, top 15 institutions own nearly three fourth of total assets of this group. Most NBFIs are relatively small. There was a significant growth in assets of NBFIs owing to the boom in stock market, but this growth has now subsided. Leasing business and investment banking is facing competition from banks who have begun to diversify into these business activities via their subsidiaries and therefore, these NBFIs are now experiencing noticeable growth.

30. The largest part of NBFIs assets are investment in securities markets, rather then credit; just the opposite of banking system asset profile. In early years of the decade, investments of all NBFIs were nearly half of their total assets, while loans and advances were a one third of total assets. Towards the end of the decade, investments were nearly 85 percent of total assets while the share of loans and advances had considerably declined. Much of the increase in investment assets occurred because of meteoric rise of mutual funds whose assets increased from a partly Rs 13 billion in FY00 to Rs 335 billion in FY08, moderating to Rs 246 billion in FY10.

31. These number should be treated with caution because of reporting problems and their compilation into a composite category of NBFIs and interpolation of calendar year data, the standard time frame of financial reporting, into fiscal year data which is not available for NBFIs. There are also consistency problems owing to different classifications adopted by such a disparate group of financial institutions. The focus has been on DFIs, insurance companies and mutual funds, the largest groups among NBFIs. The data presented here is indicative of profile of NBFIs; no more. The only source of this data is SBP's Annual reports or FSA reports with special sectoral coverage and sectoral data. This SBP data has been cobbled together, so to say, and presented in Data Set 3.4; inadequacies and all. This data shows that NBFIs are in the business of investing, not lending; and much of investment is in securities or financial assets. Hence, investment by insurance companies and mutual funds is all that matters. Together these two groups of NBFIs hold the largest proportion of investment assets. Islamic investment institutions remain a very small part of total NBFI investment.

32. The equity base of NBFIs has grown significantly over the decade from an estimated Rs 38 billion in FY00 to Rs 114 billion in FY10. Much of this increase owes to new capital requirements and entry of mutual funds, most of whom are subsidiaries of asset management companies of banks. The advent and growth of ***Mutual Fund*** industry in Pakistan is a fascinating one, if one can piece together its assorted aspects during the current decade discussed in Chapters 3, 8 and 10 of Volume II. The growth of mutual funds

was phenomenal during stock market boom years of 2003-2007, but with market crash of mid-2008, their NAV took a nose-dive as did overall market capitalization, though lately it has begun to show some growth amidst bullish market trends.

33. ***Leasing companies*** were established mostly by large business groups or banks to take advantage of fiscal incentives such as depreciation allowance which is a key element in the profitability of vehicle leasing which accounts for 55 percent of their business activity and is the core of their business. SECP has taken steps to regulate and monitor leasing companies, has issued stringent rules and guidelines and has suspended licenses of a few companies due to their poor credit rating and violations of rules.

34. The ***contractual saving*** institutions, namely insurance companies and pension funds had a modest growth over the past years. Despite proliferation of insurance companies, state-owned companies like State Life Insurance Corporation (SLIC) dominate, and have the largest share of insurance market. In fact SLIC holds a virtual monopoly with about 95 percent market share in traditional life insurance business due to the long history as sole insurance provider after nationalization of 1971, government guarantees to its policies, and its countrywide network. By the same token, SLIC is the largest institutional investor with more than Rs 70 billion in investments.

35. The largest pension scheme for industrial workers is Employee's Old-age Benefit Institution (EOBI) with assets of about Rs 45 billion in mid 2000s. This pension scheme is mandatory for selected sectors and compulsory contributions by employers are required who regard this as another form of tax. EOBI has suffered from problems of portfolio investment, high administrative and operational costs, financial mismanagement or even fraud. Pension funds are facing growing liabilities, lack of management expertise and weak policy, legislative and regulatory framework. As a social security system, the coverage of pension schemes is limited. Private pension's funds lack a regulatory framework and SECP has taken some initial steps in this regard. The insurance sector has to be privatized if meaningful improvements are to occur, but the stumbling block is the vested interest of ministry of commerce who would like to maintain the status quo, inimical though it is for the growth of this sub-sector. Lately, EOBI has suffered losses on its investment portfolio, and it remains to be seen how it will cope with it. As part of financial system structure, however, it remains on the fringes of the system.

Section 5: Taking Exception
Evolution of Banking System – Pakistan
The Game of Roulette

1. In the historical context, a long term perspective of Pakistan's financial system is that it has undergone several ***upheavals*** every decade or so in the past. These were not routine changes or corrections of the financial system, rather these were reversals on a grand scale, accompanied by financial chaos. The financial system and its structure has been turned upside down every decade or so. It seems that a tragic game of roulette has been played with the banking and financial system in ***five episodes*** in the past, each slightly more than a decade long, at a scale unprecedented in annals of banking and finance in comparator countries.

2. Much of current predicament of financial system, classified as ***challenges*** in chronology of financial system reforms, can be traced back to roots of financial system in early days of the country down to episodic upheavals as they unfolded later on. The ***first episode*** saw establishment of a rudimentary banking system in the aftermath of partition and lasted roughly from late 1940s to the late 1950s. Partition occurred in such haste that no arrangements could possibly be made for currency and banking system. There were only a dozen banks headquartered in Pakistan out of about 100 banks at the time of partition. Most of them left for India, and one bank, Habib Bank transferred its headquarters from Bombay to Karachi. There were roughly 600 branches of banks out of about 4000 in all at the time of partition. After the dust settled, banks, their management and staff, bulk of their clients, all had left for India. Only two banks were left in Pakistan with about 70 branches. In short, Pakistan did not inherit any indigenous banking industry as such. It had to be built form scratch.

3. Pakistan did not have its own currency either. There was no central bank, perception being that Pakistan will make do with Indian currency to start with, managed by Reserve Bank of India until its own currency and banking system is established. Reserve Bank of India began withdrawing Indian rupee currency and coins, and began replacing them with notes printed by Reserve Bank of India, though emblazoned with images from Pakistan and denominations in English and Urdu. This was an agency arrangement and could not last long. In due course, it became obvious that a

central bank and currency of its own is critical to the newly born state. Thus State Bank of Pakistan came into being in June 1948. The banking system, however, remained in a limbo with banks moving out, closing down their branches, transferring their own financial assets and those of their clients, thus dwindling reserve base of remaining banks in early years. These were chaotic times for banks and their shifting clientele, deposit base and asset base. Their main preoccupation in these days was to facilitate transfer of assets across border rather the usual business of financing business, commercial and mercantile activities.

4. The prevailing attitudes among Muslims in British India towards business of banking and finance were negative. The mindset in those days was that Muslims were not cut out for financial business; this was something to be left to money minders of India. Muslims reinforced this prejudice with one of their own. Majority of self-respecting Muslims did not opt for banking as a career, because banking was regarded unworthy of Muslims to dabble in as a livelihood. As a result, the role of Muslims in banking industry, like any other business, commerce or industry in pre-independence India, was abysmal at the time of partition.

5. In its first episode, the first decade after independence was a period of establishment of new banks, a central bank, country wide expansion of banking branches, replacement of India's Reserve Bank rupee currency notes with currency issued by SBP. This was symbolic of nationhood and was critical for indigenous banking system; a period of emergence, establishment and consolidation of rudimentary banking and financial system.

6. In the ***second episode*** that began towards late fifties and lasted until mid-sixties, development finance institutions (DFIs) were established to provide credit for development of mostly state owned enterprises on concessional terms at subsidized rate structure. This approach succeeded in early years; a number of new industrial units were established financed by DFIs, and private sector investment soared. These new industries were granted protection, were provided import licenses for machinery and inputs; all under the rubric of infant industry.

7. The DFI based financing mechanism served the needs very well because its fidelity was maintained. This was the golden period of DFIs. They performed very well and were instrumental in jump starting a fledgling industrial sector that did not exist before. Thus, two systems existed in parallel; a largely private commercial banking system which experienced major expansion with opening up of new ones like UBL, and a newly

established or reorganized DFIs system. Gone were the attitudes, representing a reversal towards positive trend, that banking is not more than petty coin tending - a derisive characterization of centuries old mercantilist tradition in Indian sub-continent. These institutions fostered growth of new businesses and industries and new mercantile traditions, no matter how fledgling they were; and facilitated evolution of a class of enterprenure who simply did not exist in the country.

8. In the ***third episode***, there was a reversal of financial system, All financial institutions were nationalized, so were businesses and industries, sweeping into the dustbin all that existed before. This was done in the name of socialist banking, a newly discovered paradigm of Fabian socialists. Nationalizing of the assets of ***22 families*** was not all that was done. The financial structure which had sustained commerce in the country, got dismembered and its markets evaporated owing to truncation of country in 1971. Whatever had survived, was turned upside down, converting the banking system into a vehicle of resources transfer from public to the state.

9. Banking system ended up beholden to state finances and priorities, which led to emergence of loan defaults, then to ***loan losses,*** often in connivance with bad bankers. These defaulted loans were called ***infected loans*** commented upon earlier. This euphemism survives till and it is in use because defaults are pervasive. The development of banking as a system of finance came to a crawl at great costs to the country.

10. That was the time when socialist countries, tired of their own search of an ***alternative*** to privately owned system of interest-based banking, began to introduce a *capital surcharge, or an accounting cost, or a shadow price*, to avoid an appearance of re-introducing interest in the state owned and operated banking system. This re-designation did not succeed because principles and objectives of financial resource allocation together with its mechanisms remained state administered in layers of allocative process, which needed a vast machinery to implement and monitor. The allocation mechanism ran counter to fundamental principles of resource cost and their utilization, with subsidies and coverage for losses through extra-budgetary procedures.

11. In the ***fourth episode***, during the eighties another reversal started in the wake of realization that nationalization has not been the panacea that it was supposed to be, together with the realization that financial system is perennially in dire straits. Thus, , dawned the era of reforms around late 1980s. The push for reforms of banking and financial system came about largely because pressures from IFIs, not so much from within to straighten a

system that was no longer sustainable and did not deliver. The government did reforms not because it was convinced of the need, but because it had no other option owing to its dire financial straits. State owned enterprise and nationalized banking and financial institutions were slated for privatization, rolling back the clock to pre-nationalization era.

12. This reversal eventually occurred on the same grand scale as was nationalization. The privatization process peaked in the mid 1990s to early 2000s and is still going on in current times. It has been carried too far because it provides a mechanism to sell off national assets at a pittance to favored buyers. More are slated for privatization at throw away prices to "investors" who have no stake to revitalize or operate these enterprises. They will strip down the enterprise, lay-off the employees, and sell off the remaining hulk and still make a fortune. That is why there are so many new adherents of privatization; none were to be found in 1970s.

13. The costs of de-nationalization were heavy. For example, most DFIs' were eventually closed down at a considerable loss. These DFIs were established with money borrowed from overseas in hard currencies, and their working capital and resources largely came from loans from IFIs for onlending to establish industrial units. DFIs lost a number of clients in 1971 the aftermath war, and of the remaining businesses and corporate industrial units that were established before nationalization, ended up as publicly owned enterprises. A number of them were liquidated or sold at heavy losses because state appointed managers were simply not upto the task of managing business enterprises. When these enterprises and industrial units became moribund or went insolvent, they were finished as a going concern. The DFIs got denuded of assets on their books, and ended up insolvent and could not exist without continued subventions from the budget causing more losses to the exchequer.

14. Once DFIs came under financial stress and insolvency, their major financiers and supporters, the IFIs, turned off the spigot, truncated their lines of credit, accelerating their financial collapse. The IFIs were already under pressure to withdraw their support for DFIs, specially those gone insolvent. The fiasco of nationalization provided opportunity and rationale to IFIs to stop supporting DFIs to continue their operations.

15. Privatization of loss making or marginally profitable enterprises and financial institutions required cleaning up their balance sheets and replenishing their equity base prior to their sale to new owners. This operation was long drawn and turned out to be more expensive than

anticipated. The cost were borne by treasury owing to loss of networth, and assumption of infected loans bundled in very low sale price received at auction block at time of privatization of PSEs, in comparison to actual market worth of assets of these institutions. Since government did not have resources of their own to meet costs of nationalization, it borrowed cash loans in hard currencies from IFIs for restructuring and reforms, thereby adding to debt burden during 1990s.

16. These cash loans of IFIs for structural adjustment turned out to be a bonanza for financially strapped governments, because their tranche release conditionalities were not as stringent as those under project based lending. There were muted protest as to what is being adjusted and why, but it was an arrangement of convenience. There were some stark ironies along the way as quite a few industrial units were sold by the same party of government that nationalized it with great fervor a generation earlier. *(see Ghulam Kibriya)* Zeal-Pak cement factory, for example, was privatized when little was left of its machinery or equipment, all sold for scrap value. There was nothing left of once an exemplary enterprise and state of art industrial unit, efficient and financially strong.

17. In ***fifth episode***, the current one, looks like this regressive process is not over yet; and this episode is perhaps not the last one. After reforms and privatization and the heavy cost of liquidation, waves of downsizing and rightsizing, ***the hope is*** that banking system will settle down into a market paradigm with globalization and all. It is remarkable that current structure of privatized banking has withstood this burden, cope with financial and economic volatilities of current times, and still come out ahead and be profitable; while serving needs of financing of private sector.

18. Will the banking and financial system be allowed to survive? That remains conjectural at this time, because now we have ***Islamic banking*** slated to replace modern banking if proponents have their way. In their lexicon, modern banking is 'conventional' banking; something to be dispensed with. The proponents are not mollified with the current state of banking business, and will not rest until all vestiges of interest rate are eliminated. Hence current episode of market-based banking may note be the last episode.

19. It is easier to truncate a system, supplant it with something else, or graft a system, no matter how dysfunctional it may be, make a bundle and move on. It is lot more difficult to sustain an institutional structure. There hardly is any appreciation of this process; hence, it is difficult to nurture

mercantile traditions of businesses or finance, not to speak of good corporate conduct, transparency, and accountability that have taken decades to evolve in other countries. A symbiosis between state and pluralist society, reflecting a consensus on social choices which took so long to cultivate and grow in Europe, Asian or other countries, can not be easily rooted in the norms of conduct among bankers, financiers and their clients if they continue to face uncertainties like these.

20. Looking at the future, the issue is ***are reforms reversible?*** Ordinarily, this would be a moot question; but given proclivities of ad-hocism, we can not be so sure. We can only surmise that reversibility of reforms does not seem to be in the cards, given the stakes that have been built up thus far. Pressures from groups seeking alternate system to modern banking is relentless though. These pressures aside, consolidation of reforms is needed; not more reforms. Building support for what has been already accomplished is essential, rather than pursuing new initiatives. Given this scenario, it is difficult to conceive of a return to state intervention much less state ownership of privatized financial institutions; or allocation of financial resources by fiat that held sway until the 1990s. It is unlikely that openness of foreign regime and global financial linkages will be smothered; nor is it likely that apparatus of market-based finance will be bundled up any time soon.

21. If comparative experience is any guide, once liberalization, open and market-based processes have taken hold, globalization has seeped through, foreign financial linkages have been established, mercantile sectors have begun to operate in the global economy and exposure to international trade has enhanced; this process therefore, is not reversible. It will be difficult to turn wheels of change churning backwards. Once attitudes have gone through a metamorphosis from inward looking to outward looking perspectives, a return to isolationism is not in the cards.

Data Set 3.0 printed Nov 6	Financial System - *at a Glance*										*Rs billions, end Period*
	FY00	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10p**
System of Indirect Finance; SBP, Banking System and NBFIs											
Assets	**2984**	**3325**	**3407**	**3837**	**4359**	**5193**	**6213**	**7381**	**8310**	**9475**	**10779**
SBP \ 1	966	1165	1009	1113	1180	1394	1688	1932	2294	2882	3437
Banking System \2	1731	1892	2108	2398	2810	3362	4020	4801	5453	6068	6782
NBFIs \3	287	268	290	326	369	437	505	648	563	525	560
Deposits	***1186***	***1320***	***1467***	***1742***	***2076***	***2529***	***2937***	***3461***	***3899***	***4243***	***4803***
Banking System	1152	1283	1425	1693	2022	2450	2858	3414	3862	4201	4765
NBFIs	34	37	42	49	54	79	79	47	37	42	38
Ceredit	**1105**	**1152**	**1143**	**1215**	**1527**	**2022**	**2424**	**2767**	**3156**	**3501**	**3602**
SBP Credit to Banks, NBFIs	196	200	178	158	183	197	208	267	217	300	310
Banking System	797	864	885	970	1242	1694	2071	2376	2816	3080	3175
NBFIs	112	88	81	87	102	131	145	124	123	120	117
Investments	**969**	**1050**	**893**	**987**	**1104**	**1265**	**1622**	**1867**	**2376**	**2792**	**3410**
SBP, Govt Securities	541	616	318	110	133	331	517	461	1042	1145	1165
Banking System	311	313	437	703	784	726	868	1107	1037	1360	1950
NBFIs	116	122	138	174	186	208	238	298	297	288	295
Equity	**197**	**206**	**222**	**216**	**254**	**347**	**476**	**646**	**835**	**911**	**959**
SBP	25	21	18	18	18	28	48	78	174	202	177
Banking System	134	143	154	138	170	246	351	482	566	604	668
NBFIs	*38*	*42*	*50*	*60*	*66*	*73*	*77*	*86*	*95*	*105*	*114*
System of Direct Finance; Securities Market											
Securities Markets	**891**	**807**	**1205**	**1602**	**2711**	**3454**	**4612**	**6054**	**6240**	**6011**	**8614**
Money Markets: *Treasury Bills*	*320*	*274*	*520*	*527*	*899*	*1061*	*1483*	*1665*	*2038*	*3349*	*5231*
Capital Markets	*571*	*533*	*685*	*1075*	*1812*	*2393*	*3129*	*4389*	*4202*	*2662*	*3383*
Bond Markets	*179*	*194*	*277*	*329*	*409*	*356*	*363*	*408*	*458*	*542*	*651*
Equity / Stock Market	*392*	*339*	*408*	*746*	*1403*	*2037*	*2766*	*3981*	*3744*	*2120*	*2732*
Financial System Assets	**2906**	**3082**	**3719**	**4452**	**5966**	**7382**	**9203**	**11569**	**12175**	**12694**	**15983**
Financial System Savings \ 4	**2201**	**2419**	**2715**	**3166**	**3569**	**4088**	**4566**	**5258**	**5920**	**6680**	**7570**
Deposits: Banks, NBFIs + NSS	**1820**	**1990**	**2211**	**2565**	**2907**	**3305**	**3707**	**4291**	**4810**	**5406**	**6152**

Data Set 3.0a **Financial System - *at a Glance*** ***Rs billions, end Period***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
			Percent Shares; Indirect Finance								
Financial Institution Assets	100	100	100	100	100	100	100	100	100	100	100
SBP	32.4	35.0	29.6	29.0	27.1	26.8	27.2	26.2	27.6	30.4	31.9
Banking System	58.0	56.9	61.9	62.5	64.5	64.7	64.7	65.0	65.6	64.0	62.9
NBFIs	9.6	8.1	8.5	8.5	8.5	8.4	8.1	8.8	6.8	5.5	5.2
Deposits	100	100	100	100	100	100	100	100	100	100	100
Banking System	97.1	97.2	97.1	97.2	97.4	96.9	97.3	98.6	99.1	99.0	99.2
NBFIs	2.9	2.8	2.9	2.8	2.6	3.1	2.7	1.4	0.9	1.0	0.8
Credit	106	102	100	100	100	100	100	100	100	100	100
SBP	17.7	17.4	15.6	13.0	12.0	9.7	8.6	9.6	6.9	8.6	8.6
Banking System	78.2	76.8	77.4	79.8	81.3	83.8	85.5	85.9	89.2	88.0	88.2
NBFIs	10.2	7.7	7.0	7.2	6.7	6.5	6.0	4.5	3.9	3.4	3.2
Investments	100	100	100	100	100	100	100	100	100	100	100
SBP, Govt Securities	55.9	58.6	35.6	11.2	12.1	26.2	31.8	24.7	43.9	41.0	34.2
Banking System	32.1	29.8	49.0	71.2	71.1	57.4	53.5	59.3	43.7	48.7	57.2
NBFIs	12.0	11.6	15.4	17.6	16.9	16.4	14.7	16.0	12.5	10.3	8.7
Equity	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
SBP	12.7	10.2	8.1	8.3	7.1	8.1	10.0	12.1	20.8	22.2	18.5
Banking System	68.0	69.5	69.4	63.9	66.9	70.9	73.8	74.6	67.8	66.3	69.7
NBFIs	19.3	20.3	22.5	27.8	26.0	21.0	16.2	13.3	11.4	11.5	11.9
Memo Items											
Credit to Assets Ratio	37.0	34.7	33.6	31.7	35.0	38.9	39.0	37.5	38.0	36.9	33.4
Investment to Assets Ratio	32.5	31.6	26.2	25.7	25.3	24.4	26.1	25.3	28.6	29.5	31.6
Deposits with NSS	634	670	744	823	832	776	770	830	911	1163	1350
GDP, nominal (at MP)	***3794***	***4162***	***4401***	***4822***	***5641***	***6581***	***7623***	***8723***	***10242***	***12738***	***14669***

SaF Data Set, 2011

Source: SBP, FSA 00, 05, 07 and various ARs; NBFIs assets are aggregated as per classification given in FSAs.

\ 1 All data entries here are recall values from Table 3.6

\ 2 All Banking system data are layered aggregates of annualized values; see Table 3.2 for details.

\ 3 NBFIs data is a mix of FY and CY data as per classification in FSA Annexes; not strictly compatible, see Table 3.4 for details

\ 4 Financial Savings are FY data, see Table 4.3 for details

Data Set 3.0b — **Financial System - *at a Glance*** — ***Rs billions, end Period***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
Financial System					***Annual Growth Rates***						
Financial System Assets		6.0	20.7	19.7	34.0	23.7	24.7	25.7	5.2	4.3	25.9
Financial System Savings		9.9	12.2	16.6	12.7	14.5	11.7	15.2	12.6	12.8	13.3
Assets; Indirect Finance		11.4	2.5	12.6	13.6	19.1	19.6	18.8	12.6	14.0	13.8
Equity; Indirect Finance			7.9	-2.7	17.6	36.6	37.0	35.8	29.3	9.1	5.3
Deposits; Indirect Finance		11.3	11.2	18.7	19.1	21.8	16.1	17.9	12.6	8.8	13.2
Credit; Indirect Finance		4.3	-0.8	6.3	25.6	32.4	19.8	14.2	14.1	10.9	2.9
Investments; Indirect Finance		8.4	-14.9	10.5	11.8	14.6	28.3	15.1	27.3	17.5	22.1
Direct Finance: Securities Markets		-9.4	49.3	32.9	69.2	27.4	33.5	31.3	3.1	-3.7	43.3
Direct Finance: Money Markets		-14.4	89.8	1.3	70.6	18.0	39.8	12.3	22.4	64.3	56.2
Direct Finance: Bond Markets		8.4	42.8	18.8	24.3	-13.0	2.0	12.4	12.3	18.3	20.1
Direct Finance: Stock Market		-13.5	20.4	82.8	88.1	45.2	35.8	43.9	-6.0	-43.4	28.9
Ratios of GDP											
Financial System Assets	76.6	74.0	84.5	92.3	105.8	112.2	120.7	132.6	118.9	99.7	109.0
Securities Markets	23.5	19.4	27.4	33.2	48.1	52.5	60.5	69.4	60.9	47.2	58.7
Deposits; Banks, NBFIs	31.3	31.7	33.3	36.1	36.8	38.4	38.5	39.7	38.1	33.3	32.7
Credit; SBP, Banks, NBFIs	29.1	27.7	26.0	25.2	27.1	30.7	31.8	31.7	30.8	27.5	24.6

Average Annual Growth Rates

	FY00-10	FY00-05	FY05-10
Financial System Assets	***18.6%***	***20.5%***	***16.7%***
Financial Institutions Assets	***13.7%***	***11.7%***	***15.7%***
Assets, SBP	13.5%	7.6%	19.8%
Banking System Assets	14.6%	14.2%	15.1%
Securities Markets	***25.5%***	***31.1%***	***20.1%***
Money Markets, MT-Bills	32.2%	27.1%	37.6%
Capital Markets	19.5%	33.2%	7.2%

Average Annual Growth Rates

	FY00-10	FY00-05	FY05-10
Financial System: Savings	13.1%	13.2%	13.1%
Financial System: Deposits	15.0%	16.4%	13.7%
Financial System: Credit	12.5%	12.8%	12.2%
Equity, SBP, Banks + NBFIs	17.1%	12.0%	22.5%
Equity, SBP	21.6%	2.3%	44.6%
Banking system Equity	17.4%	12.9%	22.1%

SaF Data Set

	Data Set 3.2	Banking System - Pakistan *(interpolated)*					End June, Rs billions				
		FY00	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10**
5												
6	**Banking System Assets**	**1731**	**1892**	**2108**	**2398**	**2810**	**3362**	**4020**	**4801**	**5453**	**6068**	**6782**
7	Banking System, Investment	311	313	437	703	784	726	868	1107	1037	1360	1950
8	Banking System Credit	797	864	885	970	1242	1694	2071	2376	2816	3080	3175
9	Cash & Interbank Balances	204	215	201	242	266	305	333	521	549	463	493
10	All Other Assets, residual	420	500	585	482	517	637	748	796	1051	1165	1164
11												
12	**Banking System Liabilities**	**1597**	**1749**	**1954**	**2260**	**2640**	**3116**	**3669**	**4319**	**4887**	**5464**	**6114**
13	***Banking System, Deposits \ 2***	*1152*	*1283*	*1425*	*1693*	*2022*	*2450*	*2858*	*3414*	*3862*	*4201*	*4765*
14	Demand Deposits	437	501	583	727	960	1167	1341	1507	1682	1608	2135
15	Time Deposits	715	781	842	966	1062	1283	1517	1907	2180	2593	2630
16	***Borrowings, Interbank \ 2***	161	194	190	192	212	221	367	488	330	470	*542*
17	of this: borrowings from SBP	142	141	139	141	173	190	200	269	217	290	334
18	***All Other Liabilities, residual***	284	272	339	375	406	445	444	417	695	793	807
19	**Bnking System Net Assets, Equity**	**134**	**143**	**154**	**138**	**170**	**246**	**351**	**482**	**566**	**604**	**668**
20	***Capital + Reserves***	124	129	141	122	144	187	234	350	410	568	646
21												
22	**Banking System, Assets**						***Shares***					
23	*Banking System, Investment*	18.0	16.5	20.7	29.3	27.9	21.6	21.6	23.1	19.0	22.4	28.8
24	*Banking System Credit*	46.0	45.7	42.0	40.5	44.2	50.4	51.5	49.5	51.6	50.8	46.8
25	*Cash & Interbank Balances*	11.8	11.4	9.5	10.1	9.5	9.1	8.3	10.9	10.1	7.6	7.3
26	*All Other Asssets*	24.2	26.4	27.7	20.1	18.4	18.9	18.6	16.6	19.3	19.2	17.2
27	**Banking System Liabilities**											
28	*Banking System, Deposits*	72.1	73.3	72.9	74.9	76.6	78.6	77.9	79.1	79.0	76.9	77.9
29	*Borrowings, Interbank*	10.1	11.1	9.7	8.5	8.0	7.1	10.0	11.3	6.8	8.6	8.9
30	*All Other Liabilities*	17.8	15.6	17.3	16.6	15.4	14.3	12.1	9.6	14.2	14.5	13.2
31	**Bnking System Net Assets, Equity**	7.7	7.6	7.3	5.8	6.0	7.3	8.7	10.0	10.4	10.0	9.8
32	SaF Data Set	*Source: SBP Annual Reports. FSAs; FY00 thru FY10, Data Annexes*										
33	\ 1 Interpolated from CY data series for FY01-08; Banking Stats Table 21.1; for Fy 09-10 data from QR June 2010											
34	\ 2 FY00-10 data from Table 6.1 of SBP Annual Reports as per classification shown; same as in Stat Bulletin, Table 3.1. 2010.											

Data Set 3.2a — **Banking System - Pakistan** *(interpolated)* — ***End June, Rs billions***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
					Annual Growth Rates						
Banking System, Assets		9.3	11.4	13.8	17.2	19.6	19.6	19.4	13.6	11.3	11.8
Banking System, Investment (net)		0.7	39.7	60.8	11.5	-7.5	19.6	27.6	-6.3	31.1	43.4
Banking System Credit (net)		8.4	2.4	9.7	28.0	36.4	22.3	14.7	18.5	9.4	3.1
Cash & Interbank Balances		5.6	-6.5	20.4	10.1	14.6	9.1	56.5	5.4	-15.7	6.5
All Other Assets		19.2	17.0	-17.5	7.3	23.1	17.4	6.4	32.0	10.9	-0.1
Banking System Liabilities		9.5	11.7	15.7	16.8	18.0	17.7	17.7	13.2	11.8	11.9
Banking System, Deposits		11.3	11.1	18.8	19.4	21.2	16.6	19.5	13.1	8.8	13.4
Borrowings, Interbank		20.5	-2.1	1.1	10.4	4.2	66.1	33.0	-32.4	42.4	15.3
All Other Liabilities		-4.1	24.3	10.6	8.5	9.5	-0.2	-6.2	66.8	14.1	1.8
Bnking System Net Assets, Equity		6.7	7.7	-10.4	23.2	44.7	42.7	37.3	17.4	6.7	10.6
Capital + Reserves		4.0	9.3	-13.5	18.0	29.9	25.1	49.6	17.1	38.5	13.7

Average Annual Growth Rates				*Average Annual Growth Rates*		
All, FY data	**FY00-10**	**FY00-05**	**FY05-10**	**FY00-10**	**FY00-05**	**FY05-10**
Banking System Assets	14.6%	14.2%	15.1%	14.4%	14.3%	14.4%
Banking System, Investment	20.2%	18.5%	21.9%	15.3%	16.3%	14.2%
Banking System Credit	14.8%	16.3%	13.4%	17.2%	21.7%	12.8%
Cash & Interbank Balances	9.2%	8.4%	10.1%	13.9%	12.4%	15.4%
All Other Assets, residual	10.7%	8.7%	12.8%	12.9%	6.5%	19.7%
				17.4%	12.9%	22.1%

Banking System Liabilities
Banking System, Deposits \ 2
Demand Deposits
Time Deposits
Borrowings, Interbank \ 2
Bnking System Net Assets, Equity

Nominal Weighted Averages, Banking System, end year											
Deposit rates, PLs & interest bearing	5.4	4.3	3.4	1.1	1.0	1.9	2.5	2.7	4.4	4.3	4.4
Advances, interest bearing & Islamic	13.6	13.5	12.9	7.8	7.0	10.2	11.1	11.6	14.6	13.2	13.4
Gross Banking Spread	**8.2**	**9.1**	**9.5**	**6.6**	**6.0**	**8.3**	**8.6**	**8.9**	**10.2**	**8.9**	**9.0**
GDP (nominal MP)	***3746***	***4108***	***4425***	***4974***	***5766***	***6716***	***7773***	***8881***	***10400***	***13082***	***15239***

Equity : Share Capital subscribed + Reserves + retained Profits/ accumulated loss charge + asset ravaluation (non-realizable)

Data Set 3.4 — NBFIs: Financial Status Summary — *End June, Rs billions*

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
5	***Assets, NBFIs***	***287***	***268***	***290***	***326***	***369***	***437***	***505***	***648***	***563***	***525***	***560***
6	Insurance Companies \1	98	113	130	146	175	202	245	417	339	287	312
7	Development Finance Instituions \ 2	92	61	69	79	95	108	117	95	85	99	101
8	Investment Banks	41	31	27	38	36	51	55	46	43	41	42
9	Modarabas, IFCs	15	15	17	16	18	22	24	26	30	33	38
10	Leasing	41	48	47	47	45	54	64	64	66	65	67
11	***Deposits, NBFIs***	***34***	***37***	***42***	***49***	***54***	***79***	***79***	***47***	***37***	***42***	***38***
12	Development Finance Instituions	12	11	13	17	23	35	26	7	4	14	16
13	Investment Banks	11	13	11	14	12	20	25	15	12	9	7
14	Modarabas, IFCs	1	1	1	2	3	3	4	5	4	4	3
15	Leasing	10	12	17	16	16	21	24	20	17	15	12
16	***Loans and Advances, NBFIs***	***112***	***88***	***81***	***87***	***102***	***131***	***145***	***124***	***123***	***120***	***117***
17	Development Finance Instituions	45	21	19	18	30	42	42	23	24	26	28
18	Investment Banks	20	14	10	13	14	21	23	21	16	12	9
19	Modarabas, Inv Fin Companies	9	10	10	10	11	14	15	15	17	18	16
20	Leasing Finance,	27	32	31	35	35	42	52	54	53	51	49
21	Housing Finance	11	11	11	11	12	12	13	11	13	13	15
22	***Investments, NBFIs***	***116***	***122***	***138***	***174***	***186***	***208***	***238***	***298***	***297***	***288***	***295***
23	Insurance Companies	73	81	90	104	118	135	167	231	230	212	223
24	Development Finance Institutions	26	22	30	42	43	43	38	37	36	48	45
25	Investment Banks	12	12	11	20	17	21	24	21	16	13	10
26	Modarabas, Inv Fin Companies	3	3	3	2	3	4	4	5	7	7	9
27	Leasing	3	4	3	6	5	5	5	4	7	8	8
28	***Mutual Funds, NAV***	***13***	***12***	***25***	***52***	***94***	***126***	***160***	***289***	***335***	***204***	***246***
29												
30	***Equity, NBFIs***	***38***	***42***	***50***	***60***	***66***	***73***	***77***	***86***	***95***	***105***	***114***
31												
32	SaF Data Set		*Source: SBP FSA Reports, Data Annex*					p: provisional, subject to revision				
33	\ e: Estimates based on data as available for major NBFIs.											
34	\ 1: Includes life, non-life and re-insurance, calendar year data					\ 2: Calendar year data						

Data Set 3.6 **State Bank of Pakistan: *Financial Summary*** ***Rs billion, End of Period***

5		**FY00**	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10**
6	**Total Assets of SBP**	**966**	**1165**	**1009**	**1113**	**1180**	**1394**	**1688**	**1932**	**2294**	**2882**	**3437**
7	***Equity; Capital and Reserves \ 1***	***25***	***21***	***18***	***18***	***18***	***28***	***48***	***78***	***174***	***202***	***177***
8	**Assets: Issues Dept**	**374**	**393**	**458**	**523**	**611**	**706**	**784**	**893**	**1050**	**1224**	**1377**
9	*Gold and Buillon*	31	36	39	41	48	54	76	81	123	158	220
10	*Forex Reserves*	60	111	245	459	514	484	567	698	466	384	479
11	*Govt Securities*	265	243	170	19	46	163	136	109	456	675	672
12	***Liabilities: Notes in Circulation***	*374*	*393*	*458*	*523*	*611*	*706*	*784*	*893*	*1050*	*1224*	*1377*
13	**Assets: Banking Dept**	**592**	**772**	**551**	**590**	**569**	**688**	**904**	**1039**	**1244**	**1658**	**2060**
14	*Balances held overseas*	11	22	42	104	132	140	122	153	144	411	600
15	*Loans to Banks, NBFIs*	196	200	178	158	183	197	208	267	217	300	310
16	*Investments - Banks, NBFIs*	42	50	56	37	37	31	27	20	19	20	21
17	*Investments - Govt Securities*	***277***	***372***	***148***	***92***	***88***	***168***	***381***	***352***	***586***	***470***	***493***
18												
19					*percent shares*							
20	**Assets Issues Dept**	38.7	33.7	45.4	47.0	51.8	50.6	46.4	46.2	45.8	42.5	40.1
21	*Gold and Buillon*	8.3	9.1	8.6	7.9	7.8	7.6	9.7	9.1	11.7	12.9	16.0
22	*Forex Reserves*	16.1	28.2	53.6	87.8	84.1	68.6	72.3	78.2	44.4	31.4	34.8
23	*Govt Securities*	70.7	61.9	37.2	3.6	7.5	23.1	17.3	12.2	43.4	55.1	48.8
24	**Assets Banking dept**	61.3	66.3	54.6	53.0	48.2	49.4	53.6	53.8	54.2	57.5	59.9
25	*Balances held overseas*	1.8	2.8	7.6	17.6	23.2	20.3	13.5	14.7	11.6	24.8	29.1
26	*Loans to Banks, NBFIs*	33.1	25.9	32.3	26.8	32.2	28.6	23.0	25.7	17.4	18.1	15.0
27	*Investments - Banks, NBFIs*	7.1	6.5	10.1	6.2	6.5	4.5	3.0	1.9	1.5	1.2	1.0
28	*Investments - Govt Securities*	46.8	48.2	26.9	15.5	15.4	24.5	42.1	33.9	47.1	28.3	23.9
29												
30	***Govt Securities Holdings \ 2***	***541***	***616***	***318***	***110***	***133***	***331***	***517***	***461***	***1042***	***1145***	***1165***
31	**GDP, nominal (at MP)**	***3746***	***4108***	***4425***	***4974***	***5766***	***6716***	***7773***	***8881***	***10400***	***13082***	***15239***
32	SaF Data Set	Source: SBP Annul Reports										
33	\ 1 Equity consists of capital nad reserves, but does notinclude unrealized apreciation of gold reserves an revaluation of other assets.											
34					\ 2 Total governemnt securities held at Issues Department and Banking Department							
35												

Data Set 3.6a — **State Bank of Pakistan:** ***Financial Summary*** — ***Rs billion, End of Period***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
				Annual Growth Rates							
Assets: Issues Dept		5.1	16.5	14.2	16.8	15.5	11.0	13.9	17.6	16.6	12.5
Assets: Banking Dept		30.4	-28.6	7.1	-3.6	20.9	31.4	14.9	19.7	33.3	24.2
Govt Securities Holdings		13.7	-48.3	-65.4	20.7	148.8	56.0	-10.8	126.0	9.9	1.7

	Average Annual Growth Rates		
	FY00-10	**FY00-05**	**FY05-10**
Total Assets of SBP	**13.5%**	**7.6%**	**19.8%**
Capital and Reserves	21.6%	2.3%	44.6%
Assets: Issues Dept	***13.9%***	***13.5%***	***14.3%***
Gold and Buillon	21.6%	11.7%	32.5%
Forex Reserves	23.1%	51.8%	-0.2%
Govt Securities	9.8%	-9.3%	32.8%
Liabilities: Notes	***13.9%***	***13.6%***	***14.3%***

	Average Annual Growth Rates		
	FY00-10	**FY00-05**	**FY05-10**
Assets: Banking Dept	***13.3%***	***3.1%***	***24.5%***
Balances held overseas	49.9%	67.8%	33.9%
Loans to Banks, NBFIs	4.7%	0.1%	9.5%
Investments - Banks, NBFIs	-6.7%	-5.9%	-7.5%
Investments - Govt Securities	5.9%	-9.5%	24.0%

Memo Items											
SBP Income		5	43	9	10	44	74	124	180	220	209
Discount, interest, return		64	39	21	12	30	70	93	105	183	185
SBP Profit		21	25	0.2	6	31	68	109	165	202	187

\3 Loans by both Banking and Issues Departments

Revaluation of assets not included,because much of revaluation is of gold reserves not realized (cashed), but very big; total equals Net Assets

Chapter 4: Interest Rates
Financial System and the Economy

Thematics

Interest Rate

Basics – Interest Rate and Yield, Return, Discount Rate
How Interest Rate is Determined?
Theoretical: Classical, Liquidity Preference
The General Theory, Loanable Funds
Applied: the Consensus – Costs and Returns of
Role of Financial Markets
Interventions and Monetary Management
Policy Rate, Inter-bank Rate

Interest Rate – Pakistan

Structure, Short term and Long term
Interbank Markets, KIBOR, Trends
Rates of Return on Deposits, the Structure and Trends
PLS Deposits, Interest Bearing
Lending Rates; the Structure and Trends
Banking System, Islamic Financing
Interest Rate Determination
Markets, KIBOR, SBP Bank Rate
Leading Instruments and Mechanisms

Interest Rat, Price Level, Stability

Interest Rate, Prices –Monetary Management
Comparative Experiences at Monetary Management
The Role of Central Bank
Instruments, Mechanism, Targeting
Stability Conflicts

Chapter 4: Interest Rates, Financial System and the Economy

Section 1: Interest Rate Determination

1. What is interest rate and how it is determined in ***applied context*** is fairly complex matter involving a host of factors, not easy to trace and analyze even for those well-versed in its intricacies of various types of financial markets, be they credit markets, deposit markets, money or capital markets, or even informal markets. As though this complexity was not enough, ideological views have evoked enduring controversies throughout the ages. For the uninitiated, it is a challenge; yet a consensus prevails in the realm of banking and finance that interest rate is cost of funds if borrowed; a return if invested or held in interest bearing assets. Therefore, this discussion is limited to what transpires in the applied realm only, staying away from the controversies swirling around.

2. A great deal has been written about interest rate. It is an engrossing study for those who would like to pursue it. A review of this immense body of literature is neither possible nor intended here; but in applied context, let us restrict ourselves to operational reality of banking and finance business worldwide where common dictum is that interest rate emerges from ***time value of money***, and it is either a cost or return on money, where money is interpreted as financial asset. Since money represents command over the basket of goods and services at any given time, therefore interest rate is seen as premium for ***time preference*** for the use of goods and services.

3. At ***operational level*** and in applied realm, interest rate is cost of borrowing money, hence it is central to intermediation activities in modern banking. It is also regarded as a return on liquid asset like cash, and in that sense interest rate is interpreted as ***liquidity premium*** for borrowed money; alternately, it is the cost of being illiquid. For banks as creditors, lending business is hinged to a structure of lending rates determined in credit markets. For depositors, it is the rate of return; or in its mirror like image, for banks it is ***cost of funds,*** where deposits are largest component of their funding base. If banks need funds beyond their deposit base, interest rate is a premium paid for borrowed funds, or what is the same, a ***premium for***

liquidity, borrowed in short term money markets; or borrowed in long term debt markets through bonds, where the coupon rate is the cost of borrowing. The flip side is that for banks as investors in various types of financial assets, interest rate is a ***proxy*** for returns on investment in various assets in money and capital market, all valued in nominal terms.

4. Interest rate therefore, is treated as cost of borrowed funds for users of financial resources, whether for short term or long term, regardless of the type of instrument used for this purpose. For suppliers of funds, interest rate is a return based on maturity and type of deposit instrument held. In applied realm, the consensus is that interest rate is determined by ***supply and demand of loanable funds***; be they financial intermediation activities of banks and non-bank financial institutions alike; or investment activities in financial markets. At any given time, structure of rate of interest is hinged upon ***policy rate*** of central bank, which effectively is the lending rate of central bank to banking system, also referred to as ***bank rate***. This policy rate of the central bank is shadowed by ***interbank offer rate;*** for Pakistan it is KIBOR, (***Karachi-Interbank-Offer Rate).*** Both these rates, namely the policy rate and interbank offer rate are treated as anchor rates for financing activities down the line across financial markets and banking system operations.

5. In ***modern banking operations*** worldwide, interest rates both on deposit side and on lending side are ***variable***; not fixed. That variability is spread over maturity period of financial contract where a particular interest rate may prevail over a time slice; just like the price of commodity may appear to be fixed for a time slice, but in fact it is subject to changes according to market conditions. Therefore, interest rate is not pre-determined, though some instruments carry fixed interest rates for the maturity if so specified in the financial contract. This variability of interest rate is a major operational characteristic which has little to do with theoretical discussions of pre-determined interest rate in market-based banking and finance.

6. There are no fixed or pre-determined interest rates in financial markets either. It is the other way round. In money markets, ***funds*** are being traded all the time, where ***funds represent liquidity***; that is, liquidity is being traded between its suppliers and users, the financial institutions. This demand for liquidity is originating from its end-users, the clients of banking system; the households and businesses. Banks are not borrowing ***liquidity*** for their vaults; instead, they are borrowing funds to provide liquidity as per demand of their clients, primarily, and also for their short term asset and liability

management needs arising out of their business transactions that are originating form transactions of their clients. For business, their demand for liquidity is arising out of their business activities. If business and trading is good, and economy is growing, demand for liquidity will rise; and vice-versa. These interlinks, the chain of causation, must be analyzed and unraveled, for it explains how short term interest rates get determined in markets for funds. ***(see Chapter 6, Volume II)*** In money markets, interbank trading of funds sets the level and tone of short term interest rates; it determines what short term interest rates will be, led by treasury bills market. The short term rates, namely T-bill rates, interbank rates or repo rates keep gyrating all the time based on market conditions, where an individual trading participant is a ***price taker***, not price maker. Therefore, for short term interest rates what transpires in money market operations is all that matters for determination of interest rates.

7. It also depends on the time slice one is dealing with; namely maturity of assets being traded in securities markets. There are securities with fixed rates of interest; for example, debt securities like bonds with coupon rates specified at the time of bond issue, but return on bonds shadows market interest rate and is variable over time. For the investor, interest rate determines return on securities, where return on interest bearing securities traded in the market has two components. One component is the amount of interest income accrued for holding period of security if it is interest bearing; the other is capital gain or loss depending on differential between purchase price and sale price of security. If interest bearing securities are not traded in the market, interest rate is the same as rate of return on them; for example, savings in bank accounts.

8. If the security is traded in the market, its price is affected by interest rates, where movements in interest rates inversely affect market value of securities. In turn, interest rates in part, are affected by ***policy rate*** of central bank. That is the reason announcement of changes in policy rate is much anticipated by all. Clues are eagerly sought as to what new policy rate will be to position themselves in the market ahead of policy rate announcement. The entire ***structure of interest rates*** swiftly registers any change in the policy rate, depending on how developed financial markets are.

9. If financial market participants worry about changes in ***policy rate***, then central bankers worry even more about how to nurture stability of price level, interest rates and exchange rate, and yet achieve a respectable economic growth, all at the same time. Hence their pre-occupation is to maintain supply of money, credit in the economy and interest rates at such

levels that would ascertain a desirable income and employment growth with acceptable level of inflation over a given period and with stability. Now, that makes a great deal of sense to those engaged in investing in securities markets, though complicated it is, given rigidities of financial markets, with open access to globalized financial flows, and open currency markets. The apple cart of such a complex policy stance may get upturned at any corner, no matter how savvy are those calibrating policy rate movements.

10. Conceptually, ***yield to maturity, internal rate of return, discount rate,*** viz., ***interest rate*** used for discounting future stream of cash inflows are synonymous. The reason is that internal rate of return is a unique discount rate that makes the present value of periodic cash inflows plus any capital gains equal to the price of the asset. Likewise, yield to maturity on a bond is the same as the rate used for discounting coupon income and redemption value of the bond, while the discount rate used is the rate of interest which makes the price of the bond equal to these discounted values.

11. Operationally, they are not the same and diverge from each other. The reason is that there is no ***unique rate of interest***, short term or long term. There is a structure of interest rates prevailing at any given time reflecting different time value of money for different participants, be they investors or financiers. There are various types of short term rates, depending on the time slice; overnight, daily, weekly or whatever the time slice may be. Likewise, there are medium to long term rates of interest rates or assets of various maturities. Any one of these medium to long term rate could be used as discount rate as the best approximation to determine returns.

Interest Rate Determination
in theoretical realm

12. The following is a summary review of leading theories of rate of interest, inadequate though it may be. Let us start with **classical theory** which stipulates that interest rate is determined by supply of savings and demand for investment funds in simplest formulation of the theory. This is the domain of economics based on national accounting identities. In this analytical framework, investment is always identical to savings in ***ex-post*** sense and their equilibrium determines rate of interest in a simplified economy. The size of household savings depends mainly on income flow, followed by changes in wealth, and time preference which involves postponing current consumption in favour of higher future income and

hence higher future consumption. In theory, savings are envisaged to be positively related to levels of interest rates; viz higher the interest rate, higher will be savings in the economy, other things remaining the same.

13. Demand originates from businesses for investment in long term capital and from investors in securities. The aggregate demand for investment depends on investment opportunities available to firms whose returns are asymmetric. That is, returns decline as projects with high rates of returns are exhausted. Firms are faced then with second grade investment opportunities of lower returns; hence they are willing to borrow only on lower rates of interest. The demand for investment funds gradually tapers off; therefore, investment demand curve is downward sloping. Besides, at low rates of interest, idle money balances may be large because cost of holding money is tolerable, though investors may not be keen to invest in interest bearing instruments, because if interest rates were to rise, it will mean a capital loss on these interest bearing instruments.

14. Next to be considered is Keynesian **liquidity preference theory** which states that interest rate is determined by equilibrium in demand and supply of money, where *money* is to be interpreted as nominal money balances or liquidity, held by households and firms. Hence, interest rate determination has to occur in short term money markets. According to this theory, demand for money is pivotal for determination of interest rate, more than supply of money, where demand depends on complex behavioral relationships between three factors that give rise to demand for money, namely ***transactions, precautionary*** and ***speculative*** purposes.

15. The demand for money is inversely related to rate of interest as shown by downward sloping demand curve, similar to the one in classical theory. If rate of interest is low, the demand for money will be large; and *vice-versa,* but while normal supply curve is upward sloping, in liquidity preference theory, it is a vertical line, stipulating that money supply ***is fixed*** for the time period, regardless of interest rate. The intersection of demand curve with vertical supply line determines equilibrium rate of interest. For a given supply of money, interest rate will change only if demand curve were to shift upwards or downwards.

16. The liquidity preference theory stipulates that supply of money is exogenously determined, say by government. If the government were to enhance money supply, it will cause a ***shift of supply line*** to the right to a new position, thus establishing a new equilibrium rate of interest, and a lower one along the *same* demand curve. In short, supply of money could be

treated as a discretionary variable, not a market-based variable. This is an important departure from classical theory and it provides a stronger footing to monetarism that came to dominate policy making during the past three decades. Central banks began targeting money supply as the key variable in pursuit of a desirable rate of monetary growth that would supposedly be inflation neutral,; and at the same time permit economic and growth with decent levels of employment.

17. Over the years, elaborate empirical studies have been undertaken concerning demand for money using econometric models, and they are useful to those concerned with monetary management. As for supply of money, in market based financial system, it is not the government rather the central bank who can inject or withdraw liquidity through open market operations which affects money supply but within limits and on appropriate rates of interest, not independent of rates of interest as the vertical line of money supply would suggest. Similarly, money supply could change, and it does frequently, depending on behaviour of banking system and households in response to changes in economic and financial outlook.

18. Next, the **general theory** stipulates that interest rate is determined by a set of factors posited by ***IS-LM*** curves, involving ***simultaneous determination*** of GNP and price level ***consistent*** with savings and investments equilibrium in the real economy, together with the equilibrium of demand and supply of money in financial markets. The ***IS-LM*** construct is based on the Keynesian framework of General Theory. It is just not a neo-classical theory of interest rate; rather it is a synthesis of two sets factors, explained below, in a state of simultaneous equilibrium in the economy. The rate of interest determined by these factors is a complex outcome of balance between savings and investment on the one side and demand and supply of money on the other side, both being subject to same level of national income and equilibrium in product markets and financial markets.

19. Among the two sets of factors operative on the determination of interest rate, one set is represented by saving investment curve, the downward sloping ***IS-curve***, which shows combinations of national income and interest rate such that product markets are always market clearing. The second set represents demand and supply of money, the upward sloping *LM-curve*, which shows what combinations of rate of interest and national income is consistent in with equilibrium of demand and supply of money in financial markets. It also shows the unique level of income and interest rate where both product markets and money markets are market clearing. How

the equilibrium of demand and supply of money on the one side and savings and investment on the other side is arrived at is represented by intersection point of *IS* and *LM* curves which determines a unique rate of interest consistent with a level of national income, where investment and savings are in equilibrium, so is demand and supply of money in the economy.

20. How this grand equilibrium is arrived; how stable it is and how it can be sustained needs to be explained. Does it involves shifts in the IS-LM curves; if so why those shifts occur and what can be done about them also needs elucidation. Suffice to say that it is a complex theoretical construct. The ***IS-LM theory*** represents a grand synthesis of Keynesian and neo-Keynesian theory of interest rate determination consistent with equilibrium level of savings, investment and income. In simple terms, if there could be one for such a sophisticated theory, interest rate is determined in a simultaneous fashion by saving investment equilibrium on one side, and a counterpart equilibrium of demand supply of money on the other side, both consistent with a given level of national income where prices are market clearing both in product markets and money markets.

21. Next, we have to consider **opportunity cost of capital.** In theory, rate of interest rate is envisaged to be a proxy for opportunity cost of capital in an economy. Opportunity cost is the rate differential between two alternate instruments with same features of maturity and risks but with differential in their return. In money markets, opportunity cost of interest is return foregone on two comparable instruments. Likewise, opportunity cost of investor in money market is the differential return on two short term instruments like treasury bills versus inter-bank placements, though risk features are different. Hence, opportunity cost refers to returns on alternative uses of funds which are nearly comparable in their risk features.

22. Opportunity cost of capital is an ***imaginary number*** because it is arrived at when all conceivable investment opportunities and their combinations have been exhausted over a specified time period. It is impossible to contemplate what these investment opportunities could be together with their endless combinations; much less to calculate their returns even with powerful computerized models that one could put together to estimate the outcome. It does not matter what genre of these models are; they could be deterministic general equilibrium models; or simultaneous econometric models of stochastic variety that have been around for a long time; or input-output models once a favourite of socialist planners in centralized economies.

23. Conceivably, there are numerous *opportunities* of investing, because investment funds could be deployed in several ways. Among those, it is impossible to fish for the best combination to be deployed in an economy. Hence, opportunity cost of capital remains a conceptual construct for interest rate determination. In contrast, *opportunity cost of money* is well known and is broadly interpreted as returns forgone in pursuit of returns from an invested position, whatever that position may be, whether in saving instruments or in securities market instruments. It is an operational concept and provides a guide post to investors in their business pursuits.

24. Finally, let us consider **loanable funds theory.** Beyond the classicists and neo-classicists, interest rate is deemed to be determined by supply and demand for loanable funds, thus we have the loanable funds theory. Among all the theories, loanable funds theory is referred in operational realm as to how interest rate gets determined. The theory is similar to the classical theory in stipulating that demand for loanable funds is inversely related to interest rate and is sensitive to changes in it. A reduction in interest rate will cause an increase in the demand for loanable funds to invest in financial markets, or to finance consumer durable purchases, or to hold as cash balances. An increase in interest rates will have the opposite impact, reducing the demand for loanable funds. Hence demand curve for loanable funds is downward sloping, and supply curve is upward sloping; the intersection point of the two shows a market clearing rate of interest for loanable funds.

25. Demand for loanable funds originates among borrowers or investors who may be households, firms, or governments. They are classified as ***deficit units*** who may not have any savings of their own, or if they do, these savings are insufficient to cover their expenditures. Supply of loanable funds emerges from ***surplus units***, who again may be households or firms but not the same ones who belong to deficit units, and rarely governments, because most governments are chronic deficit spenders both in advanced and developing countries. Demand for loanable funds, however, is just not demand for funds for investment in securities. Largest part of the demand for loanable funds is the demand for banking credit mainly for financing trade, and then a part of demand for liquidity or investment needs of investors operating in financial markets at large.

26. Supply of loanable funds by surplus units at any given time constitute ***financial savings*** lodged with banking system, the largest part of domestic financial savings at macro-financial level. These loanable funds provide the anchor or the base for banking credit. They also include financial savings

mobilized or held by non-bank financial institutions specially contractual financial institutions, like pension funds and insurance companies who mobilize contractual savings as regular streams of dependable cash inflows of considerable amount at any given time which are usually invested in financial instruments. Supply of funds may be augmented by net capital inflows form overseas as portfolio investment, which are considerably large in present day global financial markets.

27. The supply of loanable funds is deemed to be positively related to interest rate; viz, a rise in interest rate will enhance supply of loanable funds, whereas a decline in interest rate will have an opposite effect, so goes the theory. Often, financial savings seem to be rigid in their response at changes in interest rates; even more confounding is the obverse behaviour, where nominal savings seem to be rising in face of negative real rates of interest which is not a rare phenomenon. It has happened in Pakistan, and elsewhere as well. These complications aside, supply curve of loanable is commonly perceived to be upward sloping, just like any regular supply curve looks like, meaning that an increase in interest rates will lead to an increase in supply of loanable funds; and *vice-versa.*

28. The intersection of demand and supply curves shows the market rate of interest for the corresponding amount of loanable funds that would flow through market channels. In this respect, loanable funds theory is almost identical to classical theory, though it is more precise in identifying sources and uses of loanable funds. For the same reason, shifts in demand or supply curves of loanable funds emerge from sources exogenous to market of loanable funds. More important among these is expected inflation and consequent changes in the bank rate which may distort pricing of loanable funds from what it would otherwise be in the market.

29. Such is the realm of theoretical constructs. They begin with ***a priori*** formulation, based on a assumptions, creating a pristine setting away from complexities of applied realm. The hope is when these assumptions are stripped away, layer by layer, the causal chain will approximate to real world situation, but along the way something goes awry, nearly always. The real world does not easily oblige theoretical constructs; yet theoretical constructs, their weaknesses and all, are indispensable to unravel what transpires in the applied realm. The problem shows up when regression estimates are done; they do not seem to exhibit a good fit unless laced with a set of dummy variables that do not square with theoretical constructs, no matter how justified their inclusion may be.

Interest Rate Structure

30. Interest rate structure represents a heirarchy of interest rates, pegged to or anchored to leading market rate like inter-bank offer rate, KIBOR in Pakistan, or policy rate of central bank, or bank rate as it is often called. The peg rate or anchor rate in turn is affected by monetary and financial policies, central bank rules, regulations, and overall financial and economic trends as explained below. A movement in the structure of interest rates is typically caused by a change in the central bank's discount rate, whereas changes in rates of interest may occur because of changes in underlying market conditions concerning relevant segment of the financial market.

31. This rate structure is two-sided; one concerning rates of interest on the supply of loanable funds, mostly deposit rates; the other concerning lending, the demand of loanable funds, rates of banking credit. Movements in both structures are interlinked and changes occur more or less uniformly, depending on the changes in the base rate, such as KIBOR in Pakistan, or LIBOR, London Inter-bank offer rate internationally.

Peg Rates, Anchor Rate

32. Structure of interest rates revolves around a peg rate which provides anchor to the structure of interest rates prevailing at any given time. The peg rate for short term is the discount rate of central bank, called ***policy rate*** or ***bank rate*** applicable to discount window operations of central bank. In most countries, including Pakistan, this discount window is actually short term repo-based facility to provide liquidity to banks. Policy rate is the rate of interest for central bank lending to banks via discounting treasury bills or bonds. The peg rate is regarded as lead rate of interest for short term, but it may hold steady for longer periods without changes in it until next time a revision is called for in line with needs of monetary expansion or contraction. This interval could be of a few months or longer.

33. In practice, policy rate or bank rate is in the lead for short term interest rate structure prevailing in the money market or funds market at any given time. The impact of policy rate change is pervasive. It impacts upon the structure of interest rates prevailing both in banking system and in securities markets. Policy rate changes alter interest rates on banking credit, thereby impacting on costs of borrowings; it also affects deposit rates, but its impact on lending rates is stronger. For long term, interest rates are anchored to

some benchmark long term rate, typically long term government or treasury bonds, not ***policy rate*** as such. Yet, changes in policy rate affect market price of securities of all maturities, including long term bonds and stocks, thereby altering rates of return for investor and their investment patterns. It is in this sense, policy rate is regarded as the peg rate both for financial markets and banking system.

34. Next in line for peg rate status is inter-bank-offer rate which takes its cue from bank rate of the central bank. Inter-bank rate is primarily for volume borrowings by banks and financial institutions from funds market, or *call money* market, and is set by a consensus of large money center banks keeping in view changes in the bank rate together with market liquidity prevailing at any given time. Thereafter it percolates down to interest rates charged by banks on borrowings by business and household clients of the banking system. Therefore, inter-bank-offer-rate is considered as price setter or interest rate setter.

Interest Rate Floor, Cap and Ceiling

35. Interest rate floor is the lower limit stipulated in a contractual agreement to protect a lender against falling interest rates, or an interest rate option designed to protect earning assets against a decline in interest rates; for example, a financial institution, or a company for a fee may undertake to compensate its customer if the interest on certain securities falls below a reference rate, such as prime rate of banks, the rate of interest charged to prime coustomers of banks, or inter-bank offer rate; if the rate of interest on securities falls below the reference rate, then the company would pay the difference, but if the interest on security is at par or above the reference rate, then no payment would be made.

36. Interest rate cap is the upper limit on interest rate payable by a borrower, specified in a contractual agreement designed to cover the risk of an increase in interest rate on a floating rate loan or advance, and is the opposite of interest rate floor. To cover this risk for a fee, the lending institution itself or a third party such as a finance guarantee company, may undertake to protect the borrower against future increase in interest rate beyond a ceiling, an upper limit, and pay the difference between the increased rate and the agreed rate on the loan. Interest rate ceiling is the maximum rate of interest which can be offered on deposits of various types;

or which can be charged by banks or financial institutions on loan and advances of different types and maturities. In this sense, it is a restriction against increase in rate of interest.

Interest Rate Spread

37. Interest rate spread is interpreted as the difference between interest rate on two opposite transactions; for example, if the interest rate on deposits is 10 per cent per annum and on lending it is 15 per cent, then the spread is 5 per cent; for a re-finance facility, if 12 per cent interest is charged to the borrower and funds are reimbursed by the central bank at 9 per cent, then the spread for the lending bank is 3 per cent. Interest rate differential on the other hand, is the difference between the rate of interest applicable to similar financial transaction but originating from different sources, arising because of controls, rules and regulations; or arising because of different financial risks. It may also arise from market rigidities and imperfections.

38. In such a situation, there would be a tendency for funds to flow towards those activities which can offer better interest rates if there are no restrictions on such transactions, reducing the differential. It is also the difference between interest paid for funds, and interest rate charged for loans of the same tenure. For example, if a bank pays 8 per cent interest rate on a 6-month deposit and charges 12 per cent on a loan for six months, the interest differential for the bank is 4 percent. ***Banking spreads*** are frequently quoted to signify the differential between interest rates on all loans outstanding versus interest rates on all deposits including or excluding zero rate deposits, like current deposits. Rising levels of banking spread usually mean rising lending rates because deposit rates are more sticky, and do not accompany rising lending rates stepwise.

Interest Rate Risk

39. Interest rate risk arises from fluctuations in market rate of interest as against a fixed rate of interest stipulated in a financial contract or embedded in a financial instrument, thereby causing a major change in the costs on borrowed funds or returns on loans advanced.

for the investor *in securities market the risk that fluctuations in the market interest rates my adversely affect the market value of the security; for example bond prices fall when interest rates rise, and vice-versa; or the return on investment may decrease in line with a decrease in market interest rate depending on the type of investment, differential, maturity and type of exposure.*

for the saver*, the risk that a decline in interest rate will cause a loss if the saving instrument stipulates fluctuating instead of fixed interest rate and savers are unable to move funds into other types of saving instruments or actively participate in other segments of financial markets.*

for the borrower, *the interest rate risk arises if the loan is obtained on floating rate of interest, pegged to a benchmark or an index of market based interest rate; if the market rates rise, the cost of borrowing will increase proportionally.*

for the lender*, it is the opposite of borrowers' risk, that is, for the lending bank, if loans are extended on fixed rates and interest rate rises, the general cost of finds for the bank will rise relative to its earnings on loans outstanding, causing a loss to the lender.*

Interest Rate Premium

40. Premium on interest rate is an excess charge, or a higher rate paid above the market levels, as opposed to a discount available on a price, or a rate thereby reducing the price or rate below market levels; interpreted in various ways depending on the activity.

in securities market, a premium on a security is the positive differential between the face value of the security and its market price; for example, if the market price of a bond is above its face value or par value, it is selling at a premium; whereas if the market price of the bond is below the face value the bond is selling at a discount.

in banking, a premium paid above market interest rates by a borrower for certain type of loan depending on the risk levels; a premium paid by the bank on certain type of deposits, of funding operations.

in currency market; a premium paid over spot rate for foreign currency if the exchange rate is expected to appreciate; as opposed to a discount, if the exchange rate is expected to depreciate; additionally, the premium is also based on future interest rate differential between two currencies.

Section 2: Interest Rates - *Structure and Long Term Trends, Pakistan*

1. Interest rate regime in Pakistan, has undergone a transformation during the reform period from administered rates to market-based rates. The deregulation of interest rates occurred gradually over a period of nearly decade and half beginning in 1990s. This transition was not smooth. There was periodic volatility in interest rates but not destabilizing movements. This is a considerable achievement of SBP when observed in the light of comparative experience with financial reforms in similar phases in other countries. SBP's monetary management and control mechanism has taken root; it's policy rate has established itself as the anchor rate for banking system after having gone through several iterations and fine tuning of monetary mechanisms over the past. The auction system has gained a strong footing both in money and bond markets. It has matured, establishing a process central to price discovery of securities, and along with it both short term and long term rates of interest in Pakistan.

2. Given these observations about system level developments in Pakistan, when we come down to the nitty gritty of it, we find that a meaningful review of structure of interest rates in applied context is mostly conducted for short term because that is what counts for operational purposes, be it financial market operations, banking or corporate financial operations. A long term review like this is not much relevant, except for learning purposes. By the time long term rolls around, there is not much to do meaningful.

3. Short term analysis of rates of interest is the staple of reviews, needed for evaluation of leading financial and economic trends, monetary management response by the central bank, adoption or fine-tuning of monetary controls and market interventions which goes on all the time. Given the long term focus of this study, we shall stay with issues and analysis of long term changes in interest rates, away from short term variations resulting from operations of money markets, banks and SBP.

4. The analysis of interest rate is hazardous because there are myriad of factors affecting its structure and it is not easy to isolate impact of these factors on deposit mobilization or banking credit from other non-interest based factors. Likewise, it is difficult to isolate factors that affect interbank rate, though the leading ones are known. Change in interest rate may occur

following a change in central bank's policy rate; or may occur following changes in interbank offer rates, reflected first in short term rates, and then percolate down to long term interest rate structure. In developed countries, the impact of bank rate changes is almost instantaneous. The same rapidity of market response is not there in Pakistan, but changes in structure eventually do occur with a slight time lag whenever policy rate is changed, and the impact is selective.

5. Before we delve any further on this topic, let us have a peek at the structure of interest rates that prevailed in Pakistan during 2005-2010 given in the table on next page. We will discuss interest rates at length in chapters ahead since it is the central element in financial intermediation. There are four sets of interest rates shown here; all in nominal terms. Two of these are weighted averages at banking system level; one concerns lending rates of banking system on loans outstanding; the other one concerns deposits mobilized, both inclusive of items that do not carry a rate of interest, the zero rate items, like current account deposits. The purpose is to capture the cost and return profile of the banking system and its clients.

6. On the lending side, this weighted average of rate of return reflects costs of borrowings by clients of banking system. The other one on the deposit side, is the weighted average rate of deposits, which is a composite of return to depositors. These are monthly averages shown for June and December; not six monthly averages; and they do capture periodic movements in interest rates on the operational side. Monthly averages will do even better, but for the time being this outline should suffice. The differential of these two weighted averages is the interest rate spread, popularly known as ***banking spread*** signifying relative costs and returns to the parties of financial intermediation. At the top of the structure are policy rate of the central bank, and the inter-bank offer rate mentioned above. These four rates of interest typify the structure.

7. As the data shows, both lending and deposit rates increased over the 2005-2010 period, with interruptions in between. The deposit rates refer to the composite of ***PLS-based*** and ***interest rate-based*** deposits at banking system level, spanning Islamic banking and mainstream banking. The proviso is that this composite rate is in effect the PLS rate since PLS-based deposits constitute nearly 90 percent of total deposits of banking system as discussed in the next chapter.

Interest Rate Structure, Spreads - Pakistan

	2005	**2005**	**2006**	**2006**	**2007**	**2007**
	June	**Dec**	**June**	**Dec**	**June**	**Dec**
W Av Lending rate on loans outstanding	9.0	9.8	10.4	11.1	11.3	11.3
less, W Av Deposit rate on deposit outstanding	2.1	2.6	2.9	3.7	4.0	4.1
equals: **Banking Spread \ 1**	**6.9**	**7.3**	**7.5**	**7.4**	**7.4**	**7.1**
SBP Policy , Discount Rate	*7.5 - 9.0*			*9.0*	*9.0*	*9.0-9.5*
KIBOR, 6 months**,** average \ 2		*9.1*	*9.7*	*10.6*	*10.0*	*10.0*
	2008	**2008**	**2009**	**2009**	**2010**	**2010**
	June	**Dec**	**June**	**Dec**	**June**	**Dec**
W Av Lending rate on loans outstanding	12.0	14.5	14.0	13.5	13.4	13.5
less, W Av Deposit rate on deposit outstanding	5.2	6.7	6.5	6.1	5.8	5.9
equals: Banking Spread,	**6.8**	**7.8**	**7.5**	**7.4**	**7.6**	**7.6**
SBP Policy , Discount Rate	*9.5 - 10 - 12*		*12.0 -12.5*			14.0
KIBOR, 6 months**,** average	*13.3*	*15.7*	*13.2*	*12.4*	*12.4*	
Source: SBP Annual Reports						
\ 1 Defined as differential of weighted average rate on lending and deposit, including zero rate items.						
\ 2 KIBOR was introduced in 2002; it began to take hold and now it is a benchmark rate.						

The weighted average rates on deposits outstanding inclusive of zero rate deposits, were low indeed during the middle years of the decade ranging between 2.5 percent to 3.0 percent, but then these rates began to rise, reaching about 6 percent in 2010.

8. In parallel weighted average lending rates were about 10 to 11 percent in the middle years of the past decade and began to rise, reaching 13.5 percent on loans outstanding by end of 2010. Once again, these lending rates are a composite of the rates on interest-based banking credits, and returns on advances of Islamic banking; though this time their proportions are reversed. That is, interest rate based banking credits constitute nearly 90 percent of total banking system credits outstanding.

9. As a result, banking spread, the differential between these two rates, has stayed roughly the same over the six year period between 7 and 7.5 percent. *(Data Set 4.2)* Whenever banking spread inched upwards, it caused a great deal of uproar from all quarters forcing SBP to issue guidelines,

mostly advisory to mollify the concerns, but it did not affect the outcome, because these rates came through market-based processes that could not be overcome by intervention, except for the policy rate.

10. Both the lending and deposit rates were beholden in part to the policy rate of SBP, which was 7.5 – 9.0 percent during the middle years rising to 12 – 12.5 percent during FY09-10, and eventually to 14 percent by early 2011. In between, there were several stepwise increases in response to growing concerns of monetary stability. These increases were done as anti-inflationary measures to moderate growth of banking credit and thus aggregate demand.

11. Therefore, let us see how central bank's ***policy rate*** gets specified and what are the underlying considerations. The consensus is that it depends on monetary stance a central bank would like to pursue for the period ahead based on economic and financial trends. Any abrupt change in policy rate is usually in response to economic or financial shocks; but there were no abrupt changes like this in policy rate over this period. In normal times, changes in policy rate are deliberate and well anticipated, based on market liquidity, price stability concerns and economic growth, all mixed together in the decision underlying any change in bank rate. The newly announced bank rate becomes ***peg rate*** for all interest rates, including both short term and long term interest rates prevailing in every segment of financial market.

12. A change in SBP's policy rate is a key element but this is not a routine measure. It is undertaken only if other measures turn out to be insufficient to nudge credit and money markets via changes in market liquidity. Before policy rate changes are considered, SBP may engage in trading of its own funds to arrive at a configuration of market liquidity, banking credit and market interest rates that would be consistent with monetary objectives. The first line of action is to ensure sufficient market liquidity. Before that is attempted, SBP has to be mindful of the size of marketable treasury bills and their turnover which affect repo rates of interbank market. If liquidity levels are comfortable, an increase in the policy rate may not have much impact on lending rates in credit markets forthwith. It may not have much impact on interbank rate either if liquidity levels are high. As SBP's analysis has shown, this is the reason why changes in policy rate and KIBOR do not exhibit a consistent pattern much less a causal pattern.

13. Let us look at KIBOR and its trends. Since its inception in 2002, KIBOR achieved respectability and acceptance as reference rate status in money markets by 2004, and from subsequently it began to be treated as the peg rate for pricing financial assets on KIBOR + formula. During the first half of the

decade, KIBOR nearly doubled from 4 percent in FY03 for various short maturities upto three months to 9 percent by June of 2006 with lower rates for maturity of a week to longer maturity of 12 months. *(Data Set 4.2a)* Since then, KIBOR kept its rising momentum, and by mid-2010, the rates ranged 12.4 to 12.7 percent, just slightly ahead of SBP's policy rate; and just slightly below the weighted average lending rates for the banking system.

14. In between there were considerable variations in KIBOR. The rising trend continued from mid-2000s onwards and touched its highest levels of 16 percent by December of 2008, right in the middle of the stock market crisis, at the time of re-opening of the market after it remained 'floored' for three months. SBP had not raised its policy rate in those days from its steady levels of around 12 percent, but rising KIBOR put a tight squeeze on liquidity just at the time market needed some straws to stay afloat. It did not happen; the market promptly slumped after it re-opened in late December. This rising trend of KIBOR can not be singled out as the factor behind stock market collapse; it only shows how far KIBOR had traveled from its inception.

15. As this review shows, KIBOR is attuned to policy rate, shadowing its movements. One would like to believe that interbank rate gets determined by supply and demand forces in the interbank market, but it is significantly influenced by policy rate, since changes in it signal the cost of central bank's funds, the prime source of banking liquidity. But determination of KIBOR originates from money market operations, mainly repos market or SBP's funds market, which is a good part of supply of liquidity in the economy, originating from government securities held by the banking system.

16. The ability of banking system to garner such a liquidity, eventually comes to rest on the deposit base of banking system; and that is the lynch pin of liquidity. The turnover of these markets is immense, driven on the demand side by liquidity needs of banks; but the size of interbank market is pretty large. It is beyond the capability of any single bank to have much impact on the interbank rate that prevail in these markets, except for SBP when it begins its liquidity injection or absorption as part of its open market operations. The rate that prevails in these markets generally it follows the lead of policy rate with some lags, and in turn it causes changes in interest rates at the retail level in loan and deposit markets over the short term. What happens to KIBOR in between is not crystal clear.

17. That issue being aside, there is sufficient evidence that lending rates in credit market are linked to KIBOR and changes therein. This is because KIBOR is now accepted as the benchmark rate for corporate borrowings,

regardless whether these borrowings are done in credit market or in long term debt market, namely bond market, the market of term finance certificates, the TFCs. Since FY02, coupon rate of new floats of TFCs is pegged to KIBOR plus formula. A change in KIBOR gets reflected in the coupon rate of TFCs, and hence the cost of corporate borrowing. In retail lending banks do not use KIBOR plus formula along with its rate structure as shown in *Data Set 4.2a,* except for a general adherence to trends.

18. If policy rate change helps to nudge KIBOR it does so through interbank market mechanisms. The impact of KIBOR on lending rates can be seen in terms of long term relationship between KIBOR and weighted average lending rates. A glance at the data suggests that while changes in policy rate and KIBOR affect lending rates rather quickly and consequently enhance the cost of borrowings from the banking system, it does not seem to have much impact on deposits. Deposit rates do not seem to be affected by changes in KIBOR the same way as lending rates are; but this rigidity of deposit pattern prevails at the lower and middle ranges of interest rates not at the high end. Fixed maturity deposits for eight years or more carrying rates in the range of 8 to 10 percent evidently have been successful and there is depositor response, but this needs to be ascertained.

19. The overall trend of nominal deposit and lending rates for the banking system *including* Islamic banking has been discussed above. When we decompose these deposits between PLS based and interest based banking, the differences in their rates of return become glaring, but the trends remain the same. That is the rate structure moves in unison within a band of its own. While there may be differences between certain rates of interests as recorded, the movement of the band is unaffected. Both rates of returns on deposits, whether PLS-based or interest-bearing, show a substantial decline over the first five years, followed by a sustained rise over the next five years and that is rather intriguing as discussed in Chapter 5 next. The magnitude of volatility is just too large to be explained in terms of routine economic or financial trends over these years.

Rates of Return – Short Term

20. Briefly, nominal weighted average ***rate of return on PLS-based*** deposits of the banking system, including current deposits was 5.8 percent in December 2000, but it sharply declined to about 1.2 percent by end-2003, the lowest in the decade. *(Data Set 4.71)* By end of 2004, this rate had declined to

just about one percent, Thereafter this PLS rate of return began to climb and by end of 2007, it was 2.8 percent; then it jumped to 4.7 percent next year in 2008, and has sustained this level for the last three years of the decade. In contrast, the nominal weighted average ***rate of interest*** on banking deposits, including current deposits was about 3.8 percent, full 2 percentage points below PLS rate in that year.

21. By 2003, this average ***interest rate,*** the non-PLS rate, had declined precipitously to just about 0.6 per cent; thereafter it began to climb, and recovered some lost ground, but hovered around 1.17 to 1.28 percent during four years 2006-09. In 2010, this nominal weighted average ***rate of interest*** was 1.05 percent in stark contrast to its counterpart ***PLS rate*** of 4.76 percent. There was a silver lining, however, in this otherwise depressed rate structure. ***Interest rates*** on fixed term deposits of maturities longer than 2 years were substantially higher, and were competitive with ***PLS rate,*** ranging anywhere between 5 percent to 11.4 percent over the last three years of the decade.

22. A similar trend is observed in the rates of returns on advances of the banking system and it is rather intriguing since 90 percent plus of bank financing is interest-bearing; and only a small part is based on Islamic modes of financing. The trend of their returns is the same, more or less. *(see Chapter 8)* Briefly, the nominal weighted average rate of interest charged on loans extended by the mainstream banking was 13.1 percent in December 2000. *(Data Set 54.)* It remained at that level upto 2002, and then it declined to 9 percent in 2003; a significant drop in the rate of interest in one year.

23. By 2005, the nominal weighted average ***rate of interest*** on advances had dropped by additional two percentage points to about 7 percent by end of 2005, the lowest it ever has been. Thereafter came the phase of rising interest rates. By 2008, nominal weighted average rate had gone up to 12.5 percent; and has remained there for the last three years of the decade with minor fluctuations in between. These estimates are based on advances of the banking system and are slightly different from those cited earlier owing perhaps to differences in classification. Data quirks aside, the same trends are substantiated once again as discussed before. In parallel, NSS rates at close of the decade ranged between 12-14 percent as compared to 9-11 percent during early years of the decade. These averages of rates of return on NSS deposit instruments harbor implications for banking system deposits, regardless of maturities, instruments and type of return, whether PLS or interest bearing. The long term deposit rates of the banking system including both PLS and interest bearing are still below those of NSS instruments of similar maturity, though the differential has narrowed somewhat over time.

Long Term Interest Rate

24. A perennial issue is what ***long term lending rate*** could be treated as ***benchmark*** by the banking system on the lending side, and by institutional borrowers, if they are inclined to secure long term investment funds through debt markets or through banking system. In other words what could be a viable long term bond coupon rate at the time of its float in primary market. Currently, in bond market of Pakistan, this rate is pegged to KIBOR plus formula. In some countries, the long term bond rate provides the bench mark; but the two are different. We need to provide some rationale of choosing a bench mark long term interest rate.

25. The review of credit system, government borrowings and financial markets provide a guide to long term bench mark rate consistent with the operations of financial system. The average interest cost of public sector domestic borrowing over the past decade was about 10.5 percent mostly in short term instruments. These are risk free securities with guaranteed returns and in perpetuity, because they are rolled over. To this base cost rate, if we add premia for lending risk, maturity, risks of mismatch between funding liabilities and loans outstanding, all such premia may amount to roughly 3 to 4.5 percent over and above the base cost. The notional long term lending rate would range between 13 to 15 percent. It is not surprising that lending rates are so close to this articulation.

Section 3: Interest Rates and *Monetary Management – An Outline*

1. The interrelationships between interest rate, banking credit and price level are fairly well known in the context of monetary management. This discussion draws upon analysis and conclusions advanced here concerning financial intermediation, and also from chapters in Volume II concerning financial markets. In the following, a sketch of interest rates and its interlinks with salient elements of monetary management are presented. For detailed discussion see Chapter 14, the last chapter of this volume.

2. In outline, an increase in interest rates raises costs of banking credit and hence reduces demand for borrowings by businesses and public at large. This in turn lowers effective aggregate money demand, thereby cooling

down inflationary pressures. In between, the mechanism works through reducing the size of non-borrowed reserves, forcing banks to lower their credit expansion which has the desired result of lowering effective aggregate money demand. This is done via monetary controls where interest rate changes are driven by policy rate changes.

3. A cardinal objective of monetary management is to control inflation to sustain value of domestic currency via price stability. The central bank is the custodian of public's confidence in currency and that can be achieved if value of currency is maintained; that is if its purchasing power does not erode. Central bank can not accomplish this alone. Two other important stakeholders are the banking system and government. The mechanisms of monetary control can be compromised if banking system is weak or if banking credit does not respond to monetary control. Likewise, if fiscal operations of government run counter to monetary policy stance, efforts to control inflation through monetary measures will be unsuccessful. These considerations underlie the task of price stability. The rest flows from here.

4. The conceptual implications of monetary intervention are significant. The monetarists would argue that what matters most for controlling inflation is money supply, not interest rates, since according to them inflation is purely a monetary phenomenon; but controlling money supply will impact on GDP growth and hence employment. This view point is centered on quantity theory of money as resurrected by Friedman, stated as MV = PY which asserts that since velocity parameter, v, is a constant, changes in money supply, M, will affect both the price level and nominal GDP, Y. If then, Y is targeted, money supply, M, can also be targeted to bring about a desired combination of the general price level and Y.

5. The counterpart Keynesian view is not so much different, stated as Cambridge equation, $M = 1/v\ Y$, because if velocity parameter, v, is stable, changes in M will lead to changes in Y, the nominal GDP = P Q, where P is the price level and Q is aggregate real output; but whether or not there is a *causality* underlying this equation, that is still debated. Even ardent monetarist would concede that no causality is implied; only a relationship is observed; but when it comes to interventions to adopt a corrective policy stance, for all practical purposes, changes in M does impact price level, P, and also income, Y, the GDP; leaving aside other considerations.

6. From this simple assertion flow policy implication of significance; namely in times of crisis monetary measure would be in the vanguard, not fiscal measures. This meant that government's role should be subservient to

what markets determine; and government should pull back from fiscal activism it has shown for a long time. Governments should not intervene; markets will do the correction. This characterization may be too simplistic; but this is what it amounts to.

7. Next issue is that since interest rate are pivotal instrument of monetary control, how effectively desired changes in interest rates occur pursuant to any change in policy rate, depends on transmission mechanism between SBP's discount rate and bank lending rates, the pass through interbank rate and KIBOR. How effectively changes in KIBOR are translated into weighted average lending rate of banking system is critical. Past experience has shown that major swings in KIBOR are not quickly translated into similar changes in the lending rates; nor do they impact deposit rates. Hence there are rigidities in transmission mechanisms. But this is the outcome of intermediation side of monetary transactions and its impact on interest rates.

8. On the other side of financial system, operations of short term money impact on interest rate structure. In so far as operations of short term money markets end up providing ***liquidity*** to its participants, be they financial institutions or government, and they furnish funds for short-term liability management. These operations also provide a mechanisms to the central bank for ***monetary control*** via injections or absorption of liquidity, a quantitative dimension to impact on both the interest rate and price level.

9. At any time, structure of short term interest rates prevailing in money market and price level, together affect the ***exchange rate***, both nominal and real. One could argue that exchange rates are determined in global currency markets independently of what transpires in the domestic markets with regard to interest rates and domestic price level. In practice, the domestic price level relative to the price level of its foreign trade partners directly bears down on exchange rate, while price level is sensitive to the structure of exchange rate prevailing at any given time. It is not one way relationship.

10. In liberalized foreign trade regime, open capital accounts, and free floating exchange rate regime, a central bank can not intervene to bring about a desired level of exchange rate, because such intervention in the market is not going to have much of an impact on exchange rate. The most a central bank can do is to change the interest rate to impact on capital account flows but its impact would be all around, just not on the exchange rate; or change liquidity through absorption or injection via open market operations; though such changes in liquidity will impact on banking credit and on economic

activity that may not be in line with stabilization objectives. In Pakistan, while switching from managed float to free float of the rupee, the SBP drained out liquidity in money and currency market to prevent attack on the rupee by currency traders with the result that the rupee did not depreciate as was being widely anticipated. A year or so later, the same course was adopted by central bank of Bangladesh, and in both the cases, drying out the liquidity helped to cushion the impact of free float on the currency.

11. Therefore, a central bank can pursue interest rate and price stability, but not exchange rate stability at the same time; a conclusion re-iterated often. If it pursues price stability, exchange rate stability can not be ensured; if it pursues exchange rate stability, it may compromise domestic price stability. But this kind of trade-off will occur mainly if money markets are reasonably developed, while both current account and capital accounts of balance of payments are open to foreign markets and capital inflows.

12. In the post-reform era, thus far in Pakistan, experience with monetary control and its mechanisms has been encouraging. The banking and financial system has reasonably responded to monetary controls as intended, and therefore has been able to withstand short term ***volatility*** of interest rates. On the financial intermediation side, it is unclear how much of the banking system loan portfolio has been rebalanced each time there is a change in the structure of interest rates – the financial liability related turnover of credit. But banking system has absorbed the impact of volatile interest rates and has remained strong with respect to earnings and profitability.

	Data Set 4.2a	**KIBOR -** ***Offer Rates, Averages***			***End Period***			
		1 weeks	**2 weeks**	**1 month**	**3 month**	**6 month**	**9 month**	**1 year**
4	**Annual Average, FY 04 \ 1**	2.2	1.9	2.0	2.1	2.3	2.9	3.1
5	**Annual Average, FY 05**	4.6	4.4	4.7	5.2	5.7	5.6	6.3
6	**Annual Average, FY 06**	8.9	8.6	8.7	8.9	9.2	9.4	9.7
7	*Monthly Av , Sep 05*	8.5	8.2	8.4	8.6	8.9	9.2	9.5
8	*Monthly Av , Dec 05*	8.5	8.4	8.6	8.9	9.1	9.4	9.6
9	*Monthly Av , March 06*	8.9	8.6	8.7	9.0	9.3	9.6	9.8
10	*Monthly Av , June 06*	8.9	8.7	8.9	9.3	9.7	9.9	10.1
11								
12	**Annual Average, FY 07**	9.6	9.3	9.6	10.1	10.4	10.6	10.8
13	*Monthly Av , Sep 06*	9.5	9.2	9.5	10.0	10.4	10.6	10.8
14	*Monthly Av , Dec 06*	9.6	9.4	9.8	10.3	10.6	10.8	11.0
15	*Monthly Av , March 07*	9.8	9.5	9.7	10.2	10.4	10.7	10.9
16	*Monthly Av , June 07*	9.4	9.2	9.3	9.6	10.0	10.3	10.5
17								
18	**Annual Average, FY 08**	10.3	10.0	10.1	10.3	10.5	10.7	10.9
19	*Monthly Av , Sep 07*	9.8	9.5	9.6	9.7	10.1	10.3	10.5
20	*Monthly Av , Dec 07*	9.4	9.3	9.5	9.7	10.0	10.2	10.4
21	*Monthly Av , March 08*	10.3	9.9	10.0	10.1	10.3	10.5	10.7
22	*Monthly Av , June 08*	12.5	12.5	12.8	13.1	13.3	13.5	13.7
23								
24	**Annual Average, FY 09**	12.3	12.6	13.4	13.9	14.2	14.6	14.8
25	*Monthly Av , Sep 08*	13.9	13.7	13.8	13.9	14.0	14.1	14.3
26	*Monthly Av , Dec 08*	10.3	11.8	14.3	15.5	15.7	16.0	16.1
27	*Monthly Av , March 09*	12.1	12.0	12.1	12.2	12.5	13.6	14.0
28	*Monthly Av , June 09*	12.8	13.1	13.4	13.2	13.2	13.6	13.7
29								
30	**Annual Average, FY 10**	12.3	12.4	12.4	12.3	12.4	12.7	12.8
31	*Monthly Av , Sep 09*	12.6	12.7	12.7	12.6	12.6	12.9	12.9
32	*Monthly Av , Dec 09*	12.2	12.3	12.5	12.4	12.4	12.7	12.8
33	*Monthly Av , March 10*	12.3	12.4	12.5	12.4	12.4	12.7	12.8
34	*Monthly Av , June 10*	12.2	12.3	12.4	12.3	12.4	12.6	12.7
35								
36	SaF Data Set				Source: SBP Annual Reports			
37	\ 1 KIBOr was introduced in 2002, its early operations were erratic; i							
38	it is only in 2003, it began to take hold as operational inter-bank rate. Its rpogress is remarkable.							
39								
40								
41								

	Data Set 4.71	Nominal Rates of Return - Deposits \ 1						December, percent				
	Calendar Year Data	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
			PLS Deposits only, Nominal Weighted Average Rates on Deposits									
6	**Overall,** *excluding Current Deposis*	6.95	6.09	4.84	1.63	1.36	2.70	3.56	3.74	6.37	6.21	6.45
7	***including current deposits***	**5.84**	**4.76**	**3.85**	**1.19**	**0.99**	**1.99**	**2.69**	**2.81**	**4.71**	**4.66**	**4.76**
8	**Call Deposits**	5.18	5.27	4.97	1.25	1.34	1.46	1.93	1.86	7.38	7.21	4.76
9	**Savings Deposits**	5.93	4.98	3.96	1.40	0.94	1.71	1.95	2.13	5.40	5.39	5.48
10	**Fixed Term Deposits**											
11	< than 3 months	7.80	6.40	5.38	1.01	2.07	3.78	4.67	4.84	5.41	4.56	5.10
12	>3 months + but < 6 months	8.35	8.18	6.98	2.06	1.96	3.85	5.78	5.23	7.14	6.57	7.82
13	> 6 months + but < 12 months	8.39	8.29	7.24	2.52	2.75	4.91	6.01	6.15	7.85	7.05	7.71
14	>1 year + but < 2 years	8.56	8.96	7.65	2.69	2.84	5.83	6.01	6.92	8.51	8.18	8.37
15	>2 year + but < 3 years	8.75	9.15	7.84	2.86	2.87	5.25	5.82	6.56	8.42	8.49	8.29
16	>3 year + but < 4 years	9.08	9.26	8.4	3.11	3.26	5.52	7.16	6.73	8.61	9.12	10.36
17	>4 year + but < 5 years	9.37	9.38	8.63	2.77	3.05	6.19	7.09	7.16	8.60	7.92	9.54
18	5 years and above	10.70	9.56	8.72	3.44	3.57	5.00	6.04	7.17	9.11	8.92	8.86
19				*Interest Bearing only, non-PLS, Nominal Weighted Average Rates on Deposits*								
20	**Overall,** *excl Current Deposis*	4.67	3.20	2.10	0.85	0.97	1.31	1.92	2.08	2.49	2.13	1.77
21	*Including current deposits*	3.76	2.42	1.60	0.59	0.63	0.83	1.17	1.28	1.57	1.33	1.05
22	**Call Deposits**	4.07	4.24	3.76	0.61	1.06	0.14	0.13	0.09	1.08	0.57	0.16
23	**Savings Deposits**	3.89	2.13	1.39	0.74	0.85	1.18	1.67	1.51	1.71	0.80	0.81
24	**Fixed Term Deposits**											
25	< than 3 months	4.74	3.51	2.26	0.86	0.98	1.87	2.19	3.04	3.69	3.28	3.70
26	>3 months + but < 6 months	5.10	3.55	2.29	1.38	1.78	1.24	2.87	3.40	3.53	2.74	3.03
27	> 6 months + but < 12 months	5.29	4.31	3.31	1.47	1.05	2.56	2.85	3.47	4.62	5.22	3.22
28	>1 year + but < 2 years	5.38	5.37	3.96	1.64	1.94	2.03	3.34	3.80	4.85	7.78	5.55
29	>2 year + but < 3 years	5.41	5.47	4.19	3.16	2.96	7.46	3.74	3.98	5.06	5.12	10.73
30	>3 year + but < 4 years	6.28	6.99	4.90	2.76	1.28	2.91	4	4.82	5.47	1.58	7.84
31	>4 year + but < 5 years	7.29	2.17	5.42	4.42	3.56	3.46	4.29	5.31	5.58	7.99	1.58
32	5 years and above	9.79	8.26	7.00	3.24	3.53	2.11	3.09	5.66	5.98	2.42	11.40
33	Differential, PLS , i-based	2.1	2.3	2.3	0.6	0.4	1.2	1.5	1.5	3.1	3.3	3.7
34	SaF Data Set	*Source: SBP, Stat Bulletins, various issues*										
35	\ 1 Rates of returns for banking system deposits; shown ***separately*** for PLS and interest bearing deposits; hence different from Set 4.7											
36												

Data Set 5.4 — Returns / Interest Rates on Banking Advances — *End Period*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Interest Based		*Nominal Weighted Average Interest Rates on Interest Bearing Advances, All Banks*									
All Banks, *June*	**13.3**	**13.1**	**13.0**	**11.9**	***8.4***	**7.0**	**9.7**	**11.3**	**12.5**	**13.5**	**12.2**
All Banks, *December*	**13.1**	**13.0**	**13.0**	**9.0**	***5.6***	**8.2**	**11.0**	**11.6**	**13.6**	**12.7**	**12.4**
Precious Metals	11.5	11.0	8.1	10.6	10.6	5.6	11.5	11.4	14.6	14.1	14.7
Stocks, Securities	13.6	11.4	11.1	7.6	6.4	8.0	11.7	10.4	13.9	11.6	13.4
Merchandise	12.9	13.3	13.5	7.2	6.7	5.8	9.4	9.8	13.8	12.4	11.7
Machinery	13.8	13.8	13.7	12.0	4.7	7.5	9.7	11.1	12.1	12.8	12.0
Real Estate	12.9	12.5	12.6	12.2	7.4	8.5	11.9	12.6	13.6	13.7	12.5
Financial	13.5	14.7	13.8	7.7	7.8	6.7	10.1	10.0	16.6	12.4	13.5
Others	12.9	12.4	12.4	7.0	4.5	9.8	11.4	11.9	13.7	12.3	12.9
General Liquidity	9.0	12.9	15.0	13.8	13.9	13.3	10.3	8.4	10.1	12.2	13.9
Agriculture (ADBP)	12.5	13.5	14.0	14.0	14.0	14.0	14.0	14.0	9.0	9.0	9.0
Export Finance	7.0	13.0	8.0	8.0	10.5	8.5	8.0	5.5	8.0	9.0	7.5
SBFC, Housing Rates	11.0	18.0	18.0	16.0	16.0	16.0	12.5	12.5	15.5	16.5	16.5
		Nominal Weighted Average Rates of Return on Islamic Financing - Advances, All Banks									
Islamic Financing, *June*	**13.5**	**13.7**	**13.2**	**9.2**	**7.2**	**8.9**	**10.7**	**11.6**	**12.5**	**14.3**	**13.7**
December	**13.6**	**13.5**	**12.9**	**7.6**	**7.1**	**10.3**	**11.1**	**11.6**	**14.7**	**13.2**	**13.4**
Precious Metals	11.2	8.0	9.2	10.2	9.0	7.7	10.1	9.7	15.0	14.2	15.2
Stocks, Securities	13.5	13.5	13.1	5.2	7.2	9.9	10.6	11.3	15.8	13.6	13.8
Merchandise	13.5	13.1	12.4	5.8	7.9	9.7	10.0	10.3	14.4	12.1	13.0
Machinery	14.5	14.1	13.4	7.7	7.8	9.3	10.6	10.8	14.6	12.7	13.1
Real Estate	13.0	13.5	13.2	10.1	10.2	10.9	11.2	11.8	13.5	12.7	12.2
Financial	13.1	13.5	13.3	6.4	8.2	9.5	9.7	10.6	15.0	11.9	12.8
Others	14.1	13.7	13.0	8.5	10.2	11.3	12.5	12.9	15.9	14.9	14.6
Discount Rate - SBP	11.0	11.0-14.0	13.0-9.0	9.0-7.5	7.5	7.5-9.0	9.0	9.0-9.5	9.5-10-12	12.0-14.0	14.0
SaF Dat Set		Sources: SBP; Banking Statistics of Pakistan, various issues , Stattistical Bulletin									

Chapter 5: Financial Savings
Deposit Mobilization

Thematics

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Chapter 5: Financial Savings Deposit Mobilization

Section 1: Financial Savings

1. Financial savings represents total amount of supply of resources within an economy mobilized by the financial system, available for various uses depending on distribution or allocation of these savings through operations of banking system and financial markets. In Pakistan, financial savings consist of three main elements: financial system deposits, currency and government unfunded debt, namely NSS deposits. Financial system deposits consist of banking system deposits at macrofinancial level and deposits lodged with some of the NBFIs. Banking system deposits however, are the largest and include Islamic banking deposits. In some cases, financial savings include net asset values of mutual funds, treating them as savings. By the time households get around buying shares of mutual funds, they have invested their savings in financial asset of a class of their own, mostly a share in a portfolio of securities selected by mutual fund, much the same way if they were to buy bonds out of their savings.

2. One could argue that the same happens when households buy NSS bonds and certificates; they are deemed to be invested in these instruments; but the difference is bonds are traded in markets where they have a primary and secondary market of their own, and a price determined by market-based terms; whereas NSS bonds or certificates are not tradable; they do not have primary or secondary market, nor do they have a market price as bonds do. Therefore, purchase of NSS bonds or certificates is not to be treated the same as investment in bonds, rather it is a part of savings mobilization as the name suggests. To call purchase of NSS bonds as investment is more a matter of arbitrary classification than substance.

3. The actual amount of financial savings could be larger because there are savings outside of financial system net, and those are not recorded. Similarly, financial savings are larger than financial system deposits by the amount of currency and government debt instruments other than NSS. By the same token, financial system deposits are higher than banking system

deposits, though by a very small amount of NBFIs deposits as shown in the data sets attached. Since this difference is negligible, the focus should be deposits of banking system.

4. Financial savings at system level, represent amount of resources in nominal value generated by ***surplus units,*** mainly households, the ***savers***, and supplied to deficit units of various segments of the economy, the users, through operations of financial system, primarily financial intermediation. In the realm of direct finance, savings are deployed as investments in various instruments of financial markets by ***investors,*** mainly households and financial institutions. Yet a good of part of savings, a larger part, are mobilized through financial intermediation, the system of indirect finance, and are captured by financial institutions, mainly the banking system. These savings are funneled to the borrowers, mainly business corporations, industries, manufacturers, traders and also to retail private investors. In its simplified version, this is the process of generation of savings and their deployment in the economy.

5. Since financial intermediation originates with mobilization of financial savings, these savings at system level should be seen as total amount of ***resources*** available to various constituents of the economy, both public and private. These are nominal amounts of savings in any time period; their counterpart real amounts could be obtained to ascertain the amount of real resources available. Financial savings determine the size of borrowings obtained from financial system, primarily as financial system credit or through other debt instruments. There are residues of financial savings outside financial system that need to be noted; but are not pursued here. For example, savings held as postal deposits, or deposit like balances lodged with mutual savings societies, or even with some NBFIs if they happen to be in the business of deposit collection for specific purposes. These residues are not included here owing to lack of data and overlaps among these categories. The bulk of financial savings are captured here.

6. Since savings at conceptual level are the ***residual*** from household income after consumption - the staple definition followed by economists, then its counterpart monetized financial flow in Pakistan would be deposits mobilized by banks and NBFIs plus NSS deposits. A part of this residual of household income may get transferred and invested directly, bypassing saving instruments and institutions, howsoever defined. Apart from households, financial savings may also originate from businesses and corporations but only as long as they are lodged with banks or other financial institutions as deposits, those get captured in the aggregate savings.

7. Notice that financial saving estimates do not include contractual savings or their counterparts held by financial institutions like insurance companies or pension funds. These are contractual savings no doubt, and consist of premia payments by households, or provident fund deductions at source paid by their employer plus own contribution of employees in designated pension funds. For the beneficiaries, the contributors, these are contractual savings; the regular cash outflows to build up sizable long term financial asset, but only for those ***vested*** in these instruments under rules of eligibility, with guaranteed returns after insurance policies mature or after retirement benefits kick in the old age.

8. These are savings like balances or quasi-savings, and ought to be included in financial savings; but there are no operational counterparts of these balances, because they do not materialize nor can they be ***accessed,*** unless triggered by events classified in insurance contract, or by qualifying retirement age. These inflows are based on actuarial values and contingent factors that defy any operational assessment in ex-ante manner. One could argue that some proxy of these contractual savings ought to be included in estimates of financial savings, derived from estimates of investment in various types of securities or assets held in investment portfolios by contractual saving institutions. After all, these assets are financed by inflows of insurance premia or contributions to pension funds; but this is investment in financial assets by a third party, therefore, it is not included in estimates of financial savings.

9. The net asset value (NAV) of mutual funds are not included in these estimates either as discussed earlier. If we expand upon those concerns, one could argue that savings transferred by households to mutual fund in their portfolio accounts to buy shares are like savings balances kept in long term deposit instruments with banking system or with NSS, the difference being variability of returns. The main difference, however, is mutual fund shares get invested in securities markets and have a market of their own, not NSS funds. Hence these account balances held by mutual funds are treated as investment in mutual fund shares, which they are. Besides, such investments in mutual funds share are not done by households exclusively. There are other investors as well, like contractual savings institutions who may hold similar balances with mutual funds to diversify their investment portfolio. One could take the view that investor accounts maintained with capital market institutions like brokerages are savings; but they are not part of estimates of financial savings for the same reasons outlined above. These grey areas and overlaps are unavoidable and need to be dealt with.

10. Financial saving estimates start with banking system deposits which are its largest component and provide the base for financial intermediation. Financial savings are a residual of disposable income, leftover from consumer expenditures and diversions like hoarding gold, jewelry and expenses on wedding extravaganzas. The part that ends up as deposits with banks is kept in an assortment of accounts where interest rates is a factor but only after a certain threshold of household savings and interest rate levels are reached. Estimates of financial savings, no matter how they are arrived at, they refer to this part of household savings which account for nearly all of deposits of the banking system. Businesses hold temporary balances, but as part of cash management because they are already stretched thin for their short term liquidity needs. They can not afford to hold large amounts of deposits except for these running balances in their account. They do not save in the sense households do. Government, likewise is not into savings; just the opposite; it is perpetually in deficit. Hence the only source of financial savings are households.

11. These are ***domestic*** financial savings. To complete the picture, we may also consider ***foreign*** savings, but only those which can be identified as deposit balances held by banking system as against balances held for investment with capital market institutions. We have confined ourselves to domestic financial savings as defined above. Most financial system studies do not provide estimates of financial savings, though it is the keystone of macrofinancial aggregate, though these estimates are starting point of financial resource mobilization. Allocation comes afterwards through credit system or through financial market operations.

12. Briefly, total amount of ***financial savings*** was an estimated Rs 2200 billion in FY00, rising to Rs 7570 billion in FY10. The largest part of financial savings were deposits mobilized by financial system, consisting of baking system and NBFIs, but excluding NSS deposits for the reasons discussed later in this chapter. The financial system deposits were Rs 1174 billion in FY00, rising to Rs 4731 billion in FY10. Their proportion in financial savings was 53.3 percent in FY00, and increased to 62.5 percent by FY10. The remainder of financial savings was in currency and NSS deposits.

13. As for currency, it's stock was Rs 355 billion in FY00 and increased to Rs 1383 billion in FY10, amounting to about 18 percent of total savings, the same proportion as unfunded debt. *(Data Set 4.5, 4.5a)* It's proportion in financial savings increased slightly over these years from 16 percent in FY00 to 18.3 percent in FY10. The reason currency is regarded as saving because it is cash saving no matter how short the time period it is held for, representing

command over goods and services *in future*. As for financial savings is NSS deposits, these were Rs 672 billion in FY00, rising to Rs 1350 billion in FY10. The share of NSS deposits in financial savings declined from about 29 percent in FY00 to 17.8 percent by FY10. A negligible part of financial savings came from deposits held by NBFIs, less than one percent; hence these NBFI deposits are not considered any further.

14. The ***average rate of growth*** of financial savings during FY00-10 was nearly 13 percent per year which is a fairly high growth, considering economic and financial conditions that prevailed during the past decade. Growth of banking deposits was slightly higher over this period estimated at 15.2 percent per year. The average annual rate of growth of currency was 14.6 percent during FY00-10; while growth of NSS deposits was about 8 percent over this period. The combined outcome was a steady growth of savings, in spite of volatility of rates of return of banking deposits and NSS. This growth occurred because saving behavior of household is fairly stable, and in part it owes to efforts of banking system to mobilize deposits.

15. This in nutshell is the profile of financial savings in Pakistan and its trends. Clearly, in financial savings, deposits of banking system loom large and these are discussed in detail in the next section on deposit mobilization. No matter what caveats are put forth, it is clear that the profile of financial savings is impacted by the performance of banking system concerning deposit mobilization. This pattern of long term growth and its breakdown into sub-periods of 5 years each is convenient but not very meaningful because household deposits do not shift their patterns so drastically within a period of 5 years. Their consumption or savings behaviour do not change drastically even over long periods. On the contrary, these are most stable behavior patterns of all, observed across many countries. Their deposit behaviour may change, but deposits held in current or fixed-term accounts with banking system do not grow at rates of around 25-30 percent year after year in normal times. Likewise, patterns of term deposits of various maturities ranging from 3 months to 5 years and above do not change so quickly and in such magnitudes over short periods. Why it happened needs to be explored further.

16. Financial savings of Pakistan estimated in macrofinancial accounts as discussed above are not the same as savings estimated in national accounts in Pakistan or elsewhere in other countries. The difference lies not only in the two accounting methodologies; it is also conceptual. In *macroeconomics,* savings are a residual of disposable national income; a left over after consumption expenditures. In *macrofinance,* consumption saving behaviour is

taken as it is; it underlies decisions to save; but financial savings are accumulated as an outcome of household savers preferences for holding cash balances as deposits with banks or other financial institutions. A good part of the balance left over after consumption gets diverted into hoarding gold jewelry, or investment in real estate, or investment in securities. Most household do not target financial savings as a matter or routine; it is mostly residual. Whatever is leftover after these diversions, ends up as deposits of banking system. Hence, financial savings in macrofinancial accounts are incomparable to savings in national accounts. The two are quite different in their contents and origination.

17. Financial savings ***flows*** as proportion of nominal GNP at market prices showed considerable amount of variation during the decade which is rather unusual, because savings behavior does not change so markedly over a period of few years. Nonetheless ***annual flows*** of financial savings as a proportion of GNP was an estimated 5.3 percent in FY00 and jumped to 9.1 percent in FY03; thereafter it began to slide and at the close of decade, the proportion was back to 5.8 percent, almost the same where it started from. Similar estimates are obtained from national accounts data showing a long term decline in the ratio of national domestic savings from 18 percent of GNP in FY01 to 9.6 percent of GNP in FY10. Does this mean domestic savings as proportion of GNP has been reduced by half? Note that the ratios of GDP mentioned above are based on flows as they must be; not on stocks. After all, GNP in any year is ***income flow*** at economy level; likewise, financial saving stocks have to be netted out for flows and then ratios can be meaningfully estimated, not otherwise. Any inferences drawn from these ratio estimates need to be duly qualified and noted.

18. Such are the hazards of macroeconomic or macrofinancial estimates; but there is a key difference. Estimates of macrofinancial aggregates, financial savings have been built up from below account by account, based on deposit accounts lodged somewhere in the branch network of a bank, rising to institutional level aggregates, then to system level aggregates. These aggregates are verifiable by accounts of financial institutions, audited and consolidated into macrofinancial aggregates. These can be traced and verified; not national accounts. Those remain estimates. This is particularly vexing in case of savings; purportedly dealing with the same macro level aggregate but viewed though different lenses.

Section 2: Deposits Mobilization – *Pakistan* Banking System

1. In any country, the ***amount*** of deposits mobilized depends on levels of disposable income and consumption patterns of households first. On the second tier, it is affected by rates of return or deposit rates, so goes the argument, and also on how keen the banks are to mobilize deposits. Past experience has shown that an aggressive deposit mobilization effort does enhance overall size of deposits, by bringing in new depositors who are outside of banking network. In Pakistan, a good part of depositors are still outside banking network; there is now a healthy competition among banks to seek out new depositors and enlarge their deposit base.

2. There are only two components of ***financial system deposit;*** these are banking system deposits and NBFIs' deposits. Note that NSS deposits are not included in financial system deposits as such, because their mechanisms and operations are outside of financial system. Likewise, currency is also excluded. Financial system deposits thus defined, have grown significantly from Rs 1174 billion in FY00 to Rs 4731 billion in FY10 at an average annual rate of 15 percent, faster than the rate of growth of financial savings noted earlier. This growth was 16.4 percent during the first half of the decade and subsequently slowed down to 13.5 percent per year during the second half of the decade, FY05-10. \1

3. Financial system deposits constituted nearly 53 percent of total financial savings in early years. This share increased to about 65 percent during boom years of financial growth then backtracked, but was still 62.5 percent in FY10. That is, financial system deposits are largest part of financial savings and are still growing. Within the aggregate of financial system deposits; ***banking system deposits*** are the largest, and were Rs 1140 billion in FY00, rising to Rs 4693 billion in FY10, constituting nearly 97 percent of financial system deposits.

\1. See Data Set 4.5, 4.5a. This data series on banking system deposits is slightly different from the one given in Data sets 3.0 and 3.2 discussed earlier concerning the dimensions of financial system, owing to conversion of CY data into FY data using interpolations, and also because of differences in classification as reported; but the trends remain intact. Aggregations do not oblige an absolute adherence to one

classification or the other. There are just too many participants reporting. The ever so slight data discrepancies do not matter for this analysis.

4. A fraction of financial system deposits, less than one percent, were lodged with NBFIs in FY00, hence NBFIs' deposits are not considered any further. This domination of banking system deposits in aggregate financial savings or financial system deposits is the reason why for operational purposes banking system deposits are all that matters. Banking system deposits are almost synonymous with deposit aggregates, their major components, their trends of growth, and rates of return. Hence, we need to focus on banking system deposits while considering issues of financial savings mobilization.

Banking System Deposits - *Structure and Growth Patterns*

5. The structure of banking system deposits can be classified by type of deposit like demand deposit *versus* time deposit; or by type of account, namely PLS *versus* non-PLS, or by interest bearing versus non-interest bearing; or by maturity structure; or by size of deposits. These are overlapping classifications and often confounding. Therefore they have to be clearly defined. By convention a common classification for banks and regulatory authority is that of demand deposits and time deposits. For analyzing money supply as M_1 and M_2 and their growth, banking deposits have to be broken down between demand deposits and time deposits as given in *Data Set 4.0*. These two are used in some combination to specify liquidity requirements, the statutory liquidity ratio, that banks must maintain at any given time.

6. There are problems with the series concerning demand deposits and time deposits owing to changes in classification. In July 2006 SBP revised guideline for time deposits stipulating that deposits of a tenor of less than six months ought to be classified as demand deposits owing to banking regulation and supervision concerns and their implications for liquidity management by SBP. Pursuant to re-classification, size of demand deposits increased manifold and those of time deposits reduced to about one fourth of total banking system deposits, thus creating a disjoint in the time series data and upsetting consistency of accounting identity of M_1 in monetary aggregates of SBP.

7. Thereafter SBP ceased reporting M_1 balances in monetary aggregates, retaining M_2, and shifted to NDA, NFA classification to explain sources of monetary growth. That being so, we find that the proportion of demand deposits has been rising over the past decade. It increased from about 40.6 percent in 2000 to about 48.2 percent in 2010, as reported in opening data series of annual reports of SBP on money and banking and reproduced in *Data Set 4.6a.* This data shows preponderance of short maturities in the deposit base of banking system which has intensified over the years.

8. Those time series data inconsistencies aside, the issue is what part of banking deposits are interest bearing or PLS bearing, and what part is interest free or cost free to the banking system. That is the nub of the issue. Often, demand deposits are taken as interest free deposits, but this is not always the case. Some of the demand deposits are interest bearing especially those with maturities of one month to six months, others are not. However, current deposits are routinely identified as being cost free, though what is ***current*** needs a reconfirmation given the reclassification based on deposit maturities, not returns, mentioned earlier.

PLS and Interest Bearing Deposits

9. There are two types of deposits system in Pakistan; one is non-interest bearing PLS-based system identified with Islamic banking; and the other is interest based deposit operated by mainstream banking . We have to be careful with the term 'non-interest bearing' which often is taken to mean deposits with zero returns. In Pakistani banking, its connotation is different and this is critical. PLS-based deposit system is operated by both Islamic banks and mainstream banks. Hence deposits are further divided up as those lodged in PLS accounts operated by both Islamic banks and mainstream commercial banks side by side, while Islamic banks deal only in PLS deposits. At the same time there deposits lodged in interest bearing accounts maintained by mainstream banks only; not Islamic banks. This overlapping operational arrangement across the two systems of banking has prevailed for quite some time and the two system co-exist. This overlap in the deposit system of Pakistan has to be identified in macrofinancial aggregates.

10. Let us have a look at overall deposit trends at banking system level first. Subsequently we will look into their bifurcation between deposits held in PLS accounts versus interest bearing accounts. As observed earlier, the size of total banking deposits including both systems of banking was Rs 1140

billion in FY00, and increased swiftly to Rs 4693 billion by FY10, at average annual growth of 15 percent per year over the past decade. *(Data Set 4.6, 4.6a)* Among these, PLS-based deposits were Rs 874 billion in FY00, or about 77 percent of total banking system deposits, and increased to Rs 4222 billion in FY10 rising at average annual growth of 17.1 percent during the decade. During FY00-05 growth rate of deposits was faster at 16 percent, but during the second half of the decade growth slowed down to 14 percent per year.

11. In contrast, interest bearing deposits were Rs 266 billion in FY00 amounting to 23.3 percent of total deposits, increased to Rs 471 billion by FY10 at about 6 percent; roughly one third the rate of growth of PLS deposits. As a result, the share of PLS deposits increased further to 90 percent by FY10 and those of interest bearing deposit shrank to just about 10 percent. The breakdown of trends into two five year periods shows even more dramatic pattern of change. During FY00-05, growth of PLS deposits was very high; it was 20 percent per year, while interest bearing deposits registered a decline of about one percent per year over the same period; thereafter, during FY05-10, growth of PLS based and interest based deposits was roughly the same.

12. A shift was ongoing in the deposit base of banking system, but it did not begin at the start of the decade and got shut off at end of the decade. It has been going on for nearly two decades since the time Islamic banking was introduced. It gathered speed towards second half of the decade with sustained increase through out the past years. Currently, the deposit system has settled down as PLS return based rather than interest rate based.

13. Often PLS deposits are deemed to be free of interest, ***sood se pak;*** but this does not mean cost free. Since deposits of mainstream banks are interest bearing, those are tainted with interest, therefore deemed to be un-Islamic; but still it does not mean free of cost. That is a separate issue concerning ***soodi-banking***, not cost free banking. Hence, what is interest free and what is interest bearing needs to be identified away from Islamic or un-Islamic label. It should not be muddled up with zero-charge or zero-cost deposits across the two systems of deposits.

Components - Banking System Deposit

14. There are three main components in any deposit structure; current deposits, savings deposits and fixed term deposits, while call deposits could be treated as part of current deposits, maturity wise, not return wise. This classification cuts across both the systems in Pakistan. Among these, the

proportion of savings deposits is the largest, followed by fixed term deposits the next, and thereafter current deposits. These proportions have been fluid over the past decade, but this structure has sustained. Among these, current account deposits are classified on the basis of their maturity, separate from call deposits both in the PLS and interest based banking. Further, current deposits are zero cost deposits and do not carry any return, whether it is PLS based banking or interest-based banking. These deposits are cost free to the banking system; regardless of the brand of banking they emerge from, mainstream or Islamic; regardless of the label placed on deposits.

15. The overall size of ***current deposits*** was Rs 168 billion in FY00 amounting to about 15 percent of total deposits of the banking system. Thereafter, current deposits increased very fast to Rs 1308 billion by FY10 at average annual growth rate of about 23 percent during the decade; significantly faster than the growth of total deposits. Much of this growth occurred during FY00-FY05 at about 30 percent per year; a very high rate indeed; thereafter, this rate declined to about to 16 percent during FY06-10. As a result the proportion of current deposits increased to about 28 percent of total deposits of banking system. This is another element of structural shift that has occurred over the past decade.

16. If current account deposits are cost free, it would mean that banking system has slightly more than one fourth of deposits free of costs; and to boot, coustomers had to pay a charge to open and maintain accounts with banks plus maintain a minimum rupee balance. Why would depositors opt to lodge their increasing proportion of their savings into non-interest bearing deposits needs to be explored further. It does not make much sense, and it can not be a quirk of data, because this SBP data set is a long and established one stretching back to previous decades.

17. Savings deposits are the largest in banking system. These deposits were Rs 584 billion in FY00, amounting to 51.2 percent banking system deposits, both PLS-based and interest bearing. By FY10, savings deposits had increased to Rs 1844 billion, more than three times what they were in FY00, growing at average annual rate of 12 percent. During first half of the decade, savings deposits increased at about 17 percent per year; thereafter rate of growth slowed down to about 8 percent during second half of the decade; but the relative share of savings deposits decreased to 39.3 percent by FY10.

18. This happened because the rate of growth of savings deposits was below rates of growth of banking system deposits and also below the rate of growth of fixed term deposits. It was nearly half of the rate of growth of

current deposits. Maturity-wise, savings deposits are not fixed term deposits, rather they are like current account deposits; but savings deposits carry nominal interest rates if their accounts are interest-based whereas returns on PLS based savings deposits are quite decent. These PLS returns were in the range of 5.5 percent during 2008-10, though these were lower during middle years of the decade. Saving account balances can be withdrawn by coustomers as per their cash needs with some withdrawl restrictions as stipulated by banks regarding amount and timing of withdrawls. There are no formal maturity stipulations on savings accounts, normally.

19. But growth of ***fixed-term*** deposits showed a reverse pattern. The size of fixed-term deposits was Rs 324 billion and increased to Rs 1483 billion in FY10. Their overall growth during the decade was 16 per cent per year; but much of it was concentrated in second half of the decade with annual growth of 26 percent per year as opposed to only 7 percent growth during the first half of the decade. Most term deposits have been concentrated in maturities of 6 months to 2 years throughout and they had the fastest growth. The amount of deposits of higher maturities of two or more years was a fraction of all term deposits, just about 5 percent. Their share declined further during the decade and currently it is a negligible 2 percent. The implication is that nearly two thirds of deposits in Pakistan are short term deposits with very low rate of return or none at all.

NSS Operations –
Deposit Mobilization vs Debt Financing

20. Let us have a detailed look at NSS deposits mobilized in parallel to banking system deposits and compare their trends. The main issue is how to treat National Savings Scheme (NSS) balances mobilized year after year. Do these balances represent deposit mobilization and hence are part of financial savings, or do these balances represent borrowings and hence are part of debt financing. It is both; depends on one's perspectives. In so far as NSS balances are ***mobilized*** and drawn form the same source, namely savings of households, which they are, they constitute a part of financial savings and have been treated likewise. In so far these balances are used as debt financing, NSS balances ought to be treated as unfunded debt. The mobilization part is financial savings; the usage part is debt financing, not intermediation. We have followed this distinction.

21. NSS has been in operation for a long time. Over the past decade, the *stock* of NSS deposits rose from Rs 715 billion in FY00 to Rs 983 billion in FY03 and increased substantially to Rs 1585 billion by FY10. The rate of growth of NSS deposits was slightly above 8 percent for FY00-10, as compared with a whopping growth of about 18 percent per year during the decade of 1990s. *(Data Set 4.8)* NSS deposit growth slowed down somewhat during the first half of the decade; it was negative during the middle years, FY04-06, but then began to rise again once NSS rates were allowed to rise owing to large government borrowings over the past five years. In earlier years of declining money market rates, government was able to raise sufficient funds through its borrowings from the banking system. The government did not need NSS borrowings.

22. In the context of deposit mobilization if we lump together banking system and NSS, the implications become clear with regard to stock of deposits in the country, and the rate differential between banking system and NSS instruments. Historically, NSS preempted banking system in accessing long term deposits as shown by the ratio of NSS deposits to those of banking system in the past, but no longer; this dominance is fading. In FY00, stock of NSS deposits was nearly 63 percent of banking system deposits; by middle of the decade, this proportion had declined to 42 percent when government did not need to seek NSS based funds. It has declined further to about 33 percent in spite of ratcheting up of NSS rates and sharp increase in NSS deposits in the past two years. This is because government is using banking system more for its borrowing needs, not so much NSS.

23. For example, in FY04 there was no increase in NSS borrowings. Instead, government borrowed Rs 74 billion from the banking system, whereas the year before it had retired Rs 56 billion of banking system debt. After that, borrowings of government both form banking system and NSS took off and the cost considerations took a back seat given the government needs for liquidity to meet short term liabilities. In between, government sought foreign loans to meet its deficit financing needs domestically and to meet foreign short term liabilities that had to be covered. The recourse to IMF helped to moderate these needs, but government is back to NSS based financing. Implications of these developments are discussed in the section on domestic debt in Chapter 10 because it is a debt liability management matter, not deposit mobilization issue.

24. As for NSS rates, nominal rate of return on NSS deposits has always been much higher than those offered by the banking system on its long term deposit instruments. Up until 1998, NSS rate of return on its long term

certificate was about 16-18 percent as compared to a maximum rate of about 3-4 percent offered on savings accounts. Since then, NSS rates declined, but remained above banking deposit rates during the first half of the decade at a time when there was a sort of moratorium on NSS rates. Since then, NSS rates have inched up. In spite of increase in deposit rates during second half of 2000s, the difference between two rate structure has moderated since NSS rates also have increased and are well above market rates. Currently, ***rate of profit*** on long term NSS instruments range between 9-14 percent depending on instrument held. It is not a rate of profit in routine because government is not in the business of profit making; nor it is in the business of corporate type investing to make profits and distribute dividends to financiers, the NSS depositors. Instead, NSS rates are ***borrowing rates*** since NSS funds are used for deficit financing. For lenders, these are lending rates to the government.

25. Bulk of NSS deposits are in Defense and Special Savings Certificates. the rate of profit on defense savings certificates is 7 percent for one year maturity, around 12-14 percent on 10 year maturity. For special savings certificates, the rate of profit is 9 to 12 percent. There always has been a sizable interest rate differential between these two long term instruments of NSS, the defense saving certificates and special savings certificates; and a similar and a larger differential has existed between NSS and long term instruments of savings offered by banks, creating an interest rate arbitrage position in favour of high rate instrument.

26. From banking system perspective, NSS operations are not financial intermediation; not NSS instruments are deposit instruments. The amounts mobilized by the NSS are government borrowings lodged as ***unfunded debt***, not deposit mobilization as commonly understood; and to boot, NSS funds are not cheap. As SBP estimates show, during FY02 if government had borrowed Rs 230 billion through financial market instead of NSS, it would have saved about Rs 11 billion per year. This may hold true in current times as well. Clearly, NSS operations have led to distortions in savings mobilization because of their negative impact on financial intermediation even though institutional depositors are now banned from investing in NSS instruments. The gap between nominal returns on banking system deposits and on NSS instruments is substantial.

27. The NSS, therefore, is neither a low cost borrowing source, nor a debt management system. It has turned into a social security system for risk averse investors, mostly retirees, and it is going to stay that way in future. That NSS operations have led to distortions in savings mobilization because of negative impact on financial intermediation is clear. NSS operations are

undertaken to enable government to borrow from a segment of public searching for instrument based steady flow of income stream, and if it is risk free, all the better. In part, it is to be seen as income support to well to-do retired savers. Financial institutions got in the foray, and instead of lending they parked their liquidity in NSS instruments. Later on institutional depositors were banned from investing in NSS instruments, because it was a distortion of intermediation process. Attempts are underway to improve operations of CDNS, together with rationalization of rate structure, reducing interest arbitrage that has existed for quite some time.

28. A legitimate counterpoint may be raised that similar borrowing mechanisms to finance government budget deficits exist in many countries, both advanced and developing alike. Don't their operations pre-empt deposit mobilization by banking system? They do; because the pool of financial savings remains the same; the difference lies how it is tapped. The end result is a pressure on rate structure via enhanced demand for same pool of financial resources available; but as long as these mechanisms do not distort the structure of market-based costs and returns, they do not adversely impinge on financial intermediation process.

29. NSS operations stymied growth of long term bond markets in Pakistan because NSS created a system of long term debt financing which would not let a market based system to take hold. This is not perceived so. During the 1990s, government made efforts to resuscitate bond market, but halfheartedly from sidelines because government did not need bond market. It did not have to borrow through bonds when the same needs were being met through NSS operations. The government did not create a framework suitable to the advent of bond market during 1990s. In part, its deficit financing needs were being met by FCA deposits; and in parallel routine access to IMF standby facility, though only for first tranche of funds, a revolving door operation in those times.

30. This situation changed during the first half of the decade. In those years, government financial position was strong enough to hold cross cutting pressures. It had a breathing space to sort out sufficient conditions for growth of bond markets as discussed in chapter 8, Volume II. The bond auction mechanism had taken root; private sector was active at bond based long term borrowings, and began to issue noticeable amounts of term finance certificates. Bond market development has long ways to go; and we need to get back to issues of deposit mobilization.

Section 3: Rates of Return
Banking System Deposits

1. The growth of banking deposits in the past decade occurred in the environment of volatile rates of return on all banking deposits including those lodged in PLS and interest bearing accounts. These rates of return on are a composite of returns on PLS deposits and interest bearing deposits with the caveat in mind that PLS deposits of banking system are overwhelmingly large in Pakistan as observed earlier. The PLS deposits were nearly three fourth of total deposits of banking system in early 2000s and have risen to about 90 percent by 2010, while interest bearing deposits currently are about 10 percent of total deposits and are marginal to banking system. Therefore, return on PLS-based deposits is all that matters at system level analysis.

2. Since, PLS deposits are the largest, we will use the term ***rates of return*** rather than the term ***rates of interest*** both for nominal and real rates, but will identify them for the two systems of deposits. We start with analysis of rates of returns for all deposits, including both PLS-based and interest-based deposits. Next we analyze two layers of nominal rates, one for PLS deposits and the other for interest bearing non-PLS deposits. Within these two layers, we have to differentiate between nominal rates of return as applicable to deposits including those lodged in current accounts and the other excluding current account deposits because there are differences. This is a rather tedious going; but there are significant variations in nominal rates lying underneath the general rates returns for all deposits at system level.

3. We have discussed general patterns of interest rate trends in Chapter 4. It would be worthwhile to re-iterate those findings at the start of this analysis, though there is some unavoidable duplication. The nominal weighted average rate of return on PLS deposits ***classified by maturities*** including current deposits, the zero cost deposits, shows a declining trend during the first half of the decade from about 5.9 percent in 2000 to just about one percent in 2004. Thereafter it began to rise, and by 2010 this weighted average rate of return on PLS deposits was about 4.8 percent by 2010.

4. The nominal weighted average rate on interest bearing deposits of the banking system, including current deposits, showed a similar trend; but in contrast to rate of return on PLS based deposits, the returns on interest bearing deposits were lower. These average returns were 3.8 percent in 2000; then dropped to a bare 0.6 percent by 2004; thereafter these returns began to

rise, and by 2010 the nominal weighted average was just about 1.05 percent. There was a significant volatility in rates of returns during the past decade, and the magnitudes do not register unless a long term view is taken.

5. There are differences in the rates of returns between those arrived on the basis of deposits outstanding versus those classified by maturities owing perhaps to the mismatch; but the trend is the same. If we remove current deposits from the aggregates; the nominal weighted average rate of interest improve by about 100-150 basis points depending on the year being observed, but their trend line is the same across PLS-based or interest based deposits. Rates of returns on PLS deposits have been significantly better than rates on interest bearing deposits except for 2003-06 period. (*Data Set 4.71)* This differential is more pronounced between PLS and interest bearing savings deposits. Nominal weighted average rate of return on PLS based deposits are significantly higher during second half of the decade. The breakdown of nominal weighted average rates on fixed term deposits of various maturities shows a checkered pattern but they are higher for longer maturities. For some reason, deposit of medium term maturities of two to four years carried higher returns than deposits of five years or longer maturities. The ***weighted average nominal rate of return*** on banking system deposits, both PLS deposits as well as non-PLS deposits declined rather dramatically during the first four years of the past decade and then began to climb up slowly regaining much of the lost ground by end of the decade. This was the overall pattern that prevailed over the past years.

6. These are year-end figures for the month of December, not annual averages for the year. These figures gloss over variations that occurred during the year; therefore they can not truly represent trends. These nominal rates are to be interpreted with caution because these are only indicative of trends of rates of returns. Any behavioral inference is of limited applicability, but those have to be offered in a review like this. For a more meaningful analysis, monthly averages need to be compiled for each year, but that would not be practical for a decade long series. The most we could do is to add another mid-year rates of return to furnish two observations per year. We have not done that either, content with year end observations.

7. The nominal weighted average rate of return for all deposits, including current deposits, declined from 5.4 percent in 2000 to less than one percent by the end of 2004, their lowest level observed. Thereafter rates began to rise but did not recover fully. By end of the decade, nominal rate for all deposits was back to 4.4 percent, but full 100 basis points below the level that prevailed at the start of the decade. For most of the years, 2003-08, rates of

return for PLS and interest bearing deposits combined were fairly low ranging between one percent and two and a half percent. These were fairly depressed rates of return, nominal at that, considering overall economic and financial trends that prevailed over these years.

8. Since current deposits generally do not offer a rate of return, if we exclude them from total deposits, the nominal rates improve slightly, but the pattern remains the same. The weighted average nominal rate of return for deposits, excluding deposits lodged in current accounts, declined from 6.5 per cent in CY00 to 1.3 per cent in CY04. (*Data Set 4.7)* Thereafter, these rates began to rise, and by end of the decade these rates were back to roughly the same level where they started from, around 6 percent. Thus, the structure of nominal rates of return came around full circle during this ten year period to a level that was no higher than it was at start of the decade. The fluctuations were around a trend line that meandered between these ranges.

9. Interest rates in applied realm do not exhibit linearly rising trends neatly drawn as upward sloping curve, *perpetually;* there could not be one because it is a parameter, a rate of return or costs, not an aggregate of magnitudes. Only macrofinancial aggregates show secularly rising trends over long periods. Their trend line is always inching upwards, periodic downturns and all, around a rising trend line. There is none of this trend line behavior for interest rates. Interest rates do not continue to rise perpetually; they fluctuate within a band. That is why we see variations in averages of interest rates. The essence of interest rate analysis lies in these periodic variations; this is something basic but needed explaining or reiteration.

10. The volatility in nominal rates of return observed above was part of economic and financial trends; a combination of factors including liquidity levels and its management; monetary stance of SBP over short segments; banking credit and demand patterns; money market volatility; and short run economic prognosis. There is no way to average them out; that would be meaningless. The reason being that patterns of deposit growth were fairly stable for the decade, regardless of variations in interest rate; rising along an upward sloping line with minor saw tooth movements that has prevailed all along including this decade.

11. The highest nominal rates of return were observed for fixed term deposits of longer maturities of three year or more but within the band that prevailed for the short term, the tail end of each year. For example, for deposits of three to four year maturity, the nominal rate rose from its lowest of 3 percent at end 2003 to about 10.4 percent by end of 2010, the highest level

of deposit rates ever observed. Yet, the proportion of deposits of this maturity in total deposits was hardly 2 percent in 2003, and was even lower in 2010. The nominal rates for call deposits, the lowest maturity deposits were respectable. At their lowest, this nominal rate was 1.1 percent in 2003, but rose to a respectable 6.9 per cent by 2010. The entire structure of nominal rates moved up or down in unison. There were some aberrations to this trend but those were not consequential.

Rates of Returns – *Trends*
PLS vs Interest Bearing

12. A more meaningful way would be to look at the weighted average nominal rates of return for PLS deposits and contrast them with rates of return for interest based deposits, bearing in mind that PLS deposits are the largest in the banking system. Overall, the nominal rates for PLS deposits were higher by a wide margin over interest based deposits, confirming that depositors were far better at opening up PLS accounts rather than non-PLS accounts at banks who offer both types of deposit facilities, be they Islamic banks or modern commercial banks. The nominal weighted average rate of return for PLS deposits including current deposits was 5.8 percent in 2000, declining to about one percent in 2004; thereafter, slowly rising back to about 4.8 percent in 2010. This is almost identical to the overall rates of return discussed in para 5 above.

13. Similar is the trend of PLS deposits excluding current deposits. Their rate of return were about 7 percent in 2000 and declined to about 1.4 percent at their lowest in 2004. Thereafter, this rate began to rise and was back to about 6.5 percent by end year 2010. *(Data Set 4.71)* In contrast, rates of return for interest based non-PLS deposits excluding current deposits, were about 4.7 percent in 2000, more than 2 percent below their counterpart PLS rate in 2000. This rate for non-PLS deposits declined to 0.85 percent, its lowest level in 2003 and then began to rise but not much. By end 2010 this rate was 1.8 percent, far below its counterpart PLS rate that prevailed at that time. There simply is no comparison between deposit rates offered on PLS and non-PLS accounts. Rates of return on PLS deposits are significantly higher.

14. A further decomposition of these weighted nominal average rate of return for various categories of deposits show the same pattern. The weighted nominal average rate of return for PLS based ***savings deposits*** was about 5.9 percent in 2000, *(Data Set 4.71)* dipping below one percent in 2004,

and then climbing back to 5.5 percent by end of 2010, thereby gaining much of the lost ground. In contrast, weighted average nominal rate on ***savings*** deposits lodged in interest bearing account was much lower at about 3.9 percent in 2000, declining to 0.85 percent in 2004, but staying at the same low level for remaining years of the past decade; never reaching even one percent level. These interest based deposit rates never recovered from the crash in middle years. These rates were far below than those offered on PLS based savings accounts. Looks like interest based savings deposits were out in competition with PLS based savings deposits. That explains declining proportion of interest based deposits at the system level. Interest based deposits do not have competitive edge and banks are cognizant of their market position; but they have a comfortable deposit base, and they are not about to embark on rate competition. That would be futile. A price war is a zero-sum game, if market response patterns are any guide.

15. Something similar transpired with fixed term deposits, the next largest component of deposit base. Nominal rates for fixed term PLS deposits were in the range of 8-10 percent for most maturities at the end of 2000; thereafter they declined to 1-3 percent range in 2003, and began their climb onwards. By end of 2010, the range of weighted average nominal rate was a respectable 8-10 percent for PLS deposits. In contrast, weighted average nominal rates for interest based deposits were much below PLS deposits throughout the decade. This range was 4 -7 percent in 2000; declining to one percent to 3 percent, the same trend as for PLS deposits; then climbing back to 3 to 8 percent for most maturities. That is, nominal rates of return for interest based deposits were lower than those for PLS deposits throughout the decade for most fixed term maturities. The view that banks can mobilize large amounts of deposits if only rates are of 8 to 10 percent does not hold promise because of interlocking relationships between rates of interest and maturities.

16. For interest based banking, the only bright spot was in fixed term deposits of maturities of two to three years. The nominal weighted average rates were quite respectable and competitive in deposit market. In 2000, PLS based accounts offered upto 8.75 percent for fixed term deposits of two to three year maturities; while interest based accounts offered much lower, only 5.4 percent for same maturities; thereby showing a clear edge to PLS based accounts. By 2004, the nominal rates were down to about three percent for interest based accounts for two to three year maturities; while for PLS accounts they were slightly lower. Then the rates began to rise, and by end 2010, nominal rates for interest based accounts for 2 to 3 year maturities were substantially high at 10.7 percent; while PLS based accounts the nominal rate was 8.3 per cent, ***below*** the rate for interest based deposits.

17. For the next layer of maturities, the position was reversed; hence this . rate differential on two to three year fixed-term maturities did not lead to any increase in the amounts mobilized by the banking system. The size or of deposit did increase but its *proportion* remained a minuscule of all interest based deposits of banking system; no more than one fifth of one percent. But success of such initiatives is judged by the size or amounts of new deposits garnered, not by relative shares. At institutional level that may be fine; at system level, it does not make much difference.

18. For PLS based deposits of these maturities, the outcome was no different. These deposits have stayed the same year after year; less than one percent of total deposits. So much about the aggressive advertisements regarding rate differential being offered by banking system. Depositors do not seem to be impressed by media blitz. It is likely that some inter-bank deposit switching is going on, but it is not traceable in data series. Such anomalies in rate structure emerge all the time; they are a routine, not exception, though tracing them down is a tedious challenge. The above snapshot shows that banks find a clientele niche to operate and are not overly concerned with interest rate differentials. Their deposit base is secure; albeit arising form PLS deposits, operating side by side Islamic banking.

Real vs Nominal Rates of Returns

19. A more instructive picture emerges when nominal rates of return are adjusted for inflation by the CPI index to obtain real rates of returns as shown in three sets; one each for real returns for system level deposits including both PLS based and interest based deposits *(Data Set 4.71a)* and another *(Data Set 4.7)* which shows trends of decomposed structure. These three sets are counterparts of nominal rates of returns; caveats and all. These data show that real rates of return for both PLS and interest bearing deposits have been negative for the entire decade; and the same is reflected at system level rates of return for the banking system.

20. The degree of negativity has grown over the years with swiftly rising rates of inflation, especially during the second half of the decade. Note that structure of real rates of return exhibit a similar pattern as that of nominal rates; the reason being that adjustment of nominal rates is done by the CPI index which behaves as a scalar, preserving the underlying trend movements of nominal rates of return. The estimates of real rates of return discussed below are formula based estimates and can be approximated by simple

differential between interest rate and rate of inflation for a quick check, though this differential exaggerates negativity of estimates. These estimates are more accurate than the simple differential.

21. The weighted average real rate of return for ***PLS based*** deposits including current deposits were positive during 2000-02, though declining; thereafter the ***real weighted average rates of return*** turned negative. During 2004-08, this real rate of return was negative in the range of minus 3.4 to minus 6.6, percent and then further dropped to minus 13.3 percent in 2009, the lowest it has ever been. In 2010, this real rate recovered, but was still negative at minus 6.24 percent for all PLS based deposits including current deposits. *(Data Set 4.71a, line 42).* For interest based deposits, the profile of real rates of return was similar to PLS deposits, but it was more intense. The real weighted average rate of return was negative throughout 2001-10. In early years, during 2001-04, these rates ranged between minus 1.9 percent to minus 3.8 percent; then turned sharply negative during 2005-08 all across for all types of deposits including current deposits. In 2009, the real rate of return was minus 16.0 percent which is rather unusual outcome for a single year. The following year, in 2010, the rate pulled up a great deal but it was still negative at minus 9.6 percent. *(Data Set 4.71a, line 56)*

22. For banking system, the composite ***weighted average*** of ***real rates of return*** for both PLS and interest bearing deposits is a mixture of the above two profiles with some moderation. The real rates of return for ***all deposits*** at system level including current deposits, ranged between minus 0.05 to minus 1.9 percent during 2001-03 the early years. *(Data Set 4.7, line 21)* Thereafter owing to rapidly rising inflation, negativity of real rates began to increase fast and ranged between minus 3.46 to minus 6.87 between 2004-08; then it jumped to minus 13.6 in 2009, an all time high, and later on pulled back to minus 6.6 in 2010 but was still substantially negative. Why such gyrations within couple of years needs to be explored further.

23. The same profile of negative rates has prevailed in the leading components, namely savings and fixed term deposits at banking system level as a whole, inclusive of PLS and interest based deposits. Maturity structure of fixed deposits did not seem to make much difference in this overall pattern of negative real rates of returns. As discussed above, concentration of fixed term deposits is in the maturities of three months to two years. These are short to medium maturities. For banking system as a whole, the weighted average real rates of returns were positive during 2000-02 for all maturities, including these medium to short term maturities. Since these maturities

harbored concentration of deposits, we could infer that for these early years, rates of return were positive, overall. Thereafter, in the maturity band of short to medium term deposits, real rates turned negative but remained stable in the range of minus 0.45 to minus 4.0 until 2008; then dropped sharply to around minus 10 to 11 percent in 2009; recovering in 2010 to previous levels of around minus 3. 0 to minus 4.0 percent. As inflation speeded up during the past decade, these real rates of return followed suit; they began to erode fast and became sharply negative at end of the decade with much volatility in between.

24. This system level profile of real rates of return can be decomposed for major components of PLS and interest based deposits, namely savings deposits or fixed deposits of various maturities with some minor differences. The decomposed analysis does not change the results discussed above. The decomposed structure of real rates of return given in Data Sets 4.7 and 4.71 reconfirms the results of system level profile; it has to, because system level estimates are built up from ground level, culminating into aggregate for the two sub-categories, then arriving at the pinnacle of banking system.

25. This rather mind-numbing exercise establishes the following. The deposit rates have gone through a volatility not common, whether nominal or real rates; but deposit behaviour did not follow suit; a point that is often reiterated in this study, because it clashes with some established a priori norms. Aggregate deposits at banking system level did jump up and down over short periods, but then settled down at the end. Deposit patterns sustained; they did not follow fluctuating rates of interest, whether nominal or real. This volatility is concentrated in last three years of the decade.

26. As maturity surpassed a threshold of three years, the upper end of maturity structure, real rates became less negative for PLS deposits as shown by real rates for four years or higher terms; but were mixed for interest bearing deposits. What implications these negative real rate of returns on mainstream savings harbor for banking system deposits and future economic growth needs to be reviewed. Looks like, beyond a threshold on downside, interest rate sensitivity of deposits ceases to operate on households. Banks could then behave as market makers, rather than market participants, and not worry much about saving behaviour at large. They need not pay attention to real rates while setting their deposit rate structure. They could ride on the resilience of depositors to take whatever is thrown at them by way of returns. It all depends on how hungry banks are for new deposits. Their focus is expanding their client base; getting new depositors is motivated more by this concern than size of deposits mobilized.

Leading Results – *A Commentary*

27. A few salient conclusions from this review that need to be articulated as follows. ***Foremost,*** the rate structure of deposits in Pakistan, no matter how it is looked at, has remained fairly depressed both in boom and crash times. A great deal of concern has been expressed about this depressed structure, but hardly much can be done about it. The reason is there are powerful incentives arrayed against any meaningful increase in deposit rates. Banks are not going to raise these rates voluntarily; they do not want to see an increase in their deposit costs, hence funding costs, jeopardizing their spreads and profitability.

28. SBP can do precious little to raise deposit rates. It can not be ordered as a regulatory measure; above all, it should not be done, because gone is the era of decreed rates of interest that prevailed in administered financial regime. That era is over and should not be brought back. Similarly, no amount of 'moral suasion' can persuade banks to take steps that would raise their costs of funds, not the cost of intermediation. The rate structure follows pricing by loss leaders; and if those loss leaders also happen to be large size banks, there is not much other banks can do to raise deposit rates.

29. Besides, movements in structure of interest rates are tied together; the structure moves in unison and does reflect market conditions, good bad and all. No matter how imperfect the market may be, and how flawed are price discovery mechanisms, the implication for a single financial institution is it can not strike out on its own and engage in rate competition outside the market band. That is, price warfare does not lead a bank anywhere if it wants to garner a greater share of deposits. It is a zero sum game.

30. ***Second,*** deposit behavior of households is not interest sensitive both in face of changes in nominal rates and real rates. Interest sensitivity is displayed at extremes; namely at very high nominal returns, if that. We have already seen that even a 10 percent plus rate offer by banks on long maturity deposits did not have noticeable impact; not to speak of run of the mill deposit rates in the range of 2-3 percent. Their saving behavior does not seem to be affected by interest rates, reconfirming *a priori* constructs about households' savings behavior. No amount of rigorous quantitative analysis is going to reveal a hidden interrelationship between routine deposit rates and amount of savings mobilized at system at level.

31. In face of such negative real rates of returns as observed and analyzed above, it is 'irrational' of households, so to say, to lodge increasing amounts of deposits with the banking system; but households continue doing so. The amount of deposits has continuously risen, regardless of nominal rates and regardless of real negative rates. Obviously return on deposits is not the motive; there may be any number of other motives. This is another reason why banks are not about to raise deposit rates on their own. Given their experience with household deposits, banks are convinced of this behavior, irrational though it may be, irrespective of the prospects of deposit switching that may occur on the margin. But deposit switching occurs on the basis of service provisions; not because of minor deposit rate differentials.

32. ***Third,*** weighted average nominal rates of returns for all deposits including current deposits, are generally lower than for deposit aggregates *excluding* current deposits, be they in PLS system or interest based system, for the simple reason that current deposits do not carry any rate of interest or return to the depositors but their amounts are substantial; close to one fourth of all deposits or more. This means that for banking system, their deposit based funding costs are subsidized by interest free or return free current deposits to the tune of nearly 28 percent. Why banks would go out of the way to attract deposits by offering higher rates to depositors, even though those rates may be regarded closer to 'decent returns' in some sense than the rates currently prevailing.

33. ***Fourth,*** this cost pattern is the reason for high banking spreads and banking system profitability in Pakistan that have prevailed during the past decade. The rate structure on both sides, namely deposits and lending was so uniform in its movements that it did not materially alter banking spread. The weighted average nominal rates of returns on banking deposits, net of current deposits, kept sliding during the first four years up until CY04 to about 1.3 percent from about 6 percent in CY00. Thereafter they began to climb and came close to about 6 percent by first half of CY10. The weighted average nominal rate of return inclusive of current deposits, followed similar pattern: it kept declining during first four years and was less than one percent in CY04, and then climbed back to about 4.3 percent by CY10. This much has been established.

34. ***Fifth,*** if one were to take a long term view for 1995-2005 period, changes in nominal returns on banking deposits occurred in the wake of deregulation and liberalization of interest rate regime; the tail end of decline continued during the first few years of this decade. The rate structure underwent a significant change during the reforms from administered rates

to market-based rates. The interest rates became increasingly reflective of money market operations revolving around inter-bank market concentrated on repo or call money trading; but this happened much later, during the past decade, not in the mid or late 1990s. This transition was not smooth. There was periodic volatility in interest rates but not destabilizing movements.

35. This is a considerable achievement of monetary authority, the SBP, when observed in the light of comparative experiences of financial reforms. The current structure of rates of returns is a combined outcome of market forces within an operational framework defined by KIBOR and policy rate of SBP though transmission mechanism and pass through mechanism may not be as perfect as one would like to see. Market forces have taken hold. Household saving behaviour, funding and borrowing patterns of corporate private sector and government, all remain rooted in the framework that came into being in post reform era. As the financial system matures, both banking system and financial markets will make further inroads in the economy, the anomalies now prevailing in the rate structure may be moderated, but until inflation is brought under control, negative real rates are likely to persist.

36. ***Sixth,*** depositors' confidence in the banking system remains strong in spite of the depressed levels and volatility of nominal and real rates of return on deposits; the transition from state owned banks to privatized banks which eliminated *implicit state guarantees,* thereby exposing depositors to banking insolvency or failure if they were to materialize in future. Since those early times of transition, growth in deposits has been remarkable considering that majority of depositors are small. As many as 93 percent of them have deposits of less than Rs 100,000. They do not access high return deposit instruments due to unfamiliarity, or adverse liquidity and maturity profiles of instruments. The flow of deposits at such low interest rates has helped banks to maintain their earnings and profitability by keeping the costs of their loanable funds down.

Data Set 4.5 — **Financial Savings** — ***Rs billions, End Period***

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
5					***Financial Savings, Accumulated Stock***							
6	**Financial Savings**	**2201**	**2419**	**2715**	**3166**	**3569**	**4088**	**4566**	**5258**	**5920**	**6680**	**7570**
7	***Banking System Deposits \ 1***	1140	1276	1421	1682	2002	2428	2817	3373	3812	4138	4693
8	***Total Currency***	355	394	460	525	614	710	788	898	1051	1229	1383
9	***Govt Debt (unfunded)***	672	712	792	910	899	871	882	940	1020	1271	1456
10	National Saving Schemes	*634*	*670*	*744*	*823*	*832*	*776*	*770*	*830*	*911*	*1163*	*1350*
11	Other Debt Instruments	*38*	*42*	*51*	*88*	*67*	*95*	*112*	*110*	*109*	*108*	*107*
12	***NBFIs, Deposits***	34	37	42	49	54	79	79	47	37	42	38
13	***Financial System Deposits***	***1174***	***1313***	***1463***	***1731***	***2056***	***2507***	***2896***	***3420***	***3849***	***4180***	***4731***
14					***Financial Savings, Annual Flows***							
15	**Financial Savings, Flows**		**218**	**296**	**451**	**403**	**519**	**478**	**692**	**662**	**760**	**890**
16	*Banking System Deposits*		136	145	261	320	426	389	556	439	326	555
17	*Total Currency*		39	66	65	89	96	78	110	153	178	154
18	*National Saving Schemes*		36	73	79	9	-56	-6	60	81	253	186
19	*NBFIs, Deposits*		3	5	7	5	25	0	-32	-10	5	-4
20	***Financial System Deposits***		**175**	**223**	**347**	**334**	**395**	**383**	**584**	**510**	**584**	**737**
21			***As percentage of total Financial Savings, Stock***									
22	*Banking System Deposits \ 1*	*51.8*	*52.7*	*52.3*	*53.1*	*56.1*	*59.4*	*61.7*	*64.1*	*64.4*	*61.9*	*62.0*
23	*Total Currency*	*16.1*	*16.3*	*16.9*	*16.6*	*17.2*	*17.4*	*17.3*	*17.1*	*17.8*	*18.4*	*18.3*
24	*Govt Debt (unfunded)*	*30.5*	*29.4*	*29.2*	*28.7*	*25.2*	*21.3*	*19.3*	*17.9*	*17.2*	*19.0*	*19.2*
25	National Saving Schemes	28.8	27.7	27.4	26.0	23.3	19.0	16.9	15.8	15.4	17.4	17.8
26	*NBFIs, Deposits*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*	*1.9*	*1.7*	*0.9*	*0.6*	*0.6*	*0.5*
27	*Financial System Deposits only*	*53.3*	*54.3*	*53.9*	*54.7*	*57.6*	*61.3*	*63.4*	*65.0*	*65.0*	*62.6*	*62.5*
28	*Financial System Deposits + NSS*	*82.1*	*82.0*	*81.3*	*80.7*	*80.9*	*80.3*	*80.3*	*80.8*	*80.4*	*80.0*	*80.3*
29					***Financial Savings Flows as percentage of GNP, nominal at market prices***							
30	***Financial Savings / GNP (mp)***		*5.3*	*6.7*	*9.1*	*7.0*	*7.7*	*6.1*	*7.8*	*6.4*	*5.8*	*5.8*
31	***Banking System Deposits / GNP***		*3.3*	*3.3*	*5.2*	*5.5*	*6.3*	*5.0*	*6.3*	*4.2*	*2.5*	*3.6*
32	***National Saving Schemes / GNP***		*0.9*	*1.5*	*1.3*	*1.5*	*1.4*	*1.0*	*1.2*	*1.5*	*1.4*	*1.0*
33	SaF Data Set, revised Feb 2011		Source: SBP Annual Reports, FSAs									
34	\ 1 See table 4.6, banking sytem deposis as per SBP Table 6.6, does not match with data in Table 6.1 of ARs of SBP											
35												
36												

Data Set 4.5a — **Financial Savings** — *Rs billions, End Period*

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
				Annual Growth Rates							
Financial Savings		**9.9**	**12.2**	**16.6**	**12.7**	**14.5**	**11.7**	**15.2**	**12.6**	**12.8**	**13.3**
Banking System Deposits \ 1		11.9	11.4	18.4	19.0	21.3	16.0	19.7	13.0	8.6	13.4
Total Currency		11.0	16.8	14.1	17.0	15.6	11.0	14.0	17.0	16.9	12.5
National Saving Schemes		5.7	10.9	10.6	1.1	-6.7	-0.7	7.7	9.8	27.7	16.0
NBFIs, Deposits		8.8	13.5	16.7	10.2	46.3	0.0	-40.5	-21.3	13.5	-9.5
Financial System Deposits		***9.7***	***11.3***	***15.7***	***13.1***	***13.7***	***11.7***	***15.9***	***12.0***	***12.3***	***13.8***

	Average Annual Growth Rates				*Average Annual Growth Rates*		
	FY00-10	**FY00-05**	**FY05-10**		**FY00-10**	**FY00-05**	**FY05-10**
Financial Savings	**13.1%**	**13.2%**	**13.1%**	NBFIs, Deposits	1.1%	18.4%	-13.6%
Banking System Deposits \ 1	***15.2%***	***16.3%***	***14.1%***	*Banking System + NSS Deposits*	13.0%	12.6%	13.5%
Total Currency	14.6%	14.9%	14.3%	***Financial System Deposits + NSS***	***12.9%***	***12.7%***	***13.1%***
Govt Debt (unfunded)	8.0%	5.3%	10.8%				
National Saving Schemes	7.9%	4.1%	11.7%				

Memo Items											
Banking System + NssDeposits	***1774***	***1946***	***2165***	***2505***	***2834***	***3204***	***3587***	***4203***	***4723***	***5301***	***6043***
Domestic Savings (national A/cs)	***648***	***740***	***797***	***850***	***911***	***995***	***1200***	***1349***	***1164***	***1333***	***1457***
Domestic Savings (n/Accs) / GNP		*18.0*	*18.0*	*17.1*	*15.8*	*14.8*	*15.4*	*15.2*	*11.2*	*10.2*	*9.6*
GNP (current at mp)	***3746***	***4108***	***4425***	***4974***	***5766***	***6716***	***7773***	***8881***	***10400***	***13082***	***15239***
Financial System Deposits + NSS	***1808***	***1983***	***2207***	***2554***	***2888***	***3283***	***3666***	***4250***	***4760***	***5343***	***6081***

Data Set 4.6 **Banking System Deposits** - *PLS and interest bearing \ 1* *Rs billions, End Period*

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
PLs Deposits - All Banks \ 1	***874***	***1005***	***1200***	***1489***	***1790***	***2172***	***2514***	***3074***	***3443***	***3735***	***4222***
Interest Bearing Deposits	***266***	***271***	***221***	***193***	***212***	***256***	***303***	***299***	***369***	***403***	***471***
Banking System Deposits-All \ 1	**1140**	**1276**	**1421**	**1682**	**2002**	**2428**	**2817**	**3373**	**3812**	**4138**	**4693**
Current Deposits	***168***	***233***	***289***	***352***	***482***	***631***	***724***	***848***	***965***	***1,130***	***1,308***
Call and Other Deposits	***65***	***58***	***51***	***56***	***74***	***73***	***80***	***70***	***63***	***65***	***58***
Savings Deposits	***584***	***645***	***747***	***958***	***1,118***	***1,264***	***1,332***	***1,457***	***1,573***	***1,606***	***1,844***
Term or Fixed Deposits	***324***	***341***	***335***	***315***	***329***	***460***	***681***	***997***	***1,211***	***1,337***	***1,483***
>3 months + but < 6 months	109	125	116	98	117	229	334	438	546	563	637
> 6 months + but < 12 months	38	33	33	38	48	74	103	178	191	183	162
>1 year + but < 2 years	41	38	43	44	53	60	126	206	254	377	481
>2 year + but < 3 years	16	22	17	14	17	12	16	23	33	36	25
>3 year + but < 4 years	26	27	23	29	24	20	27	51	72	51	53
4 years and above	94	96	103	92	71	65	77	100	116	127	124
			percent shares in banking system deposits								
PLs Deposits - All Banks	***76.7***	***78.8***	***84.4***	***88.5***	***89.4***	***89.5***	***89.2***	***91.1***	***90.3***	***90.3***	***90.0***
Interest Bearing Deposits	***23.3***	***21.2***	***15.6***	***11.5***	***10.6***	***10.5***	***10.8***	***8.9***	***9.7***	***9.7***	***10.0***
Current Deposits	***14.7***	***18.3***	***20.3***	***20.9***	***24.1***	***26.0***	***25.7***	***25.1***	***25.3***	***27.3***	***27.9***
Call and Other Deposits	***5.7***	***4.5***	***3.6***	***3.3***	***3.7***	***3.0***	***2.8***	***2.1***	***1.7***	***1.6***	***1.2***
Savings Deposits	***51.2***	***50.5***	***52.6***	***57.0***	***55.8***	***52.1***	***47.3***	***43.2***	***41.3***	***38.8***	***39.3***
Term or Fixed Deposits	***28.4***	***26.7***	***23.6***	***18.7***	***16.4***	***18.9***	***24.2***	***29.6***	***31.8***	***32.3***	***31.6***
>3 months + but < 6 months	*9.6*	*9.8*	*8.2*	*5.8*	*5.8*	*9.4*	*11.9*	*13.0*	*14.3*	*13.6*	*13.6*
> 6 months + but < 12 months	*3.3*	*2.6*	*2.3*	*2.3*	*2.4*	*3.0*	*3.7*	*5.3*	*5.0*	*4.4*	*3.5*
>1 year + but < 2 years	*3.6*	*3.0*	*3.0*	*2.6*	*2.6*	*2.5*	*4.5*	*6.1*	*6.7*	*9.1*	*10.2*
>2 years and above all deposits	*11.9*	*11.4*	*10.1*	*8.0*	*5.6*	*4.0*	*4.3*	*5.2*	*5.8*	*5.2*	*4.3*
Banking System Deposits / GDP		***3.3***	***3.3***	***5.4***	***5.7***	***6.5***	***5.1***	***6.4***	***4.3***	***2.6***	***3.8***
GDP, nominal (at MP)		***4162***	***4401***	***4822***	***5641***	***6581***	***7623***	***8723***	***10242***	***12738***	***14669***
Saf Data Set		*Source: SBP ARs, Statistical Bulletins, various issues*									
\ 1 All deposits of bankign system, interest bearing and PLS, fiscal year; Statistical Bulletins, Annual Reports											

Table 4.6a **Banking System Deposits -** ***PLS and interest bearing \ 1*** ***Rs billions, End Period***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
					Annual Growth Rates						
PLs Deposits - All Banks		15.0	19.4	24.1	20.2	21.3	15.7	22.3	12.0	8.5	13.0
Interest Bearing Deposits		1.9	-18.5	-12.7	9.8	20.8	18.4	-1.3	23.4	9.2	16.9
Banking System Deposits		11.9	11.4	18.4	19.0	21.3	16.0	19.7	13.0	8.6	13.4
Current Deposits		38.7	24.0	21.8	36.9	30.9	14.7	17.1	13.8	17.1	15.8
Call and other Deposits		-10.8	-12.1	9.8	32.1	-1.4	9.6	-12.5	-10.0	3.0	-10.6
Savings Deposits		10.4	15.8	28.2	16.7	13.1	5.4	9.4	8.0	2.1	14.8
Term or Fixed Deposits		5.2	-1.8	-6.0	4.4	39.8	48.0	46.4	21.5	10.4	10.9
>3 months + but < 6 months		14.7	-7.2	-15.5	19.4	95.7	45.9	31.1	24.7	3.1	13.1
> 6 months + but < 12 months		-13.2	0.0	15.2	26.3	54.2	39.2	72.8	7.3	-4.2	-11.5
>1 year + but < 2 years		-7.3	13.2	2.3	20.5	13.2	110.0	63.5	23.3	48.4	27.6
>2 years and above all deposits		37.5	-22.7	-17.6	21.4	-29.4	33.3	43.8	43.5	9.1	-29.4

	Avg Annual Growth Rates				*Avg Annual Growth Rates*		
	FY00-10	**FY00-05**	**FY05-10**		**FY00-10**	**FY00-05**	**FY05-10**
Banking System Deposits - All	15.2%	16.3%	14.1%	***Current Deposits***	22.8%	30.3%	15.7%
PLs Deposits - All Banks	17.1%	20.0%	14.2%	***Savings Deposits***	12.2%	16.7%	7.8%
Interest Bearing Deposits	5.9%	-0.8%	13.0%	***Term or Fixed Deposits***	16.4%	7.3%	26.4%

Memo Items; \1											
Demand Deposits	375	375	429	608	790	949	1086	1326	1535	1737	1990
Time Deposits	549	611	727	846	969	1162	1380	1685	1905	1963	2140
Demand Deposit as % of total deposits	*40.6*	*38.0*	*37.1*	*41.8*	*44.9*	*45.0*	*44*	*44*	*44.6*	*46.9*	*48.2*
Tme Deposit as % of total deposits	*59.4*	*62*	*62.9*	*58.2*	*55.1*	*55*	*56*	*56*	*55.4*	*53.1*	*51.8*

\ 1 Copied from Data Set 4.0, based on table 5.1 of SBP Annual Reports with caveats as noted.

Data Set 4.61 — **Deposits -** ***PLS, All Banks \ 1*** — ***Rs billions, End Period***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
PLs Deposits - All Banks \ 1	**874**	**1005**	**1200**	**1489**	**1790**	**2172**	**2514**	**3074**	**3443**	**3735**	**4222**
Call Deposits	***16***	***17***	***25***	***28***	***53***	***51***	***45***	***48***	***36***	***49***	***48***
Savings Deposits	***556***	***661***	***582***	***1,091***	***1,328***	***1,535***	***1,614***	***1,780***	***1,894***	***1,983***	***2,282***
Term or Fixed Deposits	***302***	***327***	***353***	***370***	***408***	***587***	***856***	***1,245***	***1,515***	***1,703***	***1,893***
< 3 months or less	57	68	67	67	51	137	216	227	434	433	448
>3 months + but < 6 months	41	41	45	38	84	145	188	292	231	265	338
> 6 months + but < 12 months	31	33	33	45	61	95	130	227	234	228	207
>1 year + but < 2 years	35	37	46	53	67	78	165	271	324	489	629
>2 years and above all deposits	139	148	161	168	145	131	157	227	293	288	271
				percent shares in all PLS deposits							
Call Deposits	***1.8***	***1.7***	***2.1***	***1.9***	***2.9***	***2.4***	***1.8***	***1.6***	***1.0***	***1.3***	***1.1***
Savings Deposits	***63.6***	***65.8***	***48.5***	***73.3***	***74.2***	***70.7***	***64.2***	***57.9***	***55.0***	***53.1***	***54.1***
Term or Fixed Deposits	***34.5***	***32.5***	***29.4***	***24.8***	***22.8***	***27.0***	***34.1***	***40.5***	***44.0***	***45.6***	***44.8***
< 3 months or less	*6.5*	*6.8*	*5.6*	*4.5*	*2.9*	*6.3*	*8.6*	*7.4*	*12.6*	*11.6*	*10.6*
>3 months + but < 6 months	*4.7*	*4.1*	*3.8*	*2.6*	*4.7*	*6.7*	*7.5*	*9.5*	*6.7*	*7.1*	*8.0*
> 6 months + but < 12 months	*3.5*	*3.3*	*2.8*	*3.0*	*3.4*	*4.4*	*5.2*	*7.4*	*6.8*	*6.1*	*4.9*
>1 year + but < 2 years	*4.0*	*3.7*	*3.8*	*3.5*	*3.8*	*3.6*	*6.6*	*8.8*	*9.4*	*13.1*	*14.9*
>2 years and above all deposits	*15.9*	*14.7*	*13.4*	*11.3*	*8.1*	*6.0*	*6.2*	*7.4*	*8.5*	*7.7*	*6.4*
					Annual Growth Rates						
PLs Deposits - All Banks		15.0	19.4	24.1	20.2	21.3	15.7	22.3	12.0	8.5	13.0
Call Deposits		7.5	45.8	10.5	89.0	-3.0	-11.3	6.7	-25.8	37.7	-2.4
Savings Deposits		18.8	-12.0	87.6	21.7	15.5	5.2	10.3	6.4	4.7	15.1
Term or Fixed Deposits		8.3	8.0	4.8	10.5	43.6	46.0	45.4	21.7	12.4	11.1

	Avg Annual Growth Rates					*Avg Annual Growth Rates*		
	FY00-10	**FY00-05**	**FY05-10**			**FY00-10**	**FY00-05**	**FY05-10**
PLs Deposits - All Banks \ 1	17.1%	20.0%	14.2%		***Savings Deposits***	15.2%	22.5%	8.3%
Call Deposits	11.6%	26.0%	-1.2%		***Term or Fixed Deposits***	20.2%	14.2%	26.4%

Saf Data Set — *Source: SBP Statistical Bulletins, various issues*

\ 1 All PLS deposits of bankign system, excluding ccurrent and other depsoits

Amounts estimated using percent shares of componenets as given in SBP data on PLS deposits, Statistical Bulletin, various issues

Data Set 4.7 **Rates of Return - Deposits** - ***PLS & Interest Bearing*** ***December, percent***

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
			Nominal Weighted Average Rates on Deposits, PLS plus interest bearing									
6	**Overall,** *excluding Current Deposis*	6.52	5.62	4.22	1.55	1.32	2.57	3.42	3.61	6.02	5.88	6.07
7	***including current deposits***	**5.39**	**4.33**	**3.35**	**1.13**	**0.95**	**1.86**	**2.53**	**2.66**	**4.38**	**4.29**	**4.39**
8	**Call Deposits**	4.92	5.14	3.28	1.23	1.33	1.34	1.68	1.62	6.45	6.05	6.86
9	**Savings Deposits**	5.56	4.55	3.48	1.33	0.93	1.66	1.92	2.07	4.99	4.95	5.02
10	**Fixed Term Deposits**											
11	< than 3 months	6.95	5.56	4.07	0.99	1.93	3.62	4.32	4.64	5.26	4.56	5.00
12	>3 months + but < 6 months	7.37	6.99	4.93	1.97	1.93	3.27	5.56	5.14	6.76	6.57	7.28
13	> 6 months + but < 12 months	7.55	7.44	5.53	2.44	2.63	4.78	5.88	5.87	7.64	7.05	7.41
14	>1 year + but < 2 years	8.24	8.26	5.89	2.64	2.73	5.75	5.95	6.85	8.38	8.18	8.28
15	>2 year + but < 3 years	7.79	8.65	6.61	2.87	2.87	5.27	5.67	6.55	8.41	8.49	8.35
16	>3 year + but < 4 years	8.94	8.98	7.23	3.1	3.24	5.51	7.14	6.7	8.53	9.12	10.35
17	>4 year + but < 5 years	9.27	9.11	7.31	2.78	3.06	6.19	7.08	7.11	8.51	7.92	9.46
18	5 years and above	10.03	9.43	7.66	3.43	3.57	4.96	6.01	7.16	9.05	8.92	8.89
19		***Real Weighted Average Rates on Deposits, PLS + interest bearing. adjusted for Inflation***										
20	**Overall,** *excl Current Deposis*	2.85	1.18	0.66	-1.50	-3.11	-6.13	-4.17	-3.86	-5.40	-12.27	-5.07
21	***Including current deposits***	**1.76**	**-0.05**	**-0.18**	**-1.91**	**-3.46**	**-6.78**	**-4.99**	**-4.74**	**-6.87**	**-13.59**	**-6.57**
22	**Call Deposits**	1.31	0.72	-0.25	-1.81	-3.10	-7.26	-5.78	-5.71	-5.02	-12.13	-4.36
23	**Savings Deposits**	1.92	0.16	-0.06	-1.72	-3.48	-6.97	-5.56	-5.29	-6.32	-13.04	-6.01
24	**Fixed Term Deposits**											
25	>3 months + but < 6 months	3.27	1.13	0.51	-2.05	-2.53	-5.17	-3.34	-2.91	-6.08	-13.37	-6.02
26	> 6 months + but < 12 months	3.67	2.50	1.34	-1.10	-2.53	-5.49	-2.19	-2.44	-4.74	-11.70	-3.98
27	>1 year + but < 2 years	3.85	2.93	1.92	-0.64	-1.86	-4.11	-1.89	-1.76	-3.96	-11.30	-3.87
28	>2 year + but < 3 years	4.51	3.71	2.27	-0.45	-1.76	-3.22	-1.82	-0.85	-3.30	-10.37	-3.09
29	>3 year + but < 4 years	4.08	4.09	2.97	-0.22	-1.63	-3.66	-2.08	-1.13	-3.27	-10.11	-3.03
30	>4 year + but < 5 years	5.19	4.40	3.56	0.00	-1.27	-3.44	-0.72	-0.99	-3.16	-9.59	-1.24
31	5 years and above	5.51	4.53	3.64	-0.31	-1.45	-2.82	-0.78	-0.61	-3.18	-10.58	-2.03
32												
33	CPI rate of growth, inflation rate	*3.6*	*4.4*	*3.5*	*3.1*	*4.6*	*9.3*	*7.9*	*7.8*	*12.1*	*20.7*	*11.7*
34	SaF Data Set	*Source: SBP, Stat Bulletins, various issues*						p: Provisional, June 2010, subject to revision				
35	Source: SBP Stat Bulletins, interest rates for interest rate bearing accounts, including PLS accounts, ALL Banks											

	Data Set 4.71	Nominal Rates of Return - Deposits \ 1						December, percent				
	Calendar Year Data	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
6	**PLS,** *excluding Current Deposis*	6.95	6.09	4.84	1.63	1.36	2.70	3.56	3.74	6.37	6.21	6.45
7	***PLS rates, including current deposits***	**5.84**	**4.76**	**3.85**	**1.19**	**0.99**	**1.99**	**2.69**	**2.81**	**4.71**	**4.66**	**4.76**
8	**Call Deposits**	5.18	5.27	4.97	1.25	1.34	1.46	1.93	1.86	7.38	7.21	4.76
9	**Savings Deposits**	5.93	4.98	3.96	1.40	0.94	1.71	1.95	2.13	5.40	5.39	5.48
10	**Fixed Term Deposits**											
11	< than 3 months	7.80	6.40	5.38	1.01	2.07	3.78	4.67	4.84	5.41	4.56	5.10
12	>3 months + but < 6 months	8.35	8.18	6.98	2.06	1.96	3.85	5.78	5.23	7.14	6.57	7.82
13	> 6 months + but < 12 months	8.39	8.29	7.24	2.52	2.75	4.91	6.01	6.15	7.85	7.05	7.71
14	>1 year + but < 2 years	8.56	8.96	7.65	2.69	2.84	5.83	6.01	6.92	8.51	8.18	8.37
15	>2 year + but < 3 years	8.75	9.15	7.84	2.86	2.87	5.25	5.82	6.56	8.42	8.49	8.29
16	>3 year + but < 4 years	9.08	9.26	8.4	3.11	3.26	5.52	7.16	6.73	8.61	9.12	10.36
17	>4 year + but < 5 years	9.37	9.38	8.63	2.77	3.05	6.19	7.09	7.16	8.60	7.92	9.54
18	5 years and above	10.70	9.56	8.72	3.44	3.57	5.00	6.04	7.17	9.11	8.92	8.86
19												
20	**Int-based,** *excl Current Deposis*	4.67	3.20	2.10	0.85	0.97	1.31	1.92	2.08	2.49	2.13	1.77
21	**Int-based *incl current deposits***	**3.76**	**2.42**	**1.60**	**0.59**	**0.63**	**0.83**	**1.17**	**1.28**	**1.57**	**1.33**	**1.05**
22	**Call Deposits**	4.07	4.24	3.76	0.61	1.06	0.14	0.13	0.09	1.08	0.57	0.16
23	**Savings Deposits**	3.89	2.13	1.39	0.74	0.85	1.18	1.67	1.51	1.71	0.80	0.81
24	**Fixed Term Deposits**											
25	< than 3 months	4.74	3.51	2.26	0.86	0.98	1.87	2.19	3.04	3.69	3.28	3.70
26	>3 months + but < 6 months	5.10	3.55	2.29	1.38	1.78	1.24	2.87	3.40	3.53	2.74	3.03
27	> 6 months + but < 12 months	5.29	4.31	3.31	1.47	1.05	2.56	2.85	3.47	4.62	5.22	3.22
28	>1 year + but < 2 years	5.38	5.37	3.96	1.64	1.94	2.03	3.34	3.80	4.85	7.78	5.55
29	>2 year + but < 3 years	5.41	5.47	4.19	3.16	2.96	7.46	3.74	3.98	5.06	5.12	10.73
30	>3 year + but < 4 years	6.28	6.99	4.90	2.76	1.28	2.91	4	4.82	5.47	1.58	7.84
31	>4 year + but < 5 years	7.29	2.17	5.42	4.42	3.56	3.46	4.29	5.31	5.58	7.99	7.88
32	5 years and above	9.79	8.26	7.00	3.24	3.53	2.11	3.09	5.66	5.98	2.42	11.40
33	Differential, PLS , i-based	2.1	2.3	2.3	0.6	0.4	1.2	1.5	1.5	3.1	3.3	3.7
34	SaF Data Set	*Source: SBP, Stat Bulletins, various issues*										
35	\ 1 Rates of returns for banking system deposits; shown ***separately*** for PLS and interest bearing deposits; hence different from Set 4.7											
36												

Data Set 4.71a **Real Rates of Return,** ***PLS , Interest Bearing*** ***December, percent***

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Nominal Weighted Averages, *Banking System Deposits and Advances, All*											
Deposit rates, PLs & interest bearing	5.39	4.33	3.35	1.13	0.95	1.86	2.53	2.66	4.38	4.29	4.39
Advances, interest bearing & Islamic	13.55	13.45	12.87	7.76	6.99	10.17	11.12	11.56	14.60	13.18	13.36
Gross Banking Spread	**8.2**	**9.1**	**9.5**	**6.6**	**6.0**	**8.3**	**8.6**	**8.9**	**10.2**	**8.9**	**9.0**
PLS, Real *Weighted Average Rates on Deposits*											
PLS, *excluding Current Deposis*	3.27	1.63	1.26	-1.43	-3.07	-6.01	-4.04	-3.74	-5.09	-12.00	-4.73
PLS rates, *including current deposits*	**2.19**	**0.36**	**0.30**	**-1.85**	**-3.42**	**-6.66**	**-4.85**	**-4.60**	**-6.57**	**-13.28**	**-6.24**
Call Deposits	1.56	0.85	1.38	-1.79	-3.09	-7.15	-5.55	-5.48	-4.19	-11.17	-6.24
Savings Deposits	2.28	0.57	0.41	-1.65	-3.47	-6.92	-5.53	-5.23	-5.96	-12.68	-5.59
Term or Fixed Deposits											
< than 3 months	4.09	1.93	1.78	-2.03	-2.39	-5.03	-3.01	-2.72	-5.95	-13.37	-5.93
>3 months + but < 6 months	4.62	3.64	3.32	-1.01	-2.50	-4.96	-1.98	-2.36	-4.40	-11.70	-3.50
> 6 months + but < 12 months	4.66	3.74	3.57	-0.56	-1.74	-3.99	-1.77	-1.50	-3.77	-11.30	-3.60
>1 year + but < 2 years	4.82	4.38	3.97	-0.40	-1.66	-3.15	-1.77	-0.79	-3.18	-10.37	-3.01
5 years and above	6.89	4.96	5.00	0.33	-0.96	-3.91	-1.74	-0.56	-2.65	-9.75	-2.57
Interest Bering, non-PLS, Real *Weighted Average Rates on Deposits*											
Int-based, *excl Current Deposis*	1.06	-1.13	-1.39	-2.18	-3.44	-7.29	-5.56	-5.28	-8.55	-15.38	-8.91
Int -based, *incl current deposits*	**0.19**	**-1.88**	**-1.87**	**-2.43**	**-3.77**	**-7.73**	**-6.25**	**-6.02**	**-9.37**	**-16.04**	**-9.56**
Call Deposits	0.49	-0.14	0.21	-2.42	-3.36	-8.36	-7.22	-7.13	-9.81	-16.67	-10.36
Savings Deposits	0.31	-2.16	-2.08	-2.29	-3.56	-7.41	-5.79	-5.81	-9.25	-16.48	-9.77
Term or Fixed Deposits											
< than 3 months	1.13	-0.84	-1.24	-2.17	-3.43	-6.77	-5.31	-4.39	-7.48	-14.43	-7.19
>3 months + but < 6 months	1.48	-0.80	-1.21	-1.67	-2.67	-7.35	-4.68	-4.06	-7.62	-14.87	-7.79
> 6 months + but < 12 months	1.66	-0.07	-0.22	-1.58	-3.37	-6.14	-4.70	-3.99	-6.65	-12.82	-7.62
>1 year + but < 2 years	1.75	0.94	0.41	-1.42	-2.52	-6.63	-4.24	-3.68	-6.45	-10.70	-5.53
5 years and above	6.01	3.71	3.34	0.14	-1.00	-6.55	-4.47	-1.96	-5.44	-15.14	-0.30
CPI rate of growth, inflation rate	***3.6***	***4.4***	***3.5***	***3.1***	***4.6***	***9.3***	***7.9***	***7.8***	***12.1***	***20.7***	***11.7***
SaF Data Set	*Source: SBP, Stat Bulletins, various issues*										

	Data Set 4.8	Deposits -National Saving Scheme						*Rs biliions, end of period*				
		FY00	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10p**
5	**NSS Deposits**	**715**	**762**	**847**	**1,158**	**1,110**	**1,026**	**936**	**1,004**	**1,094**	**1,361**	**1,585**
6	***Instituional Deposits (Adeposit A/Cs)***	***51.2***	***52.7***	***56.8***	***73.8***	***89.3***	***105.7***	***121.6***	***152.0***	***185.2***	***218***	***267.2***
7	of which: Natonal Savings Centres	30.8	26.7	23.5	31.3	44.9	62.0	76.7	95.9	119.3	145.6	188.0
8	***Certificates (by instruments)***	***582.6***	***617.4***	***686.7***	***953.7***	***868.2***	***756.0***	***649.0***	***677.5***	***725.6***	***945.2***	***1081.7***
9	Defensel Savings Certificates	248.4	265.0	287.0	309.0	312.3	303.5	296.0	289.0	284.6	257.2	224.9
10	Special Savings Certificates	163.3	172.7	209.2	294.1	280.9	197.7	139.8	146.5	160.3	288.8	350.8
11	Regular Income Certificates	170.2	178.9	189.9	175.0	125.9	85.4	69.7	51.3	51.0	91.1	135.6
12	Behbood Income Certificates	0.0	0.0	0.0	0.0	22.7	83.3	143.0	190.2	229.0	307.0	366.8
13	***Prize Bonds***	***81.2***	***91.5***	***103.0***	***130.0***	***152.8***	***164.1***	***165.5***	***174.5***	***182.7***	***197.4***	***236.0***
14						*(Percentage growth rate)*						
15	**NSS Deposits**		*6.5*	*11.1*	*36.7*	*-4.1*	*-7.6*	*-8.7*	*7.3*	*8.9*	*24.4*	*16.5*
16	***Instituional Deposits (Adeposit A/Cs)***		*2.9*	*7.8*	*29.9*	*21.0*	*18.4*	*15.0*	*25.0*	*21.8*	*17.7*	*22.6*
17	of which: Natonal Savings Centres		*-13.3*	*-12.0*	*33.2*	*43.5*	*38.1*	*23.7*	*25.0*	*24.4*	*22.0*	*29.1*
18	***Certificates (by instruments)***		*6.0*	*11.2*	*38.9*	*-9.0*	*-12.9*	*-14.2*	*4.4*	*7.1*	*30.3*	*14.4*
19	Defensel Savings Certificates		*6.7*	*8.3*	*7.7*	*1.1*	*-2.8*	*-2.5*	*-2.4*	*-1.5*	*-9.6*	*-12.6*
20	Special Savings Certificates		*5.8*	*21.1*	*40.6*	*-4.5*	*-29.6*	*-29.3*	*4.8*	*9.4*	*80.2*	*21.5*
21	***Prize Bonds***		*12.8*	*12.5*	*26.2*	*17.5*	*7.4*	*0.9*	*5.4*	*4.7*	*8.0*	*19.6*
22												
23	***NSS less Prize Bonds***	***634***	***670***	***744***	***1028***	***958***	***862***	***771***	***830***	***911***	***1163***	***1349***
24	***GDP (at MP, nominal)***	***3746***	***4108***	***4425***	***4974***	***5766***	***6716***	***7773***	***8881***	***10400***	***13082***	***16743***
25	SaF Data Set							Source: SBP Annual Reports, various issues				
26												
27			*Average Annual Growth Rates*									
28			**FY00-10**	**FY00-05**	**FY05-10**							
29	**NSS Deposits**		**8.3%**	**7.5%**	**9.1%**							
30	***Instituional Deposits (Adeposit A/Cs)***		***18.0%***	***15.6%***	***20.4%***							
31	of which: Natonal Savings Centres		19.8%	15.0%	24.8%							
32	***Certificates (by instruments)***		***6.4%***	***5.3%***	***7.4%***							
33	*Defensel Savings Certificates*		-1.0%	4.1%	-5.8%							
34	*Special Savings Certificates*		7.9%	3.9%	12.2%							
35	***Prize Bonds***		***11.3%***	***15.1%***	***7.5%***							
36												

Chapter 6: Credit System

Thematics

Financial Intermediation, the Credit System
- Financial Intermediation – the Stakeholders
- Role of Banks,
- The Central Bank, SBP
- Non-bank Financial Institutions, NBFIs
- Reforms, Restructuring – Historical
- Liberalization, Privatization, Credit Regime
- Transition to Market based Credit System
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Credit System Operations
- Financial System Credit
- Structure, Size and Growth Trends
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Chapter 6 : Credit System

Section 1: Credit System in Post Reform Era

1. The leading elements of analytical framework adopted here need to be outlined. If the purpose of analysis is to guide in managing the credit system, then the focus of inquiry and analysis must be on short run segments of no more than quarter of a year; even that may be too long. Credit and money markets both turn on a dime, so to say since they are highly sensitive to market signals; market imperfections, rigidities, asymmetries and all. If these markets are reasonably open to international financial flows, and are reasonably linked up foreign financial markets and institutions as they are in practice, the combination of domestic and foreign market movements could become volatile, and their momentum would be too strong and adversities could become insurmountable unless actions are taken forthwith by authorities concerned. Therefore, their managing, usually by the central bank, requires continuous monitoring, quick and accurate diagnosis of market trends and a appropriate response or intervention calibrated to market exigencies faced.

2. The main purpose of this effort is to enhance ***learning*** about credit system as it prevails in Pakistan, its structure and constituent elements, role and functions of credit system, its operations within a financial regime and its regulatory framework, their impact in an applied setting, interaction of major stakeholders with regard to credit allocation, then for all these elements plus others. To accomplish this, we have to adopt a different line of inquiry and a different approach than usually pursued, with emphasis on fundamentals, the interlinks underlying the mechanisms of credit and tracing of their causal chain, as we have followed in this study. How this is to done and what are the leading elements is outline below.

3. A study like this requires macrofinancial analysis of credit at system level, conducted over medium to long term time frame if it is to reveal ***structural shifts*** in origin of credit and its allocation to various segments of

the economy. The selection of the past decade, the period of 2000-2010, however, is digitally convenient, not much more; mostly for is for reasons of data, and analytical ease. There are no milestones to be erected. The first task is to unravel credit system structure and trends over the long term and that is the central part of analysis.

4. After we have accomplished this, we have to turn to patterns of uses of credit and a qualitative analysis of their impact on the economy. We can then turn to issues of maintaining stability and growth of credit system in economic and financial setting, such as the one prevailing in current times. No matter how we proceed, we can not gloss over issues that credit system is facing, be it short term or long term. Such an overlap of time horizon is integral to the analysis conducted.

5. The analysis of credit system of Pakistan must contend with structural changes over tail-end of reform period as well as during the post reform era which prevails now and their contrasts. These structural changes emerged pursuant to reforms that were enacted and implemented during 1990s and early 2000s. Some remnants of these reforms have continued through present times, mostly focused on building up institutional capacity of financial system. This is not over yet. In this sense, structural changes represent a continuum and defy time slicing. The best way to capture leading features would be to identify changes that occurred during transition from directed credit system to market based system.

6. This transition occurred during the second half of 1990s through early part of the past decade. A few remnants were sorted out later on, like regulatory overlap between SECP and SBP concerning finance companies, or autonomy of SBP. There is no neat separation however, between the two time periods. The impact of these changes occurred gradually with overlaps between directed credit and market based system.

7. Seen this way, market based system has been operative for not too long a period. It is a fairly recent transformation of credit system. It has yet to manifest its mettle in trying times like current economic and financial adversities, if not crisis. The transition and institutional change is captured in the Chart on next pages contrasting the credit regime that prevailed in nationalized era of banking with the one prevailing now. As evident form this chart, a sea change has occurred in the credit system whose in-depth evaluation is a topic of it own.

8. In outline, the interventionist role of state has folded; interest regime has been liberalized; the layered system of administered credit has been transformed into market based system of credit; there are no mandatory allocation, though SBP issues guidelines to banking system regarding credit extended to priority sectors. Borrower selection is left to lending banks with all its attendant issues of crowding out less than prime borrowers, the SMEs. Credit ceilings on loan amounts are specified but with reference to collateral requirements. Beyond those guidelines, banks are free to decide on their sectoral and individual borrowers exposures, but no exposure limits are specified. Non-performing loans, defaults and loan losses have been transferred out to the owners of privatized banks; it is no longer a state liability that it used to be. Review of these topics is spread over three chapters 6,7 and 8 on credit system.

9. Liberalized of credit regime does not mean that in a developing country like Pakistan, private sector is all that matters. Private sector can not deliver on all fronts. There is a meaningful role of state which should not be abrogated, a point we shall return; time and again. The pendulum has swung too far in the opposite direction to what it was during times of nationalized system.

10. The credit system provides mechanisms for ***allocation of financial resources*** in an economy through financial intermediation In developing countries, efforts at modernizing financial system, sorting out institutional structure, improving resource mobilization and lending mechanisms, improving operational efficiently, rationalizing structure of interest rates, developing financial markets, installing a modernized system of evaluation of financial system – all of this would not be fruitful unless credit system is successful. The main objective of these efforts is to ensure that financial intermediation contributes to promotion of corporate investment and growth. Those are pivotal concerns.

11. Managing credit system is predominant role of central bank, both as monetary authority and regulatory authority. There is a convergence of the two functions of a central bank here. As monetary authority, central banks' monetary management shapes interest rate structure and banking system credit growth as part of monetary policy stance and targets. As regulatory authority, regulation and supervision of banks conducted by a central bank aims at maintaining financial strength and soundness of banking system. This is done in large measure through monitoring of loan portfolio and its management so that profitability is sustained, while loan losses are kept within manageable limits without compromising solvency of banks at large.

Credit System – Pakistan

Directed Credit System …historical	***Market-based Credit***
Financial Regime governing credit system Orientation – *Repressive*, see Glossary Ownership: nationalized banking system Capitalization, Equity, government Profits and Losses, government budget absorbed Entry, Exit based on government policy	*Financial Regime* governing credit system Orientation – Liberal, market-based, but Ownership: mostly private, some state Capitalization, equity; private owners Profits and Losses – private, balance sheet absorbed Entry and Exit based on financial capability
Institutional mechanism: DFIs, *all* banks, state ownership and funding	*Institutional mechanism:* entire banking system, DFIs, non-bank institutions
Interest Rate Structure: Administered, government controlled Ceilings and Floors, on deposits and lending Preferential, sector based, borrower based Subsidized and targeted	*Interest Rate Structure:* Market – based, not fully, with market imperfections Upper and lower limits within narrow band, for deposits and lending Prime coustomer based across sectors Market funding cost based, Or market segment based
Banking System Credit: Quantitative targets at all levels in a layered fashion Credit Rationing, direct controls User categories specified for public and private sectors Priority sector lending mandatory: SMEs, exporting, agriculture, rural credit Borrower categories specified, down to enterprise level ; Financial penalties for non-compliance	*Banking System Credit:* Broad *guides* for credit growth, at the economy level No Credit Rationing, but indirect controls; no user categories specified for public or private sector; Priority sector lending voluntary to SMEs, exporting and agriculture. No borrower categories specified No specific financial penalties for non-compliance
System of credit control, direct monetary overlapping with quantitative targets Direct monetary controls, controlled interest rates, quantitative controls on credit growth and monetary expansion, capitalization and gearing limitations non-operative on lending activities, lending risks inconsequential	*System of credit control, indirect monetary* Indirect monetary controls impacting on credit growth and monetary expansion thru policy rate driven interest rates, also affected by reserve, liquidity ratios, capitalization requirements, apart from market based lending criteria of credit risk management

Impact and Experience: controversial; led to financial repressions; Mixed results at tremendous costs to the economy; growth of NPLs and defaults, the tarnished role of state DFIs did contribute to industrialization and agricultural growth in early stages, but were stymied by repressive & directed economic policy regime	*Impact and Experience: more effective at later stages of development* Clash between distributive social goals and market led concentration and segmentation of the credit system, crowding out SMEs, new enterprises Incipient tendencies of pyramiding, macro-financial instabilities, emergence of financial crises at tremendous costs to regulatory authorities
"Goodbye Control !" ***Controls of directed variety***	***" Hello Chaos "*** ***Crises of market variety***

The last line of the chart …Goodbye Control, Hello Chaos….. is a similative refrain to the title of an article by Aljendro-Diaz, 'Goodbye Repression, Hello Crash', written in a somewhat despairing note way back in 1985; may be forgotten by now. (See Reference, 79) Such expressions seems to have come back to haunt in these turbulent times of financial crises of global proportions, and say a great deal about the origins of the current US and European crisis. There is a resonance of it in financial crises that have erupted in developing countries, though stock market crisis of Pakistan was a mini-crisis in comparison. But most crisis began with overexposure of one type or the other, hence a nostalgic longing to bring the control regimes back.

The article was written in the backdrop of financial crises of Latin American countries that began to appear routinely during the decades of 1970s and 1980s. Since then, whenever the financial crises have occurred, they bear an uncanny resemblance to the preceding ones in their root causes and spread effect. The same is true of the current economic and financial crisis, and it is a gripping episode. Gone is the faith in benign self regulation and self imposed market discipline.

Before we plunge into issues of solvency, stability and crisis, we need to acknowledge that barely a decade has passed since financial system reforms in Pakistan gained momentum, took hold, and led to a sea change in the credit system, so profound that the current system bears hardly any resemblance to what it was during nationalized era of banking during the decades of 1970s through 1990s. The salient differences between the two credit systems are highlighted in the Chart above.

The grip of the control mechanisms on credit system deployed in the past has loosened for good or worse; not only the credit but the financial system as a whole. Does this loosening of control harbor seeds of instability? Perhaps not; it depends on how effective the financial regime is in keeping order in chaotic markets of funds, liquidity and credit, and also in the securities markets. As long as the liberalized credit system obeys self rule of viability and operates within norms of prudent banking, it is likely to withstand internal instabilities and routine type of external shocks. The control apparatus is not going to be of much help and can not substitute self regulation. But faith in self regulation has been tarnished.
Hence the lament… 'goodbye control, hello chaos'…..

Financial systems do seem to undergo upheavals whenever liberalized framework is abused. At first, these abuses appear to be incongruent to most regulators, but remain incipient in the system. By the time regulators wake up to the abuse, it is too late, and the immensity of crisis is just overwhelming.

Pakistan's financial system after reforms and liberalization experienced fast growth weaknesses and all, but it is facing unprecedented levels of defaults, rising NPLs, ever increasing burden of provisioning, a languishing stock market, and a limited client base of the corporate sector.

The credit system has sustained the transition, but fledgling system of direct transfer, namely stock markets went on a binge of ever rising stock prices fueled by unrestrained speculation which had no rooting in corporate valuation. In part this occurred because regulatory system was not strong enough to control self-destructive trends, culminating into an unprecedented crisis, so the argument goes. What gamut of control could have prevented the crisis remains conjectural at best.

The query is: was this financial system chaos simply waiting to happen pursuant to reforms and liberalization, or does the genesis of the crisis lie elsewhere? These are advanced topics for many trying to cope with fundamentals to start with. This shows how far the road has to be traveled.

12. Viewed as above, the credit system appears to be fairly complex; but from the vantage point of its clients, the borrowers, it boils down to their ***access*** for loans and ***costs*** of borrowings; as simple as that. A typical borrower is not worried about how the credit system operates, or how well credit markets operate, or how good it is in allocating credit among various categories of borrowers, or how efficient it is in its operational lending mechanisms, or how profitable or solvent it is so as to maintain stability and growth in the financial system. Those are system level issues, not borrower level issues, and those will occupy us a great deal here. In between are banks, the financial intermediaries at institutional level, whose operations determine the outcome of credit system.

13. Considering all these we need to look at the main features which characterize credit system at operational level. These are:

- lending institutions, largely commercial banks
- lending instruments, practices and operations
- structure of lending rates and their determination
- credit allocation mechanisms and patterns
- credit markets and their operations
- rules and regulations of central bank governing lending
- self-regulation and controls of lending practices by institutions.

This stylized presentation may be inadequate to some, but it does capture the leading elements that need to be at the centre of system level analysis. There is a great deal out there, but we have to be selective.

Financial System Credit – *Origination*

14. For a meaningful discussion about origination of credit, we must distinguish between ***financial system credit*** and its main component, ***banking system credit.*** The two are not the same, though they seem to be. Financial system credit in generic sense refers to lending by banking system, plus lending by NBFIs and the central bank, both to the public and private sectors. These three components of financial system credit were discussed in Chapter 3 in the context of financial intermediation and its structure. They are discussed below in the context of their operations.

15. Every care has been taken to identify which part of macrofinancial credit is being discussed and at what layer of aggregation. At times it may appear that they are similar, but they are not. we have adhered to SBP's classification of ***scheduled banks*** to identify origination and allocation of ***banking system credit***, which includes all commercial banks, public or private, domestic or foreign; development finance institutions, the DFIs, incorporated as scheduled bank; and microfinance banks, often referred to as ***All Banks*** in the SBP data formats for fiscal years and calendar years. This is rather odd to include DFIs in this group, but it does not compromise system level aggregates because only one DFI operative, the ZTBL. As we shall see below, the applied realm adds its own complexities, defying attempts like these to arrive at neat classifications and watertight constructs.

16. By far the most significant change that has occurred in credit system of Pakistan concerns relative shares of public and private sectors with regard to both ***origination*** of credit by their sources on the supply side; and ***allocation*** of credit on the demand side, representing uses of credit finance. This happened because of financial reforms that were undertaken during the 1990s upto middle of the past decade. The changes ushered in by financial reforms included: ***privatization*** of nationalized banks and PSEs which is still going on; establishment of new private banks and other financial institutions; ***deregulation*** and ***elimination of layered system of credit*** allocation and annual credit plans that prevailed under the directed regime; and liberalization of state determined ***interest rate structure*** into ***market-based*** determined structure.

17. The salutary change was in the ownership. With privatization, the credit system was transformed from what it was during nationalized period and its operations underwent a transformation that was pervasive and is not going to recur on that scale again. In 1990, there were no domestic private commercial banks. They were all state owned, though there were four foreign banks. At the end of past decade, in 2010, there were only four state owned commercial banks, and four DFIs; two in name, and two operational. The rest were all private banks, consisting of 25 commercial banks; seven Islamic banks and seven microfinance banks, interspersed with Islamic banks in between.

18. Up until 1990, financial system credit originated almost entirely form state owned banks because 92 percent of ***banking system credit*** originated from state owned banks, and the remaining 8 percent from private banks, estimated as a residual. This proportion began to decline as privatization of

banks proceeded and a number of new private banks were established and came on line. Gradually, the dominance of public sector banks began to dwindle over these years, but at the start of the decade of 2000s, the relative share of public sector banks was still about 50 percent, down from 92 percent a decade earlier. At that point the state owned and privatized banks were evenly matched. The structural shift continued during the decade of 2000s, because two of the largest banks UBL and HBL did not get privatized until 2002-03. Privatization of banking system was a long drawn process and was finally completed with sale of these two largest banks. Therefore, the proportion of credit extended by private banks rose sharply and reached 82 percent of total banking credit by 2004. It has stayed there since then through end of the decade.

19. In a mirror like fashion, the share of state owned banks has dwindled to 20 percent and that is unlikely to decrease any further. Among existing state owned banks, National Bank of Pakistan is one of the largest five banks in the country. Of the remaining, ZTBL is most active, but it is not a commercial bank, though is classified as a scheduled bank. Bank of Punjab, is a hybrid and functions as a commercial bank because it takes deposits and engages in lending to private sector; but it also functions as a specialized financial institution for the provincial government. Recent bank frauds have eroded its financial position and may have brought it to the brink, but since it is a government owned bank, it has been kept afloat by all provincial governments during their tenure. Bank of Punjab is now being proposed to rejuvenate scheme of yellow cabs; a repeat of failure that it was in 1990s.

20. Banks were always main source of credit, privatization or none, but their dominance in credit system has further increased with demise or marginalization of development finance institutions who were once a major source of term financing for investment, though mostly to public sector; but no longer. That niche still exists because banks do not engage in contractual term lending, and not much term transformation has occurred. From this angle alone, long term DFI lending is not to be overlooked, apart from societal objectives that gave rise to DFI lending in developing countries. Those objectives and concerns are still relevant.

21. As discussed in Chapter 3, within NBFI group, some DFIs are active lenders, like HBFC; most NBFIs are not. The amount of credit extended by all NBFIs is an insignificant amount of total financial system credit, overlaps and all, because lending is not their main business. Therefore, we shall focus on the banking system alone as categorized above, including commercial

banks and some DFIs, all dubbed together as scheduled banks in SBP's classification. For system level analysis of origination of credit, calendar year data has been used because this series extends from 2010 to all the way back to 1990, and provides a consistent base for estimation and comparisons.

22. Next to commercial banks, SBP is a major creditor in financial system; but SBP is not in the business of lending as such, and that sounds contradictory. As a central bank SBP is the lender of the last resort to banks suffering from financial distress, and also lender to the government, but both the operations are done through money markets, not through credit system. That is the crucial difference. Beyond these money market operations, SBP provides credit to banks and NBFIs through refinancing facilities set up to promote lending to priority sectors such as machine producing industries, agriculture, exports and housing as discussed in next chapter. This is a mechanism of onlending mainly through commercial banks to priority sectors. Therefore, seemingly there is an overlap and perhaps double counting as well. For commercial banks, refinancing facility is a low cost funding source This facility helps banks to diversify their borrowing portfolio on funding side, and their loan portfolio on lending side. The rate structure of these refinancing facilities helps to lower their costs of on-lending to private sector. That is why refinancing facility is popular both with banks and their clients. Does the refinancing facility help intended beneficiaries of subsidized credit is another matter discussed in Chapter 8. That is a separate issue.

Financial System Credit – *Growth Patterns in Post Reform Era*

23. There has been significant growth of ***financial system credit*** during the past decade from Rs 1138 billion in FY00 to Rs 3617 by FY10 at average annual rate of 12.5 percent. *(Data Set 5.1, 5.1a)* Much of the it occurred during middle years upto stock market crisis of 2008, the post reform years. This average annual increase of about 13 percent of financial system credit conveys a sense of sedentary growth; but it is misleading because there has been a great deal of volatility in between. For example, growth of credit in FY01 was 3.5 percent, followed by near stagnation next year. Thereafter, in FY04 growth rate shot up to nearly 25 percent in one year, and in FY 05 it registered an unprecedented increase of 32.4 percent, highest ever recorded in any single year.

24. If we disregard annual variations and treat them as an exception to long term trend, it is still a fairly rapid decade long growth. Why such a volatile growth in financial system credit. The issue as to where this growth originate from; how it picked up momentum in mid-2000s relative to what it was in late 1990s or early 2000s need to be sorted out. In parallel, did this growth occur because of underlying economic and business conditions, or was it a result of ongoing changes in financial system, needs to be looked into. These were early post reform years, full of uncertainties and implications of new financial regime. The concern was whether financial regime will sustain, the proclivity to ad-hocism in Pakistan. The credit system has to settle down to established operational benchmarks or standards of its own under the new financial regime. These standards take time to establish as evident from experiences of mature credit systems. Later on growth of system credit moderated and was 12 percent per year during second half of decade.

25. Some would argue that volatility of financial system credit was intensified by government borrowing and consequent changes in level of SBP credit to public sector which is dictated not by market factors; instead, it is propelled by annual financing needs of government. ***SBP financing*** extended to the government, however, is not part of credit mechanism, and therefore it is not included in estimation of financial system credit. These are investments of SBP in government securities; hence these are outside the credit system. Government borrowings were done through money and capital market mechanisms, not through credit mechanisms. Hence, volatility in system credit growth can not be explained in terms of what SBP did or did not do by way of lending to the government. The reasons are to be found in the operational framework of credit system.

26. Much of this volatility occurred owing to changes in the patterns of corporate sector demand for credit after privatization. The newly privatized banks were looking for diversification of their client base amidst newly privatized or newly established corporations, though only a handful of large ones among them. There was a substantial corporate growth, in the wake of economic recovery and improved business outlook during three years, FY04 through FY06. In part this growth was spurred by a decline in lending rates during these early years. Not all segments of corporate sector participated in this trend; rather growth originated from a handful of sectors, like textiles for its modernization needs, consumer goods industries owing to the advent of installment credit, drive for leasing for automobiles, and a brisk activity in construction sector.

27. Increase in banking credit could be ascribed to a decline in rates of interest, and a consequent decrease in the cost of borrowings; but declining lending rates would also lower banking spread and hurt their profitability, other cost components of lending remaining the same. Corporate borrowers would like to borrow more when interest rates are down, no doubt, or do the repricing of their existing loans if loan payoffs and refinancing is permissible under terms of lending. Banks would like to do just the opposite for their asset liability management needs; they would want to reprice their funding base if interest rates are declining on the deposit side as well and payoff their high cost borrowings. This is a classic pair of opposite behaviour in credit markets. Why would banks do more lending if their profitability is compromised. It is not as straightforward as it seems.

28. Therefore, long term volatility can not be explained in these terms. We have to decompose the stock of credit in disbursement flows over maturity short term of 3 to six months to discern changes in credit demand and relate them to economic and financial factors prevailing at that time. For the borrowers, disbursements are more relevant than stock of debt outstanding. Borrowers are driven by business conditions that have a fairly short span of relevance before changes in the underlying factors intervene, they are not interested in long term trends. We also have to decompose financial system credit into its components to analyze this outcome.

29. Underlying these trends are patterns of growth of ***banking system credit***, for the reason that banking credit is the largest proportion of total financial system credit; the stock of credit outstanding. Therefore, whatever transpires in banking credit it gets reflected at system level in a mirror image fashion, not the other way round, though in slightly subdued manner owing to other components of financial system credit. In FY00, banking system credit was about 70 percent of total financial system credit. Thereafter this proportion began to increase, and by end of the decade, it had reached 88 percent of financial system credit. *(Data Set 5.1)* In parallel, share of SBP credit decreased from 18 percent in FY00 to about 9 percent in FY10, while the proportion of credit extended by NBFIs declined from 10 percent to 3.2 percent over this period.

30. Banking system credit, thus, has always been the largest part of financial system credit, whereas proportions of SBP and NBFI credit were much smaller. In current times, credit extended by NBFIs like finance companies, investment companies and all other assorted quasi-banking institutions is negligible at system level. Therefore, financial system volatility occurred because banking system credit growth was volatile. The average

annual growth was about 15 percent during FY00-10, as compared to 12 percent during the 1990s. *(Data Set 5.2. 5.2a)* This growth was faster in the first half of the decade at an estimated 16.3 percent; thereafter it slowed down and was about 13 percent during the second half of the decade. In early years growth of banking credit was uneven. It was around 8 percent in F00, dropping to 2.7 percent next year, and rising back to 9 percent in FY03 and then jumped to 28 percent in FY04, and again to 36 percent in FY05, highest annual growth ever recorded. Thereafter, growth went in to a tailspin and was about 9.4 percent in FY09, and 3 percent in FY10.

31. This up down of annual growth rates does not tell us much about the patterns underlying banking credit expansion over these years. Besides, these are based on stock of credit outstanding at end of the year; whereas bulk of bank credit is of the short term in overdraft or trade financing loans hardly exceeding maturities in the range of three to six months, the business cycle of borrowers. During the course of a year, there is a great deal of turnover of disbursement flow which is not captured in the stock figure at the end of the year. It could be grossly misleading in times of volatile changes in banking credit disbursements which are critical to the borrowers. These disbursements could spin around liquidity needs of borrowers but year end stock figures will not capture the turnover.

32. Looks like banking system had not found the solid lending base essential for orderly changes in volume of credit. It had a core of lending base, but after privatization and ushering in of market based banking, many banks domestic or foreign, old or new were initially reluctant to find new clients or new lines of credit for the fear of unknown credit risks with a corporate structure that had not been in operations for a sufficiently long period to engender confidence. They much preferred their own primary borrower base, and having saturated this base, they looked for ways and means to lend to the government via treasury bills, even though treasury bills did not provide gross returns comparable to those on lending. This mode of credit was preferable because cost of funding of the banks; that is, the average deposit rate was much lower throughout these years which enabled banks to park their liquidity in safe heavens rather than take risk lending to new clientele and opening new lines of credit.

33. In first half of the decade, one third of credit growth is estimated to have originated from increase in loans for trade financing and loans to corporate sector for replacements and refurbishing, mainly textiles; a sharp increase in consumer finance; and increase in lending against NSS instruments representing interest rate arbitrage. During second half of the

decade, loans for rehabilitation and new investments tapered off, even loans for working capital declined. That left only trade financing and overdraft lending to corporate sector, the staple of banking credit. A fast expansion in consumer financing did occur but was not sustainable. Besides, enthusiasm about high end of consumer spending had to be moderated in a society with low levels of savings; a tradition of ostentatious consumption and living beyond means; credit concentration in large urban areas; rudimentary instruments an for credit risk mitigation available to contend with practices of non-performance on debt obligations which has waned but has not disappeared. No steps were taken to contend with these trends. High consumer spending fueled by installment credits and consumer cards eroded fast, in part owing to rising NPLs and interest rates.

34. This type of volatility can not be explained in terms of economic and business outlook; instead, it occurred because of a sudden upsurge of credit demand by corporate sector, which begs more explanation than the answer. This up down of growth pattern of banking system credit can not be explained entirely in terms of interest rate changes either, initiated as part of SBP's monetary stance and the like. Over the long term, banking system credit growth has continued throughout the decade and rate of growth was quite respectable. Perforce, evaluations of short term have to contend with prevailing economic and financial conditions. Reviews of quarterly or annual trends in those middle years were rather ebullient when viewed in long term context.

35. During middle of the decade when banking credit growth shot up to 25- 30 percent per year and stock market was booming, these evaluations were ebullient to a fault, declaring Pakistan being strongest emerging market among many for portfolio investment. The stellar performances of stock market was viewed as based on strong economic fundamentals; vibrant growth of investment supported by banking credit; and revival of asset based investing. The fundamentals had not changed so drastically over a span of half a decade of privatized banking system and a small corporate to sustain stock price increases of the kind experienced at that time as discussed in **Volume II.** These evaluations heralded dawn of a new era in Pakistan, tempered though they were with concerns for international capital flows and monetary stability.

36. All this came to an end in mid-2008 with meltdown of stock market with in a few weeks. The euphoria died down, and exuberance replaced gloomy scenarios very quickly. In current times, while the market has inexplicably recovered a good part of lost ground; the preoccupation is

coping with economic and financial slow down, rapidly rising inflation, massive budget deficits, massive circular debt of leading public sector enterprises, their solvency at near crisis levels. It is true that growth of banking credit during FY08-10 has been lower as compared to those of middle years, but this shortfall in credit growth of those two years occurred mainly owing to a host of factors that adversely affected corporate borrowers, the largest segment in manufacturing and trade sectors. During middle years of the decade, banking credit expanded rapidly, but after stock market crash of 2008, demand for banking credit slowed down to a crawl and its growth was a minuscule of growth in years prior to crash.

37. A proposition is that decline in the rate of banking credit growth occurred because banks diverted their funds to investing in securities and stocks rather then lending, given high returns on their investments in government securities that prevailed throughout the decade. This trend intensified when stock market took off as shown by share of investments in total banking system assets, which rose from about 16 percent at the start of decade to about 28 percent by FY10, at a rate of growth of about 20 percent per year for the decade, a rate faster than the rate of growth of banking credit. This evidence holds for investment in government securities, not in corporate stocks. In spite of increase in banking system ***investments***, the proportion of banking credit in total assets did not decline; it also registered a significant increase from about 45 percent to about 54 percent precisely during the years of stock market boom, then declined. It was back to about 48 percent at the end of the decade. It looks like banks shifted their asset liability management strategies away from other assets towards investing in securities.

38. Further, growth of banking investment was not adversely affected by stock market crash of 2008, for the reason that most of banking exposure has been in government securities, around 70 percent of all investments. Next are investment in private TFCs, though fairly small; followed by investment in stock market of Pakistan, though the exposure of banks to stock market was only about 8 percent of their total investment portfolio, contrary to popular perception that banks are major investors in stock market. Given this composition of their investment assets, banks were not jeopardized by stock market crash. Their main business remains lending, not investing, nor financial services; though banks have aggressively invested in subsidiaries of their own, mostly leasing companies and mutual funds.

39. The issue is whether increase in banking credit over the past decade can be sustained, although in a more moderate fashion. If so, does this 15 percent average growth represent a breakthrough in banking credit, if not a

vanguard of structural change in bank lending that was the expected outcome of financial reforms and dissipation of financial repression. These issues are alive, regardless of short term volatility, even reversals, as observed. There is a mounting evidence of a turnaround in operations of financial system buoyed by a strong economic revival, restoration of financial flows and monetary stability.

40. Annual growth of credit in a year or two, however extraordinary though it may be, does not diminish system level concerns discussed in previous section, like sustainability of credit, financial strength, profitability and solvency of financial institutions, defaults and overhang of NPLs, capability to handle systemic risk and contribution to economic development and poverty alleviation.

SBP Credit - *Refinancing*

41. In parallel to banking system credit, SBP credit to private sector has been channeled through banks and NBFIs for credit financing needs of priority sectors discussed in Chapter 8. The growth of this refinancing credit facility has been fairly steady throughout the decade. *(Data Set 3.7)* It increased from Rs 196 billion in FY00 to Rs 310 billion in FY10 at an average rate of 4.7 per cent. SBP credit to banks was mainly for agriculture and export financing operated by SBP through banking system destined to private sector. Similarly credit to NBFIs was also destined primarily to private sector through their intermediation activities.

42. We have included this refinancing facility as SBP credit to private sector in estimates of financial system credit for two reasons. One, commercial banks are unlikely to lend much to priority sector if this facility were to be withdrawn, though the incremental banking credit riding over this facility is difficult to identify. SBP refinancing credit amount outstanding is relatively small as end year balance, but disbursements during the year are very large owing to revolving credit for trade and working capital finance for short term. This rollover of banking credit at lower costs is important to borrowers for liquidity needs. This rollover does not show up in year end balances outstanding, suggesting not much has transpired which is not the case. We can not include disbursement flows, the turnover during the year, into stock of financial system credit outstanding at end of the year.

Allocation of Credit

Public vs Private Sector

43. The long running debate about preferential allocation of credit to public sector relative to private sector, based as it was on the argument of unquestioned superiority of social good vs private good regardless of the outcome. A hallmark of financial reforms was to realign performance criteria with allocation of credit. As reform proceeded, the ***allocation or uses*** of credit between public and private sector began to shift towards private sector. The share of private sector in ***financial system credit***, not just banking system credit, in the 1990s was 55 percent. This share jumped to about 86 percent in FY00 towards the tail end of reforms. *(Data Set 5.1)* By then, this structural shift in allocation pattern was almost complete.

44. Thereafter, private sector share increased to about 92 percent towards middle of the decade, but in the last two years, the share declined back to about 84 percent of total financial system credit. ***(Data Set 5.1)*** Correspondingly, share of public sector in financial system credit declined from 45 percent in the 1990s to around 14 percent in early years of the past decade, and declined further to about 8 percent during middle years of the decade. This is the image in reverse of the same trend. This declining trend halted and turned back during FY09-10 because of unusually heavy borrowings of the government as it increased to about 16 percent by FY10.

45. These trends represents a shift in patterns of credit allocation and its usage between private and public sectors which occurred during reform period, but then only marginal gain for private sector during post-reform era. In good measure, this shift reflects growing role of private sector, but at the same time it also owes a great deal to privatization of a number of public sector enterprise, the PSEs, who were major clients of state-owned bank who dominated credit use during 1970s all the way through late 1990s. During reform period, massive privatization of public sector enterprises, together with liberalized entry of new private companies, and an improved business environment contributed to this long-term shift in credit allocation and use pattern. This shift is structural, because public sector is unlikely to re-emerge as a significant borrower of financial system credit in the future; but that does not mean government borrowings from financial system has decreased over time. Far from it, as discussed below. These are patterns of allocation as they prevail now.

Public Sector

Credit vs Borrowings

46. We need to distinguish between ***financial system credit*** and ***financial system borrowings*** and their overlaps as they appear in the analysis of allocation of resources generated by financial system. This distinction between two types of public sector borrowings has profound implications for resources allocation at macrofinancial level. The proposition is that if we look at allocation of resources solely from vantage point of financial system credit, then the share of the government has dwindled to around 16 percent in current times. From there it is easy to arrive at the conclusion that bulk of financial credit is being used by the private sector, close to 84 percent. Therefore, loins' share of financial system credit is being used by private sector, not public sector, and that's what was intended by financial reforms. After all credit markets in Pakistan are functioning properly, and there is no ***crowding out*** of private sector by public sector in credit allocation which was rampant in nationalized banking era. So goes the argument, but no longer.

47. This conclusion is correct if we confine our attention to financial system credit alone; otherwise, it is misleading. If we broaden the canvass to include all types of ***borrowed financing***, whether obtained as banking credit finance or obtained through operations of financial markets both short term and long term, we get some idea of the actual size of public sector borrowings from financial system as a whole. This distinction between two types of borrowings that government routinely undertakes, escapes broader cognizance. Apart from borrowing as overdraft finance from SBP, government has borrows from banking system and SBP through financial instruments like T-bills, government bonds, and from the public through NSS instruments. This is ***borrowing*** through financial markets or through issue of NSS instruments in parallel to credit system mechanisms. Thus, governments borrow from banks, the central bank, financial markets and the public through various instruments to meet their deficit financing needs in advanced or developing countries alike, thereby garnering a much larger share of financial system resources than accounted for through banking credit finance only.

48. Part of these borrowing of government is through overdraft facility of SBP, similar to overdrafts extended by commercial banks to its prime borrowers. These overdrafts are revolving credit to government and are critical for liquidity management by Treasury. The largest overdraft facility is extended to federal government, but provincial governments also have their separate overdraft lines of credit form SBP. Operations of overdraft facility

are often reported in public domain and this is in parallel to other borrowing operations via T-bills at fortnightly auctions. On several occasions, federal government has exceeded its overdraft limits authorized under budgetary provisions and legally binding limits incorporated in budget law of the year.

49. A larger part of SBP lending to government involves holdings of government securities, not outright credit. Same is the case with commercial banks; their lending to government via ***credit channels*** is limited, averaging around 12 percent during the second half of the decade; but their lending to government through ***investment channels*** of money and capital markets has increased manifolds. This is not banking system credit of garden variety as such, where government did reduce its exposure, but borrowing it is through short and long term borrowing instruments via money and capital markets.

50. As shown in Data Set 5.7 , total borrowings of both private and public sectors from financial system in routine banking credit plus as borrowings through money and capital market instruments was an estimated Rs 2684 billion in FY00 and rose to about Rs 8374 billion by FY10, more than thee times just within one decade. Of the total borrowings from financial system in FY10, private sector borrowings were an estimated Rs 3177 billion, while borrowings of public sector were about Rs 5197 billion. The proportionate share of public sector borrowings was about 55 percent of total borrowings from financial system for the decade; while share of private sector was the remainder about 45 percent. These are stock figures outstanding; and much of it is net of repayments because of short term money market instruments, like T-bills have a built-in mechanism of periodic rollovers of interest and principal due on T-bills, called ***floating debt*** in the domestic debt estimates.

51. If we combine borrowings of government of ***all types***, government borrowings loom much larger than simply banking credit finance. If we follow this approach, the patterns of resource allocation at financial system level from all sources counted shows that public sector has garnered more than half of financial resources. What public sector has to show for the use of these resources is another matter, though those who argue that private sector has not been ***crowded out*** are looking only at banking credit flows.

52. The major part of ***banking system credit*** to private sector was in loans to private businesses, and corporations, and only a negligible part was in long term debt instruments from capital markets, like term finance certificates or *sukuks*. In contrast, composition of public sector borrowings was just the opposite; namely a small of part of it was borrowed as routine

banking credit; while bulk of it was borrowed from financial market through Treasury bills, and government bonds. In addition government borrowed directly from public in NSS instruments and prize bonds which is called unfunded debt, because no budgetary provisions are made for their repayments. These are stock of accumulated liabilities, called ***unfunded debt***, net of repayments, because they are rolled over into new maturities upon expiry of original maturity or periodic withdrawls from NSS by the public. These are covered from new issues of NSS instruments.

53. The dynamics of public sector borrowings in recent years has sobering implications. Look at it this way, it took five decades since independence for government borrowings from financial system to reach the level of about Rs 1686 billion at the end of 1990s. From there onwards, just one decade later, these borrowings tripled to about Rs 5197 billion. Such a huge flow of financial resource and its lopsided allocation occurred in just one decade. *(Data Set 5.7)* One could look at it in any manner preferable. If viewed as public debt as part of liability management, it has one set of implications; if seen as debt burden, it has another set of implications; and if seen as financial resource use from the perspective of financial system resource flows, that introduces yet another set of implications. Those are not quite the same.

54. Borrowings of ***public sector from banking system*** in all instruments were about one quarter of all borrowings in early years of the decade. Thereafter share of these borrowings rose sharply to about 45 percent towards the end of the decade. Banking system has emerged as the largest lender to the government, more than it was in days of nationalized banking. This sounds rather odd, but the data given here clearly establishes this observation. One would think that government borrows more from SBP, but share of SBP's instrument based lending to government has decreased over the decade from about 28 percent to 22 percent by FY10. These borrowings rose from an estimated Rs 466 billion in FY00 to Rs 2333 billion. *(Data Set 5.7)* Of this, the largest part was borrowed through T-bills operations whose stock held by banking system in their ***investment portfolio*** increased from Rs 106 billion in FY00 to Rs 1120 billion in FY10, nearly ten times the level it was at the start of the decade. It is a staggering increase by any count. In previous decades T-bills held by SBP and banking system hardly exceeded a threshold of couple of hundred million rupees; by end of the past decade, it was closing in to two half billion rupees. Of the remainder, at close of FY10, Rs 590 billion was borrowed in direct banking credit lodged in the loan portfolio of banking system, mostly to PSEs; another Rs 415 billion was borrowed to cover commodity purchase operations of provincial governments.

55. Borrowings of the ***public sector from SBP*** was done through T-bills, this time held by SBP and not to be confused with T-bills held by banking system. Holdings of T-bills by SBP rose from and estimated Rs 467 billion in FY00 to about Rs 1172 billion in one decade alone, while it took five decades to reach Rs 467 billion. These T-bills are held with SBP for cash replenishment purposes of the government, and while they are part of short term liabilities incurred by Treasury, these are SBP assets for currency issue and its banking operations. These holdings of marketable T-bills if traded in the market as part of OMO of SBP, become part of the portfolio of banking system. In effect, SBP is recycling the borrowings of government through the banking system.

56. SBP holdings of Treasury bills during past decade was ***volatile***; that is, amount of T-bills held by SBP declined from Rs 467 billion in FY00 to Rs 113 billion in FY03; thereafter there was a ten-fold increase to Rs 1172 billion by FY10. (Data Set 5.7) These figures of borrowings form money and capital markets are consistent with permanent debt and floating debt figures reported as domestic debt by the government. In another corner of the ledger, they match with financial system data on money and capital market operations, also with operations of NSS and prize bond scheme.

57. In addition to investment of banking system in government securities, government borrowings from public increased over the past decade, where an estimated 37 percent of borrowings were made from public in all sorts of NSS instruments and prize bonds. This was called ***investment*** while returns to investors were called profit whatever profit generating business of the government may have been. These returns declined over the years from a high of about 18 percent in early 1990s to about 12 percent in early 2000s, which stayed the same through middle of the decade. Thereafter NSS rates were increased back to around 16 percent. Since then borrowings through NSS has increased from Rs 753 billion in FY00 to Rs 1692 billion in FY10; twice the level it was at start of decade. This conclusion could be controversial because holding of government securities by commercial banks, are regarded as ***investment,*** not lending. To the extent bond are instruments of ***borrowing*** form capital markets, buyers of government bonds must then be regarded as ***lenders***, because there can not exist borrowers without lenders.

58. Likewise, to the extent T-bills are an instrument of short term borrowings by Treasury, ***purchasers*** of T-bills are in effect ***lenders*** for short term to the government. This is not a matter of semantics; this is how government borrowings from financial system are treated by those investing in these instruments. This view point may not be acceptable to purists of

money markets; but can not be refuted. If the government, instead of borrowing from credit window of banking system, begins to borrow through T-bills and PIBs, then it ought to be treated as ***lending*** by banking system in interpretive sense, though not in operational sense. If for the time being we adopt this view point, its implications for resource use magnitudes are far reaching. Whether one regards this investment or lending, government used substantial amounts of financial system resources, and thereby pre-empted private sector. Whether or not SBP's advances to government against securities is to be treated as credit or investment is a moot issue, because SBP is not in the business of portfolio investing like commercial banks are, diversifying their portfolio into various investments besides lending. SBP does not hold government securities because it happens to have surplus funds left over to be deployed in most profitable but risk free papers. SBP is a central bank. It holds securities because government wants liquidity but does not want to borrow from commercial banks.

59. This brings us back to the central issue as to what is the role of banking system in a privatized and market based setting, where banks can not be directed to undertake lending to targeted groups. The concern is whether the role of banks will remain confined to short term revolving credit to businesses or could it to be extended to cover investment and equity financing needs. The issue is whether bank lending instruments are suitable for long term investment financing because there are instruments of long term debt markets that could be deployed to achieve same goals. Whatever role of banking system is envisaged, the fact remains that for financial intermediation, banking credit is all that matters. Likewise, any structural change, such as diversification and deepening of credit will occur in a meaningful way only if it is embedded in the banking system lending, not in the lending by appendages of financial system, the quasi-banking institutions.

60. This review establishes that the two credit systems were distinctly apart in their leading structural features and modes of operations. The same was the case in almost all countries, Pakistan included. The credit mechanisms of the two systems are quite different, leading to different patterns of origination and allocation of system level credit. Likewise, their implications for economic growth and distributional aspects are distinctly apart. One way to present these differences is in the chart on the next page; it may not be self-contained but it gives an encapsulated view of the leading features of the two systems that have prevailed in Pakistan. Concern of their viability and stability are common to both. Those concerns are still with us, reforms or none.

Section 2: Banking Credit - Operations

1. In banking operations, no topic has caused more controversy and angst than sector based or borrower based patterns of distribution of banking credit specially in developing countries including Pakistan where banks have a virtual monopoly on all types of credit financing. There is an old adage – banks would like to lend money to those who do not need it, so their repayment is guaranteed with reasonable rate of interest income. A similar misconception is that banks are so rich they can lend money and afford to loose it if not repayment is made. The fact is that banks need borrowers as badly as coustomers need loan financing, escapes common perception. The only proviso is banks seek ***creditworthy*** borrowers not just any borrower where the criteria of creditworthiness are not arbitrary.

2. The misconception arises from expressions like ***credit allocation***, which seem to imply that banks draw up a list of their favorites on whatever criteria one may conjure up and discriminate against others. That lending is not a favour, much less a charity business is not appreciated. The fact that in a reasonably competitive banking, there are well defined and clearly stipulated objective criteria that determine eligibility of borrowers. Cost of borrowing is an issue for coustomers no doubt, but much of competition among lenders is non-price based. That is, banks do not lure coustomers on the basis of interest rate differential. That is a zero sum game anyway, and it can not be sustained before competitors catch-up.

3. Banks attract coustomers on the basis of superior services rendered. That banking is a service industry and a highly specialized one is not so widely known. It is very competitive, but market competition is not price based; there are no price wars among banks. Lending rates confronting the borrowers are fairly uniform across the baking system, so are deposit rates. There may be marginal differences in lending rates, but the way lending is structured it does not cause a notable shift in clientele. Coustomers used to price wars and discounts on their fancy purchases, however, would like to believe that if banks do not engage in interest rate warfare, somehow they are violating basic principles of open market competition.

4. The stereotype images of bankers inaccessible to anyone needy of loan money who may walk in, further re-inforces these biases. In early days of banking, in the socio-cultural milieu of sub-continent, bankers were routinely considered not much different than money lenders, except banks were

inaccessible to borrowers at large. Bankers were lumped in the same category as ***sahukars*** of the old days who were loathed by their clients. Money lenders were not regarded amicable characters. They never were a favourite in any society. The class of ***sahukars*** had a close kin; the class of ***shylocks*** of European folklore. From there, it was only a short side leap to think of local bankers as greedy money minders when they first appeared on the scene.

5. All this has changed, but image problem has stayed. Money lender image of bankers has faded but has not been erased. They are more respectable then before, but the credit they extend is a fair game. The anomaly is banking loans are not rebuffed by the populace; instead, they are eagerly sought after, and given half a chance, most will borrow; but the intention is not to repay if possible. After all it is just money borrowed from rich banks who can afford to loose, so goes the logic.

6. This image was re-inforced in the days of nationalized banking. It is less likely in days of market based private banking, because bad bankers are apt to be identified and booted out by their owners long before they indulge in shady lending. Islamic banking is not immune to bad banking practices either. In current times, their NPLs are rising as fast as NPLs of mainstream banking. NPLs emerge all the time, though not as frequently and as easily as they did before. Bad bankers or willful defaulters do not spare anyone given half a chance; Islamic banks are no hindrance to bad banking.

Lending – Practices and Patterns

7. From banker's perspective, the world view of business operations is divided into three main groups; namely borrower based ***retail banking*** like trade financing in any name since this is the staple of banking business; and ***corporate banking***. In between is ***relationship banking*** focused on expanding their client base, starting with deposit side; seeking coustomers from the same corporate pool, limited or otherwise. Their favourite remains ***corporate banking*** business and they are very good at it. Retail banking is worthwhile but only if it does not entail unwarranted risk exposure and expensive operations relative to loan amounts involved. To them, a large loan to a well known corporate client is preferable than chasing around retail loans of relatively small amounts spread all over their clientele network. For the same reason, while bankers would make all kind of right noises about socially desirable causes like supporting SME, agriculture and export business clients, but in practice they are not in it for their main business.

8. Bankers are fond of claims of ***innovative*** banking products tailored to the needs of clients to convey the impression that each client is treated on its own strength; as though they are design engineers producing customized model of formula cars as per client specifications. In practice they are more like production or assembly line engineers, because the ***products*** they are referring to is some version of base lending business practices around well defined parameters, rooted in policies and procedures for lending approved by bank management. The innovate aspect lies in elements of financial engineering, but that happens mostly in case of large corporate clients, not for run of the mill retail lending where a banker may have more leeway at innovating. If one were to borrow consumer credit, not much financial engineering is involved; neither much innovating can be done for installment borrowers. For clients of retail banking, ***product model*** rarely diverges from base frame; identification may be changed at assembly line, but product remains the same, after all.

9. In its fundamentals, bank lending is driven by profitability like any other business. Profitability depends on banking spread between costs of funds and returns on loans and advances outstanding, with a proviso that losses on their loan portfolio are kept at a minimum, given risks of lending, while repayments due form borrowers are to be realized by the bank at end of the day. To ensure this, banks have to select creditworthy borrowers based on operational business criteria. In practice, evaluation and assessment based on ratio analysis of income statements or balance sheet is the start, but often qualitative assessments and evaluation supersede number crunching, because banks are after determining ***quality*** of borrowers. In this sense it is as much an art as a science for experienced bankers. Number of borrowers is fine; but size of loans and amount of lending determines banking performance; while safe lending determines financial performance.

10. Among these, creditworthiness is characterized by 4 Cs of credit or more as per banking practices and business preferences; namely ***character, capability, collateral, and capital***. There are elaborate technocratic procedures of follow up on these 4Cs determining creditworthiness, centering around a thorough analysis, scrutiny, and evaluation of balance sheet and financial statements submitted by prospective borrower, involving ratio analyses, and their comparisons with industry benchmarks. In parallel, sector and industry analysis is undertaken to determine future prospects of borrower's business and its potential strength over the short term. These are fairly standard procedures of evaluation, customized by banks as per their own creditworthiness and loan eligibility criteria, summed up as 'due diligence' procedures performed by a lending bank.

Bank Lending: *Borrower Focus*

11. In practice, creditworthiness evaluation is limited to identification of ***prime borrowers*** from a crowd of loan seekers, where prime borrowers are characterized by several elements such as: strong commercial and financial base; well established business profiles, performance record, financial strength and integrity; strong collateral base needing minimal scrutiny or follow-up hence low-risk clients; strength of their balance sheet; their assets and exposure to liabilities, all documented and authenticated through regular financial disclosures as per rules governing these disclosures, together with standard accounting and auditing practices. Next in line is strength of their business, their relative market position in the sector or industry; prospects of future earnings and its market valuation by independent analysts, summed up in the record of stock prices. Next in line is the size and performance of sector or industry the borrower is operating in, and its future prospects of growth and expansion. This list of elements constituting prime borrower is fairly elaborate and enduring.

12. These borrowers are given priority access to credit over other borrower at a lending institution. This priority access may be bundled together with preferential credit terms. If priority is accorded through credit system to promote social and economic objectives, it also involves lending on preferential terms based on social and economic considerations usually for borrowers who otherwise may not be able to gain access to credit on market terms. If priority is rendered on market basis to prime borrower and top-rated creditworthy clients, it entails preferential credit terms on the basis of creditworthiness and financial status of borrowers; the two sets of preferences are not the same. This overlap is often source of contention among bankers and borrowers alike.

13. The first layer of group of ***prime borrowers*** in Pakistan consists of top fifty or so companies as indicated by their corporate business size and its evaluation by stock market. The second layer consists of a few wealthy groups with very large bank accounts, if they risk documentation. For banks in Pakistan, name of the game is to somehow get these top listed companies or wealthy groups to establish an account with them; but mostly they are already spoken for. Undaunted, bankers try coustomer switching techniques, or may settle as a junior banker to these prime borrowers. If there is no breakthrough, banks perforce seek out second string borrowers who satisfy above criteria but are not top rated. Seeking or sifting through potential switch customers however is zero sum game at system level and is not very helpful to create a reliable client base.

14. Therefore, banks seek out new borrowers with sound business practices and potential for growth, provided their business, financial position and performance are documented and are available for scrutiny and evaluation. This is an ideal partnership between a true business enterprenure and financier banker and it is the fountain of corporate and business growth in every country. The quality and dimension of this partnership spells the difference between the more successful and frontline developing countries and just other countries. This is not collusion or cartelization by investors and their financier bankers; it is more a matter of identifying potential winners and spotting upcoming businesses, short of venture capital type undertaking by bankers.

15. Therein lies developmental role of banking institutions. Small new banks are more successful at this and that is why they are profitable all over, also in Pakistan. They are more nimble, and have a greater stake at seeking out a niche in up and coming segments of the economy so as to develop customer base. They display superior drive and initiative to specialize their lending products, and provide services tailored to the needs of their clients. In short, often these small banks are better at relationship banking. Large banks are relatively complacent about striking out in new areas; they don't have to, riding on their money center bank status and already diversified coustomer base of primary borrowers, or second tier of eligible borrowers. They are not so hard pressed to seek potential winners.

16. ***Prime borrower*** oriented lending is the reason of loan concentration in the banking system of Pakistan. Nearly three fourth of total banking credit outstanding consists of loans extended in the amount of Rs one million or more on large accounts held with banks. These large loans are very cost effective for banks, and are fairly safe since large loans are mostly borrowed by prime borrowers. In contrast, loans extended on accounts at average value of Rs one lakh or less amount to about 8 percent of total banking credit outstanding in Pakistan.

17. At other end of the spectrum are ***non-prime borrowers,*** or ***marginal borrowers***. Mostly these are small to medium business enterprises; with weak capital base and cash flow profile; most often they do not have proper financial record. Banks find their evaluation sketchy, time consuming and costly for the potential loan size. These loans are costlier to process and supervise; therefore, these borrowers may be poorly served by existing infrastructure of banking system. Nonprime borrowers are generally more risky because their business activities are riskier and have less stable revenue generation and cash flows, hence less dependable income levels. Their

collateral may not be secure; ownership may be doubtful; it may not be accessible if recourse is sought in the event of default; it may fall short of quality standards banks are seeking. Hence, banking spread or interest margin of lending bank may not be sufficient to cover costs or lending risks. They fall short on criteria of 'good borrowers', and most often they are denied banking credit; or their access to banking credit is restricted.

18. There has been a concerted effort to enhance ***access*** of small or marginal ***business borrowers*** to formal banking credit. For the past half a century in one developing country after other, including Pakistan, various schemes were launched to promote financing of small and medium enterprises with a checkerboard performance. This is not limited to developing countries either. Many advanced countries also have tried to do the same. Attempts to bring them into mainstream of bank borrowers have not been successful. Most banks will not lend, unless some kind of cover is provided as a premium for extra risks, and extra costs of loan processing and managing, known as subsidized credit schemes. Hence, it is not surprising that a small proportion of banking credit is availed by the lower end of borrower spectrum comprising of small and medium size businesses and enterprises. They are not microfinance borrowers; that is a separate category of borrowers altogether.

Bank Loans: *Classification*

19. There are various types of loans, and they are classified in several different ways. Foremost, loan classification is carried out by banks from their own perspective as part of their internal lending policies and procedures, funding levels, and comparative risk and return features. It also depends on bank's capacity to lend at manageable levels of various types of exposure to lending risks; their exposure limits; their internal control and monitoring mechanism; their capacity to undertake assessment of loan portfolio quality; portfolio concentration or diversification. Hence, loan classification is an amalgam of all these considerations. Then, there are overlaps because loans are also classified as per regulatory rules and procedures to identify good loans versus bad, performing versus non-performing loans to determine the soundness of loan portfolio of a bank. It is not easy to cut through this thicket and come out with a neat classification that would be self contained. An attempt has been made to arrange various types of loans in broad categories as follows.

20. **Loan,** ***by Type of Borrower:***

- ***prime or nonprime*** borrowers, where rating of client is done by recognized private institutions; loans to large businesses, manufacturing, trading, or service enterprises; or loans obtained by ***SMEs***; or loans obtained by profit or non-profit institutions; or borrowings of government or its enterprises, public entities or institutions; ***f***urther overlapping categories could be as follows.
- ***sovereign borrower,*** a government or a government enterprise, usually backed by government guarantee, the sovereign guarantee, to cover risk of default; also called public sector loan.
- ***corporation, a company, or a business*** borrower, borrowing to finance their routine business needs, based on creditworthiness and tendered collateral.
- ***individual borrower,*** seeking personal loans under terms and conditions for such loans and collateral requirements. These are formal loans, as against informal loans obtained on personal basis.

21. **Loan,** ***by Terms and Conditions: interest rate, security tendered:***

- ***Soft loans*** extended on concessional rates of interest, generous grace period and maturity suited to the needs of the borrower.; soft loans carry a grant element for the borrower.
- ***Hard loans*** reflect full market costs of the loan plus a spread or premium depending on creditworthiness, competitive terms and conditions prevailing in the market.
- ***Term loans***, of medium to long-term maturity, usually extended on KIBOR formula based variable interest rates.
- ***Fixed or variable rate loans*** where interest is either fixed or variable depending on loan agreement. In times of volatile interest rates, fixed loans are difficult to obtain and command a premium, a front-end fee in addition to the interest rate.
- ***Guaranteed loans*** issued with a third party guarantee besides the collateral or security furnished by the borrower, such as a bank guarantee, foreign currency deposit guarantee, a government guarantee, all furnished as a third party guarantee instrument.
- ***Secured or Unsecured Loans*** depending on the status of collateral or security tendered by the borrower; the security could be finished

goods and inventories; liquid assets such as cash or near cash or marketable securities; a property on free-hold or lease-hold; buildings, machinery or other fixed assets; assignments of receivables, contracts; signature and guarantees.

22. **Loan*, by Type of Use:***

- ***Commercial Loan;*** they constitute bulk of lending and are a major part of loan portfolio of commercial banks, extended to cover routine financing needs of businesses, companies and individuals.
- ***Trade Financing Loans;*** *(see details below)*
- ***Sectoral Loan;*** such as agricultural, industrial, transport loans for a defined line of business or productive activity, often extended by specialized financial institutions for longer maturities and at interest rates that may or may not be full market rates, such as those under subsidized credit programs.
- ***Consumer Loan;*** extended to households to finance consumer durable, or retail purchases as a line of credit pre-approved by a financial institution or customized loan for a single purchase.
- ***Installment Loans;*** of various types and maturities borrowed mostly for purchase of consumer durables.
- ***Real Estate Loan;*** mortgage loans for acquisition of residential or commercial property for long term using property title as collateral.

23. **Loan*, by Maturity:***

- ***Short term Loan;*** in trade financing usually up to 90 days, or a maximum of 180 days; in established business up to one year; revolving credits and overdrafts usually for 90 days.
- ***Medium term Loan;*** usually for a period of one to two years consisting mostly of institutional loans.
- ***Long term Loan;*** typically for a period of 3 to 5 years or more, depending on the type of borrower.

Overdraft (OD)

24. Overdraft facility is a pre-approved line of credit, stipulating borrowing limits on the basis of cash flows of the borrower, which are easily gauged by the bank because of the corporate account with them. It is a single loan agreement with ***general collateral*** on the assets of borrowers. Interest costs are kept in line with current market rates with prepayment facility. The balance of loan amount outstanding if not fully paid within stipulated short period from the date of draw down, is automatically renewed into another short term loan but with different rate of interest and different maturity. It is a revolving credit with perpetual rollover, where maturity constraint drops out of loan picture. The advantage to the borrower is a pre-approved facility that can be accessed as needed without going through lengthy and time consuming loan approval process. For banks, it is equally suited for the same reasons, as long as creditworthiness of the borrower is not impaired

25. Overdraft is mainline mechanism of banking credit in Pakistan with variable rates of market based interest rates. It is a credit facility extended to the business and cooperate clients of a bank; ***a line of credit pre-approved*** by a bank to an account holder up to a designated limit on short term but variable interest rates, allowing cash draw downs or cheques in excess of credit balance on the account to provide a cover to cheques issued, and to provide ready liquidity as and when needed. In substance, overdraft loan is not much different from bridge financing, whereby the borrower is tiding over liquidity shortage lasting for short periods. Only when overdraft is for 30 plus days, it has crossed the threshold of bridge financing.

26. Overdraft credit accounts for bulk of banking credit outstanding. It is the most common type of short term commercial bank credit. It is preferred to other types of business loans, mainly because in an overdraft facility, cost of lending is minimal and no formal credit assessment is needed for draw downs. Borrowers prefer it since it is a standby line of credit, and it is rolled-over if repayment is delayed beyond the due date.

27. There are two types of overdrafts; a ***temporary overdraft,*** which is an accommodation allowed to customers to meet unexpected credit requirements for a short period, say a week; or a ***clean overdraft*** if needs of a customer exceeds a period of seven days. This is a regular overdraft facility, extended for draw downs against a demand promissory note tendered by the borrower and secured against bonds, shares, mortgages, or other securities and tangible assets if extended for longer periods.

Line of Credit

28. There is considerable overlap between ***overdraft facility*** and a ***line of credit;*** practically they are treated as the same. However, a line of credit may be extended under a stand-alone agreement by a bank or by a lender to its clients, independent of overdraft facility, or in addition to it; the proviso being that the borrower is of good standing with well established loan performance record with the lender, namely a prime borrower. The line of credit may be extended:

- ***by a bank to a customer,*** a credit line extended to a single customer, similar to overdraft facility but under its own terms of loan which may be similar to overdraft but a separate loan account.
- ***by a bank to another bank*** for inter-bank borrowing agreements, either domestic or foreign, providing ready access to liquidity; or in case of foreign bank line of credit, providing foreign currency loans to domestic customers under the protocol authenticated by central bank.
- ***by a central bank to the government*** extended under the arrangements of central bank as banker to the government on terms and conditions specified for this purpose.
- ***by central bank to a bank;*** a line of credit extended by a central bank to participating banks as part of a credit program that may be funded separately but managed by central bank for onlending on retail basis by participating banks to designated borrowers.

Trade Financing - *Letters of Credit*

29. Besides overdraft lending, trade financing is next mainline lending activity of banks. This is not to be mixed-up with suppliers' credit often extended by large firms to their clients which is essentially back to back credit for similar purpose. It is usually a short term loan facility with market based rate of interest, where payment is agreed pursuant to sale of goods, supplies and materials, hence it is a deferred arrangement recorded as accounts receivable. There is an overlap between trade financing credit and Letters of Credit, so-called L/C financing, depending on the instrument of lending used by a bank. In substance, L/Cs are instruments of trade financing discussed below in detail. Banks extend trade credit as a matter of routine to their clients whose terms are predefined and agreed with borrower, advanced against traded merchandise as a collateral.

30. Letters of Credit (L/C) are short term credits for trade financing. This is a mainline lending instrument for banks. It is specific use oriented loan facility than general purpose overdraft, tied to trading cycle of the borrower. There is a rollover provision but in limited case of revolving L/Cs; otherwise, the loan part is closed once trade cycle is completed, usually after shipment of merchandise to the borrower trader. If the merchandise stays in the inventory, inventory financing arrangement may be sought by the trader, but separate from L/C financing.

31. Under protocol of financing, L/C is a credit arrangement whereby a bank, on behalf of a customer makes payment to the order of beneficiary. The bank may pay, accepts or negotiates bills of exchange, drafts, drawn by the beneficiary; or the bank may authorizes such payments to be made or such drafts to be paid or accepted or negotiated by another bank. In formal terms, L/C is defined in the articles UCP as any arrangement whereby the issuing bank, acting on instructions of a customer or on its own behalf makes a payment to the order beneficiary, accepts and pays bills of exchange or drafts drawn by the beneficiary; or authorizes another bank to effect such payment; or authorizes another bank to negotiate against stipulated documents, provided terms and conditions of the credit are complied with.

32. A trade credit may be extended against security of ***clean bills of exchange***, granted in local currency irrespective of foreign currency in which the bill is drawn. In such a case exchange risk is borne by the customer; agreed margin is deducted from the amount of the bill and repayment is made out of the proceeds realized. A clean credit against foreign bills may be advanced where cheques, drafts, promissory notes or any other negotiable instruments are not accompanied by titled documents of goods. In that case bank acquires ownership of negotiable instrument; arranges to cover foreign exchange risk and sends the bills for collection. In case of ***local bills,*** credit may be advanced against bills drawn and payable within the country, and is not accompanied by title of goods.

33. If a trade credit is granted against purchase of negotiable instruments like cheques, drafts, and promissory notes , domestic or foreign, and is accompanied by titled documents of the goods, it is called ***documentary trade credit.*** This includes local bills drawn and paid within the country; or foreing bills paid in foreign currency. A trade credit may be advanced against local or foreign bills, the negotiable instruments in a similar way, but if the amount of interest is calculated at expected interest rate from the date of purchase to the expected date of arrival of return remittances, and deducted from the face value of the bill, the amount of interest thus deducted is the discount. This type of

trade credit is called discounted credit against foreign or local bills of exchange. If the bills of exchange are further re-discounted, such as in case of foreing bills of exchange, this re-discount is to be approved by authorities concerned.

34. If a bank were to make payment against documented bills on behalf of a coustomer, then it is a credit for a short period, a maximum of ten days. In this case, the bank makes payment to the negotiating bank after checking and verifying documents received under its letter of credit on accounts of its coustomers. Often a ***Packing Credit*** is granted by banks to exporters to facilitate raw material purchase for manufacturing and finished goods exports, provided the exporter has received a firm contract, or a purchase order, or a letter of credit in favor of the borrower and security of inventory purchase. Often banks extend credit against pledge of merchandise already imported by dealers. These are short term trade credits secured through bonded warehouses. In such case, imported goods are released only against receipt of sale proceeds deposited in the credit account with lending bank, thus guaranteeing repayment after sale of merchandise.

35. Beyond these two staple lending instruments of commercial banking, namely overdrafts and trade financing, which are a shade different from inventory finance or working capital finance, banks may also commit for self-standing loans, say, for refurbishing of existing plant and machinery or repair and rehabilitation expenses. Again, such lending is for short to medium term maturities with KIBOR based interest rates as per loan agreement executed by the borrower specifically for single purpose loan. Often these are classified as investment loans as opposed to routine business loans, or loans for working capital. These loans are specific to the needs of corporate clients for refurbishing or expansion of their existing business operations and are structured accordingly. If these investment needs are fairly large, banks may seek co-lenders to share the burden and risks involved, short of a syndicate arrangement of the type put together for floating new IPOs in the arena of investment banking. Banks are very versatile in working out arrangements for such lending or innovative banking as it is called.

Data Set 3.7 **SBP Refinancing Facility - Banks, NBFIs** ***Rs billion, End of Period***

5		**FY00**	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10**
6	**SBP Loans to Banks, NBFIs**	***196***	***200***	***178***	**158**	**183**	**197**	**208**	**267**	**217**	**300**	**310**
7	***SBP Loans to Banks***	***153***	***150***	***144***	***131***	***162***	***182***	***194***	***253***	***204***	***288***	***297***
8	for: Agriculture	50	55	55	56	58	59	62	62	48	58	55
9	Exports	75	75	59	57	88	109	108	135	101	177	186
10	***Loans to NBFIs***	***43***	***50***	***35***	***27***	***21***	***15***	***14***	***15***	***13***	***13***	***13***
11					*Percent Shares of Total Refinancing*							
12	***SBP Loans to Banks***	78.2	75.0	80.9	82.9	88.5	92.4	93.0	94.9	94.2	95.8	95.8
13	for: Agriculture	25.5	27.5	30.9	35.4	31.7	29.9	29.8	23.2	22.1	19.3	17.7
14	Exports	38.3	37.5	33.1	36.1	48.1	55.3	51.9	50.6	46.5	59.0	60.0
15									*Percent Shares of Export Refinancing*			
16	***Export Financing Scheme;*** *Percent Shares of*							***2006***	***2007***	***2008***	***2009***	***2010***
17	Textiles							67	67	62	62	63
18	Food Exports							12	14	13	14	14
19	Commodities							6	5	11	14	13
20												
21												
22			*Average Annual Growth Rates*									
23			**FY00-10**	**FY00-05**	**FY05-10**			***Annual Growth Rates***				
24	**SBP Loans to Banks, NBFIs**		4.7%	0.1%	9.5%		12.3	6.3	31.0	-19.3	40.7	3.3
25	***SBP Loans to Banks***		6.8%	3.5%	10.3%		1.7	5.1	0.0	-22.6	20.8	-5.2
26	for: Agriculture		1.0%	3.4%	-1.4%		23.9	-0.9	25.0	-25.2	75.2	5.1
27	Exports		9.5%	7.8%	11.3%		-28.6	-5.3	3.5	-14.3	-0.8	3.2
28												
29	SaF Data Set	Source: SBP Annul Reports, Dev Fin Reports										

Data Set 5.1 — Financial System Credit

End Period, Rs billions

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Financial System Credit \ 1	**1105**	**1152**	**1143**	**1215**	**1527**	**2022**	**2424**	**2767**	**3156**	**3501**	**3602**
Banking System Credit	***797***	***864***	***885***	***970***	***1242***	***1694***	***2071***	***2376***	***2816***	***3080***	***3175***
to Private Sector	640	702	717	848	1109	1527	1869	2161	2575	2522	2585
to Public Sector	157	162	168	123	133	167	202	216	241	558	590
NBFIs Credit	***112***	***88***	***81***	***87***	***102***	***131***	***145***	***124***	***123***	***120***	***117***
SBP Credit to Banks and NBFIs \ 2	***196***	***200***	***178***	***158***	***183***	***197***	***208***	***267***	***217***	***300***	***310***
FinSys Credit to Private Sector \ 3	948	990	975	1093	1394	1856	2222	2551	2915	2942	3012
FinSys Credit to Public Sector \ 4	157	162	168	123	133	167	202	216	241	558	590
Memo item: Islamic Banking Credit \ 5				7	21	35	52	75	128	142	168
				Annual growth rates of CY magnitudes							
Financial System Credit \ 1		4.3	-0.8	6.3	25.6	32.4	19.8	14.2	14.1	10.9	2.9
Banking System Credit		8.4	2.4	9.7	28.0	36.4	22.3	14.7	18.5	9.4	3.1
to Private Sector		9.7	2.1	18.3	30.8	37.7	22.4	15.6	19.2	-2.1	2.5
to Public Sector		3.2	3.9	-27.1	8.3	25.6	21.2	6.7	11.8	131.7	5.6
				percent share of total financial system credit							
Banking System Credit	72.1	75.0	77.4	79.8	81.3	83.8	85.5	85.9	89.2	88.0	88.2
NBFIs Credit	10.2	7.7	7.0	7.2	6.7	6.5	6.0	4.5	3.9	3.4	3.2
SBP Credit to Banks and NBFIs \ 2	17.7	17.4	15.6	13.0	12.0	9.7	8.6	9.6	6.9	8.6	8.6
Private Sector Credit / FinSys Credit	85.8	86.0	85.3	89.9	91.3	91.8	91.7	92.2	92.4	84.0	83.6
Public Sector Credit / FinSys Credit	14.2	14.0	14.7	10.1	8.7	8.2	8.3	7.8	7.6	16.0	16.4
				percent share of banking system credit							
Private Sector Credit / BnkSystem	*80.3*	*81.3*	*81.0*	*87.4*	*89.3*	*90.2*	*90.2*	*90.9*	*91.4*	*81.9*	*81.4*
Public Sector Credit / Bnk System	*19.7*	*18.7*	*19.0*	*12.6*	*10.7*	*9.8*	*9.8*	*9.1*	*8.6*	*18.1*	*18.6*
Islamic Banking Credit / Bnk System	*0.0*	*0.0*	*0.0*	*0.7*	*1.7*	*2.1*	*2.5*	*3.2*	*4.5*	*4.6*	*5.3*

SaF Data Set — Source: SBP Annual Reports, FSA reports — p: provisional, subject to revision

1 \ For distribution of credit between public and private sector at financial system level, see Table 5.7

2 \ SBP Credit to banking system and NBFIs is to refinance their credit to priority sectors.

3 \ Includes credit extended by all the three sources: banking system, SBP and NBFIs.

35												
36	**Data Set 5.1a**			**Financial System Credit**					***End Period, Rs billions***			
37	**Calendar Year, CY data**	**CY00**	**CY01**	**CY02**	**CY03**	**CY04**	**CY05**	**CY06**	**CY07**	**CY08**	**CY09**	**CY10p**
38												
39	**Gross Credit, NetLoans + Provisions**	**1021**	**1056**	**1063**	**1244**	**1724**	**2121**	**2578**	**2901**	**3445**	**3555**	**3581**
40	**NPLs - All Banks, CY data**	**240**	**244**	**232**	**211**	**200**	**177**	**173**	**214**	**314**	**432**	**494**
41	***Net Loans - All Banks, CY \ 6***	***889***	***922***	***923***	***1109***	***1585***	***1989***	***2441***	***2717***	***3210***	***3248***	***3230***
42	Provisioning, CY	132	134	140	135	139	132	137	184	235	307	351
43	Provisioning as % of NPLs	55	55	61	64	69	74	79	86	75	71	71
44	**Net NPLs - All Banks, CY**	**108**	**111**	**91**	**76**	**61**	**45**	**37**	**30**	**79**	**125**	**143**
45	***NPLs as % of Banking Credit***	***23.5***	***23.1***	***21.8***	***17.0***	***11.6***	***8.4***	***6.7***	***7.4***	***9.1***	***12.2***	***13.8***
46	***Net NPLs as % Net Loans, SBP data***	***10.1***	***10.3***	***8.3***	***5.3***	***2.6***	***2.1***	***1.5***	***1.1***	***2.5***	***3.9***	***4.1***
47												
48						***Annual growth rates, CY data***							
49	***NPLs - All Banks, CY data***		1.6	-5.4	-9.6	-5.8	-12.8	-2.3	19.1	31.8	27.3	12.6
50	*Provisioning, CY*		1.0	4.8	-3.8	2.6	-5.2	3.6	25.7	21.7	23.5	12.5
51	***Net NPLs - All Banks, CY***		2.3	-21.0	-19.8	-24.7	-34.6	-24.4	-21.7	62.0	36.8	12.6
52	***Net Loans - All Banks, CY \ 6***		3.6	0.1	16.8	30.0	20.3	18.5	10.2	15.4	1.2	-0.6
53												
54		*Average Annual Growth Rates*								*Average Annual Growth Rates*		
55		**FY00-10**	**FY00-05**	**FY05-10**						**CY00-10**	**CY00-05**	**CY05-10**
56	**Financial System Credit \ 1**	**12.5%**	**12.8%**	**12.2%**			**Gross Credit, Bnk System**			***13.4%***	***15.7%***	***11.0%***
57	***Banking System Credit***		***16.3%***	***13.4%***			***NPLs - All Banks, CY data***			***7.5%***	***-5.9%***	***22.8%***
58	to Private Sector	15.0%	19.0%	11.1%			Provisioning, CY			10.3%	0.0%	21.6%
59	to Public Sector	14.2%	1.2%	28.7%			Net NPLs - All Banks, CY			2.8%	-15.9%	25.8%
60	NBFIs Credit	0.4%	3.2%	-2.3%			Net Loans - All Banks, CY \ 6			13.8%	17.5%	10.2%
61	SBP Credit to Banks and NBFIs \ 2	4.7%	0.1%	9.5%								
62	*FinSys Credit to Private Sector \ 3*	*12.2%*	*14.4%*	*10.2%*								
63	*FinSys Credit to Public Sector \ 4*	*14.2%*	*1.2%*	*28.7%*								
64	4 \ Formal credit extended to public sector by financial intermediaries; excludes borrowings through securities markets.											
65	5 \ Islamic banking credit is included in *banking system credit.*											
66	6 \ Net Loans equals loans outstanding in the protfolio of a bank *less* provisioning as shown in Table 21.1 of Banking Stattistics, and Quarterly Reports, CY data.											
67												

	Data Set 5.2	Banking Credit *by Borrowers*					*June, Rs billions*					
		FY00	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10**
4												
5	**Total Banking Credit**	**797**	**864**	**885**	**970**	**1,242**	**1,694**	**2,071**	**2,376**	**2,816**	**3,080**	**3,175**
6	**Govt + PSEs**	**157**	**162**	**168**	**123**	**133**	**167**	**202**	**216**	**241**	**558**	**590**
7	Government	86	76	95	57	51	84	107	100	133	342	424
8	Public Sector Enterprises	71	86	73	66	82	83	95	115	108	217	166
9	**Private Sector**	**640**	**702**	**717**	**848**	**1,109**	**1,527**	**1,869**	**2,161**	**2,575**	**2,522**	**2,585**
10	***Private Enterprises***	***557***	***614***	***614***	***711***	***909***	***1,201***	***1,445***	***1,670***	***2,075***	***2,096***	***2,194***
11	of which: Agriculture	97	96	102	111	114	127	132	144	154	157	165
12	Manufacturing	305	355	381	415	573	736	865	955	1,178	1,187	1,228
13	*Textiles*	*162*	*187*	*168*	*193*	*315*	*332*	*446*	*462*	***561***	***513***	***504***
14	Trade and Comerce	78	77	59	66	98	125	180	209	245	226	220
15	Transport	12	11	13	14	25	52	63	79	94	98	102
16	***Personal***	***69***	***74***	***76***	***107***	***158***	***258***	***344***	***401***	***422***	***365***	***322***
17	of which: consumer finance					122	214	295	345	360	292	240
18	***Others \ 1***	***14***	***14***	***27***	***30***	***42***	***68***	***80***	***90***	***78***	***61***	***69***
19	***Share of:* Public Sector**	**19.7**	**18.7**	**19.0**	**12.6**	**10.7**	**9.8**	**9.8**	**9.1**	**8.6**	**18.1**	**18.6**
20	***Share of:* Private Sector**	**80.3**	**81.3**	**81.0**	**87.4**	**89.3**	**90.2**	**90.2**	**90.9**	**91.4**	**81.9**	**81.4**
21					*(Percentage Share of Bankign Credit to Private Sector)*							
22	***Private Enterprises \ 2***	***87.0***	***87.5***	***85.6***	***83.8***	***82.0***	***78.7***	***77.3***	***77.3***	***80.6***	***83.1***	***84.9***
23	Agriculture	15.2	13.7	14.2	13.1	10.3	8.3	7.1	6.7	6.0	6.2	6.4
24	Manufacturing	47.6	50.6	53.2	49.0	51.7	48.2	46.3	44.2	45.7	47.1	47.5
25	*Textiles*	25.3	26.6	23.4	22.8	28.4	21.7	23.9	21.4	21.8	20.3	19.5
26	Trade and Commerce	12.2	11.0	8.2	7.8	8.8	8.2	9.6	9.7	9.5	9.0	8.5
27	Transport	1.9	1.6	1.8	1.7	2.3	3.4	3.4	3.7	3.7	3.9	3.9
28	***Personal***	***10.8***	***10.5***	***10.6***	***12.6***	***14.3***	***16.9***	***18.4***	***18.6***	***16.4***	***14.5***	***12.5***
29	***of which: consumer finance***	0.0	0.0	0.0	0.0	11.0	14.0	15.8	16.0	14.0	11.6	9.3
30	***Others \ 1***	2.2	2.0	3.8	3.5	3.8	4.5	4.3	4.2	3.0	2.4	2.7
31	SaF Data Set			Source: SBP Annual Reports, FY data								
32	\ 1 Credit extended to NBFIs and other private business borrowers; excludes inter-bank credit											
33	\ 2 Credit to Private Sector further decomposed into credit to private eneterpises and personal loans; their shares refer to this sub-total.											
34												

Data Set 5.2a — **Banking Credit, *by Borrowers*** — ***June, Rs billions***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
					(annual growth rate)						
Total Banking Credit		**8.4**	**2.4**	**9.7**	**28.0**	**36.4**	**22.3**	**14.7**	**18.5**	**9.4**	**3.1**
Govt + PSEs		3.2	3.9	-27.1	8.3	25.6	21.2	6.7	11.8	131.7	5.6
Private Sector		9.7	2.1	18.3	30.8	37.7	22.4	15.6	19.2	-2.1	2.5
Private Enterprises		10.2	-0.1	15.8	28.0	32.2	20.3	15.5	24.3	1.0	4.7
of which: Agriculture		-1.0	6.3	8.8	2.7	11.4	3.9	9.1	6.9	1.9	5.1
Manufacturing		16.4	7.3	8.9	38.1	28.4	17.5	10.4	23.4	0.8	3.5
Textiles		15.4	-10.2	14.9	63.2	5.4	34.3	3.6	21.4	-8.6	-1.8
Banking Credit to SMEs, *Rs billions*				148	226	302	361	408	437	*383*	308
SMEs' share in Credit, %				15.3	18.2	17.8	17.4	17.2	15.5	12.4	9.7
Number of Borrowers (000)							168	185	215	217	225
Average Loan Size, *(Rs, 000)*							2,149	2,205	2,033	1,765	1,369
Banking System Credit, by Origination, Calnedar Year											
	1990	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
All Banks \ 3	**219**	**862**	**910**	**936**	**1096**	**1536**	**1935**	**2301**	**2613**	**3056**	**3192**
State Owned Com Banks \ 4	201	428	428	320	365	271	345	430	487	560	620
Private Commercial Banks \ 5	18	434	482	616	731	1265	1590	1871	2126	2496	2572
Share of State Owned	***92***	***50***	***47***	***34***	***33***	***18***	***18***	***19***	***19***	***18***	***19***
Share of Privately Owned	8	50	53	66	67	82	82	81	81	82	81
	Average Annual Growth Rates								*Average Annual Growth Rates*		
	FY00-10	**FY00-05**	**FY05-10**						**FY00-10**	**FY00-05**	**FY05-10**
Total Banking Credit	14.8%	16.3%	13.4%				Manufacturing		14.9%	19.3%	10.8%
Govt + PSEs	14.2%	1.2%	28.7%				Textiles		12.0%	15.4%	8.7%
Private Sector	15.0%	19.0%	11.1%						**FY03-10**	**FY03-08**	**FY08-10**
Private Enterprises	14.7%	16.6%	12.8%				SME Credit		18.5%	23.8%	6.2%
of which: Agriculture	5.5%	5.5%	5.4%				SME Credit		11.0%	24.2%	-44.8%

\ 3 Credit extended by all scheduled banks, calendar year data, Statitical Bulletin, 2007, June 2011

\ 4 State owned commercail banks only; FSA 2000, FSA 2010. \ 5 Private bank credit taken as differential of total credit and state owned banks

Table 5.7 **Government Borrowings from Financial System** ***End Period, Rs billions***

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
5	**Borrowings from Financial System**	**2684**	**2807**	**2722**	**3071**	**3532**	**4068**	**4736**	**5320**	**6383**	**7448**	**8374**
6	***both public and private Sectors***											
7	**Govt Borrowings from Fin System**	**1686**	**1777**	**1695**	**1914**	**2078**	**2162**	**2457**	**2707**	**3413**	**4418**	**5197**
8	***from Banking System: as***	***466***	***466***	***574***	***761***	***828***	***803***	***902***	***1141***	***1110***	***1841***	***2333***
9	*Federal Bonds, PIBs in Banks' Portoflio*	*148*	*126*	*152*	*211*	*259*	*188*	*182*	*169*	*183*	*198*	*208*
10	*Treasury Bills in Banks' Portoflio*	*106*	*126*	*222*	*405*	*411*	*415*	*410*	*657*	*559*	*749*	*1120*
11	*Commodity operations, provinces*	*55*	*52*	*31*	*22*	*25*	*34*	*108*	*99*	*127*	*336*	*415*
12	*Banking Credit to Public Sector \ 2*	*157*	*162*	*168*	*123*	*133*	*167*	*202*	*216*	*241*	*558*	*590*
13	***from SBP: as T-bills Holdings***	***467***	***508***	***226***	***113***	***198***	***325***	***508***	***452***	***1100***	***1108***	***1172***
14	***from Public:***	***753***	***804***	***895***	***1040***	***1052***	***1034***	***1048***	***1115***	***1203***	***1468***	***1692***
15	*through NSS*	*672*	*712*	*792*	*910*	*899*	*871*	*882*	*940*	*1020*	*1271*	*1456*
16	*through Prize Bonds*	*81*	*92*	*103*	*130*	*153*	*163*	*166*	*175*	*183*	*197*	*236*
17												
18	**Private Sec Borrowings from Fin Sys**	**998**	**1030**	**1027**	**1157**	**1454**	**1906**	**2279**	**2613**	**2970**	**3030**	**3177**
19	*Bonds, TFCs; long term borrowings*	*16*	*14*	*20*	*37*	*28*	*22*	*34*	*36*	*37*	*70*	*150*
20	*Banking System Credit \ 1*	*982*	*1016*	*1007*	*1120*	*1426*	*1884*	*2245*	*2577*	*2933*	*2960*	*3027*
21												
22	***Financial System Borrowings: by***			***percent share of total financial system borrowings***								
23	***Private Sector***	***37.2***	***36.7***	***37.7***	***37.7***	***41.2***	***46.9***	***48.1***	***49.1***	***46.5***	***40.7***	***37.9***
24	***Public Sector***	***62.8***	***63.3***	***62.3***	***62.3***	***58.8***	***53.1***	***51.9***	***50.9***	***53.5***	***59.3***	***62.1***
25	*of this: from banking system*	*27.6*	*26.2*	*33.8*	*39.8*	*39.8*	*37.2*	*36.7*	*42.1*	*32.5*	*41.7*	*44.9*
26	*from SBP*	*27.7*	*28.6*	*13.3*	*5.9*	*9.5*	*15.0*	*20.7*	*16.7*	*32.2*	*25.1*	*22.6*
27	*from Public*	*44.7*	*45.2*	*52.8*	*54.3*	*50.6*	*47.8*	*42.6*	*41.2*	*35.2*	*33.2*	*32.6*
28												
29												
30	SaF Data Set		Source: SBP Annual Reports, FSA reports						p: provisional, subject to revision			
31	1 \ Financial System credit to private sector extended mainly by banks; plus NBFIs, plus SBP credit intended for private sector via refinancing scheme to fund credit topriority sectors.											
32	2 \ Banking system credit to Govt and PSEs as reportd on Table 6.2 of SBP AR s											
33												

Data Set 5.7a **Government Borrowings from Financial System** ***End Period, Rs billions***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
					(Percentage growth rate)						
Borrowings from Financial System		*4.6*	*-3.1*	*12.8*	*15.0*	*15.2*	*16.4*	*12.3*	*20.0*	*16.7*	*12.4*
Private Sec Borrowings from Fin Sys		*3.2*	*-0.3*	*12.7*	*25.7*	*31.1*	*19.6*	*14.7*	*13.7*	*2.0*	*4.9*
Banking System Credit \ 1		*3.5*	*-0.9*	*11.2*	*27.3*	*32.1*	*19.2*	*14.8*	*13.8*	*0.9*	*2.3*
Govt Borrowings from Fin System		*5.4*	*-4.7*	*12.9*	*8.6*	*4.0*	*13.7*	*10.2*	*26.1*	*29.4*	*17.6*
from Banking system		*0.1*	*23.1*	*32.7*	*8.8*	*-3.0*	*12.3*	*26.5*	*-2.7*	*65.9*	*26.7*
from SBP: as T-bills Holdings		*8.8*	*-55.5*	*-50.0*	*75.2*	*64.1*	*56.3*	*-11.0*	*143.4*	*0.7*	*5.8*
from Public:		*6.7*	*11.4*	*16.2*	*1.2*	*-1.7*	*1.3*	*6.4*	*7.9*	*22.1*	*15.2*

Average Annual Growth Rates

	FY00-10	FY00-05	FY05-10
Borrowings from Financial System	**12.1%**	**8.7%**	**15.5%**
Private Sec Borrowings from Fin Sys	***12.3%***	***13.8%***	***10.8%***
Banking System Credit \ 1	11.9%	13.9%	9.9%
Govt Borrowings from Fin System	***11.9%***	***5.1%***	***19.2%***
from Banking System: as	***17.5%***	***11.5%***	***23.8%***
Banking Credit to Public Sector \ 2	14.2%	1.2%	28.7%
Federal Bonds, PIBs in Banks' Portoflio	3.5%	4.9%	2.1%
Treasury Bills in Banks' Portoflio	26.6%	31.4%	22.0%
from SBP: as T-bills Holdings	***9.6%***	***-7.0%***	***29.2%***
from Public:	***8.4%***	***6.5%***	***10.4%***

Chapter 7: Banking System Credit
Operations and Allocation

Thematics

Banking System Credit, Operations

Patterns of Lending
Banking Risks, Premia and Credit Costs
Lending Rates, Trends
Costs and Profitability

Banking System Credit, Allocation

Public versus Private Sector
Comparative Size, Shifts, Growth, Trends

Sectoral Distribution – Orientations
Sectoral Shares, Size, Shifts, Trends
Orientations, Concentration
Banking Credit and Priority Sectors

Borrower Distribution - Concentration
Prime, non-Prime Borrowers

Loan Portfolio, Rise of NPLs

Size, Growth and Trends
Managing NPLs; Regulatory Framework
Defaults, Classification of NPLs
Provisioning; Rules and Compliance
Banking Practices and Loan Defaults
Involuntary Lending

Issues and Prognosis – A Summary

Chapter 7 : Banking System Credit
Operations and Allocation

Section 1: Banking Credit Allocation

1. We need to analyze patterns of credit allocation and its usage in Pakistan as classified by borrower categories including major productive sectors of the economy as well as household borrowings. The source of this data is SBP reports classified by major borrowers, type of collateral, interest rates, loan size, and their sectoral and sub-sectoral breakdown, identifying credit flow to producing sectors of Pakistan's economy. It is a wealth of data, more than sufficient for analytical purposes at macrofinancial level.

2. The first classification concerns banking credit used by public sector and private sector. It follows the same pattern discussed earlier in the context of financial system credit and it has to because banking credit is the largest of financial system credit. The share of private sector in total banking credit has been very high during most years of the decade, ranging between 80 to 87 percent, except for couple of years in middle of the decade. Correspondingly, share of public sector has been fairly small in total banking credit. A good part of banking credit to public sector has been used by government, not public sector enterprises, for their business operations. In current times, commercial banks are not lending to PSEs which is a complete reversal of pattern of lending that prevailed in the past.

3. The analysis shows that significant changes have occurred over the past decade with regard to allocation of credit between various sectors of the economy, although long gone are the days of layered system of credit that prevailed until late 1990s; and also gone are credit plans, that were eventually abandoned in 2005. Both these mechanisms of directed credit regime designed for credit allocation by fiat were the polar opposite of market based allocation that replaced it gradually, but not until credit plans were finally given up to control the size of credit and its allocation. Now banking credit is extended on borrower based creditworthiness and capacity to borrow, where changes in the use patterns of credit are market based.

4. The salient trends in sectoral distribution of credit are as follows. As regards banking credit to private sector and its distribution between major sectors of the economy, there has been a substantial reduction in the share of agriculture sector from 15 percent in FY00 *(Data Set 5.2, p-219)* to 6.4 percent in FY10. This long term trend represents a shift in allocation of credit at sectoral level. Agriculture is major sector of Pakistan's economy, even though if one were to look at sectoral shares in GDP, its share is about 21 percent, eclipsed by share of services which is 51 per cent. In particular food production and supply of critical industrial inputs for food industries like sugar and edible oils, manufacturing and exporting industries like textiles, all originate from agricultural sector, but its financing needs are not met by banking system credit.

5. In part, this trend explains periodic crises of food items and consequent rise of food imports. This is also a major factor in inflation and persistent pressure on food prices. Without a solid base of food supply, in particular supply of staples and basic food items the economy can not survive, no matter how much service based it is. Food imports are not sustainable given chronic and large balance of payment deficits. Above all food security is a strategic national issue and can not be compromised regardless of what proportion of GDP it happens to be.

6. Banking system credit no longer supports agricultural sector and that is worrisome development. The argument frequently propounded is that agricultural borrowers are not creditworthy. That in part may be true, but lending to rural farmers has never been an attractive option as lending to urban borrowers, even if creditworthiness factors are similar, aside of lending to agribusiness and corporate agriculture. This is a phenomenon prevalent in almost all developing countries. If at system level, agriculture is not a priority sector for banks, one wonders how far patchwork arrangements through ZTBL or credit facilities of SBP can plug in the gap of financing needs of this sector.

7. Manufacturing sector is the largest borrower and is the most important client for banks, garnering nearly half of banking system credit for most of the years of past decade. *(Data Set 5.2, p-219)* These two prime sectors of the economy, agriculture and manufacturing together receive about 55 percent of bank credit in current tines which is sufficiently large. Within manufacturing, textile sector is the dominant borrower; it receives nearly half of banking credit to manufacturing sector. This is not surprising considering the position of textiles in domestic industrial structure and in exports, given that textiles are the largest item of export earnings as they has been for decades. Textiles

sector has also suffered same erosion of its share of banking credit over time. In early years of the decade, share of textile sector in banking credit was around 25 percent, propelled mainly by the demand for balancing, modernization and rehabilitation of textile industries, facing onslaught of foreign competition with the demise of textile quota system in world trade. Thereafter, the share of banking to credit textiles sector declined, but still it has been in the range of 20 to 22 percent for most years.

8. This brings us to the issue that how far banking system has been responsive to the credit needs of priority sectors like SMEs, exporting, housing and others? This is discussed in the next chapter. Briefly, banking system lending to priority sectors, has remained unsatisfactory, caveats and all as noted in the next chapter. The government of Pakistan, like many in developing countries, has been drumming up development of SMEs and exports, but had limited success thus far after decades of promotional efforts.

Patterns of Lending

9. Overall, in banking system credit, there is ***borrower concentration.*** Loans to large corporate borrowers in the amount of rupees one million or more account for nearly 70 percent of total banking system credit, In contrast, small loans usually extended to small retail borrowers are a miniscule proportion of total banking credit, no more than one percent of all loans extended for the reason that bankers generally prefer lower risks and lower costs of banking. In this regard, their lending practices in Pakistan are similar to those in other countries. Any noticeable borrower diversification in near future is unlikely, given the concentration on prime borrowers, with the exception of consumer loans unless efforts are made for the promotion of priority sector finance.

10. Similarly, banks do not lend to residential housing sector as distinct from lending for real estate, which is mostly commercial. The proportion of banking credit extended to housing at around 2-3 percent. In comparison, housing sector in most developed countries is front line sector as regards performance of the economy; garnering nearly one half of total banking credit. Among the comparator countries of Pakistan, housing loans are 10-20 percent of total loan portfolio and rising. Housing is a major industry; it is a priority sector; it has strong linkages with nearly 37 industries, but it has not been on the radar screen of commercial banks as discussed in Chapter 8 next.

11. At retail level, patterns of lending by banking system began to change with the advent of consumer lending through credit cards and fully collateralized installment loans. This was facilitated through lease financing via lines of credit to newly established leasing companies, or lines of credit extended by banks via large corporate borrowers willing to underwrite part of financing costs. This was done in part to provide some degree of comfort to dealers, the borrowers of the banks, but lenders to the clients, on their installment purchases, like automobiles. These efforts were heralded in Pakistan as a break-through, or start of a new pattern where new ***innovative products,*** namely new lines of credit. This was a new trend in Pakistani banking; though a fairly routine operation in established banking system. The amount of banking credit that could be absorbed by new credit lines was marginal to banking system credit. These are also private sector loans and should be combined with sectoral loans to private sector. If so, the proportion of banking credit to private sector rises to about 90 percent in recent years.

12. Consequently, there was a significant growth in ***personal loans,*** particularly consumer end of it, over the recent years which is by now the largest component of personal loans. The proportion of personal credit increased from about 11 percent in FY00 to 19 percent in FY07, thereafter this proportion began to decline and reverted to an estimated 12.5 percent in FY10. The expansion of consumer credit has leveled off, and the early enthusiasm with consumer credit is waning because of widespread default in recent years. There has been a swift scaling down of consumer credit without a specific collateral because of rather sordid experience with segments of credit card coustomers, accumulation of large amount of NPLs and uncertain economic trends. Advent of personal loans via credit cards is a worrisome aspect in a society riddled with defaults and conspicuous consumption patterns.

13. The issue remains as to whom banks should extend credit, if it is not agriculture, and if textiles sub-sector is saturated, and if housing is beyond their risk envelop? The only viable section of borrowers is corporate sector. Without sustained growth in corporate sector, banking credit is unlikely to grow. Banks will not have much of choice except to continue lending in the format that they are most familiar without a fast expanding corporate sector and emergence of new clients. They will invest their liquid funds in government securities rather than lend to privates businesses and clients.

14. There is not much *contractual* long term lending in the banking system, like investment loans or mortgage loans. Bulk of lending is overdraft. It would be stretching the point to dub its roll over as effective long term

lending. Thus, banking system has not engaged in effective term transformation, where ***term transformation*** is to be interpreted as converting the short term maturity structure of deposits to long term lending. We have already seen in Chapter 6 the maturity structure of deposits and a good deal of it is in current deposits or in maturities of less than a year. A similar analysis on lending is difficult because maturity structure of loans are not reported. Having looked at lending practices, it would not be inappropriate to conclude that beyond overdraft and trade financing there is not much term lending in the system.

15. Why ***term transformation*** is significant for long term banking credit and investment growth in the country, because it provides a mechanism to convert matching maturity structure of deposits, mostly short term, to the maturity or term structure of loans. This is especially the case for medium to long term loans, if banks are inclined towards contractual lending of medium to long term maturities, critically needed for investment financing, aside trade financing or revolving credit financing, as done through overdrafts. Term transformation is central to the process of financial intermediation by banking system and is critical for growth of investment finance, equity finance or capitalization. It involves reshaping term structure of loanable funds into term financing facilities to borrowers through lending mechanisms and instruments within acceptable levels of risk and costs. The more efficient banking system is in term transformation, stronger is the base for lending and investment financing, the foundation of corporate growth.

Banking Risks *and Interest Rates*

16. Conceptually, interest rates on the lending side of banking operations originate from ***base cost of funds*** which has two components. The largest component is cost of deposits based on deposit rates which we have already discussed in Chapter 5. The second component is the cost of borrowings of banks from financial markets which is smaller part of the base cost. Once the base cost is firmed up, there are several premia that are added to base cost of funds to arrive at lending rates which are not uniform across all types of borrowers, industries or sectors of the economy. Diversity of interest rate structure on lending side emerges from differences in the premia charged by banks and added to lending rates, while base cost of funding remains the same for all borrowers.

17. Among various types of premia added to the base interest rate, credit ***risk premium*** is dominant consisting of premia for ***default risk***; ***market risk*** or what is the same ***interest rate risk***, and ***industry or sector risk***. Since these risks are not the same across various categories of borrowers, risk premia also vary considerably. Much of interest rate differential on loans emerges from different risk premium owing to diverse risk profile of borrowers. In addition, there is a premium for maturity and a premium for type of collateral tendered. Longer the maturity, higher is ***maturity premium***, other factors remaining the same. Likewise, ***liquidity premium*** is specific to type of collateral tendered. A near-cash collateral has zero premium for risk, maturity or liquidity, over and above base cost of funds and is always preferred over other forms of collateral. Similar is the case of third party guarantees as long as the guarantor is a financial institution, who extend such guarantees against hefty fees chargeable to borrower.

18. In practice, it is difficult to decompose these premia and estimate them for each loan or for each borrower. Banks normally identify risk premium, maturity and collateral quality premia for broad categories of borrowers and for various types of loans to arrive at their loan pricing stance in credit market, while keeping an eye on prevailing lending rates, peg rates or anchor rates. Hence, in real market place, loan pricing is as much an art as a science of price determination, namely interest rate determination.

19. There are three categories of risks in banking business, and all three are pertinent to profitability of a bank, though with varying degrees of impact, not in equal measure. These are:

- ***risks associated with lending activities*** of a bank such as credit risks or what is the same, default risk or borrower risks; interest rate risks; loan portfolio risks concerning loan losses on all loans outstanding; credit concentration and overexposure risks; foreign exchange risks in case of loans advanced in foreign currencies.
- ***risks inherent in funding*** activities concerning deposits, borrowings, mismatch of maturity structure between loan portfolio and deposit or borrowing portfolio, and cost of borrowings.
- ***operational risks;*** such as liquidity risk; risks in payments and settlements; and risk associated with off-balance sheet activities. How good is management of these risks determines profitability, financial strength and solvency of a bank as a lender. How such risks are managed, depends on operational policies and procedures, balancing of risks and returns, control system, reporting and information system.

20. On the lending side, foremost is ***credit risk,*** or ***default risk,*** the same; namely the risk that a borrower will not repay the debt outstanding, or interest and principal due on a loan. It is risk of nonperformance by a borrower resulting in non-repayment of a loan. This is the most important risk in banking business and it is covered primarily through security or collateral tendered. Default risk is over-riding concern of a lending bank and is evaluated as a composite of realizable collateral value, credit history and business growth potential and profitability of borrower, overall financial strength, third party recourse in case of non-performance, or such other factors pertinent to borrower to qualify for a bank loan.

21. In spite of all precautions that a bank may take, credit risk may emerge from a market downturn, or a recession, or a slack in business and financial activities, causing losses to borrowers, leading to nonperformance on credit obligations. Credit risk may also emerge from an unrealistic assessment of future income and profitability of the borrower, underlying credit appraisal; or may emerge from an insufficient collateral base or illiquidity of collateral. Worst of all, credit risk may emerge from fraudulent lending and borrowing practices causing deliberate or ***willful default*** by the borrower, if borrower is able to get loan write-offs, or get away without serious consequences. Occasionally banks engage in risky lending; or lending without proper credit risk assessment for risks that a loan may have exposure to; or lending with insufficient security or a collateral without obtaining relevant charge documents to secure financial and legal position of the collateral; or lending for activities with uncertain income for higher than normal interest mark-up or front end fees. Risky lending is not a rare phenomenon; it is the forte' of aggressive bankers.

22. Next is ***market risk,*** or ***interest rate risk***. This risk arises from fluctuations in market rate of interest as against rate of interest stipulated in a financial contract or embedded in a financial instrument, thereby causing a change in costs or returns of lending banks. Interest rate risk has different interpretations as follows:

- ***for the borrower,*** interest rate risk arises if a loan is obtained on floating rate of interest, pegged to a benchmark or an index of market based interest rate. If market rates rise, cost of borrowing increases proportionally.
- ***for the lender,*** it is the opposite of borrowers' risk; namely, the risk that if a loan is extended on fixed interest rate and if market interest rate declines during repayment period, it causes a loss to lender.

23. There is ***sector or industry risk*** and these vary across sectors, each pertaining to a specific line of business or to an industry. If bank lending is concentrated in a few sectors and those turn out to be more risky, such over-exposure of a bank may cause losses owing to adverse business and financial trends associated with the sector, impairing ability of borrowers to repay their loans, causing loan losses or lowering the quality of loan portfolio of the bank. Such transmission of business losses into bank's loan losses is a common, outside the control of borrowers and lenders alike.

24. Among all these banking risks; credit risk and interest rate risks dominate profitability. The issue is how well banks in Pakistan are able to manage ***credit risk*** in a liberalized financial regime with free floating interest rates and exchange rates, open external accounts, and increased exposure to forex reserve position. The pattern of credit risk in bank lending to real sectors of the economy has not changed much as discussed below. It has increased credit risk owing to a move to new lines of lending like consumer credit; but as long as exposure of banks remains heavily concentrated towards large prime borrowers this shift in the profile of credit risk among Pakistani banks is relatively small and is manageable.

25. For banks, changes in interest rate are more worrisome because they affect both funding side of banks, namely deposits and borrowings, as well as lending side. Interest rate movements, if not properly managed could severely affect banks profitability; one of the reason being mis-match of maturity structure between deposits and loans outstanding in times of volatile movements in the interest rates. For example, in times of falling interest rates, banks would like to reprice their liabilities faster than their assets; that is, lower their interest rates on their deposit liabilities faster than interest rates on their loans, their assets. Thus their balance sheet is more liability sensitive. The borrowers would also like to reprice their liabilities as well, that is they would refinance old loans at higher interest rates with new loans at lower interest rates, but in doing so they are repricing assets of the bank downwards, just the opposite of what banks would like to achieve with regard to their assets. Given this conflict of interest, unless banks are able to replace or refinance their funds at lower interest costs, that is, manage their liabilities with respect to interest rate risk, they are likely to suffer a loss.

26. Similarly, in times of rising interest rates, interest income of banks increases relatively faster than their interest costs, mainly because banks reprice their loans faster, or more effectively, than their deposits to reflect market interest costs, or because structure of deposit interest rates is

regulated preventing a full impact of rising interest rates on deposits. In this situation the balance sheet is relatively more asset sensitive with rising interest income. While banks are repricing their assets, depositors also would like to reprice their assets, upwards, thereby narrowing banking spreads. These adversarial trends represent a daunting challenge to the asset and liability managers.

27. Another banking risk concerns ***foreign exchange exposure*** on forex liabilities of banks. In the past, Pakistani banking system was shielded from exchange rate risk through a number of explicit and implicit safeguards extended to them by SBP in return to their surrendering their forex inflows, be on FCAs, remittances, or exports earnings. All this has changed since then in the new forex regime whereby commercial banks practically are on their own with regard to exchange rate risks on their reserves, exporters' balances, foreign currency deposits where some revival has occurred, forex loans extended to foreign companies or coustomers, and on their portfolio related operations in the foreign currency markets.

28. In Pakistan banking system has withstood volatility of interest rates and has been able to manage associated interest rate risks, by and large. It is unclear how much of loan portfolio of banking system has been rebalanced with current structure of interest rates – the financial liability related turnover of credit, because borrowers effectively recycle the shorter loan maturities relatively easily than their medium to long term maturities which are not a major proportion of commercial banks' portfolio. As analysis of SBP shows, banking system has absorbed impact of volatile interest rates and has emerged with stronger earnings and profitability.

29. The amount of capital available to banks to absorb these risks is relatively low because banks are highly geared on their deposit base. Further, banks most often make profits by riding the yield curve of short term and long term assets they hold, mostly loans and some investments, mobilizing much of their short term deposits at low or zero interest rates, and lending or investing such funds in longer term assets at higher rates. This inherent liquidity mis-match is potentially dangerous, requiring banks to maintain a higher level of liquid assets around 20 to 25 percent to meet the normal liquid needs of their coustomers. Central bank also extend liquidity as a lender of the last resort to help meet their cash requirements provided insolvency is not involved. In absence of such safeguards, liquidity problems of banks may quickly degenerate into solvency problems, more so because liquidation of long term assets involves a capital loss of serious magnitudes.

30. Since most banks are holders of deposits and are a primary source of credit to finance business operations and investments, they are the conduit of very large financial flows through payment mechanism they deploy, which carries ***settlement risk.*** The efficiency of payment mechanism and its reliability is critical to the transactions of businesses and households. If for some reason, this mechanism were to falter or get clogged up, it would create a chain reaction freezing bank liquidity, and if serious enough, it may result in financial contagion through no fault of any single bank as such. The chain of payments simply breaks down with disastrous results. Therefore, banks are regulated, and most payment mechanisms are either operated by the central bank, or by the private sector under a close scrutiny of the central bank as part of its regulatory function.

Loan Markets

31. Loan markets consist of lenders and borrowers, a variety of lending instruments of flexible maturities rather than a grab all category of short term revolving credit. For example, loans for investments in well defined lines of business or industrial activities such as installations and machinery suited to the needs of specific industries, like information technology, transport and communication. The primary market for loans consists of credit originated by banking system where banks are lenders of first party and their borrowers are second party. In secondary loan markets, securitized loans are sold to third party investors by banks, where securitization is conversion of collateralized loans, usually property mortgage loans into asset-backed securities.

32. There are three motives in this type of transaction. One, banks engage in selling securitized loans to enhance lending base; second, to diversify and spread out the risks underlying such loans; and third, to soften the maturity mismatch between sources of funds and term structure of such loans. Commercial banks engage in trading in secondary loan markets for asset/liability management. The terms and conditions for these loans including lending rate, collateral and guarantees, repayments, loan participation or syndication are specifically tailored for the instrument of lending or class of borrowers. This difference in the terms and conditions across borrowers becomes identification mark of the loan markets.

33. In Pakistan, loan markets hardly exist, in the sense that borrowers could swap their obligations, or lenders could trade lending instruments to a third party in the secondary markets. For example there is no mortgage loan market as such for the simple reason that the housing loan base is tiny. The portfolio of housing loans is very small and there are no mechanisms yet to securitize such loans and bundle them up for investors. In contrast, primary market for auto loans is thriving, but there is no secondary market for securitized auto loans. In this sense, loan markets are a feature of fairly developed financial systems. All we have is the primary loan market and a fairly narrow one, limited to a few mainline instruments of lending. The market is thin and is not diversified. The reasons for this have to do with the legacy of nationalized banking, and periodic upheavals in the financial system discussed earlier.

Credit Expansion and Lending Rates - *Pakistan*

34. The state of the loan market aside, we need to look at lending rates in the context of expansion in domestic credit analyzed earlier. This analysis of changes in the credit system conveys the direction and magnitudes of the changes. In part these changes were spurred by long term changes in the structure of interest rates discussed in Chapter 5 and encapsulated here together with some details on sectoral lending rates. Those changes in interest rate structure happened as a result of financial reforms, particularly the shift from a system of administered interest rates to market-based interest rates pursuant to the liberalization of financial regime. This liberalization did not occur overnight. As the deregulation of the credit system proceeded, liberalization of interest rate structure and its move towards market based mechanisms was more an outcome of reform processes rather than a change brought out by fiat. In that respect, Pakistan's experience is no different from those of comparator countries including India, next door.

35. In a market-based system, lending rates are anchored to interbank offer rate, like KIBOR in Pakistan, or the discount rate of central bank, the policy rate of SBP, or a step removed it is influenced by treasury bill rate in the primary market, which is not determined by the central bank; or some combination thereof. Any change in policy rate or T-bills rate in primary market gets reflected in KIBOR and then filters down to lending rates, but

not so much on deposit side. Deposit rate changes are much more sluggish upwards than are the lending rates and for good reasons – namely to preserve interest rate spread for the banks. The discount rate of central bank is charged when banks approach the discount window for their liquidity needs, tendering their T-bill holdings. The treasury bill rate is an outcome of T-bill auctions conducted by SBP, and is a composite rate of all the bids received. In practice, the discount rate and T-bills rate are very close, except for the periods when central bank changes its monetary stance and actively seeks to alter liquidity level of the banking system so as to alter credit supply as well as its costs to the borrowers.

36. The nominal weighted average lending rates for all banks has shown a significant volatility during the past decade and there is no defined trend. In the early years this rate was 13 percent, the declined dramatically to 5 percent at end of 2005. For the first half of the decade, lending rates were on a downward trend. Thereafter this average rate began to rise and was 13.6 percent at the end of 2008; then it moderated and was 12.4 percent by end of 2010. *(Data Set 5.4)* This was the trend of system level average, but it masks differences across various sectors as shown. Lending rates for merchandise borrowers, namely domestic trading mostly in consumer goods, followed the same pattern. It was in the range of 13-13.5 percent in early years; declined to as low as 5.8 percent in 2005, thereafter it rose to 11.7 percent by end-2010.

37. Lending rates for funds borrowed by business clients to meet their liquidity needs dubbed as financial obligations, meaning overdraft or line of credit, was the highest rate for all categories of borrowers. The nominal weighted average rate was 14.7 percent at end of the year 2001, and then declining to about half of this level to 6.7 percent by end of 2005. thereafter this rate rose to 16.6 percent by end of 2008, the highest for all categories shown; moderating to 13.5 percent by end 2010. More or less the same pattern prevailed for all other categories.

38. The rates of return on Islamic financing, or costs of Islamic banking credit, show a similar pattern. These costs are slightly higher than comparable rates of banking system credit as shown by overall nominal weighted average or sectoral lending rates but it closely follows the trends discussed above. The weighted average rate of Islamic financing declined by nearly half from 13.5 percent at the end of 2000 to 7.2 percent by end of 2004, then began to climb without interruption reaching to a high of 13.7 percent by end 2010, roughly the same it was in 2000. In other words cost of Islamic finance nearly doubled over the second half of the decade, the same way as it

did for borrowings from banking system. Why this increase occurred in cost of Islamic financing? Part of the reason may be found in the rise in base cost of PLS deposits that increased by 400-450 basis points over these years.

39. Sectoral rates of Islamic financing show similar trends. These rates move in narrow band around the weighted average rate and are not too far apart; a pattern identical to the one prevailing for lending rates of banking system credit. At the start of the decade, these sectoral rates of cost of Islamic finance were in the range of 11-14.5 percent. The entire structure moved towards a decline and was down to the range of 8-11 percent in 2005. Thereafter these sectoral rates moved upwards; and by end of the decade were back to 12-15 percent for various sectors. Thus, costs of Islamic financing are higher than those of banking system by about 100 basis points for the last couple of years of the decade; otherwise those costs are fairly comparable if one were to look at the composite of credit market in Pakistan based on these two purportedly different systems of financing.

40. By far the most expensive loans are personal loans, including house building loans. Those were 15-17 percent in early years through middle of the decade; and then began to nudge higher in later years, and this explains in good measure why growth of housing finance has not taken off, while the rest of credit system has expanded at a long term growth rate of about 15 percent annually.

41. The entire structure of interest rate structure on lending side moves in unison in an interdependent manner following the pattern all across. These are not isolated movements; instead, changes in interest rates occur in a well defined pattern within a narrow band, called ***snake***, depending on the class or the segment of private sector borrowers. The reason is that in the system of ***overdraft*** lending that prevails in Pakistan, interest rates are not likely to diverge much from KIBOR plus pegging of lending rates. Overdraft lending is an all purpose system based on creditworthiness, regardless of borrower needs or usage of funds, beyond a review of borrower's financial status. It's size depends on the needs of borrowers with solid banking credentials, regardless use of credit. Banks have to safeguard their profitability. They are not overly concerned with what credit money is used for like overdraft lending, unless credit is specifically tied to usage, which most often it is not. There are variations in the structure of lending rates by sectors; that is banking system does differentiate between sectoral attributes of their loan exposure, being cognizant of relative strength of the sectors concerned.

42. Despite decline in deposit rates from 6 percent in 2000 to 2 percent by 2006, a faster decline in lending rates squeezed average interest spread to close to 5 percent which together with the cost of provisioning NPLs has kept the pressure on profitability. The floor on interest rate decline was reached by 2005. Afterwards, during the second half of the decade, both deposit and lending rates began to rise and by FY10, lending rates had reached a level not attained before. Increase in lending rate occurred because pricing of loans in credit market is pegged to cost base of loss-leaders saddled with a higher burden of NPLs relative to new banks. It occurred because SBP had no other alternative but to raise policy rate, keep lending rates higher to counter inflationary trends at a time when revival of economic growth called for just the opposite monetary stance. It is the classic dilemma that monetary authority faces in times of sluggish economic activity and rising inflation.

43. Given these movements in interest rate, pressures on earnings and profitability are likely to intensify rather than diminish focus of the banks on a narrow but bankable segments of borrowers who can withstand rising tide of interest rates, with implications for sectoral credit. Priority sectors can not afford credit at high costs, and are likely to be further marginalized.

Section 2: Nonperforming Loans
The Burden of NPLs

1. Banking risks, particularly credit risk if not managed properly, culminate into non-performing loans. At any time in any banking system, be a developing country or advanced, non-performing loans ***(NPLs)*** do emerge no matter how well the banks do their business of lending, because of business risks borrowers face. The proportions of NPLs in healthy banking system is around three to five percent of loan portfolio, and it is substantive because it has to be provisioned from earnings of banks, whether current earnings or retained earnings; except for ***willful default*** which starts its process with the objective of defrauding a bank, in normal course of events, business loans do go sour because of unforeseen business risks that neither the borrower nor the lender could anticipate over maturity period of the loan. These risks can not be mitigated.

2. These are genuine business risks depending on the exposure of the borrower to type of business activity harboring these risks, for the simple reason that there is no business which is not exposed to these risks that occur because of the asymmetry built into the parameters of the business of lending in the first step and asymmetric risk faced by borrowers in their own line of businesses. In contrast, ***willful default*** starts its cycle with loan origination often with the connivance of bad bankers; specially when accountability is compromised owing to conditions that prevail. For example, during nationalized banking willful default were frequent and have continued in subdued form in Pakistan until recent times.

3. A culture of default permeated into bank borrowings in Pakistan over the decades of nationalized banking and it is proving difficult to get rid of. It was re-inforced with repeated write-off of loan losses the past four decades. It has been an uphill task for the regulator of banking system, the SBP, to impose a discipline on lending banks regarding management of default when they arise. A great deal of progress has been made as evident from analysis of NPLs given below. Nonetheless, NPLs have persisted. Ordinary borrowers realize that borrowing is a commitment that must be honoured; but if some people continue to paint banking business as dirty and sinful because it is based on *sood,* and therefore in a perverse sense it reinforces the psyche of willful default.

4. For good banking practices, a necessary condition is responsible ownership; this has occurred in Pakistan. The sufficient condition is good banking practices where banker is able to identify presence of willful default elements. Good banking practices are likely to take their own time to take roots in Pakistani banking. A start has already been made with the advent of privatized banking with significant competition on a playing field which may not be level owing to the dominance of five large banks; but nonetheless it is a beginning in the right direction.

5. Generally, in banking business default is failure of a borrower to repay principal amount and interest due on the debt outstanding. In practice default is not declared until after both the lender and borrower have exhausted all possible means to clear the overdue payments and there are no further prospects of repayment. At that stage, the only resource left to lender is to proceed for liquidation of collateral, and if the realized value of collateral is insufficient to cover the amount of overdue payments, then take a loan loss on its balance sheet against shareholders' funds.

6. There are three types of default to be considered among others. First among these is a ***loan default*** which pertains to a specific loan; that is, repayments on a single loan may be overdue though borrower may still be current on his other loan obligations and other debts outstanding. A ***repayment default*** is failure of borrower to make repayments of principal and interest due on dates specified in loan agreement. At this point borrower may not be declared in default, but if several repayments accumulate, and are overdue, borrower may be declared in default. A ***systemic default*** is the wide-spread default of borrowers affecting the entire banking system.

7. In banking business, ***formal default*** is declared after lender and borrower have exhausted all possible means to clear overdue payments and there are no further prospects of repayment, forcing a bank to make provisions from current income, hence causing a reduction in profits or eventual loan loss. At that point only resource left to lending bank is to proceed for liquidation of collateral. If realized value of collateral is insufficient to cover amount of overdue payments, bank has to take a loan loss on its balance sheet against shareholders' funds. This is the reason why default is declared as a last ditch step.

8. Default risk is defined as the risk that a borrower will not repay interest and principal due on a loan. This is same as credit risk and hence most important risk in banking business. It needs to be covered primarily through creditworthiness of borrower and quality of collateral tendered. In practice, default risk is evaluated as a composite of collateral, credit performance history, potential of the line of business of the borrower, financial strength, third party recourse, and other considerations pertinent to the borrower to qualify for the loan.

Loan Classification –*NPL*

9. Generally, a loan is classified nonperforming if the borrower has ceased to pay principal and interest due as specified in the loan repayment agreement, or if the repayments on the loan are past due by 90 days or more. Loans whose payments are overdue are classified according to the time period in default status and by maturity of loans; or the nature of loan default and the delay in their repayment. This may be a statutory classification based on banking regulation of the central bank, as it is in Pakistan as articulated below, or it may be a prudential classification adopted by a bank to closely monitor the magnitude of the impaired loan portfolio.

10. In 2006, SBP issued revised regulations for loan classification whereby a loan is to be classified as ***Substandard*** if repayments of principal and interest are overdue by 30 days; ***Doubtful*** if repayments are overdue by 90 days; and loss if repayments are overdue by 180 days, and this is NPL. This classification is applicable regardless of maturity or type of loan. Since bulk of lending in the banking system of Pakistan consists of overdraft with perpetual rollovers within 90 days, and in some cases even longer; hence maturity considerations are not pertinent as they would be if loans were maturity specific at the time they are granted to the borrowers.

11. The provisioning requirements stipulated by SBP are as follows. A general provision of 15 percent is to be maintained by banks assessed on the amount of ***net loans*** outstanding, where net loans are defined as total amount of all loans outstanding in the loan portfolio of a bank less provisioning for nonperforming loans. For ***substandard*** loans, provisioning requirement is 25 percent of principal amount due, net of cash collateral. For doubtful loans, provisioning requirement is 50 percent; and for loans classified as ***loss***, this requirement is 100 percent of principal outstanding net of cash collateral.

12. If nonpayment persists and there is no hope of recovery, then a borrower is deemed in a state of default. The lending bank may seize the collateral or security tendered, if accessible; but it happens after the bank has exhausted all routine steps and recourse to recover overdue payments. Impounding of collateral or seizure of security are last ditch measures. Prior to that, bank invoke legal procedures of recovery. Banks in practice usually refrain from invoking legal procedures and keep nonperforming loans on the books as long as possible to avoid the loan losses from being charged against income or share holder's funds in bank's balance sheet.

13. This may happen even if collateral is impaired or is insufficient to cover overdue payments. The bank may end up incurring considerable legal costs in recovery procedures. If the bank succeeds in the court room, which does not happen all the time, the court may declare the borrower bankrupt and even may provide relief from recovery procedures. If that happens the bank may practically not realize any recovery value. Or, it may end up holding a collateral whose value has been eroded over time; or may not recover a price at auction of assets worth the costs and procedures undertaken. At the end of the day, if past experience is any guide, the market value of impaired loan may not be more than one third of face amount, the original loan size. It is not uncommon to come across sale of non-performing loans in the secondary markets at 15 to 20 percent of face value of loan being sold.

14. As routine rectifying measures, the easiest way out for a bank is to rollover a doubtful or a bad loan before it becomes nonperforming; including original loan amount due, plus interest charges, all into a new loan with a relief period, a temporary moratorium on repayments, and thus be able to carry the loan on its books, until repayments come due. If such rollovers turn out to be ineffective and non-performance persists, often bank extend new loans to the borrower, over and above loans rolled over, or loans already impaired, in the hope that client's business may revive and the client may recover enough to payoff both impaired loan as well as new loan. If not, then it is a losing proposition altogether. This is where bank's experience with business cycle of nonperforming client is critical.

15. This new exposure is called ***involuntary lending***. It occurs when a lender is forced to extend a loan bypassing its routine rules and procedures of lending. Such a predicament may arise if the lender's exposure to the borrower is fairly extensive at times of non-performance on existing obligations, and at the same time the possibility that the borrower may become insolvent if the loan is not extended. The lender then is faced with the unpleasant choice of compromising its lending standards to keep the borrower afloat, or the disastrous choice of a major loan loss implied in the denial of fresh loans owing to the bankers' exposure; if indeed the borrower were to become insolvent or bankrupt. Some bankers consider this type of loan as throwing away good money after bad money; while others regard it risky but potentially a rewarding action if indeed the borrower is able to pull out of imminent insolvency.

16. Involuntary lending, however, is a phenomenon better understood in case of large and influential borrowers such as major corporation or involuntary lending enterprises of strategic significance for the economy as a whole, whose failure may have a serious country-wide economic or financial impact, forcing the government to arrange syndicated loans on terms and conditions considered out-of-routine. Involuntary lending may also occur in case of sovereign borrowers with massive exposure to commercial loans in foreign currencies extended by multinational banks or even ordinary banks where insolvency is not the issue.

17. Such a situation arises if foreign liquidity crunch of temporary or recurring nature needs to be funded through syndicated loans, again, on terms and conditions out-of-routine arranged under umbrella of debt rescheduling, or under a multi-bank agreement with new net exposure to the sovereign borrower, which in effect is the amount of involuntary lending.

18. When routine measures are exhausted, banks slide into questionable practices to stave off losses, followed by illiquidity, erosion of equity and insolvency, but not strictly in that order. The bank may re-bundle default payments into fresh loans on the book, although there is no fresh disbursement of funds. It sounds a feasible option, but often it degenerates into ***'ever-greening'*** of accounts; a bad banking procedure, bordering on fraudulent activities. What are the limits where a genuine rollover may be helpful and where ever-greening begins is a judgment call in banking business. The issue is how large non-performing loans have to be to pose a threat to profitability and solvency of banks; or what proportion of loan portfolio in NPLs is tolerable before it becomes a threat to the lending bank? There are no guidelines as to what levels of NPLs in total amount of loans outstanding are acceptable; rules and regulations of classification and provisioning aside.

19. If NPLs degenerate into loan loss, this loss has to be set against income of the bank and if that turns out to be insufficient in any given year, then these NPLs have to be set off against equity of the bank. As long as NPLs are manageable through in-house remedies to keep the loan *current*, such as enhanced grace period as part of loan restructuring, recall of third party guarantees if any, or even partial write-offs, the non-performing loans do not pose a serious threat to solvency of the creditor bank, though in the process, its profitability is compromised. By the time the stage is reached to seek formal recourse to collateral through courts and liquidation, it is too late. The loan has turned into a loss and it has to be charged against profit; if profits are not enough, then it has to be charged against net assets on balance sheet of the bank; the equity of the bank.

NPLs in Pakistan

20. Emergence of NPLs in banking system of Pakistan is rather an enduring phenomenon. It never seems to subside, though it goes through its own cycles. In the days of nationalized banking system, NPLs began building up and by early 1990s reached record levels, raising the specter of system level insolvency and bankruptcy of major financial institutions, be nationalized banks or the DFIs. This plunged the banking system into a severe financial distress bordering on crisis. There were no bank failures though; because banks were state owned and their obligations were liabilities of the government of Pakistan, or sovereign liabilities.

21. Over the past centuries, sovereigns are known to have gone bankrupt. They lost their throne and were lucky if they did not loose their head. Aurangzeb was one of them. He kept fighting wars for 51 years of his rule with borrowed money from Hindu *sahukars* of his time, and bankrupted Mughal empire in the process. The same fate befell Ottomon sultans of Turkey who had gone bankrupt by late 19th century. Their empires were easy picking, but emperor was never declared bankrupt; nobody could dare do so. There are no more imperials around, give and take a few, but governments have not been declared in default either. Recently the US came very close to being ***technically*** insolvent in the summer of 2011, but a compromise was reached that took away the gleam off gilt-edged US securities and plunged the markets, in new rounds of downward spiral; the default was averted.

22. In Pakistan in the late 1990s, nearly one third of loan portfolio of banking system was impaired by non-performance. Banking industry maintained the myth of ***infected loans*** as though the disease can be cured. Bad loans commonly were referred to as ***stuck-up*** loans, as though some kind of rescue could be organized to drag these loans out of non-performance and restore their financial viability. These euphemisms still prevail and are much in use, effectively obfuscating real financial state of loan portfolio. NPLs are just not infected loans; they could be deadly.

23. The total amount of NPLs were Rs 240 billion in 2000, amounting to about 22 percent of ***gross banking system credit***, which is equal to ***net loans*** plus provisioning. *(Data Set 5.1a, p-218)* Thereafter NPLs began to decline slowly but steadily until 2006 and were Rs 173 billion or 6.6 percent of banking system credit, the lowest they have been over the past decade. Thereafter, NPLs began to build up fast, rising to Rs 494 billion by end of the decade and were rising faster. During the first half of the decade, NPLs *declined* at an average annual rate of about 6 percent; but during the second half of the decade, NPLs increased at an average annual rate of about 23 percent. This was a complete reversal of trends concerning NPLs.

24. As a result, ***net loans*** of banking system, namely gross loans less NPLs, rose faster than gross banking credit. Net loans were an estimated Rs 863 billion in CY00 and increased to Rs 1989 billion by CY05 at an average annual rate of 18.2 percent. Thereafter growth of ***net loans*** slowed down to 11 percent during the second half of the decade owing to rising NPLs and the amount of net loans increased to Rs 3348 billion by CY10. Likewise, the proportion of NPLs to gross banking credit declined from about 22 percent in CY00 to about 7 percent by CY06. This was quite a decent proportion for banking system of a developing country like Pakistan because NPLs of five

to six percent of total banking loans outstanding are commonplace in developing countries. After 2006, this proportion rose back to about 13 percent by 2010 owing to fast increase in NPLs. It should be noted that the data on NPLs presented here is calendar year data. It does not correspond with fiscal year data. This does not materially affect overall analysis, nor does it violate tenor of the results since these results are based on a long term review spanning a decade, but short term conclusions from this data will be inappropriate. The short term developments are adequately covered in SBP's Quarterly Performance Reports of banking system.

Provisioning and NPLs

25. There are several implications of rising NPLs and provisioning for financial soundness and solvency of banking system. Briefly, the amount of ***provisioning*** for bad loans, as required by banking regulatory rules, was an estimated Rs 132 billion in CY00 and stayed there for the first half of the decade because NPLs did not rise. Thereafter, as NPLs rose, there was a substantial increase in provisioning to Rs 351 billion by CY10, including loan write-offs. *(Data Set 5.1a, p-218)* These levels of provisioning were observed for the first time in the post reform era and had significant impact on asset quality of banking system discussed in Chapter 13.

26. As provisioning levels increased, ***net NPLs*** declined from Rs 108 billion in 2000 to Rs 45 billion in 2005, and further to Rs 30 billion in 2007, where net NPLs are estimated as total non-performing loans, *less* the amount of provisioning set aside. For a typical bank, the amount of net NPLs is critical because it is the left over of bad loans after provisioning has been done from balance sheet resources. Eventually the remaining balance of NPLs has to be provisioned or taken off the books in later years, but there is no reprieve from it. It is a test of how the banking system is coping with this burden. In line with these developments, net NPLs as proportion of ***net loans*** also declined from 10 percent in 2000 to 2.1 percent by CY05, where net loans are defined as total stock of banking credit outstanding in the loan portfolio less provisioning. This ratio of net NPLs to net loans kept declining and was as low as one percent by 2007, though it began to rise again and was 4.1 percent in 2010 in spite of increasingly large amounts of provisioning that had never been seen before.

27. Much of provisioning is done for ***loan loss*** category, not ***doubtful*** or ***substandard*** category of loans outstanding, though the share of these two categories is slowly rising relative to the share of loan loss category. As a result, asset quality ratios of banking system have suffered in recent years. This is after a massive write-off of loans amounting to Rs 193 billion during 1997-2009. The decline in NPLs during 2000 and 2006 was not so much because banks recovered their sick loans; rather it now appears it was because of write-offs. There is not much new from the past patterns. We are back to the observation made at the start of this section that NPLs in Pakistan are an enduring phenomenon.

28. Provisioning for NPLs adds to ***banking intermediation cost***, an issue that has stuck with the banking system for some time and is unlikely to fade away. Intermediation costs excluding cost of provisioning declined as discussed in Chapter 13, mainly because banks were able to cap growth of administrative expenses after massive downsizing. Because of declining NPLs during CY01-06 and comfortable levels of provisioning, the proportion of provisioned NPLs rose from 55 percent in CY01 to about 86 percent in CY07. This is ***coverage ratio of NPLs*** indicating ability of banking system to absorb loan losses when the time comes to take them off balance sheet. The coverage ratio improved during first half of the decade; though during last three years of the decade, it pulled back to about 71 percent. Still, it is a fairly high compared to what it was earlier.

29. Hence, solvency of banking system is not the concern as it was earlier; it is the profitability of banking system that has been compromised and their stability may be at stake. For same reasons resolution of problem banks is no longer a pressing issue that it was during the 1990s when a large part of the banking system was in financial distress. By middle of the decade there were only three problem banks and they did not pose a systemic threat. Private banks did impose a much tighter discipline on lending practices to prevent loan defaults, but how far will it be contained to stem bleeding of the banking system remains a concern. Bank wide data on NPLs is not available, but the number of banks affected by NPLs is not pervasive. The top 5 banks have roughly 12 percent of total NPLs, but among themselves they have more than half of total banking credit portfolio; proportionately their burden of NPLs is not that large. These top 5 banks are not suffering from unusual burden of NPLs.

30. A decomposition of NPLs by borrowing sectors reflects similar patterns of distribution as observed with regard to sectoral exposure of bank lending. To recapitulate, traditionally, by far the largest group of borrowers belongs

to corporate manufacturing sector with close to 50 percent of total banking system credit to private sector, of which slightly less than half is in textile sector. Barring annual variations, this pattern has sustained through most of the decade. Similarly, the corporate sector has the largest amount of NPLs, as well as the largest proportion of total NPLs, but with an important caveat. That is, the ***amount of NPLs*** of corporate sector is high, but the ***proportion of NPLs*** is about 12 to 13 percent of total loans outstanding against corporate sector, considerably lower than similar proportion of SMEs of about 29 percent. For agriculture sector this proportion is 18 percent; for housing loans 21 percent; for consumer financing 16 percent. The lowest proportion is in commodity financing at less than one percent while holding the second largest portfolio of banking credit, after corporate sector. This explains why banks prefer trade financing over any other type of credit.

31. This process continued during first half of decade with privatization of two largest nationalized banks. The government cleaned up balance sheet of nationalized banks, reorganized and restructured these institutions and absorbed the costs from external borrowings earmarked for financial reforms and restructuring. A public asset management company, CIRC, was set up in 2000 to handle part of bad loans jettisoned from the portfolio of newly privatized banks. It happened just not in Pakistan, rather in several developing countries. A similar process was going on in India virtually at the same time; a leaf turn coincidence of all.

32. There have been several recovery drives over the past years. The cost of provisioning and fresh equity contributions were recycled into balance sheets of financial institutions, raising their costs of operations and showing up in high intermediation costs. Since 75 percent of NPLs fall in the loss category, SBP issued new guidelines for ***write-offs*** of irrecoverable loans which enabled the banks to settle a good part of NPLs. It was a welcome reprieve granted to defaulters but has come back full circle and is seen in current times as a controversial move. A partial tally of write-offs and equity replenishment at system level has been made from time to time; but a full tally has not appeared. The banks recovered some problem loans; turned a portion of NPLs into performing loans and borrowers received a partial waiver in their outstanding liabilities.

33. During first half of the decade, borrower performance did improve with better ***due diligence*** on the part of new private owners of banks. Monitoring of borrower performance also became routine for new banks including foreing banks, all facing erosion of their equity base if non-performance was not contained. Some banks became complacent and began

lending for high end consumerism like financing leased vehicles and introduced credit cards. It appeared that worst was over; leading indicators showed a swift turnaround. It was not to be, because the fundamentals underlying NPLs had not shifted commensurately. The levels of NPLs do not turn around so quickly in a systemic fashion, especially where bailout and loan write-offs are involved regardless of provisioning. This is well documented from comparative experiences since early 1980s through 1990s. Much of decline in NPLs occurred not because borrowers woke up to their obligations and began performing in erstwhile manner. Nor it happened because stuck-up loans were pulled out of the rut and began rolling, rather because of massive loan write-offs, bailouts, cleaning up of balance sheets of nationalized financial institutions.

34. Systemic weaknesses of lending had not been eliminated. They began to resurface in the wake of stock market collapse of 2008. It hit the banking system hard because much capitalization of corporate sector was wiped out as share prices tumbled, exposing overextended corporations to financial pressures. Corporate NPLs began to rise during second half of the decade. Alongwith it, provisioning burden increased from Rs 184 billion in 2007 to about Rs 390 billion by end of 2010. Net loans did manage to rise because of sustained increase in banking credit during these years, but at a slow rate of about 10 percent per year.

35. In practice, the first impact of ***management of NPLs*** is on profitability owing to increased provisioning required. Banks may carry bad loans on their books, but required provisioning amounts have to be funded from profits. When the time comes to take off bad loans from the books of accounts, or the loan portfolio, it has to be set off against provisions already made. If provisions fall short, then bad loan has to be written off against banks equity, consisting of shareholders capital, reserves, revalued assets or unappropriated profits or retained earnings. Bank reserves are deposited with SBP as part of statutory reserve requirements. Those reserves can not be touched to do the write-off.

36. If there are any prudential reserves over and above required reserves, loan write–off may be done against prudential reserves. If these reserves fall short, then retained earnings may be used, but revalued assets can not normally be used because those are unrealizable assets consisting of office buildings, or other real estate owned by the bank. Hence, the brunt of loan write-off not covered from provisions, retained earnings or revalued assets, falls upon share holder's capital. A simple exercise of assessing extent of feasible write-off will show that if in current times a good part of existing net

NPLs are to be written-off, it will significantly impair shareholder's funds. Banks, therefore, resist write-off until all possible recourse for recovery of bad loans are exhausted.

37. With the reduction in NPLs of the banking system from an all time high of Rs 240 billion in early years, solvency risk was mitigated, but NPLs remained a drag on the profitability of banks and were the main source of financial distress. This distress never melted away completely. During the early phase of privatized banking, burden of NPLs did not appear to be a systemic risk to banking system as it was at the start of reforms. It re-emerged during the second half of the decade. Quite clearly, the decline in NPLs during 2000 and 2006 was not so much because banks recovered their sick loans; rather it now appears it was because of write-offs. Default practices have not evaporated, and size of NPLs has shown new dimension of growth. So, what is new from the past patterns? We are back to the observation made at the start of this section that NPLs in Pakistan are an enduring phenomenon.

Banking System Credit – *A Commentary*

38. A few comments are in order as a rejoinder to common perceptions of what banking business is and how good it is in current times. Often questions are raised as to how well banking credit system has served needs of the country, and how well it has done? Likewise, in a technocratic sense, the issue is how well banking system has served credit needs of the economy, and in what ways it has promoted economic growth. In the same vein, questions keep emerging how far banks have been socially responsible, given that there are large defaults in the system. After all, it is public money that banks are lending.

39. Answers to these questions are to be found in the literature but those will take us into a lengthy digression. Overall, banking system in Pakistan today in its practices is not much different from those prevailing elsewhere, be they advanced countries or developing ones. It performs as well as possibly it can given the societal milieu it is operating within and serving those who are creditworthy even on diluted criteria. Banking system in its routine is not to be viewed as vanguard of social change in the context of financial accountability and integrity. It operates within the parameters as they prevail. In Pakistan it has done fairly well by current standards.

40. An intriguing part of this perception has to do with the last element cited above; namely integrity. That bad banking practices compromise integrity is well known. Most bankers begin as good bankers, but along the way, when banking operations go awry, they begin to indulge in questionable practices. The transition from good banking practices to bad ones begins with efforts to meet corporate targets of garnering a larger share of credit market to become a big banker. Some get carried away, and begin to compromise and cut corners in evaluation of creditworthiness. The loans are made and targets are met; but in the process, a foundation is laid for emergence of NPLs down the road. Fulfilling credit targets and earning bonuses becomes an obsession and is the root cause of bad banking. The workplace rivalries, competition for promotions and aggressiveness of bankers does the rest.

41. In the process, having saddled their bank with less than business worthy loans, the bankers begins the search to keep afloat the client before delayed payments appear on the loan repayment roster. One typical practice is to get other bankers extend fresh loans on top of those already extended. Most good borrowers are gratified of the fresh loans they have received and often they succeed in pulling out of their financial predicament. The shady borrower could not have asked for a better deal; they want just the opposite; they want more bail out than they have received and then slam the door shut.

42. At this stage a good banker would pull out at a loss. Those who do not, they begin ever-greening coustomer accounts with receivables which are unlikely to materialize, but as long as they can be lodged in financial statements of their clients, without violating rules and covenants of reporting, it is done. That is the start of a bad banker. Senior management most often is not aware of these ongoing until it is too late to stem financial hemorrhaging that ensues in the wake of bad loans.

43. This is what happened in the US concerning sub-prime mortgage lending and that was the start. It was compounded by securitized investing of sub-prime loans by large financial institutions who in turn were backed by insurance, thus involving layers of investors and insurers, all stacked up on the house of cards of very questionable retail mortgage loans. When the sub-prime lending collapsed, it led to a financial crisis of proportions never seen before. Bad banking practices at retail lending were the root cause of the crisis as it was in other crises as well that have emerged in the past. Bad banking practices have to be identified and rooted out of the banking system. Has this been done in Pakistan? Perhaps so, in the privatized banking that prevails now, though there is no foolproof system.

44. There is more to this anecdotal summary of how bad banking practices begin. It can not answer why defaults emerge, but it shows what is the role of banker in it and how solvency of bank gets endangered. If the malaise is widespread, this is where financial crisis germinate, and when they burst on the scene, by then most is lost, if not all. At that point, even largest banking institutions may end up being insolvent, and so fast that it does not leave much time or room to maneuver. In a microcosm, the beginnings of financial crises are to be found in bad banking practices in some nook or cranny of credit system. Can the regulatory system spot it; the answer is hardly ever so. The regulators are too far removed from the scene of bad banking practices.

Banking System Credit – *Some Issues*

45. The major issue concerning dynamics of credit system is whether increase of banking credit witnessed in recent years can be sustained, and if so, does it represent an exception to the trend, or is it the vanguard of a structural change in bank lending that was the expected outcome of a decade long financial reforms and dissipation of financial repression. There is a mounting evidence of a turnaround in the operations of financial system buoyed by a strong economic revival, restoration of financial flows and monetary stability. Annual growth of credit in a year or two, however extraordinary though it may be, does not diminish the system level concerns like sustainability of credit patterns, financial strength, profitability and solvency of financial institutions, defaults and overhang of NPLs, capability to handle systemic risk and contribution to economic development and poverty alleviation.

46. ***First,*** the system of ***overdraft lending*** is preponderant with short term maturities, and there is not much of term lending, specially after the demise of DFIs with the exception of ZTBL and HBFC. In other words, there is hardly much term transformation in the system. That is, the banks are keen to get hold of long term deposits, after having being sidelined by NSS instruments; but they are not keen to enter into contractual term lending. One could argue that overdraft lending with variable interest rates is effectively term lending given the perpetual roll-over of loan maturities at call, but that is stretching the point. The reason is for businesses strapped for cash flow, borrowing through overdrafts has higher repayment burden than it is in contractual term lending with or without variable interest rates.

47. Hence, term lending is more conducive for promoting longer term investment and business commitments for balancing, modernization and rehabilitation (BMR) variety. This is the same rationale that underpinned the DFIs' era in Pakistan in the 1950s and 1960s and also in other developing countries, though that is a separate and controversial topic. Banks have not stepped in; at least there is no data on maturity structure of banking credit to conclude otherwise. Therefore, a roll-over of a line of credit is a poor substitute of contractual term lending. This bias against term lending shows up in sectoral credit. Those sectors which are in need of term loans, their borrowing rates are generally higher than others.

48. ***Second,*** overdraft lending creates a bias in favor of large, well-heeled corporate borrowers with firmly established businesses and an impeccable track record – the ***premium borrowers*** with substantial cash flow potential. Most banks keep chasing this small group of premium borrowers to extend large loans, thereby keeping their banking risks and cost of intermediation fairly low and hence are averse to diversify their client base once they have garnered their share of premium borrowers.

49. Such being the frontline business preference of bankers, small and struggling new borrowers are left high and dry. This is why SME lending, or micro-credit has not made significant inroads in the mainline banking system, not only in Pakistan but in many developing countries. This has forced authorities to revive SME bank, and offer incentives for establishment of micro-finance institutions and to revive housing finance. Lately, banks have begun to extend these loans, but there still is a large interest premium that borrowers have to pay for house building loans.

50. ***Third,*** the spectacular growth of banking credit over the past years has also been accompanied by rising risk level in the loan portfolio. The proportion of risk based assets has grown. How well these risks are managed has implications for soundness of banking system that needs to be explored further than has been possible here.

51. ***Fourth,*** there remains ***sectoral concentration*** of banking credit which has always persisted both in the pre-reform and post reform period. Textile sector is the major borrower as traditionally it has been, and its share in total banking system credit has ranged between 25-31 percent, followed by consumer credit whose share was about 10 percent. In contrast, share of agriculture sector credit has been less than 10 percent; the share of construction and real estate credit a negligible 2 percent, and the share of trade credit to exports and imports of about 8 percent in recent years.

52. ***Fifth,*** there is ***loan concentration*** as well though it has diminished somewhat. If size of accounts by proxy denotes small or large client, the amount of bank credit advanced to large size accounts of one million rupees or more, constitutes nearly 79 percent the total banking credit. In contrast, the proportion of loans advanced to accounts of rupees fifty thousand or less is a miniscule, only about one percent of banking system credit. Since larger loans are typically advanced to large businesses or corporations, by implication, the amount of banking credit extended to medium and small borrowers is fairly low because bankers prefer lower risks and lower costs of banking of large size. In this regard lending practices of banks in Pakistan are similar to those in other countries.

53. ***Sixth,*** the volatile growth of consumer credit and credit card balances outstanding is not a healthy aspect, although it is being touted as an important source of consumer spending resulting into high economic growth as well as diversification of banking credit. Diversification it may be in its own way, but an engine of growth it simply can not be except for installment credit portion, because the proportion of consumer loans in total banking credit is currently about 8 per cent at best. A major incentive for banks to push for expansion of credit card balances are exorbitantly high interest rates of 30 percent or more on annualized basis.

54. This is very profitable for banks at institutional level, because the first wave of coustomers are premium borrowers of their own; but it is not healthy for banking system. The reasons are swings in their portfolio. To avoid lending risks, bankers prefer to hold government securities over lending, even if rates of return are lower. If not indulging into this type of investing, bankers would run to the other extreme of lending through credit cards at exorbitant rates whose risks are minimal in the first wave, but will catch up sooner or later. Such a fast expansion in consumer finance is to be moderated in a society with historically low levels of savings, credit concentration in urban areas, rudimentary instruments for credit risk mitigation.

55. In-spite of attention recently devoted to promote housing finance, and some inroads made by a few commercial banks in mortgage lending, the proportion of housing building finance remains an insignificant fraction at only about 2 percent of total commercial bank credit. Commercial banks have recently begun to look at housing finance as a potential growth area, but it is beset by two major issues; the prime one concerns property collateral tendered is bankable; and the second one is the mismatch in the maturity structure of bank funding and house building loans of long term maturities.

Gross disbursements of housing loans currently is about 3 billion, originating from HBFC portfolio. Housing finance remains on the fringes of lending by commercial banks; mortgage interest rates are very high, and out of line with market fundamentals.

56. ***Seventh,*** in bank lending practices, priority sectors remain neglected. Their needs of credit have not been met. The remnants of subsidized interest rate based lending has not delivered either, even though Pakistan has always been on this road map for nearly half a century. Tall claims have been made by lending institutions, mostly development finance institutions (DFIs), but needs of priority sector are as neglected today as they were in the past. Agricultural credit has not delivered to small and medium sized farmers, though it has taken more than adequate care of the needs of large farmers. Similarly, lending to export industries, specially the small and medium industries remains as inadequate as it ever was, even though there is a great deal of substantial evidence that several developing countries have successfully followed this route.

Data Set 5.4 — Returns / Interest Rates on Banking Advances — *End Period*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Interest Based		*Nominal Weighted Average Interest Rates on Interest Bearing Advances, All Banks*									
All Banks, *June*	**13.3**	**13.1**	**13.0**	**11.9**	***8.4***	**7.0**	**9.7**	**11.3**	**12.5**	**13.5**	**12.2**
All Banks, *December*	**13.1**	**13.0**	**13.0**	**9.0**	***5.6***	**8.2**	**11.0**	**11.6**	**13.6**	**12.7**	**12.4**
Precious Metals	11.5	11.0	8.1	10.6	10.6	5.6	11.5	11.4	14.6	14.1	14.7
Stocks, Securities	13.6	11.4	11.1	7.6	6.4	8.0	11.7	10.4	13.9	11.6	13.4
Merchandise	12.9	13.3	13.5	7.2	6.7	5.8	9.4	9.8	13.8	12.4	11.7
Machinery	13.8	13.8	13.7	12.0	4.7	7.5	9.7	11.1	12.1	12.8	12.0
Real Estate	12.9	12.5	12.6	12.2	7.4	8.5	11.9	12.6	13.6	13.7	12.5
Financial	13.5	14.7	13.8	7.7	7.8	6.7	10.1	10.0	16.6	12.4	13.5
Others	12.9	12.4	12.4	7.0	4.5	9.8	11.4	11.9	13.7	12.3	12.9
General Liquidity	9.0	12.9	15.0	13.8	13.9	13.3	10.3	8.4	10.1	12.2	13.9
Agriculture (ADBP)	12.5	13.5	14.0	14.0	14.0	14.0	14.0	14.0	9.0	9.0	9.0
Export Finance	7.0	13.0	8.0	8.0	10.5	8.5	8.0	5.5	8.0	9.0	7.5
SBFC, Housing Rates	11.0	18.0	18.0	16.0	16.0	16.0	12.5	12.5	15.5	16.5	16.5
	Nominal Weighted Average Rates of Return on Islamic Financing - Advances, All Banks										
Islamic Financing, *June*	**13.5**	**13.7**	**13.2**	**9.2**	**7.2**	**8.9**	**10.7**	**11.6**	**12.5**	**14.3**	**13.7**
December	**13.6**	**13.5**	**12.9**	**7.6**	**7.1**	**10.3**	**11.1**	**11.6**	**14.7**	**13.2**	**13.4**
Precious Metals	11.2	8.0	9.2	10.2	9.0	7.7	10.1	9.7	15.0	14.2	15.2
Stocks, Securities	13.5	13.5	13.1	5.2	7.2	9.9	10.6	11.3	15.8	13.6	13.8
Merchandise	13.5	13.1	12.4	5.8	7.9	9.7	10.0	10.3	14.4	12.1	13.0
Machinery	14.5	14.1	13.4	7.7	7.8	9.3	10.6	10.8	14.6	12.7	13.1
Real Estate	13.0	13.5	13.2	10.1	10.2	10.9	11.2	11.8	13.5	12.7	12.2
Financial	13.1	13.5	13.3	6.4	8.2	9.5	9.7	10.6	15.0	11.9	12.8
Others	14.1	13.7	13.0	8.5	10.2	11.3	12.5	12.9	15.9	14.9	14.6
Discount Rate - SBP	11.0	11.0-14.0	13.0-9.0	9.0-7.5	7.5	7.5-9.0	9.0	9.0-9.5	9.5-10-12	12.0-14.0	14.0
SaF Dat Set	Sources: SBP; Banking Statistics of Pakistan, various issues , Stattistical Bulletin										

Chapter 8: Issues of Priority Sector Finance - *Pakistan*

Thematics

Priority Sector Finance

Objectives, Rationale
Prime *vs* Marginal Borrowers - Characterization
Directed Credit System; Allocation by Fiat
Role of DFIs – *Comparative and Historical*
Role of Banking System in Post Reform Era
Priority Sector Finance - Current Status
Instruments and Mechanisms
Performance and Prognosis - An Evaluation

Status of Sectoral Finance - Pakistan

SMEs, SMEDA
Housing, HBFC or the Banking System
Exports, SBP's Refinancing
Agriculture, ZTBL; Farmers vs Agro Industries
Rural, Cooperative Finance Failure
Microfinance; Khushhali Bank, Others
Infrastructure; Banking System, IFIs

Chapter 8: Priority Sector Finance

Section 1: Objectives, Rationale

1. Priority sector financing is interpreted as enhanced availability and use of financial system credit for investment and working capital needs of businesses engaged in lines of activities designated as ***priority sectors*** in view of their contribution to the objectives of growth, broad based employment generation, regional growth and poverty alleviation. These are societal objectives, which may or may not be adequately served by market based financing narrowly based on profitability. The debate is long over as to what are priority sectors and why such designation is accorded to them; who are the neglected segments of borrowers and why their access to formal credit is essential.

2. For purposes of this review, priority sectors are identified as small and medium enterprises ***(SMEs)*** which cut across all sectors and hence constitute the first tier, followed by those sectors of the economy which have the largest potential of impact such as ***housing*** and ***agriculture,*** and ***export*** industries. Occasionally to this list, ***rural finance*** and ***microfinance*** is added for their impact on socio-economic objectives, like employment generation, empowerment and poverty alleviation, and alongwith it some impact on the rural and urban poor, not so much on broad based growth of the economy, as the other priority sectors. Their size of operations is minuscule relative to others sectors. ***Infrastructure*** is a new candidate for such designation but it is not in the same league as others, because infrastructure credits are meant for mainstream large borrowers who have access to banking credit or creditworthiness. Therefore, the issue is not the access, rather the size of borrowing which depends on their borrowing capacity and the type of infrastructure investment. These borrowers are not pre-empted from institutional finance the way small borrowers are.

3. The ***objectives*** and rationale for providing support to priority sectors through financing are as enumerated above; namely broad based economic growth and employment generation, regional growth and poverty alleviation.. To this list is added enhancing technological growth. Past

experience has shown that priority sector promote adoption of modern technology at the bootstraps, beginning at rudimentary levels and help to disseminate new ideas and new techniques that would not occur otherwise. They germinate business acumen and enterpreneurship at grass root levels. Some SMEs of today may end up being large businesses no matter how few are the successful ones at tail end of the process. These objectives are standard fare in texts on development economics and are well known.

4. As for ***mechanisms,*** financing has always been in the vanguard of efforts to promote priority sectors with focus on small business enterprises. The leading mechanism of financing has been institutional credit among developing counties; but the similar financing facilities also exist in advanced countries. The postwar experience has shown that preferential credit plays a central role in promoting priority sector growth, but from here the approaches to priority sector finance and its mechanisms diverge. In the earlier stages, preferential credit got mixed up with subsidized credit extended by specialized institutions to targeted groups in their operations. The sordid experience with subsidized credit and its abuses ended up in the demise of specialized institutions and led back to reliance upon financial system credit at large. Pakistan's experience has been similar.

5. There is a rich literature on these topics in annals of development finance but a review of this literature is not possible here. There is a consensus that priority sectors and their borrowers are neglected by credit system, though there is hardly any dispute on the central tenet that these segments of economy dominated by SMEs are the largest; their presence is palpable, permeating every corner be it a developing country or developed one. Enhanced participation of these segments in formal credit finance in developing countries is a key for future development. They are operating on fringes but their inclusion in the mainstream of economy and their empowerment is essential for a wider distribution of benefits of economic growth. This would facilitate spread of technological change and transformation of producing sectors as it has occurred among more successful developing countries over the past decades.

6. Priority sector development has come to be identified with availability of development finance; and from here it has been an easy slide towards subsidized financing. Priority sector financing concerns a larger number of borrowers who are marginalized by credit system in formal credit finance owing to weak creditworthiness; hence they are also known as ***marginal borrowers***. Within this sub-group, small borrower are the largest in number

who do not share in banking credit flows in any meaningful way. Their participation in mainstream of banking and financial system remains problematic in current times for the same old reasons that led to creation of development finance institutions (DFIs) based sectoral finance in the first place. These issues are non-availability of formal credit to small and medium enterprise borrowers across sectors and reluctance of banks to extend credit due to higher risks of default and high costs of lending to marginal borrowers.

7. Consider the following. Currently, a miniscule proportion of ***all account holders*** of banking system in Pakistan, about 0.8 percent, including businesses and households, are large borrowers defined as those with accounts of Rs 7 million or more. We need to identify only business borrowers in this group. Pending that, if we interpret the size of account as a proxy for large and small and if this proxy were to hold, banking credit availed by this group of large account holders constitutes nearly 79 percent of total banking credit in recent years. At the other end of the spectrum, small borrowers of all types, defined as those with accounts of up to Rs 40,000, constitute 39 percent of all borrowers; and their share is hardly one percent in total banking credit. The next category of borrowers with accounts of Rs 40,000 to Rs 100,000 constitute about 27 percent of all borrowers, but account for only 2.6 percent of total banking credit.
(see Table 3.8, Statistical Bulletin, December 2010, SBP)

8. Thus, these two groups of ***all account holders*** are at the lowest rung of the ladder. Together, they are nearly two thirds of all borrowers of banking system; but their combined share is no more than 3.4 percent of total banking credit. Correspondingly, borrowers with account size of Rs 100,000 and above received lion's share of banking credit, and their share is estimated at 96.6 percent of total banking credit. Clearly, banking system is geared far more to cater needs of large borrowers than small borrowers. This holds true not only in developing countries, but also in advanced countries; it is observable in many countries.

9. This was the borrower profile and banking system lending in 2010; but a similar exercise for early years of the decade confirms that this pattern has prevailed for a long time. Hence, any strategy devised to chart out future directions of financial system credit has to contend with this ***lopsided structure*** of bank lending given the potential of small borrowers in these sectors. Cost of lending to SME or microfinance borrowers are high but manageable, and they have a reasonable record of loan performance if the

banks have viable outreach mechanisms and a motivated staff. Export financing is banking system based; and there is a support mechanism, the export refinancing scheme of SBP, which needs further adjustment to reach new exporters without pre-empting established large exporters.

10. A part of credit destined for priority sector extended by banking system and NBFIs was refinanced by SBP under its refinancing scheme designed to alleviate costs of lending hence an inducement for priority sector credit growth. SBP refinancing was Rs 195 billion in FY00, and rose to Rs 325 billion by FY10, about 9 percent of banking credit. This is ***stock*** figure, the amount outstanding for priority sectors including borrowings of all kinds of enterprises, not just SMEs or exporting. If we look at ***flows***, total amount of credit extended by SBP is about Rs 95 billion, over the entire decade of 2000s all told, destined for priority sectors.

11. After experimenting with modes of financing, in Pakistan over the past five decades, we have come back full circle to recognize that reliance on specialized institutions and provision of subsidized finance is not the way to proceed; instead priority sector financing has to be opened up to larger mechanisms within financial system. This experience has shown that within financial system, focus ought to be on banking system credit, because it is the largest component as provider of credit.

12. In Pakistan, most development finance institutions (DFIs) are no longer operational and are not engaged in priority sector lending, except for HBFC for housing finance and ZTBL *(Zarai Traqiati Bank Ltd)* for agriculture credit financing. On the roster of banks, IDB and SME are listed, but both these banks are no longer operational, though efforts are underway to revive SME Bank. There are no other NBFIs engaged in housing finance or agriculture credit or priority sector financing of any variety. There are six microbanks, as a group, their credit financing is a negligible proportion of banking system credit as discussed before.

13. Hence, for priority sector credit finance, reliance has to be placed on banking system, not the financial system at large. Banking system is the largest provider of formal credit to private sector enterprises. Priority sector financing in its wider context is seen as an extension of banking system credit to those borrowers in designated priority sectors who do not have meaningful access to formal credit for a variety of reasons. If left to its own devices, banking system is not prepared to engaged in priority sector finance. Currently, the proportion of banking system credit to these sectors is fairly small as already shown above, regardless of what SBP does on its part

through refinancing facility for priority sectors. A good part is used to finance credit needs of export industries through banking system; much the same way as EXIM banks do in most other countries, advanced or developing ones, though on a much lower scale than their operations.

14. What transpired in the past decades concerning sectoral finance, priority or otherwise, needs to be reviewed because it has a bearing on current state of financing and support for priority sector. Starting from scratch and having no industrial or mercantile base of its won, since early days Pakistan pursued these goals riveted around nurturing indigenous enterprises. Most enterprises began their life as medium size businesses supported by the state and accorded protection for being the classic form of infant industries.

15. Since banking system was not geared for catering to the needs of these enterprises, DFIs were established; though they ended up lending to large enterprises established in public sector, and to textiles and jute mills established in the private sector. The conventional wisdom of those days called for import substitution not exporting, and that turned out to be a dead end. Nonetheless, these were considered strategic industries, because there were none in Pakistan to begin with. These industries spawned a number of medium size engineering industries mostly in private sector. The backward linkages worked as they were supposed to but not forward linkages as they were understood then.

Role of DFIs

16. The role of the DFIs in early industrialization was exemplary and there was a very fast expansion owing to clarity of purpose, objectives and above all integrity of operations. Subsequently, there was an erosion of DFI financed growth of industrial base, owing to upheavals of two wars that country went through during 1965 and 1971, leading to truncation of Pakistan into half. The wars, political turmoil followed by truncations cost DFIs dearly. There was a quick spread of major defaults stemming from losses on investment owing to these upheavals. After the dust has settled, nationalization delivered *coup de grace'* to DFIs, as they lost their entire client base of private sector but got saddled with their liabilities.

17. In nationalized regime, the role of DFIs got diluted. They ended up doling out subsidized credit under mandatory credit targets to borrowers designated by authorities concerned, bereft of any banking or investing

element in their financing decisions. This caused ultimate blow to DFIs; they were reduced to subsist on deteriorating finances of nationalized state enterprises who were run poorly because their management had no enduring stake in their financial solvency. These reversals eventually led to demise of DFIs during 1980s through 1990s. Along with their demise, there ended preoccupation with priority sector finance in Pakistan.

18. DFIs made a salutary contribution in many Asian countries, notably Korea, Malaysia, India and in Latin American countries. As a mechanism of long term investment finance, DFIs performed fairly well. What went wrong was state intervention, often abuse by state apparatus, defaults, some genuine others orchestrated, subsidized interest rates, together with allocation of fuel and electric power at subsidized costs. This bred a syndrome of perpetual infancy among enterprises across various sectors of the economy with scant attention to efficiency or competitiveness. There was an erosion of borrower integrity, and onslaught on enterpreneurship via the system of patronage rather than performance – factors that are ignored in reviews of this period. As a result, Pakistan could not develop a diversified industrial or export base; nor it could find ways to support enterprises with potential for growth.

19. Interest rate subsidies through DFI and banking credit were extended for decades in Pakistan, but there is not much to show in terms of indigenous enterprise growth. The experience in Pakistan as elsewhere has shown that subsidized credit ends up being distributed to mostly well heeled borrowers or influential borrowers who have privileged access to credit, and they pre-empt genuine small and medium size businesses and enterprises, thus defeating the objectives of subsidized credit. This was the genesis of the crisis concerning DFI based priority sector financing.

20. A great deal has been written about downfall of DFIs. Much of it is focused on their degeneration into dysfunctional financial institution, but this is one sided picture focusing on failures. An impression is stamped on the minds that DFIs were flawed from their start. It is true that DFIs ended up being a conduit of state patronage, sectoral allocation by fiat, but they did not start out that way. They were not loss making institutions. Their lending ethos was a leaf taken from experiences and practices of advanced countries in their early stages of industrialization amidst mercantilist traditions of heavily protected industrial structure and foreign trade of classic variety that has continued through present times. In advanced countries whenever the issue of supporting local industries arose, overseas competition was smothered and this practice did not die out.

21. During the postwar era of 1950s and 1960s, the most emulated model of growth was autarchic, state financed and state led in which institutions like DFIs were a natural part. The wisdom of pursuing this paradigm was not questioned. Besides, in those early days, there was nothing inherently wrong with DFI based financing of early industrialization in developing countries who were starting out with hardly any industry of their own and poor resource endowments, a fierce competition, and pressures applied by advanced industrial countries. Oil countries did slightly better, but followed the same path of state funded industrialization which had a mixed success. Some ended up suffering from 'Dutch disease', a syndrome of reliance on oil revenues. Their efforts to diversify their economy through state led and subsidized investing did not succeed much either.

22. The misuse of DFI financing was not confined to Pakistan during the 1970s and 1980s. It also existed in varying degrees among other countries also in early years of their start. It would be inappropriate to name them simply to drive the point home that after unblemished start, DFI based funding ended up discredited because the industrialization it spawned could not withstand onslaught of opening up of global trade and finance. The DFI funded import-substitution led growth lagged behind. The outcome was failure of state enterprises in socialist countries and also among countries who emulated this paradigm; Pakistan included.

23. Most East Asian and Latin American countries, also India, found a way to deploy DFIs in support of their priority sectors. They successfully followed the same path for industrial growth, richly funded with subsidized and prioritized credit. Newly established industries operated while tucked away behind protective structure, targeted transformation and promotion. When these infants grew up, protective shell of these industries was slowly and selectively lifted, prioritized credit flow enhanced instead of being removed, enabling them to expand their exports of basic consumer goods, and subsequently high value exports produced under license and investment of parent companies in advanced countries. In quite a few countries like Korea and subsequently in China, India and Brazil, DFI funded export led industrialization succeeded spectacularly, and no qualms were expressed about role of their DFIs in these countries because they succeeded.

24. These export-led industries learned to carve out a place of their own in international trade via superior competitiveness based on internalizing latest technologies through a massive effort to garner supply contracts from markets of advanced countries. That was the start of the era of open foreign trade regimes and market based financing. More so, the parent industries in

the US, Japan and Europe were looking for new supply sources based on much cheaper costs, provided they met their quality standards. These were two powerful factors leading industrialization during 1980s onwards, and much of it was DFI financed.

25. This confluence of interests of developing and advanced country industrial establishments enabled a foothold to processing and assembly line industries, bolstered by technology transfer, which became the centerpiece of new model of industrial growth in most East Asian countries. Ironically, after the protective shell was discarded, these new industries and their owners in successful developing countries became new champions of open markets, quota eliminations and free trade, endeared by their counterparts in developing countries who had much larger stake in the outcome. This transformation of industrial structure and foreign trade in developing countries who followed export led growth is fascinating one as it has unfolded over the past decades.

26. This growth of consumer goods industries, in part funded by DFIs, with significant cost advantage of emerging exporting countries, caused alarm in importing countries and led to crude attempts to shut off the tap of long term foreign currency credits that were being channeled through DFIs. This coincided with misuse of DFI financing and erosion of their financial strength in countries like Pakistan who did not diversify into export led industrialization. The outcome was a slow but grinding halt of concessionary long term foreign currency credits which were the lifeblood of DFIs; it contributed to their phasing out and eventual demise when their financial distress could not be overcome. The era of DFI based long term prioritized and directed credit is long over; it is bygone. So is the era of administered exchange rates, tariff barriers erected for protection of new industries. Along with it is gone the era of subsidized credit for enterprises; SME or none. This is now the era of openly competitive trade and finance. Where priority sector financing fits into this is difficult to articulate. Hardly much progress is witnessed in this arena, beyond a rehash of the same old arguments that how vital is priority sector financing.

27. These observations have taken us away from the theme of this chapter concerning priority sector financing. This review was needed for a discussion of priority sector financing, specially how did the process culminate into success in several countries but not in Pakistan, and why it is difficult to jumpstart a viable system of priority sector financing. One may argue that the current system is doing well in a privatized market based setting and there is no need to introduce elements in banking credit system that may

jeopardize banking profitability and solvency. This is, however, debatable as mentioned before. Banking system has to be engaged for future growth and profitability which is to originate from new clientele; not form the saturated clientele of a small group of corporate clients perched on the top of the ladder. Most bankers subscribe to this new paradigm.

Section 2: Financing Priority Sectors

1. Promotion of growth of priority sectors has been in the forefront of economic development strategy predicated upon supply of subsidized credit alongwith preferential allocation of foreign exchange, subsidized energy resources and free infrastructure. In current times Pakistan can no longer afford to assist enterprises and businesses in an unfettered manner; nor can it provide protection to infant industries it used to do before. In spite of these limitations on government's role, in this new paradigm of private ownership, floating exchange rates and market based credit finance, the issue is whether growth of indigenous enterprise from bootstraps feasible.

2. The answer is in affirmative. From the angle of availability of credit finance, it centers around mitigation of risks inherent in deepening and diversification of activity based financing activities on business lines, not institution based or targeted client base. The question is can Pakistan emulate the same path countries have followed when it is no longer feasible to nurture industrial growth behind protective barriers with subsidized financing, and selectively open them up as these industries are ready to get a toehold in export markets. This system was best exemplified by duty draw back schemes of 1970s and 1980s in East Asian countries. Excise duty drawback schemes exist in Pakistan, but has benefited exporters in a limited manner. It is, however, not possible to replicate the process across industrial sector which requires large investment in new industrial units, and it is difficult to envisage given strong cross currents of a business environment inimical to long term commitment for investment by even domestic investors not to speak of foreign investors.

3. Financial institutions have shied away from lending to priority sectors largely because of rising NPLs; failure of promotional regime in fostering investor friendly environment; indifference practices of some of those concerned; a lackadaisical performance of 'one window' operation; and the usual economic and financial malaise confronting enterprises new or old,

large or small, alike. These issues have not eroded away in financial system of Pakistan in spite of reforms. The restructured banking system has further marginalized borrowers in those sectors which have potential for faster growth. This should have been anticipated at the demise of directed credit system and truncation of DFIs. Lately, sentiments have resurfaced with some recrimination that demise of DFIs was not such a good tiding after all.

4. But a revival of old style development finance, replete with interest rate subsidies and preferential access is not in the cards. Interest rate based subsidies have been doled out for decades in Pakistan, but there is not much to show for returns on these subsidies in terms of a stronger productive base, regardless of sectoral origins. The experience in Pakistan and other countries has shown that subsidized credit ends up being distributed to mostly well heeled borrowers for whom credit finance is not such an issue. They already have privileged access to credit, and they pre-empt genuine medium size businesses and enterprises, thus defeating the objectives of subsidized credit. Whenever market price or interest rate has been tampered with in the past, it has created more distortions and misallocation of resources through loopholes of allocating mechanism. This could not be done in the days of directed credit regime; much less in market-based credit regime. Private banks can not be ordered to lend on subsidized rates from their own funds; nor can they adopt a distribution mechanism that will ensure subsidized credit is being extended to target groups.

5. The need is to improve ***access*** of non-prime borrowers of the credit system mainly through enhanced enabling environment together with some fine tuning of incentives that would ensure profitability of banking system For, a profitable financial system is ***not incompatible*** with priority sector financing. Interest subsidies do not foster improved ***access*** of marginal borrowers to financial system credit. If anything, interest subsidies have led to a segmentation of clientele, relegating non-prime borrowers to non-bankable borrowers. The banking system on its own will not address issue of fringe borrowers no matter how relevant they are to poverty alleviation. Credit performance is all that matters. As long as credit markets remain reasonably open and interests rates are market determined, banks will focus on their profitability than other aspects. Therefore, unless sectoral finance is as much profitable as other avenues of lending, the banking system is not going to engage in sectoral finance.

SME Finance

6. SMEs are defined as self-owned enterprises or businesses, or owner proprietorships, not incorporated or registered as a public limited liability company. Their size is predicated on their assets, number of workers employed and turnover. Among these, small enterprises are defined as those businesses employing 10 to 35 workers with assets of rupees two million to twenty million. Medium size enterprises are those employing 36 to 100 workers and have assets of about Rs 20 to 40 million. The upper end of SMEs are businesses employing between 100-250 people, with assets of about Rs 30 million to 60 million, and annual sales of Rs 300 million. There is further distinction within these groups between trading companies and manufacturing companies. Generally, for manufacturing companies the upper end threshold is used define SME unit with a maximum of Rs 50 million in assets excluding real estate assets like land and building, and a net turnover not exceeding Rs 300 million per year.

7. This upper end limit is high for a business in Pakistan to be classified as small and medium enterprises. A turnover of Rs 300 million is not a small or medium size business operation. The operational profile of SMEs and their needs of credit finance are well known from cross section estimates of Small and Medium Enterprise Authority (SMEDA) According to these estimates SMEs constitute 47 percent of total economic activity, 44 percent of employment mostly in the industrial centers or urban areas. There are about 80,000 SMEs employing 10 to 100 people, and 2.2 million micro-enterprises employing less than 10 people, and roughly 78 percent of urban employed work in the SMEs. In manufacturing sector, about 83 percent of labor force is employed by SMEs. A large number of SMEs are in manufacturing or assembly line operations. The next largest is in trading and distributorship, wholesale or retail, with considerable amount of turnover, with a fair number of workers deployed in sales, inventories and ancillary activities like repairs and workshops.

8. This profile of SMEs is common to most countries in its outline; the difference is in the asset base and their business turnover. A large number of people are engaged in SME type businesses both in developing and advanced countries alike; some well documented; others are not. A swath of urban and semi-urban population in Pakistan depend on these businesses, though a good chunk of SMEs operations are part of underground economy as in other Asian countries, but it may not be so pervasive.

9. We can gauge the presence of SME in daily commerce if we observe what transpires when businesses close down. One day of shutter down strike causes huge losses in sales and wipes out daily wagers earnings. If the strike gets violent, it causes massive loss of business property, merchandise and inventories. There are anecdotal estimates of losses, but reliable estimates are not forthcoming. In the same vein, financial side of SMEs' operations are difficult to pin down because financial data on sales, costs, wages, salaries and profits are not easily available, much less a long term series. However, snapshot reviews of SME financing routinely appear in SBP publications focused on recent developments and these are quite useful in their own.

10. On its part, SMEDA has been very active in providing assistance to SMEs assisting with preparation of their business plans; marketing of their products and services domestically and abroad, though in a limited way given its modest resources; advisory and training on technical and financial matters on modest scales; assistance with networking of SMEs with their counterparts elsewhere. Among these, help with business development is substantive. SMEDA has prepared detailed profiles of a large number of business lines relevant to SMEs. The industry profiles are well documented and provide the base information to set up SMEs and start operations. SMEDA has kept the limelight on SME development and has helped to keep the focus on policy objectives intact over these years.

11. A financial profile of SMEs has been prepared from SBP data for second half of the past decade as follows. First, banking credit borrowed by SMEs had a very fast growth from Rs 148 billion in FY03 to Rs 437 billion in FY08, rising at an average annual rate of 24 over these seven years, but the ***proportion*** of banking credit to SMEs declined from about 18 percent in FY04 to about 16 percent in FY08. *(Data Set 5.2a, p-220)* During FY08-10, there was a decline in SME credit outstanding from Rs 437 billion in FY08 to Rs 308 billion in FY10. Consequently, SMEs' share has further shrunk to about 10 percent of banking credit. The reported number of SME borrowers in FY06 was 168 thousand, rising to 225 thousand in FY10 while net SME borrowings dwindled. As a result, the size of loan per SME borrower is estimated to have shrunk from Rs 2.2 million in FY07 to about Rs 1.4 million in FY10. This decline means that flow of credit to SMEs, net of disbursements was negative. That is, SMEs paid back more than they received in fresh credits from banks; problems of reporting and disjointed data series aside.

12. There are myriad of reasons of this downturn exemplified by rising amounts of NPLs in SME credit. In December 2007, NPLs of SMEs were about Rs 41 billion or 10 percent of banking credit outstanding with SMEs.

These NPLs of SME at that time were roughly one fifth of total NPLs of banking system, higher than the ratio of SME credit to banking credit. This confirms that incidence of NPLs in SME lending was higher than incidence of NPLs in banking system credit as a whole. Subsequently, growth of NPLs accelerated and by the third quarter of 2010, these NPLs were about Rs 92 billion, roughly 30 percent of SME credit; nearly 9 percent more than they were three years before. Once again these data have to be taken only as indicative of trend given the mismatch of reporting period; but it does point out a worsening profile of SME credit. This explains reluctance of banks to enhance their exposure to SMEs; a well known problem in SME lending all over, just not in Pakistan alone.

13. The largest proportion of SME credit, nearly 83 percent of it, originates from private commercial banks, while all other lenders such as public sector banks, DFIs, Islamic banks provide the remainder. Private commercial banks have the largest number of SME borrowers, given their network of branches and resources to outreach these enterprises. Nearly all SME borrowings are collateral based, almost 95 percent or more. Loans without collateral, the so-called clean loans are nearly negligible proportion of all loans. Given this pattern of origination and lending, improvements in SME lending have to focused on commercial banks a wider impact is sought, a point that has been stressed before.

14. Operationally, most of credit is extended to manufacturing and trading enterprises amounting to roughly 85 percent of all SME credit. The shares of these two enterprises are nearly the same, at about 40 percent each, though these two types of SMEs keep swapping their lead position with minor differences in their shares. Private proprietorships remains the most common form of ownership of SMEs spread over distributive trade, light manufacturing, house building materials, real estate services and a large number of street corner repair shops. There is a great diversity of SME borrowers which banks find difficult to keep tabs on, and since the loan amounts are small, it is not worthwhile for them to keep pursuing these small borrowers. Most SME loans, nearly 80 percent of them are borrowed for less than a year; there is no term lending, given that trading has a short cycle of its own. For manufacturing units, bulk of their borrowings is for working capital needs, not long term investments.

15. Surprisingly, large loans of Rs 10 million and over are more than half of total SME loans, whereas small loans of Rs one million or less are no more than 10 to 12 percent of all size of loans borrowed. Usually the common perceptions are the contrary; that is, SME lending is perceived to be

concentrated in small size loans, but this is not the case. The number of borrowers of large loans is much smaller than their counterparts at the other end of the spectrum, no matter how they are counted. This cursory analysis shows that within the SME group, there are strong and viable mercantile business units who can play a catalytic role in future.

16. The list of these supportive elements for business growth is large and is well known. A good deal of attention has been given to these issues and detailed recommendations have appeared on the scene based on comprehensive studies undertake from time to time like the ADB study. A good number of these prescriptions are summarized in SBP reports oft and on together with a short analysis of quarterly trends. There is no lack of ideas as to what is needed, short of feasible steps to be taken to enhance viability of collateral acceptable to banks other than hypothecation letter, bills of exchange or other such mercantile instruments. Recommendations focus on business development contents, quality of credit proposal, reliable financial reporting, and adequate loan documentation as required by lending institutions.

17. A larger issue is that SMEs have not been able to forge a breakthrough into high value-added and skill intensive industries like IT and related business services which have mushroomed over the past decade in many developing countries. Call centers providing account services, or centers for medical recording services, airline coustomer assistance services have sprung up all over, but not so much in Pakistan. The constraint is not so much in skill differential as in outreach capacity of new firms that have been established so far. There is a great deal of private sector interest in these high value service vending outfits, and government has provided incentives, reduced the tax burden, and extended support for the creation of IT facilities. Success thus far has been limited because, in part, there is a disjoint between what SMEs need are and what they are offered by way of routine incentive packages or financing.

18. For example, for manufacturing SMEs, their prime needs are sites and services for their business location which require substantial infrastructure investment well beyond any industry to provide for itself except for behemoths of public sector corporations like steel mill. It is lot easier to get funding approved for the infrastructure of a large company, particularly it happens to be a public sector enterprise, than a fraction of it for infrastructure needed by SMEs. These sites and services need not be subsidized but their pay off period is very long, like it is for most infrastructures regardless who ends up using it.

19. This may be seen as subsidy in kind if not in cash. While the era of subsidized industrialization is over, needs of SMEs have not changed. Their foremost problem is to start their business at a locale suitable to their operations; and in current times, a safe one. They can not afford to pay rent in most cities in Pakistan; the same as in most other developing countries. SME studies done in the past confirm that SMEs need financing mostly for working capital for medium term, but not for long term. Their access to credit is difficult due to lack of collateral and their high credit risk. For risk-averse banks, this is sufficient ground to deny credit apart from lack of instruments to match credit demand. Most SMEs, the smaller ones, employing fewer than 30 workers continue to operate in the informal sector; but their number is the largest.

20. Besides financial assistance, SMEs need trained personnel as much as any new business does if they intend to explore and join jump into export markets, additionally they need help with access to overseas markets which often are hide bound in trade regulations, qualitative restrictions some genuine ones but mostly concocted, brand name rules, or packaging requirements that rule out entry of overseas exporters into markets of advanced, like EU countries and the US. To break into these markets is getting to be an uphill task and new exporters, those SME types, need substantial assistance to gain access to new markets and sales effort.

21. In current times, the window of opportunity to provide sheltered growth of SME type industries behind protective tariffs is gone in the wake of various rounds of GATT and WTO agreements of which Pakistan is a signatory. Similarly, subsidized credit is no longer the option. The government does not have resources anyway to repackage subsidies into some other instruments. Restarting SME bank is not going to be able to cater for needs of SMEs in any meaningful manner. Instead, banking system is to be deployed with improved access to banking credit. How this could be done? Perhaps by providing collateral guarantees in parallel; or some kind of collateral insurance, as done in advanced countries as part of rescue packages; or some arrangement of clean collateral on fee basis. These are operational issues and need to be looked into further detail.

22. One may argue that this is a veiled advocacy for subsidized credit. All one needs is to look at state supported institutions in advanced countries who function along the same lines in the name of their own national priorities to promote small businesses, though justified in various names. Most of the time it is subsided credit; or a third party guarantee offered for those venturing into exporting, or suppliers' credits offered by export-

import (EXIM) banks which are found in almost all developed countries aggressively engaged in promoting their own industries vis-à-vis international competition. After all, European consortium of Airbus industries is not a small business, though many of their subcontractors and their suppliers are highly specialized companies who do not have other clients except Airbus or the airlines for maintenance and spare part sales. These sub-contractors and third party suppliers actively benefit from these They benefit form export guarantee or export financing institutions. For these borrowers financing provided by these institutions is acceptable and is widely practiced all over. A mechanism has to be found to supplement creditworthiness profile of SME borrowers at front line of skill-based operations to enhance there eligibility for banking credit if they have to breakout in export markets. A guarantee agency like ***Cofas, Hermes, ECGD, Saache*** of Europe could supplement as guarantee collateral; but export financing like EXIM bank credits is premature in Pakistan. This needs more elaboration than provided here.

23. Government organizations like ***SMEDA*** have been at SME promotion for a long time and their struggle continues. In the past, a number of schemes were launched and specialized institutions were established to provide SME finance, but most ended in failure. The surviving two DFIs were reorganized into ***SME Bank***, but this bank has not been able to shake off the operating mode of its predecessor institutions and has been accumulating NPLs after its reorganization. The SME Bank is no longer operational..

24. A number of initiatives were articulated and proposed over the past years but not much has transpired. In 2004, the government launched another initiative with support from ADB under a TA grant aimed at development financing instruments for SME credit; extension of private credit guarantees to leverage market-based credit to SMEs, extended by participating financial institutions and shared by ADB including loss determination and safeguards; restructuring of SMEDA; and establishing a business support fund to finance business development services for SMEs including access to finance, legal and business advisory, marketing, and technology upgrading.

25. In 2007, SBP and SMEDA jointly proposed establishment of a credit guarantee fund and did some spade work but not much has transpired thus far owing to costs of establishment of such funds and management of the underlying risks of such operations. The SBP did launch a limited credit guarantee scheme in FY10 for small and rural enterprises with modest reach in northern areas of Pakistan. The proposal of a credit rating agency bundled

with credit guarantee for the much larger group around towns and cities would indeed make a difference to the system of SME lending. Currently most banks simply do not have the capacity to evaluate creditworthiness of such a large number of borrowers with difficult operational profiles and poor documentation that would meet the criteria of eligibility. A credit rating agency, if properly equipped could provide this service to banks intending to enter SME loan market. If the experience of credit rating agencies of financial institutions is any guide, it will take some time before their apparatus and mechanisms could be effective and acceptability of their ratings is established beyond any reproach. Likewise, a few years back,

Housing Finance

1. In Pakistan, housing is one of the trio in the slogan *roti, kapra, makan* which has been bandied around for a long time. If it had any positive impact, it has elevated public consciousness of agriculture, light apparel manufacturing and housing as leading sectors in Pakistan. Political sloganeering aside in Pakistan, the same is true in almost every other country. Housing starts in many countries are regarded a bell-weather indicator of economic turnaround because of its impact on employment and the industries that are linked with new construction, like construction materials and durable consumer items, particularly in times of recession and housing is a leading sector when . For this reason, in the US, number of housing starts together with automobile sales during a quarter of the year signifies how well the economy is doing. This is taken as a barometer of short term economic trends. These quarterly announcements are keenly anticipated and are widely quoted. In Pakistan we do not have automobile industry of that league, but potential of housing sector for growth of economic activity and employment is larger than any other sector given its impact on 35 to 40 industries in construction and manufacturing and job opportunities.

2. The annual increase in the demand for housing in current times is estimated at about 600,000 units per year on top of a backlog of about 7 million units that already exists, perhaps more. The annual rate of construction of housing units is estimated at about half of this annual growth, thereby piling up the backlog of demand for housing which can be seen either as a potential for growth of housing finance or a crisis for housing finance; it depends on perspectives. Construction of most of the new housing units in the country is owner financed, expensive or modest ones alike, not bank financed or HBFC financed.

3. For households of any description, poor or rich, housing is the top priority; political sloganeering of *roti, kapra, makan* aside. A great deal of investment is done in housing; much of it remains undocumented or falsely declared at the time of sale and registration. For most households, investment in housing means creating an asset, perhaps the only asset they will ever own in their lifetime. In the not distant past, housing used to be characterized by bankers, as "non-productive" sector, not to speak of it as a priority sector in Pakistan. Banks did not lend for house building or purchase in the past, nor they do in. current times in a noticeable manner.

4. Time series data is not available on state of housing sector and its financing for the past decade to enable a detailed analysis of its trends. In part this is because there was hardly any bank lending for outright purchase or construction by large developers and builders, the most creditworthy and tractable borrowers, not to speak of ordinary households. Banks did not get around to lend for housing until middle of the past decade, and HBFC did not have much noticeable presence on the scene either. A small number of banks of have recently begun to lend for housing, but their participation is sporadic and the amount of credit extended is nearly negligible in the overall bank lending profile.

5. The total amount of banking system credit outstanding for housing, including those extended by Islamic banks, was Rs 84 billion, all counted cumulatively from the day of start through December 2008. This is the stock of housing credit outstanding at end of the year, not annual flows. This stock of credit outstanding was 2.3 percent of total ***financial system credit*** in the country, extended by all banks and two NBFIs, mainly HBFC, and on the margin by AHFL (Asia Housing Finance Limited) or other NBFIs. Among these, the amount of housing loans extended by banking system in 2008 was about Rs 70 billion, or 80 percent of total housing finance in Pakistan supplied from all sources. The remaining Rs 14 billion was extended by HBFC and a tiny amount by AHFL which henceforth shall be disregarded in this analysis. We will look at performance of banking system first, followed by performance of HBFC.

6. In recent years, 2008-2010, instead of growth, there was a decline in housing credit outstanding and it was Rs 67 billion in December 2010. Of this, banking system credit was about Rs 53 billion, or about 2 percent of the total credit outstanding, and about Rs 14 billion was with HBFC. The number of borrowers is also shrinking. In 2008, number of borrowers was around 123,000 in all; by end of 2010, it was 98500. Simply put, housing finance extended by financial institutions in Pakistan hardly exists as a ***system of***

finance. It has precious little to show towards promoting growth of the economy, which presents a stark contrast with the role of housing finance in comparator countries, not to speak of its role in advanced countries.

7. For bankers, a major reason for decline of housing finance was their sordid experience of non-performance of their borrowers, exemplified by rising trend of NPLs on housing credit extended, in line with the overall trends of NPLs. The genesis and causes of rising NPLs has been discussed in the previous chapter, but rising NPLs on housing backed by solid collateral is difficult to comprehend. The reason is that lending parameters and practices of mortgages are predicated upon well established creditworthiness of borrowers and their sustainable long term debt servicing capacity, while keeping a margin for income variations owing to cyclic downturn in economic or financial trends.

8. Housing sales may slow down owing to recessionary short terms, but NPLs on housing loans do not appear, unless recession is deep and long lasting, or unless there is a notable backlog of speculative investing, ***financed*** primarily by banking system credit, not if financed by own sources. That is not the case in Pakistan. Banks have not financed even routine borrowers, much less speculative borrowers; their overall exposure is tiny; hence their NPLs on housing credit can not be explained by the factors mentioned above. Nor can we easily surmise that due diligence in mortgage lending exercised by banks and HBFC was faulty to the detriment of their loan portfolio.

9. Be that as it may, the practice of default is alive and is aggravated by deteriorating economic and financial outlook. At the end of 2008, total NPLs on housing loans were RS 12.3 billion, and they increased to about Rs 16 billion in 2009, and further to Rs 18.5 billion by December 2010. The proportion of NPLs consequently increased from 14.6 percent in 2008 to 27.5 percent within two years. The hardest hit is HBFC, whose NPLs were Rs 7.1 billion, half of its total loan portfolio outstanding which is untenable. *(see Development Finance, SBP, various issues)* It is a state of financial distress that will be difficult to overcome unless HBFC is rescued again through reimbursements of costs of unrecoverable credit by the government. It's profile of NPLs is unlikely to improve over the next couple of years to enable it to overcome the burden of NPLs. Nothing much seems to have changed for HBFC over these years; reforms and restructuring aside.

10. For the borrowers, high interest rates on mortgage loans is what ails house building finance. The lopsided structure of interest rates on mortgages is source of the malaise if we compare it with their counterpart structures

prevailing in other countries. In the past couple of years, mortgage rates in Pakistan have ranged between 15 to 17.5 percent, yielding a gross banking spread of about 9 percent, an unheard of spread on long term collateralized lending. The collateral tendered has already been discounted by one third or so of their market value, the standard practice for mortgage lending; irrespective of all the ailments alluded to quality of collateral and weaknesses of legal recourse to collateral and recovery in the event of default.

11. In most countries long term mortgage lending rates are well below short term interest rates; in Pakistan it is the other way round. Interest rates on housing loan are higher than short term rates. Looks like banking system treats housing credit similar to overdraft lending to its mainstream large corporate borrowers. There is not much innovation evident here; claims aside. In lending practices of modern banking, treating mortgage loans like trade financing overdrafts does not say much about banking practices. Mortgage lending with a premium on short term rates set by loss leader of the sector, can not be viable as a system of lending. The cost of borrowing to their clients is inordinate; the long term debt servicing capacity of borrowers is impaired well beyond retrieval; hence the rise of NPLs.

12. Banking system is not doing the term transformation; it does not have to, given the maturity structures of deposits banking credit outstanding analyzed in chapters 6 and 7 earlier. There is a mismatch of maturity structure between bank funding maturities with housing credit maturities, no doubt, but this mismatch is not an ***operational constraint*** that it is touted to be; this mismatch is not ***inimical*** to long term contractual lending of housing credit, given banking spreads emerging from persistently interest insensitive deposit structure in Pakistan Banks do not need to raise long term finance for mortgage lending; they are already over-invested in government securities and have no incentives to diversify into mortgage lending. Bankers are unlikely to be convinced of all this; but they have not come forward with their own analysis of rising NPLs on housing finance.

13. The rejoinder of the banks could be that they are lending for real estate, after all; they are not neglecting housing sector. The muddle is that much of their lending is for commercial real estate, not residential property, and much of it is for construction of large plaza buildings in urban centers, though their exposure is fairly small because of the way investment in these new complexes is structured by its owners. Banks are keen to get into this market not for lending as much as for acquisition of prime real estate to diversify their investment portfolio by swapping loans into part ownership. This is on the side lines, because owners do not wish to dilute their control; besides

they want to avoid disclosure by keeping it as privately held investment rather than a partnership or a public limited company. They are lending for commercial real estate, but that amount is also small. The amount of credit for real estate, aside housing, was Rs 103 billion in FY10, or 3.2 percent of total banking system credit. The role of commercial banks in housing finance, therefore, is marginal relative to financing other sectors of the economy.

14. Some banks have started housing finance, but most have to gear-up for mortgage lending, a capacity they do not have at present. Banks have to find ways to internalize lending risks and interest rate risks. Lack of loanable funds of long term maturity is not the issue; managing risks is the issue. Banks can not enter long term debt markets to raise funds because it would be costly relative to their current costs of loanable funds. Further, banks will not be able to compete with NSS instruments to attract investors; but funding is not an impediment for housing loans. Currently, prospects of a meaningful turn around in housing finance are not bright given shrinking client base, high interest rates, and rising NPLs of banks.

15. Role NBFIs in housing finance is negligible since these two institutions, HBFC and AHFL provide no more than one fifth of total housing credit and among them operations of AHFL are too small.. Mainstream commercial banks provide the rest four fifth of total housing finance. HBFC was established to promote house building loans, but it was practically insolvent owing to persistent losses and build up of NPLs during the 1990s. As a DFI, it's role is a footnote in the credit system. Previously, in nationalized system of banking, HBFC had a virtual monopoly on housing finance. In current times its presence in housing loan market is relatively small; though it has developed a network of branches alongwith a reasonable size of client base after long years being in the business. For a single institution, HBFC is sizable enough and has made efforts to enhance its operations.

16. The total net assets of housing finance companies were about Rs 4.2 billion in FY00, practically all of it in HBFC assets. Their loans outstanding were about Rs 11 billion. By middle of the decade, loans outstanding in their portfolio were Rs 12.2 billion, representing a net increase of Rs 1.2 billion over five years. Their total net assets were Rs 4.3 billion, almost the same as they were in FY00. By FY09, the net assets of these two companies had grown to Rs 5.6 billion; and the their advances had grown to Rs 13.6 billion; but nearly all of it was HBFC credit. Thus over a period of nine years, net increase in mortgage loans provided by these two companies was only about Rs 2 billion for all borrowers in the country.

17. In the past, due to poor lending practices, HBFC and housing finance companies accumulated large NPLs which rose from 4 percent of their total assets in FY90 to 66 percent by FY00. During the decade of 2000s, the hemorrhaging did slow down but has not stopped altogether and NPLs have risen as mentioned above. For the first time in FY06 HBFC showed a modest profit after years of losses. It was reorganized with injection of new equity by the government, to raise its paid-up capital. It is the same pattern observed for most DFIs over the past decades.

18. This performance of banking system and NBFIs being what it was, let us revert back to issues confronting start up and growth of housing finance. Clearly, NBFIs can not lead to a revival of housing finance on country level; hence reliance has to be placed on mainstream commercial banks. Any meaningful participation of banks is unlikely until the issues of housing finance are resolved. These issues keep circling around ownership, title, transfer and recording, and access to courts for remedial actions. At the same time, while a good number of banks may not feel the need to diversify their business of lending, relying on their client network; but a good number of them will have to because relationship banking is a merry go round circling the same group of clients being targeted by all banks. Meanwhile, auto lease financing and consumer financing have reached saturation points and will not be the way to earn huge profits.

19. The central issue of housing finance is property based collateral. This has to with the legal framework concerning sorry state of documentation, property rights and ownership records, declaration of sales, their registration and transfers. In a scenario like this, it is anomalous to speak of housing as a priority sector for banking credit. It is priority credit in most other countries Asian countries where the proportion of banking credit for housing was small but it is rising and it constitutes 14 to 22 percent of banking credit. This proportion is much higher in developed countries, about one third of banking credit. In the US, close to half of banking credit is deployed in housing sector. In Pakistan, a good number of commercial bankers until recently did not even consider housing as a productive sector of the economy. They treated it as a personal finance, in line with current SBP classification of banking advances to this sector placed in the same league as installment credit or credit card lending.

20. GoP and SBP are trying to promote housing finance and a number of actions were taken but with limited success. For example, interest payments on small mortgages were made tax deductible, but since these borrowings are not tax sensitive enough, it did no create much new borrowings of small

mortgages. New recovery law provide more authority to a lending bank concerning mortgaged property, including repossession without recourse to courts. SBP has liberalized housing finance lending rules; limits for mortgage loans have been raised to Rs 7.5 million for a maturity of 20 years with 8 to 2 debt equity ratio; banks have been allowed to float long-term mortgage bonds to raise term finance for mortgage lending to avoid the mis-match of maturity structure. The cost of mortgage lending is not out of line, but recovery of bad loans is out of question given the legal morass and endemic frauds of multiple ownership. Those are the reasons why banking system has stayed away from housing finance. It has only recently begun to take active interest but cautiously and for housing of upper brackets in affluent areas.

21. To promote housing finance, improvements are needed to ensure that collateral base is secure for lending banks, and meaningful recourse is available in timely fashion to take remedial actions in case of default. At the same time mechanisms have to be developed to support growth of primary and secondary markets for mortgage finance. A revamping of the system of lending along the following lines has been on the agenda for a long time; how far progress has been made needs to be assessed.

- Creation of a reliable system of ***registration***, titling, ownership and transfers; the most significant element if banks have to get involved in mortgage financing meaningfully. Reduction of registration fee and other transaction costs.
- Investment in ***housing infrastructure*** at local levels.
- Development of ***property pricing*** and valuation standards. Development of market information and real estate data trading base.
- Development of house building codes and construction industry standards to be specified and adopted.
- Improvements in tax system, fees and stamp duties.
- Reorganization of housing sector ***governance***; Reorganization of property markets; licensing of brokers, agents, listing and documentation services.
- Legal remedies and recource; access to courts and timely adjudication.

22. Among the items listed above, titling and registration is most important. The legal framework concerning titling, registration and ownership must be equipped or upgraded to deal with property rights related issues. This is part of the jurisdiction of provincial, local and municipal authorities. Disputes invariably arise and by the time they are adjudicated, the aggrieved

party may not be around to see the outcome. These disputes are legendary. The system of registration, ownership, its transfers or its subordination as a collateral has to be overhauled because it is replete wit unsavory practices; it is time consuming and costly for real estate transactions. In spite of all this, the turnover is quite decent, often brisk and at times frenzied depending on market trends. This holds for urban property markets exemplified by number of real estate agents in urban areas and also in rural areas. Banks may not wish to diversify into mortgage lending if they already have a reliable network of corporate clients and do not need new borrowers, unless mortgage lending risks and profitability are better or at par with their current lending business.

23. Investment in housing infrastructure has to be undertaken by either developers or by housing development authorities, requiring massive outlays, and it occurs mostly in urban areas. Rural housing infrastructure is minimal and rural house builders are left to their own devices. Those housing schemes in urban areas who bundle cost of local infrastructure into the price of a plot are relatively more successful than others. The new owners have to bear the costs of development of property tracks, because local governments do not have resources nor capability to deliver.

24. The development of ***primary markets*** for housing finance is fairly straightforward and revolves around issues discussed above. The primary market is fairly large. The main client are households and property developers for purchase or construction of housing units. The development of ***secondary markets*** would involve some form of securitization of mortgage loans into tradable securities whereby these securities are floated and traded in the capital market for investment. Securitization may be done by underwriters for lenders active in the primary market through bundling first or second mortgages thereby reducing their exposure, spreading their risks, and bridging the maturity structure on the asset and liability side of the lending. Advent of this type of secondary market is long ways ahead.

25. In between, there is a need to create home equity lines of credit so that households are able to leverage their equities locked-up in their properties until the property is sold away. If property evaluation methods are standardized so that housing investment is listed as a bankable asset and the owner is able to borrow against it in some reasonable proportion of its market value, preferably for investment, this leveraging of locked-up equity in housing could boost asset acquisition such as another property or investment of a similar class of asset. This potential of equity base is currently frozen in their residences and properties.

26. Before any secondary market develops, there has to be a fairly large size of primary market instruments and that depends on the amount of housing credit outstanding. At the moment this asset base is very small. Once there is a sizable base of primary securities, a regulatory framework has to be developed for issuance of asset-based mortgage securities in capital market. In 2008 SECP issued rules concerning formation of ***real estate investment trust (REITs)*** which have been quite successful in securitization of mortgage backed securities in most countries, thereby providing long term finance to housing sector. REITs are sold as mutual fund or trust fund shares to investors, thereby raising capital for housing construction industries on the one hand, at the same time providing investors with long term high returns, both dividends and capital gains with less volatility, that otherwise would not be possible for small or medium size investors. In 2010, two companies were authorized to be established and it will take time before they become operational. The issue is management of assets in trust by a third party and asset management company floating these REITs, something which has not been tried before.

Agriculture Finance

1. The priority of agriculture sector has remained undiminished over the past years owing to concerns with food self sufficiency even though it no longer dominates GDP. Share of agriculture sector in GDP has declined from about 38 percent in 1971 to 24 percent in 2000, and further decreased to 20 percent in 2010, about half of what it was four decades ago. This structural shift occurred in the wake of relatively faster growth of manufacturing and services sector over the same period. These long term trends suggests that for output and income growth, agriculture sector is not in the vanguard that it used to be in the past. Likewise, there has been a long term decline in the share of agricultural credit in total banking system credit to private sector, keeping in line with the slide in the share of agriculture in GDP.

2. These long term GDP based shifting trends warrant a rethinking as regards role of banking credit in agricultural growth in Pakistan. There is a need to revisit this issue but not around conventional lines, rather around the dynamics of current structure of production, borrower base and financing needs of modern agriculture. Lending to agriculture sector in its previous mode of mandatory allocation and targets is long over, though indicative targeting is still being done and it is non-binding. The reliance of major exports like cotton, yarn and textiles on agriculture production, will continue

for years to come, because Pakistan's export base is not diversified. Increasingly, high priced food items like fruits and vegetables and a good part of fisheries is being exported. In parallel growth of agro-processing industries is beholden to growth of agriculture sector. Therefore, in the analysis of agricultural credit, we have to differentiate between various segments of borrowers of agriculture sector, keeping aside subsistence farmers and a large number of rural borrowers from well to do farmers, agri-businesses and agro-export industries. Financial institutions can not cater to credit needs of these diverse segments of borrowers all across.

3. If share of agriculture sector in GDP is the only yardstick, it is difficult to contend that agriculture is a priority sector. For a country teetering on the brink of food self-sufficiency in spite of green revolution, with a precarious import capacity of food grains and given a burgeoning population, growth of agriculture sector is vital regardless of the long term secular decline in the share of agriculture in GDP. The staples include wheat and rice, but oil seeds like corn are not far behind. International prices of gains have risen high, and if in any crop cycle, Pakistan were to import food to maintain adequate stocks to avert food crisis, Pakistan is likely to find itself in a tight corner. There is not much cushion available. Food self sufficiency is one lesson that should not be lost. In current times, Saudi Arabia, China, India, Korea and other countries are buying large parcels of cultivable land in African countries, mindful of their burgeoning needs of staple food items. Pakistan does not have to embark on this path; but a great deal of prime agricultural land has been lost to urbanization, and farming is being forced upon marginal lands with poor and unpredictable water supply.

4. The point concerning bank lending to agriculture is that its priority is not evident if we focus on sectoral production patterns and long term shifts in them. The issues surrounding agricultural credit are all too familiar, namely, reliance on a single financial institution, ZTBL, to provide credit to farmers; a small role of banking system in agriculture sector on market terms mostly for agro-industries; poor access of agriculture sector borrowers to formal credit because most operate in informal sector; and crowding out of small farmers by large farmers in credit as well as in financial assistance schemes launched by the government. In the past, a good part of subsidized agriculture credit, rural credit and cooperative bank credit was utilized by large farmers, not by small farmers.

5. With those caveats in mind, let us look at the size and trends of agriculture credit. There are usual data problems but the *Data Set 5.3a* has been compiled on as consistent a basis as possible. The analysis of agriculture

credit pertains to the financially viable segment of borrowers in agriculture sector. It excludes subsistence farmers and rural borrowers who can not access formal credit extended by banking system or ZTBL. Both lenders focus on creditworthy segment of agricultural borrowers since they have to safeguard their own financial strength and viability. Hence, this discussion is not about subsidized rural credit, rather it is about market based credit for mercantile agriculture sector. In between is the refinancing facility of SBP which provides a cushion to the banks engaged in agricultural credit through refinancing mechanism below market rates of interest. The relative size of refinancing facility has remained around Rs 55 billion and has not grown. *(Data Set 3.7)* It is recycled into banking system credit to agriculture and is not a net addition to the stock of agriculture credit outstanding.

6. There are two sources of agricultural credit in Pakistan; commercial banks and ZTBL. Total agricultural credit outstanding from both these sources was an estimated Rs 97 billion in FY00, rising to Rs 183 billion in FY10, at an average annual rate of growth of 6.6 percent over these years. *(Data Set 5.3a)* This growth was slow during first half of the decade at 4.7 percent, but picked up momentum during second half of the decade increasing at average annual growth of 8.5 percent. Note that it includes credit both to public sector and private sector. We need to focus on credit to private sector The proportion of loans extended to agriculture sector by commercial banks and ZTBL as a proportion of total banking system credit outstanding with private sector, decreased from about 15 percent in FY00 to about 7 percent in FY10. *(Data Set 5.3a)* This is a substantial decline in the relative shares of agriculture over the long term that occurred in the wake of dismantling of credit plan and lending targets for agriculture sector, assiduously followed during the days of directed credit regime.

7. There are no more mandatory targets of lending to agriculture sector. The share of agriculture sector in total ***financial system credit*** is even lower, but that does not matter because NBFIs are not lending much anyway, while part of SBP lending to financial institutions gets recycled and the part that goes to agriculture sector is included in banking system credit as shown here. Banking system credit trends compiled on ***borrower basis*** portray a sectoral redistribution away from agriculture sector in a more revealing manner. In current times, banking system is lending far more as consumer finance than agriculture finance. There has been a phenomenal growth in consumer finance. In FY05 consumer finance was Rs 214 billion, tucked under the category of personal loans, as compared with agriculture credit of Rs 127 billion. *(Data Set 5.2)* By end of the decade, consumer finance was Rs 322 billion in FY10, while agriculture credit was Rs 165 billion.

8. So much about agriculture being an important sector of the economy; periodic *atta* crisis or sugar crisis notwithstanding. The crises are blamed on all sorts of factors, like international price of wheat and sugar, but not on the domestic pricing via a pot-holed sales and procurement system, and an incentive regime that seems to fall short of farmer needs, though impacts crop production costs.

9. The main provider of agriculture credit is ZTBL, not banking system, but this contentious as discussed in paragraph below. The share of ZTBL credit in total net agriculture credit outstanding has been large in early years of the decade, around 80 percent, and it has been declining, but it was still close to half of the total credit. In FY02, net ZTBL credit outstanding was Rs 84 billion, but declined to Rs 72 billion next year by 14.6 percent, and stayed around this level unchanged until FY08. In between, net ZTBL credit had another decline of 16 percent to Rs 67 billion during FY07, the lowest it has been during the entire decade. This means disbursement and repayments of principal amount remained roughly the same for most years and there was no increase in net exposure of ZTBL for nearly six years..

10. Lately, there was some increase in ZTBL, rising by about 11 percent during FY09 and FY10. But banking system lending to farming is catching up fast, hence the proportion of ZTBL credit will further decline in years ahead. This is a structural shift in sources and origin of agriculture credit. We have to be careful though with generalizations like this because trends of net credit outstanding discussed above excludes banking credit to food processing and agri-businesses, agro-chemicals, fertilizer industries, agricultural machinery like tractor manufacturing and agriculture transport equipment. Banking system credit to these industries is fairly large and it is included in manufacturing credit, not farming credit. Operationally, credit to agro-industries supports the production base of the sector and can not be treated separated. Perhaps this is the reason why national accounts data of GDP and its sectoral decomposition presents a secular trend of declining share based as it is on strict definitions of crop production, livestock and fisheries.

11. Majority of borrowers of ZTBL and banking system are not small subsistence farmers as shown by data on borrower distribution. The usage of agriculture credit between farming and non-farming activities is stark. The total amount of farming credit was about Rs 42 billion in FY01 or about 48 percent of total net agriculture credit outstanding. *(Data Set 5.3a)* By FY05, farming credit doubled to Rs 93 billion and its share in total credit rose to about 77 percent; thereafter, farming credit nearly doubled again, to Rs 170 billion by FY09, and it was 98 percent of total net agriculture credit. The rate

of growth of farming credit for the decade was an estimated 16.7 percent per year; more than twice the rate of growth of agriculture credit. This rate was about 21 percent per year during the first half of the decade and slowed down to about 13 percent during the second half of the decade. Bulk of agriculture credit is for farming activities and it is mainly provided by ZTBL.

12. Annual disbursements of banking system credit to agriculture and its repayment profile show a sobering picture. The total disbursements were ***less*** than recoveries during FY00-03. The amount of credit disbursed kept rising, but amount of recoveries rose faster during these years, meaning a net repayment by borrowers of agriculture credit to the lenders. This would imply there was financial disintermediation in agriculture sector. The trend reversed later on, but not by much. During the last three years, FY08-10, net credit on the basis of disbursements and recoveries hardly improved, but the data series shows a different picture.

13. As regards supply of credit finance for liquidity needs, it was inadequate relative to the demand, though this is not clear cut, because much of lending by commercial banks is for working capital finance or trade finance for short term, covering crop cycle. If credit borrowed is repaid within the year and reissued again, this roll over would not show up in agriculture credit. A good part of commercial banks lending is short term roll over credit that does is not captured in the stock of credit if reported on annual basis. On the surface of it seems there is hardly any increase in net credit outstanding, leading to the conclusion that banks are not lending; but that would be erroneous. The rollover conveys size of agriculture ***credit activity*** but does not convey the allocation of credit in relative terms over periods longer than credit cycle.

14. This is a typical problem of stock versus flow analysis. For size estimation, we have to stick to end period stock outstanding rather than the turnover during the reporting period because it exaggerates the size of the credit being estimated. On the other hand, the issue is not the amount of credit stock outstanding; rather enlargement of client base, and supply of *revolving* liquidity needs during the year which are first to be met. Once that is on a satisfactory level, then comes long term financing for machinery and equipment and infrastructure type needs of agriculture sector. But if we wish to analyze relative shares of system credit components, it can not be done on the basis of flow data and that is why we have to turn back to outstanding stocks at end of reporting period.

15. The breakdown of disbursements and recoveries show that during FY02-05, ZTBL disbursed roughly Rs 40 billion each year, but commercial banks disbursed more. Thereafter, disbursements of ZTBL picked up momentum and were higher than recoveries during the period of FY05-10. The increase in commercial bank credit to agriculture occurred because of mainstreaming of agricultural loans in their lending patterns. If these trends continue, and lending to sub-sectors like livestock, fruits and agri-businesses is included, agriculture credit disbursement of commercial banks would far outstrip those of ZTBL.

16. For benchmarking this trend, note that ZTBL disbursements in FY02 were Rs 29 billion, and recoveries were Rs 33 billion. This inverse trend continued until FY06 when ZTBL disbursements rose to Rs 46 billion, while recoveries rose to Rs 46 billion, just slightly below disbursed amount, thereby reversing the decade long pattern. Disbursement of commercial banks were Rs 23 billion in FY02 and recoveries were Rs 20 billion. By FY06 the disbursements rose to Rs 89 billion in FY06, while recoveries were Rs 75 billion. In FY10, disbursements of commercial banks were slightly below the recoveries. Therefore, no clear cut trend can be discerned, except that volume of lending to agriculture sector did increase, but it could not have much of impact because the size of credit at sectoral level is relatively small, and it is dominated by net recoveries within the annual cycle.

17. A more worrisome development in agriculture credit is the rise of non-performing loans (NPLs) over the past years. Their growth is faster than NPLs of the banking system. NPLs of agriculture credit were about 20 percent of total agriculture credit outstanding in FY07, and this is a large proportion of non-performing loans. NPLs of banking credit were also very high; about 21 percent in early years of the decade, but there was a substantial decline in this proportion by 2006 rising again during the second half of the decade to 14 percent. In the middle of the decade this ratio of NPLs of banking system touched its lowest levels of about 7 roughly half of the ratio of NPLs in agriculture sector. This differential has narrowed over the past two years because of a swift increase in banking system NPLs, but that does not explain high level of NPLs in agriculture credit.

18. The reason for high NPLs in agriculture are not seasonal as is commonly believed. Instead, it emanates from defaults of well to do farmers, rather than low income or medium income borrowers. The defaulters found agriculture credit as yet another mechanism of transfer of financial resources via banking system to themselves. This happened during nationalized

banking. Many a sugar mills were started but folded quickly with losses because they were not intended to be a going concern. The 'investors' leveraged their own equity with bank credit, sold the hulk of a new factory at an accounting loss which ended up being lodged as NPLs of lending bank. The lending institution ended up holding the bag of NPLs, eventually written off by their owner, the state. This process has come to a close in privatized banking; yet, rising NPLs in current times are originating from the same group of large income borrowers as in other sectors.

Rural Finance

19. Rural finance is the lower end of agricultural credit, though nearly half of rural finance is in non-farm sectors of rural areas. Much of the rural finance remains on the fringes of credit system. In the past, part of the reason was reliance on defunct schemes like rural cooperatives to deliver rural credit whose credit mechanism was compromised. Hence, government sponsored schemes of rural finance through cooperatives ended in failure. Further, ZTBL could not deliver rural finance since it was never geared up for it, nor was it intended to be a microfinance type institution.

20. In the past, a number of rural cooperatives were established to enhance access of rural borrowers to formal credit. To support credit financing activities of the cooperatives, cooperative banks were also established. As it turned out, both the cooperatives and the bank were riddled with questionable lending practices in favor of influential member of cooperatives. Eventually, financial position of cooperative banks degenerated, some were closed down after suffering major losses, underwritten first by provincial governments, and eventually by federal government. The same transpired in case of cooperative societies. The experience was a failure when judged by standards of achievements for larger numbers of rural borrowers seeking access to rural credit finance, fraught with losses and liabilities eventually paid for by public funds.

21. A good deal of rural finance is informal finance, obtained on personal basis to cover contingencies, and only a small part for business purposes. These informal personal loans do not constitute the market for rural credit. Given that the banking system is not going to be a source of rural finance, therefore, the issue is how to promote rural finance outside of banking system. Microfinance banks nor ZTBL are a viable alternative where all others have not succeeded thus far.

Export Finance

1. Export financing is an issue not so much for export trading as much as for investment in export manufacturing, processing orders, and marketing. Currently, banking system provides a substantial proportion of credit for ***trade financing*** and working capital needs of its clients. A good number of them are exporters, though no estimates are available at banking system level. Among this clientele, banking credit extended to those engaged in exporting business is eligible for refinancing from SBP's Export Financing Scheme (EFS) that has been operating for a long time. It is a refinancing mechanism for credit already extended by banks to their clients. The rate of interest charged to the borrowers is about 1.5 percent to two percent below rates of interests prevailing in the market.

2. The refinancing scheme ensures availability of liquidity when eligible exporters need it most at the time of processing export orders. The size of EFS has grown over the years from Rs 58 billion in FY04, the lowest it ever was in the last decade, to Rs 108 billion by FY06. Since then it has risen to Rs 186 billion by FY10. Likewise, the proportion of export credit in total SBP refinancing facility has increased from 33 percent in FY02, to about 52 percent by FY06. In current times this share has risen to about 60 percent.

3. The ***amount*** of refinancing channeled through banking system on concessional terms has been sizable, but it remains a small ***proportion*** of total banking system credit, hardly 7 percent in FY10. This does not mean that the amount of credit extended by the banking system to exporters is no more than 7 percent; it simply shows that refinancing facility covers a small proportion of total banking credit, and only the proportion extended to exporters. Otherwise, estimates suggest that refinancing facility covers roughly half of the needs of exporters for pre-shipment and post-shipment financing by all commercial banks on transaction basis, but it is extended mostly to large established exporters.

4. The base rate of refinancing stipulated by SBP began to rise in middle years of the decade from 6.5 percent to 8.5 by FY10. It has risen further to 10 percent by end of FY11. The ceiling rates of banks charged to borrowers have risen in stepwise manner, with a premium of about one percent over and above this base rate. This is still below market rates for retail credit, though the subsidy element has narrowed by about half of what it was during middle years and is no more than 1.5 to 2 percent, therefore, hence they are not pursued any further. Interest rate subsidies to export are an intricate issue and need a more thorough analysis than has been possible here.

5. Much of refinancing is of short maturities, but medium to long term maturities for 2 to 7.5 years are also eligible for refinancing as per eligibility criteria, including assistance to exporters of local machinery, and for import of machinery for refurbishing plant equipment of established exporters. The main beneficiary of refinancing scheme has been textile industry both as the leading exporter as well as importer of machinery for modernization and rehabilitation. Its share in refinancing facility has stayed around 62 percent of total refinancing done by SBP during FY0-10. Export of food items and commodities are the next largest beneficiaries, accounting for about 13 to 14 percent each over the same period. Leather exporting industries are next, followed by a fairly large number of small exporters spread all over; but the amounts refinanced are small.

6. Since much EFS is a short term revolving credit based on trading cycle, there is a rollover by lending banks of base funds during a year; hence the amount of liquidity churning over is fairly large, if rollovers are taken into account. There is a long term component of EFS for export of machinery and equipment, but its size is very small, about Rs 9.5 billion in a fiscal year. In parallel, another part of this refinancing facility is meant for assisting with modernization and upgrading of export industries as mentioned above through import of machinery by export industries. These imports are eligible for refinancing within certain limits.

7. Refinancing facility assists mainly existing exporters. New exporters have a difficult time accessing it and carving out a niche for themselves. This is another reason why exporting base of Pakistan has not diversified much over the past decades in spite of reforms, liberalization, promotional activities and a slew incentives extended by the government. But the weakness lies with industrial structure more than with the banking credit system. Quality of exports, costs and pricing, international competitiveness and performance of exporting industries is the issue. Lack of industrial finance is a constraint, but it is not the stumbling block for growth of diversified manufacturing base and corporate growth. The crux of the matter lies in ***nurturing*** an institutionalized and effective mechanism to promote establishment and growth of exporting companies; something Pakistan has been unable to do thus far. In this sense, much of what afflicts SMEs discussed earlier, also holds true for small and new exporters.

8. A number of studies done in the past, point to lack of access to credit by new enterprises whether for exports or domestic markets due to high risk and risk-averse attitude of banks, lack of bankable collateral, inadequate risk assessment by banks, rigidity in lending rules and regulations, lack of

instruments to match the market liquidity, and ineffective public credit information services. In addition to these financial elements, exporting industries and businesses have their own requirements that affect their performance at exporting.

9. New and emerging exporters, including SME exporters face difficulties in accessing EFS because banks do not easily accept payment instruments such as L/C as collateral. Under the EFS, export loans are based on export L/C of preceding year, and are refinanced by SBP at a subsidized rate of interest for on-lending to exporters with about a margin of about 2 percent. Those new SME exporters who can not meet collateral requirements are left out to borrow at high rates if they can find a bank willing to lend, thus inhibiting export growth.

10. SBP has refocussed EFS on value added exports, streamlined a system of no-duty no draw-back; improved access of new exporters and SMEs to export finance, assisted enterprises with ISO classification, and has set up an export facilitation unit at CBR. The objective of rationalizing export finance remains to move away from a subsidized scheme to WTO-compliant export finance that would make refinancing available to a larger number of existing as well as new and emerging exporters.

11. In view of the weaknesses of EFS such as absence of effective risk mitigation, the government launched way back in early years of 2000 a revolving credit facility for short term export finance, basically a dollar based refinancing window of SBP at market terms; a bankable export finance guarantee to supplant exporter's L/C collateral; and a partial risk guarantee covering imports for export production and post shipment credit insurance. These measures provided some assistance but how much and how effective these measures have been needs to be assessed.

12. As in the past, cotton yarn, raw cotton, textiles and clothing continue to dominate exporting, constituting slightly more than half of total merchandise exports, followed by food and livestock sector which accounts for another 15 percent of exports. These two sectors together contribute nearly two thirds of all export earnings. Textile industry is no longer in the forefront it used to be in the export markets given its substantial comparative advantage as cotton growing country and reasonable labor costs. It has been overtaken by countries who do not produce any cotton of their own and are dependent on supplies at international prices. This slide of textile sector was hardly due to lack of credit finance.

13. The proportion of manufactured exports continues to remain fairly small in the total exports as it has been for years. As a result, export base has not diversified as was expected at the time foreign trade and exchange rate regime was being liberalized. Investment for exporting in private sector has been confined to a few traditional sectors and has not branched out in other sectors for a variety of reasons such as acquisition of technology and a manufacturing base with decisive cost advantage.

14. In such a situation, export financing scheme can not accomplish much beyond providing modest amount of trade financing and working capital finance. Occasionally, a proposal to set up export-import bank resurfaces without a clear direction as to the future of EFS. A choice is to be made here. Often suggestion is made to establish a credit institution together with performance guarantees like EXIM bank; but in current situation, a broad based export financing mechanism through banking system with improved EFS, enhanced outreach and an expanded risk guarantee scheme, would be more effective to cater for financing needs of exporters than setting up a new institution in competition with the commercial banks. This needs to be looked at further.

Microfinance

1. Microfinance institutions have recently been launched and they are in the process of establishing and mobilizing their outreach activities. They are new and are still in early phases of their operations. There is not much interest among mainline commercial banks for reasons all too familiar, like viability of credit financing, documentation, disproportionate lending costs, and collateral issues which have deterred their participation in microfinance thus far. In addition to micro credit, microfinance institutions support social empowerment and mobilization activities within poor communities, development of modest infrastructure such as water supply and link roads in rural areas and are planning to start microfinance activities in urban areas.

2. Formal microfinance has grown rapidly over the past years. The antecedents of microfinance in Pakistan are the same as in other developing countries, largely inspired by Grameen Bank of Bangladesh and modeled on the same pattern. The thrust of the movement is to develop an operationally feasible system of ***outreach*** to poor segments of society. The clients of microfinance are on the lowest rung of income strata in the country, specially women, both in rural and urban areas, who can not approach much less

access formal financial institutions to obtain meager amounts of credit for their otherwise valid income generating needs. The issues of routine lending practices, viable collateral or how far those are bankable, relevance of this approach towards the rural poor has been extensively looked into in several countries and in Pakistan. The consensus is microfinance is viable but not on traditional lines and not within routine practices, framework and criteria of banking credit. The conventional practices of bank lending do not fit into this mould. There has been a good deal of success in extending microfinance against all odds has been a subject of much scrutiny. A good deal of literature is now available showing that it is a grass root movement aimed at rural and urban poor, led by NGOs as well as microfinance banks and has attracted a great deal of public attention all around given its impact on alleviation of poverty at grass root levels.

3. Currently in Pakistan, there are seven microfinance banks, Khushhali Bank being in the lead, though it would like to upgrade itself as a regular bank. Their main activity is to provide micro credit through their own branch network which has grown from scratch in late 1990s to 287 by CY10. Micro credit is also being provided by 14 non-financial institutions like NGOs and rural support program outfits who furnish a broad range of development services including modest sums of credit to poor segments of society in rural areas as integral part of their own programs. This network is much larger than those of microfinance banks, consisting of 847 branches in CY07.

4. The expansion of formal microfinance credit over past decade is impressive, growing from negligible amounts in late 1990s to Rs 8.3 billion in CY06. Thereafter, the growth slowed down and by CY10 total credit outstanding was about Rs 10 billion, spread over 631 thousand borrowers. The target to reach three million borrowers did not materialize. The coustomer base as well as credit amount of microfinance banks is expanding, but it is still lower than credit furnished by NGOs and rural support organizations. Similarly, deposits have grown to Rs 10.4 billion by end of 2010, and assets have grown to Rs 21.4 billion. Microbanks borrowed heavily during the middle of the decade to shore up their funding base, but after having reached the a threshold of Rs 5 billion, borrowings have not grown further in a noticeably. Micro credit extended by NGOs and rural support outfits have been funded from financial assistance secured from outside of financial system.

5. The performance of microfinance banks was satisfactory considering that these were new institutions reaching out a segment of society hitherto neglected by mainstream banks. They had their hands full with known risks

over the few years of their lending operations. Their NPLs began to appear soon afterwards but were quite reasonable until end 2009 amounting to Rs 137 million, hardly 1.6 percent of total loans outstanding of Rs 8.5 billion. Within a year, NPLs increased by nearly two and half times, and by the end of 2010, they were Rs 350 billion or 3.5 percent of total loan portfolio of Rs 10 billion of all microfinance banks. The level of NPLs is manageable, but the trend is ominous. This is just the opposite of loan performance of Grameen Bank in its early years.

Infrastructure Finance

1. Financing needs for investment in new infrastructure or maintenance of existing facilities are largely unmet due to persistent fiscal deficit of the federal government. Installed infrastructure facilities have been crumbling with disastrous results not just for consumers but also for manufacturers and businesses of all categories. The well to do among them have installed back up systems of their own at considerable costs and inefficiencies. This situation is likely to remain unchanged since infrastructure is in the public domain rather than private domain, and there is no effective mechanism of private sector participation or public-private sector cooperation.

2. Credit financing of public sector infrastructure by the banking system is non-existent. If it is revived in some fashion, separate from borrowing operations of the government with the banking system discussed in chapter 6 earlier, it would add to the public sector borrowing from the banking system, with another layer of implications of its own. Financing of private infrastructure by banking system credit is a different proposition altogether and outside of usual lending practices, instruments and mechanism. If the privatized public utilities were to engage in infrastructure projects, a more feasible instrument of such borrowing would be utility bonds floated in debt market, and some banking credit as a supplement to bond financing than the main source of long term funds. This is predicated on a restructuring of public utilities, prevention of owner abuses, and streamlining of their management, finances, pricing structure, and the system of recoveries of defaults. In view of these issues the scope of commercial bank financing for infrastructure is likely to remain restricted.

Data Set 3.7 — SBP Refinancing Facility - Banks, NBFIs — *Rs billion, End of Period*

5		**FY00**	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10**
6	**SBP Loans to Banks, NBFIs**	***196***	***200***	***178***	**158**	**183**	**197**	**208**	**267**	**217**	**300**	**310**
7	***SBP Loans to Banks***	***153***	***150***	***144***	***131***	***162***	***182***	***194***	***253***	***204***	***288***	***297***
8	for: Agriculture	50	55	55	56	58	59	62	62	48	58	55
9	Exports	75	75	59	57	88	109	108	135	101	177	186
10	***Loans to NBFIs***	***43***	***50***	***35***	***27***	***21***	***15***	***14***	***15***	***13***	***13***	***13***
11					*Percent Shares of Total Refinancing*							
12	***SBP Loans to Banks***	78.2	75.0	80.9	82.9	88.5	92.4	93.0	94.9	94.2	95.8	95.8
13	for: Agriculture	25.5	27.5	30.9	35.4	31.7	29.9	29.8	23.2	22.1	19.3	17.7
14	Exports	38.3	37.5	33.1	36.1	48.1	55.3	51.9	50.6	46.5	59.0	60.0
15									*Percent Shares of Export Refinancing*			
16	***Export Financing Scheme;*** *Percent Shares of*							***2006***	***2007***	***2008***	***2009***	***2010***
17	Textiles							67	67	62	62	63
18	Food Exports							12	14	13	14	14
19	Commodities							6	5	11	14	13
20												
21												
22			*Average Annual Growth Rates*									
23			**FY00-10**	**FY00-05**	**FY05-10**			***Annual Growth Rates***				
24	**SBP Loans to Banks, NBFIs**		4.7%	0.1%	9.5%		12.3	6.3	31.0	-19.3	40.7	3.3
25	***SBP Loans to Banks***		6.8%	3.5%	10.3%		1.7	5.1	0.0	-22.6	20.8	-5.2
26	for: Agriculture		1.0%	3.4%	-1.4%		23.9	-0.9	25.0	-25.2	75.2	5.1
27	Exports		9.5%	7.8%	11.3%		-28.6	-5.3	3.5	-14.3	-0.8	3.2
28												
29	SaF Data Set	Source: SBP Annul Reports, Dev Fin Reports										

Data Set 5.3a — **Agriculture Credit - *A Profile*** — ***June, Rs billions***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Total Banking Credit	**797**	**864**	**885**	**971**	**1,242**	**1,694**	**2,071**	**2,377**	**2,816**	**3,080**	**3,175**
to Private Sector	**640**	**702**	**727**	**848**	**1,109**	**1,527**	**1,869**	**2,161**	**2,575**	**2,522**	**2,585**
Agri Credit Outstanding (net)	97	96	101	92	104	122	150	147	169	174	183
ZTBL	78	77	84	72	73	76	80	67	75	84	94
Commercial Banks \ 1	19	19	17	21	31	46	71	81	93	90	89
Farming	37	42	48	51	63	93	116	140	160	170	172
Disbursements, All	39	45	52	57	71	96	137	169	212	233	248
ZTBL Disbursements			29	29	30	37	48	57	67	75	79
Recoveries, All	44	48	53	59	66	86	121	156	192	230	248
ZTBL Recoveries			33	34	36	41	46	54	61	70	73
NPLs, Outstanding \ 2								28.9	28.3	30.7	33.0
Number of Borrowers (000)	936	1054	1080	1080	1136	1143	1100	1009	1197	1416	1044
Average Loan Size, *(Rs, 000)*	103.6	91.1	93.1	85.3	91.8	106.6	136.4	146.0	140.9	122.7	175.7
					Annual Growth Rate						
Agri Credit Outstanding (net)		-1.0	4.8	-8.4	13.2	16.9	23.1	-1.8	14.5	3.0	5.6
ZTBL		-1.3	8.7	-14.6	2.2	4.5	4.1	-16.0	12.7	11.4	12.6
Farming		14.2	15.3	5.2	24.9	47.4	23.8	20.8	14.5	6.3	1.1
Disbursements		15.6	16.2	10.8	23.6	36.0	42.7	22.9	25.4	10.1	6.4
					Percentage Shares						
Agri Credit / Bank Sys Credit (pvt)	15.2	13.7	13.8	10.9	9.4	8.0	8.0	6.8	6.5	6.9	7.1
Farming / Agri Credit	37.7	43.5	47.9	55.0	60.7	76.5	77.0	94.7	94.7	97.8	93.6
ZTBL / Agri Credit	80.4	80.2	83.2	77.6	70.1	62.7	53.0	45.3	44.7	48.3	51.5
Agri NPLs / Agri Credit	*6.0*	*6.0*	*6.0*	*6.0*	*6.0*	*6.0*	*6.0*	19.6	16.8	17.7	18.0

	Average Annual Growth Rates				*Average Annual Growth Rates*		
	FY00-10	**FY00-05**	**FY05-10**		**FY00-10**	**FY00-05**	**FY05-10**
Agriculture, Outstanding (net)	6.6%	4.7%	8.5%	Farming	16.7%	20.6%	13.0%
ZTBL	1.9%	-0.4%	4.3%	Disbursements	20.5%	20.1%	20.8%

SaF Data Set, *preliminary* — Source: SBP Annual Reports, Dev Fin Reports, Statitical Bulletin

\ 1 Commercial Bank's credit to agriculutre sector taken as residual of total agriculture credit (net) outstanding less ZTBL credit.

\ 2 Compiled from various issues of Development Finnace, quarterly SBP reports, 2008 onwards; only quartery data, no time series data

Chapter 9: Islamic Banking and Finance
Features, Operations, Issues

Thematics

Islamic Finance – Pakistan
Structure and Operations

Islamic Banking, Organisation and Structure
Islamic Finance, Patterns and Growth
Funding: Islamic Banking – Deposits, Returns
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Islamic Finance – *Operational Framework*

Interest Rate, the Root of it All
General Stipulations of Islamic Finance
Treatment of Assets and Liabilities
Instruments of Islamic Finance
Baye'el-mua'ajjel, Murabaha, Bay's Sal'am, Modaraba Musharaka, Musawamah, Ijara, Istisna, Sukuk

Islamic Banking; Modern Banking

Comparative Experience
Towards a Symbiosis

Chapter 9: Islamic Banking and Finance

Features, Operations, Issues

1. Islamic banking is a part of ***Islamic Finance***, widely regarded as interest free banking in contrast to interest based banking as commonly practiced worldwide, including among a large number of leading Muslim countries. This is because ***banking interest*** is interpreted as ***riba,*** and ***riba*** is prohibited. In Islamic banking, there is ***no lending*** as such, hence there are ***no lenders***. There are ***no borrowers*** either, because ***no loan*** or debt is being created in Islamic banking; hence there are ***no debtors*** either. Instead, Islamic banking is a mode of financing on profit and loss sharing terms, PLS**,** whereby financiers and clients share risks of financing or investing in underlying assets on equal terms. Since there can not be proportional risk sharing without proportional ownership, therefore, financiers have to acquire ownership of items prior to extending credit finance, a key stipulation that can not be circumvented. Likewise, in Islamic banking, there are no interest-based deposits; instead, deposits are lodged on PLS terms. Given these features, Islamic banking is a system of finance rather than banking as the term ***banking*** is commonly understood worldwide; though it is labeled as Islamic banking.

2. We need to familiarize with the ***nomenclature*** of Islamic finance, its terms and expressions. The term ***Islamic finance*** is used for modern finance; ***Islamic financial system*** for modern financial system; and ***Islamic banking*** for mainstream modern banking. In the literature, modern banking is dubbed as 'conventional' banking though for the rest of the world, modern banking is anything but conventional. This misrepresentation it is not going to make worldwide banking any less modern than it is.

3. The term ***Islamic bank financing*** is used both for credit type financing and investment financing, but we can not get rid of the term ***credit*** since it is a pillar of accounting system. We must distinguish between bank advances or credit-based financing from security-based debt or equity financing; the two are vastly different. Therefore, Islamic financing extended as advances on credit terms is called here ***Islamic banking credit*** to avoid confusion with other types of financing. Within this category, activities undertaken using

instruments of finance such as *bay'el muajjel* or its twin, *murabaha,* and *bay'el salam* are trade financing activities. In contrast, financing extended using instruments like *modaraba, musharaka* and *sukuk,* is investment financing, while *Ijara* is leasing, and *takaful* is insurance. We shall identify Islamic financing with the type of instrument being used to differentiate between them in the analysis given below.

4. Islamic banks routinely do financing of their clients needs through extending advances to them on ***mark-up basis*** which is the counterpart of lending by mainstream banks, and hold a portfolio of financing which we shall call ***Islamic banking credit*** portfolio. Likewise, Islamic banks invest in securities and hold an ***investment portfolio*** like any other bank does. This portfolio must be distinguished from credit portfolio to keep definitions straight. These two portfolios are completely apart in their salient features and can not be lumped together. In Islamic finance, for investment financing, client corporations do not access long term debt markets through issue of bonds as they do in modern system of finance; because there are no long term debt instruments like bonds.

5. There is no bond financing and there are ***no bonds*** in Islamic finance; hence in strict sense, there are ***no bond or debt markets*** as these terms are routinely understood. However, bond like instruments, ***sukuk,*** are being launched which are an instrument of long term debt like financing, based on claims on all or part of assets of issuing corporations, provided they satisfy a string of stipulations concerning assets pledged as collateral. The stipulations of ***sukuk*** are transactional; hence they are as ad-hoc and may differ from one issue from other in their details.

6. The distinguishing feature of Islamic banking is in its adherence to stipulations of financing which are conditionalities of lending in common parlance. These require possession of collateral by financier, with whatever interpretation there may be in practice. If this stipulation comes to be widely practiced, it will put an end to ***willful defaults***, or engineered defaults so endemic in banking system of Pakistan. This is ***bay'el muajjel*** or ***murabaha*** whose stipulations require the financier first to buy the item to be financed for spot delivery, and then sell it to the client on deferred payment basis at a mark-up above the purchase price; thus circumventing interest rate charged, though this differential is the cost of financing. In practice it is difficult to execute such financing without adopting a benign interpretation of the term 'taking possession' of collateral.

7. Similarly, for borrowing by corporations through bond like debt instrument, sukuk**,** the same rule applies. That is, the borrowing instrument must be secured by physical assets that are clearly identifiable and pledged for the issue, and must not be tampered with until redemption at maturity of sukuk or their recall. That is, pledged assets must be quarantined. This stipulation guarantees financial safety to investors for the life of instrument. In this sense, sukuk are unlike corporate bonds or notes which are not secured by physical assets.

8. There are differences among Sharia scholars concerning interpretation of banking interest as *riba,* though in late 18th century, the time the translation of *riba* occurred, there were no banks, and no banking interest. The expression *sood* is derived from Persian expression, *sood ve ziyan,* literally meaning gain or loss. The argument for injunction against *sood* is that since money is currency, and currency is a piece of paper, therefore, *sood* is making money out of money, hence it is *'haraam'* and therefore banking *sood* should be eliminated. If for the moment one were to accept currency is only a piece of paper, devoid of any intrinsic attributes like ***liquid financial asset***, or purchasing power, or harboring ***time value of money***, or a premium for ***time preference,*** then if some one were to ***sell*** this piece of paper bearing a nominal value of 100 rupees, for 110 rupees in deferred payment by the buyer, then according to some Sharia scholars this is acceptable.

9. The reason is that it is trade of *baye'el-mua'ajjel* variety involving spot delivery for deferred payment of higher than original cost; therefore, such trade is not prohibited in *Sharia* law. This brings us to the issue as to whose version of *Sharia* law is to be followed, because there are many versions of it There are at least four leading *Sharia* of Sunni Islam and separate *Sharia* of Shia Islam and others. Adherents of each Sharia claim *sole veracity* to denial of others owing to differences amongst them, citing sources of Islamic law pertinent to their *Sharia.*

10. This is where we depart from this discussion and move on with analysis of current state of Islamic finance in Pakistan; its trends over past years at ***financial system level,*** not at ***institutional level***, much less at ***transactional level,*** routinely discussed in the literature of Islamic finance. This is because the issue of risk sharing, which is at the centre of Islamic banking, significantly changes its nature and its operational substance at each level. If at the transactional level, there has to be correspondence between risk and return pertaining to that transaction alone; then the same type of correspondence must hold at system level; there is no other way of

dealing with risk in a consistent manner. When financing is done, say, for trade of wheat, then profit or loss on wheat trading determines the share of financier. If Islamic bank undertakes credit type financing for several trade transactions, which it routinely does in any time period, the ***transactional analogy*** breaks down because some items financed may be profitable, others may not be; but risks have to be assigned on the ***credit portfolio*** rather than on itemized transaction basis. The only way to do this is on the basis of composite return for all financing, not transactional returns. This is the return Islamic banker receives, not depositor, the initial financier. The two returns are distinct from each other.

11. In this way, Islamic bank has performed function of risk diversification, but not of risk bearing. It does not share losses, because it has not used its own funds. These are depositors funds, and Islamic bank has passed on losses to depositors, that is the rationale of PLS, but it shares the profit, thus diluting the rationale of risk and reward sharing. If we take this argument to its logical end, if Islamic bank has passed on all transactional risks to depositors, the banker should not be entitled to profits, only agency fee in principle. The same type of ***moral hazard,*** a financial term, emerges in modern banking when deposit insurance is invoked. Moral hazard occurs when risks of business are pawned off to others; allowing bankers to indulge into risky ventures which they otherwise will not undertake.

12. As we move up the ladder to system level, transactional analogy is swept aside by system level outcome, which is a composite of institutional performance, where costs and returns are determined by what markets do, not what institutions do, much less what single traders do. These traders do not determine price, nor can they determine rate of return; they are price takers. How one differentiates between system level risks and transaction level risks assigned in PLS based returns is not specified.

13. At system level, risks and returns of all financing institutions get submerged where some institutions may be profitable, others may not be. Therefore, costs and returns in Islamic finance get aligned to market based rates at system level, not at institutional level, and certainly not at transactional level. That is the role of markets, and that is the reason why there is such a uniformity across financing institutions, be they Islamic banks or modern banks. In such situations how Islamic banks should go about determining costs, returns and risks at transactional level is difficult to say. This is the cleavage in Islamic finance between system level and transactional level. This cleavage occurs because there is no ***systems analysis,*** as a discipline, on operational side of these issues.

Section 1: Islamic Banking – Pakistan

1. There has been a significant expansion of Islamic finance in Pakistan since its advent nearly three decades ago and it has come in force recently. Much expansion of ***Islamic banking credit*** occurred during 2005-10. There was only one Islamic Bank in 2002 with 6 branches; none other exited before. By 2007, there were six Islamic banks, licensed and registered, with 109 branches. In addition, there were 18 mainstream banks authorized to do business of Islamic banking at 180 branches. Thus total number of banks was 24, and number of branches was 289 by end of 2007. By 2010, the number of banks had remained the same but number of branches had increased to 751. Of this 415 branches were of six Islamic banks, and remaining 336 branches of participating banks, constituting ***Islamic banking.*** Currently, this is the structure of system of Islamic banking in Pakistan.

2. For the ***six Islamic banks,*** sufficient data is available for the last few years. For the ***18 mainstream banks*** engaged in Islamic banking, this is not as straightforward as it seems because of the overlaps of two different data streams within their business operations; one for the business of Islamic banking and the other for mainline banking. There is no decade long time series data on the composite of Islamic banking with matching classification covering all banks because Islamic banking is new. At times Islamic banking credit is lumped together with investment and called ***Islamic financing.*** In a generic sense it is; but in operational sense, mechanisms and modes of financing underlying advances are vastly different from those of investing; they can not be lumped together without contravening norms of financial disclosure and reporting.

3. The consolidated balance sheet and income statements began to appear only a few years ago and those do not stretch back to early years. Hence tabulation is patched together to construct a time series and may contain errors, though care has been taken to ensure consistency of classification. SBP's reports contain analysis and data on Islamic banking, but a common data configuration is not adhered to, creating a disjoint that can not be spanned. The charts are of not much help either, though colorful they are. These reports, however, are very useful and their data has been used here.

4. There has been a fast expansion of Islamic banking since its advent in early 2000s. There was a seven-fold increase in Islamic banking assets during 2003-2010, starting from Rs 13 billion in 2003 to Rs 71 billion by 2005, and to about Rs 477 billion by 2010. Their average annual growth was 46 percent

during 2005-2010 as compared with growth of 14 percent for total assets of banking system. Given these differences in growth rates, the proportion of assets of ***Islamic banking*** to total assets of ***banking system*** increased from about 3 percent in 2005 to 6 percent in 2010. *(Data Set 3.9, 3.9a)* Within Islamic banking, assets of six Islamic banks dominate; they are about two thirds of total assets of Islamic banking, though the data pertains to 2009-10, only two reporting years.

5. Among assets, ***Islamic banking credit*** is the largest component. In 2005, total Islamic banking credit was Rs 46 billion; it increased to Rs 190 billion by 2010 at average annual rate of 33 percent over those five years. This growth has been volatile because Islamic banks had to establish their clientele network from scratch. Besides, second half of the decade was an unusual time for banking clients, given the boom and bust episodes of stock market. In spite of a fast growth of Islamic banking credit, its proportion of total asset declined over the 2005-10 period. In 2005, Islamic banking credit was about 65 percent of total assets of Islamic banking; it declined to 40 percent of total assets in 2010. *(Data Set 3.9)* This is a structural shift in composition of assets, if the balance sheet data is error free and is unusual. Structural change of this type do not occur with such rapidity.

6. This fast growth of Islamic banking credit, was accompanied by a swift rise in non-performing credits (NPCs) lodged in the portfolio of Islamic banks, parallel to NPLs in the portfolio of mainstream banks. In the early years of their opening up until 2005, it was not an issue, because the size of credit portfolio was too small, starting from a clean slate. As credit portfolio enlarged and number of borrowers grew, default began to show up and increased from Rs half a billion, or one percent in 2005 to Rs 13.8 billion, or about 8 percent of total Islamic banking credit. *(Data Set 3.9a)* This fast increase in non-performing credits and is similar to the increase in NPLs of banking system.

7. The implications of rising NPCs need to be analyzed in terms of its impact of financial soundness and solvency of Islamic banking institutions, and it is being done routinely by SBP. The results of these evaluations appearing in quarterly reports and summarized in special section of FSA reports of 2008-09 show that financial soundness has not been impaired thus far, neither of Islamic banks nor of the banking system. **T**his is evidenced by detailed results of analysis of capital and its adequacy, asset quality, earnings and profitability, and liquidity levels.

8. Under the prudential regulations of SBP, the part of NPLs deemed to be in the category of impaired loans must be provisioned from net income to begin with. Consequently, provisioning for bad loans did increase over the years covering more than half of the NPCs of Islamic banking and at the end of 2010; its ratio was 58 percent while the coverage for the banking system was even higher at 70 percent. Likewise, at end 2010, the ratio of net non-performing assets to capital was about 15 percent for Islamic banking institutions and for the banking system was 21 percent. The return on equity, ROE for Islamic banking institutions was 5 percent and for banking system was nearly twice, at 9.8 percent. Therefore, all leading indicators show a comfortable margin for Islamic banks in spite of the fast increase in non-performing credits in recent years.

9. Given this overall picture, we need to look next into how Islamic banks extend credit financing and in what ways it is different from lending by mainstream banks; who are the clients; and what are costs of Islamic credit finance. The largest coustomer of Islamic bank financing has been corporate sector. Its share in total financing has been on the rise from about 55 percent in early years to about 65 percent at the close of the decade. The next largest group of borrowers are individuals mostly for consumer finance, and they account for about one fifth of Islamic bank financing.

10. Nearly 85 percent of Islamic banking credit is held by corporate and individual borrowers. In early days, lending to SMEs was about 15 percent of total credit, but slowly their share declined, and in currently it is about 5 percent. The rest is distributed among a number of various other borrowers. Among sectoral borrowers, textile sector is the largest borrower, as it is for the banking system. The share of textile sector is about 22 percent; followed by share of consumer credit of about 16 -19 percent; and pharmaceuticals about 8 percent. Borrowers of these three sector constitute nearly half of Islamic banking credit; the rest is diversified among of sectoral borrowers.

11. As for instruments, ***murabaha*** financing has been the largest at about 40 to 45 percent for many years, so it is in current times. This is trade financing; followed by ***ijara*** financing of about 30 percent. *Musharaka* financing is next at about 28-30 percent. Nearly all of Islamic bank financing is concentrated in these three instruments which can be interpreted as three main users of financing. At the other end, there is no ***modaraba*** financing; nor there is any ***Qarz-e-Hasna*** and ***Istisn'a*** financing. Islamic banking institutions are simply not engaged in these three types of financing. Lack of ***modaraba*** financing is in keeping with its history of the past three decades; but absence of ***Qarz-e-Hasna*** is notable.

12. The crux of the matter is treatment of collateral. In trade financing, Islamic banks do not have much of the leeway because the collateral and procedures of self-liquidating trading loans are well standardized, and Islamic banks do not have much of choice in tinkering with trade financing documents to re-shape the collateral. In overdraft lending, Islamic banks can not participate given stipulations of Islamic finance, because no trading transaction is involved. If Islamic banks want to finance working capital needs they have to fall in line with other banks, because there is a stiff competition for 'conventional lending' done by 'conventional' banks.

13. ***Investments*** of Islamic banking institutions, all 24 of them, are a rising proportion of total assets as shown by estimated data for 2005-08, and actual data for 2009-10. *(Data Set 3.9)*. The combined proportion of Islamic banking credit and investments was 62 to 67 percent of total assets during 2005-07 and remained there for most years, but in 2010 it jumped to about 71 percent. This means that assets emerging from Islamic banking credit and investment constitute two thirds of total assets. Of the remainder, about 16 percent of total assets are required reserves kept with treasury banks, cash balances and prudential reserves with other banks, and another 4 percent in fixed assets. In comparison, banking system credit is close to 50 percent of its total assets, while investments constitute another 23 percent of total assets. Thus lending and investments constitute nearly three fourth of total of entire banking system in Pakistan. The remainder consists of reserves with treasury banks, operating fixed assets, and other assets, while cash balances and reserves are another 10-12 percent of total banking system assets.

14. This pattern of ***asset distribution*** reflects a difference in the structure of Islamic banking with mainstream banking; but if it is, what Islamic banks do is different from what the rest of the banking system does, if it is not lending and investment. Part of the answer is that Islamic banks are relatively more heavily invested than mainstream banks are. The proportion of investment in total assets has risen from 2.5 percent in 2005 to about 33 percent in 2010; while the proportion of Islamic bank advances in total assets has been declining. *(Data Set 3.9)* The estimates for 2005-07 are tentative; but for 2009-2010 these are actual amounts reported in quarterly reports of SBP. Islamic banks have done heavy investing at a time when not many securities could meet the criteria that is, business finances of their issuers, the corporations, should be free of banking interest, especially their income. This is because working capital and trade financing is routinely done from short term borrowings from banking system on market rates. Without this liquidity, business operations are not possible.

15. A similar issue is faced in investing in stock market. If Islamic investors want to invest, they are unlikely to find stocks of companies whose finances are not tainted with interest rate in Pakistan or anywhere else. If they want to invest through mutual funds, there are no Islamic mutual funds as yet; and there are hardly any stock not tainted with banking interest; yet, the proportion of stock investment in assets of Islamic banking institutions has increased significantly. Islamic banks are finding it hard to do credit financing. It is easier to park their liquidity in government securities.

16. This is the reason about half of total investments of Islamic banking institutions was held in government securities in 2010; another 23 percent in TFCs and bonds. The remainder was in investments in stocks. A large part of these securities, Rs 134 billion out of total investment of Rs 157.8 billion was held as 'available for sale' a classification that has to be adhered to and conveys it all. Islamic banking institutions are active investors of securities market, irrespective of the issues and reservations expressed above.

17. Next, we need to look at ***equity*** of Islamic banks, including owners' capital, reserves held as cash balances with treasury banks, retained profits, and revaluation of assets. For six Islamic banks, it is fairly easy since their balance sheet is regularly reported. Balance sheet data using the same classification is needed for 18 participating banks, separate from banking data in their consolidated accounts. This is reported for 2009-10, but not for years. Often investments and credit of 'Islamic banking industry' are lumped together which makes it difficult to analyze these two categories of assets and make any comparison with the banking system. Besides, capital adequacy requirement have been in a state of flux over the past years; including reprieve granted for compliance on discretionary basis owing to disparate growth of the two systems of finance.

18. Estimates of equity of Islamic banking show that in 2007, assets of Islamic banking were Rs 206 billion, and liabilities were Rs 176.4 billion; hence, net assets or equity of Islamic banking was about Rs 29.5 billion. By 2010, equity rose to Rs 46.4 billion, but ratio of equity to total assets has been declining because assets of Islamic finance have grown faster, upwards of 40 percent per year as compared to equity growth of 14 percent for banking system. *(Data Set 3.9)* Consequently, the ratio of equity to total assets was 14.3 percent in 2007; by 2010 this ratio had fallen to 9.7 percent of total assets, just above minimum capital requirements of 9 percent, almost on the dot, stipulated in prudential regulations of SBP.

19. It would be premature to draw any conclusion given the early phases of Islamic banking operations and sparse data of a few years except the observation that this drop in the proportion of equity to assets occurred mainly because average rate of growth of total assets during this period was higher than growth in net assets. There could not be a similar increase in shareholder's capital. Hence, the proportion of equity both in assets and liabilities declined. This does not mean that Islamic banking institutions experienced a shortfall in their capital adequacy levels. Capital adequacy did not suffer as shown by performance indicators of Islamic banking discussed earlier in the context of non-performing assets of Islamic banks.

Costs and Returns - *Islamic Banking*

20. The main source of growth of Islamic banking has been rapid increase in deposits which are a significant part of liability of Islamic finance as they are for banking systems all over. In 2003, total deposit with Islamic finance institutions was a paltry Rs 8 billion. *(Data Set 3.9)* By June 2005, total deposits had grown to Rs 50 billion, more than six times their level just couple of years ago, owing largely to a starting base from scratch that did not exist before. Thereafter, Islamic banking deposits increased to an estimated Rs 390 billion by end 2010, a phenomenal growth over five years at average annual rate of about 46 percent. In contrast, the average annual growth rate of deposits of banking system was 15 percent or one third the rate of growth of deposits of Islamic banks over the same period.

21. The phenomenal increase of Islamic banking deposits is being seen as vindication of Islamic finance over 'conventional' banking; but whether it is sustainable, it remains to be seen. For one, a 46 percent average increase in deposits year after year over five years, does not mean that it came from a similar increase in nominal incomes of those household depositors over the same five years. Increase in deposits can not be ascribed to growth of household nominal income over this period. Household incomes did not increase at this rate over any period including the one being discussed.

22. With respect to the source of growth of Islamic deposits, some would argue that it occurred because mark-up rate on deposits in Islamic finance were higher than those of banking system and this is true. The nominal weighted average rate of return, or average ***PLS rate for deposits*** in Islamic banking was about 4.7 percent, but only during 2008-09, including current deposits, the highest it has ever reached if compared with the rate of 2.0 percent in 2005. This PLS rate of return on deposits of Islamic banking was

significantly above the estimated weighted average nominal ***rate of interest on deposits*** of 1.2 percent during 2005-10 period for the banking system. Such a large differential in rates of returns occurred because nominal weighted average rate of interest rates on interest-based ***savings deposits*** of banking system was about 1.3 percent, while savings deposits constitute upwards of 60 percent of the total deposits of banking system. *(Data Set 4.71)* In contrast, weighted average rate of return on PLS-based savings deposits were higher; nearly 5.5 percent during 2008-10, while deposits constitute about 54 percent of ***all PLS deposits*** of banking system.

23. This differential is substantive and it does explain growth of deposits with Islamic banking institutions. This growth occurred because of ***depositor preference*** to shift their deposits to Islamic banks because interest on deposits is considered ***sood***, not mark-up or profit return and hence it is deemed ***haraam*** by depositors. These two factors may have also caused a switching of deposits to PLS mode. Besides, Islamic banks have begun aggressive drive for long term deposits through instruments like ***mahana amadni*** accounts with fixed rates for deposits of 8 to 12 years, being advertises as ***sood se pak.*** These rates for long term deposits are guaranteed returns; they are very high for the deposit market of Pakistan, and are in direct competition with similar offers now being made by commercial banks, and are a direct challenge to NSS deposits of similar returns for similar maturities. Therefore, increase in deposits of Islamic banking is not a one time phenomenon; it is likely to be sustained in future years; may be not at this rate.

24. Deposits are main source of funding of Islamic banking institutions as they are for all other banks. For six Islamic banks, deposits were just about half of liabilities during early years rising to about 56 percent by 2005, and thereafter to an overwhelming 86 percent of their liabilities. That is, the proportion of deposits in total liabilities has risen sharply. This is understandable given that Islamic banking recently started and deposits began their climb from sublime levels at the time of door opening with limited clientele and supporters of these new institutions. Recently, Islamic banks have begun to borrow in financial markets. These ***borrowings*** were an estimated Rs 9 billion in 2005 and increased to Rs 19 billion by 2010, constituting barely 4.4 percent of liabilities, almost a negligible proportion at system level. Deposits and borrowings is the ***funding base***, constituting nearly 93 percent of total liabilities of six Islamic banks. For Islamic finance as a whole; these two constitute about 70 percent of total liabilities.

Costs and Profitability

25. The ***costs of borrowings*** has three major elements; primarily ***cost of funding, intermediation costs*** and ***premia*** that determine banking margin. The same holds for ***cost of financing*** obtained from Islamic banking institutions. These costs have generally followed patterns of lending rates of the banking system, though Islamic bank financing costs are slightly higher by one to two percent as discussed in chapters 5 and 7 and as given in *Data Set 5.4* attached there. Briefly, the weighted average rate of Islamic banking credit has ranged between 10 to 11.5 percent during 2005-07, then shot up to 14.7 percent in 2008. Thereafter this rate moderated to 13.8 percent during the last couple of years of the decade. At the other end, funding costs are hinged upon weighted average rate of PLS returns to depositors, though borrowing costs are generally higher, based mostly on money market rates. The costs of borrowing, are a tiny part of funding costs of Islamic banks, because these borrowings are very small relative to borrowings of banking system.

26. The ***costs of funding*** for Islamic banks is not known because of a tiny part of borrowed funds, but costs of PLS deposits are known. The weighted average of PLS returns to depositors was 2–2.8 percent during 2005-07; rising to 4.6-4.8 percent during 2008-2010. *(Data Set 3.9)* As a result, gross banking spread for Islamic banking was 8.6 percent over the past few years, though it touched a high of 10 percent in 2008, an unusual but very profitable year indeed in the midst of the crisis spawned by stock market crash. These annual averages are to treated cautiously because averaging obliterates traces of variations that are the essence of interest rate movements both on the funding side and financing side of Islamic banking.

27. The ***costs of intermediation*** of Islamic banking institutions increased from about two percent in 2004 to 2.4 percent in 2006, and further to 3 and 3.4 percent over the past three years. These costs have been high, considering that these were formative years of Islamic banking business. The tentativeness in these estimates is due to lack of data on details of costs at system level. Data problems aside, growth of Islamic banking credit or its volatility can be explained by costs as shadowed by weighted average ***rates of return***, or average intermediation costs; nor can it be explained by monetary policy stance affecting system level credit.

28. Islamic banking business is less profitable relative to mainstream banking as shown by earnings and profitability. The return on assets, ROA, of Islamic banking has been declining throughout the period. It began falling

behind during the middle years of the decade and was below its counterpart ROA for the banking system by a good margin. *(Data Set 3.9)* The ROA for Islamic banking was 2.2 in 2003, but ahead of ROA of banking system of 1.8; it fell to 0.9 in 2007 and was well below ROA of 2.1 in that year. This lays to the rest the perception that Islamic banks are more profitable. In spite of this, the enthusiasm to invest in Islamic banks, or in its expansion, and placement of depositor's funds has not weaned.

29. Islamic financing has a dynamics of its own rooted in a combination of factors, aside of costs or returns. It will eventually settle down and will operate within the overall financial parameters. It has to respond to client oriented demand for credit finance at costs that are close to ***market based costs***. It can not swim against market determined finance, otherwise it will loose its client base. Thus far, Islamic banking has been operating within a market niche; it has not yet come into full competition with mainstream banks. Banking system has yielded a market space; but once Islamic financing comes knocking on the door, this ambiance will be over. Then it will be a matter of survival. That stage has yet to arrive.

Islamic Banking *and Banking System*

30. There are differences between the profiles of Islamic banks and 18 or so mainstream banks engaged in ***Islamic banking*** in Pakistan versus the profile of banking system institutions consisting of 40 odd banks of all types in Pakistan. The reason is Islamic banks are small relative to mainstream banks who are now operating Islamic finance windows; their clientele is not as diversified as it is for large banks; and their financial depth is less than those 18 banks. Size of banking business operations critically matters because it is the demand side of business; on supply side, funding patterns are dominant as they ought to be in any banking system.

31. Rapid growth distinguishes Islamic banking. Its relative position in the banking system of Pakistan has enhanced. For example, assets of Islamic finance were about 2.0 percent of total assets of banking system in 2005; by 2010, this share had grown to about 6.7 percent owing to significantly disparate growths discussed earlier. The share of Islamic banking credit in total banking system credit was about 2 percent in 2005; by 2010 it had grown to about 5 percent, more than double of what it was five years ago. Similarly, investment of Islamic finance were negligible in early years, but by

2010, its proportion had grown to 3.7 percent of total investments of banking system. On the funding side, deposits of Islamic banking were less than 2 percent of deposits of banking system in 2005. By 2010, this proportion had grown to 6 percent of total banking system deposits. Borrowings of Islamic finance are almost negligible relative to liabilities as compared to banking system borrowings. It is a *niche* banking system by any yardstick.

32. The fast growth of Islamic banking credit, over the past ten years emanated from trade financing, followed by consumer financing and lease financing, *ijara*. There is not much difference between a routine lease and Ijara mode of leasing; but that does not explain growth of Ijara financing. Besides, Islamic banking started from a near zero base in early 2000s since there were no Islamic banks in those years. At that time whatever Islamic banking was being done by authorized banks was miniscule part of their operations; though PLS and mark-up modes were in wide use. *Musharakas* and *modarabas* were established in the 1980s but their operations never rose to high levels to be noticed much less to replace mainstream banks.

33. Islamic banks offer better returns on deposits and their costs of are higher than deposit costs of mainstream banks. Their weighted average rate of return on PLS deposits is significantly higher than rates on interest bearing deposits. Islamic bank financing, however, is costlier by couple of percent points relative to cost of borrowings from banking system; still borrowers use this facility in part because of segmentation of loan markets. The non-prime borrowers have limited access to banks, if any at all. Islamic banking being a niche of the larger credit market is seeking new clients. For new borrowers, Islamic banks may be the only source available. The popular perception remains that banks are very rich profitable because their lending rates are exploitative of borrowers, and that their deposit rates are too low which are equally exploitative of depositors; and that this is not so in Islamic banking. These contentions are not evidenced by data. A comparison of borrowing costs shows that Islamic financing is costlier than interest-based banking; though it has little to do with the cost of funding; rather it has a great deal to do with client costs of the two systems.

34. Islamic banking is relatively less risky because, in theory, risks can be passed on to those funding the bank under PLS mode, the depositors. Otherwise, Islamic banking is no less risky than others, though there are no contractual costs of deposit funds. The penalty for bad business decisions can be passed on to depositors given the edict of risk sharing, rather than being lodged on their balance sheets, thus compromising their capital or equity

base. As a result, financiers may undertake riskier propositions that may not be acceptable otherwise. An effort is underway to rewrite norms and rules of banking regulation and supervision for Islamic banking institutions that would address this anomaly.

35. Islamic banking institutions are new and are not burdened by non-performing credits (NPCs) as are mainstream banks; though, NPCs on Islamic modes of financing are rising fast. The ratio of NPCs total credit in Islamic banking has remained very low in the range of one to two percent of total Islamic credit outstanding throughout the decade. In comparison NPLs of banking system have been fairly high and are close to 13-14 percent of total loan portfolio. Therefore, burden of provisioning and write-offs on Islamic banks is relatively lower than for mainstream banks.

36. A better comparison of the two profiles emerges from return on assets (ROA) before taxes for all banks and Islamic banks because corporate taxation is the same for both. Note that net return on assets after taxes for six Islamic banks in 2009 was 0.5 percent, but return on equity was 4.2 percent. *(Data Set 3.9, 3.9a)* In contrast, net return after taxes for banks was 1.0 percent; and their return on equity was 8.2 percent. Further, return on owner's capital, was 16.7 percent in 2009 for all banks, whereas it was 4.7 percent for the six Islamic banks; but these estimates for a few years should be treated with caution. The business of banking for Islamic banks is not as profitable as people think it is, even though Islamic banking institutions may charge higher rates for credit- financing from their clients, pay slightly less to their depositors, gain a high spread, yet fall short of profitability.

37. The source of differential is in cost patterns. The costs of Islamic banking are slightly high, not due to provisioning but because of high operational costs. Intermediation costs are a good indicator of how efficient are banks at managing deposit mobilization and borrowings, their credit portfolio and investment. We do not have many observation to go by to estimate intermediation costs of Islamic banking at ***system level*** on a consistent basis to permit meaningful comparisons. The patterns of Islamic banking show that financial intermediation by Islamic banking institutions is dwindling as measured by the proportion of Islamic banking credits to ***their total assets***. Instead, the proportion of investments to their total assets has gone up. The reverse is the case of mainstream banking. The proportion of banking system credit in total assets has increased, and the ratio of investment to total assets has fallen over these years. This raises the issue what is the role of ***Islamic banking*** if not financial intermediation. Investing in securities is not the main function of financial intermediaries.

38. This is the status of Islamic banking in Pakistan relative to mainstream banking. Islamic banking is likely to increase further but it may not become a dominant part any time soon because of fast banking system growth as witnessed in recent years. Similar is the pattern of a swift expansion in Islamic finance on international scene in various Muslim countries, money centers of UAE, Dubai, Bahrain, and a smattering of Islamic finance in a few Western European countries.

Section 2: Islamic Finance Operational Implications

1. A great deal has been written on Islamic finance in Pakistan and elsewhere. It is not possible to review such a rich and diverse material, much less try to put together a summary or an overview of this literature. Therefore, for purposes of elucidation of basics of Islamic finance, the focus here is on issues related to replace interest-based banking with Islamic banking. Since the decision handed down by Supreme Court in 1991, pressures intensified to launch Islamic banking. Subsequently, the ruling of 1991was upheld by *Sharia*h Appellate Bench in December 1999, and on appeals, a reprieve of sorts was granted in 2002 by the full bench of Supreme Court. In the process, segmentation of banking and finance has occurred which is not healthy for the financial system, particularly in times of financial and economic stress and economic instability such as the one prevails at the end of the decade of 2000s.

2. The government and SBP have been under pressure for nearly two decades to usher in and implement interest free banking. There has been implementation of sorts; though there is hardly any appreciation that systems can not be decreed into existence by government or court edict; instead systems evolve from societal imperatives, needs and priorities for all, not just because a few are vociferous for their causes. Implementation of court ruling started out with authorization of existing banks to do business of Islamic banking, opening of new Islamic banks and a proliferation of subsidiaries of existing banks, or opening up of branches for Islamic banking all over the country, operating side by side though in segmented markets. This segmentation has brought forward issues that need to be resolved if financial strength and solvency of banking system is not to be jeopardized. The need is to evaluate operations of Islamic banking; and its implications for compatibility with modern banking and finance.

3. Currently there is insufficient cognizance among the public with regard to these issues, except among a few engrossed with Islamic finance regarding deposit mobilization and financing by Islamic banks. There is not much elucidation forthcoming either from advisory groups regarding how Islamic banking will operate; what are *Sharia* based modes of financing; what bridges if any are available for a resolution of issues that need be arrived at if Islamic finance is to operate side by side mainstream modern banking as it does now. The recent disagreements among *Sharia* advisors concerning sukuk is one instance among several, regarding lack of consensus among the scholars what is or what is not Islamic when it comes to banking finance.

The Root of it All - *Interest Rate*

4. What is interest rate in applied world, how it gets determined, and how it permeates financial system has been discussed at length in Chapter 4 and it need not be repeated here. Interest rate is at the root of controversy between Islamic banking and modern banking and finance. A great deal has been written about interest rate and it provides an engrossing study for those who would like to pursue it. A review of this literature is neither possible nor intended; nor it is feasible to summarize this literature here. An attempt has been made to briefly outline main threads pursued by various schools of thought concerning interest and why it arises.

5. A review of various schools of thought concerning interest rate would include prominent economists, philosophers, socialists, reformers and theologians of all shades who have written about interest rate. Among this group of thinkers, especially Western thinkers, if one were to seek a consensus, one will not find it. The philosophical underpinnings of what interest rate is and why it arises, has rarely been resolved to the satisfaction of all. Interest rate has always been the bone contention between socialist and capitalist ideologies. Those controversies have not abated.

6. There is a consensus of sorts that interest rate is time value of money, and in applied context interest rate is the cost or return for mobilization and use of loanable funds, though there is no unique rate of interest as such. Instead there is a whole structure of interest rates in market based banking system determined in financial markets on the two sides; namely deposit mobilization and lending. At one spectrum, socialist thinkers made a break away from classical thinkers, and denied the validity of interest rate. Following this thinking, societies who tried to forge an alternative regime to interest based banking and financial system did not succeed in their efforts.

For nearly 50 years, socialist countries kept searching an operational counterpart of interest rate; they never found one that would be in line with their view. Sometimes they called it a charge on capital, a factor of discount, a shadow price of capital, opportunity cost of capital, or a valuation factor, but they never found one that could become the basis of an alternative financial regime. Eventually this experiment ended in a grand failure. In current times far more interest-bearing banks are to be found in Russia than in good part of Europe.

7. At another spectrum are proponents of Islamic banking, who interpret ***riba*** as ***bankari sood***, denying validity of interest rate on theological grounds. They and have introduced their own version of interest like charge as mark-up or premium, which is not much different from interest rate in its fundamentals in business operations of Islamic banking. There is hardly any consensus among these scholars. There is a group of proponents who insist on abolition of modern interest based banking. What it will be replaced with and how it is to be done remains un known or controversial.

8. That being a cryptic summary of history of thought concerning interest rate, the history of banking operations worldwide has been remarkably free of controversy. It has fostered an operational consensus regardless of what anybody said about interest rate. The consensus is that interest rate emerges from time value of money; or it is cost of money if you do not have it and you have to borrow it you for your needs; or it is the return on money if you have it place it in interest-bearing accounts, or invest in securities, because money is a financial asset, representing command over real goods and services to its holders or investors.

9. This consensus exists and cannot be repudiated. In modern finance, sometimes interest rate is described as cost of money, sometimes premium for time preference, or sometimes it is the time value of money; or it is a return on liquid asset like cash. In that sense interest rate is interpreted as liquidity premium; or the inverse of it, namely, cost of being illiquid. Interest rate is also regarded as a proxy return on a range of mercantile activities, or it is considered as the premium paid for the command over real resources over time. The list of operational interpretation of interest rate in banking and finance is long indeed, but interest rate exists as the pillar of valuation in banking and finance. It simply exists in one form or the other; it cannot be denied; and there is no escape from it, no matter what brand of banking or financing it is.

10. These concerns aside, majority of people in many Islamic countries continue to go about their business without worrying too much how Islamic is business of banking. Both mark-up based Islamic banking and interest based modern banking prevail in many Muslim countries including Arab countries and also in Iran, Turkey, Malaysia, Indonesia. The business operations in these countries continue without their owners worrying too much about brand of banking they are dealing with, as long as it meets their financing needs at reasonable costs and profitability.

11. Further, worldwide, banking is market-based with variable interest rates, both on the deposit side and on the lending side. Therefore, it cannot be argued that in modern banking and finance, interest rate is of necessity ***fixed*** or necessarily ***pre-determined*** any more than prices of consumer goods are some would like to portray. Financing instruments and contracts may carry fixed or variable interest rates, but variability of interest rate over time slices such as a month, a quarter, or a year reigns supreme and is an operational reality of market based banking and finance. This has little to do with arcane discussions of pre-determined nature of interest rate.

12. In Islamic banking, funding side is not articulated except for blanket rule that pre-determined and fixed interest-rate cannot be paid to savers on their deposits. Funding for investment or trade financing requires savings mobilization, regardless of the system of finance. As long as investors are not the same group as savers, financial intermediation will have to be done at zero plus costs together with a premium for risk assumption inherent in financial intermediation. Hence savings cannot be mobilized at zero rate of return. A society that insists on zero or near zero returns will soon run dry of funding, and may find its capital eroded without much replacement or new investment, resulting in chronic supply shortages as happened in socialist countries in not too distant past.

13. Savings involve time preferences, hence a premium is essential for savings mobilization and allocation; namely for financial intermediation. In operational realm, financial intermediation can not be accomplished at zero cost or returns, both time based; that is financial intermediation can not be done without time based cost or return, namely interest rate or a mark-up determined by market conditions.

14. Among proponents of Islamic finance, ***money*** is of no intrinsic value, identified as ***fiat money***. Their interpretation of ***money*** can not allow for time value of money, or ***seignorage***, or a premium for time preference. At the same time, in practice, they would allow a ***mark-up,*** both ex-post and ex-

ante, but what mark-up is, remains oblique, beyond suggesting that it is part of price paid for item financed, hence it is part of profit of the seller, and also that of banker financier. For example, on financing side of Islamic banking, some instruments of Islamic finance allow deferred payment, where future installments include cost of sale and an implicit charge on capital over time, bundled together in the mark-up as a "consideration" for deferred payment.

15. Therefore, in credit like financing operations**,** mark-up is implicitly based on a discounted value of future streams of payments to cover the sales costs plus cost of funds and risk premium over time, and it can be determined easily. The underlying rate of discount or the internal rate of return is nothing else but a proxy for interest rate, or a charge on liquid capital, and it cannot be denied. The moment one allows a charge on capital, or a cost of capital, there has to be a return, an internal rate of return, or a discount factor, and it is acceptable in Islamic finance**.** Therein lies operational resolution of the issue concerning interest rate and Islamic finance.

16. This resolution is not tantamount to rationalizing ***riba*** as critics have claimed; rather it is based on operational realities of modern business of banking and finance. It emerges from properties underlying instruments of Islamic finance. The hurdles to a resolution emerge from the zeal to establish interest-free banking in another name namely profit or loss. Several prominent Muslim societies in modern times have crossed that bar and have arrived at their own version of a resolution and are living at ease with it. Pakistan has yet to cross that rubicon. Societies who have shown economic progress have done so by raising finance for future, while guaranteeing security for the present. That is the essence of financial intermediation in modern days. That explains in part, why some societies have grown while others have lagged behind.

Road to Islamic finance

17. The picture that has emerged thus far centers around start of Islamic banking by opening up new windows at mainstream banks operating with instruments of Islamic finance. Very likely, Islamic finance will continue in parallel to the existing system. Some of the modes of Islamic finance are already in place, such as *Murabaha, Musharaka, Modaraba, and Ijara.* The banking system is operating a PLS based system of deposits, imperfect though it may be in strict sense of stipulations of Islamic banking. The government has launched housing finance as per guidelines of Islamic

finance. In addition, authorities have allowed establishment of companies to provide finance to small business and enterprises or micro credit along the lines of Islamic finance. Many Muslim countries have a hybrid of banking and financial system where the routine market-based financing co-exists with Islamic finance. Same outcome is likely to occur in Pakistan as well.

18. A transformation of banking system is not in the cards and will be prohibitively expensive for Pakistan struggling under massive financial burden of public debt. It is not simply a matter of abolishing interest-based banking; nor it is the issue of replacing entries in books of accounts as often suggested. It has potential of derailing the economy from which it may not recover, much the same way as nationalization did during its rein. The direct cost will be colossal not to mention indirect costs. The early success of Islamic banking is reassuring, though a recent rise of ***stuck-up loans*** in Islamic financing is not an encouraging development.

19. The character of banks will change from financial institutions to a mix of trading houses and financier, requiring a new breed of managers different from what banks currently employ. The transformation means that banks will be required to raise deposits on *modaraba* basis only, that is, on risk-sharing basis. In this respect, public confidence in the banking system is critical. The public is used to putting its deposits in what it perceives as risk-free deposit instruments. In daily routine, PLS based accounts are not perceived by public as risk sharing. A move towards risk sharing system could lead to diversion of finances away from deposits into avenues other than supporting business financing via Islamic banks. Already Islamic banks are investing a great deal and shying away from extending finance to businesses. This reallocation of financial resources in a resource poor country will have serious adverse consequences.

20. As for deposit maturities, a higher weight for longer-term maturity deposits will be encouraged as being done now with ex-ante and fixed ***mahana amadni*** accounts at Islamic banking institutions. On the other hand, discounting of bills of exchange is disallowed and fees will not based on time factor. This ambiguity could lead to legal challenges adding another layer of uncertainty because government's actions and recommendations do not enjoy legal immunity. For a number of financial services that are inevitably time based such as letters of credit, performance bonds, banks will not be allowed to charge a fee on consideration of time involved. Similarly, a fee for underwriting will not be allowed; depositors will be allocated profits on basis of daily product and weightage system, involving a high administrative cost. In such conditions either profitability of financial institutions will suffer, or

most likely, they will tailor their fee structure at the higher end to have a cushion for contingencies, thereby raising cost of intermediation. Moreover, inter-bank lending will be allowed on profit sharing basis. Under this scenario, loss-making banks will loose an important tool of liquidity management, putting them at a serious risk, if not acute financial distress.

21. The risk of non-performance should be a major concern given that at present level of loan defaults is a problem facing country's banking system. This might become even worse as the principles of Islamic finance concerning transformation, favor defaulters. The modes of financing are tilted in favor of profit and loss sharing; banks will not be allowed to include penalty charges to their income and liquidated damages that courts would allow. A related risk is that a system favoring borrowers might encourage litigations, damaging financial strength of banking system and putting even greater burden on the country's court system. This system does not suit a situation where defaults are endemic and have become a routine, with a weakened and ineffective accountability apparatus.

22. There is no guideline on how monetary management will be done under Islamic banking system, critical to maintain solvency and stability of the financial system. In a system with only about half a dozen financial instruments of trading and financing, why would there be a need for sophisticated modern monetary control apparatus. It is not clear as to how the government will finance its fiscal deficit without access to money markets operating on discount rates. Fiscal balance is a highly desirable objective, but it can not be decreed; government will have to borrow increasing amounts as it has been doing thus far, otherwise it will come to a grinding halt.

23. Government borrowings can not be done on *modaraba* based instruments; the ideal borrowing instrument. Nor do these instruments lend themselves for monetary policy management, as their values and earning prospects will be susceptible in public perception, because effective monetary management requires that instruments being used have a stable and predictable price. Alternatively, direct monetary policy tools such as reserve requirements, credit quotas will have to be used which have already proven ineffective in the past. Regulatory system will have to be changed to allow parallel arrangements for two systems of banking. If so, a central bank like SBP with its current mandate may not remain relevant any more since banks and financial institutions will essentially be providing trade and equity financing. An entity of a different character and orientation will be needed. That line of argument is too speculative to be pursued any further.

General Stipulations

Islamic finance

24. Islamic finance requires broad-base stipulations that are over and above the stipulations specific to various instruments currently in use and those to be floated in due course. The following general stipulations are applicable across the spectrum to be adopted both on the asset side and liability side of financial operations. There are some overlaps or repetitions, because there is no unique set of these stipulations, rendered with accuracy to avoid divergences in practice of Islamic financing.

25. On the **asset side,** the stipulations are:

- *Sharia* compliance is uppermost: financial institutions are allowed only those modes of finance that comply with rules of *Sharia*.
- Fixed or time deposit receipts can be used as collateral but only upto initial amount, the face value of deposit instrument, ignoring accrued interest component of the deposit.
- Banks may charge single commission or fee for L/Cs and guarantees, but these charges should be free of interest rate over time; if guarantee or commitment is for repayment of a debt or a loan, these charges can be levied and recovered.
- Banks can extend financing against bills of exchange and it has to be interest free; though, banks can collect a service charge as agency fee though without interest over time.
- Inter-bank transactions are allowed provided banks operate on profit or loss basis, and hence can share in the profit of the debiting bank earned on inter-bank transactions on daily product basis.
- In investment financing, syndication and underwriting fee is allowed but fees and commission are not. If underwriters end up holding shares, those will be allowed only at offer price.

26. On the **liability Side,** stipulations cover the following:

- All deposits except current account deposits are acceptable but on the basis of *modaraba* and without a mark up though banks can levy a service charge on current account holders; return on saving account would be paid on the basis of weighted categories of savings or fixed time deposits, determined in advance.

- Fixed term deposits and investment are allowed on *modaraba* basis though long-term accounts may be given a higher weightage.
- Mutual funds, investment funds, trusts, are allowed. Banks may own mutual funds or may act as fund manager and share in profits on agreed basis; however, losses will be borne by investors of mutual funds.
- Cash management account will be on the basis of *modaraba* without offering any fixed profit rate and will not be off-balance sheet item.
- Profit among various items on the liabilities side shall be allocated on the basis of assigned weights to these items.
- Central bank has to adopt measures to protect interest of depositors and to ensure better quality of decision making in several areas including obligations of financial institutions for deposits mobilized; periodic monitoring and ratings of banks and financial institutions and their clients as necessary; disclosure requirements; and strengthening of accounting, auditing and supervision requirements.

27. There are various issues concerning these stipulations. For example, in case of financial disputes arising from non-compliance or delayed payments and defaults, these stipulations in effect do not protect interest of financier and are detrimental to their genuine business interest. For example, if payments are delayed banks may levy a fee, but not payable to banker, rather to charitable organisation. Likewise, if disputes drag on, banks can seek recourse to courts but court decreed awards against defaulters are payable to charities, not covering court costs of the banker. There is no meaningful financial recourse to adjudication for banks in this system. After incurring all the costs of recourse and procedural travails, if banks have to surrender any financial award in their favor to some charity rather than help them to recover part of their losses, why would they seek recourse in the first place.

28. The practice of Islamic financing in Pakistan is to have *Sharia* board sanctify each and every financing transaction conducted to ensure that it is in accordance with these general stipulations and also conforms to stipulation set forth for the instrument of financing concerned. This practice has reduced Islamic banking to ***transactional banking*** rather than a system of finance where uniformity of treatment across the instruments or within a category of instruments is not possible. The implication of transactional level *versus* system level financing are a significant hurdle if Islamic banking is to emerge as an alternate to system of modern banking.

Section 3: Instruments of Islamic Finance

1. There are several instruments of Islamic finance concerning trade finance, equity finance and participation, long term fixed asset finance and partnership. Among these, the following ten are most commonly referred to and are main element of transformation. Since *murabaha* and *musawamah* are operationally the same, so is *baye'el-mua'ajjel*, the number of instruments of Islamic banking is reduced to seven in all and a derivative called *sukuk* which can be based on any of these seven instruments. Lately, an insurance type instrument, takaful, has been introduced. Hence we have:

- ***baye'el-mua'ajjel***
- ***murabaha***
- ***bay'es sal'am***
- ***modaraba***
- ***musharaka***
- ***musawamah***
- ***ijara***
- ***istisna'a***
- ***sukuk***
- ***takaful***

2. Besides these, in the literature on Islamic finance a bewildering variety of instruments are listed, and just because they happen to carry Arabic names, they are not any more sanctimonious then routine instrument; but for the liturgy they are. For example, *ijara* and *takaful* are lease finance and insurance. A close scrutiny reveals that these are some variant of the instruments listed above, but most were non-operational, because banking did not exist in Muslim countries until mid or late 19th century, much less ***Islamic banking.*** Whatever limited modes of financing prevailed in Muslim countries, those were trade financing instruments. Inter-country mercantile traditions had faded away or were overtaken by European countries.

3. Islamic financing instruments rule out contractual returns in principle. In practice they shadow contractual returns, because these returns are not arbitrary; fixed for all times, they are based on market returns which are revised as per dictates of market supply and demand and a host of related factors, financial and economic, just like prices in product the markets which are fixed at the time of transaction though vary all the time.

4. Further, instruments of Islamic finance both on the supply side of funds and usage side of funds are predicated on the basic principle that financiers should participate in funding arrangement on equal footing, sharing in both profits and losses, instead of participating only on the basis of a pre-determined

and fixed return. On the side of supply of funds, depositors maintain profits and loss sharing (PLS) accounts with financial institutions *regardless* of the tenure of the deposits. This stipulation considerably restricts the variety of deposit instruments available to the savers.

5. As for usage of funds, there are instruments stipulating that the financier should participate in the profit and loss of the business venture being financed through various types of ***sale contracts***. This principle adds business risks to financial risks because the mode of financing through these instruments is such that the financier has to assume business risks associated with the funding activity, thereby enhancing the overall risks of financial exposure. This participation, ensures proper use of funds. Risk of misuse is considerably mitigated; but the drawback is that such funding activities force the financier to become first an active trader and then a financier. In practice, this is not feasible, besides creating serious situations of ***moral hazard*** in financing as this term is understood.

6. Besides, this is transactional finance unlike a line of credit which is a source of readily available finance regardless of the business activity being funded and its timing. These financial instruments need customization for each type of transaction regarding their terms of participants, thereby significantly adding to the cost of funding activities and their risks; therefore founding cannot be bundled into financial packages through instruments to meet diversified needs of modern day business activities.

7. ***In contrast,*** to the handful of instruments of Islamic finance listed above, a large number of interest based financial instruments are in use in modern banking as grouped and listed in the next page, and this is only a partial list, hence incomplete, though it is included here for illustrative purposes. Not all of these are prevalent in the banking system of Pakistan, but a good number of them are operational in international banking and finance. Besides there are instruments that are typical to banking business locally, mostly concerning various modes of banking finance. This variety is essence of banking; and more are being added as 'innovative products' by bankers all the time, customized to the needs of their clients.

8. Therefore, this listing, incomplete though it is, serves the purpose of providing a contrast. The replacement of this vast number of financial instruments with a handful of Islamic finance instruments will turn the banking system of Pakistan backwards. This becomes apparent when operational features of these instruments is analyzed along with their stipulations. Interpretations of these stipulations of instruments are not

Modern Banking Instruments
A Stylized List

Cheques and Deposit Receipt
Bearer or Crossed Cheques; Certified Cheques; Money Orders; Bank Drafts; Demand Certificates of Deposits; Time Certificates of Deposit; Variable Rate Current Deposits; Savings Deposits; Escrow Accounts; and Current Accounts.

Loans & Credits
Real Estate Loans; Auto Loans; Installment Loans, Consumer loans, Credit Cards; Accommodation Loans; Mortgage Loans; Account Receivable Loans; Bridge Loans; Construction Loans; Demand Loans; Swap Loans; Signature Loans; Subordinated Loans; Development Loans; Agriculture Credit; Pledge Loans; Debt Consolidation Loans; Syndicated Loans; Debt/Equity Swap.

Trade Finance
Bills of Exchange and Letters of Credit , See Glossary for *Letters of Credit*

Bank Guarantees
Performance Guarantees; Advance Payment or Mobilization Guarantees; Fidelity Guarantees; Construction Insurance Guarantees; Standby Payment Guarantees; Deferred Payment; and Foreign Suppliers Guarantees.

Equity Investment
Common Stocks; Preferred Stocks; Cumulative (Preference) Shares; Convertible (Preference) Shares; Dividend Warrants; Mutual Capital Certificates; Closed End Fund Units; and Open End Fund Units.

Portfolio Investment
Treasury Bills; Term Participation Certifications; Corporate Debentures; Commercial Papers; Mortgage Swaps; Margin Buying; Futures Commodity Contracts; Futures Financial Contracts; Convertible Debentures; Non-Convertible Debentures; Bearer Bonds; Trust Bonds; Floating Rate Bond; Cushion Bonds; Indexed Bonds; Zero Coupon Bonds; Revenue Bonds; Perpetual Bonds and Escrow Bonds; Municipal Bonds; Mortgage Bonds;

Money Market Transactions
Money Market Certificates; Arbitrage and Hedging Contracts; Leverage Contracts; Options Trading; Currency Trading; and Floating Rate Notes.

uniform across Islamic banking institutions, creating anomalies in the process, because these are embedded in transaction as approved by resident *Sharia* advisor. The implications of customized interpretations of stipulations need to be examined carefully. Nonetheless, to provide a contrast, a partial list of instruments prevalent in modern banking are given on next page, which may not be present in banking system operations in Pakistan in full.

9. The operational aspects of instruments of Islamic finance especially trade financing instrument is one-sided; favoring the client, and are loaded against the financier. These instruments do not categorize maturity and the terms of financing according to maturity; hence no cost differential between various types of financing is specified except vague cost-plus stipulations. The instruments do not categorize borrowers for their portfolio quality. There is time value of money of predetermined variety implicit in the mark-up hence they contradict the repudiation of riba. They hide extortionist nature of premium for future, worse than banking interest; they have bearing on how credit markets operate, since these are transaction-based arrangements in isolation of transactions elsewhere at the system level.

Islamic Modes of Finance

Baey'el-mua'ajjel

10. *Baey'el-mua'ajjel* is trade financing through a sales contract executed by the financier as a seller for spot delivery of traded items but with deferred payment as a lump sum or in installments for an agreed period. Thus the seller also assumes the role of financier, but to be a seller the financier must have the title to the goods being sold and must have their possession. In effect, the financier must be a trader first then a financier; under the contract the seller can ask a price for credit sale higher from the price of cash-sale; in case of credit sale the sales proceeds provide the profit margin or the cover for the financed amount on pre-determined terms.

11. Therefore, price of credit sale includes cash price plus a premium or mark-up for deferred payment, predetermined and bundled into credit price. Maturity is defined as per credit sale agreement and it may vary from a short period of a few months to a few years depending on item traded or the financing cycle. Since traded item has already been delivered on spot, it cannot serve as security except if it is a fixed asset; therefore, in case of non-performance the only recourse available to seller, the financier, is security specified in sales contract or business operation of the buyer, the borrower.

The rules of *baey'el-mua'ajjel,* stipulate that in the event of default, buyer may be asked to pay a penalty but not to the seller rather to a charity. Default penalty does not accrue to creditor; therefore, seller has no recourse against default even though buyer may have furnished a security or a lien on other assets, because by the time default occurs these assets may or may not remain performing assets.

Murabaha

12. It is identical to *bay'el-mua'ajjel,* almost. It is a trade financing instrument for item-based trade with a mark-up or cost plus sale, where the financier as a seller undertakes to supply specific items being traded under a contract for sale to the client at a mutually agreed price including cost and a mark-up or profit margin. As in *baey'el-mua'ajjel*, the financier becomes party to the trade, purchases the traded item from the original supplier or the manufacturer, takes title and possession of the goods being traded, and then sells it to the buyer. The financier may sell to the buyer or to his agent who may buy the goods on his behalf and take possession, though the transaction remains the risk of the financier. The price, however, is fixed and agreed at the time the contract is executed. The financier is allowed to charge a mark-up on cost plus basis and this may include a consideration for deferred payment; but after the goods have been delivered and if the seller has not been paid and there is a default there is no meaningful resource available to the financier except the general resource of business operations of the buyer.

13. Thus, *murabaha* is mark-up based cost-plus sale with deferred payment, including a *consideration* for deferred payment and the consideration is time value of money though not in explicit fashion. This mark-up, or consideration, is a crude form of compounding present value of amounts involved. In essence, *murabaha* is trade financing where financier is trader first, then financier. There is no there is no borrowing involved, nor there is lending in the ordinary sense. There is a conflict of interest embedded in opportunities for manipulating the mark-up inclusive price and its future value through cost-plus provision. The same is true about the dual role of financier and trader depending on the nature of collusion that may emerge.

14. The two types of risks are merged together; financing risk and trading risk. Financier becomes supplier, but is beholden to producer; and as trader he is beholden to his client. As supplier, the financier can never outsmart the dealers in the middle. For financing transaction, the financier has to acquire the assets, take legal possession then extend financing. These transactions could be very risky in commodity operations in Pakistan.

15. In *murabaha*, collateral is loosely defined and extends only to items being financial. In case of non-performance, no recourse available to financier. Even if recourse is pursued, the beneficiary of litigation is charity not the financier, therefore, recource does not provide compensation to those who have been wronged; this compensation is denied. Likewise, the concept of maturity is loosely mentioned, because the central issue is whether cost-plus, or the mark-up element is term-sensitive? If it is, then, it is implicit. This ambiguity could be a source of moral hazard; though the date of payment is to be specific and certain.

16. The ***stipulations of murabaha*** are:

- Finance is provided for goods traded but must not to be based on credit documents; financier is seller and is obligated to disclose cost of goods sold to the buyer.
- The promissory note or bill of exchange cannot be assigned or transferred to another party at a price difference from its face value.
- A *murabaha* cannot be rolled over; any buy-back is prohibited.
- The commodity being financed must exist and seller must have ownership and possession of items for financing to be extended; price of item, and date of payment must be specified in advance.
- Late payment fee can be levied but it will not be paid to banker; it will go to charity. Courts can award a premium for costs incurred but accrued interest is not allowed; banks may require collateral; and they can sell pledged collateral without recource to courts.

Baey'es Sal'am

17. *Baey'es Sal'am* is similar to *murabaha* and *baey'el mua'ajjel,* though as trade financing instrument it is a variant of these two instruments the buyer pays the seller full cash price in advance for future delivery, and thus the buyer becomes financier to the seller for the contract period with mutated rights for undefined or ambiguous privileges of no legal merit and unenforceable, without a meaningful recourse. That is why *Sal'am* is non-operational.

18. It is trade financing under a sales contract for advance payment for deferred delivery of traded and financed item. It is similar to a forward contract where the buyer pays the seller full cash price in advance for future

delivery and thus becomes financier to the seller for contract period. After goods have been delivered, buyer who is also the financier under *sal'am* can sell at market price. Thus, in effect, financier becomes a trader in commodity futures market. The financier also assumes a business risk in case deferred supply does not materialize, or occurs when commodity market has taken a downturn and the final sale price is below the price paid at the time of advance payment.

19. The ***stipulations*** of ***baey'es-sal'am*** are:

- The buyer will pay full price at time of sale; otherwise, it is deemed as sale against a loan which is not permissible. Agreed date of delivery can be changed with mutual consent for a cost.
- *Sal'am* can be used for commodities which must be delivered on the spot but cannot be tied to production process.
- Financier can seek collateral or security; penalty for late delivery can be levied but will go to charity; courts can award damages for costs incurred, banks can sell collateral without recourse to courts.
- Before taking possession of goods, financier, the buyer, cannot sell or transfer goods to another party; contractual buy-back is not permissible, but after transaction is completed, it can be done.

20. Often *sal'am* is described as raw material purchase financing or agricultural credit based on the crop cycle, but inherently this financing carries the risk of non-performance as well as the risk of future market price. There is no specific security against non-performance because traded item may or may not get produced or delivered; it does not exist at the time of contract, it is yet to be produced or manufactured. The financier may secure a pledge on other assets or business operations of the client, the future supplier. The maturity period may or may not be specifically dated in the contract depending on the production cycle of the item concerned; hence it may not be enforceable.

Modaraba

21. It is a profit sharing arrangement similar to investment funds where one party provides investment funds, the investors, and the other party consists of the managers who manage investments on the basis of a proportional share in profits. Investments are allowed only in activities approved by *Sharia* with profit, loss and risk sharing arrangements stipulated

for each investment activity. *Modaraba* may be a multipurpose investment company or a single purpose company created to finance a large investment such as investing in a factory or a plant. In case of multipurpose *modaraba*, the selection of investment activities is done carefully to ensure that profit accruing to *modaraba* is not tainted with interest or interest-like income from the business activities of the clients.

22. For example, investment by *modaraba* in those investment trust units is not permissible where interest-bearing instruments are part of the unit's investment portfolio, like bonds or guaranteed notes payable with interest. The profit from investment is shared among the investors in strict proportions based on the size of their investment and agreed to among them at the time of participation; but investors are not allowed a pre-determined amount from profit. If there is a loss, it is limited to the invested amount, the exposure of the investor.

23. Thus, *modaraba* is not a single item or a single activity investment financing. It is a participation in a pool of investments where risks of investment are spread over a large number of investment items in the portfolio funded by *modaraba*. The shareholders can sell-off shares back to *modaraba* or in a secondary market if it exists; therefore, a multipurpose *modaraba* is more like a close-ended mutual fund where the net-worth of *modaraba* depends on investment performance of its managers, and secondary market conditions.

24. The ***stipulations of modaraba*** are:

- Business will be conducted by *modaraba* manager within the stipulations and framework of *modaraba* agreement.
- The participants shall provide investment in cash or assets of mutually agreed valuation. Liability of *modaraba* members is limited to their contribution unless agreed beforehand.
- Profits shall be divided among members according to agreed proportions; no member is entitled to pre-determined amount of return; but losses shall be borne by *modaraba* fund.
- A variety of *modaraba*s can be set up such as multi-purpose or specialized business in perpetuity or over a time period; *modaraba* could be close-end or open-end like mutual fund.
- *Modaraba* manager can invest, but as original member he shall not be entitled to a proportion of profits in excess of ratio of investment to total original investment.

25. Operationally, it is limited liability investment, like buying shares in mutual fund; where placing the investments is left to fund managers under the protocol of mutual fund concerned, and investors place their investments under an agreement for proportional profit sharing. Among the stipulations of *modaraba*, first four items are pretty straightforward, but the last item is a peculiarity, because it is reverse of insider control system. Normally, manager is prohibited to invest because he will be first to disinvest in adverse situations because of asymmetric information, and is likely to indulge in insider trading, so inimical to financial soundness and health of any mutual fund. The managing party, the ***mudarib***, has the upper hand with no meaningful recourse available to investors and a clear conflict of interest through insider trading.

26. Further, no capital gains accrue to investors on fund investments and related activities of the managers, or do they? That is the ambiguity of *modaraba*. This is because managers are allowed to invest like ordinary investors, which is wrong for conflict of interest, but original investors are disallowed any sharing of profits made by mudarib on their placement. Nor the original investors receive shares from total returns of the fund including capital gains on the total portfolio; this is because profits do not include capital gains. There is hardly any investment fund in the real world where investors are not allowed sharing in capital gains, instead their return is based only on profits. May be this explains the poor performance of *modarabas* in Pakistan.

Musharaka

27. It is equity finance with active participation of investor in the management as well. It is similar to a joint venture where the investors as owners contribute capital and fixed assets, machinery, equipment, and working capital, together with technical and managerial expertise. Thus, *musharaka* is a partnership in investment and business operations for medium to long term period. It is activity based investment financing where financing and investing both are combined into a single activity, making the financier a shareholder; but exposure is not limited to financed amount since it is a joint venture and not a limited liability company. Therefore, *musharaka* may have open-ended liability where share in profits and loss may not be proportional to the amount invested. In case of business failure and if *musharaka* goes under, all liabilities in excess of remaining assets are to be shared proportionally by the partners.

28. The ***stipulations of musharaka*** are:

- Investment will be made by all shareholders in *musharaka*, and profits shall be distributed and losses shared as per their proportionate shares or as agreed in contract with investors. Profits accruing to any partner cannot exceed proportionate share in total investment.
- If manager of *musharaka* also invests, he will be entitled to share profit in proportion to his own capital in addition to his share as a manager.
- No fixed or lump-sum amount of return is permissible; nor any pre-determined profits; returns and profits will be based on share capital; but a management fee can be paid.
- Partners should jointly own all assets in proportionate shares and contribute their share capital at an agreed valuation.

29. These stipulations provide *musharaka* manager various opportunities of insider activities not available to members, hence it is laced with high degrees of moral hazard in investing. On top of it, since open-ended liability means loss is not proportional to the amount invested, it is a major disincentive for investors. For these reasons *Musharaka* investing never took off in Pakistan.

Ijara

30. It is lease financing under a leasing contract charted and is almost identical to current leasing practices and procedures and therefore, it is the same as routine leasing business. Lease may be for a specific item whose ownership is retained by lessor, with pre-specified leasing costs over the lease period, where privileges and obligations of both parties to the lease are spelled out in leasing contract, which is legally binding with usual recourse and remedies. *Ijara* is not much different from leasing but it harbors several issues. For example, if it is lease rental, and if rental is predetermined, it is not different from literalists' interpretation of ***riba.*** In normal leading, lease contracts provide for recourse in case of non-performance, but not *ijara*. In case of non-performance, the beneficiary is lessee who has many incentives for non-performance. There is no recourse against abuse of asset under *ijara,* because if an asset does not render service, it is free of charge to the lessee; but at whose discretion or under what situations, that is not stipulated in *ijara* contract. Lessee has the upper hand because of built in opportunities of abuse of contract.

31. The ***stipulations of Ijara*** are:

- The leased item will remains in ownership of lessor; only consumer items can be leased; hence no leasing of machinery or equipment is allowed in strict interpretation of Ijara.
- Since lessor retains title of the assets during the term of lease, therefore lessor bears all risks and returns of ownership. Leased assets will be insured and lessor shall be designated beneficiary.
- Either party can enter into agreement to buy or sell the leased assets upon expiry of the lease term or earlier, but lease agreement will not be conditional to such agreements.
- The amount of rental will be clearly stipulated agreed to in advance; lease rental of assets is not permissible except at par value.
- Late payment penalty can be levied but will go to charity, not the lessor. Courts will have same authority to award damages as in case of all other instruments of Islamic finance, except for opportunity cost of monetary asset.

Istisna'a

32. It is project based investment financing with ownership, where funding and project implementation are combined into a single activity on profit and loss sharing basis. For example, *istisna'a* could be housing finance with contractual obligation tendered by the financier to produce and deliver a housing unit to the buyer at a pre-agreed price, whose payment by the buyer may be in full or in part at the time of contract as advance payment, and the remainder as deferred payment on delivery, or as installment over a contractual time period. However, unlike mortgage payment where interest and principal amounts are stipulated, this pre-agreed price at the time of contract includes costs of construction plus a profit margin. The time of delivery is specified, so is payment date if it is deferred payment, or installment dates if it is installment payment.

33. The difference between *istisna'a* and mortgage finance is that in *istisna'a* the financier is a builder, and extends financing to the buyer for the purchase bundled into purchase price of the dwelling and financing charges; whereas in mortgage finance, financier may or may not be the builder; title of ownership is with the buyer and it provides the collateral for mortgage loan. Therefore, *istisna'a* is not commodity finance of short-term as it is made to appear; nor it is project finance

34. Istisna'a is installment based financing for acquisition of durable assets such as mortgage financing, or some project financing, where the financier is owner-manager-contractor-builder of the asset first, and financier later. The price of asset is fixed, but which price is it? It is the delivery price of the asset yet to be constructed; it is the future price, and includes the mark-up or consideration for the future delivery. Time value of money is involved; financier assumes all risks including project risks.

35. The ***stipulations of istisna'a*** for commodity finance are:

- Price must be fixed and can be paid in lump sum or in installments.
- The purchaser should not provide material required for manufacture.
- Any party can unilaterally cancel the contract if seller has not incurred any direct or indirect cost.
- The buyer before taking possession of goods shall not sell or transfer goods to any other party.
- In case of delivery delays, price of the commodity can be reduced by a specified amount per day as provided in contract.

36. These stipulations of *istisna'a* are hardly different from those of trade financing instruments, except for the issue of ownership. The closest example would be sale of housing units or flats offered for sale by the builder with financing arrangements usually on installment basis, where ownership is not transferred until the full payment is made upto last installment. The abuse inherent in this type of financing are legendary in Pakistan, usually non-completion or sub-standard construction, and no amount of rule, regulations or laws have prevented non-performance.

Sukuk

37. Lately there has been much enthusiasm for a new instrument of Islamic finance which has attracted a good deal of attention of investors all around, called *sukuk (plural)* a bond like instrument, especially in London and UAE financial centers. *Sukuk* are certificates of claim on assets pledged as collateral for long term financing. These certificates, *sukuk,* are of a specified face value, issued by the borrower in the name of the buyer of certificates, the investor, establishing a claim of the investor over assets of borrower called *sukuk* assets. The investor, thus becomes a share holder rather than a lender or a financier only; an owner of borrowing enterprise or business, no matter how small its share total assets may be. Hence, *sukuk* are not a debt obligation of issuer to buyer of certificates as bonds are, and this is a critical distinction between bonds and *sukuk*.

39. In practice, bonds are issued on the basis of market rating of the issuer; not for specific assets pledged by the issuer for bond issue. In case of sukuk, assets have to be pledged to be financed by sukuk. This pledge, in principle, is indeed a strong stipulation, almost eliminating specter of default, though assets *to be financed by sukuk* donot exist, they have yet to be created which is the purpose of sukuk based financing. Hence, how this stipulation is to be implemented remains to be sorted out.

40. If this stipulation is reinterpreted liberally to mean pledging *existing assets* of a company then it is impractical, because if any corporation or business entity owned such assets and if it could furnish those assets as dedicated collateral ***before*** issue of *sukuk*, one wonders why such a corporation would need to go through *sukuk* issue to finance its business operations because such financing is sought to create assets in ex-post fashion. Hence, second thoughts are being given as to whether such borrowings are admissible in Islamic finance if the issue of pledged assets is not satisfactorily resolved.

38. As regards returns, unlike bonds which carry a contractual bond rate, the coupon rate, *sukuk* carry a return based on the outcome of investment shared in proportions agreed to at the time of issue between issuer and the buyer of *sukuk.* This return, is based not only on the *sukuk* assets of the issuer, but entire assets underlying the business of the issuer and this is a source of confusion. If ownership of *sukuk* bearer is limited to assets underlying *sukuk*, the borrower has to find ways to separate these assets from total assets to limit the claim of *sukuk* bearer to only those assets under sukuk financing. Otherwise, the claim may be lodged or a lien may be established on other assets of the borrower. If *sukuk* represent ownership of *all* assets of the business, then for a small amount of sukuk investment why any business would allow a claim extending over its entire asset portfolio. This separating of assets is easier said than done.

39. *Sukuk* are of various types, designed and based on various modes of Islamic finance discussed above. Hence, there are *ijara sukuk, salam sukuk, modaraba sukuk, murabaha sukuk,* and so forth. The stipulations of those modes of financing are equally binding on *sukuk* issued, and they could be a securitized version of original assets underlying *sukuk.* As for maturity of *sukuk*, in principle it could short term, medium term or long term. In practice, most *sukuk* issued thus far and being sold in its nascent secondary market are long term bearer certificates. Most *sukuk* issued thus far are Ijara *sukuk* whereby leased assets underlying the *sukuk* come under the ownership of *sukuk* buyer. Whereas in a lease arrangement, the lease holder is essentially

paid a rental without having any claim of ownership of leased assets, in *sukuk,* the bearer is not only a lease holder earning the rental, but is supposedly owner as well, thus augmenting his return, as well as enhancing his risks, unlike a bond holder who does not. There are business risks in *sukuk* unlike bonds, though these risks are limited to proportional value of certificates. In some cases, an insurance like fund called *takaful*, is created to spread the risk around and lower risk exposure to certificate holder.

40. The argument pivots around contractual bond rate, the coupon rate fixed for maturity of the bond, irrespective of yield of the bond which guarantees bond holder a fixed income. The return to the bond holder is not contractual bond rate, rather a composite of bond rate and capital gains or losses on the market price of the bond. This aspect has been overlooked in this argument. In adverse times, a decline in the bond price from its purchase price could easily wipe out bond income, leaving the bond owner with a major loss on total returns. *(see Chapters 7 and 8,* ***Volume II)***

41. Price of the bond is determined by long term rate of interest and also by networth of the bond issuer and by its business performance as shown by quarterly earnings pursuant to expectation, or a change in the outlook of its creditworthiness bundled into bond rating. This rating changes according to business risks to which the bond holder is exposed. Often bonds of good quality become junk bonds of no market value, and rather quickly if bond issuer has failed at its business. Therefore, to assert bond holder does not share in risks of underlying business of the bond issuer is not true; it is contrary to operational experience of bond investing. There are bonds of very low risks, such as treasury bonds or triple AAA bonds, but bond rating could change if the bond issuer is no longer a first rate business. Bond risks are mitigated, though never eliminated.

42. There is no way of avoiding risk of investment in *sukuk* or in a bond. The issue is to what extent investors or buyers are exposed to business risks over time. Likewise, no amount of *takaful,* insurance arrangement, is going to reduce risks beyond a threshold. These arrangements simply spread around the liability of risk, paid for by *all* buyers as a collectivity and bundled into the price of certificate much like ordinary insurance. *Sukuk* or its associated *takaful* does not make much difference. One could not buy an insurance at the same time claim that they are risk sharer in full.

43. Of the late, a controversy has emerged regarding collateral for issue of corporate *sukuk.* One contention is that corporation must tender specific assets as collateral for *sukuk* issued, because general corporate commitment

supporting bond issue may not be sufficient for redemption of *sukuk* at maturity owing to deterioration in the financial status of corporate issuer. If this stipulation were to be followed then *sukuk* are similar to corporate debentures, rather than corporate bonds routinely issued on the strength of corporate borrower rating done by reputable rating agencies.

44. A larger issue is that corporate bonds are issued for ***creating new assets*** that do not exist, like for a new plant; or refurbishing and modernization of machinery and equipment with longer pay-off period than available for working capital borrowings. In case of public utilities, new bond issues are named after new infrastructure facility that does not exist; like a highway or a bridge or a power plant. If these assets or their counterparts existed, there would not be much need to issue a borrowing instrument, be it *sukuk* in Islamic finance or be they long term bonds in modern finance. The prior ownership stipulation is similar to the stipulation in trade financing where the financier is required to possess the items being financed. In this sense this stipulation is consistent though impractical in operational realm.

Section 4: Islamic Banking and Modern Banking - *Towards a Symbiosis*

1. A review of literature on Islamic banking laced with ideological undertones would suggest that no resolution is likely between Islamic banking and modern banking. They are poles apart if one were to focus only on the banner item of prohibition against banking interest and insistence to establish *bila sood bankari* in Pakistan or any Muslim country. Often it appears dismayingly difficult to achieve, especially if purists are given the space and opportunity to pursue their interests, but in real world situation a ***symbiosis*** has already emerged because of even more enduring interest to sustain trade and finance, the lifeblood of any economy.

2. If one were to dwell on controversies, those are endless; if one were to seek ways to live with these two systems, it is already being done even in most ardent Muslim countries. One has to look around in dispassionate manner to find the elements of symbiosis, with some appreciation of limitations, tolerance and forbearance. In strict sense, Islamic finance is not a ***system*** of finance, as we understand the term ***financial system***. It is a collection of modes of transactional finance spread over a very limited number of

instruments depending on the transaction being conducted, though these handful of instruments are supposed to replace existing banking system, if not the entire financial system. However, the evolutionary process for creating a structure has started with bricks, mortar and foundations of modern banking and finance, but it has long ways to go and its outcome is uncertain.

Financial Intermediation
Islamic Banking, Credit Financing

3. There are two strands of developments concerning Islamic banking that provide a basis for an operational resolution, a symbiosis referred above. ***One***, the mainstream financial institutions have found that a part of banking risks can be hived-off, and hence Islamic modes of financing are relatively less risky, at least in principle. Therefore, banks plunged into it rather enthusiastically during the mid-2000s which was atypical of their usual cautious posture. They thought that if one peels away the rhetorical rubric, some modes of Islamic financing are not only feasible but also profitable owing to the availability of a captive clientele with supply of deposit funds at below market costs of borrowing and without attendant risks. Since the rallying point of Islamic finance is to share the risks equitably on both sides of the balance sheet, a viable mechanism has to be found. The rush into Islamic banking has tapered off; though the interest remains.

4. In the process, Islamic finance attracted an unusual array of participants who are willing to re-label various financing mechanisms as *Sharia compliant*, the licensing code of Islamic finance, and are willing to redesign instruments to satisfy moderated if not diluted certification criteria. Once the instruments are certified by *Sharia* advisors, there is no holds barred except for prudential regulations of central bank. That there is a conflict of interest here, that is besides the point. This is the reason for pressure to redefine prudential regulations in Pakistan, and to redesign mainstream statutory requirements such as reserves and liquidity ratios, and thus admit holdings of Islamic instruments of finance in fulfillment of statutory requirements. The ***second*** element of a possible resolution lies in operational realm, to be found rooted in the ***deferred payment*** allowed under various instruments of Islamic finance alongwith a premium for ***consideration*** for deferred payment. This position has come a long way from insistence on eliminating interest like capital charge on financing. We will take it up first.

5. Three of seven instruments of Islamic finance involve deferred payment. These are *Bay'el-mua'ajjel, Murabaha* and *Istisna'a.* In all these three instruments a pre-agreed price of an item of finance is allowed to be paid on installments, where the pre-agreed price includes cost of item financed plus a premium in *consideration* of future payments. There is no stipulation or restriction on size of premium though it is likely to vary according to maturity. Simple financial calculation of discounted value of future cash flows would reveal it as charge on capital, or an internal rate of return, and this is nothing else but an operational proxy for medium or long-term interest rate. This is a profound break from ideological rift surrounding interest rate as such. For example, under *murabaha,* the starship of Islamic finance, together with its stipulations as listed above, deferred payment of financing on installment basis is permissible where installment price admittedly includes a premium over spot price, and this premium is none other than ordinary rate of interest, with the difference that it is variable, but it is fixed ex-ante, at the time installment payment is being determined; end of the argument concerning pre-determined and ex-ante fixed interest rate.

6. Likewise, under *istisna'a,* housing finance for long periods can be done on installment payment basis, where ownership of dwelling is not transferred to the buyer at the time of purchase; rather it stays with the financier. This is a contradiction of principles buried in the operational side of financing instruments. That is the key difference between *murabaha* and *istisna'a.* Aside ownership, in both these instruments, there is a rate of return in which an implicit charge on capital exists; that is, a cost of funds is included, to be recovered over time. Those cost exists and are pre-determined; that is, a shadow long-term interest rate exists within operative mode of instruments of Islamic finance. Thus, debate regarding interest rate and its pre-determination on operational side of asset-based financing is reduced to denial of elements embedded in instruments of Islamic finance.

7. Most promising resolution concerns *sukuk* a leading instrument for floating corporate debt in capital markets. Currently, there is a good deal of interest in this instrument all around. Purists would like to believe that *sukuk* do not involve debt obligation as such, rather they represent a claim on assets of corporation issuing *sukuk.* That issue aside, with some fine tuning, *sukuk* and bonds become indistinguishable *in substance* not in appearance, whether one calls it a debt instrument or not. Concern are being raised about general or specific asset pledge underlying *sukuk* issues discussed above. This search will go on, but eventually some moderate version of stipulations of asset pledging will come around. Meanwhile sukuk are being floated without stipulation of pledged assets and declared.

8. Of the remaining six instruments of Islamic finance, *musharaka* and *modaraba* are investment financing instruments, *ijara* is leasing, *sal'am* is trade financing of forward delivery variety, *istisna'a* is project financing, and *takaful* is insurance. For the first three instruments the issue of interest rate does not arise because these are return based financing activities; nor does it arise in istisna'a or *takaful.* The only instrument left is *Sal'am,* which is a forward contract with spot payment for future delivery where price may include financing premium..

9. Often it is argued that time value of money is not acknowledged in Islamic finance because it such admission would contradict interpretation of *bankari sood* as *riba,* though operational aspects of some of the instruments of Islamic finance are centrally based on time value of money in an unmitigated fashion. The time value is implicit in the mark-up, and it is pre-determined in deferred payment allowed by the instruments of Islamic finance, and it is explicitly recognized. The implicit time value of money can be ascertained in any financial transaction done under stipulations of any one of the instruments of Islamic finance. This is true of both *murabaha* and istisna'a. Under stipulations of *murabaha*, financing of consumer durables can occur on installment payment basis where ownership of the item being financed is transferred to the buyer at the time of delivery. Under istisna'a mortgage financing and similar types of project financing can be done without raising issues of charge on capital. The operational realm of Islamic finance is more flexible than its conceptual realm.

10. Let us next consider the issue of ***fixed or variable*** interest rates on both sides of balance sheet, even though it is going over similar arguments as presented before; namely deposit mobilization, financing or lending. It depends on how time horizon is perceived, both on the funding side and financing side. True, interest rate are fixed in market-based banking, but only for a time slice, however long or short it may be; just like price of a commodity which is fixed for a period, however long or short that may be. At the time of transaction, it is fixed; otherwise it is variable. Therefore, if the time line is perceived as a continuum, rate of return is variable; if time line is seen in discrete slices, it is fixed. This property of time line is identical to both sides of any variety of finance; be it Islamic finance, or modern finance, and this serves as a basis for resolution of this issue.

11. Often a question is raised that if Islamic banks are offering competitive rates of return on deposits and are doing financing on rates higher than lending rates of banking system, then what is the difference between Islamic banking and modern banking. Leaving aside complex arguments or esoteric

debates, the discussion regarding what interest is or is not is brought down to a folkloric analogy of trading a piece of paper for a price higher than nominal value embossed on it; thereby breaking the logjam on implicit charge on a liquid financial asset like currency note. For the purists, this is controversial; it is tantamount to *opening doors of riba*, a common refrain heard frequently. For the practitioners this is the way out of controversy on interest rate involving a liquid financial asset like money represented by currency note of any denomination.

12. In operational sense, interest rate or its counterpart, the rate of return on liquid assets, converges around a rate anchored to a broad range of rates of return on financial assets of similar varieties, which in turn are tied to rates of return on investment on physical assets through explicit securitization, or through mechanisms of financial intermediation. These returns move in a synchronized fashion within a band over time, and fluctuate within the boundaries of the band with reference to their maturity structure, and class of assets. The band is thin if markets are efficient otherwise wider; however, the band does not extend to cover fringe activities of informal markets.

Financial Intermediation, Funding
Deposit Mobilization

13. Let us return to funding side, namely deposit mobilization and examine the nature of fixed and pre-determined *mahana amadni* on Islamic banking deposit instruments and compare it with fixed rate of interest on modern banking deposits of long term. The two are identical regardless of arguments proclaiming one being *sood se pak,* the other being tainted by interest charge. How could a *mahana amadni* be guaranteed on a deposit instrument otherwise. This is an operational resolution of significance and is already prevailing in the deposit market, but the dictum remains that no fixed and pre-determined interest rate is to be paid to the depositors; instead depositors have to share in the risks of financing; that is, an ex-post risk based return is to be paid to the depositors. This is a classic example of what the dictum is and what practice is in operational realm.

14. There are three issues here. These are: risk sharing by depositors; fixed or variable rate of return to depositors; and pre-determined or post-determined rates of interest or return. Among these, the issue of fixed or variable rate of return has already been explored above. As regards issue of

risk sharing in market-based finance, depositors do share in the risk, however minimal it may be; one such risk being insolvency of financial institution or loss of deposits. In modern banking system, these risks are mitigated by efficiency of financial intermediation, its diversification and strength of asset portfolio.

15. Further, exit-entry mechanism of banking system runs so smoothly, buy-outs and mergers of banks occur so frequently that depositors rarely face deposit loss, which leads to erroneous conclusion that in modern banking depositors do not share in the risks of banking. They share the risks at ***system level.*** Since these risks are bundled and spread over the entire group of depositors, they cannot be traced at ***transactional level.***

16. The risk of depositors can be covered through a deposit insurance system where costs are spread over all categories of depositors. A return may then accrue to depositors because costs of insurance can be pre-determined. If for a banker, lending risk is colored by the assurance that in case there were to be a default, its liability on funding side is covered from sources other than bank's equity, then those lending decisions will not be combed through with due diligence as otherwise. This assurance could cause a lax behaviour on part of bankers, and hence it is a ***moral hazard***. These operational issues of deposit insurance aside; participation in banking risks by depositors can be secured through this mechanism.

17. There are layers of safeguards to protect interest of depositors to the point where risk of depositors is reduced to infinitesimal level in banking system; but it exists in its full dimension among non-bank financial institutions. Since in operational proposals of Islamic finance there is a cleavage between system level and transactional level operations, limited to the financing side, the assertion is made that depositors receive risk free and pre-determined returns if they are paid a rate of interest.

18. In contrast, if savings are to be mobilized free of interest cost, it has severe implications for the reason that if financiers acquire funds free of cost, their financing margin has no binding operational constraint. That margin includes return on financing transaction and it is swelled with all kinds of exorbitant service charges allowed under instruments of Islamic finance. This is detrimental to interests of depositors which Islamic finance is attempting to eliminate. The essence of modern finance is to reduce these costs and enhance efficiency of financial intermediation. An interest-free deposit system is inimical to intermediation because financier will primarily safeguard his interests first, and pass on the losses to depositors. The instruments of

finance, be Islamic or otherwise, should not reinforce moral hazard any more than it already exists. Instead these instruments need to be designed in such a way to reduce it, otherwise, survivability of financial institutions is affected. This lesson comes out clearly from review of financial crises among advanced and developing countries.

19. In a system where the suppliers of funds, the savers, are willing to tender deposits at zero interest rates and provide a pool of investable funds at zero contractual costs and are willing to accept a share in the risk taking activities of financial intermediaries, it is not that difficult to place these funds through a variety of instruments that will be profitable. The issue is at what costs financial intermediation is being done and how does it compare with savers' returns in interest-based deposit system or returns elsewhere. This is because in almost all Muslim countries a hybrid system exists where savers can access both the mark-up based or interest-based banking opportunities, but there are no interest free systems.

20. In principle, in Islamic finance there is no distinction between savers and investors, because savers are required to participate in risks and losses on equal footing; so are investors. In practice, they are different parties, where savers are passive investors. In between are banks who are supposed to collect deposits interest free, pass on the funds to investors, bundle up financing risks, and give back to savers a risk-based return. In Islamic finance, energies have been devoted to eliminate *soodi qard*, but not enough attention has been given to saving mobilization perhaps because of a captive clientele willing to tender deposits regardless of returns offered. Savings instruments have not been specified the way financing instruments have been specified. The focus is not on the funding side; rather it is on elimination of *soodi qard*. Islamic finance needs to come up with safeguard for depositor interests on instrument of saving, if indeed risks have to be shared equally. Depositors have not extended credit; banker has extended financing.

21. This means that returns on liquid assets, deposits or money balances inclusive, converge around a central rate within the band, well below informal rates of financing. This is a worldwide phenomenon operational in banking and finance and this provides the rationale for existing PLS system with pre-specified returns. Another option would be a PLS system with ex-post returns for short maturities, say a month or three months on odd-lot deposit balances. This would be better than zero interest rates on current account balances. Another option would be introduction of saving instruments that can be bought and sold at market determined discounts together with market risks embedded in the quality of instruments. These

could be savings bonds of different varieties and traded like zero coupon bonds. Recently a few banks have floated Islamic Savings Certificates at a significant premium over long-term deposit rate. These arrangements, however, would remain appendages to deposit mobilization system; so would be *modaraba* based fund raising.

22. In Pakistan, a PLS system already exists; however imperfect that may be. There are *modaraba and musharaka* companies; insignificant though they are at system level. There are leasing companies and a few housing finance companies. Their operations need to be streamlined. Besides, the government has taken several steps to begin implementation which represent operational resolution of one sort or the other. Together, all these initiatives represent a major advance towards Islamic finance. As mentioned earlier, this evolutionary process is gradual to ensure that it does not shatter the fabric of Pakistan's economy. This system has taken roots; people have come to accept it as norm of deposits and costs of credit financing. Their concern is with comparative costs and returns not the nomenclature. They donot apprehend much of the difference between the two systems existing side by side. Clients are free to move around and find the best financial arrangement they can secure no matter what labels are affixed to it.

Comparative Experiences

23. An operational resolution is to be found in practices of Islamic banking prevailing in other Muslim countries. The government is actively exploring these experiences of Muslim countries to give operational shape to implementation of Islamic finance. Briefly, in Egypt, Malaysia, Saudi Arabia and other Muslim countries, Islamic banking is being done with some kind of implicit or explicit charge akin to rate of interest. The rationale is that modern banking is a business, like any other business. It is not the informal money lending of old times; it is highly regulated and has safeguards that did not exist before. It is monitored and supervised to ensure protection of both the suppliers and users of funds. Therefore, operational side of modern finance is in line with Islamic injunctions against exploitation of coustomers.

24. Proponents would argue that Islamic banking is being practiced in several countries, its turnover is substantial and it is increasing, then there must be features inherent in Islamic banking that must be superior to 'conventional banking'. A cursory review shows that Islamic banking currently

operating in Pakistan is PLS mode based; a good deal of lease financing is being done as *ijara,* and some variety of equity financing is being done. All of these activities of Islamic finance are not much different in substance to instruments with inherent charge on capital.

25. It is true that parts and pieces of Islamic finance are in operation in many Muslim countries, though not as the mainframe system, rather on the fringes of the main system. The reason that this is viable because the version of Islamic finance being practiced is according to country's own interpretations of Islamic finance. They have mark-up and cost-plus characteristics typical to those of interest-based systems. Among the 46 Muslim countries, banking in Saudi Arabia is interest based; in Iran, it is some variety of profit and loss sharing, some of it is interest based; and in Pakistan, it is a mixture of PLS based and mark-up based. In Malaysia, it is a composite of interest based and mark-up based systems co-existing side by side, though Islamic banking is the fringe component. Some argue that Sudan has successfully implemented Islamic banking. Perhaps so, but Sudanese financial system is not much of a model of modern financial system worth emulating.

26. Evolutionary process, however, has already been traversed by the existing system over centuries and very sophisticated instruments of finance have been developed, albeit all interest-based; or based on rates of return similar to those in Islamic instruments of finance. Then why trudge on the same path and try to rediscover its salient elements all over given. A better option would be to adopt as has been done in Malaysia regarding Islamic bonds. The contradiction is in replacing the existing system, instead of going through evolutionary processes.

	Data Set 3.9	Islamic Finance					end Dec, Rs billions		
	Calendar Year	2003	2004	2005	2006	2007	2008	2009	2010p
5				Islamic Finance; All Banks \1					
6	**Total Assets *(balance sheet data)***	**13.0**	**44.0**	**71.0**	**119.0**	**205.9**	**276.3**	**366.3**	**477.0**
7	Total Financing (credit) + Investment (net)	10.0	30.0	48.0	73.0	138.0	186.0	226.0	338.0
8	Financing (advances)			46.2	67.6	110.4	148.5	159.4	190.2
9	Investment			1.8	5.4	27.6	37.5	64.7	157.8
10	**Total Liabilities *(balance sheet data)***					**176.4**	**240.5**	**324.4**	**430.6**
11	Islamic Banking Deposit Liabilities	8.0	30.0	50.0	84.0	147.0	202.0	283.0	390.0
12	Equity					29.5	35.8	41.9	46.4
13	Mark - Up **Income** *(income statement)*		1.1	3.1	6.4	12.7	22.0	31.5	36.4
14	Mark - Up **Expenses** *(income statement)*		0.5	1.5	3.5	6.8	11.3	17.2	20.1
15	**Provisions** *(income statement)*		0.0	0.2	0.2	0.8	1.0	3.1	3.1
16	**Administratuve Expenses** *(income statement)*		0.8	1.4	2.9	5.6	9.7	12.6	14.7
17	**Profit , Loss** before Taxes		0.4	1.2	0.8	1.7	2.0	2.3	2.5
18	***Shares, Ratios***								
19	Financing + Investment / Total Assets (net)	76.9	68.2	67.6	61.3	67.0	67.3	61.7	70.9
20	Financing / Total Assets (net)			65.1	56.8	72.1	40.0	43.5	39.9
21	Investment / Total Assets (net)			2.5	4.5	13.4	13.6	17.7	33.1
22	Deposit Liabilities / Total Liabilities					83.3	84.0	87.2	90.6
23	Equity / Total Assets					14.3	13.0	11.4	9.7
24	ROA, Islamic Banking, after tax		1.2	1.7	0.9	0.9	0.8	0.6	
25	ROA, banking system	2.2	1.2	1.7	0.9	2.1	1.6	0.8	0.9
26									
27	*Gross Banking Spread*			8.3	8.4	8.7	10.0	8.6	8.6
28	W Ave Rate of Return, **Advances, pls**- based			10.3	11.1	11.54	14.7	13.2	13.4
29	W Ave Rate of Return, **Deposits, pls**-based			2.0	2.7	2.8	4.7	4.6	4.8
30									
31	SaF Data Set	*Source: SBP Annual Reports, QR. Islamic Banking Bulletin*					see: Data Set 4.71		
32	\1 Assets of All Banks include 6 full fledged Isalmic banks plus 13-19 banks modern banks engaged in Islamic finance business.								
33	In 2009, these six Islamic banks were: Meezan Bank,	Dawood Islamic Bank, Emirates Global and Albarka Bank, Dubai Islamic, Bank Islami							
34									

Data Set 3.9a **Islamic Finance** *end Dec, Rs billions*

	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Non Performaing Finance (NPLs, amounts) *ested*			0.5	0.8	1.3	3.2	9.8	13.8
NPFs (NPLs) / total Financing, Advances, %		0.9	1.0	1.3	1.3	2.3	6.3	8.1
Intermediation Costs (Total Assets)		1.8	2.0	2.4	2.7	3.5	3.4	3.1
		Islamic Banking, All banks, Annual growth rates						
Assets		238.5	61.4	67.6	73.1	34.2	32.6	30.2
Total Financing (credit + Investment)		200.0	60.0	52.1	89.0	34.8	21.5	49.6
Financing (credit)				46.3	119.7	-25.7	44.4	19.3
Investment				200.0	411.1	35.9	72.5	144.0
Deposits		275.0	66.7	78.0	75.0	37.4	40.1	37.8
		Islamic Banking as ratio of Banking System, ALL banks. \ 2						
Assets	0.5	1.5	2.0	2.8	4.0	4.9	5.6	6.7
Credit Financing + Investment	0.5	1.3	1.7	2.3	3.3	4.3	4.5	6.2
Deposits	0.4	1.3	1.8	2.6	3.8	4.8	5.9	7.2
Islamic Banking - Borrowers			46.2	77.6	110.3	148.5	159.4	190.2
Corporate Borrowers			56.2	81.4	58.2	64.4		
SME Borrowers			14.7	13.0	11.6	9.8		
Consumer Finance			21.7	22.8	26.8	22.3		
Islamic Banks, ***full fledged,*** *number*			2	4	6	6	6	6
Islamic Banking, *modern banks, number*			11	16	18	18	19	17
Islamic Banking Branches - All Banks			70	150	289	515	651	751

Average Annual Growth Rates		*Average Annual Growth*	
	Islamic 19		***Islamic 19***
Banking Operations, ***CY***	**CY05-10**		**CY05-10**
Total Assets ***(from balance sheet data)***	46.4%	Investment	144.7%
Total Financing (credit) + Investment (net)	47.8%	Deposits	50.8%
Financing (credit, ested)	32.7%		

\ 2. Islamic Fin QR, 2010, p-3; Includes the six full fledged islamic banks and all those mainstram banks operating various modes of Islamic banking.

Data Set 3.9a already done,

Chapter 10: Financial System and the Economy - *Pakistan*

Thematics

Financial System and the Economy
- The Interface – Operational Interlinkages
- Macroeconomic Fundamentals
- Economic Growth, GDP, Saving /Investment
- The Cross Over to Financial Realm
- Monetary Developments, Inflation and Price Level
- Linkages with Banking System

Fiscal Operations of Government
- Revenues, Expenditures, Trends
- Emergence of Deficits; Structure, Size and Sources
- Financing of Deficits; Role of Financial System
- Financing by Banking System
- Financing through Money Markets, Bond Markets
- Implications for Interest Rate Levels
- System Liquidity
- Allocation of Financial Savings

Emergence of Public Debt
- Domestic and External Debt
- Size, Structure, Growth,
- Debt Servicing Burden, Domestic and External
- Issues of Sustainability
- Banking System Operations; Trends and Impact

Foreign Sector and the Financial System
- BoP - Current Account Deficit/Surplus
- Remittances and Foreign Direct Investment
- Linkages with Financial System
- Prognosis

Chapter 10: Financial System and the Economy - *Pakistan*

The Interface

1. This is a long term review of the economy of Pakistan, highlighting its interface with financial system. The leading issues of the economy are discussed here but from a different perspective involving operations of financial system and their implications for output, employment and growth. The objective is to facilitate ***learning*** of the following:

- structure of the economy and its interlinks with financial system;
- underlying trends of growth and structural change over time; their counterpart flows in financial system;
- key elements of monetary, fiscal, budgetary and public debt trends; their overlaps with financial system;
- role of financial system in the economy and its interlinkages;
- how that role has been managed over time?

2. Economic environment is characterized by leading economic and financial trends, prices, interest rates and exchange rates impacting on investment and economic growth; all within a policy regime pursued by central bank and government and its consequences for stability. This requires a review of aggregate production and output growth, investment, and trade while pursuing domestic prices, interest rates and exchange rate stability. The review focuses on the macroeconomic and financial orientations of policy regime and major initiatives launched concerning monetary, fiscal policy and trade policies and their impact on macroeconomic fundamentals. If we extend these essentials of economic review in a study like this and look at the economy from vantage point of resource transfer via mechanisms of financial system, we have to trace financial flows embedded in the operations of financial system as they occur over time, and follow it up with analysis of their impact on the economy.

3. A favourite tool of analysis is the two-gap model, which has been the staple of applied macroeconomic analysis. It is more a system of identities to enable crosschecks of consistency rather than a behavioral model of the economy. It does help in identifying domestic gap as budget deficit, and external gap as balance of payments deficit, both financed through borrowing mechanisms. The external gap remains intriguing in a regime of relatively free floating exchange rates that are supposed to rectify external imbalances as they arise. If we pursue this analysis, we end up in the realm of financial system with intricate interrelationship between credit system, financial markets, external flows, and their combined outcome.

4. We need to thread through essentials of interface between economy and financial system intertwined as they are at various layers of productive sectors. The interface occurs through financial system on intermediation side and financial markets side, impacting on investment and production in the real economy. On the financial intermediation side, operations of banking system credit determine its size and allocation between various sectors of the economy and their borrowers. On the financial market side, operations of money markets result into supply and allocation of ***liquidity funds***; while operations of capital markets result into supply and allocation of ***investment funds*** for businesses, government and households. In between is the financial regime where mechanisms of monetary management operate through financial system, involving both the credit system and financial markets.

5. In an open economy with market based determination of interest rates, prices and exchange rates, monetary management has come to occupy center stage in managing the economy. For example, interest rate determination is powerfully affected by policy rate of the central bank which impacts upon money market operations and thus on money supply and liquidity of the banking system and financial markets. It is central to operations of credit system and deposit mobilization both by banking system and NBFIs. At operational level, the impact of interest rates works through banking credit and liquidity. A squeeze on banking credit and liquidity is the prime mechanism for impacting on the activities of productive sectors.

6. Take production in any sector of the economy. Before aggregate value of output is estimated, transactions are taking place at every stage of production and those transactions are lodged in part or full, somewhere in the financial system. In case of large business and companies, sales or purchases are financed or processed through the banking system. In case of small businesses, cash transactions are always occurring and those are not traceable, but these cash transactions can not occur without liquidity. At

some level, liquidity is being provided by banking system, thereby enabling transactions, big or small. Once production cycle is completed, its market disposition is being handled at retail level or at sub-aggregate level by a financial institution because without trade financing of one type or other, trading within or among productive sectors are not possible.

7. As regards fiscal operations of the government, it seems financial system is far removed; but a closer look would reveal otherwise; even routine budgetary operations can not be carried out without recourse to one or the other part of financial system. At any time, proceeds of fiscal operations are lodged somewhere with the treasury banks in the country; thus, transactions originating in fiscal operations are being processed through treasury banks or their agent banks. Whenever government indulges in borrowing from financial markets, invariably the lender is banking system. How good banking system is at operations of government borrowings and how good markets are in enabling such borrowings, determines fiscal outcome of budgetary finance. How it happens is not that obvious.

8. The same is the case with balance of payments. Its analysis requires tracking down transactions and trends in its leading components, their outcome and their implications; in particular foreign trade and capital flows; followed by evaluation of how trading sectors are performing, market conditions and competitiveness of export sector; often accompanied by debates on foreign trade regime, its suitability or otherwise with reference to its impact on the economy. A layer below trading, there are trade financing and foreign currency transactions, or capital flows and their counterparts that are being transmitted through financial system operations. An understanding of this ***interface*** is needed with focus on how financial system operations are intertwined with the balance of payments proceedings. This is essential to unravel how the economy is impacted by international financial trends; how it internalizes and assimilates them.

9. This brief portrayal of ***interface*** would suggest that all the financial system does is to log-in, trace and facilitate transactions at various layers of the economy and no more; it is only a financial imagery of the real economy and productive sectors. Far more than this, mechanisms of financial system provide liquidity and funding at market determined costs and prices, the life blood of an economy, thereby enabling business and economic activity to occur in the first place. In the process, these operations impact upon ***allocation*** of resources. This would be possible only if financial system is able to ***mobilize*** resources in an economy to begin with, at ***costs and prices*** that are sustainable. Therein lies the essence of interface.

Section 1 : Macroeconomic Performance

1. At the start of the decade, in early 2000s, the economy was facing significant constraints which gave way to a more healthy outlook by middle of the decade. It seemed that the economy has turned the corner. The outlook was that twin deficits, namely budget deficits and balance of payments (BoP) deficits, may not recur on the same scale as before; but towards end of the decade, the deficits reappeared with an intensity that could not be foreseen earlier. In current times, leading economic indicators exhibit unfavorable trends. Pakistan's finances are in a critical state. The economy is in the grip of energy crisis and fast rising costs, causing production cutbacks or closure of businesses and industrial units. Pakistan is back to borrow from IMF which is reminiscent of the decade of 1990s. There are a few bright spots as discussed below in this chapter; food production is in high gear and there are no looming food shortages except for cartelized items; remittances are running at record levels; manufacturing and exports have shown some revival and their performance could improve if energy crises is tamed.

2. Overall, long term performance of Pakistan's economy has been good, averaging 4.7 percent of GDP growth per year during FY00-10, though in comparison to front line Asian countries it was a second best performance. The pattern began with a cycle of tepid growth in early years, followed by a fast growth of around 7 percent during middle years; then a nosedived after collapse of stock market. *(see Data Set 1.2)* Stock markets recovered, but economic recovery lagged behind; yet, the economy managed to grow by about 3.5 percent during FY05-10, which is not a salutary performance, nonetheless it was better than expected.

3. Major sectors of the economy, namely agriculture and industry, showed similar growth over the second half of the decade, while services and manufacturing showed slightly higher growth of over 5 percent per year. The long term trend of shift in sectoral origination of GDP continued throughout the decade. Share of agriculture sector output in GDP has continued its slide from 24 percent in early years of the decade to about 20 percent of GDP at the end of the decade, while services and industrial sectors further gained over the past decade. Currently, service sector accounts for half of the GDP. *(Data Set1.2a)* Agriculture sector, however, is no longer a peasant oriented subsistence sector that it was in the 1960s or 1970s. A large swath of agriculture sector is commercialized at various scales of operations; it is a part of mercantile sector, and very likely it is underestimated.

4. The economy today is more diverse than it was before. It is reasonably modernized and is operating on commercial lines relatively more that it ever did in the past. The emergence of service sector in the lead, points the way to future growth, with relatively faster gains in productivity and income arising from service industries than other sectors; but service sector alone can not provide the platform needed to sustain long term output and employment growth. There has to be an enlarging production base, and it has to come largely from manufacturing sector whose moderate performance over second half of the decade should be a matter of concern. Diversification of economy can not ride on the back of service sector alone. A strong manufacturing sector is essential, but this will not come by easily in a fiercely competitive and open foreign trade and exchange regime.

5. Economic recovery of the past couple of years is marred by high inflation and consequent monetary tightening and compliance with IMF's standby stipulations. These factors do not augur well for a growth beyond 4 to 5 percent over the next years. Macroeconomic fundamentals are sound, though punctuated by inflationary pressures; an unabated energy crisis costing about 2 percent growth of GDP; an inimical investment climate for foreign or domestic investors alike, given endless rounds of market shutdown amidst terrorist activities. The ebullience of middle years of the past decade has been replaced by uncertainty amidst loud concerns of governance, widely circulated reports of corruption and lack of direction concerning economic management.

6. There are a few bright spots. In spite of worsening chaos and economic pressures that forced the government to seek IMF's assistance, private sector business and investment continues to grow though not as fast as one would like to see. Stock market is back in force and has gained much of the lost ground more swiftly than was anticipated; but this turnaround can not be explained by national accounts data on savings and investment. Farming activities continue in spite of water shortages and high input costs, swiftly rising fuel and fertilizer prices. Outlook for major food crops remains strong and agricultural exports have done quite well. Pakistanis abroad continue to send ever enlarging amounts of remittances which have grown from less than a billion US dollars in FY00-01 to about $9 billion at close of the decade. If this growth is sustained it is likely to likely to catch up with merchandise exports earnings in a few years.

7. This resilience of the economy does not square with record of economic management. Government's attention is stuck with fulfilling standby commitments and rounds of tax and price hikes to paper over public sector

deficits and their financing through unprecedented levels of borrowings from financial system. The preoccupation seems with tax measures like sales tax whose incidence will be upon the larger populace or indiscriminately on the same group of tax payers documented in the tax net, while others will not feel the burden. This has sparked rounds of debate on its implementation, because, it is a cumbersome tax code, full of discretionary powers to tax authorities. The leading issue for the government is low tax to GDP ratio; easier to pronounce but difficult to sort out in its operational ramifications.

8. Such a narrow view of economic management is the legacy of past. It has to be followed by a more balanced perception of how to promote growth over the next few years and how to assist those sectors of the economy that have shown a great deal of potential throughout the past years. The key factor is revival of investment activity both in public and private sectors; but how to go about needs to be analyzed further and requirements of investment promotion need to be articulated in operational terms beyond routine policy advisory so common in such endeavours. This is not attempted here; however, analysis of salient pieces is give below.

Investment

9. Recent trends have furnished policy makers a basis to continue with improvements in the structure of incentives, governance and effective regulatory mechanisms. The program of privatization is coming to a close as major state-owned banks and enterprises have been sold to the private sector. Further privatization of national assets and on below market values and prices is not justified. These concerns aside, the challenge is how to enhance private sector investment; a process in which banking system and capital markets play a key role. The impact can be gauged from leveraging of equity base of borrowers for investing in existing units as has occurred in textiles sector with emphasis on balancing, modernization and rehabilitation to alleviate international competitive pressures.

10. The following analysis of investments and savings trends is conducted in nominal values of national accounts. For routine macroeconomic analysis, these nominal magnitudes are adjusted by a deflator index to arrive at their counterpart real values to enable analysis and evaluation of trends of savings, investment and economic growth. This analysis is central to unravel why these trends in savings and investments have prevailed, but how they have reacted to leading financial trends is difficult to determine unless we transcend to financial system performance.

11. The proportion of gross fixed investments to GNP was around 17 percent during the past decade, though slightly higher in the second half of the decade. *(see Data Set 1.6)* The proportion of private fixed investment in total gross fixed investment increased from 65 percent in FY00, to about 71 percent in FY10, signifying enhanced role of private sector as would be anticipated with dwindling of the public sector. The proportion of public sector investment was not much, only about one third in early years of the decade and declined to about 26 percent during the second half of the decade. The dilapidated state of infrastructure is a result of decline in public sector gross fixed investment to the detriment of producing sectors of economy and reduced growth performance.

12. There was a sharp decline in the proportion of ***domestic savings*** to GNP, from about 18 percent in early years to about 10 percent over the past decade. *(Data Set 1.6)* The impact of the sharp decline in domestic savings was compensated in part by inflows of net factor income from abroad, hence, the proportion of national savings to GNP was moderated somewhat and did not suffer the same decline as did the proportion of domestic savings. Within this ambit, private savings matter most, because private household savings constitute 75 percent of national savings, nearly three fourth of it; though slightly lower than what they were in early part of the decade, amounting to about 80 percent of national savings. The upshot of this cursory analysis is that domestic savings in Pakistan are inadequate to sustain high levels of investment and are the ultimate constraint on faster growth.

13. During the past decade, much of growth in gross fixed investment at aggregate level came from private sector fixed investment which increased at an average annual rate of about 15 percent. This decade long average annual growth is misleading because there was a great deal of volatility in between. During the middle years, there was a very high growth of gross fixed investments. For example, in FY06 there was a very unusual growth of 51 percent in nominal terms. In FY09, this growth tumbled down to around 5 percent and was negative in FY10. In comparison, growth of public sector gross fixed investment was slightly lower, around 12 percent per year for the decade, but showed the same pattern of volatility as private sector. Resources for aggregate gross fixed investment came from national savings which increase at around 13 percent per year during the decade with the proviso that domestic savings by themselves were inadequate to enable the size of gross fixed investment. A good deal of fixed investment was financed from foreign savings. Looks like, Pakistan would not have been able to achieve growth of this size in gross fixed investment without inflows of foreign resources; a pattern that has endured throughout the past decades.

14. Why this volatility during middle years in gross fixed investment, and why a turn around and decline in last year of the decade? The answer is not to be found in income growth or inflows of net factor income from abroad, embedded as they are in national accounts. We have to cross over to financial system developments. Burst of investment activity during middle years of the decade occurred because of a sharp decline in interest rates on bank borrowings which gave impetus to corporate investment. It also occurred because of improved investment incentive regime; relatively stable exchange rates and open trade regime which provided opportunities for exporting and availability of imported inputs at predictable costs; and a more business friendly environment that gave boost to private investment.

15. These same factors were operative in early years of the decade with varying degrees of effectiveness, but investors response was mixed, and private investing did not revive significantly until FY04. Thereafter, growth of private investment was fast, but the trend reversed after financial crisis of 2008, jeopardizing market-based outlook of investment. This was followed by a rise in interest rates and a tightening of banking credit which further choked off growth in FY10.

16. The issue is what will jump start private investment given that a good number of potential investors, particularly less resourceful ones who do not find prevailing environment investor friendly seem to have retreated. They have limited access to banking credit and are shut out from access to capital market. Much of investment is owner financed. The prospect of securing approvals from local authorities, forces many investors to operate in the informal sector. Investment promotion and improved enabling environment for these investors should be top priority of policy makers. In parallel, mechanisms have to be put in place to enhance the role of financial system in extending credit to priority sectors.

17. Institutional financing of private investment activities is documented and well accounted for; but a good part of private sector investment does not get captured either by national accounts or financial accounts. It consists of investment in small businesses all over the country; most remain outside reporting network. One could argue that since investment gets translated into outlays on materials and inputs, it is captured in sectoral output. Perhaps it is; private investment is taking place all the time self-financed from owner's funds, rather from borrowed funds from banking system. This segment is fairly large, ranging from small workshops in back alleys to shopping malls and plazas for affluent businesses whose investments are visible, though much of it remains undocumented.

18. Another segment of unrecorded investment in Pakistan is real estate and housing sector. For a single household, acquiring a dwelling is the lifetime investment. In advanced countries, mortgage debt servicing is nearly one third of monthly income of the start up households. In Pakistan, mortgage loans are not available. Instead, much of this investment is owner financed, spanning several years. This does not mean these investments are not taking place, just because these are neither recorded nor approved by some government agency. Residential housing construction goes on and a good deal of it remains unreported. A number of shopping plazas fall in the same category. This construction activity in commercial and residential real estate sector seems to have its own cycle. Trading of construction materials may get captured in sectoral output data, but investing in commercial real estate goes unreported.

19. The same applies to investment in stock market, though it is well documented, regulated and traceable. No formal estimates, however, are available how much private investors have invested in stock market, though it is substantial. Investments done by financial institutions are fully recorded; be they banks or NBFIs like mutual funds. The recovery of market in couple of years after crash implies sustained inflows of new funds in the market, but neither the investors nor the size of their investment is known. For these reasons it is insufficient to rely upon national accounts based scenarios of investment in Pakistan. We have to look into what financial system does to figure out dynamics of investing in Pakistan.

Money and Price Level

20. Overall trends of monetary growth have been discussed in Chapter 2, together with their leading components, namely banking deposits and currency. Those trends are recapitulated here. Briefly, average annual rate of growth of money supply during the past decade was 15.2 percent, a relatively fast growth. There was a great deal of volatility in between. Growth of money supply more than doubled from 9 percent in FY01 to about 19 percent in FY03, and this growth persisted throughout the middle years accompanied by significant monetary expansion and an increase in price level. This monetary expansion was the precursors of high inflation during second half of the decade. Subsequently, monetary expansion slowed down, but not the rate of increase in price level. Instead, inflation increased significantly during first half of the decade. Of the late, in 2011, there has been some moderation, but inflation continues at double digits.

21. The average annual rate of inflation in Pakistan was 8.4 percent over the past decade as per consumer price index, CPI. *(Data Set 3.8)* This is on the high side but not by a great margin, but this average rate is misleading. During first half of the decade, inflation was about 5 percent per year; a comfortable level, though of concern for those exposed to inflationary pressures. During FY05-10, rate of inflation more than doubled to about 12 percent per year. During the last three years, FY08-10 it was about 15 percent per year. Alarmed by the price rise, SBP embarked upon a tight monetary stance to control monetary growth and gradually increased policy rate to 14 percent from around 9 percent in middle years of the decade.

22. In 2010-11, there were alarm calls that economy is on the verge of hyperinflation, but inflation did not degenerate into a self-feeding frenzy of price rise, not because the main source of inflation namely government spending, has been put on a leash, but because the cushion provided by food production and its cost structure has helped to keep price increases in check to levels that can not be construed as hyperinflation. The stocks of staple food items are adequate for foreseeable future though food prices have been rising fast. Inflationary pressures have mainly originated from fiscal deficits and consequent monetary expansion by the banking system during second half of the decade. This expansion has accelerated in recent times.

23. Budget deficit is not the only source of inflationary pressures. A part of price increase is traceable to imported inflation, in particular energy imports and consequent increases in domestic petroleum prices. The current account deficits have contributed to inflation; they were supposed to moderate once foreign trade was liberalized and foreign exchange regime was market based. In Pakistan, market based regime has been in operation for nearly a decade now; exchange rate is free floating, almost; SBP does not intervene in forex markets because it does not have the kind of forex reserves needed to try to intervene; the most it can do is to mop up liquidity in the system with adverse consequences for growth. There is precious little SBP or any central bank can do to try to smother inflationary pressures via interventions in foreign currency market.

24. The tools and mechanisms that were used to control in pre-reform days are no longer available. Old fashioned price controls, allocation of credit through credit plans or administrative controls on credit system, raising rate of interest by fiat; devaluing currency outright or through dirty float; all these measure are history and are no longer available. Hence, there seems to be no checks on inflationary pressures, except for raising public sector utility

prices, thus contributing more to inflation; or engaging in a dialogue with government to curtail its borrowings pursuant to budget deficit. No one would urge choking out flow of borrowed finance to government altogether.

25. Whatever remedies have been tried, their impact has shown an imbalance in the burden of adjustments borne by lower income groups or fixed income groups since they belong to documented economy and are in the tax net. For example, nearly one half of the number of electric power users are believed to escape increases in electric tariff rates, but power companies keep raising their charges to cover their genuine cost increases because they have to recoup their losses suffered from illegal connections. The illegal connections are never severed; or if severed they are quickly restored. These users never get caught in any kind of ***net.***

26. The undocumented economy escapes burden of belt tightening. It is estimated variously to be half or more of the documented economy. This thriving parallel economy keeps operating without much evidence of burden carrying called upon by the government. As long as undocumented economy is able to shift the burden, it will be difficult to control inflation by tweaking interest rates alone. As it is, government borrowing is not sensitive to cost of borrowing because it is ***sovereign borrowing.*** SBP policy rate has little impact on it; but a rise in policy rate will choke off corporate sector and business expansion, which is not large to begin with, but has the potential to lift the economy out of recessionary trends.

Fiscal Operations and Financial System

27. The purpose of reviewing fiscal operations is to find out how much resources government is mobilizing and using in any fiscal year through fiscal mechanisms, and how these mechanisms are being supplemented by borrowing operations from financial system to support budgetary outcome. In that context, we need to know what is the contribution of financial institutions specially SBP and banking system to fiscal operations, and what types of interlinks underlie fiscal operations and financial system. The reason is that mobilization of financial resources through both system, namely taxes and borrowings, is much larger than if we were to focus just on tax revenues collected, and therefore it alters the overall allocation of financial resources between public and private sectors. This allocation adversely affects resources available to private sector most of the time.

28. Fiscal account data may not tally with financial data as reported. Reconciling their differences is not possible, though financial system data used here is consistent with major trends as reported in fiscal accounts. A great deal of information and analysis is available on fiscal operations of the government in Pakistan. The outcome of budgetary process in terms of fiscal deficits and their financing through domestic and foreign borrowing is the starting point of financial system analysis. We need to analyze how these liabilities are met via operations of financial system after the fiscal process is over; what amounts are borrowed from financial markets as short term and long term debt, and how it gets lodged as investments in the portfolio of financial institutions, and what are its implications.

29. ***Fiscal deficit*** increased from Rs 354 billion in FY00 to Rs 1180 billion in FY10, nearly three times the level it was ten years ago. The average annual rate of growth of deficit was about 13 percent per year during the past decade. *(Data Set 7.0)* During FY00-06, government fiscal deficit was confined within narrow range of Rs 350-370 billion except for FY02 owing to fiscal restraints and there was hardly any growth during first half of the decade; barely one percent per year. It was heralded as an achievement of fiscal responsibility in those days, and assertions were made that Pakistan has finally turned the corner and will not need to resort to borrowings from IMF and other creditors. In retrospect, this was achieved at the cost of public sector fixed investment in infrastructure, which turned out to be very costly for the economy in later years. In hindsight, a moratorium on borrowing and reduction in investment on infrastructure and public utilities is not much of an achievement after all.

30. During second half of the decade, fiscal deficit shot up from Rs 371 billion in FY05 to Rs 1180 billion in FY10, rising at an average rate of 26 percent per year, an exceptionally high growth indeed. The government did not seem to care much about state of public finances, deficits, and borrowings as long as its expenditures were kept on line for preferred causes. With rising deficits of this magnitude, the government had to resort to borrowings from the financial system and the public domestically; and also from abroad. Government borrowings from ***domestic sources*** were Rs 255 billion in FY00 rising to Rs 603 billion on net basis as annual flows, lodged in fiscal accounts. *(Data Set 7.0)* These ***annual flows*** should not be mixed up with the ***stock*** of borrowings or public debt at end of fiscal years, since these are ***net amounts*** of borrowed funds after repayments or re-financing of domestic liabilities of government.

31. Government sets its fiscal prudence targets on several criteria, mostly relating to revenues and expenditure flows; it also uses performance indicators like deficit to GDP ratio in line with revenue and expenditure targets. In these deliberations, the focus is to maintain deficit to real GDP ratio at some desired level. On that yardstick, the ratio of fiscal deficits to GDP was 9.3 percent in FY00, then declined to an all time low of 5.6 percent in FY05, and since then has climbed back to 8 percent in FY10. This volatility stemmed from patterns of growth of revenues and expenditures.

32. The reasons of volatility are embedded in the lopsided structure of taxation that has prevailed in Pakistan. Concerning revenues, there are several issues that need to be explored further such as incidence of taxation; the size of tax evasion; performance of FBR, though most of these issues are well know. On the other side, we need to contend with patterns of expenditure and their profile over time; the ratio of expenditures to revenues; or the ratio of mandatory versus discretionary expenses; the routine reports concerning pilferage of considerable amounts of public funds.

33. Briefly, there has been a significant growth in ***federal government revenues***, both tax and non-tax revenues, from Rs 531 billion in FY00 to Rs 2052 billion in FY2010, nearly four times over the decade. Tax net remained narrow though some parts of undocumented economy were dragged into tax net. *(see Data Set 7.1)* Both tax revenues and non-tax revenues increased at a fairly high rate of growth of about 15 percent annually over the past decade. ***Tax revenues*** increased from Rs 386 billion in FY00 to Rs 1483 billion in FY10 at average rate of 14 percent. In parallel, non tax revenues were Rs 144 billion in FY00 and increased to Rs 655 billion by FY10 at about the same average annual rate of about 14 percent as direct tax revenues.

34. The federal government extended ***transfers to provinces***. These transfers were Rs 144 billion in FY00 or about 27 percent of total tax and non-tax revenues. By FY10, these transfers had increased to Rs 569 billion, but their proportion in total revenues remained unchanged. (Data Set 7.1) As a result, ***net revenues*** available to federal government were reduced to Rs 388 billion in FY00, and to Rs 1397 billion in FY10. The net revenues represent financial resources available to the federal government in a fiscal year. The average annual growth of net revenues was, 13.7 percent, just about the same as growth of revenues.

35. Simultaneously, ***expenditures*** of federal government also increased though not as fast as revenues, from Rs 741 billion in FY00 to Rs 2577 billion in FY10 at about 13 percent per year thereby keeping some check on overall

deficit growth. *(Data Set 7.2)* Growth of expenditures has been erratic over long periods, but deficit kept rising because expenditures started growing from a higher base than revenues, and this base differential got reflected in high levels of deficit over the past decade. The largest part of total government expenditures were ***current expenditures*** amounting to Rs 652 billion in FY00, rising to Rs 2133 billion by FY10. The current expenditures were 88 percent of total expenditures in FY00, then declined to 83 percent in FY10 owing to growth differential between revenues and expenditures.

36. Among the current expenditures, the largest item was debt service payments discussed below, amounting to Rs 352 billion in FY00 and rising to Rs 892 billion by FY10. *(Data Set 7.2)* As a proportion of current expenditures, debt service payments were 54 percent in FY00, but declined to 42 percent by FY10. Defense expenditures were the next largest item and were Rs 153 billion in FY00, or about 23 percent of current expenditures; rising to Rs 378 billion by FY 10, but they decline to about 18 percent as a proportion of current expenditures. Development expenditures were only Rs 22 billion in FY00 rising to Rs 316 billion by FY10. These development outlays were a minuscule part of budget, less than one a half percent of as a proportion of total budget expenditures.

37. On this basis, federal deficit was Rs 354 billion in FY00, rising to Rs 1180 billion by FY10. As proportion of GDP, the deficit was as much as 11.4 percent in FY03, the highest it ever was. Couple of years later this ratio was to 5.6 percent in FY05, the lowest point it ever reached.*(Data Set 7.0)* Thereafter this proportion began to rise, and was 9.5 percent in FY08, moderating to 8 percent in FY10. Bulk of this deficit, almost 72 percent was financed from domestic borrowings amounting to Rs 255 billion in FY00; the remainder from foreign borrowings. By FY10 this picture had changed somewhat; domestic borrowings were Rs 603 billion, or about 51 percent of total deficit. Correspondingly, foreign borrowings were Rs 578 billion, or 49 percent of federal deficit. This is the standard portrayal of fiscal operations of federal government, but it needs to be analyzed further with regard to their implications for domestic and foreign borrowings where financial system operations get involved.

38. This discussion can be summed up in simple terms this way. For each Rs 100 collected as revenue by the federal government over the past decade, the government spent Rs 126 every year. The deficit of Rs 26 per Rs 100 in revenues was financed from borrowings, both domestic and foreign, leading to rise of public debt, though this aspect of fiscal imbalance does not square with reported levels of public debt. Debt service alone, both domestic and

foreign, was 51 percent of total revenues; that is, it used up half of revenues collected. Looking at it another way, if we combine current expenditures and *transfers to provinces*, both mandatory expenses in operational sense, the federal government spent about Rs 135 for each Rs 100 collected in revenue, leaving little for development, social sectors or other priorities, but debt.

39. If we combine fiscal position of federal and provincial governments; the situation gets worse. For each Rs 100 raised as revenue by federal and provincial governments, Rs 152 were spent over the last decade, piling up debt of Rs 52 per Rs100 of revenues, year after year. Those issues aside, *defense* expenditures, *debt service* and *transfers to provinces* took up about Rs 103 for each Rs 100 of revenues, on average, every year of the entire decade, forcing the government to borrow to meet statutory obligations, leaving nothing for establishment expenses, nor for development expenditures to shore up crumbling infrastructure, or to maintain social sectors like health and education in the country; investment in human capital aside.

40. The rate of growth of expenditures is cause for concern, but more worrisome aspect is that debt service, transfers to provinces and defense expenditures together have exceeded revenues every year, leaving hardly any financial resources with the government for other items. This is the reason why government could not find funds for development and social sectors like health and education. This neglect continues and would be costly for the future. When the borrowings and debt position got rough, policymakers began blaming IFI lenders as though somehow they were responsible for the predicament government found itself in.

41. One could argue that government did increase financing for development activities of public sector in a significant manner, given that there was a meteoric rise in development expenditures from Rs 19 billion in FY00 to Rs 316 billion by FY10, at an average annual rate of nearly 40 percent as compared with much smaller growth during all of 1990s. This sounds rather odd in face of discussion above. These outlays were financed by borrowed money, not revenues of the government, and they represent a shift over the past decade. The amounts involved were relatively small as a proportion of fiscal expenditures, though heir growth rate was high. Whether these trends can be sustained remains an issue because apart from debt servicing and defense expenditures. Next in line are grants, subsidies and entitlements, disaster relief and war expenses. Between these mandatory and entitlement expenditures, there is nothing left for any other item of social priority. The government, perforce, ended up borrowing to spare some funds for social priorities, but not for public infrastructure development.

42. Most governments borrow for financing budget deficits and also for fixed investment in infrastructure. The reason is that in most low income countries, large infrastructure projects can not be financed entirely by private sector because of externalities on returns that can not be captured by private investors. Borrowing for infrastructure projects is done even in advanced countries where long term bonds are issued for dedicated investments in highways, railways, or power projects. Borrowing exclusively for financing budget deficits year after year is the issue to be considered.

43. There are major ***unresolved issues*** in the fiscal system that need to be discussed but in a fiscal system study. Foremost, agriculture income remains outside the tax net amounting to nearly one fourth of GNP; documentation drives have enhanced tax net but a large proportion of businesses remain outside tax net, hence taxation base has remained narrow; import and excise duties remain major source of revenue as they have been for a long time; fixed income groups carry a relatively larger tax burden, and is a major source of tax inequities in the country. The culture of tax avoidance has not been mitigated over the years. The perceived inequities and injustices of tax system by the public together with practices and operations of tax machinery are just the opposite of tax collector's perception. These are root causes of low tax GDP ratio in the country.

Section 2: Public Debt and Financial System

1. Review of public debt revolves around size and structure of debt outstanding. The discussion quickly bogs down into intricacies of various types of debts as per their classification followed by chronology of what transpired. This review has somewhat different orientation beyond analysis of public debt outstanding as it explores its operational linkages with financial system. In addition an effort has been made to ascertain salient features of ***debt profile*** over a fairly long period; its origination and its trends, together with identification of factors that have affected this profile over time, and its implications for the public. \1

\1. Perhaps one of the difficult data series to prepare concerns public debt liabilities over a long period of time, ensuring internal consistency of magnitudes assembled from various sources hence difficult to reconcile. I know this from experience with Paris Club debt reschedulings. I have trudged far enough to ensure that overall conclusions and their consistency is broadly maintained, though there are data problems and the series may not match with a more rigorous classification with matching time slices.

2. The socio-economic implications of debt burden are sobering in their historical perspective. The total public debt outstanding and its servicing may have gone through any number of gyrations over the past, but the debt burden for ordinary households in Pakistan is staggering. It is not enough to simply recount the size of the debt and its growth, but we need to briefly peek into the historical trends of debt and then examine its social implications in terms of its burden upon ordinary households.

3. We routinely come across figures of public debt outstanding in billions of rupees, or as ratio of GDP; but most can not cope with it; for them it is an abstract number, almost. We need to have some feel for what a billion rupee means. Public debt as a ratio of a GDP is equally incomprehensible. It has relevance in high level discussions of trends of debt burden, but it is not illuminating. For example, in Pakistan, the ratio of ***Total Public Debt & Liabilities*** outstanding to current GDP (mp), including both domestic and foreign debt, has declined from 103 percent in FY00 to 69 percent in FY10. *(Data Set 7.5)* This ratio could be taken to mean that burden of debt has ***decreased*** over the past decade, estimated in nominal values.

4. That would be a startling conclusion indeed. As the following analysis shows, the burden has increased, not diminished over the past decade which confounds findings like these. While proportion of total debt to GDP has gone down, it does not mean that the ***debt burden*** has been alleviated much less reduced. Such are hazards of debt GDP ratio analysis.

5. Before we analyze historical trends, a few words about this abstraction of Rs one billion are in order. A billion rupees in current times means that if a fresh MBA graduate were to earn Rs 25000 per month as starting salary, it would take 40,000 months of earnings of this highly educated person to reach one billion. Or, for that matter, it would take 40,000 MBAs to be employed at that salary per month to amass rupees one billion. If monthly pay of a worker in lower income groups is Rs 10,000, it would take one lakh workers to pile up earnings of Rs one billion in one month. Meanwhile, one lakh households of five or six persons will have to survive on Rs10,000 for one month before they get next months' pay. This also provides some idea of real goods and services that underlie the purchasing power of Rs one billion. Here, we are dealing with thousands of billion rupees of public debt. Such are the dimensions of debt burden.

6. The size of ***domestic public debt & liabilities*** of Pakistan at the end of FY00, was Rs 1946 billion, and it increased nearly three times to Rs 5443 billion by June 2010, the end of FY10. In addition, the size of ***external debt &***

liabilities was US$ 3.9 billion in FY00, and increased to $55.6 billion by FY10. *(Data Sets 7.5, 7.7)* When we convert this dollar figure into rupees, external debt was Rs 1971 billion in FY00 and increased to Rs 4743 billion in FY10. consequently, the ***total debt*** of Pakistan was about Rs 3917 billion in FY00, and increase to Rs 10186 billion by FY10. The total debt service on both domestic and foreing debt was an estimated Rs 352 billion in FY00, and it increased by nearly three times to an estimated Rs 892 billion by FY10. This summary profile is discussed in detail below.

7. These figures may not tally with those obtained from other debt reporting sources, but would be fairly close. In particular, these estimates may not match with entries in books of creditors regarding total debt outstanding and debt servicing, namely ***repayments*** of principal and interest. Debt servicing estimates are particularly difficult to arrive at. One could try ascertaining as to who the government paid in what amounts; or, in case of foreing debt service payments, what payments were made in rupees, and on what exchange rates were they translated into foreign currencies. If such data could be rounded up, differences between estimates and ***actual figures*** are likely to occur. But discrepancies are unlikely to be large enough to jeopardize broad trends and overall conclusions arrived here; and that is what matters most for this study.

8. The debt burden for ordinary households can be gauged by estimates given in *Data Set7.5* which shows that for a population of 133 million in 2000, debt per household of six persons was Rs 177,000. Since then over the past decade, it has more than doubled to Rs 367,000 per household of six, even though population of Pakistan has grown to about 177 million by 2010. Likewise, the debt service amount per household of six was about Rs 16000 in FY00, at the start of the decade, and it has doubled to about Rs 32100 per household of six at the end of the decade. The increase in population and number of households *lowers* debt amount and its servicing per household, diluting debt burden. Otherwise, this amount would be even higher if population growth was ***less*** than 177 million and number of household did not increase as much as it did over these years.

9. In historical sense, it took Pakistan more than five decades to reach indebtedness levels of Rs 3817 billion in FY00, the start of new millennium. Thereafter, it took the government only one decade to more than double the debt outstanding. A large swath of public did not benefit much, directly, form borrowings that took place during the past decade. Implications of this increase for income distribution and poverty alleviation are yet to be reckoned with.

10. At the time of independence, the new born country hardly had resources to meet the needs at that time, but the debt burden was zero for the country. By mid-1950s, domestic debt was roughly Rs 1.4 billion. The external debt was no more than $330 million in the mid-1950s, though this is also an estimate but can be verified from archives. Thereafter, at the time of truncation of Pakistan in 1971, domestic debt was Rs 13 billion. Foreign debt in 1971 was about $2.9 billion, including the liabilities that got transferred to Pakistan since Pakistan government was signatory of these obligations. Within six years, by 1977, domestic debt had increased to Rs 32.7 billion and foreign debt to Rs 53.6 billion.

11. By 1987, roughly eleven years later, domestic debt had grown to Rs 225 billion, and foreign debt was roughly $9.5 billion. That is, within 17 years after truncation of the country, domestic debt had increased by Rs 212 billion, much of it was in financing of nationalized economy. By 1990, three year later, domestic debt had nearly doubled to Rs 442 billion, and foreing debt had grown to about $10 billion. These were still tolerable levels. Thereafter, at the close of the decade of 1990s, , domestic debt in FY00 was Rs 1946 billion, and external debt was Rs 1971 billion and total debt was Rs 3917 billion, rising to Rs 10,186 billion in FY10, growing at an average annual rate of about 10 percent. This is the stock of debt accumulated since independence and can not be repaid; instead more debt is piling up in current times. We have come back full circle from where we started from.

12. Of the total public debt, ***domestic debt*** was an estimated Rs 5443 billion, while ***external debt*** was Rs 4743 billion equivalent as reported or converted into rupees at average annual exchange rate of rupee in US dollars. The external debt is tallied in US dollars, the accounting currency of foreign transactions in Pakistan, and also currency of foreign exchange reserves. At the start of the decade, both domestic and foreign debt as proportion of total public debt were about equal. Since then, the proportion of domestic debt increased to abut 53 percent by end of FY10. (*Data Set7.5)* This happened because average annual rate growth of domestic debt was slightly higher, about 11 percent during past decade, while rate of growth of external debt was about 9 percent.

13. These annual averages of growth paint a sedentary picture of rise in public debt magnitudes but this growth was volatile. During FY00-05, first half of decade, average annual growth of total public debt was 2.3 percent. Thereafter, during FY05-10, second half of decade, this rate of growth shot up to 18.4 percent per year. Rising at this rate, any magnitude will double in about four years, and this is what happened with total public debt.

14. The average annual rate of growth of domestic debt during first half of the decade was about 3 percent, but during the second half of the decade, this average annual growth for five years shot up to 19 percent. Similar trend is evident for external debt. The average annual growth of external debt was only 1.4 percent during first half of decade; thereafter it increased to about 18 percent, nearly 12 times faster than growth rate during first half of the decade. That is, growth of both domestic debt and foreing debt in second half of the decade was very high, never experienced before.

15. This volatility is more pronounced when we look at simple annual rates of growth, too numerous to be discussed. (*Data Set 7.5a)* Briefly, there was a decline of 5.3 percent in total debt in FY02, and another small decline of 0.7 percent in FY03; that was all. Thus, during FY02-03, Pakistan paid off some part of public debt both domestic and external on net basis instead of borrowing more. There was a slight dip in ***stock of total debt*** outstanding at that time, perhaps the only time in history of Pakistan that it ever happened. This payoff was patchy because Pakistan did borrow from IMF under poverty reduction facility; and borrowing it was for medium term maturity funds; poverty alleviation aside. This net repayment had a built in roll over of short term supplier's credit, banker's acceptances and credits extended by banks that were paid off and closed down on the books.

16. Not all of these liabilities were incurred by the government. A good part originated from private sector, whose counterpart rupee repayments could not be converted into foreign currencies in time in requisite amounts and they ended up being foreign currency arrears of short maturities. These obligations were extended by foreign banks who could not get repaid in due course. These obligations got bundled up and leveraged into accumulated liabilities. When the government borrowed from IFIs under pressure to clear these liabilities, the rupee part of the obligation was discharged domestically, but the foreign currency part ended up being ***public*** external debt. This is how private foreign credit got transformed into a longer term sovereign liabilities. Foreign banks and other creditors got paid off for their indiscretion to lend but their obligations in foreign currency ended up being government debt. This happened in Pakistan; it also happened to other countries.

17. A brief respite of couple of years was much heralded as though the corner has been turned without much regard to underlying weaknesses of structure of government finance. At that time public investment programs in water and energy resources and public infrastructure were inadequate relative to current and projected needs. This neglect would come back to haunt later in the closing years of decade, though in those days no one could

perceive what this neglect would mean to the economy down the road. In part, the ebullience with new found vitality of private sector investment in areas that were purview of public sector, such as telecommunication, created a blind spot which led to this perception. Whatever the causes, this unrealistic perception of public debt was not to endure much longer. Public borrowings began in earnest. Within couple of years, during FY08-09, annual rates of growth of public debt touched the peak at 27 to 30 percent, far exceeding historical pattern of growth of around 8 to 10 percent per year.

18. By 2008, Pakistan was back to borrow from IMF, this time for much larger amounts with familiar conditionalities as during the 1990s; namely to tighten the belt, raise tariffs on utilities, raise prices of energy imports, and the like. Much incidence of these sacrifices fell upon the same group of tax payers and a disproportionate impact on lower income groups, while large farmers, real estate and other undocumented but wealthy segments in the country escaped the burden. The fall out was that unless IMF were to give a clean bill of health during standby period, no creditor would be forthcoming with fresh commitments to provide short term finance.

19. This was a repeat of the past patterns. From 1971 through late 1990s, governments deployed every technique to borrow domestically and overseas, including foreign currency deposits lodged mainly by overseas Pakistanis, and were almost oblivious to their implications. Freezing of foreign currency deposits lodged with banking system occurred in a panicky atmosphere without much thought given to its consequences except for the threat of imminent default. Pakistan consortium meetings or Paris Club reschedulings were too arcane for even the well informed, not to speak of ordinary public. The government did meet their debt servicing obligations but did not care much about implications of mounting debt burden, or how this burden will be met down the line in years to come. Instead, garnering more foreign debt was deemed a ***success*** because impact of this debt seeking and deal making binge would not show up during the tenure of those governing. The sardonic irony of mortgaging future generations has not been on their radar screen. Those being governed could not do much about it either.

20. After a brief interlude in early 2000s, the same scenario began to unfold in second half of the past decade, though there were no more foreign deposits to freeze. This attitude of apathy is not much different in current times. Public debt operations are being reported and its repayments are being met; but the fact that it is being financed by revolving credit with additional burden slapped onto it in each new round of refinancing of maturing debt obligations, is not widely understood. The attitude seems to

be to somehow tide over current exigencies of funding crisis, and leave consequences to successors who are likely to be not much different in their outlook and perceptions on these matters.

21. In closing this long term review a few remarks are put forth on the attitudinal change, the mind-set, concerning debt obligations. Gone is the stigma, once powerful that indulging in debt is debasing social status and is to be avoided at all costs. Instead, garnering more debt has become a sign of success, a perverse one though. With this change in social mores, it was a short hop towards engineered defaults and the practice has firmly entrenched itself among those who can garner a hefty share of bank borrowings. This societal change underlies the curse of indebtedness.

Domestic Debt

22. ***Total domestic public debt*** consists of debt of federal and provincial governments, and debt of public sector enterprises, the PSEs. Among these, federal government debt is the largest. As mentioned before, total domestic debt was Rs 1946 billion in FY00 rising to Rs 5443 billion in FY10. Of this, domestic debt of federal government was Rs 1891 billion in FY00, rising to Rs 4653 billion in FY10 at an average annual rate of 10.8 percent during this period. *(Data Set 7.6)* The average annual rate of growth of federal debt was only 3.2 percent during the first half of the decade; but then shot upto 19 percent during second half of the decade as shown in the text table below. In spite of this lopsided growth, the proportion of federal debt in total domestic declined from 97 percent in FY00 to 86 percent in FY10, but it is still the largest proportion of total domestic debt.

23. Federal domestic debt is classified into three categories: ***permanent debt, floating debt*** and ***unfunded debt.*** Among these, the proportion of permanent debt has been around 17 percent; while floating debt has risen from 37 percent in FY00 to 51 percent in FY10. The proportion of unfunded debt was 36 percent in FY00 and decrease to 31 percent by FY10. These were salient elements of changes in the structure of public domestic debt. ***Permanent debt*** consists of government bonds, mainly PIBs, though prize bonds are a notable part of total bond based borrowings. Borrowings of the Treasury through PIBs is done in long term debt market where SBP conducts periodic auctions as discussed in Chapters 8 of **Volume II** in detail. The size of permanent debt was Rs 317 billion in FY00 and increased to Rs 794 billion at an average annual rate of growth of 9.6 percent per year and remained remarkably stable throughout the decade.

Average Annual Growth Rates

	FY00-10	FY00-05	FY05-10
Domestic Public Debt & Liabilities	10.8%	3.2%	19.1%
Domestic Debt - Federal Government	9.4%	2.8%	16.4%
Permanent Debt	9.6%	9.6%	9.6%
Federal Bonds, PIBs	6.5%	2.6%	10.6%
Prize Bonds	11.3%	15.0%	7.7%
Floating Debt, T-Bills	14.0%	3.8%	25.3%
Unfunded Debt including NSS	8.0%	5.3%	10.8%
Extern Debt & Liabilities	9.2%	1.4%	17.6%

24. ***Floating debt*** is the largest part of domestic debt of federal government and all of it is in a single debt instrument, the treasury bills, discussed in Chapter 5 of **Volume II.** The stock of floating debt was Rs 647 billion in FY00 and increased to Rs 2399 billion in FY10 nearly four times of what it was a decade before. The average annual rate for FY00-10 was 14 percent; but during the first half of the decade, FY00-05, the rate of growth was very low, just about 4 percent, then it shot upto 25.3 percent per year during FY05-10, the second half of the decade. These borrowings have been extra-ordinarily high and a source of inflation in the economy.

25. The ***unfunded debt*** consists of ***NSS based*** borrowings. It is classified as unfunded debt, because it's repayments are not provided for in annual budget; it is rolled over into new instruments. For the government, it is a mechanism of borrowing to finance budget deficits; for the investors, NSS instruments are akin to long term deposits at rates much higher than those offered by banking system. There is no market for these instruments, neither primary, nor secondary; that is, unfunded instruments can not be bought or sold in debt market. They can be redeemed or swapped at maturity or can be cashed during the maturity period subject to stipulations specific to the instruments held. The ***stock*** of unfunded debt, rose from Rs 672 billion in FY00 to Rs 1456 billion by Fy10, and the average annual rate of growth of was about 8.5 percent during the past decade, as compared with 45 percent per year during the decade of 1990s. Borrowing through NSS slowed down during the 1997-2006 period, and reduced its reliance on banking system.

Managing Domestic Debt
The Interface with Financial System

26. The ***interface*** between financial system operations, fiscal operations, and debt management can be articulated from three different angles. ***First,*** for the government, borrowing from financial markets through instruments of T-bills or bonds is a mechanism for managing public debt and liabilities. ***Second***, for lenders, the financial institutions mostly banks, borrowings of Treasury are lodged as investment in their portfolio; therefore, for banks these investments require trade-off with loan portfolio. Banks have to decide what those trade-offs will be; the options are to lend to their clients with and face exposure to a variety of credit risks but with higher returns, or lodge their funds into default free securities of Treasury but with lower returns.

27. ***Third,*** for the central bank, borrowings of government from money and capital markets provide a mechanism for monetary management with focus on liquidity of the system and rates of interest. Government borrowings are the same; the underlying perceptions are vastly different. It all depends on how one looks at it; it depends on the perceptions or vantage point of the observer. The goal is to determine in what way total debt obligations and their servicing is linked up with financial system and its operations; how good are these operations in keeping cost of government borrowing down to market based costs.

28. The ***largest lender to government*** is banking system through financial market instruments though a smaller part is borrowed in direct banking credits by public sector enterprises. The proportion of borrowings from banking system via financial market and direct credit have grown form about 25 percent in early years of the decade to about 46 percent by end of the decade. These borrowings are being done on market-based rates of interest determined in money and debt markets via auctions conducted by SBP in a transparent manner. These mechanisms are well established though barely a decade old, and they respond to market forces. Therefore, whatever category of debt is selected, its financing lies in market mechanisms. The only mechanism outside financial system is borrowing through NSS instruments.

29. This interface arises from the way fiscal deficits are financed through the operations of money markets and long term debt markets by central bank and the banking system. These market operations provide the mechanism to cover fiscal deficits. No matter how domestic debt is classified, it is borrowed through mechanisms of financial system via short term and long term debt markets. Much of it is in ***floating debt,*** borrowed through treasury bills and

government bonds at market-based costs. Borrowings through T-bills is revolving credit to meet short term payment obligations, but since it is perpetually rolled over, it is to be treated as a regular debt obligation regardless of maturity of T-bills. Treasury bills market is discussed in detail ***Chapter 5*** of **Volume II** and those need not be repeated here.

30. The operational side of these short term borrowings are managed by SBP and are conducted through auctions of T-bills and trading of OMO based funds in interbank market. The short term debt liability management is a liquidity operation and it is revolving credit. These operations have a profound impact on liquidity of banking system at any time, and are central to monetary policy management. The lynch-pin of debt management, however, remains with short term financing, its instruments and their use in money markets, particularly in treasury bills market.

31. Government also borrows from SBP as overdraft through T-bills held by SBP in its portfolio. These may be used in open markets operations and if traded, these T-bills enter money market trading, and government short term debt is passed on to commercial banks for financing. A similar process is involved in government borrowings through instrument of bonds, the PIBs, the domestic debt of long maturities, or through NSS. Financial system mechanisms come into play when government decides to access long term debt markets and float bonds, discussed in Chapter 8, **Volume II.**

Circular Debt

32. Circular debt represents IOUs of public sector enterprises, PSEs. These are not borrowings, rather it is accumulation of arrears on inter-company transactions of PSEs. These arrears amount to involuntary credit because debtor companies are unable to clear accumulated arrears from their own cash flow. There has been a significant increase in circular debt during the second half of the decade. The size of circular debt over the past couple of years has risen from about Rs 340 billion to Rs 500 billion. Among these, circular debt of energy sector looms large at Rs 160 billion. A good part of this debt is owed by power distributing companies who have been unable to pay for electricity purchased from power generating companies. In turn some IPPs like Hubco have been unable to pay PSO for furnace oil supplies. In turn PSO has either to stop supplying fuel oil or extend more involuntary credit to power producers.

33. Circular debt becomes liability of government if it is originating from PSEs. Since government is strapped for funds, it releases some funds to paper over this debt, but it is borrowed money being recycled to settle a debt which is amalgam of public and private sector liabilities. The origination of power sector circular debt lies in the differential between revenues generated from power tariffs and cost of power generation, transmission losses, and outright theft. Distribution companies have not been able to do much about transmission losses, conservatively estimated at around 20 percent but actually much higher. A large part of arrears have built up owing to overdue electric bills by public sector companies and large private users. A good part of arrears have emerged because of misclassification of well to do coustomers like businesses in posh urban areas not entitled to tariff concessions otherwise intended for low income groups.

34. The government plans to issue mega borrowing through TFCs or sukuk for power sector through a subsidiary of Govt Power Holding Company. It means that government will paying for non-performance of power companies which in turn is non-performance of its coustomers, both in private and public sector. This bailing out of power companies means transforming private liabilities into sovereign liabilities, creating more public debt. This is the same process deployed over the past decades by previous governments. Energy sector companies are not the only ones caught in this spiral. Major state-owned enterprises like Pakistan Steel, PIA, Railways, NICL and others have been piling up substantive losses attributed to dismal record of management of these enterprises.

Debt Service Burden

35. The total ***amount of debt service*** both domestic and foreign, has risen almost as fast as the size of public debt has risen, at average annual rate of about 10 percent; but there was a considerable volatility in its growth. During FY00-05, growth of total debt service was hardly noticeable; it was less than half a percent per year; but in the second half of the decade, this growth rate was an astounding 20 percent per year. As shown in *Data Set 7.5*, total debt service increased from an estimated Rs 352 billion in FY00 to Rs 892 billion by FY10. Domestic debt service was about 58.7 percent of total debt service, amounting to Rs 206 billion in FY00; but it increased faster and was about 66.5 percent of total debt service in FY10, amounting to Rs 593 billion. Correspondingly, the share of foreign debt service declined from 41 percent of total debt service in FY00 to about 34 percent in FY10.

36. The ***debt service burden*** of public debt, domestic and foreign combined in rupee value, as a proportion of government revenue, declined from around 62 plus percent in early years to about 43 percent in later years of the decade, even though the ***amount*** of total debt service has increased as noted above. One interpretation of the ratio of debt service to government revenue is that payments of principal and interest on both domestic and external debt, cost 43 rupees out of each 100 rupees in revenue in FY10 as compared with the cost of Rs 62 plus in FY00. This decline in the ratio occurred because of relatively faster growth of revenues. The same trend is evident form ratio of debt service to federal government expenditures which declined from 47 percent at start of the decade to about 35 percent at the end of the decade. At end of the day what matters is the *capacity* of government to sustain debt repayments. This capacity has ***improved*** over the past decade as shown by significant drop of debt service ratio.

37. In part this drop occurred because cost of borrowing, the rate of interest both domestically and abroad, remained remarkably stable with the usual up and down over a long period of ten years. The implicit cost of interest on domestic and foreign liabilities, ***both,*** has ranged between 6.5 to 7.5 percent per year, while the average interest cost for the decade is about 6.7 percent, whatever meaning may be ascribed to such an average for long term. *(Data Set 7.5)* Decomposing the two, the implicit cost of interest on domestic debt was around 11 percent per year throughout the ten year period, including interest liabilities of short term and long term debt of government, garnered from the banking system, SBP, or the public, and from international lenders. Debt service on external debt is typically viewed with reference to foreign currency earnings. The rupee obligation of borrowings both domestic and external have to be sorted out because their repayments have to be provided for in the budget, except for the debt perpetually rolled over, both domestic and foreign.

38. Since there are no repayments of principal on floating or unfunded domestic debt, therefore, interest cost should be interpreted as cost of ***domestic borrowings.*** Interest cost of external debt has to be estimated separately because there are repayments of principal. These debt service amounts have to be translated into rupees at various exchange rates. Suffice to say that interest cost of ***external borrowings*** has been fairly small, around 2.7 percent, and declining over the past decade. It was an estimated 3.6 percent in the first couple of years, and then began declining, and was 2.4 percent per year during second half of the decade. *(Data Set 7.7)*

39. Much of debt service is in interest payments; only about one fourth of it is in repayments of principal. Nearly two thirds of interest payments are on domestic debt and one third on foreign debt. Ordinarily, it is much costlier for the government to borrow domestically than abroad due to interest rate differential. This is misleading, because foreign currency also entail losses owing to depreciation of exchange rate. Each time rupee depreciates, stock of foreign debt in local currency increases; so does its servicing in a proportionate manner. Pakistan was able to maintain stable exchange rate for a few years during FY02-07; but not before, nor in current times.

40. Therefore, ***debt servicing capacity*** is important as indicated by revenue inflows of the government, much the same way as debt servicing capacity of a household is determined by its level of income, except for the difference that households capacity to borrow extends only to the part of income that can be reasonably set aside as repayments of principal and interest charge in installments as stipulated in loan agreement. This is not binding on the government; government is a sovereign borrower, and has the power to raise taxes if it so wills to do; not the households.

External Debt

41. The government borrowed heavily overseas throughout the previous three decades which led to significant increase in foreign debt burden. The difference over the past years was that upto mid-1980s, foreign debt was incurred mostly to finance capital budget shortfalls. Thereafter, governments began to borrow for current expenditures in the name of policy support and structural adjustment, which did not add to the productive base of the economy, but added to the debt burden whose repayment liability was transferred to the public. This suited the lenders, as well as the government. There was a reversal, just not a shift in mind-set, concerning incurring debt obligations mentioned earlier.

42. Total external debt including liabilities (ED&L) was about US$38 billion in 2000, and increased to US$55.6 billion, by 2010, growing at average annual rate of about 9 percent, slightly below the rate of growth of total public debt. ED&L actually declined to about US$ 35.2 billion by FY04. Thereafter, the stock of ED&L began to rise and in FY06 it was $37.2 billion, still well below the level reached in mid-2000. *(Data Set 7.7)* External debt

remained viable until middle of the decade, in part because of a steep decline in foreign currency liabilities from US $5.7 billion in FY00 to US $2.0 billion in FY03 and to about $1.3 billion in FY06. This happened because of draw downs of frozen FCA obligations and retirement of special US$ bonds. As a result, ED&L decreased from about US $38 billion in FY99 to US $35.2 billion in FY04, which is a reversal of a long term trend. Eventually, these liabilities came to be absorbed in the mainstream of external debt reported above.

43. Of this, public and publicly guaranteed medium to long term (M&LT) debt was the largest part estimated at about US$28 billion in FY00 or about 73 percent of ED&L, rising to about US$43 billion by mid-2010 or about 77 percent of ED&L. The largest part of public M&LT debt was obtained mainly from World Bank and ADB which was US$12 billion in FY00 or about 46 percent of public M&LT debt, rising to 23.7 billion in FY10, amounting to about 55 percent of total public M&LT debt.

44. Outside of public M&LT debt, financing secured from IMF in short term liabilities, i.e., short term debt, was around US$1.5 billion for most of the years without any net addition until FY09 when it stood at US$5.1 billion, rising to US$ 8.0 by mid-2010. With further tranche releases in early 2011, this stock of IMF debt is likely to rise further.

45. Private non-guaranteed M&LT debt has not been much of a factor in total external debt, although its stock did increase from US$2.8 billion in FY00 to about US$3.4 billion in FY2010. This private M$LT debt is likely to rise, if foreign currency denominated bonds are issued, but if those are publicly guaranteed which is most likely, then it will be part of sovereign external liabilities, not private sector foreign liabilities.

46. The ***external debt service burden*** has been discussed as proportion of fiscal revenues in local currency, the rupee because government has to find rupee balances to buy foreign currency to service external debt obligations. These rupee balances could be borrowed domestically, or they could emerge from a revenue surplus. Once that hurdle is crossed, next step is to find foreign currency in sufficient amount at a reasonable price in open and free floating exchange rate regime to repay foreign obligations. Foreign currency inflows become next constraint if supply is limited or if there is devaluation.

47. For these reasons, a more appropriate measure of external debt servicing is with reference to receipts of foreing exchange earnings, lodged in current account of balance of payments; viz, exports plus *nfs*. It is a convention widely followed permitting contrasts with comparator countries.

This convention is not so meaningful if the purpose is to gauge ability of debt servicing from ***foreign liquidity*** position which is critical when debt service payments fall due. At that point liquidity position is more significant than simply inflows of export earnings. Any shortfall in foreign liquidity at that time ends up as short term arrear, and if arrears become overdue, they end up being lodged as short term debt which has to be resolved through roll over or rescheduling of liabilities.

48. The ***ratio of debt service*** to exports of goods and non-factor services *(nfs)* was close to 40 percent in FY00; but it declined to about 21 percent in FY10 representing a major turnaround and it is a structural shift in the debt profile of Pakistan. *(Data Set 7.7)* If we add remittances to these earnings, the ratio profile improves further; viz the ratio of external debt service to exports, nfs plus remittances was about 36 percent in FY00, and declined to about 16 percent in FY10, nearly half of what it was at start of the decade. Thus, the burden of debt service as a proportion of foreign currency earnings has been reduced by more than half what it was in early years. This happened while size of total debt significantly increased over the past decade.

49. The decrease in debt service ratio occurred owing to a much faster increase in foreign currency inflows from export earnings, services and remittances. These earnings were about US$ 10.5 billion in FY00 and increased to US$33.7 billion, more than three times during the decade representing much faster growth in forex earnings than repayments on external debt. In parallel, the costs of foreign borrowings declined. The estimated average rate of interest on all external debt liability ***decreased*** by half from 3.6 percent in 2000 to 1.8 percent in 2010.

50. The ***ratio*** of debt service therefore, declined, not the ***amount*** of debt service payments. Debt service amount did increase from US$ 3.8 billion in FY00 to US$ 5.7 billion in FY10, or by about 50 percent over the decade. This is hard to accept, but such is the evidence from data compiled after a good deal of scrutiny and rechecks. *(Data Sets 6.0, 6.5, 7.7)* The long term decrease in average interest rate on foreign liabilities is a major element in this trend. If compared to the cost of foreign borrowings on commercial terms often quoted as LIBOR+ rate, this composite cost is much lower.

51. The common perception is just the opposite; that foreign loans are expensive and that lenders are forcing Pakistan to borrow because of high profits on such borrowing. On the contrary, costs are below commercial rates and a good part of loans are obtained on concessional terms from IFIs.

52. The realigning of ED&L portfolio is almost over, the reduction in explicit liabilities other than mainstream external debt has taken place. In parallel, the fast build up of the forex reserves to current level of about $17 billion has improved creditworthiness of Pakistan overseas. The chaotic situation that prevailed during much of the 1990s was replaced by a much comfortable position by FY07; then reversal. The total ED&L increased from US$40 billion in FY07 to a reported US$60 billion end of 2010; debt servicing burden increased further, and government found itself facing foreing liquidity crunch with no end insight. These events forced government to seek IMF assistance. IMF is back in saddle with short term cover for shortfall in forex earnings relative to demand for outflows on imports plus other items.

Foreign Trade, Capital Flows
Structural Shifts?

53. ***Structural changes*** that occurred during the past decade have been briefly mentioned but the treatment has been rather cursory given the focus on financial system implications. Pakistan's balance of trade showed some improvement during early years of the decade; trade deficit narrowed down from US$ 1412 million in FY00 to about US$360 million during FY02-03 discussed in Chapter 6 of **Volume II** and encapsulated below.

54. An open foreign trade regime, liberal incentives for exporting, market determined exchange rate and fairly good forex reserve position led to a strong balance of payments position during FY00-FY04. The current account deficit improved and turned positive in FY01 after nearly two decades of deficits, and stayed positive upto FY04. This happened because of a four-fold increase in workers remittances from $1.1 billion in FY00 to $3.9 billion in FY04. Thereafter worker's remittances began to rise and reached $8.9 billion by FY10, growing at average annual rate of about 15 percent.

55. There was a substantial growth of exports as well from $8.2 billion in FY00 to $12.5 billion in FY04 at average annual rate of 11 percent. Over the same period, imports increased less faster at average annual rate of 9.4 percent. These developments engendered the hope, that perhaps Pakistan would not face balance of payments crisis.

56. That did not come to pass. Beginning FY05, Pakistan returned to the same paradigm experienced all along over historical period. The pattern of improvement in BoP position reversed. The surplus of about $4 billion on current account in FY03 to a deficit of $1.5 billion in FY05, rising to a deficit of $5.0 billion in FY06, and eventually to a deficit of $14 billion in FY08 owing to runaway growth in imports and service payments, in spite of record inflows of remittances. Net outflows for services began to rise fast and increased from $1.3 billion in FY04 to about $6.5 billion in FY08, largely owing to interest payments on foreign debt and liabilities.

57. There has been some moderation and current account deficit in FY10 was nearly $3.5 billion. Volatility of such magnitudes has not been seen before. Pakistan once again is facing worsened BoP position with pressures on economy, exchange rate and general price level. A fast increase in remittances that has sustained over the recent turbulent years is the only redeeming feature.

58. An encouraging development was growth of forex reserves at an average annual rate of about 21 percent from $2.1 billion in FY00 to $15.3 billion in FY10. These forex reserves are nowhere in comparison with other developing countries in Asia, but still it is much better than it was in early years of the decade, discussed in Chapter 11 of **Volume II.** This is reflected by adequacy of reserves to provide import coverage. This coverage was good for about 12 weeks in FY00 and it has risen to about 26 weeks in FY10. Or for that matter, forex reserves of about U$15 billion are sufficient for nearly half a year of imports rather than for barely a quarter of year imports in the past.

59. The worsening BoP position has led to pressures on exchange rate, though for exporters it is a bonanza. There was a significant depreciation of Pakistani rupee, from Rs 51.8 to a US dollar in FY00 to about Rs 85.3 to a US dollar in FY10 representing nearly 67 percent devaluation over the decade. The pattern of devaluation has been volatile. There was a swift devaluation in the first couple of years of the decade, followed by an appreciation of rupee versus US dollar, precisely in those years when BoP position had reversed for good. It has been downhill since then. There was a 13 percent devaluation in FY08, followed by another 19 percent devaluation in FY09. During FY10, rupee stabilized somewhat and rate of devaluation slowed down markedly to 5.3 percent.

60. News of devaluation excites everyone, just not currency traders, exporters and importers, because people have come to perceive devaluations as harbinger of bad news which it is; namely more inflation, rising fuel and

food prices with no end in sight. This bad news is usually punctuated by IMF's refusal to release tranches of standby unless more belt tightening is done. Pakistanis are now veterans of belt tightening, having lived through nearly 14 IMF standbys during the 1990s; though not that many during this decade, but certainly during the past three years. They are accustomed to call for more utility rate increases, fuel price increases. Since currency markets are relatively free floating, not dirty floating as they were earlier, there are no clarion calls for devaluation. Pakistani rupee slides in the market but the news no longer impacts the way it use during much of 1990s in the days of managed or dirty float.

61. Pursuant to reforms and liberalization, domestic currency markets are open, foreign trade barriers have been lowered; current and capital accounts are open; foreing currency flows occur without impediments within rules of transfer. Among these, open capital accounts are an issue because weak export base; dim prospects of global FDI or FPI inflows and an incentive regime at par or less than those prevailing in other Asian countries. Pakistan has not experienced capital inflows pursuant to opening up of its capital account; and is way behind the levels that occurred in East Asian or Latin American countries. There are no FDI induced bubbles in Pakistan to worry about, though capital market rebound could be nearing bubble situation once again. Once current account balance, and eventually BoP turns significantly negative as it has recently, it forces government to seek autonomous inflows, first, those items that do not entail a counterpart repayment liability, namely foreign direct investment (FDIs) and foreign portfolio investment (FPI) which have been very sluggish over the second half of the decade except for a few captive investments in telecom and banking sectors.

62. The issue is are these trends indicative of ***structural shift*** in external sector to a new paradigm as was anticipated when reforms were undertaken, or are they a cyclical phenomenon? Some of the changes are structural, such as open foreign trade regime and liberalized forex market, and these are unlikely to be reversed. Much of export growth, however, is coming from same export manufacturing base, namely textiles which has not seen much diversification in the wake of reforms.

63. The shift of remittances from informal channels to banking system at the current level in late 2011 of about US$ 12 billion is a new trend and these may grow further as long as premium between kerb market and interbank forex market remains negligible. This shift to formal transfers is unlikely to make any about-turn, given international pressures on informal overseas transfers, provided exchange rate differential between formal and informal

markets remains minimal. Most other inflows including lending by WB, ADB, and the IMF for BoP support, bilateral logistical support, debt write-offs, and some of the FDI tied to privatization are unlikely to recur on the same scale as they did previously.

64. In early years of the past decade official view was that given the strength of external sector, a gradual upward adjustment in forex rate would not hurt much exporter's competitiveness overseas despite rising domestic inflation relative to those of trading partners. As it turned out, the Rupee depreciated owing to weaknesses within the economy, and also because of depreciation of dollar against major currencies in early years of the decade, and this depreciation more than compensated exporters for inflation differential, thus maintaining competitiveness of exporters. The trends of early years of the decade have reversed now. Exchange rate has come under pressure, apart from heavy repayments of external debt and emergence of domestic inflationary pressures.

65. Given these trends, ***exchange rate stability*** has been difficult to maintain, periodic ups and downs aside. Building up of a relatively modest forex reserve position which began under free floating forex rate and an operative inter-bank forex market with expanded stakeholders did not seem to prevent slide of exchange rate in the second half of the decade. Forex reserve build up started from a modest level of US$ 1.35 billion in late 2000 under unified exchange rate, and eventually reached to levels as noted above in free floating exchange rate regime, which provides some assurance that if only exporting were to pickup or if current pressures could be managed, exchange rate may not be as volatile as it was over the FY08-10 period.

66. There are ***threats*** to the buoyancy external sector has exhibited thus far. Much of it lies in the slowing down of major economies, sustained increases in oil prices and global uncertainties generated by financial crisis. Since rationalization of real sectors of Pakistan's economy is incomplete, fiscal side remains vulnerable, investment growth has been erratic over past years, concerns with the leading issues of economic management have re-emerged. They never really disappeared from the scene.

67. Such a cryptic review of recent development in the BoP does not fully capture trends in external sector, sweeping as it is, but it is sufficient for our purposes to identify interlinks with the financial system. Notice that there are five broad aggregates that we need to focus on; namely, exports, imports, worker's remittances, net services payments and foreign direct investment. In all these areas, banking system plays a vital role.

68. Consider the following. Banking system is pivotal to foreign trade financing, both for exports and imports through the system of revolving credit, using letters of credits (L/Cs) of all varieties. Regarding exports, banking system credit to the exporters is vital, because availability of timely credit could spell the difference between performance and non-performance of overseas orders. The SBP operates an export credit facility, which functions as a discount window for bankers at concessional interest rates, whereby a bank could access this credit from SBP and pass it on to exporters. The concessionary element helps exporters to be more competitive in global markets. At times this edge could be critical.

69. Likewise, bulk of inflows of worker's remittances is being channeled through the banking system after the pressures to close down informal operations like *hundis.* The banking system is the conduit to these inflows. For service related payments and receipts, nearly all of those are handled and facilitated by the banking system. Foreign direct investments are somewhat different, in that they are funneled through financial markets and its own institutions like mutual funds and brokerages. However, financial transactions invariably involve intervention by the banking system to facilitate transactions. The issue is how good the financial system is in promoting these activities.

Data Set 1.2 **Sectoral Origin of GDP** - *at constant prices, 2000=100* *Rs billion*

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
4	Agriculture	924	904	904	942	965	1,029	1,092	1,132	1,149	1,195	1,219
5	Industry	798	827	849	889	1,077	1,200	1,257	1,357	1,387	1,361	1,428
6	Manufacturing	523	571	597	638	727	818	913	988	1,035	998	1,050
7	Services Sector	1,808	1,863	1,952	2,054	2,174	2,347	2,511	2,703	2,847	2,892	3,024
8	**GDP at Factor Cost**	**3,530**	**3,594**	**3,705**	**3,885**	**4,216**	**4,576**	**4,860**	**5,192**	**5,383**	**5,448**	**5,671**
9	Indirect Taxes(+)	296	302	313	355	371	359	395	401	372	361	374
10	Subsidies(-)	31	32	30	54	53	70	72	98	190	41	26
11	**GDP at Market Prices**	**3,795**	**3,864**	**3,988**	**4,186**	**4,534**	**4,865**	**5,183**	**5,495**	**5,565**	**5,768**	**6,019**
12	Net Factor Y - Abroad	-48	-47	23	127	90	89	84	83	86	113	194
13	**GNP at Factor Cost**	**3,482**	**3,547**	**3,728**	**4,012**	**4,306**	**4,665**	**4,944**	**5,275**	**5,469**	**5,561**	**5,865**
14	**GNP at Market Prices**	**3,747**	**3,817**	**4,011**	**4,313**	**4,624**	**4,953**	**5,267**	**5,578**	**5,651**	**5,881**	**6,213**
15	**GDP deflator**	100	108	110	115	125	136	148	159	184	222	245
16						**(Annual growth rate)**						
17	Agriculture		-2.2	0.0	4.2	2.5	6.6	6.1	3.7	1.5	4.0	2.0
18	Industry		3.6	2.7	4.7	21.1	11.4	4.8	8.0	2.2	-1.9	4.9
19	Manufacturing		9.2	4.6	6.9	13.9	12.5	11.6	8.2	4.8	-3.6	5.2
20	Services Sector		3.0	4.8	5.2	5.8	8.0	7.0	7.6	5.3	1.6	4.6
21	GDP at Factor Cost		**1.8**	**3.1**	**4.9**	**8.5**	**8.5**	**6.2**	**6.8**	**3.7**	**1.2**	**4.1**
22	GDP at Market Prices		1.8	3.2	5.0	8.3	7.3	6.5	6.0	1.3	3.6	4.4
23	GNP at Factor Cost		**1.9**	**5.1**	**7.6**	**7.3**	**8.3**	**6.0**	**6.7**	**3.7**	**1.7**	**5.5**
24	GNP at Market Prices		**1.9**	**5.1**	**7.5**	**7.2**	**7.1**	**6.3**	**5.9**	**1.3**	**4.1**	**5.6**
25	GDP Deflator (growth) as per above		*7.7*	*2.5*	*4.5*	*8.1*	*8.7*	*8.8*	*7.9*	*15.6*	*20.9*	*10.3*
26	GDP Deflator (growth)	3.8	8.0	2.7	4.4	7.7	7.0	10.5	7.8	16.2	20.3	10.1
27						**(Sectoral shares, %)**						
28	***Agriculture***	24.3	23.4	22.7	22.5	21.3	21.2	21.1	20.6	20.6	20.7	20.3
29	***Industry***	21.0	21.4	21.3	21.2	23.8	24.7	24.3	24.7	24.9	23.6	23.7
30	***Manufacturing***	13.8	14.8	15.0	15.2	16.0	16.8	17.6	18.0	18.6	17.3	17.4
31	***Services Sector***	47.6	48.2	48.9	49.1	47.9	48.2	48.4	49.2	51.2	50.1	50.2
32	***Population (millions)***	***138***	***140***	***143***	***146***	***149***	***150***	***153***	***155***	***158***	***161***	***164***
33	SaF: Data Set				Source; SBP, various Annual Reports, GDP tables							

Data Set 1.2a **Sectoral Origin of GDP** - *at constant prices, 2000=100* *Growth Rates*

		Average Annual Growth Rates					Average Annual Growth Rates		
		FY00-10	**FY00-05**	**FY05-10**			**FY00-10**	**FY00-05**	**FY05-10**
Agriculture		2.8%	2.2%	3.4%		Gross Fixed Investment	13.7%	12.4%	15.1%
Industry		6.0%	8.5%	3.5%		Public Sector	11.6%	6.5%	16.8%
	Manufacturing	7.2%	9.4%	5.1%		Private Sector	14.8%	15.0%	14.5%
Services Sector		5.3%	5.4%	5.2%		Net External Resource Inflow	21.2%	9.1%	34.7%
GDP at Factor Cost		***4.9%***	***5.3%***	4.4%		National Savings	12.9%	12.9%	13.0%
	Indirect Taxes(+)	2.4%	3.9%	0.9%		Private Sector	11.7%	9.6%	13.8%
	Subsidies(-)	-1.7%	17.7%	-18.0%		Households	11.1%	9.6%	12.7%
GDP at Market Prices		***4.7%***	***5.1%***	***4.4%***		Corporate	15.2%	9.7%	21.0%
GNP at Factor Cost		***5.4%***	***6.0%***	***4.7%***		Domestic Savings	8.4%	9.0%	7.9%
GNP at Market Prices		***5.2%***	***5.7%***	***4.6%***					
GDP deflator		***9.4%***	***6.3%***	***12.6%***					

Data Set 1.6 **Investment and Savings** - *at Current Prices* *Rs billions, end of period*

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
Gross Total Investment	***659***	***715***	***738***	***817***	***935***	***1,192***	***1,688***	***1,953***	***2,259***	***2,415***	***2,431***
Change in Stocks	52	56	58	81	90	105	122	139	164	204	235
Gross Fixed Investment	***607***	***659***	***680***	***736***	***845***	***1087***	***1566***	***1815***	***2095***	***2211***	***2197***
Public Sector	212	236	184	191	228	291	368	479	555	590	633
Private Sector	395	423	496	545	617	796	1198	1336	1540	1621	1564
Net External Resource Inflow	59	30	-82	-185	-94	91	338	446	886	738	404
National Savings	***600***	***686***	***821***	***1002***	***1030***	***1101***	***1350***	***1507***	***1373***	***1677***	***2027***
Public Savings	-3	58	74	72	195	146	195	88	-188	286	203
Private Savings	603	627	746	930	834	955	1154	1419	1560	1392	1824
Households	532	553	658	821	736	842	1002	1246	1356	1137	1531
Corporate	71	74	88	110	98	113	153	174	205	255	293
Net Factor Income	-48	-54	24	152	118	106	150	158	209	346	571
Domestic Savings	***648***	***740***	***797***	***850***	***911***	***995***	***1200***	***1349***	***1164***	***1333***	***1457***
					(Annual growth rate)						
Gross Fixed Investment		8.6	3.2	8.2	14.8	28.6	44.1	15.9	15.4	5.5	-0.6
Public Sector		11.3	-22.0	3.8	19.4	27.6	26.5	30.2	15.9	6.3	7.3
Private Sector		7.1	17.3	9.9	13.2	29.0	50.5	11.5	15.3	5.3	-3.5
National Savings		14.3	19.7	22.0	2.8	6.9	22.6	11.6	-8.9	22.1	20.9
Public Savings			27.6	-2.7	170.8	-25.1	33.6	-54.9	-313.6	-252.1	-29.0
Private Savings		4.0	19.0	24.7	-10.3	14.5	20.8	23.0	9.9	-10.8	31.0
Households		3.9	19.0	24.8	-10.4	14.4	19.0	24.4	8.8	-16.2	34.7
Corporate		4.2	18.9	25.0	-10.9	15.3	35.4	13.7	17.8	24.4	14.9
Domestic Savings		14.2	7.7	6.6	7.2	9.2	20.6	12.4	-13.7	14.5	9.3
Public Sector Inv / Gross fixed Inv	34.9	35.8	27.1	26.0	27.0	26.8	23.5	26.4	26.5	26.7	28.8
Private Sector/Fixed Investment	65.1	64.2	72.9	74.0	73.0	73.2	76.5	73.6	73.5	73.3	71.2
Gross Fixed Investment / GNP	16.2	16.0	15.4	14.8	14.7	16.2	20.1	20.4	20.1	16.9	14.4
National Savings / GNP	16.0	16.7	18.6	20.1	17.9	16.4	17.4	17.0	13.2	12.8	13.3
Household Sav / National Sav	88.7	80.6	80.1	81.9	71.5	76.5	74.2	82.7	98.8	67.8	75.5
Domesticl Savings / GNP	17.3	18.0	18.0	17.1	15.8	14.8	15.4	15.2	11.2	10.2	9.6
SaF Data Set		Source: SBP Annual Reports									

Data Set 3.8 — **Price Trends** — *End of period*

			FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
5	**Inflation**	**Weights**											
6	***Cost of Living, CPI \ 1***	100.0	***3.6***	***4.4***	***3.5***	***3.1***	***4.6***	***9.3***	***7.9***	***7.8***	***12.1***	***20.7***	***11.7***
7	Food Prices	40.3	2.2	3.6	2.5	2.8	6.0	12.5	6.9	10.3	17.6	23.8	12.5
8	Clothing	6.1	5.4	2.7	3.2	3.5	2.7	3.0	4.1	5.2	8.2	14.2	6.3
9	House Rent	23.4	4.2	3.0	2.8	0.7	4.5	11.3	10.0	6.6	9.4	17.1	13.8
10	Fuel & Light	7.3	5.4	2.8	9.5	7.6	3.0	3.7	8.9	9.1	6.1	25.5	14.1
11	Transport & Comm	7.3	8.5	12.4	5.0	6.7	3.0	8.4	16.6	2.1	-9.0	42.0	6.0
12	***Wholesale Prices***		***1.5***	***6.2***	***2.1***	***5.6***	***7.9***	***6.8***	***10.1***	***6.6***	***16.7***	***18.2***	***12.7***
13	**Indices**												
14	***Cost of Living (CPI)***	***92.5***	***95.8***	***100.0***	***103.5***	***106.8***	***111.6***	***122.0***	***131.6***	***141.9***	***159.0***	***191.9***	***214.4***
15	Food Prices (40.3%) \ 1	94.4	96.5	100.0	102.5	105.4	111.7	125.7	134.4	148.2	174.3	215.7	242.6
16	Clothing (6.1%)	92.4	97.4	100.0	103.2	106.8	109.7	113.0	117.6	123.7	133.8	152.8	162.5
17	House Rent (23.4%)	93.2	97.1	100.0	102.8	103.5	108.2	120.4	132.4	141.2	154.5	180.9	205.9
18	Fuel & Light (7.3%)	92.3	97.3	100.0	109.5	117.8	121.3	125.8	137.0	149.4	158.5	198.9	226.9
19	Transport & Comm (7.3%)	82.0	89.0	100.0	105.0	112.0	115.4	125.1	145.9	149.0	135.6	192.6	204.2
20	***Wholesale***	***92.8***	***94.2***	***100.0***	***102.1***	***107.8***	***116.3***	***124.1***	***136.7***	***145.7***	***170.0***	***201.0***	***226.5***
21													
22			*Average Annual Growth Rates*										
23			**FY00-10**	**FY00-05**	**FY05-10**	**FY07-10**							
24	***Cost of Living (CPI)***		***8.4%***	***5.0%***	***11.9%***	***14.8%***							
25	Food Prices (40.3%) \ 1		9.7%	5.4%	14.1%	17.9%							
26	Clothing (6.1%)		5.3%	3.0%	7.5%	9.5%							
27	House Rent (23.4%)		7.8%	4.4%	11.3%	13.4%							
28	Fuel & Light (7.3%)		8.8%	5.3%	12.5%	14.9%							
29	Transport & Comm (7.3%)		8.7%	7.0%	10.3%	11.1%							
30	Wholesale		9.2%	5.7%	12.8%	15.8%							
31													
32	SaF Data Set		Source: SBP Annual Reports; data from Federal Bureau of Statistics										
33	\ 1 Componenets of CPI shown here together have nearly 80 percent of total wieght of CPI.						\ 2 From Table 3.4, AR 2010, p23						

Data Set 7.0 **Consolidated Government Fiscal Operations** ***Rs billions***

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
4												
5	**Total Federal Revenue**	**531**	**534**	**619**	**702**	**761**	**875**	**1023**	**1214**	**1402**	**1680**	**2052**
6	Taxes	386	422	459	526	580	626	716	840	1009	1252	1483
7	Non-Tax \ 1	145	112	160	176	181	249	307	374	393	428	569
8	less Transfers to Provinces	144	163	172	193	211	245	301	391	457	568	655
9	*Net Revenue*	*388*	*371*	*447*	*509*	*550*	*630*	*722*	*823*	*945*	*1112*	*1397*
10	**Total Federal Expenditure**	**741**	**708**	**949**	**861**	**899**	**1001**	**1196**	**1364**	**1921**	**2101**	**2577**
11	Current Expenditure \ 2	652	624	843	758	779	837	957	1065	1556	1746	2133
12	Debt Service; Repayments + int	352	338	589	436	492	359	382	493	601	903	892
13	Defence	153	131	149	160	181	216	241	253	277	311	378
14	Development Expenditure	12	19	44	36	59	82	153	201	253	238	316
15												
16	**Overall Balance, Federal Deficit**	**-354**	**-337**	**-502**	**-352**	**-348**	**-371**	**-475**	**-541**	**-976**	**-989**	**-1180**
17	**Financing of Federal Deficit**	***354***	***337***	***502***	***352***	***349***	***371***	***476***	***542***	***976***	***989***	***1181***
18	*External, Borrowings, Grants*	*99*	*170*	*239*	*169*	*145*	*198*	*234*	*277*	*152*	*149*	*578*
19	*Internal, domestic*	*255*	*167*	*262*	*183*	*204*	*173*	*242*	*265*	*824*	*840*	*603*
20	Internal Resources \ 4	144	135	163	190	105	76	57	112	182	277	376
21	Borowings from banking system	40	-33	13	-33	74	81	67	55	608	459	144
22	Others \ 5	71	65	86	26	25	16	118	98	34	104	83
23												
24	***Mandatory Federal Expenditures***	***648***	***632***	***910***	***789***	***883***	***820***	***924***	***1137***	***1335***	***1782***	***1925***
25	Percent of Total Federal Revenues, %	122.0	118.4	146.9	112.5	116.1	93.7	90.4	93.6	95.2	106.1	93.8
26						***Percent of current GDP at mp***						
27	***Total Revenue***	14.0	12.8	14.1	14.5	13.5	13.3	13.4	13.9	13.7	13.2	14.0
28	***Total Expenditures***	19.5	17.0	21.6	17.9	15.9	15.2	15.7	15.6	18.8	16.5	17.6
29	***Overall Balance, Federal Deficit***	-9.3	-8.1	-11.4	-7.3	-6.2	-5.6	-6.2	-6.2	-9.5	-7.8	-8.0
30	***GDP, current (mp)***	***3794***	***4162***	***4401***	***4822***	***5641***	***6581***	***7623***	***8723***	***10242***	***12738***	***14669***
31	SaF Data Set					Source: MinFin, primary; SBP, Annual reports						
32	\ 1 Includes SBP profits which are substantial, Rs 65 b in 07			\ 2 Includes expenditures from revenues plus capital disbursements; lending, financing of PSEs								
33	\ 3 Repayments of interest on domestic & external debt, (DoD), plus repayments on external DoD only											
34	\ 4 Internal Resources net public debt flows, recoveries of loans and advances, deferred liabilities, deposits, and reserves											
35	\ 5 Changes in provincial cash balances, privatizationn proceeds, and adjustment balances.											
36												
37												

Data Set 7.0a **Consolidated Government Fiscal Operations** ***Rs billions***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
					(Annual Growth Rate)						
Total Expenditures		-4.5	34.0	-9.2	4.3	11.4	19.5	14.0	40.8	9.4	22.6
Current Expenditures		-4.3	35.1	-10.1	2.7	7.5	14.3	11.3	46.0	12.2	22.1
Financing - Deficits		-4.8	48.7	-29.8	-0.9	6.4	28.4	13.7	80.2	1.4	19.4
External, *Borrowings, Grants*		71.7	40.5	-29.3	-14.3	36.5	18.4	18.2	-45.1	-1.8	287.7
Internal, domestic		-34.5	57.1	-30.3	11.5	-15.0	39.7	9.4	210.9	1.9	-28.2
Borowings from banking system		-182.5	-139.4	-353.8	-324.2	9.5	-17.3	-17.9	1005.5	-24.5	-68.6
Internal Resources		-6.3	21.0	16.3	-44.7	-27.2	-25.0	95.5	62.5	52.2	35.7
Others		-8.5	32.3	-69.8	-3.8	-36.0	637.5	-16.9	-65.3	205.9	-20.2
					(Percent of total Revenues)						
Debt Repayments	66.2	63.3	95.1	62.2	64.6	41.0	37.4	40.6	42.9	53.8	43.5
Defence	28.8	24.6	24.1	22.8	23.7	24.7	23.6	20.8	19.8	18.5	18.4
Transfers to Provinces	27.0	30.5	27.8	27.5	27.7	28.0	29.4	32.2	32.6	33.8	31.9
					(Percent of total Expenditures)						
Debt Repayments	53.9	54.2	69.8	57.6	63.1	42.8	39.9	46.2	38.6	51.7	41.8
Defence	23.4	21.0	17.7	21.1	23.2	25.8	25.2	23.7	17.8	17.8	17.7
Transfers to Provinces	22.0	26.1	20.4	25.4	27.1	29.3	31.4	36.7	29.4	32.5	30.7
Residual: Development Expenditures	1.8	3.0	5.2	4.7	7.6	9.8	16.0	18.9	16.3	13.6	14.8

Average Annual Growth Rates					***Average Annual Growth Rates***		
	Fy00-10	**Fy00-05**	**Fy05-10**			**Fy00-10**	**Fy00-05**	**Fy05-10**
Total Federal Revenue	14.5%	10.5%	18.6%		**Financing of Federal Deficit**	12.8%	0.9%	26.1%
Tax Revenue	14.4%	10.2%	18.8%		External, Borrowings, Grants	19.3%	14.8%	23.9%
Total Federal Expenditure	13.3%	6.2%	20.8%		Internal, domestic	9.0%	-7.4%	28.3%
Current Expenditures	12.6%	5.1%	20.6%		Borowings from banking system	13.7%	15.2%	12.2%
Debt Repayments	9.8%	0.4%	20.0%					
Defence	9.5%	7.2%	11.8%					
Development Expenditures	38.9%	47.4%	30.9%					

Data Set 7.1 — **Government Revenues** — *Rs billions*

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
Federal Revenues	**531**	**534**	**619**	**702**	**761**	**875**	**1023**	**1214**	**1402**	**1680**	**2052**
Tax Revenue	***386***	***422***	***459***	***526***	***580***	***626***	***716***	***840***	***1009***	***1252***	***1483***
Direct Taxes	113	125	143	145	162	183	225	321	388	496	540
Income Taxes	105	118	137	139	155	175	216	305	368	477	520
Indirect Taxes	234	268	262	314	349	407	479	519	622	755	943
Sales Taxes	117	154	167	198	218	239	287	311	386	472	540
Customs Duties	62	65	48	70	87	114	136	134	151	170	165
Non-Tax \ 1	***145***	***112***	***160***	***176***	***181***	***249***	***307***	***374***	***393***	***428***	***569***
less Transfers to Provinces	***144***	***163***	***172***	***193***	***211***	***245***	***301***	***391***	***457***	***568***	***655***
Net Federal Revenue	**388**	**371**	**447**	**509**	**550**	**630**	**722**	**823**	**945**	**1112**	**1397**
Provincial Revenues, Consolidated	**286**	**227**	**241**	**279**	**305**	**358**	**436**	**543**	**620**	**723**	**855**
Tax Revenues	163	189	198	217	243	284	340	382	443	528	631
Share in Federal Taxes	143	168	177	194	212	251	299	333	392	467	567
Net Prov Tax Revenues	19	21	22	23	31	33	41	49	51	61	64
Non - Tax Revenues	124	39	43	62	62	74	96	160	176	195	225
Provincial Revenues (net of Federal Share)	***143***	***60***	***64***	***85***	***93***	***107***	***137***	***210***	***227***	***256***	***288***
Total Revenues (Federal, Provincial)	**674**	**594**	**683**	**787**	**854**	**982**	**1160**	**1424**	**1629**	**1936**	**2340**
Share of GDP	***17.8***	***14.3***	***15.5***	***16.3***	***15.1***	***14.9***	***15.2***	***16.3***	***15.9***	***15.2***	***16.0***
GDP, current (mp)	***3794***	***4162***	***4401***	***4822***	***5641***	***6581***	***7623***	***8723***	***10242***	***12738***	***14669***

SaF Data Set — Source: MinFin, primary; SBP, Annual reports

\ 1 Includes SBP profits which are substantial, Rs 65 b in 07

\ 2 Includes expenditures from revenues plus capital disbursements; lending, financing of PSEs

\ 3 Repayments of interest on domestic & external debt, (DoD), plus repayments on external DoD only

\ 4 Internal Resources net public debt flows, recoveries of loans and advances, deferred liabilities, deposits, and reserves

\ 5 Changes in provincial cash balances, privatizationn proceeds, and adjustment balances.

Data Set 7.1a — **Government Revenues** — *Rs billions*

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
					(Percent of current GDP at mp)						
Total Revenue (federal and proivncial)	17.8	14.3	15.5	16.3	15.1	14.9	15.2	16.3	15.9	15.2	16.0
Total Expenditures	1.6	1.6	1.1	1.4	1.5	1.7	1.8	1.5	1.5	1.3	1.1
Overall Balance, budget deficit	-3.8	-2.7	-3.6	-3.6	-3.2	-3.8	-4.0	-4.3	-3.8	-3.4	-3.9
Taxes	386	422	459	526	580	626	715	840	1009	1252	1483
Non-Tax \ 1	145	112	160	176	181	249	307	374	393	428	569

Average Annual Growth Rates

	Fy00-10	Fy00-05	Fy05-10
Federal Revenues	14.5%	10.5%	18.6%
Tax Revenue	14.4%	10.2%	18.8%
Direct Taxes	16.9%	10.1%	24.2%
Income Taxes	17.3%	10.7%	24.3%
Indirect Taxes	15.0%	11.7%	18.3%
Sales Taxes	16.6%	15.4%	17.7%
Customs Duties	10.3%	13.0%	7.7%
Non-Tax \ 1	14.7%	11.4%	18.0%
less Transfers to Provinces	16.4%	11.3%	21.7%
Net Federal Revenue	13.7%	10.2%	17.3%
Total Revenues (Federal, Provincial)	13.3%	7.8%	19.0%

Provincial Revenues, Consolidated

Tax Revenues

Share in Federal Taxes

Net Prov Tax Revenues

Non - Tax Revenues

Provincial Revenues (net of Federal Share)

Average Annual Growth Rates

	Fy00-10	Fy00-05	Fy05-10
	11.6%	4.6%	19.0%
	14.5%	11.8%	17.3%
	14.8%	11.9%	17.7%
	12.6%	11.1%	14.2%
	6.1%	-9.7%	24.8%
	7.2%	-5.7%	21.9%

Data Set 7.2 **Federal Government Expenditures** *Rs billions*

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
Public Expenditures: Federal, Provincial		**974**	**950**	**1211**	**1148**	**1259**	**1435**	**1750**	**2035**	**2675**	**2926**	**3585**
Total Expenditures: Federal		**741**	**708**	**949**	**861**	**899**	**1001**	**1196**	**1364**	**1921**	**2101**	**2577**
1. Current Expenditure \ 1		***652***	***624***	***843***	***758***	*779*	***837***	**957**	***1065***	***1556***	***1746***	***2133***
Debt Service Payments \ 2		***352***	***338***	***589***	***436***	***492***	***359***	***382***	***493***	***601***	***903***	***892***
Interest payment, Domestic Public Debt		206	195	213	189	185	182	237	359	448	597	593
Principal Repayments, External Debt		97	86	300	183	250	123	94	79	91	230	225
Interest Payment on External Debt		48	57	77	64	57	54	51	55	62	76	74
Defense		*153*	*131*	*149*	*160*	*181*	*216*	*241*	*253*	*277*	*311*	*378*
2. Development Expenditure		***12***	***19***	***44***	***36***	***59***	***82***	***153***	***201***	***253***	***238***	***316***
3.Transfers, Public Service and others		***78***	***65***	***62***	***67***	***60***	***82***	***86***	***98***	***112***	***117***	***128***
Consolidated Provincial Expenditures		**233**	**242.3**	**262.3**	**286.6**	**360.6**	**434.4**	**553.1**	**671**	**754.6**	**824.6**	**1008**
Mnadatory Expenditures: Federal budget		***648***	***632***	***910***	***789***	***883***	***820***	***924***	***1137***	***1335***	***1782***	***1925***
Financing of Federal Govt Expenditure		**741**	**708**	**949**	**861**	**898**	**1001**	**1197**	**1364**	**1921**	**2101**	**2577**
Revenue Receipts (Net) \ 3		*388*	*372*	*448*	*509*	*550*	*630*	*721*	*823*	*946*	*1111*	*1397*
Internal Resources (Public debt, others)		*144*	*135*	*163*	*190*	*105*	*76*	*57*	*112*	*182*	*277*	*376*
External Recources, Loan & Grants		*99*	*170*	*239*	*169*	*145*	*198*	*234*	*277*	*152*	*149*	*578*
Borrowings from Banking Sysem		*40*	*13*	*-33*	*74*	*81*	*67*	*140*	*55*	*424*	*149*	*89*
Privatization Proceeds & others		*70*	*18*	*132*	*-81*	*18*	*30*	*44*	*97*	*217*	*414*	*137*
GDP, current (mp)		***3794***	***4162***	***4401***	***4822***	***5641***	***6581***	***7623***	***8723***	***10242***	***12738***	***14669***
SaF Data Set						Source: MinFin, primary; SBP, Annual reports						
\ 1 Current expenditures from revenues, line I.A; plus current expenditures of capital disbursements, line II.A classified as *current expenditure,* including some debt servicing. .												
\ 2 Repayments of interest on domestic & external debt, (DoD), plus repayments on external DoD only for all govt liabilities												

Data Set 7.5 Pakistan - Domestic and External Debt - *Outstanding, Summary* *End Period, Rs billions*

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
4												
5	**Total Public Debt & Liabilities \ 1**	**3917**	**4206**	**3985**	**3955**	**4063**	**4386**	**4769**	**5247**	**6683**	**8734**	**10186**
6	**i. Domestic Debt & Liabilities \ 2**	**1946**	**1854**	**1791**	**1903**	**2038**	**2273**	**2529**	**2813**	**3539**	**4487**	**5443**
7	**Domestic Debt - Federal Government \ 3**	***1891***	***1802***	***1760***	***1881***	***2013***	***2176***	***2337***	***2610***	***3275***	***3861***	***4653***
8	**Domestic Provincial Govt Liabilities**	*55*	*52*	*31*	*22*	*25*	*34*	*108*	*99*	*127*	*336*	*415*
9	**Domestic Debt, PSEs \ 4**						63	84	104	137	290	375
10	**ii. External Debt+Liabs, *Rs billions***	**1971**	**2352**	**2194**	**2052**	**2025**	**2113**	**2239**	**2434**	**3144**	**4247**	**4743**
11	**External Debt+Liabs, *US$ billions***	**37.9**	**37.1**	**36.5**	**35.5**	**34.8**	**35.4**	**37.2**	**40.3**	**46.1**	**52.3**	**55.6**
12	**ii. External Debt+Liabs, *Rs billions***	**1971**	**2352**	**2194**	**2052**	**2025**	**2113**	**2239**	**2434**	**3144**	**4247**	**4743**
13	**Total Debt Service; All Public Debt \ 5**	**352**	**338**	**589**	**436**	**492**	**359**	**382**	**493**	**601**	**903**	**892**
14	*Debt Service on domestic debt only*	*206*	*195*	*213*	*189*	*185*	*182*	*237*	*359*	*448*	*597*	*593*
15	*Debt Service on external debt*	*145*	*143*	*376*	*247*	*307*	*177*	*145*	*134*	*153*	*306*	*299*
16	**Interest Paid on Totl Public Debt & Liabilities**	**254**	**252**	**289**	**253**	**242**	**236**	**288**	**414**	**510**	**673**	**667**
17	***Paid on Govt Domestic Debt + Dom Liabilities***	***206***	***195***	***213***	***189***	***185***	***182***	***237***	***359***	***448***	***597***	***593***
18	*Average rate of interest, Total Debt*	*6.5*	*6.0*	*7.3*	*6.4*	*6.0*	*5.4*	*6.0*	*7.9*	*7.6*	*7.7*	*6.5*
19	*Average rate of interest, Domestic Debt only*	*10.6*	*10.5*	*11.9*	*9.9*	*9.1*	*8.0*	*9.4*	*12.7*	*12.7*	*13.3*	*10.9*
20	*Av Rate of Interest on External Debt*	*3.6*	*3.6*	*2.9*	*2.6*	*2.8*	*2.6*	*2.4*	*2.8*	*2.7*	*2.2*	*1.8*
21	Total Public Debt Service: % of Fed Govt Revenue	66.2	63.3	95.1	62.2	64.6	41.0	37.4	40.6	42.9	53.8	43.5
22	Total Public Debt Service : % of Total Fed Expenditures	47.4	47.8	62.1	50.7	54.7	35.8	31.9	36.1	31.3	43.0	34.6
23												
24	**Total Debt Burden (Amount; Rs per household of 6) \ 6**	176,698	184,211	170,771	165,940	165,851	175,455	187,005	203,122	249,114	319,996	367,004
25	**Annual Debt Service Burden (Amount; Rs per household of 6)**	15,857	14,812	25,230	18,310	20,078	14,352	14,980	19,065	22,402	33,085	32,140
26							**Ratios**					
27	*Doemstic Debt / Total Debt*	*49.7*	*44.1*	*44.9*	*48.1*	*50.2*	*51.8*	*53.0*	*53.6*	*53.0*	*51.4*	*53.4*
28	*External Debt / Total Debt*	*50.3*	*55.9*	*55.1*	*51.9*	*49.8*	*48.2*	*47.0*	*46.4*	*47.0*	*48.6*	*46.6*
29	*Total Public Debt & Laibilitiees; % of GDP*	*103.2*	*101.1*	*90.5*	*82.0*	*72.0*	*66.7*	*62.6*	*60.2*	*65.3*	*68.6*	*69.4*
30	**Population (millions)**	**133**	**137**	**140**	**143**	**147**	**150**	**153**	**155**	**161**	**164**	**167**
31	**GDP (current, MP)**	**3794**	**4162**	**4401**	**4822**	**5641**	**6581**	**7623**	**8723**	**10242**	**12738**	**14669**
32	SaF Data Set	Source: SBP various AR and Statistical Bulletin										
33	\ 1 Total of i + ii; Composite of domestic and external debt; see details in Table 7.6 for doemstic debt; Table 7.7 for external debt.											
34	\ 2 All domestic debt liabilities of government including PSEs and provincial debt and liabilities.						\ 4 PSE's domestic debt estimates not available for earlier years					
35	\ 3 See details of Federal domestic debt in Table 7.6, line 6; and its breakdown in componenets.						\ 5 see Table 7.5a for details, line 49.					
36	\ 6 Burden decreases for households of five, but only marginally; does not change the big picture.											
37												

Data Set 7.5a **Total Debt Service - *domestic and external public debt, details*** ***End Period, Rs billions***

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
Debt Service on Doemstic Debt / Total Debt Service	*58.7*	*57.8*	*36.1*	*43.3*	*37.7*	*50.7*	*62.1*	*72.8*	*74.5*	*66.1*	*66.5*
Debt Service on External Debt / Total Debt Service	*41.3*	*42.2*	*63.9*	*56.7*	*62.3*	*49.3*	*37.9*	*27.2*	*25.5*	*33.9*	*33.5*
				Rate of Growth							
Total Public Debt & Liabilities \ 1		7.4	-5.3	-0.7	2.7	7.9	8.7	10.0	27.4	30.7	16.6
i. Domestic Debt & Liabilities \ 2		-4.7	-3.4	6.3	7.1	11.5	11.3	11.2	25.8	26.8	21.3
Domestic Debt - Federal Government \ 3		-4.7	-2.3	6.9	7.0	8.1	7.4	11.7	25.5	17.9	20.5
ii. External Debt+Liabs, Rs billions		19.3	-6.7	-6.5	-1.3	4.3	6.0	8.7	29.2	35.1	11.7
Total Debt Service; All Public Debt \ 5		-3.8	74.1	-25.9	12.7	-27.1	6.5	28.9	22.0	50.2	-1.2
Debt Service on domestic debt only		-5.3	8.8	-11.1	-2.0	-1.8	30.3	51.2	24.9	33.3	-0.7
Debt Service on external debt		-1.7	163.4	-34.2	23.9	-42.3	-18.1	-7.6	14.3	100.0	-2.3
	Avg Annual Growth Rates							*Avg Annual Growth Rates*			
	FY00-10	**FY00-05**	**FY05-10**					**FY00-10**	**FY00-05**	**FY05-10**	
Total Public Debt domestic & foreign	10.0%	2.3%	18.4%			**Total Debt Service**		9.8%	0.4%	20.0%	
Domestic Debt + Liabilities	10.8%	3.2%	19.1%			***Domestic***		11.1%	-2.5%	26.7%	
Foreign Debt + Liabilities	9.2%	1.4%	17.5%			***Foreign***		7.5%	4.0%	11.1%	
Debt Burden per Household (6)	7.6%	-0.1%	15.9%								
Memo Items: Debt Service											
Total Public Debt Service: domestic & foreign	**352**	**338**	**589**	**436**	**492**	**359**	**382**	**493**	**601**	**903**	**892**
i. Repayment of principal on Domestic Debt		*none, no principal repayment made, govt debt is rolled over and over*									
ii. Repayments on External Debt, total	**97.1**	**85.9**	**299.7**	**183.3**	**250.1**	**122.6**	**130.4**	**112.9**	**122.0**	**282.0**	**392.0**
govt debt repayment	*97.1*	*85.9*	*299.7*	*183.3*	*250.1*	*122.6*	*94.0*	*79.0*	*91.0*	*230.0*	*225.0*
private debt repayment							*25.0*	*29.0*	*31.0*	*53.0*	*155.0*
iii. Interest Payments on public debt	**254.4**	**252.3**	**289.0**	**253.1**	**241.8**	**236.2**	**288.0**	**413.5**	**510.0**	**673.0**	**667.0**
on govt Domestic Debt + Dom Liabilities \ 7	*206.3*	*195.4*	*212.5*	*189.0*	*185.3*	*181.9*	*237.1*	*358.6*	*448.0*	*597.0*	*593.0*
on External Debt	*44.9*	*51.3*	*51.3*	*48.1*	*51.2*	*49.1*	*50.5*	*61.1*	*75.0*	*89.0*	*83.0*
of this: private debt							*6.0*	*12.0*	*15.0*	*15.0*	*11.0*
hence, *net govt external debt*	*44.9*	*51.3*	*51.3*	*48.1*	*51.2*	*49.1*	*44.5*	*49.1*	*60.0*	*74.0*	*72.0*
plus on govt External Liabilities	*3.2*	*5.6*	*25.2*	*16.0*	*5.3*	*5.2*	*6.4*	*5.8*	*2.0*	*2.0*	*2.0*

\ 7 The same as **domestic debt service**, Data Set 7.6

See AR10, Table 8.2, appearing for the first time; for 00-07 data, Table 8.1 of AR05, 07.

Includes interest only on govt domestic debt plus amortization of external debt. For 00-07 data, Table 8.1 of AR05& 07; for 06-10 AR10, Table 8.3

Data Set 7.6 **Domestic Debt** - *Outstanding, Public Sector* *End Period, Rs billions*

4		**FY00**	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10p**
5	**Domestic Public Debt & Liabilities \ 1**	**1946**	**1854**	**1791**	**1903**	**2038**	**2273**	**2529**	**2813**	**3539**	**4487**	**5443**
6	**i. Domestic Debt - Federal Government \ 3**	**1891**	**1802**	**1760**	**1881**	**2013**	**2176**	**2337**	**2610**	**3275**	**3861**	**4653**
7	***Permanent Debt***	317	281	368	428	537	501	500	553	608	678	794
8	Federal Bonds, PIBs \ 4	295	183	259	293	381	335	331	375	423	478	555
9	Prize Bonds	81	92	103	130	153	163	166	175	183	197	236
10	***Floating Debt, T-Bills \ 5***	647	738	557	516	543	778	940	1108	1637	1904	2399
11	***Unfunded Debt including NSS***	672	712	792	910	899	871	882	940	1020	1271	1456
12	**ii. Domestic Provincial Govt Liabilities \ 2**	55	52	31	22	25	34	108	99	127	336	415
13	**iii. Domestic Debt, PSEs \ 6**						63	84	104	137	290	375
14												
15	**Total *Domestic* Public Debt Service \ 7**	**206**	**195**	**213**	**189**	**185**	**182**	**237**	**359**	**448**	**597**	**593**
16	***Implicit rate of interest, cost of domestic debt***	***10.6***	***10.5***	***11.9***	***9.9***	***9.1***	***8.0***	***9.4***	***12.7***	***12.7***	***13.3***	***10.9***
17	Govt Dom Debt Service: % of Govt Revenue	38.9	36.6	34.3	26.9	24.3	20.8	23.2	29.5	32.0	35.5	28.9
18	Govt Dom Debt Service: % of Current Expenditure	27.8	27.6	22.4	21.9	20.6	18.2	19.8	26.3	23.3	28.4	23.0
19												
20	***Federal Government Only***					**Shares**						
21	*Federal Domestic Debt / Total Domestic Debt*	*97.2*	*97.2*	*98.3*	*98.8*	*98.8*	*95.7*	*92.4*	*92.8*	*92.5*	*86.0*	*85.5*
22	Permannet Debt / Federal Domestic Debt	16.8	15.6	20.9	22.8	26.7	23.0	21.4	21.2	18.6	17.6	17.1
23	Flaoting Debt / Federal Domestic Debt	34.2	41.0	31.6	27.4	27.0	35.8	40.2	42.5	50.0	49.3	51.6
24	Unfunded Debt / Federal Domestic Debt	35.5	39.5	45.0	48.4	44.7	40.0	37.7	36.0	31.1	32.9	31.3
25												
26	SaF Data Set	Source: SBP various AR and Statistical Bulletin										
27	\ 1 All domestic debt liabilities of government including PSEs and provincial debt and liabilities; sum of items i, ii and iii as shown.											
28	\ 2 Provincial commodity operations loans; for 06-10 from AR10. For 00-05 from various Areports						\ 4 Including market loans, PIBs, prize bonds					
29	\ 3 Including special US$ bonds added to domestic governemnt debt liabilities..			\ 5 Consists of Treasury bills outstanding with banks, and T-bills in SBP's portfolio.								
30	\ 6 Sheduled Banks Credit to govt and PSE's, Table 6.2, SBP AR s, various years; does not match with Table 8.3, AR10 data											
31	\ 7 Includes interest only on govt domestic debt; no repayment of principal; perpetual rollover.. For 00-07 data, Table 8.1 of AR05& 07; for 06-10 AR10, Table 8.2											
32	\ 8 SBP held T-bills as short term revolving cash replenishment; estiamted as residual of federal borrowings											
33												

Data Set 7.6a **Domestic Debt** - *Outstanding, Public Sector* *End Period, Rs billions*

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
Domestic Public Debt and Liabilities \1	**1946**	**1854**	**1791**	**1903**	**2038**	**2273**	**2529**	**2813**	**3539**	**4487**	**5443**
Of this:											
Borrowings from Financial System	***1686***	***1777***	***1695***	***1914***	***2078***	***2162***	***2457***	***2707***	***3413***	***4418***	***5197***
Borrowed from Banking System	***466***	***466***	***574***	***761***	***828***	***803***	***902***	***1141***	***1110***	***1841***	***2333***
Federal Bonds, PIBs - Banks	148	126	152	211	259	188	182	169	183	198	208
Treasury Bills - Banks	106	126	222	405	411	415	410	657	559	749	1120
Provincial Commodity Operations	55	52	31	22	25	34	108	99	127	336	415
Banking Credit to Govt & PSEs	157	162	168	123	133	167	202	216	241	558	590
Borrowed from Public	***753***	***804***	***895***	***1040***	***1052***	***1034***	***1048***	***1115***	***1203***	***1468***	***1692***
of this: through NSS	672	712	792	910	899	871	882	940	1020	1271	1456
through Prize Bonds	81	92	103	130	153	163	166	175	183	197	236
Borrowed from SBP - T-bills held	***467***	***508***	***226***	***113***	***198***	***325***	***508***	***452***	***1100***	***1108***	***1172***
Adjustments, n.i.e.,	*260*	*77*	*96*	*-11*	*-40*	*111*	*72*	*106*	*127*	*69*	*246*
				Annual Growth Rates							
Total Domestic Debt		-4.7	-3.4	6.3	7.1	11.5	11.3	11.2	25.8	26.8	21.3
Permannet Debt		-11.4	31.0	16.3	25.5	-6.7	-0.2	10.6	9.9	11.5	17.1
Flaoting Debt		14.1	-24.5	-7.4	5.2	43.3	20.8	17.9	47.7	16.3	26.0
Unfunded Debt / Total Domestic Debt		6.0	11.2	14.9	-1.2	-3.1	1.3	6.6	8.5	24.6	14.6
Notes:	**FY00**	**FY01**	**FY02**	**FY03**	**FY04**	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**FY10**
Borrowings, Fin System / Total Debt	86.6	95.9	94.6	100.6	102.0	95.1	97.2	96.2	96.4	98.5	95.5
Borrowings, Bnk System / Total Domestic Debt	23.9	25.1	32.0	40.0	40.6	35.3	35.7	40.6	31.4	41.0	42.9
Borrowings, Public, *NSS* / Total Domestic Debt	38.7	43.3	50.0	54.7	51.6	45.5	41.4	39.6	34.0	32.7	31.1
Borrowings, SBP / Total Domestic Debt	24.0	27.4	12.6	5.9	9.7	14.3	20.1	16.1	31.1	24.7	21.5
SaF Data Set	Source: SBP various AR and Statistical Bulletin										

Table 7.7 External Debt and Liabilities - *Outstanding* *End Period, US$ billions*

		FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10p
5	**External Debt & Liabilities, US $**	**37.9**	**37.1**	**36.5**	**35.5**	**34.8**	**35.4**	**37.2**	**40.3**	**46.1**	**52.3**	**55.6**
6	**External Debt only, 1+2+3 \ *1***	**32.2**	**32.1**	**33.4**	**33.4**	**33.4**	**34.0**	**35.9**	**39.0**	**44.5**	**50.8**	**54.4**
7	***1. Public M&LT Guaranteed Debt***	*27.8*	*28.2*	*29.2*	*29.2*	*29.9*	*31.0*	*32.8*	*35.3*	*40.2*	*42.4*	*42.9*
8	***Paris Club & other Bilaterals, CY***	*12.4*	*11.8*	*13.0*	*13.1*	*14.3*	*13.8*	*13.6*	*13.7*	*15.1*	*15.4*	*15.8*
9	***Multilaterals (WB, ADB, others) CY***	*12.7*	*13.3*	*14.3*	*15.0*	*14.3*	*15.4*	*16.5*	*16.5*	*21.4*	*23.0*	*23.7*
10	***2. Private Non-guaranteed (M&LT)***	*2.8*	*2.5*	*2.2*	*2.0*	*1.7*	*1.3*	*1.6*	*2.0*	*2.6*	*3.2*	*3.4*
11	***3. IMF***	*1.6*	*1.5*	*1.9*	*2.1*	*1.8*	*1.6*	*1.5*	*1.5*	*1.3*	*5.1*	*8.0*
12	***Foreign Exchange Liabilities \ 2***	*5.7*	*5.0*	*3.1*	*2.1*	*1.4*	*1.4*	*1.3*	*1.3*	*1.3*	*1.3*	*1.3*
13	**Debt Service, *EDebt & L***	**3.76**	**5.10**	**6.33**	**4.35**	**5.27**	**2.97**	**2.96**	**2.94**	**3.22**	**4.84**	**5.68**
14	*Principal Payment*	2.40	3.77	5.26	3.41	4.30	2.05	2.05	1.83	1.98	3.67	4.67
15	*Interest Payment*	1.36	1.34	1.07	0.93	0.97	0.91	0.91	1.11	1.24	1.17	1.01
16	Effective rate of Interest on Ext'l Debt, %	3.58	3.60	2.93	2.63	2.79	2.57	2.44	2.75	2.70	2.23	1.82
17	**Debt Rescheduled / Rolled over**	**4.08**	**2.80**	**2.24**	**1.91**	**1.30**	**1.30**	**1.30**	**1.30**	**1.20**	**1.60**	**1.72**
18	**Ratio of External Debt Service to**											
19	*Export +nfs*	39.7	49.6	57.2	31.7	34.9	16.7	14.6	13.7	13.4	20.8	22.9
20	*Foreign Exchange Earnings*	27.6	35.7	41.0	21.1	24.0	11.0	6.5	8.9	8.6	13.7	14.8
21	*Export +nfs + Remittances*	36.0	44.9	47.0	24.2	27.8	13.5	11.9	10.9	10.6	15.6	16.9
22	*Ext Debt & Liabilities Inflows*											
23	***Public M&LT as ratio of EDebt & L***	*73.4*	*76.0*	*80.0*	*82.3*	*85.9*	*87.6*	*88.2*	*87.6*	*87.2*	*81.1*	*77.2*
24	*from Multilaterals / Public M & L T*	*45.7*	*47.2*	*49.0*	*51.4*	*47.8*	*49.7*	*50.3*	*46.7*	*53.2*	*54.2*	*55.2*
25												
26	**ALL - External Debt+Liabs, *Rs billions***	**1971**	**2352**	**2194**	**2052**	**2025**	**2113**	**2239**	**2434**	**3144**	**4247**	**4743**
27	***Forex Rate, Interbank, Rs/US$***	***52.0***	***63.4***	***60.1***	***57.8***	***58.2***	***59.7***	***60.2***	***60.4***	***68.2***	***81.2***	***85.3***
28	***GDP (current MP, US$ millions)***	***73.0***	***65.6***	***73.2***	***83.4***	***96.9***	***110.2***	***126.6***	***144.4***	***150.2***	***156.9***	***172.0***
29	SaF Data Set	Source: SBP various AR. World Bank, Debt Tables										
30	*\ 1 Includes Public Debt M&LT, IMF and forex liabilities of govt such as Special US$ & foreign bonds, FCAs, ; plus PSEs' and private debt guaranteed and non-guaranteed,*											
31	*For Fy02-06, from table 8.14 of AR07; for Fy07-10 from table 8.17 of AR10;*				\ 2 Mostly forecign Currency Accounts that were forzen in 1999							
32												

Chapter 11: Financial Reforms and Transition
Evolving Structure in Post Reform Era

Thematics

Reforms and Transition

Financial System - *Reforms and Beyond*

Financial Deepening *vs Financial Repression*

Post Reform Evolution – *Banking System*

- Privatization and Post Reforms
  - *Changes in the Structure*
  - *Changes in Operations*

Structural Transformation
- *Roles of Public and Private Sector*
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Financial Intermediation
- *Structural Changes and Growth*

Chapter 11: Financial Reforms and Transition

1. Over the past three decades, reforms and restructuring of financial systems of developed and developing countries alike have been carried out on a scale and depth never witnessed before. There have been far reaching structural changes in the way financial systems are now organised and managed across most countries. They operate under a restructured market-based financial regime that bears hardly much resemblance to what prevailed before. In some countries, the process began in fits and starts. In others, there was a leapfrogging both in the sequencing and stages of reforms, as in Pakistan, bypassing a period of trial and error, witnessed in countries who embarked on this process much earlier.

2. Among late comers, the process was compressed, benefiting from the reform era experiences of other countries in the comparator group. There is a growing body of literature which provides a rich material of comparative experiences with financial system reforms, post reforms experiences, unprecedented growth, often laced together with financial crises and their aftermath. Most of this literature takes for granted an understanding of underlying conceptual and theoretical framework, though there has been a great deal of soul searching regarding their relevance among countries with considerable differences in their economic structure and financial systems.

3. The driving concerns have been twofold. ***One concern*** has been in what manner financial system reforms have helped to usher in a system more sound and efficient than the one it replace, resilient to absorb financial stress, erupting from within owing to weaknesses endogenous to the system and innate to the characteristics of financial system prevailing within a country. There has been a worry as to how far the economy is capable of coping with stresses of open and liberalized financial system; how strong is reformed financial system to withstand financial market failures at home, or to withstand exogenous shocks of market downturns abroad. The impact of exogenous shocks gets transmitted through ***contagion,*** owing to open capital accounts, routine capital flows and globalized financial markets, depending on how strong these interlinks are between domestic financial system and global financial markets.

4. ***The second concern*** has been in what ways reformed financial system has promoted economic growth as compared with the old system that was replaced. There is now available strong evidence that financial system reforms, liberalization and opening up have promoted economic growth in several East Asian and Latin American countries. Others in South Asia, particularly India, are catching up fast, and they are also well on their way to similar performance as observed elsewhere, though not of the same scale as witnessed elsewhere.

5. Financial reforms and crises are by no means a preserve of developing countries only. A few developed countries including USA has gone through processes of financial reforms, distress and crises that are inherently similar in their innate characteristics as those experienced by developing countries. The elemental one is that once reforms are ushered in and financial system is liberalized with more open and market oriented processes, it is more prone to distress and crises unless strong regulatory and remedial systems are put in place to undertake watch-dog functions. Even if these systems are in place, there is no guarantee that eruption of financial crisis can be prevented.

6. This process, stretched as it was over a period of about three decades, has not been without agonies of financial crises that have repeatedly erupted on grand scale both among advanced countries and also among East Asian and Latin American countries. The latest one being the meltdown of financial system in the US and European countries in 2008 on a scale never witnessed before with far reaching consequences, not only to those institutions who experienced financial ruin, but also who had to contend with its impact in public arena. Up until then, financial crises that erupted during 1980s and 1990s were considered grand enough in terms of their size, pervasiveness, scale and breath of impact. The impact of 2008 crisis is still unfolding as advanced economies cope with its fall out.

7. Most of the crises spread not so much owing to contagion that came later, but initially due to weaknesses ***internal*** to financial system with in the country. At the same time, the more these systems were exposed to shocks and stresses after opening up capital accounts and foreign trade liberalization, the more susceptible they became to these external factors. In the aftermath of crises, rescue packages and safety net were needed in a hurry of such mega dimensions that dislodged eminence of earlier record holders like Brady Plan of late 1980s or rescue packages of mid-1990s for Mexico, Turkey and Argentina, and late 1990s for East Asian countries.

8. All of them have now been dwarfed by the rescue packages of post 2008, enacted in the US and a good number of European countries, where such a thinking has been anathema for long. IMF is back in the business in European countries, whereas just a few years ago it has been finding it difficult to sustain previous level of commitments. Existence of strong regulatory mechanisms, availability of domestic safety–net such as deposit insurance, a tapestry of comparative experiences, are no guarantee against eruption of financial upheavals. Managing financial systems in post-reform era is more difficult than it was in the pre-reform period. This is ***the theme*** that we will pursue with reference to Pakistan for the period of 2000-10.

Financial Reforms – *the Start*

9. Financial reforms are aimed at improving performance of the financial system, their strength and solvency, and thus contribute to economic growth with stability. This has been the driving force behind financial reforms wherever they have been undertaken. Same was in Pakistan during 1990s through middle of the past decade. In the process, financial system has to withstand impact of reforms and changes, absorb shocks and emerge financially and institutionally stronger than before. It is a long drawn process as evident from discussions in various chapters of this book. Since financial system encompasses both direct and indirect finance; that is, both the system of intermediation as well as financial markets, this overview has to contend with what transpired in both these arenas to the extent feasible.

10. Further, *reforms* largely focus on policy regime and structure of incentives governing operations at macrofinancial level, or component level or institutional level; while *restructuring* is focused on ownership, spheres and modes of operations, legal infrastructure and regulatory system. This is not a hard and fast distinction. There are interdependencies and overlaps given the complex mosaic of financial system. Hence, it is important to understand why reforms have to be undertaken; what is being reformed or what is being restructured, and how it is being done. What are the processes and mechanisms deployed. Answers to questions like these are fairly complex, and require an incisive analysis and evaluation of financial system and a clear articulation of goal posts. There has to be some progress at consensus building among stakeholders spread over various segments of the economy who are profoundly affected by reforms, liberalization and deregulation of financial system.

11. Financial system ***reforms*** in Pakistan started in early 1990s and kept going for nearly decade and a half. The pace of reforms accelerated from mid-1990s onwards. The process came to almost a grinding halt in mid-1998 in the aftermath of nuclear tests with imposition of sanctions and deterioration in the economic and financial situation facing the country. During the 1990s, government launched a number of programs to complete the process, mostly with assistance of IFIs that was extended to underwrite cots of reforms, restructuring, budgetary support and to cover BoP deficits. These programs were designed to support system building to improve sectoral finance, investments, installation of financial infrastructure, like payments system; improvement in governance and regulatory framework; enhanced transparency; establishment of new institutions or restructuring of old ones; their capacity building, skills development and training.

The Impact

12. Overall, a great deal has transpired in Pakistan since financial system reforms began nearly two decades ago. There have been significant structural changes at the system level involving a complete turnover of ownership, organization and operations of banking system and NBFIs. Liberalization phase is nearly complete and policy regime governing is more market oriented than before; directed credit system has been replaced by market based credit system. The role of DFIs has been greatly reduced and almost all state-owned banks have been privatized. Major financial institutions, particularly the large commercial banks have undergone restructuring and reorganization of their own; improved operational practices and corporate governance is taking root; and their business diversification has begun. Mechanisms for participation of financial system in external sector have been strengthened given that current and capital accounts of BoP are open, by and large, and exchange controls have been phased out. The regulatory and supervisory capabilities of SBP and SECP have substantially improved.

13. Therefore, the process of reforms is complete and transition is nearly over; hence era of major financial reforms – banner item variety – is now a history. Financial system is more open and market oriented than before; privatization of banks is nearly complete, and system of credit is market based. As a result, financial intermediation by banking system has improved; likewise, operations of capital market have also improved. Financial system in its structure, functions and policy regime that governs it, bears little resemblance to what it was a decade and half ago.

14. There has been a ***paradigm shift*** and there is growing evidence of ***structural shift***, though it has to traverse a longer road. The stage has been set for a more sophisticated phase of financial system development over the long term by shifting gears from macrofinancial reforms to sectoral or sub-sectoral reforms with focus on line item variety reforms. There is a growing recognition that the next stage is to shift financial system business away from its traditional base to a more diversified base, away from a few sectors in manufacturing and energy sectors towards a more diversified sectoral base so as to enhance private sector investment in areas where feasible. For this to occur, viable mechanisms are needed because public sector would not be able to undertake investment beyond current levels given fiscal constraints.

15. This transformation occurred due to ***deregulation*** and ***restructuring*** of financial system as well as leading sectors of the economy, including restructuring of PSEs; rationalization of prices, interest rates and exchange rate. In this sense, reforms in interest rate regime were a part of reforms and restructuring of financial system and of the economy of Pakistan that were carried out since early 1990s thru mid 2000s.

16. At system level, ***changes in the structure*** of financial system occurred due to privatization of financial institutions reflected in asset holdings of public and private sectors over 1990-2005 period; entry of new commercial banks, both domestic and foreign, micro-finance banks, and Islamic finance institutions. Reforms and restructuring occurred with a sequencing of its own among original clients of banking system, the PSEs, operating in various sectors of the economy which facilitated changes in financial system.

17. At institutional level, almost all major financial institutions including SBP have undergone restructuring and reorganization of their own. A great deal has been done for capacity building at SBP as well as among the mainline financial institutions. Improved business practices and corporate governance, specially among large commercial banks, is taking root, and their business diversification has begun. This is happening in parallel to a similar dynamism among their clients, the newly revitalized corporate sector. Mechanisms of participation and operations of financial system in the external sector have been strengthened; current and capital accounts are open by and large, and foreign exchange controls have been greatly reduced if not eliminated. Current structure and modes of business operations have changed a great deal as compared with banking practices that prevailed in pre-reform era.

18. ***Changes in the operations*** mainly occurred due to deregulation, liberalization and a revamping of policy and regulatory regime governing financial intermediation which is now more market oriented than before. Directed credit system that prevailed until mid-1990s with layered allocative targets and their interest rates for specific sectors, sub-sectors or priority categories of borrowers has been replaced by market based credit system. Interest rate structure and foreign exchange regimes have been liberalized and are market-based. The era of subsidized credit extended via DFIs is over. Interest rate structure and foreign exchange regimes have been liberalized and are now market-based, more or less.

19. In the glow of deregulated environment, there is a swing to the other extreme, where deregulation is being interpreted by some aggressive bankers and financiers as a state of free-for-all, and this has made the task of SBP more difficult. If any thing, a deregulated regime has to be more stringent and more elaborate in the body structure of its laws, regulations, directives and stipulations than a directed regime, for the simple reason that the task of achieving stability, free of financial stress in an open market environment with globalized linkages is more difficult.

20. Introduction of Islamic banking has added twists of its own. The rules concerning financial intermediation, namely lending. have to be customized and charted out in a re-iterative fashion in an ever-changing environment until they come to grips with market realities. A balance has to be struck between lack of rules and over-regulation all across, be it Islamic banking or modern banking. The same will have to be done regarding operations of financial markets, specially those of long term debt markets. This will take time. The collective mind-set has yet to reconcile with this iterative process.

21. The change is evident from the analysis of financial intermediation. We have already seen growth performance of banking system as discussed in Chapters 5, 6 and 7 earlier. There has been a significant increase in depth and size of financial intermediation in the country. However, the concern remains that banner performance witnessed during middle years of the past decade was one time phenomenon, if not aberration to the trend, and it is unlikely to return. It could not sustained, and hence could not serve as the base line for charting out future directions of the financial system.

22. The performance of financial markets was spectacular during mid-years of the past decade, and growth of stock markets was unparalleled by records of performance of emerging market economies. For the years it lasted, stock market of Pakistan was rated as one of the best performers in the group

of emerging markets. During the boom years, concern was never raised that stock prices have reached unprecedented highs, well beyond those indicated by analyses of market fundaments, and that it is way overvalued until the crash occurred in mid-2008. Following the crash attention has belatedly shifted to financial system stability; a pre-requisite to sustained economic growth as evidenced by comparative experiences. Financial market developments during the past decade are discussed in various chapters of **Volume II,** specially Chapter 9 on stock markets; and Chapter 11 on issues of performance and stability with in post reform era and global finance.

Financial Deepening vs *Financial Repression*

23. Financial deepening provides another evidence of change that has occurred. It is a measure of how effective financial system is in its central role of generating and allocating resources across various segments of the economy. Commonly, measures of monetization are deployed to gauge the extent of financial deepening such as the ratio of M2 to GDP. This is a good measure but captures only monetary magnitudes of banking system because M2 consists of the liabilities of the central bank and deposit money banks only. The counterparts are assets for the holders of components if M2; namely households and businesses. In parallel, we also need to look at holdings of stocks and bonds in the economy; hence at the ratio of capitalized value of stocks to GDP, or the value of bonds outstanding to GDP, which together with banking system magnitudes provides a more meaningful gauge of financial deepening over time.

24. The reason is that starting in early 1970s, growth of capital markets has far outstripped growth of banking system in many developed countries. The pace of growth during the past decade has quickened further. As a result the proportion of banking assets to GDP among leading developed countries has stagnated or has even declined over the past three decades; whereas the proportion of equities and bonds to GDP has surged to very high levels. This trend has not happened in developing countries given relatively weak structure and growth of capital markets. Yet, among leading developing countries, growth of capital markets has been faster than that of banking system. Hence financial deepening as shown by M2 to GDP ratio underestimates pace of financial growth.

25. Notice that numerator of financial deepening index is M2 which in large part consists of deposit liabilities of banking system, while currency, the liability of central bank is only a fraction of it. For that reason, financial deepening first occurs at institutional level, and is embedded into assets and liabilities of financial institutions, almost entirely those of the banks. It involves a process whereby banking institutions build their assets from deposits and deposit like resources. In doing so, while their risks are reduced through asset diversification, the counterpart risk of liabilities increases, unless resources thus used are generated internally from their own funds and capital base. This is the outcome of financial deepening. While it helps to reduce risks through diversifying into various assets, it increases risks to depositors, when banks borrow if their deposit base is fully committed. This inversion in financial deepening process is a rationale for regulatory and supervisory role of central banks as discussed in Chapter 12 next.

26. In Pakistan, ***financial deepening*** as reflected by the ratio of M2/GDP, was nearly stagnant during much of the 1990s, but jumped from 37 percent in FY00 to 44 percent in FY06, a 7 point move within a short period of six years. This does not imply that a structural change of this magnitude erupted within the economy because much of this jump owes to expansion of net foreign assets. A large part of the economy remains non-monetized and will remain so for some time in the future. This was borne out by near stagnation of this ratio during FY04-08. In the aftermath of market crash and a significant reduction in monetary liabilities of banking system, M2/GDP ratio decreased to about 34 percent in FY10, back to the level it was at start of decade. If one were to focus only just one indicator, M2/GDP, it would seem that there was no change in structure of financial resource mobilization or use; but such a conclusion is unwarranted for the reasons discussed in chapters 5, 6 and 7 of this volume and chapters 6 and 9 of **Volume II.**

27. One could argue that while necessary conditions for future development of financial system and consequent financial deepening have largely been taken care of; now is the time to move to tackle sufficient conditions through consolidation of banking system, restructuring of sectoral or sub-sectoral system of lending and strengthening of financial institutions. That is the task ahead.

28. That there is ample room for further growth is evidenced by levels of financial deepening achieved among comparator countries over the past decade. All the leading indicators of financial deepening in Pakistan, namely, broad money to GDP ratio, money multiplier, currency to M2 ratio, ratios of private sector credit to GDP and to total credit, are significantly lower than

those prevailing in most comparator countries and are nearly half of those prevailing in Malaysia and Thailand. This comparison also shows that the post financial reforms period is as crucial towards sustaining what has been achieved thus far, while goal posts are threshold of financial deepening prevailing among leading comparator countries.

29. Likewise, ***financial repression*** of the previous decades in Pakistan has receded though not eliminated. Currently, financial system in its structure, functions and policy regime that governs it, bears little resemblance to what it was a decade ago. There has been a paradigm shift, and in its wake there is a shift away from solvency concerns that dominated much of the 1990s, towards efficiency of financial intermediation and stability of the financial system. The structural shift owes to privatization of public sector financial institutions. The operational shift owes to a series of measures such as liberalization of interest rates; removal of ceilings both on deposit and lending rates; a virtual elimination of system of directed or subsidized credit and removal of direct controls that governed lending operations at institutional level.

The Post Reform Era

Roles of Public and Private Sector

30. The role of public sector in financial system has receded over the past decade from the peaks observed during nationalization era. In the early 1970s, nationalization of financial institutions, industry and commerce was a revolutionary change with severe consequences of its own. Thereafter came reforms and de-nationalization and this phase lasted nearly two decades. With the ***privatization*** of major commercial banks like UBL and HBL and partial sale of government shares in MCB, ABL and NBP, era of nationalized banking was over by 2005, and government was virtually phased out of owning financial institutions. In parallel, privatization of a large number of state-owned enterprises, public utilities and state monopolies, who were major clients of financial institutions during nationalized era, has led to a transformation of the financial system and industrial organisation in Pakistan. The post reform structure is vastly different from the one that prevailed before reforms began around 1990.

31. Dimensions of transformation owing to privatization can be gauged from changes in ownership structure of banking system together with changes in patterns of financial intermediation and financial market participation of public and private sector financial institutions. Since banking

system is predominant in financial system, this shift in ownership structure was more pronounced, but closely followed this pattern. The proportion of private share capital in total share capital of banking system increased from about one fifth at the start of reforms in 1990 to more than three fourth of total share capital; and by end of the decade this share had risen to 93 percent. This is a reversal of a grand reversal, namely that of nationalization of major sectors of the economy that occurred in early 1970s whose vestiges still linger on in the financial system.

32. Share of government ownership of financial institutions has declined no doubt, but not its share in the use of total financial resources mobilized. This is discussed in Chapter 7 in the context of public sector share in banking system credit and borrowings of the government through treasury bills from the banking system. While structure of asset ownership shifted towards private sector, the share of public sector in the use of total financial resources mobilized in the country did not decrease, and this does not get reflected by share of public sector in banking credit alone. The reason is that a great deal of ***financial savings***, the annual flows of financial resources, are being channeled to the public sector through government borrowing from the banking system such as purchases of government securities by banks as investors at large, and in a smaller part through banking credits extended to the PSEs and various government entities.

33. Typically, discussion of relative shares of credit extended to public and private sectors stops with analysis of financial system credit. This is incomplete because while assessing share of government in ***financial resources use,*** it is not appropriate to focus only on what happened to the share of government in total banking system credit alone. We have to combine it with borrowings in money and capital markets through treasury bills and government bonds to arrive at an understanding of total resources used by public sector. Government borrowings are lodged as investments with banks, but these are loans to government in the guise of investing. If we combine, we find that nearly half of annual flows of financial resources, namely ***financial savings,*** are being channeled to public sector through financial system, plus NSS operations which are outside of financial system flows, currency seignorage and inflation tax.

34. Consequently, public sector is still able to garner a hefty share of total financial resources generated in the country through the operations of financial system, and thus acquire underlying real resources of the economy. The issue of ***crowding out*** of private sector has been mitigated but only in the arena of banking credit, not in the context of resources at macrofinancial level.

This goes back to the issue of who generates and supplies financial resources and who eventually uses it, and how good is the transfer mechanism, namely financial intermediation which facilitates this transfer.

35. Impact of this transformation on banking business has been profound. A re-orientation of banking business operations has occurred. Long gone are days of ***credit plans*** and a ***layered system of credit allocation***, sector by sector and bank by bank. Similarly, a good number of specialized banks and DFIs have been sold, merged or closed outright, except for a few like IDBP which is closed down but is surviving in name only. SME Bank has been side-lined; but efforts are underway to revive it; and now there are couples of specialized finance institution left on the scene, ZTBL for agricultural credit and HBF for housing with a tiny share in overall banking credit. For banks, the current phase in institution building and growth is to internalize business processes of open credit markets that offer new opportunities as well pose new risks to the bankers at large.

36. As a result, a shift occurred in operations of financial intermediaries, primarily banks, concerning deposits, loans and advances, and their investments. The share of loans and advances extended by private sector banks in 1990 was about 17 percent of total banking system loans and advances outstanding. By end of reforms, share of private sector banks had increased to about 80 percent. By end of the past decade, this transformation was complete, and this share had risen to about 90 percent, owing to an aggressive business effort that led to unprecedented growth in banking credit discussed in Chapter 7. Some would argue that this growth was not in corporate credit financing as much as it was for stock market financing; but there is not much evidence for this view point.

37. Similar trends prevailed concerning deposits and investments of banking system. In 1990, the share of private sector institutions, mainly banks, in financial system level deposits excluding NSS deposits was a mere 7 percent. After reforms were over, a decade and half later, this share rose dramatically to about 80 percent by middle of the past decade. The converse holds true for changes in the share of public sector banks in total deposits over the same time period. As regards investments of banking system, the share of public sector banks had dropped to 18 percent of total investment of banking system by end of the past decade.

38. Privatization by itself, namely sale of financial institutions to private sector alone can not be successful unless it is accompanied by major initiatives that have to be undertaken in parallel as part and parcel of financial system reforms. The most important is ***deregulation*** involving

elimination of directed credit to market based credit, liberalization of interest rate and exchange rate regimes. In addition, to ensure that privatization succeeds, the government as the owner of these financial institutions, undertook restructuring of the targeted financial institutions prior to their privatization, underwrote the massive costs of their restructuring embedded in asset revaluation and employee severance; cleaned up the balance sheet of the dead weight of non-performing loans and other assets of dubious value partly through massive loan write-offs and provisioning for the NPLs.

39. The government had to enact new laws or modify existing laws of exit and entry. At the same time, the government had to undertake restructuring and privatization of PSEs who were an important client of the nationalized financial system. In the process, state-owned financial institutions had to assume and absorb loan losses on advances extended to PSEs on their balance sheets. Finally, the government not only had to absorb their operational losses, and had to ensure solvency through periodic equity replenishments of financial institutions over the reform period.

40. This structural transformation is similar to those observed in other developing countries that underwent financial system reforms over the past couple of decades. The comparative experience demonstrates that privatization is a critical element in the structural transformation of any financial system. However, if it is to be successful, certain principles and practices have to be adhered to, specially stipulation of the roles of public and private sectors in a market-based regime. One of the cardinal principles underlying privatization is a demarcation of spheres of ownership and control of the public sector and the role of private sector. In particular the role of public sector financial institutions and enterprises in the economy has to be clarified in parallel to embarking upon transition from a nationalized to a privatized structure.

41. Without this demarcation and a clarification of the role of public sector, transformation is incomplete. Consequently, policy and operational framework of the financial system can not be designed, much less implemented to ensure stability and growth. The failure to define the roles of public and private sector, and the failure to demarcate their spheres for various societal reasons have led to economic and financial crisis in countries that have gone through the process of reforms and restructuring.

42. In the hey-days of planned economies, adherence to autarchic model with primacy of state in ownership and operations, prevented a demarcation of roles of public and private sectors. The ensuing conflicts about the role of

private sector versus public sector stymied growth or worse. Sometimes it led to economic and financial crisis. There followed a series of stabilization effort and several rounds of debt reschedulings to sort out foreign liabilities strangulating routine foreign trade. The crisis most often was triggered by drying out of foreign currency liquidity, no doubt, but was sustained by failure of PSEs as going concerns and efforts of the government to keep bailing them out through credits extended by DFIs and banking system.

43. Meantime, PSEs kept operating at unsustainable prices and exchange rates and kept financing each other through internally generated IOUs. Often it took the government several years of repetitive stabilization efforts to realize that until role of PSEs is rationalized, current account deficits and budget deficits will continue to emerge and no reform effort will succeed. Eventually, several PSEs were forced to close down, or were restructured or privatized not because the government incharge had an urge to do so on its own, but mainly due to conditionalities of stabilization, debt relief and reschedulings, and restructuring programs financed by IFIs which generated severe opposition, repeatedly bringing down the government incharge, thereby compounding the chaos.

44. At the root of it all was the failure to arrive at a societal consensus on the role of public sector and it took a long a time to emerge. Strangely enough, while the economy was buffeted by one crisis after the other in succession, and no end in sight, it found ways to not only survive but also show modest growth amidst all the crisis. Meanwhile, the economy did get diversified, into the mainstream of reasonably open and market-based economies; the primacy of public sector abated; but the impact of past legacy lingered on for quite sometime. There is a great deal of resonance of this historical process with what is currently transpiring in Pakistan.

45. A few Latin American countries went through similar episodes, but then recovered after enduring their share of financial and economic crises in the 1970s and 1980s that occurred largely because of this conundrum as to what the roles of public and private sectors should be in future. Even after a drastic change was undertaken to shift their respective roles, neither the economy nor society at large were prepared to go through shift of mind-set. State intervention lingered on; necessitated by the need to cope with the aftermath of crises that emerged because of excesses of public sector in the first place. The regime of state intervention lingered on for a long period, punctuated by periodic financial crisis in between.

46. The same happened in Pakistan, more or less, during the 1990s. Structural reforms in Pakistan were started not because successive governments wanted to embark on this process of their own, but largely because of conditionalities embedded in the IFIs stabilization and restructuring loans borrowed to meet persistent foreign exchange liquidity short falls and precariously low foreign exchange reserves as discussed in section II. As soon as foreign exchange liquidity crunch was mitigated somewhat, there was non-performance on stipulated program items, leading to its cancellation or abeyance until the next round. In this milieu, there was hardly any consensus on leading issues such as what will be the role of public and private sectors in the future.

47. Further, once domain of public sector is specified, it should not be tampered with or circumvented, deliberately or otherwise in *ad-hoc* fashion as happened in Pakistan. When privatization began in the early 1990s, there was much skepticism and uncertainty, but those involved shrewdly saw an opportunity to amass considerable gains which they did because in its early phases privatization program presented an opportunity to buy state owned assets at bargain prices without transparency to the process of valuation of assets. There were other ironic implications embedded in the sale of assets; the major one being that the public ended up shouldering burden of misguided nationalization of 1970s. Subsequently, it ended up shouldering even a larger burden of privatization costs during 1990s and 2000s. These costs eventually seeped through into government budget, and were lodged in the staggering burden of domestic and external debt.

48. This happened as follows. The public sector financial institutions, enterprises and utilities that were acquired during nationalization of 1970s, for their acquisition government had to compensate a few owners in various ways, howsoever niggardly. A good number of business entities were declared insolvent even before their acquisition by the state, and their losses were not recoverable by financial institutions who themselves were undergoing nationalization. After acquisition, government had to take over their operational losses that began accumulating shortly thereafter. In addition government had to infuse new equity from time to time in these financial institutions and also into PSEs, the clients of these financial institutions. Since government did not have sufficient budgetary resources of its own, it was running perpetual deficits year after year; government was forced to borrow heavily both domestically through nationalized financial system and NSS scheme, and also from abroad.

49. These entities also began accumulating loans borrowed from DFIs and nationalized banks, both domestic currency and foreign exchange loans with implicit or explicit guarantee of state as required by foreign lenders, thereby turning them into sovereign debt. These borrowings of PSEs, together with private sector loans obtained from nationalized banks and DFIs without due sufficient due diligence adequate collateral safeguards, later on turned into non-performing loans (NPLs) whose burden remained intact for nearly two decades and began to be resolved after reforms started in earnest in mid-1990s. A resolution occurred after public sector absorbed periodic equity replenishments to stave off imminent bankruptcy of nationalized banks, and periodic write–off of defaults throughout much of 1980s and also during the 1990s. Eventually, when privatization occurred, nationalized banks and a number of PSEs were sold mostly below re-furbished capitalized value though mostly at market prices of their remaining assets.

50. Throughout this period, burden of equity replenishments, resolution of defaults and NPLs, and operating losses were ultimately borne by public through explicit and implicit taxation, domestic and foreign borrowings, NSS operations, currency seignorage and inflation over these years. This was by far the toughest and most expensive aspect of privatization that preceded actual sale of financial institutions. Overall, costs of privatization were staggering to the economy and were absorbed by the government and were financed by borrowed funds; but no estimates have ever been offered. After this transpired, the resulting post-reform structure turned out to be far different that prevailed before. Thus privatization is to be viewed not simply a shift of ownership, but it has to be accompanied by deregulation, institutional or enterprise based restructuring, asset revaluation and resolution, a cleaning of balance sheets of financial institutions to be privatized, together with privatization of their clientele of the pre-reform period, namely the PSEs. This can not be done without a consensus on the role of public sector during and after transformation has occurred.

51. In this sense, task of macrofinancial reforms may be over, but the task of financial system development is not over, and this phase will be no less demanding than previous one. There is unfinished business that needs attention in financial resource mobilization and its allocation, specially the way newly privatized banks and their credit system is operating. Front line reforms have been centre of attention of policy makers in the past. The focus now has to be on financial system development under the newly reformed policy regime and rules of the game in an environment vastly different from what prevailed before.

Post Reform Evolution *of Banking System*

52. In Pakistan, financial system is dominated by banking system with regard to asset base, deposit mobilization and credit extension and also with respect to size of operations of securities markets. This dominance has been much discussed since it is common to many developing countries. To recapitulate earlier discussion on financial system structure, though there is some repetition, assets of banking system constitute nearly three fourth of total assets of financial system, followed by about 20 percent share of assets of SBP, and about 10 percent share of assets of NBFIs, a fairly small proportional share. Similar pattern prevails regarding credit, savings and deposits of financial system. Nearly 90 percent of financial system credit originates from banking system and it is not a surprise since assets are none else but advances outstanding at end of a given period.

53. In contrast, credit extended by NBFIs as group is a negligible 3 percent of total system credit. Therefore, what matters is banking credit as it is in any financial system, be it a developing country or advanced. The proportion of financial system savings lodged with banking system is about 60 percent; about 19 percent plus is lodged with NSS, and savings lodged with NBFIs are a minuscule share of total savings. These proportions have held sway over the past decade; suggesting that structure of financial system has remained fairly steady in the post reform period; yet, there have been shifts in structure on the margin as discussed here.

Competition vs Concentration

54. A look at business shares shows that banking business is concentrated among the top five commercial banks who dominate the banking system in every category while remaining banks are small players. Four of these are: NBP, HBL, UBL, MCB. The fifth one was ABL until recently and has now been displaced from 5th position by Alflah Bank. The dominance of these five banks has diminished somewhat over the past years; yet, their combined assets are slightly more than half of the banking system assets; so are the proportions of their deposits and advances in the banking system. The combined non-performing loans of original five banks were higher, about three fourth of total NPLs of the banking system until couple of years ago. This dominance of five banks is unlikely to be diminished; it may even gain strength if these five banks evolve into universal banks given their resources, their client base and their market position.

55. Financial strength of the banking system, therefore, is closely tied to financial fortunes of these large five banks. They are the price setters; while at the same time in the past, many of them were loss leaders as well. Their profitability and solvency is of systemic significance to the banking system and hinges upon efficiency of their operations and cost effectiveness, risk management, credit outreach and their business diversification. Impetus for future improvements will come from institution-specific initiatives concerning meaningful capacity building and change management. This will happen owing to pressures of profitability and efforts to maintain their relative market shares, and this market is not expanding fast, tied as it is to the growth of businesses and corporate sector. A direct role of SBP or the government in this arena is no longer material as it was in the past.

56. This shift has implications for fostering ***competition*** within a largely market-based banking system where price-based competition, namely interest rate based competition is operationally not feasible except within narrow margins since it has very short shelf life. In recent years in times of exceptionally low interest rates on deposit, where lending rates were set by the loss leaders of previous years, many well managed and cost efficient new banks, without any overhang of NPLs and provisioning costs to contend with, preferred to reap efficiency premium rather than lower their interest rates and pass on the differential to their borrowers.

Consolidation or Fragmentation?

57. Faced with this situation, Pakistan, like other countries in similar stages of financial system development, has tried to enhance competition by promoting quasi-banking institutions which worsened fragmentation but did not materially enhance competition within the financial system. Ironically, it ended up increased grouped linked banking activities, inimical to fostering competition. An alternative approach would have been to foster activity based competition on a level playing field, that is, diversification in new loan markets and sub-sectors.

58. As discussed in Chapter 4, the number of bank and non-bank financial institutions is large even though there has been some buy-outs and mergers and entry of new banks has become more difficult given substantially increased minimum capital requirements. The number of banks is roughly the same it was five years ago, but the number of NBFIs has increased. The number of ***NBFIs*** is much larger, and their number has increased over the past five years in spite of closures, mergers and buy-outs. In addition, there

are a number of foreign exchange companies outside of this group of NBFIs, who have been documented and registered and their operations are an important part of financial system. Does the economy really need 36 or so commercial banking institutions of all variety, plus a veritable collection of NBFIs, owned in a labyrinth of group linked ownership with overlapping financial interests?

59. Currently, entry of Islamic finance and micro-finance institutions is being heralded as a start of new era in Pakistani banking and in some ways it is, given that their entry is driven by societal preferences of one kind or the other. This is not going to help with ***diversification*** of financial intermediation given that they are likely to remain appendages of financial intermediation for a long time to come. Diversification does not occur just because number of financial institutions has increased, rather it occurs when new institutions or old launch new business operations, introduce new products such as term lending, and begin to cover new segments of clientele. Therefore, in open financial systems, what matters is activity-based diversification and not institution based diversification.

60. The sheer number of financial institutions, therefore, remains unwieldy and it is not healthy for the structure since it has led to ***fragmentation*** of financial intermediation activities which should not be confused with diversification. Entry continues unabated and it will, given demands and pressures from new entrants, such as finance companies who are ensconced in their niche markets, providing consumer finance or Islamic finance. These new entrants, together, they are ***marginal players*** in the financial system given the size of their operations relative to mainline banking institutions as discussed below. They have ended up enhancing fragmentation because they perform similar services as existing institutions do, and have a potential for mismanagement or overexposure to various risks which may cause serious financial losses It happened in several Asian countries when finance companies inflicted huge losses to their depositors, and nearly caused a collapse of banking system owing to contagion effect of their insolvencies.

61. Besides, such a large and diverse group of financial institutions under a liberalized regime poses serious challenges for the regulatory and oversight apparatus of SBP and SECP as they have to ultimately rely on reasonably good ***corporate governance*** rather than on their stretched supervisory capabilities and diminished arsenal of direct controls. In recent years, SBP and SECP have placed emphasis on the evolution of a responsible corporate culture among the banks and NBFIs, and have issued guidelines over and above the financial disclosure requirements and mandatory accounting and

reporting standards which are a part of the regulatory framework. A system of credit rating of financial institutions and its disclosure has been put in place. Ratings are conducted by two agencies who provide a composite ranking of banks, NBFIs, and corporations, as well as ratings of financial instruments, lines of credit of various types, stocks and IPOs ratings.

62. Strong pressures on earnings and profitability together with the need to capture wide segments of credit market have led to consolidation of a few small banks and NBFIs through mergers and buy-outs by stronger institutions. These initiatives were spurred by increase in capital requirements to for the banks, up from Rs one billion in early 2000s to about Rs 7 billion in current times. This capital increase was accompanied by tax incentives for consolidation and mergers, liberalization of bank branch requirements, and encouragements for buy-outs by larger banks. Thus far mergers and acquisitions have led by mid-size commercial bank, rather than the big five because they do not need more branches or extra capacity to cope with enlarged business. Therefore, mostly smaller banks, both foreign and local, together with some NBFIs are merging into private local banks.

Role of NBFIs

63. To elaborate upon earlier discussion of NBFIs' niche in the structure of Pakistan's financial system the point worth repeating is the decline in their financial intermediation activities *relative* to those of banking system. This is reflected in the proportion of their assets, particularly advances, since loans outstanding are largest part of assets of banks and bank like financial institution any time. The analysis given there shows that banking system is much larger than all NBFIs taken together. Therefore, from the perspective of structural change that has unfolded during reform period and also in post reform era, role of NBFIs has been marginalized in financial system no matter what indicator is used; a conclusion we have already discussed in Chapter 3. NBFIs were not significant element of financial system in the pre-reform period. After reforms their size has dwindled further relative to that of banking system.

64. What role there is for the NBFIs in future with regard to *financial intermediation* activities, not with regard to specialized functions they perform in their own niche of financial system? It depends on perspectives one holds about nature of regulation, competition and diversification in an open market-based system of intermediation. The issue therefore is should

there be promotion of activity-based intermediation or institution-based intermediation. If financial intermediation is seen primarily as activity-based, then clearly NBFIs do not hold much potential because much of their deposit taking or lending business could be done in far better way by commercial banks with much larger outreach than the NBFIs. For example, housing finance should be encouraged to become a mainline banking business as it is in many countries, rather than business of housing finance companies alone. Commercial banks are getting into it but they face severe problems associated with title and ownership, registration, legal recourse and dispute resolution which has little to do with financial side of mortgage lending. These issues are is for local governments to resolve.

65. The same is true of finance companies, investment companies and modarabas, which are a special case of their own. There is not much role for investment banks or companies if banking system were to gear up for term lending rather than general purpose overdraft lending as it does now. Provided- and that is an important proviso- banks were to broaden their client network and cater to the needs of long term financing of businesses and companies that are being left out in the mainstream of bank lending. This opening has little to do with their newly acquired underwriting role in bond float, because it caters to the same group of prime borrowers that banks are already involved with. There are signs that commercial banks would move in that direction as regulations regarding loan collateral and its valuation become more effective and secondary markets develop for packaged maturities like mortgage loans; but it is a long road ahead.

66. As comparative experience shows, small and medium finance companies or investment companies have indulged in over-exposure of speculative variety time and again and have caused systemic distress, often ending up in financial crisis. Their contribution to financial intermediation therefore is questionable. As for large investment companies, they could merge with commercial banks thereby providing them a competitive edge in a developing market like Pakistan. Will these companies eventually become like large investment banks? That depends on how banking system evolves over the coming years. As for *modarabas,* investment companies they are, but from their inception in the early 1980s, their performance has been dismal and they have inflicted severe losses to the common investors, if not the owners and financiers operating these outfits. They belong to the group of Islamic finance and in that segment they may have a niche market role, but they are unlikely to become a recognizable element in the overall picture of financial intermediation.

67. The brightest segment of NBFIs include insurance companies, leasing companies and mutual funds. They have a meaningful role in the financial system in any country, including Pakistan, and they will continue to grow in their own market niche, even though business of lease finance is a specialized and expensive version of targeted term finance that could be done by commercial banks provided they gear-up to manage lending risks involved and provide for extra services that lease companies offer. Lease companies, have proven to be a powerful match to their competition and will continue to hold their own, not because they offer superior finance but because they offer services that commercial banks are not geared for. Perhaps in realization of this, commercial banks in Pakistan are moving into leasing business via subsidiaries of their own. Similarly, banks have been active in setting up their own asset management companies who have floated a large number of mutual funds.

68. These structural changes in financial intermediation patterns Pakistan are considered an improvement and a meaningful shift from what prevailed before. However, whether extensive bank group linkages of ownership and operations of financial intermediation activities is conducive to healthy future growth without compromising solvency or stability of financial system is a separate issue.

Chapter 12: Banking Regulation and Supervision

Thematics

Banking Regulation and Supervision – An Overview
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Chapter 12: Banking Regulation and Supervision

Section 1: *An Outline, Role of Central Bank*

1. Banking regulation and supervision is conducted by the regulatory authority, the central bank, to ensure that financial strength and solvency of banks is not compromised, both at institutional level and its collectivity at banking system level. The central bank has to take steps to ensure that banking system is financially strong and resilient enough to withstand instabilities and financial shocks wherever they may originate form and does not plunge into financial distress, degenerating into financial crisis. The system of banking regulation and supervision consists of diagnosis and evaluation of financial performance of banks at institutional level, including adherence and compliance with rules, requirements, together with principles and practices of self-regulation, voluntarily adopted by banks in their primary business of financial intermediation. This institutional performance provides the foundation to build system level performance.

2. The principal role of a central bank as regulatory authority is to foster public's confidence in the banking system. This is accomplished through ensuring that banks remain financially healthy and strong, which is routinely monitored through banking regulation and supervision system. If needed, steps are taken to ensure that their financial viability is maintained, though it may be supplemented by monetary management and control. Public confidence can be fragile in times of financial stress. Imminent illiquidity of a financial institution or a bank could have a ripple effect on the rest of the banking system, because no deposit taking institution can withstand a ***bank run***, a mass withdrawl of deposits, unless central bank steps in with its massive resources to ensure depositors.

3. If such a situation were to arise, central bank may have to step in with substantial financial resources that only a central bank can muster which potentially may threaten to spread if not contained forthwith. This role of central bank is not confined to banks, it covers non-bank financial institutions as well because insolvency of NBFIs has often triggered financial crisis; however, the supervisory function of central bank may be limited to banks

only. This is an enormous responsibility with implications for not only the banking system, but for the well being of depositors of all categories, specially small depositors who have no means of safeguarding their life time savings on their own.

4. The regulatory and supervision system is needed because in any financial system, there will be times when financial stress will develop affecting its soundness and solvency as has happened in advanced and developing countries alike. A major source of this stress is emergence of non-performing loans which are routinely cropping up because borrowers may face business losses if the losses are serious and persist, they may go out of business, thus impairing financial capacity of a bank, mainly its capital. There is hardly any escape from business losses; the issue is how these losses are managed by the borrowers and their financiers in time before it is too late to recover from them; how they impact their financier, the banks; and how banks cope with non-performance of their clients when it occurs.

5. Banking supervision can not prevent emergence of non-performing loans no matter how good it is, such has been the comparative experience, but it provides a mechanism to deal with the non-performing loans at institutional level, and also at the system wide basis. Maintaining financial strength, soundness and solvency of market based banking system is a preoccupation whose intricacy and dimensions defy easy rendition. In modern times, it is not localized rather it is knotted in an intricate web of global reach, spanning leading monetary systems and currency markets across countries transcending their boundaries, and impact upon advanced and developing countries alike. Financial crisis seem to have a way of erupting without much warning and on a scale not witnessed before. The latest was US financial crisis of 2008 which started with failure of sub-prime mortgage lending, whose aftermath has surpassed all other crises before.

6. Banking regulation and supervision is being singled out for not doing its part as it should have to ensure that banks are financially strong; their loan portfolio is sound and there are no imminent threats to their solvency. A great deal of concern is now being raised why bankers, financiers, specialists, and CEOs of financial institutions failed to spot these threats, much less to take measures in time and adjust their operational procedures; and why the system of banking regulation and supervision failed in its role. The search is on for improving evaluation and diagnostic apparatus embedded in the framework, practices and operations of banking regulation and supervision system both in advanced and developing countries alike.

7. Profitability of banks is the central issue. There is an innate tussle if not a conflict between institutional level and system level in this regard. For banks, at institutional level, the driving motive is to maintain and enhance profitability. For the CEOs of banks, the motto is 'profit in my times' but profitability of a few banks does not mean solvency and stability of ***banking system*** is intact. Maintaining financial strength and solvency of banks at system level is quite a different proposition than doing the same for a bank at institutional level. That is a cardinal lesson of financial crises that have erupted over the past three decades. For a single bank, sustaining profitability and protecting shareholders capital remains the focus, while other considerations take a back seat; but at system level, maintaining financial strength can not be reduced to simple mottos like 'profits in my times'. Intuitively it seems that if banks are doing well, there is hardly much to worry about because banking system is a collectivity of all banks; therefore, by analogy the same must be true of financial system, since banks are dominant part of financial system, at least in developing countries.

8. The reason for this cleavage is that pursuit of profits often times blurs the distinction between good and bad banking practices, though this distinction comes in various shades of gray and is difficult to discern. The difference between prudent and cautious banking and aggressive banking lies in those shades of gray. Profitability is the driving objective; and a great deal has been written concerning banking profitability in the context of various types of banking risks. Those need not be revisited except for the comment that conjuring up profitability amidst all risks is an art; ensuring and safeguarding various profitability ratios to some decimal point is a technocratic preoccupation laced with judgment calls. Bankers traverse both the domain with ease; yet quite often they find themselves in hot waters.

9. Consequences of missing profitability targets over the short term may not be that serious for a bank. Owners of banks may be able to ride out temporary downturn in profits; but if in public's perception, insolvency of a financial institution is imminent, it percolates down and spreads fast. If it is not contained it could spread and undermine solvency of banking and financial system as a whole causing financial crisis. Hence, at system level, the responsibility of maintaining financial strength and soundness of banking system ends up with the central bank. The two concerns are not the same. Strategies of pursuing profitability are different from strategies to maintain soundness of the banking system, specially in a market based system where degrees of control and freedom available to central bank are restricted to mechanisms and levers embedded in banking regulation and supervision framework as discussed here.

10. At operational level, the ***paramount objective*** of banking regulation and supervision is to identify financial weaknesses of the banks as they emerge in various shades and intensity both at institutional level and system level and take strong steps to overcome such adversities as they appear. The same objectives govern present system of bank regulation and supervision in Pakistan. Given the nature and size of this task, focus of banking regulation and supervision is on preventive measures, where a dose of over-caution may be preferable to systemic distress in the banking system. The operational objectives may be articulated as follows. These are:

i. *to ensure compliance with laws, regulations and directives so that banks maintain high standards of financial and professional conduct;*

ii. *to ensure that banking credit and investments have an appropriate structure which affects bank's profitability as well as efficiency of allocation of financial resources at their disposal.*

iii. *to promote competition, product innovation and development of a wide range of services to ensure that banks are responsive to market signals and coustomer needs.*

iv. *to ensure that banking supervision and regulations and monetary policy operations are unified, since prudential regulations often cross over monetary policy orientations and controls.*

v. *to have a system of checks and balances on the power of banking system to participate in creation of money, near money, or quasi- money through instruments other than the legal tender.*

11. The regulatory system for banks is separate from a similar regulatory framework for non-bank financial institutions which may or may not be operated by the central bank. The dividing line is the way non-bank institutions come into being. They may be established under their own special charter conferred by the legislature, or may be licensed by the government under companies act, instead of banking act. Bank supervision focuses on monitoring financial operations of banks and assessing their possible impact on the financial strength and health of the banking system as a whole through a system of banking supervision consisting of on-site examination and off-site surveillance as follows.

12. A system of banking supervision like the one prevailing now was not needed in Pakistan during nationalized era for the reason that borrowers were state owned enterprises, and creditors were state owned banks, acting on directives of Banking Council, not State Bank of Pakistan; operating under a system of layered directed credit discussed earlier. The owner was the

government; the regulator was the government, not an autonomous central bank; the financial regime was a series of directives; interest rate structure was state specified both on lending side and deposit side, though with some consideration of what the mutated markets were doing. Most key rates were state specified; for example NSS borrowing rates and DFIs lending rates. All loans extended by banking system had either explicit or implicit guarantee against default; banks did not have to be cognizable for their decisions to lend; losses of banking system were sheltered through the guarantees and through equity replenishment if losses breached the barrier of income and profitability. In such a system there was not much role for banking regulation and supervision as it is in current times.

A few Basic Concepts

13. Explanations of a few basic concepts are in order here. In outline, ***financial strength*** is invariably interpreted as strong capital base to enable a bank to ride out normal levels of bank losses mostly attributable to non-performing loans. ***Soundness*** overlaps with capital adequacy, but extends to quality of assets that banks end up acquiring in their business operations; the loans outstanding in their portfolio. ***Insolvency*** is preceded by emergence of ***illiquidity*** as discussed below and it has to be dealt with in its early stages when tell-tale signs emerge, because once these weaknesses have degenerated, it is too late to prevent financial collapse or banking crisis.

14. At institutional level, financial distress is interpreted as a situation when a bank is unable to honor its commitments owing to dwindling cash inflow; or drying up of its routine liquidity sources, thus forcing it to seek funding at a premium over market costs. The bank may have suffered losses, or may be facing potential losses of major proportions endangering its survival. The causes of distress may lie in lending operations; or in over-extended commitments; or adverse turn of events in markets; or insolvency or bankruptcy of its major clients, well beyond the control of the bank. Thus, financial distress builds over time; it is not a sudden deterioration caused by adverse market trends; such as persistently low profitability and dwindling income from poor business practices and operations.

15. At banking system level, financial distress prevails if a large number of banks are suffering from persistent losses and erosion of their capital base that can be traced to bad loans. Banks may have become effectively insolvent due to defaults of a large number of their borrowers, and they

may be unable to cover the erosion of their capital base from shareholders' funds, requiring rescue effort by the central bank or the government. If this systemic distress is, its magnitudes may be beyond rescue efforts. At that point, bank failures becomes inevitable.

16. Banking based financial flows occur through payment and settlement system which carries settlement risk. Efficiency of payment mechanism and its reliability is critical to transactions of banks' clients, the businesses and households. If for some reason, this mechanism were to falter or get clogged up, the flow of payments does not get processed, it would create a chain reaction freezing bank liquidity at system level. Therefore, payment systems are operated by a central bank or by private sector entity under scrutiny of the central bank as part of its regulatory function. Often, banks create settlement float, a practice that is costly to clients. In Pakistan, banks are required to clear transactions in couple of days called T+2 mechanism.

17. There are problems of ***asymmetric information*** and ***transparency*** between banks and their clients. It occurs when banks as lenders are not privy to the same information about assets being pledged as clients are. There are also asymmetries of information between banks and regulators, requiring regulatory authority to be vigilant about financial position of a bank and follow up with prompt actions before it is too late to reverse deterioration in the financial position of a bank to the point of no return. Similarly, lack of ***transparency*** occurs when shareholders do not have access to actual financial state of a bank. For example, the true value of bank's assets may not be known to shareholders, even to regulators, while management of the bank may take decisions which may not be in interest of its clients or shareholders. Lack of transparency may arise from improper financial disclosure, changes in the market value of assets at the time of sale or liquidation, or because of volatile changes in the markets of those assets.

18. In trading of securitized loans or in financial markets, the issue of transparency is more serious because banks hold a distant claim derived from an asset rather than a direct claim on a real asset with a direct recource to its market value. There are intervening claimants in between. The bank may be holding only a link among the chain of claims originating from asset, bearing little relation to real asset where the chain started out from. Failure of one asset-issuing company may trigger off a series of failures in a domino fashion. One way of dealing with rise of asymmetric information or lack of transparency is to adopt uniform accounting standards and tight compliance disclosure requirements, together with reliable flow of data, submission and analysis of financial statements to regulatory authority.

19. The amount of capital available to banks at any given time to absorb these risks is relatively low. Their vulnerability to financial distress arises from high gearing on deposit base, or high leverage; mis-match of maturities between assets and liabilities; settlement risks; and risk of systemic failure. Besides, banks make profits by riding yield curve of both the short term and long term assets they hold, mobilizing much of their short term deposits at low or zero interest rates, and lending or investing such funds in assets of different maturities at higher rates. This inherent liquidity mis-match is potentially dangerous, requiring banks to maintain a higher level of liquid assets to meet liquidity needs of their coustomers. Central bank may extend liquidity as a lender of the last resort to preserve the liquidity of the banking system to help meet their cash requirements provided insolvency is not involved. In absence of such safeguards, liquidity problems of banks may quickly degenerate into solvency problems, more so because liquidation of long term assets inevitably involves a capital loss of serious magnitudes.

Section 2: Approaches to Banking Supervision

1. The basic approaches to banking supervision are:

i. ***self-regulation*** *by a bank through its own internal financial control, checks and balances, internal or external audit, adherence to prudent norms of banking, compliance with banking laws, rules, regulations, and disclosure.*

ii. a ***system of banking supervision*** *conducted by central bank that has been developed over past couple of decades for a liberalized and open financial systems.*

iii. an ***early warning system****, may be self standing or piggy-backed to self-regulation or to a system of banking supervision triggered by deviations from norms of prudent banking, requiring corrective actions by affected banks.*

iv. a ***system of safety net****, like deposit insurance schemes, covers or guarantees now prevalent in a number of countries.*

2. Among these, record of ***self-regulation*** is a checkered one at best. In times of financial distress it fails even in developed countries where well established corporate governance culture, long tradition of competition, and public disclosure are supposed to serve as powerful check on financial degeneration well before the point of no return is reached. There are several reasons for it. In Pakistan, privatized banks have established a strong self-regulation procedure; otherwise they may end up with losses, given the proclivity for bank fraud whose incidence is hushed-up because it reflects

badly on bank's senior management. Internal control processes work only up to a limit, because they slow down decision making and are in conflict with principle of delegation of authority and require a layered system of verification which is time consuming and expensive. Internal audit is beholden to management and is hesitant to take a position in conflict with the management. It is focused on compliance, and it is reduced to inventory taking without judgment calls for corrective measures.

3. External audit can be only as effective as auditors; but their quality varies. Invariably in times of financial stress or losses, external auditors are placed in an awkward position because they are hired by the bank and the bank is their client. Auditors perceive their role more as an advisory rather than a whistle blower, and even of they were to extend their role, the senior management is loath to admit their failure, believing that they are just about to turn the corner. Auditors are apprehensive as well because their adverse reporting may cause a serious erosion of share price of the bank and hence its capitals base, compounding financial stress everyone wants the bank to ride out. In situation like these, safeguarding the bank overtakes judgment calls; and external audit fails to help change in operations of the bank. External auditors can not assume the role of bank examiners of a central bank.

Banking Supervision – *the Mechanisms*

4. The following are leading mechanisms of banking supervision in a generic setting. These mechanisms are customized and adapted to the needs of countries, and within that changes are always being made to suit the requirements of maintaining a healthy banking system. Banking supervision, is a diagnostic process at system level, rather than an adherence to rules, regulations and procedures stipulated by central bank to be followed by the banks, regardless of the state of banking system at any given time.

On-site examinations

5. On-site examinations of banks are normally conducted by bank examiners or supervisors or of the Banking Supervision Department (BSD) of SBP. Their practices and procedure vary from time to time depending on exigencies they face. Broadly, central bank targets a sample of banks if number of banks is large, or targets all banks at their head offices at least

once a year if their numbers are manageable. Branch offices of banks are selected for examination based on bank's internal reporting procedures and the importance of the branch to overall financial health of a bank, while other branches are selected for on-site visits on a sample basis. In planning bank examinations, known or suspected problem banks are given the first priority in scheduling of examination activities of BSD.

6. During on-site examinations, the focus is on bank's overall financial condition, requiring evaluation of the five components of CAMEL discussed below. In order of priority, the areas examined are activities of higher risk such as loans, insider transactions, foreign exchange, or speculative activities such as high loan exposure or investments in risky sectors. Therefore, risk profiling of bank and managements' policies, procedures and practices to handle risks attracts attention of bank examiners. This emphasis on prudent bank management is necessary to ensure that banks keep risks within reasonable tolerance and have an anticipatory stance to prevent emergence of problem loans. This approach moves bank supervisors away from focusing on a bank's conditions today and its compliance to regulatory rules to ensure bank's financial strength in future. In the process, bank supervisors become a catalyst for change in the way a financial institutions operates.

Off-Site Surveillance

7. The off-site surveillance function is undertaken based on reports submitted by banks. These include a large number of following items. Each one of these have to be spelled out. Among these, ***monthly or bi-weekly*** reports are required from all banks regarding status of their financial position and operations; listing of their major borrowers and their loan performance; status of contingent liabilities of large coustomers; their inter-bank transactions; and status of classified assets, overdue and non-performing loans. This is the core set of status reports; their composition and frequency can be adjusted as per needs. In addition quarterly or semi-annual summary statement of assets and liabilities, income and expenses, together with their details is required. At close of the year, financial statements are required, including balance sheet and profit and loss statement and their explanation in standard attachments as per disclosure requirements.

8. In addition, a variety of reports are required from operating banks at specified intervals, providing information regarding amount of credit granted to various sectors of the economy, public or private, classified by size of loans and types of borrowers or businesses. These reports are compiled,

analyzed and problem areas identified for follow-up. This is a demanding task for any banking supervision department at a central bank. The reporting system of SBP is fairly extensive and its data warehouse is enormous. In fact, there is just too much data spilling out all over. There is no shortage of formatted, IT based data with instantaneous flow, followed by authentication and verification as per rules of financial disclosure which are adhered to by banks, by and large. The quality of reporting has immensely improved over the past decade. Lack of data is no longer an impediment at myriad tasks of banking analysis as per guidelines of banking regulations and supervision.

Early Warning System

9. The early warning mechanism is a system of information flow about financial and business activities of banks that may have potential to adversely affect their financial strength. This information may originate from data sources installed for off-site surveillance or from soft sources like market reports and complaints of mismanagement or fraud lodged with the supervisory authority, triggering a comprehensive review of financial status of the bank concerned well before it degenerates into a problem bank while there is room to maneuver out of impending financial distress or even failure. The review focuses on overexposure to large borrowers, speculative investments, liquidity shortage, bank fraud or mismanagement. It involves ratio analysis of the bank, a reassessment of its rating, and preparation of its performance report by bank examiners.

10. The tell-tale signs of emerging bank problems that can be captured by an early warning system are delayed submission of bank returns and reports; problems with large coustomers, affiliates, subsidiaries or in companies where the bank is a large shareholder; rapid changes in top management or senior staff turnover; change of auditors; rapid increase in assets not substantiated by routine business; offer of higher than market deposit rates mainly owing to liquidity problems not reported; weak or uniformed board of directors. In situations like these, off-site surveillance or reports submitted by external auditors is not enough; these are to be followed through on-site bank examination; evaluation of major borrower accounts; tracing signs of inventive or cosmetic accounting; tracing signs of virtual default by a large borrower, though not technical to be lodged as formal default; insider or connected lending; tracing impact of reported non-performance of client businesses associated with lending activities.

Prudential Controls and Limits

11. Prudential controls focus on capital adequacy, concentration of ownership, exposure limits in lending, equity investments, loans to insiders, classification of asset, provisioning for loan losses, and interest suspension. Thus, prudential controls overlap with the ***CAMEL*** system of rating are subject of routine monitoring for their compliance together with items listed in the rating system. Therefore, capital adequacy and asset classification are discussed in the section on ***CAMEL*** system.

12. As for ***concentration*** of ownership, banking act may stipulate limits on shareholding of a single shareholder, or may specify that a bank will not have less than, say, 200 shareholders each of whom may not hold more than a small specified proportion of total shares. The purpose is to regulate ownership and control of a bank as a public company entrusted with the obligation of safe keeping of deposits, and in that sense a trustee of public money, which will not be diverted to the use of a powerful shareholder for his own purposes. This central tenet of banking has been flouted often in many countries, including Pakistan under nationalized banking. The chances of this mishap in private bank is unlikely because there is just too much at stake for the survival of a bank.

13. Similarly, limits are imposed to prevent banks from ***overdue exposure*** to its borrowers as a group or as individuals, specifying that the total amount of credit extended to a single borrower may not exceed, say, 10 or 15 percent of its total capital, not the total credit extended over a given period. If contingent liabilities are also included, a higher limit may be granted, but if a bank is forced to disburse credit under contingent liabilities at an inappropriate time, the bank may become overexposed to a borrower in distress. Therefore, exposure limits are normally confined to bank's capital base, without adding on contingent liabilities.

14. There are statutory limits on *investment exposure* as well. Banks are active in stock markets for their portfolio management purposes or may assist with the establishment of a new company through their direct investments. These investment have exposure limits whereby banks may not acquire more than, say, 10 percent of the total shares outstanding, or in case of shares of another bank or company this limit may be higher, say, 20 or 25 percent of shares outstanding. This limit however, does not apply to mergers or buy-outs by a stronger bank acquiring another bank or a finance company or leasing company outright.

15. To control ***insider lending***, banks are prohibited from extending or guaranteeing credit to their own directors or partners or lead owners or their close relatives holding preferred or common shares. This prohibition does not apply to ordinary shareholders who invest in common shares of the bank, or to the partners with limited liabilities. The problem occurs in group ownership of banks. If a group owning companies is also large shareholder of banks, and these group owned corporations borrow from its own bank, these limits become non-operative. In such cases, insider lending becomes an issue for banks, specially if borrowing corporation is over-extended or its income and profitability is not at par with good borrowers.

16. Based on asset classification, banks are required to make ***provisions*** for NPLs as a separate balance sheet item, though aggressive provisioning based on more conservative views of solvency calls for some provisioning for the aggregate of substandard and doubtful loans as well. In addition, general reserves are established for the balance of portfolio based on historical loss experience, economic and financial trends, growth in lending, changes in loan policies, and inherent riskiness in different categories of loans. The tax deductibility of provisions is important, otherwise it acts as a disincentive to adequate provisioning, requiring the bank to exhaust all possible remedies before the loss is allowed as a deductible expense.

17. ***Prudential rules*** also require suspension of interest on non-performing assets, though in practice implementation of this rule varies. Generally, accrual of interest should be allowed for a maximum of 90 days of arrears on a loan and should not be tied to the quality of collateral. In some cases, accrual of interest is allowed upto 180 days of arrears if adequate collateral is pledged against the loan such as real estate, even if the borrower is non-performing. This is rather generous, because collateral should be viewed as ultimate source of repayment in case a borrower fails as a going concern. Before that happens, recource to collateral is infeasible.

Asset Classification

18. The analysis of financial strength of a bank revolves around quality of its assets reported on the balance sheet which includes loans which are the largest item of assets as well as its investments, mostly portfolio investment in securities, and off-balance sheet assets. Hence, *asset classification* is different from *loan classification*. Classification of assets of a bank is based on various categories of credit risk; that is, only credit risk is taken into account, and

other banking risks like interest rate risks, liquidity risks, funding or market risks are not included in the risk-weighting system. Asset classification is carried out to determine the value of ***risk based assets,*** also called ***classified assets*** critical to capital adequacy of a bank as discussed below.

Balance Sheet Assets

19. The risk categories of loan portfolio are assigned weights ranging between zero percent, 20 percent, 50 percent, or 100 percent, thereby reducing the risk-based value of loan portfolio from its face value as reported in balance sheet of a bank. This process lowers performance indicators of a bank but provides a more realistic assessment of its financial strength. The practice of determining risk categories and their weights differs widely; however, since banking risks are always present, risk-based value of assets is lower than face value of assets. There may be some exemptions to risk weighting, but exemptions weaken capital adequacy ratios, and therefore are not encouraged. The important point to consider is that risk weighting of assets serves as a tool of economic regulation to encourage flow of credit rather than as a buffer to absorb losses.

Off-Balance Sheet Assets

20. Off-balance sheet items are essentially contingent claims on the bank arising from commitments made or guarantees issued to its clients by the bank for a fee as part of its routine business dealings. If the client were to default in his obligations, serious contingent claims may materialize as liabilities or losses to be charged to the capital of the bank. There are a myriad of risks associated with these items and those need to be factored in at the time of evaluation of the bank. Further these risks affect not only the value of off-balance sheet items, they also affect management goals and profitability scenarios though these factors can not be quantified in a meaningful way. Hence conversion factors used to determine the risk-based value of these items are front loaded with these considerations.

21. Major off-balance sheet items are: L/Cs issued on behalf of private or government enterprises, the largest item; loan repayment guarantees issued to the business clients; bid-bonds tendered on behalf of clients or similar guarantees issued to them, and underwriting commitments issued, such as a bond issue or launching of IPOs. The valuation of off-balance sheet assets as

risk-based assets is carried out through determination of credit equivalent amounts of off-balance sheet items by multiplying their face value with their credit-conversion factor ranging between zero to 100 percent. Technically, conversion factors are similar to the weights assigned for regular balance sheet assets, but they are specified more conservatively and their impact on risk based valuation is much stronger than the impact of weights assigned to balance sheet assets. As to the question why banks engage in off-balance sheet activities which are riskier than lending, simply because it is very profitable, much more than routine lending is. This has been one of the fastest growth activities of banks everywhere. The risks are high because the bank has no control on activities of clients on whose behalf L/C guarantees, or bid-bonds are issued.

Loan Classification

22. Loan classification is specified as part of regulatory system focusing upon the financial status of loans in the portfolio of a bank. This classification is generally followed, though there may be variations depending on local country situations. This may be ***statutory classification*** based on banking regulation and supervision framework of the central bank, requiring monitoring, supervision, and provisioning for potential loan losses depending on seriousness of default; or, it may be ***prudential classification*** adopted by a bank to closely monitor the magnitude of the impaired loan portfolio. In practice, this classification has to be modified to arrive at its operational counterpart along the following lines.

23. A loan is classified ***overdue*** or ***substandard*** if interest or principal on the loan is past due and unpaid for a certain period of time, usually 90 days. This definition may be enlarged to include ***problems loans*** covering loans whose borrowers have been delinquent in loan repayment for periods of less than 90 days, or have faced frequent difficulties in installment payment on time including interest or principal or both. This may occur if cash flow of businesses is weakened because of adverse economic environment such as a decline in prices of their products domestically or in export markets, or unanticipated cost increase due to labor unrest or surcharges imposed, or because of new competition, or new business restrictions. Whatever the reason, if the cash flow of business is disrupted it may lead to emergence of problem loans. This situation is more serious in case of unsecured loans or cash loans to businesses or individuals such as credit card obligations.

24. A loan is classified as ***doubtful*** if interest or principal or both are past due for 180 days. If it is an unsecured loan where asymmetries of information raises serious doubts about capacity of the borrower to meet repayment obligations, or if borrower has filed for reorganization of business prior to declaring bankruptcy, then the loan may be included in doubtful category if repayment of interest or principal is overdue beyond three months *before* six months stipulation is reached. This is not so obvious in the case of a secured loan whose collateral value may become uncertain because of a precipitous fall in market value of assets before six month limit is reached. A loan is classified as ***irrecoverable*** or ***loss*** if no payment for interest or principal amount due has been received for more than two years. In practice it also includes loans whose borrower has disappeared or has filed for bankruptcy well before the two year limit has been reached where even a partial recovery is not possible.

25. A loan is considered ***non-performing*** when repayment of interest or principal is overdue beyond 90 days. The lender may not invoke a borrower in ***default*** for some period beyond 90 days, but beyond 180 days it becomes difficult for banks to hold declaration of default status to seek remedies, short of foreclosure which is the last ditch effort. Normally banks do not declare default, hoping a turn around in the business of borrower or a partial restoration of its cash flow enough to keep the loan current in its books. Once a default is declared, it heralds the onset of adversarial relationship with the borrower as against accommodating relationship which may rescue the bank from an imminent loss. The bank may even indulge in involuntary lending, hoping business solvency of the borrower, thus enhancing their exposure to the defaulter, instead of going for a partial recovery before foreclosure. By the time foreclosure stage is arrived, a loan is effectively a loss for the bank.

Provisioning – *Stemming Insolvency?*

26. In generic sense, provisioning is an amount retained out of profits to provide for known payments such as asset replacement, depreciation and pension. In the context of impaired loan portfolio of a bank pursuant to loan classification as above, provisioning for bad loans is stipulated by the regulatory authority which requires mandatory charges against bank's net income to cover loan losses as per provisioning guidelines specified under rules and regulations of banking supervision summarized below. The

amount of charge is based on classification of nonperforming loans depending on severity of default, and provisioned amounts are maintained as loan loss reserves until the resolution of default occurs through loan recovery proceedings against the borrower. The implication of provisioning is that if the size of loan losses in any given year is large, required provisioned amounts may exceed a bank's net income, and in extreme cases, total provisioning required under the rules may even exceed shareholder's funds signaling technical insolvency of a bank owing to a badly impaired loan portfolio.

27. ***Provisioning guidelines*** stipulate provisioning amounts as some proportion of nonperforming loans, charged against bank's net income as follows:

i. *for loans classified as bad debts, 100 per cent provisioning is required; that is, full amount of loan loss is to be charged against net income;*

ii. *for loans classified as doubtful, 50 per cent provisioning is required;*

iii. *for loans classified substandard, 25 per cent provisioning is required. Additionally, banks are required to maintain prudential reserves of one per cent against net income for the remaining portfolio.*

28. Those who advocate strong provisioning rules and guidelines would argue that provisioning is a safeguard against insolvency because it forces banks to review their lending practices and procedures and forces them to face weaknesses of loan portfolio. Before we delve into this issue we need to distinguish between institutional insolvency and system level insolvency, though in either case if the failure of a major financial institution is imminent, only a massive bail out operation by central bank or jointly with the government could stave off such imminent failure.

29. ***Insolvency of a bank*** occurs if bank's capital is wiped-out; or if shareholders' funds and prudential reserves are insufficient to cover massive losses arising mainly from seriously impaired loan portfolio, a widespread default among its borrowers, and unrecoverable debt repayments. In such a situation the only recourse available to the bank is swift re-capitalization by its owners, otherwise the bank would have to close its operations and end-up in receivership, followed by eventual bankruptcy or closure if a restructuring and consolidation is not feasible. In this sense, financial distress of a bank maybe interpreted as illiquidity, but insolvency is the end result of financial distress if it is not ameliorated.

30. This is because a bank becomes insolvent first and becomes illiquid later, though this is far from being settled among those close to the sequence of insolvency. The reason for this assertions is that if inflows of repayments do not sustain owing to borrower illiquidity or insolvency, the experience is that those repayment shortfalls become endemic, and stop gap remedies by banks to make up for the shortfall are not going to suffice over the longer run, because these measures taken by a bank to shore up its liquidity are predicated upon restoration of repayment inflows which is unlikely. central bank has to play a key role in managing insolvency and provide liquidity as lender of the last resort. If a bank can be rescued through injection of liquidity, then fresh capital is needed, and this may not be possible in case of systemic insolvency.

31. In contrast, ***insolvency of banking system*** occurs when a large number of banks in a country are facing insolvency, also called systemic insolvency. for similar reasons as above. Insolvency of a single bank may be manageable by a central bank, and receivership or bankruptcy may be averted if owners are willing and capable of substantial re-capitalization, or new investors may be found. A systemic insolvency, however, is beyond the resources of even a central bank because total re-capitalization needs are massive. In a systemic insolvency, a number of banks need to be restructured, consolidated or even closed down causing widespread financial losses.

32. Therefore, provisioning can not staving off insolvency. It can overcome weaknesses of a loan portfolio at institutional level; but beyond that provisioning is simply no where the needs of rescue operations needed in times of systemic insolvency. This is amply borne by past experiences of financial crisis that engulfed banking system. In Pakistan, there has not been any case of insolvency and no bank has been declared insolvent during the past decade. Under the nationalized regime there was no insolvency either; there could not have been because they were all state owned banks. During reform period, there were forced closures of several DFIs, but they were not commercial banks. Their failure occurred over a protracted period of financial distress stemming from their loan portfolio consisting largely of loans to insolvent PSEs, not private businesses.

Section 3: Banking Performance
Criteria Dimensions and Rating System

1. The ***performance criteria*** of soundness of banking system used in performance evaluation of banks are well established in annals of financial management, or in treatises of risk and returns and their trade-offs, centered around financial strength of banking institutions as exhibited by leading balance sheet indicators and profitability indicators, widely used by banking industry. These criteria were embellished from experiences with financial crises of 1980s at the heels of liberalization of banking industry to admit score of quasi-banking institutions in the fold to usher in market based banking, removal of controls and restrictions on banking business and a move towards universal banking.

Basel Accords – I and II

2. The criteria concerning performance got further boost with the adoption and implementation of ***Basel Accord I*** of 1988 and ***Basel Accord II*** of 2005 and those were adopted in Pakistan to conform to international standards of banking regulation and supervision. Basel Accords were arrived at pursuant to deliberations of Basel Committee on Banking Supervision organised by Bank for International Settlement (BIS). The first accord, ***Basel – I*** , was forged in 1988 by group of G-10 plus countries with focus on capital adequacy for credit risks faced by multinational banks. It contained performance criteria and monitoring framework and uniform standards of financial disclosure, reporting and evaluation for banks of member countries. Lately, there has been some loud criticisms of Basel Accords at implementing capital requirements in times of open capital accounts, global financial flows and freely floating currencies which have turned out to be unrealistic and a source of financial distress, leading to crisis. This debate needs a separate treatise of its own.

3. Subsequently, Basel Committee forged ***Basel – II Accord*** in 2004, and this time the signatories of Accord included 57 countries including India and Pakistan. This is a comprehensive Accord requiring governments and central banks, its signatories, to set up uniform capital adequacy standards, to adopt criteria of accounting, auditing, reporting on uniform norms and standards. If a country is not a signatory of Basel Accords, effectively, it may find itself

cast aside of global monetary and financial system, and is unlikely to succeed in securing financial assistance at international level from multinational money center banks or IFIs. Effectively, such a country will soon find itself out on a limb on its own. Such isolationism is no longer practical in current global network of international finance. Membership of BIS and being a signatory of Basel Concordat is a requirement of IFIs! That explains it all.

CAMEL – the Rating System

4. The acronym ***CAMEL*** stands for ***Capital*** adequacy, ***Asset*** quality, ***Management*** effectiveness, ***Earnings*** and profitability, and ***Liquidity***. It is a system of performance rating of banks at institutional level based on CAMEL indicators. The aggregation of these indicators is used at banking system level. Subsequently, ***sensitivity*** analysis focusing on banks ability to absorb economic and financial shocks was added to these indicators. These shocks may originate within the country or abroad to the extent banking system is integrated with international finance; hence the acronym ***CAMELS.*** These indicators and their analysis provides a measure of financial strength and overall soundness on a scale of one to five, where one is the highest rating and five is the lowest. This rating system of financial strength of banks embodies ***prudential controls*** and ***limits*** that are mandatory for banks as prescribed by regulatory authorities.

5. An important clarification need to be made here. CAMEL is a tool of performance analysis; it does not stipulate any standard of performance. Those standards are prescribed in banking regulation and supervision framework as stipulated by central bank, SBP pursuant to Basel Accords I and II and banks are required to comply with those stipulations. Among these, the most important one concern risk based capital adequacy as prescribed by prudential regulations.

6. Among these stipulations, the most important one is ***risk-weighted capital adequacy*** as prescribed by prudential regulations issued by central bank. It is gauged by capital adequacy ratio, known simply by its acronym, ***CAR***. It is the *ratio* of capital to total risk-weighted assets, and Most often a minimum capital ratio of 8 percent is the standard, where the minimum is based on a prudential definitions of capital including Tier-1 or core capital items and Tier-2 capital or supplementary capital as follows:.

- ***Tier - 1 Capital*** or ***Core Capital*** includes paid-up capital, retained earnings, and statutory reserves;
- ***Tier - 2 Capital*** or ***Supplementary Capital*** includes reserves for loan losses as general provisioning, revaluation and other reserves, and subordinated debt;

7. Note that the total capital as reported in the balance sheet including share capital, reserves, unappropriated profits and revaluation of assets whether realizable or otherwise stays as it is; but for regulatory purposes it is reclassified, for estimation of capital adequacy ratio, CAR. The numerator of the capital adequacy ratio is the sum of Tier-1 and Tier-2 capital; the denominator is risk-weighted assets of banks as discussed above. In practice, the amounts of Tier-2 capital can not exceed the amount of Tier-1 capital; that is, Tier-2 capital can not be more than 50 percent of total capital for capital adequacy ratio purposes. In practice, general provisioning can not be more than 1.25 times of total risk weighted assets. Hence, the proportion of major income earning assets of a bank, can be smaller than reserves for general provisioning, but not much smaller.

8. There are some deduction from and additions to capital account. Investments of bank in its subsidiaries, and reciprocal share holdings are deducted, while off-balance sheet items are added as credit equivalent amounts, again, weighted by their risk categories. Or, two ratios may be calculated; one based on risk-weighted assets; another based on contingent liabilities with off balance-sheet risks. The denominator of capital adequacy ratio is the value of risk-based assets arrived at through asset classification of both balance sheet and off-balance sheet items as discussed above.

9. In a banking systems where loan defaults are pervasive, or those banking systems who are in transition from state owned to privatized banking as in Pakistan, the practice is to assign 100 percent risk weight to all assets because majority of assets are deemed to fall in *full risk* category. Whatever the case, the nominal book value of assets, namely the loans advanced and outstanding is multiplied by the risk weight and added up to make the denominator of capital adequacy ratio. Besides the capital adequacy ratio, other supplementary indicators are also deployed to evaluate capital adequacy. These are dividend to after tax income ratio, the growth rate of capital and growth rate of assets. These indicators provide an insight into the dynamics of capital base of a bank, encompassing in them forward looking trends of financial strength of a bank.

10. A critical element of CAMEL analysis concerns ***asset quality*** which depends on the amount of non-performing loans in bank's portfolio as per ***loan classification*** stipulations discussed above. The effort is to determine potential problem loans well before they degenerate into loss status. Potential problem loans are defined as loans on which the borrower has experienced frequent difficulties in paying interest and principle to the bank due at maturity; or unsecured loans to businesses whose financial situation is weakened by changes in economic environment such as a decline in export prices, insufficient cash flow, or an acute shortage of working capital detrimental to the business of the borrower.

11. There are stipulations concerning ***banking liquidity*** levels, specified as statutory liquidity ratios. Since it is not possible to ensure that at the end of the day what liquidity position will actually prevail, banks normally add on prudential levels of liquidity just in case the fall short of statutory liquidity levels; because there are penalties for violating liquidity ratio required under banking regulation rules. Therefore, in practice banks usually end up holding more liquidity than prescribed by the central bank. Then there are norms of ***earnings*** and ***profitability*** that banks generally strive to achieve, bur there are no required levels of earnings and profitability as such under regulatory rules. The indicators are the well known profitability ratios to determine how successful banks are in their business of banking. Finally, there are normative standards of ***management effectiveness***, usually captured by cost features as proxy for efficiency of banking operations, captured by intermediation costs. For well managed, intermediation cost is about two to two and half percent of total assets, or outstanding loans and investments. The ***sensitivity*** tests of are normative parameters providing benchmarks of financial strength and are discussed in the next chapter.

Chapter 13: Banking System - Pakistan
Managing Soundness and Solvency

Thematics

Banking System – Soundness and Solvency
- The Basic Parameters
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Banking System Performance Evaluation
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Chapter 13: Banking System - *Pakistan*
Managing Soundness and Solvency

1. The salient objectives of the system of banking regulation and supervision are to help maintain ***financial strength, soundness and solvency*** of the banking system in almost all countries, including Pakistan. The same objectives are re-iterated by SBP from time to time. Since banking system dominates financial system, hence financial strength and soundness of banking system is synonymous to a healthy and strong financial system. The key is how to spot financial distress in the banking system using CAMELS analysis discussed in generic terms in the previous chapter.

2. In applied context, this evaluation has to be done at institutional level first, because the technocracy of evaluation is CAMELS analysis as discussed in this chapter. CAMELS it is a rating system of banks and quasi-banking institutions, not their collectivity at system level. The analysis and CAMELS indicators of financial strength and soundness of banks include ***capital adequacy***, ***asset quality, liquidity, earnings, profitability,*** and ***sensitivity*** of banks to withstand economic and financial shocks originating within the country and abroad to the extent banking system is integrated with international finance.

3. In applied context, in Pakistan as elsewhere, these ***institutional level*** indicators are aggregated to analyze and determine what has transpired at banking ***system level***, though such an aggregation has its own weaknesses, These system level indicators show how far SBP has been successful as the ***regulatory authority*** in its efforts to promote soundness and solvency of banking system over the post-reform era. Another interpretation of these indicators is how far a central bank like SBP, has been successful in its role as custodian of public's confidence in the banking system. If public's confidence is undermined, it could jeopardize not only the banking and financial system, it could spill over with disastrous impact on the economy. It is an awesome responsibility requiring massive financial resources that only a central bank can muster in adverse times. Often, that has not been enough; such are comparative experiences of the past three decades.

4. Routinely, banking regulation and supervision is relied upon to identify weaknesses of banking system and provide advance warnings, thereby triggering remedial actions by institutions concerned, before these pressures build up as system level weaknesses and degenerate into financial distress across the banking and financial system. By and large, banking supervision system has fulfilled this role, but often it has fallen short and has not pinpointed financial pressures that built up in due course into financial crises both in developing and advanced countries alike as shown by comparative experiences.

5. These experiences suggest that no matter how good practices of banking supervision are, and how sophisticated the body of banking laws and regulations is, the system has not been able to identify financial weaknesses across banking institutions before they degenerate into insolvencies or financial crisis. The early warning system broke down time and again; though in hind sight one could suggest that much of the financial pressures could easily be tracked, identified and contained. Why did signals went unheeded for long and why did the failure occur provides an interesting reading as cited in References.

6. We have to be cognizant of limitations of practices and effectiveness of the system of banking supervision in applied realm. We need to have a balanced perception of what banking regulation and supervision can accomplish, no matter how elaborate its institutional capabilities are, arrayed with state of the art evaluation techniques and built-in safeguards. The technocracy of evaluation of banking system's financial strength no matter how sophisticated it maybe, it is no match to complexities of financial distress which requires judgment calls, or if contrasted with innovativeness of bankers and financiers, which is almost legendary. A central bank has to be vigilant to identify potential weakness of banks or financial institutions operating within a privatized and market based system. With these caveats in mind, let us see how supervision and regulatory system operates in Pakistan, and what are its outcome with respect to financial strength as profiled here in a summary fashion.

7. Foremost, since routine banking operations are impacted by central bank's monetary stance in its role as ***monetary authority,*** there is considerable overlap between objectives of monetary management and objectives of maintaining banking system soundness and solvency. These two functions have to be aligned. How these roles interface, and what their implications are needs to be sorted out to achieve monetary stability and at the same time maintain financial soundness of banking system.

8. The elements common to both are to maintain viable levels of banking credit, liquidity and interest rates; ensuring smooth interface of banking system with money markets operations, particularly government borrowing operations through treasury bills. It also includes liquidity management via absorption and injections of liquidity through trading of central bank funds, and managing its impact on banking credit and interest rates. Besides, it involves managing currency markets and exchange rates to the extent it is feasible, given open capital accounts and floating exchange rates. This is where impact of the two roles of central bank converges as a monetary authority and as a regulatory authority. The tweaking done for monetary controls bumps into the leading indicators of financial performance in an accordion like manner.

9. Sustainability of financial strength, therefore, has to be squared off with objective of broadening access of borrowers to banking credit; and in that context promote priority sector financing. It has also to be squared off with banking systems interface with financial markets, especially money markets; though superficially it seems that whatever transpires in money or capital markets does not have much link with routine banking operations. From the perspective of banks, the focus of their operations are earnings and profitability while maintaining capital adequacy and liquidity as specified under rules of banking supervision.

10. In between is the issue of monitoring and managing operations of quasi-banking institutions, the NBFIs. Currently, in Pakistan regulation and supervision of banks is responsibility of SBP, and those of non-bank financial institutions is responsibility of SECP. In many countries this function resides solely with the central bank as it was in Pakistan until early 2000s for the simple expedient that there was no SECP until its predecessor, the Corporate Law Authority, was re-incarnated in late 1990s into what SECP is today. The reason is, financial intermediation activities are to be treated and supervised at par, no matter where they originate from; since insolvency of a financial institution can quickly spread to the banking system and endanger solvency at system level, if it were to spark a run on the banks in the wake of a run on the institution where it started out in the first place. If this division of responsibility is to be institution-based, rather than function-based or activity-based, it will cause an unwelcome overlap between SBP and SECP as it has in the past, because operations of NBFIs impinge upon what financial intermediaries do regardless of their moorings or charted origin; and this is sole responsibility of SBP. Therefore, practice has been a ***de facto*** shift towards function based responsibilities.

11. SECP is supervising NBFI as a corporate entity, a company business, much the same way as it treats all other business companies regarding their incorporation, registration and compliance with rules and regulations with regard to their capital structure, their management, their financial status, reporting and disclosure; and for publicly owned companies, their access to long term debt markets, their listing and operations at stock market to raise equity finance. The SBP is looking after their financial strength and solvency, their access to banking credit and debt markets. It is a hazy dividing line but it has been the only way to supervise these companies.

12. Improving the system of banking regulation and supervision has been a key element of financial reforms in Pakistan and its implementation has paid rich dividends. The procedures and practices of SBP have improved, their facilities have been modernized and are as sophisticated as one would find among comparator countries. It has firmly established SBP in the saddle with regard to evaluation of financial performance. Currently, the system is supported by modern IT facilities at SBP and banks and an upgraded payments system which has enabled online banking, thus significantly improving speed and accuracy of financial information flow vital for routine supervision. A similar institutionalized mechanism for supervision of NBFIs would have improved soundness and solvency of the entire financial system, not just the banking system.

13. A major change is ***transparency*** in the processes of supervision and regulation as to what is being regulated and why, and by whom. That was lacking until late 1990s. There was not much information flow in public arena concerning business operations of banks and NBFIs ***at system level,*** much less on the state of their financial health with regard to impaired capital, NPLs, and other weaknesses that were source of financial distress. SBP always had full access to information concerning banks with regard to their business operations and their state of profitability, capital adequacy and soundness at institutional level, but not at system level.

14. Information flow and analysis started with launching of annual series of Financial Sector Assessment (FSA) and Banking System Reviews (BSR) by SBP. The BSR reports of earlier years, and now Quarterly Reports on Banking Performance focus on latest developments concerning soundness of banking system. Their evaluation is based on routine reporting required under disclosure laws enacted during reforms. ***Prudential regulations*** have been revamped and their practices improved to meet international standards in compliance with Basel accord, covering operations of mainstream banks, and also for micro-finance banks and Islamic finance institutions. Similar

guidelines have been stipulated and implemented for NBFIs like investment companies, leasing companies, foreign exchange companies, and mutual funds. Compliance with prudential regulations and guidelines is ascertained largely through ***on-site examinations*** or through ***off-site surveillance,*** central to banking supervision. These guidelines focus on capital adequacy with reference to risk-weighted assets, portfolio quality, management of NPLs, earnings and profitability, adequacy of liquidity levels, and lately sensitivity and stress tests.

15. Currently, banking supervision and regulatory system in Pakistan is comprehensive and it is well structured; There are differences in practices, coverage and depth of on-site surveillance of 36 odd commercial banks with about 8600 branches. Supervision of Islamic banks presents another dimension because they are operating with different sets of rules, procedures and practices that are not uniform across banks owing to differences in transactional interpretations by those concerned. As for improving the capacity of supervisory staff at SBP, their needs of training is a perennial one. The staff is outnumbered and could possibly be outmaneuvered at times. There is always room for improvement owing to the dynamism of banking practices that are always shifting in response to ground realities.

Section 1: Banking System
Performance Evaluation; CAMELS Analysis

1. The soundness and solvency analysis of banking system of Pakistan is regularly being done by SBP and published every quarter of the year, using CAMELS analysis focused on ***c***apital, ***a***ssets, ***m***anagement, ***e***quity and ***l***iquidity together with ***s****ensitivity* tests. At banking system level, these institutional indicators are aggregated and sensitivity analysis to shocks and their test results are added, which provide a set of indicators, CAMELS, used to determine financial strength or fragilities at banking system level. This task is undertaken first at institutional level because that is where remedial measures are applied. Based on the same results, a ***credit rating system*** of banks has been developed by rating agencies, independent of banking supervision system and it is now operational and these ratings are available to the public. This rating is different from SBP assigned ratings as part of its Institutional Risk Assessment Framework (IRAF).

2. ***Financial disclosure*** requirements are most stringent and these are based on Chart of Accounts. There is now in place an ***early-warning system*** of sorts though how effective it is can not be determined. A supervision framework for Islamic Finance institutions is being developed and it has long ways to go to satisfy their operational needs. SBP and banks have to wade through the thicket of what is Sharia compliance, item by item, most of the times. A ***safety-net*** is contemplated via a deposit insurance scheme, though there are several lingering issues to be resolved. A review of all these elements is not possible here, but evaluation of soundness and solvency can be gauged from discussion given below.

3. The uppermost concern of SBP has been maintaining soundness and solvency of the financial system. Evaluation of banking system shows that at the system level financial strength and soundness of banking system has considerably improved, substantiated by ***CAMELS indicators***. Its capability to withstands various types of shocks is strong within plausible limits. It may face difficulties in extreme situations whose probability of occurrence is largely remote. This conclusion is shared in the evaluation of IMF-WB group in their FSSA report on Pakistan conducted in previous years.

Capital Adequacy

4. Among solvency indicators, the first is ***capital adequacy*** based on assessment of bank's capital to risk weighted assets, interpreted as capital adequacy ratio, ***CAR.*** This capital adequacy ratio was around 9 percent in early years. It began to rise in 2004 and during second half of the decade it was about 12 percent. *(Data Set 3.3)* During FY08-10, it rose to an all time high of 14 percent in spite of the rise in non-performing loans, the most risky assets in the loan portfolio. This assessment hinges upon minimum capital requirements. For years, minimum capital requirement (MCR) was fairly low at around Rs 500 million; it was raised to Rs 1 billion in 2002. In 2004, it was again raised to Rs 2 billion and banks were required to comply with it by end of 2005. This increase in paid-up capital together with cleaning up of the loan portfolio of bad loans was the main factor leading to improvement in the risk weighted capital adequacy ratio, ***CAR***, a statutory obligation for all banks regardless of their ownership.

5. A great deal of quarterly data and analysis is available in SBP reports concerning capital adequacy in its various dimensions including Tier-1 capital and total capital for all major categories of banks, but time series data is also needed on the ***amounts or size*** of risk-weighted assets and variations

in the size of Tier-1 or core capital. Similarly, the series on NPLs and net NPLs is reported but the series on provisioning reported on balance sheet basis does not square-off with the differential between NPLs and net NPLs which is to be interpreted as provisioning plus loan write-offs. Likewise no separate time series estimates are available on costs of intermediation, differentiated from total administrative expenses that are spread over total assets. These data problems aside, there is a wealth of statistical information available for the analysis presented here.

6. After 2005, on the heels of **Basel - 2** Accord that Pakistan signed in 2005 with the commitment to start implementation in 2007, SBP further raised minimum paid up capital to Rs seven billion to be accomplished by end of 2010. This has been achieved, because the total share capital of all banks in mid-2010 was Rs 357.2 billion amounting to close to Rs 9 billion per bank, surpassing Rs 7 billion required. As a result, all other capital based ratios have improved regardless what adjustments are made to account for risk element inherent in the assets of banking system. In 2009, SBP further increased minimum paid up capital to Rs 10 billion to be achieved by 2013 at the rate of Rs one billion per year. Already, the share of ***core capital*** of banks is well over 80 percent of total capital, ahead of comparative benchmarks for adequate capitalization levels for banks.

7. One could take issues with such a steep rise in minimum capital requirements, the main one being whether capital increase of such magnitudes is warranted, and if so, how increase in MCR adds to margin of safety. In what ways current level of banking capital is inadequate, even though capital adequacy has risen to high levels in recent years. These issue are not settled by any means. Looks like that both BIS and IMF were not fully cognizant of implications in the context of open capital accounts and their aftermath. For Pakistan, compliance to Basel-2 was driven more by the prospect that it will enable the government to borrow from multilaterals or bilaterals which otherwise would be difficult.

8. A swift rise of minimum capital requirements over a few years is a powerful barrier to entry for new banks seeking incorporation and a banking charter, though not for non-bank entities who are incorporated under companies charter. Enhancing solvency is important indeed, so is enhancing competition; but minimum capital requirements are likely to thwart competition because these are a barrier to entry; so goes the argument. Does Pakistan need more banks to enhance competition? Is the entry of new banks only way to enhance competition? In the same vein, do we need more Islamic banks? The answers are not so clear cut.

9. Increase in minimum capital requirements do not eliminate risk in the asset structure of banking system, because portfolio risks are not arising out of capital inadequacy; they are arising from lending operations. The ratio of risk weighted assets to total assets has been rising. It increased from a reported 42 percent in early 2000s to an estimated level of about 64 to 66 percent towards close of the decade as derived from SBP adequacy ratio data streams. This happened in parallel to a substantial increase in capital adequacy ratio from 9.7 percent in 2000 to about 14 percent in 2010, in spite of rising NPLs, write-offs and all. There were annual variations in between, but ***CAR*** remained at fairly high levels.

10. The ratio of Tier -1 capital to risk-weighted assets remained low but stable in early years of the decade in the range of 6 percent to about 8 percent. Then it began to climb and quickly reached to about 10 percent during 2007-08, and rose further to 11.7 percent in 2010. Therefore, capital base of Pakistan's banking system is much stronger today than it was at the close of reform era. Perhaps this is the reason, banking system was not buffeted by collapse of domestic stock market, though it did register a significant increase in risk weighted assets. Nor it was affected much by financial crisis that gripped advanced countries at the same time; but the reason was a fairly insular banking system not exposed to vicissitudes of capital flows even though capital accounts have remained open throughout.

Asset Quality - *Burden of NPLs*

11. Asset quality revolves around the proportion of risk weighted assets in total assets or the ratio of non-performing loans (NPLs) in total assets. The management of NPLs by the banking system has considerably improved over the past years, and the burden of NPLs does not pose a threat to the solvency of the banking system, large and growing though it is. As discussed in Chapter 7, total NPLs of the banking system have doubled over the past decade showing a rise in defaults based on stringent evaluation standards using market-based criteria. The ratio of NPLs to gross loans of the banking system outstanding declined from about 24 percent in 2000 to half its level within four years. It was 11.6 percent in 2004 and declined further to about 7 percent by 2006. This is a dramatic decline in this ratio over such a short period. Thereafter NPLs rose from Rs 173 billion in 2006, the lowest they have ever been, to Rs 494 billion by end of 2010. *(Data Set 3.3)* Consequently, the ratio of NPLs to gross banking loans outstanding began to rise and was an estimated 14.7 percent by 2010.

12. The same pattern is evidenced in ***net NPLs*** and capital base. There was a dramatic decline in net NPLs from Rs 108 billion in 2000 to Rs 30 billion in 2007 which engendered a great deal of confidence that the corner has finally been turned in the decades long trends of defaults. Thereafter, net NPLs began to rise and by end of the decade net NPLs were Rs 143 billion, much higher than what they were at the start, but increase in net NPLs was moderated owing to substantial provisioning as discussed in Chapter 7, though provisioning was not fast enough and did not keep pace with rising NPLs. The ratio of net NPLs to total capital followed the same pattern. It was 145 percent in 2001, the highest it ever has been. Afterwards, there was a steep drop in this ratio to 30.7 percent by 2004, and it went down further to about 5.4 percent by 2007. Since then, there has been a significant increase in this ratio as it was estimated at 21 percent by 2010. This is high indeed, but it is at a more comfortable level and suggests that loan defaults no longer pose a threat to solvency of banking system.

13. Risk weighting aside, the phenomenal increase in minimum paid up capital has smothered risks of loan portfolio of banking system even though proportion of risk weighted assets has increased over the past years; but risks of banking have not disappeared. The management of banking risks of various types remains a concern due to substantial increase in banking credit over the past decade as well as a meteoric rise in the number of borrowers with varying risk profiles. This was to be expected after privatization and deregulation of credit markets, a process that has led to more risks in bank lending if the comparative experience are any guide in countries at similar stages of post reform era.

14. The issue is what proportion of total loan portfolio in non-performing loans is tolerable before it becomes a threat to the lending bank. As long as non-performance is manageable to a creditor bank through in-house remedies to keep the loan *current*, such as enhanced grace period as part of loan restructuring, recall of third party guarantees, or partial write-offs, the non-performing loans do not pose a threat to solvency of the creditor bank, though in the process, its profitability is compromised. In the literature it is known as ever-greening of loan portfolio. Such practices do not lead anywhere if borrower's ability is compromised beyond rescue. By the time stage arrives to seek recourse to underlying collateral through courts and liquidation, it is too late because loan recovery through courts takes several years, large expenses and outcome is uncertain. It can not be relied upon to provide any meaningful relief to the lending bank from non-performance. For all it is worth, the loan has turned into a loss and that loss has to appear on balance sheet of the bank as a charge against its capital.

15. The current profile of NPLs is vastly different from the past. The public sector has jettisoned much of its liability of loss coverage and the need for periodic equity infusions through privatization of major state-owned financial institutions, but this liability is potentially alive for a few institutions whose trend of NPLs has not reversed. A part of cost of provisioning has been assimilated and recycled into the balance sheets of financial institutions, raising intermediation costs which refuse to be compressed beyond current levels. Since 75 percent of NPLs of the banking system fall in the loss category, SBP issued guidelines for write-offs of irrecoverable loans which enabled banks to settle a large amount of NPLs. The banks recovered some and turned part of NPLs into performing loans while borrowers received a partial waiver in their outstanding liabilities.

16. For the same reasons, resolution of problem banks is no longer a pressing issue that it was during the 1990s when a large part of the banking system was in financial distress. There are now only a few problem banks but they do not pose a systemic threat. Private banks are likely to impose a much tighter discipline on lending practices to prevent incidence of loan defaults, but how far will it be contained to stem the losses to banking system remains uncertain given the recent rise of defaults owing to ever present market risks and enhanced exposure to new clients.

17. Most indicators of asset quality show that the pervasive disregard to sound lending practices that prevailed before has given way to rather cautious lending. The management of NPLs, restructuring of loss-leaders, closing down of the DFIs, a much improved regulatory capacity and diligent oversight functions, a firmness in dealing with the wayward banks by the authorities concerned rarely exhibited before, all these factors have contributed to this improvement. There are no imminent threats to ***solvency*** of the banking system that loomed large during the 1990s. The risks are alive because NPLs have not vanished and their burden is large. This burden has been managed through provisioning, but at the same time the source of NPLs, the defaults have been checked through a combination of privatized banking and enhancement of owner's capital.

18. There are two potential risks to solvency, however. One is lodged in the portfolio of consumer finance and credit card operations; the other is lodged in the investment portfolio, though it is not worrisome, given that exposure of banks to stock market is no more than 6 percent. Besides, it has been contained by exposure limits in stock markets set by SBP and have been complied with. Regulatory regime governing financial sector can only create conditions which enable banks to achieve ***efficiency*** of intermediation. In

times of reforms and transition, this is accomplished through liberalization of entry of new financial institutions, activity-based deregulation whereby qualified NBFIs can engage in bank-like lending, and liberalization of interest rates both on deposit and lending side. Institutions are free to set interest rates within a band determined by what the competition is offering.

19. This has happened in Pakistan, and this trend has impacted on efficiency of intermediation gauged by intermediation costs. It has forced financial institutions be they banks or NBFIs, to streamline their cost structure, improve their operations and their organisational structure though large interest spreads persist, and are unlikely to be reduced any time soon. There is hardly much prospect of lending rates to go down any further below from current levels given market pressures and given that they are affected by cost structure of ***loss leaders***. Who the loss leaders are in current times and what impact they have on the structure of lending rates needs to be further investigated.

Banking Intermediation Costs

20. Intermediation costs of banking system are not part of ***CAMEL*** indictors, but reflect operating ***efficiency of banks*** though only on funding side, since it is the ratio of administrative expenses to average amount of deposits and borrowings of a financial institution and thus are exclusive of costs of provisioning for NPLs. That is, operating costs relative to funding structure are critical; not relative to assets accumulated through lending and investing. It is not only the efficiency of banks in mobilizing funds that matters, rather equally significant is how cost effective banks are in their lending and investing operations.

21. The ratio of operating expenses to gross income comes closer as a proxy indicator, but it is not a true gauge of banking efficiency as such. Improvement in this ratio among privatized banks in Pakistan has occurred after a great deal of restructuring and staff reduction had taken place which enabled these banks to cap growth of administrative expenses. SBP estimates intermediation costs as ratio of administrative expenses to deposits and borrowing; the funding side of banking operations, not lending or investing side. Using the same methodology, estimates for the past decades show a decline in intermediation costs from 3.1 percent in 2001 to a low of 2.5 percent during middle years and a rising trend during second half of the decade to an estimated 3.3 percent in 2010.

22. A better estimate of the costs would have to be based on financial intermediation, because that is what commercial banks are supposed to do, rather than engage in syndication, mergers, leveraged buy-outs or other off-balance sheet activities. If viewed this way, intermediation costs are higher. They were about 4 percent in 2000, declined in the middle years, and their average was 3.5 percent during second half of the decade. This would suggest that banking efficiency improved during mid-decade; thereafter it worsened during second half of the decade. These costs are above those prevailing in comparator countries, but conclusions like these are hazardous without a thorough look at comparative cost structure.

23. The high levels of intermediation costs are a concern because generally banking deposit costs are fairly low. Borrowing costs are close to market benchmark interest rates, but in terms of amounts involved, borrowing costs were around one tenth of total funding costs of banking system at close of the decade, though there has been a long term decline in the proportion of market based costs of borrowing in total funding. Therefore intermediation costs should have gone down; instead, in the second half of the decade they show a rising trend. This means banks will have to take steps to contain rise in their administrative expenses.

24. The cost structure prevailing in current times is an outcome after a great deal of restructuring and staff reduction that occurred which has enabled banks to cap growth of administrative expenses during the first half of the decade. During the 1990s, improvement in cost structure occurred through underwriting expenses of restructuring by government at the time of their privatization. This process is complete now. No more cost reductions are to be had through restructuring alone. The issue of high intermediation costs is likely to remain with banking system for coming years.

25. Another way to look at intermediation efficiency is the ratio of administrative expenses to gross interest income which has stayed at around one third for most years of the past decade, but with considerable volatility in between. This ratio would be even lower if both interest and non-interest income on gross basis were to be taken into account. This ratio has been volatile during middle years of the decade and rose to as high as 55 percent and then it declined to 32 percent in later years, back to what it was in early years of the decade. This exercise, however, is not to dampen costs and paint a rosy picture at the time of annual meeting of shareholders; rather it is a system level analysis of banking system. Since their main business is banking; one has to focus on gross income from banking business as such rather than consolidated business of banks. For that purpose, costs have to be

divided into banking and non-banking business costs, because funding base of banks in Pakistan is beholden to deposits not borrowings to enable them to undertake non-banking businesses. Banks do borrow to enhance their funding base, provided there are opportunities of interest rate arbitrage large enough to compensate for costs, not to speak of interest rate risks.

Banking Spread

26. There has been a great deal of concern throughout the past decade that interest spreads are high ranging around 7 to 8 percent and this is mainly because of depressed rates of interest of deposits of no more than two to three percent for savings while current account deposits of substantial amounts are cost free to banks. Social equity consideration require that extra-ordinary banking profits ought to be brought down by raising deposit rates, so was the logic of these assessments and muted protestations. At the other end, lending rates remained high around 12-14 percent though they declined in first half of the decade from levels that prevailed during mid-1990s through close of the decade.

27. Costs of funding, namely mark-up or returns on deposits and borrowings, have been volatile throughout the decade. In 2001, these costs averaged to about six percent at a time when borrowings of banks were very limited. *(Data Set 3.3a, line 50)* Thereafter these costs declined significantly and were 1.4 of total deposits and borrowings in 2004, the lowest it has ever been, and then began to rise again throughout the second half of the decade and was back to six percent by 2010. This did not happen because banks borrowed heavily and their borrowing costs through TFCs went up. There were a few issues of TFCs by banks during 2008-10, the last three years. Bulk of bank funding has remained deposit based; banks have not borrowed much to enhance their funding base. On the other side of the ledger, gross return to banks from lending and investing as a ratio of total net loans outstanding and investments were also volatile throughout the past decade. This ratio was 13.2 percent in 2001, and then declined for a few years to 7.7 percent by 2005. During the second half of the decade this ratio began to rise and by close of the decade it was 11.5 percent. *(Data Set 3.3a, line 49)*

28. We have estimated gross banking spread as the ***difference*** between the ***average*** rate of return, mark-up or interest paid on deposits or borrowings, interpreted as costs of funding; and its counterpart ***average*** ratio of return, mark-up or interest earned on bank lending and investments. These averages

are derived from macrofinancial aggregates of banking system concerning gross earnings on loans and investment, and expenses on deposits and borrowings. ***Gross banking spread*** thus estimated was around five percent in early years with the exception of 2000, *(Data Set 3.3)* during early years of the decade. During second half of the decade it has remained fairly stable around five to six percent. This ***gross*** banking spread on the core business of financial intermediation is not out of line as popularly believed. Since intermediation cost is estimated around 3 percent during 2005-10, that leaves about 1.5 – 2 percent as average returns before taxes and no more than one percent as returns on assets of banking system. This is corroborated by consolidated income statements of the banking system.

29. From here on, one could estimate all kinds of returns and profitability, but those results are likely to be close enough to the trend as above. These long term trends are grounded in market based rates of interest, mark-up, returns or whatever label they may be accorded, both on income side and expenditure side. This is not surprising, because structural changes in the credit system occurred concurrently to volatility both in deposit and lending rates over the post reform period discussed earlier.

30. The estimates of ***banking interest spread*** are arrived as the differential between nominal weighted averages of returns on both interest bearing and Islamic modes of financing, *less* their counterpart nominal averages of returns or interest on PLS based or interest based deposits including current deposits. This spread was about 9 percent in early years, then declined to 6 percent by 2004; thereafter it began rising and reached around 9 percent by 2007, and has stayed there with some volatility in between. Therefore, the impression that banking spreads have been high during the second half of the decade is not unfounded. These trends are embedded into bank's deposit structure on one side, and into lending operations on the other side.

31. The difference between the two spreads is now obvious. Gross banking spreads refers to both lending and investment operations, the full spectrum of financial intermediation activities of banks; while interest rate spread refers only to the differential between costs of deposit raising and returns on lending operations. Since deposits and lending both are dominant part of overall banking portfolio, this interest spread is the main determinant of profitability of banking system. One could do a decomposition and figure out similar spreads for Islamic banking and interest based banking. Given the scissor like patterns across the two systems, the results are unlikely to diverge from this system level scenario.

Section 2: Managing Banking System
Risks and Profitability

1. The impact of these trends on profitability is he next issue to be analyzed. During 2005-10, given a faster decline in lending rates relative to the decline in deposit rates, there was some squeeze on nominal weighted average interest spread, which together with the cost of provisioning NPLs kept the pressure on profitability. The floor on interest rate decline was reached during middle years of the decade and after that they began to rise. Given a reasonably active credit market, pricing of loans in credit market is pegged to cost base of large banks, most of them were loss-leaders in the past and a good number are saddled with a large burden of NPLs relative to the new banks, both domestic and foreign.

2. What the trends will be in future is speculative, but in good measure it will depend on monetary stance adopted by SBP, shaped by inflationary trends and government borrowing needs – two rather conflicting concerns that will have be squared with. Banking spreads are not going to be rising to levels beyond what they have been in the second half of the decade which were a source of much hand-wringing among policy advisors. Given the pattern of interest rate movements, credit concentration, banking risks and costs, and burden of NPLs in privatized banking era and market-based financial regime discussed thus far, commercial banks returned to profitability after persistent losses for many years, though specialized banks are still unprofitable. There were losses during the early years of the decade but thereafter banks settled down and have shown reasonable profits during remainder of the decade.

3. Pressures on ***profitability*** of banks stem from drag of NPLs, enhanced competition and from a long term slide in the interest rates on government securities over the years which have always been a major source of steady income for the banks. There has been a marked improvement in profitability which has mitigated the specter of insolvency at institutional level that loomed large in early reform period, though not at system level. Nothing prevents a single financial institution becoming insolvent while rest of the banking system is doing well.

4. Profitability may be gauged through indicators like return on assets, ROA, both before and after tax; or return on equity, ROE, before and after tax; or the ratio of net interest income to gross income; or the cost income ratio. All of these indicators unanimously show a marked improvement

during the past decade in profitability of banking system in Pakistan after a shaky performance in early years. After tax ROA for the banking system was negative until CY01 and then turned positive and swiftly rose to about 2 percent. After stock market crash of 2008, it slipped back to one percent level where it has stayed during the last years of the decade.

5. After tax ROE is a broad indicator of profitability. It was negative until CY01, but thereafter it has shown an unprecedented increase to 35 percent in CY06, highest it ever reached during the past decade. Thereafter it slid back to half of it by 2010 to 17.7 percent. *(Data Set 3.3)* This quantum jump in early years was regarded a one time phenomenon, unlikely to be replicated in future on the same scale, and that is what has happened. Net interest income as a proportion of gross income showed a remarkable increase from 49 percent in CY97 to 72 percent in CY05, largely owing to scissor like pattern of interest rates on deposits and lending over this period discussed earlier.

6. A number of factors contributed to enhanced profitability. Banks were able to lower their interest expenses faster than decline in their interest income owing to low borrowing needs, followed by repricing of their interest bearing liabilities. This was accompanied by a large growth in non-interest income from investments and income on other assets over the past two years. In addition, improved operating and business practices and financial services; restructuring and reorganization and downsizing; staff reduction, branch closures, tightened internal costs, and controls on administrative expenses have helped to reduce their operating costs.

7. There has been a tightening of accounting and reporting standards the plugged the loopholes concerning treatment of profits in financial statements. A decline in corporate taxes on banking business from 56 percent to 42 percent did improve after tax profits, and got a further boost when tax rate was lowered to 35 percent. Specialized banks have continued to suffer losses throughout; their profitability indicators never became positive. Lately these losses have narrowed down but profitability for specialized banks remains as elusive as ever.

8. A related issue is where future ***income growth*** and profitability of banks will come from, given their reliance on traditional lines of credit and narrow borrower base, intensified competition, and given that their investment in T-bills and GoP securities has reached a level of profitability which is unlikely to be surpassed, though government borrowing patterns show no sign of abating. The sale of other securities was a one time capital

gain and is non-recurring. Decline in corporate taxes have reached the plateau at 35 percent; hence, future gain in profitability will have to come from improved costs and efficiency in banking operations.

9. Future income and profitability on core business of lending will remain a concern, though not as serious as it was in previous years. These pressures on earnings and profitability are likely to intensify rather than diminish focus of the banks on bankable segments of borrowers which has implications for banking credit to priority sectors like SME, exports, and agriculture, housing and infrastructure which hold large potential for growth of banking credit and the economy.

Managing Banking Risks

10. In this context, the issue is how well banks would be able to manage banking risks in a liberalized financial regime with market-based interest rates, floating exchange rates and exposure in foreign exchange reserve position, open external accounts, increased participation in FDIs and capital inflows. From the point of view of soundness as well as profitability, banks have to contend with ***credit risk*** and ***market risks*** including interest rate, exchange rate and equity price risks. In addition, when banks begin to diversify their borrower clientele in sectors they were not operating before like housing, they are likely to face enhanced risks due to their unfamiliarity with the sector as well as its borrowers.

11. The pattern of ***credit risk*** in routine bank lending to sectors of the economy has not changed much. If anything, it has increased owing to a move to new lines of lending like consumer credit. As long as the exposure of banks remains heavily concentrated towards large prime borrowers, this shift in the profile of credit risk will be manageable. If credit risk is not managed properly it eventually shows up as NPLs of the bank. It also shows up in concentration of banking credits in a few sectors of the economy or in a few segment of borrowers, or rising proportion of riskier loans in its portfolio, specially during times of rapid expansion of banking credits. As discussed earlier, NPLs of banking system are rising and there is overhang of past NPLs, though they are well provisioned and are within tolerance range of their capital base.

12. The impact of ***interest rate risk*** on the portfolio of a bank, both investment portfolio and loan portfolio is central to asset/liability management. The impact of interest rate changes is severe if there is a mismatch of maturity structure within the loan portfolio because of significant divergence in interest rates associated with these maturities. The risk may be enhanced depending on interest rate movements owing to switching by borrowers between various types of loans, or by depositors between various types of deposits, though in a much narrow range.

13. Unless the bank is able to compensate both on asset and liability sides of its balance sheet, it is likely to suffer a loss. In times of falling interest rates, banks would like to reprice their liabilities faster than their assets; that is, lower their interest rates on deposit liabilities faster than interest rates on their loans, their assets; hence their balance sheet is more liability sensitive. The borrowers would like to reprice their liabilities as well, that is they would refinance old loans at higher interest rates with new loans at lower interest rates, but in doing so they are repricing assets of the bank downwards, just the opposite of what bankers would like to do.

14. Similarly, in times of rising interest rates, interest income of banks increases relatively faster than their interest costs, mainly because banks reprice their loans faster than their deposits to reflect market interest costs, or because the structure of deposit interest rates is regulated, thereby preventing a full impact of rising interest rates on deposits. In this situation their balance sheet is relatively more asset sensitive with rising interest income. While banks are repricing their assets, depositors also would like to reprice their assets upwards, thereby narrowing the spread of bankers. How well these conflicting trends are managed, determines ability of banks to cope with changes in interest rates.

15. Interest rates were falling during most of early years of the decade and then stabilized, but during this period, overall profitability of banks was not compromised. Thereafter, when interest rates began to rise as they have during recent years at close of decade, this rise has been accompanied by a modest growth in banking profits. This indicates that during both periods, banks were able to absorb the impact of interest rates on their portfolio, be investment portfolio or loan portfolio.

16. Likewise, banks have been able to manage ***equity price risk*** over this period. When growth of stock market and equity prices continued unabated during boom period, and accelerated further, SBP placed a cap on the direct

exposure of banks in stock market placements. As a result, the share of direct exposure in total investments held by the banking system remained fairly small estimated at about 7 percent in those years. The indirect exposure through *badla* financing, namely carry over transactions was about high during middle of the decade, but then decreased further owing to restrictions placed on *badla* financing and its attempted replacement with margin financing. As it turned out, sources of financing did not create a risk factor in stock investment of the banking system.

17. Banks did suffer a decline in the value of their investment portfolio, but quickly recovered and by end of the decade, the impact was nowhere to be seen on their aggregate securities portfolio. This could be verified if portfolio data is decomposed into government securities and private securities; and then it is further decomposed into corporate stock holdings by quarter of the year, specially for 2008 and thereafter. As it was, when stock market tumbled, given the manageable banking system exposure to stock market, equity price risk remained manageable.

18. ***Exchange rate risk*** concerns exposure of banks on their foreign exchange liabilities. The banking system was shielded from exchange rate risk in the past owing to a number of explicit and implicit safeguards extended to them by the SBP in return to their surrendering their foreign exchange inflows, be on FCAs, remittances, or exports earnings. All this has changed since then in the new foreign exchange regime whereby commercial banks practically are on their own with regard to foreign exchange risks on their reserves, exporters' balances, foreign currency deposits where some revival has occurred, foreign exchange loans extended to the foreign companies or coustomers, and on their portfolio related operations in the foreign exchange markets.

Illiquidity vs Insolvency - *the Sequence*

19. From the point of view of soundness, the proposition put forth here that banks become insolvent first and illiquid later is likely to generate much debate among bankers and financiers. No matter how one perceives it, ***liquidity risk*** has to be managed well. Mitigation of this risk is largely a short term phenomenon at best, but it has the potential for serious financial difficulties if prudent levels of liquidity are not observed. It is defined as the risk that a bank or a financial institution may not be able to meet its payment obligations falling due without adversely affecting its profitability. Since

observance of liquidity levels is an statutory obligation, and the statutory liquidity ratio (SLR) is closely monitored by SBP, banking system has to keep adequate liquidity levels all times in compliance of SLR.

20. While financial institutions have a significant stake in being liquid, often in times of market boom they overexpose themselves and take positions which appear to be self-liquidating, but if they get stuck, the costs are significant. In times of squeeze, their first recourse is overnight markets for inter-bank funds which are exorbitantly expensive if liquidity crunch happens to be widespread; even otherwise overnight rates tend to be fairly high nearly always. Therefore, there is a premium on being liquid. What levels of liquidity are sufficient is a judgment call.

21. Observance of statutory liquidity ratio (SLR), currently specified at 24 percent of liquid liabilities, does not eliminate liquidity risk. For banking system in Pakistan this risk has emerged partly from inflation, and partly from rapid growth of banking credit. Currently, the liquid assets are nearly one third of total assets, and this is a reasonably comfortable position; their actual liquidity position is well in excess of statutory liquidity ratio of around 5 percent. The concern is that nearly half of the liquid assets of banking system are held in government securities, but not all of them are tradable in secondary markets except for a part of treasury bills and government investment bonds. There is a further squeeze on tradable portfolio because of a regulatory reclassification of securities held in banking system portfolio. This situation has been exacerbated by tight monetary policy being pursued by SBP. The open market operations have drained a good chunk of liquidity from the banking system.

Soundness of Banking System
Comparative Experiences

22. A cardinal lesson of banking and financial crises is that no amount of banking supervision is enough to prevent emergence of crises. Nearly all major crises occurred in countries who had well established system of supervision and first rate managers who had experience of previous episodes and were supposedly alive to potential for crisis though this was not enough to prevent a recurrence. That is a sobering thought if past two decades are any guide to events as they unfolded.

23. In times of financial distress, banks, particularly quasi-banking institutions, have a way of going belly-up not because of any lack of supervision, but mainly because of excesses of placements, untenable risk exposure, and herd behavior at garnering a piece of what is perceived in a hectic atmosphere as golden opportunities of profit or unusually large capital gains in a red-hot market; be it loan market, financial market, exchange market, or real estate market. Owing to ***contagion,*** open capital accounts and globalized financial linkages, there is an astounding rapidity in the onset of the crises and its monumental dimensions, once speculative exposures come to unravel as it did in the past. This has happened in developed countries, particularly in Japan and in the US. During the 1990s a few large commercial banks became insolvent in the US; and before any remedial action could be taken they had folded in spite of all the paraphernalia of a modern supervision system and an enviable system of information flow.

24. In recent times, the most celebrated among these is the banking crises of the US discussed in various chapters of this book. The crises began with the systemic failure of sub-prime mortgage lending and quickly escalated to insolvency of major financial institutions. The most comprehensive treatment of this crisis is to be found in "Financial Crisis Inquiry Report" of the US National Commission. There have been a spate of very good publications in the aftermath of this crisis; a few of those are listed in the Reference. This crisis has not yet run out of steam and has engulfed European economies as well. The post-crises evaluation and diagnosis of these crises -- and there is no dearth of these diagnoses--have pointed out one or the other weakness of banking supervision labeling it as the weakest link in the chain of regulatory structure. It seems that no matter how comprehensive the coverage of banking supervision maybe, there is always something hidden in an obscure nook or cranny of the system that is inadvertently left outside of surveillance and supervisory net of the central bank.

25. Earlier on and couple of decades ago, the fiasco of Savings and Loans Associations (S&Ls) in United States emerged on a grand scale after their deregulation in the early 1980s who were previously limited to personal guarantee loans and mortgage lending and were permitted them to do business like a bank. Their lending practices and procedures were sub-standard that eventually caused massive losses upwards of $500 billion to federal deposit insurance system (FDIC) and then ultimately to the government. This happened in spite of a state of the art system of checks and balances, proper disclosure and information flow and vigilant oversight of FDIC. The fiasco sparked a debate whether the safety net of FDIC should have been extended to S&Ls in the first place. That debate led nowhere.

26. Similarly, the Mexican crisis of mid-1990s and East Asian crisis of late 1990s happened even though their banking supervision and regulation systems and the sophistication of bankers and financiers managing the business operations and their expertise in handling capital inflows was regarded at par with international standards, if not exemplary. Both these groups also had the knowledge and experience of similar crises that erupted previously. What went wrong and why so swiftly? The post-crisis diagnosis reveals that one of the common element is herd behaviour in anticipation of more than normal market returns and overexposure of speculative variety in a few sectors.

27. As soon as the inflow began to dry out and the specter of foreign exchange illiquidity loomed large, investors wanted to exit before imminent devaluation of host country currency in face illiquidity. This mass exit of foreign capital, the reverse flow, is akin to a bank run domestically, and there is no safeguard against it, much the same way as there is no safeguard against a bank-run. And now, after the crisis of 2008, the spotlight has come back full circle to the inadequacies or weaknesses banking regulation and supervision system, and there is a feeling of despair with early warning system which is being blamed for not providing loud and clear signals of impending disaster.

Sensitivity of Banking System

Scenarios and Test Results

28. The crux of management of soundness and solvency of ***banking system,*** is to enhance its resilience, so that it can successfully absorb moderate levels of financial system shocks and economic instabilities, both domestic and external, while operating in market environment with open capital accounts and a vibrant external sector. This is a challenge to regulatory authority, such as SBP and also to managers of the financial institutions, alike. This management has to be accomplished within limited degrees of freedom available through a limited arsenal of indirect controls and at a time of increasing complexity of risk management owing to deregulation, increasing competition and emergence of new risk factors.

29. Lately, sensitivity analysis and stress testing is being done routinely and is common in many countries. As early as 2004, SBP issued Stress Testing Guidelines to financial institutions, both banks and DFIs, along the lines of stress techniques specified earlier on by the joint group of IMF-WB,

to conduct simplified sensitivity analysis and stress test of five different types of banking risks. These risks include: interest rate risk, exchange rate risk, and risk of equity prices; also, credit risk namely borrower default, and operational risk involving banking fraud or system failure.

30. These five types of risks cover most of the banking risks at institutional level, but their combination may not capture all possible types of risk scenarios. Their underlying assumptions are not uniform; they vary considerably among financial institutions, and may not always prevail in real market situations. With these caveats in mind, SBP guidelines also specified different levels of shocks to these risks based on observed and assumed movements in various risk elements. Towards 2005, the IMF-FSSA report put forth several recommendations to further strengthen soundness of financial system via enhancing capacity and resources of SECP to carry out evaluation of quasi-banking institutions, privatization of NBP and divestiture of other banks, revision of SBP Act to provide legal authority to conduct consolidated supervision and to strengthen its autonomy which has now been done.

31. About the same time, SBP started its own assessment of resilience of the banking system and conducted stress tests as reported for the first time in BSR05 involving 12 largest banks. Thereafter, stress testing has became a routine procedure and is now reported on quarterly basis. The results show slight variations; but the pattern of results has not diverged much in the post stock market crash period. The resilience of banking system has endured shocks emanating from liquidity and rising NPLs, two most significant shock factors to any banking system.

32. These exercise cover all three market risks, namely interest rate and exchange rate risks, equity price risks, and liquidity risk. In the first testing four stress scenarios were developed for each of these risks and their impact was estimated on the combined profitability and capital of these banks as a useful approximation to the impact at system level. The results showed that among these four risks, liquidity risk is relatively more worrisome and shock of liquidity risk is more severe for the reason that liquidity margins are thin, particularly if liquid assets exclude near-liquid government securities. If these are included, the amount of liquid assets with banks increase and consequently liquidity shocks are not so severe. Similar results were arrived at in tests conducted at close of the decade.

33. In early rounds, stress tests of credit risk shocks showed that degeneration of NPLs position of 10 largest banks is not a material threat to their solvency; it is manageable and banks will be able to withstand a

degeneration of their portfolio quality except for extreme situations which are unlikely to occur. The impairment of the quality of portfolio is exhibited in levels of NPLs of these large banks because if credit risk were to materialize, it shows up as NPLs. This was subsequently borne out with the swift rise of NPLs in the last three years of the decade. The rise of NPLs has not caused bank insolvency thus far. The test results of early rounds showed that capital adequacy of banks will be unimpaired and they will be able to tolerate as much as 10 percent increase in their NPLs together with 50 percent degeneration on their loan portfolio into classified loan category. Further, if the ratio of NPLs to loans currently estimated at 6.7 percent degenerated to as much as 33.5 percent, only then it will wipe out capital banks, not otherwise, meaning that banks are fairly strong and their solvency will be at stake only in extreme cases of far out shocks.

34. Similarly, the impact of shocks of upward interest rate movements together with parallel shifts of yield curve on the value of bank's portfolio is tolerable, except for a large shock in the case when interest rate increases by 100 basis points or 200 basis points and there is a parallel shift and flattening of yield curve. The impact on gross income is more pronounced and the percentage loss is substantial.

35. The shock of exchange rate movements is more manageable because foreign assets of banks are larger than their foreign currency liabilities; therefore, a depreciation of exchange rate of as much as 25 percent, does not have any negative impact on their capital; in fact their CAR appreciates. Their borrowers will face difficulties in loan servicing of foreign credits; therefore the value of their foreign currency loan portfolio will decrease. If there were to be an appreciation of exchange rate by 20 percent, it will lower the rupee value of their assets and their CAR will decline but slightly. It seems that banks are resilient enough to absorb shocks of any combination of exchange rate movements within these ranges together with counterpart impact of their clients.

36. The shock of a decrease in equity prices, that is, a fall in stock price index in the range of 20-40 percent will not have much negative impact on the banks, and banks will be able to ride out these adverse movements. The shock of liquidity risk is more sever than any of the above for the reason that liquidity margins of the banks are thin, particularly illiquid assets exclude near liquid government securities. If these are included, the amounts of liquid assets with the banks increase and consequently liquidity shocks are not so sever.

37. There is a corroboration of the central conclusions of SBP tests with those of IMF-FSSA report based on its own sensitivity and stress tests. The results show that Pakistan's financial system is resilient enough to absorb various types of moderate shocks and there are no imminent threat, except in extraordinary situations where several types of shocks may occur simultaneously and in a deadly combination, though the report does not elaborate upon the combination of shocks or their severity. The report contends that there are weaknesses in the system and there is room for improvement, but there are no systemic weaknesses that may threaten soundness or solvency of the banking system.

38. At the close of decade, the results of SBP's stress tests with regard to sensitivities to the four categories of shocks reconfirm that banking system is capable of riding out adverse financial and economic conditions. Its solvency and financial strength is not going to be easily compromised. For example, these tests show that rising net NPLs have to be twice the present levels to cause a deterioration of loan portfolio to have an impact on capital base of the banking system. As for interest rate and exchange rate risks are concerned, those risks do not pose a threat within conceivable levels of deterioration. Liquidity levels of banking system remains fairly strong, and there are no imminent dangers of illiquidity and insolvency. Details of these sensitivity tests are reassuring indeed in spite of the chaotic situation that is swirling around in current times.

Good Bankers vs Bad Bankers

39. The nub of the issue is ***prudent banking***, and this does need further elaboration after one has gone through this volume, or any of the literature cited in the ***Reference.*** Among these, Aristobulo de Juan's seminal paper ***"From Good Bankers to Bad Bankers"*** is particularly illuminating. It was written nearly two decades ago but it is still relevant. *(Reference, 77)* In annals of banking, ***good bankers*** have been known to become ***bad bankers***, and this process unfolds right under the nose of bank examiners and supervisors. This has happened time again in developed and developing countries alike. Spotting this trend is a judgment call and is a matter of experience. Whenever basic rules of prudent banking have been violated, deliberately and systematically, it has led to crisis. In between there are numerous episodes of solitary malpractices that have led to demise of well heeled and financially strong institutions, and those have been well documented.

40. This transformation occurs because of inability of bankers or financiers to keep a lid on acceptable business risks if they do materialize, and tame these risks when they get out line but well before they are beyond their reach. This is a precarious situation, a tight rope walk and when it unwinds, there is always an unwillingness to close loosing operations, take early losses and quit in the early stages when these losses are still bearable. Instead, the instinct of most bankers is to keep the borrowers alive through recycling and renewals of bad loans into loans, a window dressing exercise; or worse yet, advancing effectively insolvent borrowers additional fresh loans to tide over cash flow problems and imminent illiquidity, thereby getting deeper into financial distress. In this sense, insolvency occurs first, illiquidity follows later. The borrowers are already in deep distress by then, and they are well past the stage of routine rescue operations because their illiquidity originates not from their routine business turnover and cash flows, rather from structural weaknesses in their operations.

41. This happened in Pakistan in the nationalized banking era, when banks kept bailing out insolvent PSEs and doubtful business outfits, lending more in collusion with PSE's management than on the basis of prudent lending criteria. When NPLs emerged they were written. This happened at a time that banking supervision of SBP was alive to these perils. Therefore, it is not enough to acquire command over the technocracy of banking supervision; rather implementation of banking regulations and guidelines and ensuring their compliance is the key factor. That is the difference between the pre-reform and post-reform era in Pakistan. Monitoring and implementation, both have come long ways from what prevailed before. The financial strength of banking institutions has improved as evident from CAMEL analysis discussed earlier.

Table 3.3 **Banking System Performance - Pakistan** *End Year, Rs billions*

	Calendar Year, All Banks \ 1	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010e
5	**Banking System, Assets CY**	**1806**	**1978**	**2237**	**2559**	**3061**	**3662**	**4377**	**5224**	**5682**	**6454**	**7027**
6	Banking System Credit (net Loans)	863	923	923	1109	1586	1989	2441	2717	3210	3227	3348
7	Banking System, Investment (net)	314	349	704	792	678	801	833	1280	1089	1699	2123
8	**Banking Sys Credit + Investment (net)**	**1177**	**1272**	**1627**	**1901**	**2264**	**2790**	**3274**	**3997**	**4299**	**4926**	**5471**
9	**Banking System Equity**	**81**	**76**	**107**	**140**	**199**	**293**	**408**	**555**	**579**	**648**	**678**
10	**Banking System Liabilites**	**1724**	**1902**	**2130**	**2419**	**2862**	**3369**	**3969**	**4669**	**5103**	**5804**	**6349**
11	**Total Funding of Banking System**	**1592**	**1776**	**1970**	**2278**	**2700**	**3171**	**3710**	**4346**	**4714**	**5407**	**5943**
12	***Banking System, Deposits***	1341	1507	1691	1978	2410	2833	3271	3887	4251	4755	5401
13	***Borrowings, Interbank***	*251*	*269*	*279*	*300*	*290*	*338*	*439*	*459*	*463*	*652*	*542*
14												
15	**NPLs - All Banks**	**240**	**244**	**232**	**211**	**200**	**177**	**173**	**214**	**314**	**432**	**494**
16	**Net NPLs - All Banks**	**108**	**111**	**91**	**76**	**61**	**45**	**37**	**30**	**79**	**125**	**143**
17	*hence,* Provisiong & Loan Write-off \ 2	132	134	140	135	139	132	137	184	235	307	351
18	Provisioning as ratio of NPLs, %	55.0	54.7	60.6	63.9	69.4	74.4	78.9	86.0	74.8	71.1	71.1
19	**Gross Banking System Credit \ 3**	**1103**	**1167**	**1155**	**1320**	**1786**	**2166**	**2614**	**2931**	**3524**	**3659**	**3842**
20	NPLs / Total Gross Loans, % \ 4	23.5	23.4	21.8	17.0	11.6	8.3	6.9	7.6	10.5	12.6	14.7
21	Net NPLs / Total Capital, %	133.3	145.4	85.3	54.4	30.7	15.5	8.9	5.4	13.6	19.3	21.1
22												
23	Mark-up / Returns earned as ratio of loans + Inv		13.2	8.6	6.2	5.3	7.7	9.6	9.7	11.3	12.0	11.5
24	Mark-up, Returns paid, ratio of Depos + Borrowings		5.9	3.9	1.8	1.4	2.4	3.7	4.2	5.2	6.0	6.0
25	**Gross Banking Spread**		***7.4***	***4.7***	***4.3***	***3.9***	***5.3***	***5.9***	***5.4***	***6.0***	***6.0***	***5.5***
26	*Nominal Weighted Average Rates on Deposits, PLS plus interest bearing*											
27	incl current deposits - All Banks	5.39	4.33	3.35	1.13	0.95	1.86	2.53	2.66	4.38	4.29	4.39
28	*Nominal Weighted Average Interest Rates on Interest Bearing Advances and Islamic modes of Financing*											
29	*All Banks*	13.55	13.45	12.87	7.76	6.99	10.17	11.12	11.56	14.60	13.18	13.36
30	**Banking Interest Spread**	**8.2**	**9.1**	**9.5**	**6.6**	**6.0**	**8.3**	**8.6**	**8.9**	**10.2**	**8.9**	**9.0**
31												
32	SaF Data Set	*Source: SBP Banking Statistics 2010, Table 19.1, pp 203-204,Reports. Banking Performance QRs various issues 2006-10*										
33	\ 1 All Banks CY data series, table 19.1, Banking Statistics 2010 and table 21.1 in earlier ones; does not match with data in table 2.8 of Stat Bulletins.											
34	\ 2 Provisioning and Loan write-offs estimated as residual of total NPLs all banks, ***less*** net NPLs as reported.											
35	\ 3 Estimated as total of banking system credit net ***plus*** NPLs			\ 4 As reported in Soundness Indicators; does not match with estimated ratio on data here								
36												

Data Set 3.3a — **Banking System Perfromance** — *End Year, Rs billions*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010e
Mark-up, Returns, Interest Income		168	140	117	121	216	314	386	485	591	631
Mark-up, Returns, Interest Expenses		104	77	42	38	76	137	184	247	324	341
Net Interest Income (NII)		***64***	***63***	***75***	***83***	***141***	***177***	***201***	***238***	***266***	***289***
Provisions, Debt Write-offs \ 1		*23*	*13*	*18*	*11*	*19*	*22*	*60*	*106*	*115*	*97*
Net Interest Income after Provisions		***41***	***50***	***56***	***72***	***121***	***156***	***142***	***133***	***151***	***192***
Non-interest Income		27	33	51	48	55	71	96	106	102	101
Administrative Expenses	47	54	55	58	68	79	100	126	162	180	198
Profits before Taxes		***-10***	***13***	***25***	***35***	***94***	***122***	***110***	***70***	***67***	***89***
Risk Weighted Assets, amounts \ 2	764	843	902	1190	1751	2355	2946	3542	4131	4176	4462
						Ratios					
RWA Capital Adequacy Ratio, CAR	9.7	8.8	8.8	8.5	10.5	11.3	12.7	12.3	12.2	14.0	13.9
Capital toTotal Assets ratio	4.5	3.8	4.8	5.5	6.5	8.0	9.3	10.6	10.2	10.0	9.6
Tier 1 Capital to RWA ratio	8.3	7.3	6.2	6.5	7.6	8.3	10.0	10.0	10.1	11.6	11.7
RWAssets to total asset ratio	42.3	42.6	40.3	46.5	57.2	64.3	67.3	67.8	72.7	64.7	63.5
Intermediation Costs, Credit + Inv based	4.0	4.2	3.4	3.1	3.0	2.8	3.1	3.2	3.8	3.7	3.6
Intermediation Costs, funding based	3.0	3.0	2.8	2.5	2.5	2.5	2.7	2.9	3.4	3.3	3.3
Return on Assets, after tax ROA	-0.2	-0.5	0.1	1.0	1.2	1.8	2.1	1.5	0.8	0.9	1.1
Return on Equity, after tax ROE	-3.5	-12.6	3.2	20.0	20.3	25.0	35.2	22.6	11.4	13.2	17.7
Net Int Income / Gross Income	62.3	70.4	67.1	59.3	62.8	72.0	70.9	68.2	70.3	72.4	74.7
Liquidity: Liquid Assets / Total Assets	36.0	38.5	46.7	45.1	36.6	33.7	32.0	33.6	28.2	32.7	34.2
Liquid Assets / Total Deposits	48.5	50.7	61.8	58.5	46.5	43.6	42.7	45.1	37.7	44.5	45.3
Loans / Total Deposits	66.2	61.7	54.9	56.4	65.8	70.3	74.6	69.7	75.2	67.7	63.0

SaF Data Set — *Source: SBP Banking Statistics, 2010, Table 19.1, pp 203-204, QRs various issues 2006-10, Data Annexes*

\ 1 As reported in Banking Statistics, SBP 2010, Table 19.1, pp 202-203 and differes from estimates given in Data Set 3.3

\ 2 Risk Weighted Assets estimated from ratio data.

72												
73	**Data Set 3.3b**			**Banking System Perfromance**				***End Year, Rs billions***				
74		**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010e**
75												
76	***Capital Required \ 1***					***139***	***188***	***231***	***282***	***366***	***422***	
77	Tier-1 Capital, Actual					132	195	288	372	417	492	
78	Tier-1 Capital, Required					70	94	115	141	183	211	
79	Supplementary Capital					51	70	76	87	82	104	
80	***Total Capital***					183	265	364	459	499	596	
81												
82												
83		*Average Annual Growth Rates*								*Average Annual Growth Rates*		
84	**Banking Operations,** ***CY as of end Dec***	**CY00-10**	**CY00-05**	**CY05-10**						**CY01-10**	**CY01-05**	**CY05-10**
85	Banking System, Assets CY	14.6%	15.2%	13.9%		Mark-up, Returns, Interest Income				15.8%	6.5%	23.9%
86	Banking System Credit (net Loans)	14.5%	18.2%	11.0%		Mark-up, Returns, Interest Expenses				14.1%	-7.5%	35.0%
87	Banking System, Investment (net)	21.1%	20.6%	21.5%		Provisions, Debt Write-offs				17.3%	-4.7%	38.5%
88	Banking Sys Credit + Investment (net)	16.6%	18.8%	14.4%		***Net Interest Income after Provisions***				***18.7%***	***31.1%***	***9.7%***
89	Banking System Equity	23.7%	29.3%	18.3%		Non-Mark-up Inocme				15.8%	19.5%	12.9%
90	Banking System Liabilites	13.9%	14.3%	13.5%		Admin Expenses				15.5%	10.0%	20.2%
91	Total Funding of Banking System	14.1%	14.8%	13.4%		*Risk Weighted Assets*				20.3%	29.3%	13.6%
92	Banking System, Deposits	14.9%	16.1%	13.8%								
93	Borrowings, Interbank	8.0%	6.1%	9.9%								
94												
95	Mark up, Interest earnings, growth rates			-16.7	-16.4	3.4	78.5	45.4	22.9	25.6	21.9	6.8
96	Mark up, Interest expenses, growth rates			-26.0	-45.5	-9.5	100.0	80.3	34.3	34.2	31.2	5.2
97												
98	SaF Data Set	*Source: SBP Banking Statistics, 2010, QRs various issues 2006-10, Data Annexes*										
99	\ 1 From Quarterly Report, 2009, p-30											
100												

Chapter 14: Managing Financial System in Post-Reform Era

Thematics

Perspective on Managing Financial System
- Objectives of Stability - Revisited
- Where Distortions Arise From
- Antecedents - A Paradigm Shift, *Historical*
- Stability of Monetary System

Monetary Management vs System Management
- Stability: Prices, Interest Rates and Exchange Rate
- Soft Landing vs Hard Landing
- Monetary Stability – How Elusive it is?
- Interface with Financial Markets
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Financial System and the External Sector
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Chapter 14: Managing Financial System in Post-Reform Era

Section 1: Perspectives on Managing Financial System

1. This chapter brings together diverse strands of analysis as pursued in this applied study and its varied perceptions on a vast subject as financial system, with focus on soundness, stability and growth in post reform era. This is not an executive summary of findings, rather it is an attempt to rise above the forest and ascertain how financial system operates in a developing country like Pakistan and how it impacts on various segments of the economy and where it is headed for. These aspects are presently strewn all over the two volumes of this book. A good part of material has already been covered; there are repetitions here, perforce.

2. Let us begin with a central query. Do the financial system have an innate propensity to veer towards instability if left on their own devices while operating within a rubric of regulatory regime. It seems to be so, because need for managing financial system is invariably stated in terms of maintaining its stability, soundness and solvency to foster economic growth, with sustainability concerns and socio-economic objectives thrown in between. The core objectives were often articulated as maintaining price level, interest rate and exchange rate stability; broadening access of borrowers to banking credit; enhancing participation in financial markets while ensuring adequate levels of system wide liquidity; improving financial system infrastructure including payments system; and strengthening regulatory regime and the legal framework.

3. In the post reform era, the foremost issue is what are the ***remaining distortions*** or weaknesses in the financial system, how significant they are, and where do they originate from? Do they exist in the financial system, or do their roots lie elsewhere, such as in the system of governance or in the real sectors of the economy? A number of them are embedded in real sectors of the economy and if they get monetized, they would seeping into operations of financial system. What interventions are needed and how to balance them with economic and social priorities. What are intervention points, and how

those can be managed in fast moving financial markets, while being mindful of conflicting interests of stakeholders. This is a large agenda and its complexity will grow as financial system progresses and becomes more sophisticated in an open and liberalized financial regime.

4. Distortions in financial system are to be found in both structures; namely on financial intermediation side as well as financial markets side. These distortions may be rooted in the interest rate structure, say, in the structure of deposit rates; or distortions may exist in credit system in the way banking credit get allocated by markets. We may find distortions embedded in legal and regulatory framework; or they may be lodged in the system of licensing and entry; or in the system of exit, insolvency, bankruptcy, foreclosure and receivership. Distortions may be found in functioning of financial markets, including access and degrees of openness and competition. These distortions have to be identified and dealt with to maintain stability of financial system.

5. Stability with growth is focus of monetary management, while soundness and solvency are the focus of banking supervision and regulation, percolating down to institutional level, though there is no hard and fast division as such. The practice turns out to be that way. To maintain soundness, solvency and stability, the focus is on intermediation side because the size of banking system is large in Pakistan as it is in many developing countries. Hence, soundness and solvency of financial system is synonymous to solvency and soundness of banking system. Financial markets are left behind, though they are catching up fast. The paramountcy of banking system has been established in the discussions in Chapters 4 through 9 of this Volume. The issue is how banking system has fared thus far regarding soundness and solvency, and what are its prospects in post- reform era.

6. This perception should not be stretched though central bankers have a bias towards monetary management and tend to believe that this is all there is for keeping financial system on line; much the same way that some would like to believe managing the twin gaps via tinkering NDAs and NFAs is all that matters. Managing financial system is more than monetary management, though it is critical for maintaining stability and fostering growth of the economy via its impact on banking system, and through their operations in short term money markets. When this is combined with policy based changes in interest rates, their impact on equity and bond market price completes this dominance of monetary control. Monetary management, however, should not be seen as panacea of what ails financial system at large.

7. On the financial markets side, main objective is to keep money and capital markets stable and avoid volatility, swings and market corrections if that can be achieved, though markets have a way of surprising everyone. Financial market behavior is notoriously unpredictable and there is hardly much that can be done to avoid periodic episodes of swings or volatility in financial market prices and transactions. Therefore, maintaining stability of interest rates, prices and exchange rates is a necessary condition for the stability of financial markets. That is the role of SBP; while maintaining orderliness, participation, transparency and integrity of financial market operations is the role of SECP in times of liberalized securities market; open capital accounts, and FPI inflows.

Antecedents of Financial System Management - *Historical*

8. The preoccupation with financial system management in developing countries is a recent phenomenon. It began in 1980s with emergence of financial crises in several developing countries of a severity that defied piecemeal corrective measures. Up until then, financial system was not perceived as a *sector,* much less a *system*, as a collectivity of a variety of financial institutions and diverse markets with complex interlinkages among their operations and mechanisms that needed coordinated action on much broader front to have the desired impact. This collectivity of institutions and markets existed all along no doubt, and their interlinks were broadly known as well, but their regulation and control were compartmentalized in various segments which were not seen as an entity to be managed at system level warranting a comprehensive analysis and evaluation. There were no financial system reviews couple of decades ago; nor there was much interest in macrofinancial analysis. Academia was interested in money and banking, but not in financial system.

9. In many developing countries, central bank were occupied with control of currency and foreign exchange far more than what commercial banks were doing as long as they did not violate rules and regulations and conformed to banking credit guidelines. Whether or not they were well managed, or financially strong and solvent were not the prime concerns, and their lapses from sound bank management practices were not scrutinized because they were not perceived as a systemic threat to the solvency of the banking system. Similarly, banking supervision and regulation was institution focused rather than system focused, and in some countries it still is. There were bank

failures, but these were mostly regarded as institution specific management failures, which in most cases they were, rather than worrisome as something of systemic significance.

10. Up until 1990s financial markets remained rudimentary in many developing countries and they still are in some of them, confined to a narrow segment of investors and stock issuing companies while operating in a framework of their own whose interlinks with financial system were known but were not a matter of system level concern as such. A good number of them did not establish a regulatory framework or transparent mechanism of market operations beyond licensing brokerages underwriters, or establishing stock exchanges. In most developing countries there were no securities and exchange commissions some decades ago; most were established in the backdrop of financial crises of 1970s and 1980s, and began regulatory and legal oversight on the operations of financial markets much later.

11. Besides commercial banks a number of quasi-banking institutions were established to enhance competition and diversification to enhance depth of financial system. Instead, proliferation of these quasi-banking institutions often became a source of financial stress because they were not on radar screen of regulatory authorities, being on the periphery of financial system. In some countries if they were within jurisdiction of central banks, they were not regarded any material threat because they were small and were not seen as part of banking and financial system. When crises erupted, central banks were forced to intervene to prevent spill over of the crises threatening a bank run. In the process central banks ended up with massive costs of intervention. The realization seeped through that NBFIs are important part of financial system, small though they are in their size and operations.

12. The impetus for management of financial system came from various quarters. Foremost, financial crises of 1980s forced system level approach in managing financial system. In times of system wide crisis, narrowly focused interventions in a distressed segment of financial system in isolation of other segments, or among a few ailing institutions could not resolve the crisis. The evaluations of financial system undertaken in those times called for major overhaul in the financial regime operative on entire financial system, together with structural adjustments and restructuring that were not confined to financial system alone. Banking failures or financial crises were not confined to developing countries alone. They spread all over and their advent was swift though they were in the making for a long time.

13. Another impetus came from recognition that system of mobilization, allocation and pricing of financial resources has to be rationalized to alleviate ***financial repression*** and that piecemeal changes will not suffice or will not work. This perception was by no means confined to developing countries alone. Some developed countries like the US went through privatization and elimination of controls to enable a broader segment of financial institutions like savings and loans association to participate in financial intermediation or in market niches these institutions could profitably occupy. The difference was that rationalization of financial system in successful countries was driven by enhancing competition across various segments of financial system, creating level playing field and thereby enhancing market competition.

14. By far the most pressing concern is maintaining ***stability of financial system*** in post reform era. Maintaining stability is a challenge often mixed-up with socio-economic objectives of financial reforms like enhanced access to formal finance by neglected segments of economy and priority sector financing, besides economic growth and employment generation. To these objectives are added government's concern to finance budget deficits on preferential terms. Any change brought by fiat in the way financial system allocates resources within the economy could not be contemplated without addressing fiscal deficits, their size and needs of borrowings.

15. These borrowing operations were seen as transitory but in practice turned out to be anything but transitory, requiring their management. The apple cart of objectives gets loaded rather fast, and it becomes difficult to keep stability objectives separate from all others. From mid-1970s onwards, globalization of international finance, the start of massive capital flows, their mechanisms required a relatively free floating exchange rate, opening up of the capital accounts of balance of payments, removal or reforms of controls on foreign direct investment, particularly portfolio investment.

16. Among these, liberalization of capital accounts had far reaching ramifications for the structure of external debt liabilities and its management, and for integration of financial system with international finance. These developments occurred from late 1970s onwards, and for latecomers among developing countries, these structural shifts are still ongoing and this shift is not over yet. Over the past three decades, this process has riveted attention of financiers, bankers and policy makers alike on how liberalized capital flows operate in riskier environments, and how financial system goes about internalizing the impact without endangering domestic price and exchange rate stability, vital to sustain foreign capital inflows.

Financial System Development
A Paradigm Shift

17. The financial system of Pakistan has undergone a sea-change owing to reforms that were initiated in early 1990s rather gingerly, but gathered momentum, culminating into accelerated change in the structure of financial system and a revamping of financial regime that governed its operations. The reform era, lasted for nearly a decade and half, 1991-2006. A great deal has been accomplished during this period. There has been a ***paradigm shift*** in the financial regime away from the regime that prevailed prior to the reform era and continued to dominate during much of the 1990s. These changes occurred amidst economic and financial constraints that have persisted for many years and unprecedented events that occurred in-between, both domestic and foreign.

18. Financial system has moved away from simply being a conduit for transfer of financed to public sector entities towards promoting efficiency of financial intermediation across sectors while maintaining stability and fostering growth of the economy. The accomplishments of reforms of Pakistan's financial system ought to be seen in this background. The focus ought to be on medium to long term structural shifts and system level changes rather than on recent developments in macrofinancial aggregates over short periods. References, however, have been made to salient short term trends in a summary form because after all, instability is essentially a short term phenomenon, so are its corrective actions. Currently, financial system in its structure, functions and policy regime that governs it, is drastically different from what it was a decade ago.

19. With deregulation of financial regime, financial repression of previous decades has receded though it has not disappeared. There has been a move away from concerns of weak and ailing nationalized financial institutions and state enterprises, a directed credit regime with layered system of credit allocation, administered interest rates, regulated and controlled foreing trade and exchange regimes in the 1990s, towards efficiency of financial intermediation and stability of the financial system involving both a structural shift as well as operational shift. The structural shift owes to privatization of public sector financial institutions. The operational shift owes to liberalization of interest rates; removal of ceilings both on deposit and lending rates; a virtual elimination of the system of directed or subsidized credit; and removal of direct controls that governed lending operations at institutional level or on case by case basis.

20. In this sense, the ***task of reforms is over*** but the task of financial system development is not over and this phase will be no less demanding than previous phases. Pakistan's financial system has now entered post-reform era with all its potentials as well as its complexities and challenges. How well the financial system performs in this era depends on how sustainable the financial regime is, and how resilient it is in coping with change, both domestic and global; and how good and forward looking is management of financial system. Front line reforms have been centre of attention of policy makers over the past fifteen year and a great deal of resources were devoted to bring about structural changes. Those changes have occurred.

21. A shift is warranted from macrofinancial reforms, to restructuring of sectoral or sub-sectoral finance which has to be system-wide and ***activity based,*** not ***institution based.*** The focus has to be shifted under a new incentive regime and new rules of game in an environment different from what prevailed before. At macrofinancial level, the paramount issue however, remains the same as before, namely who generates and supplies financial resources, i.e., underlying real resources of the economy, and who eventually uses it, i.e., public or private sector.

22. If we analyze financial system reforms beyond restructuring the ailing system that prevailed before, and restoring it to soundness and financial strength, it leads back to the central issue, namely in what ways financial system has facilitated growth of economy, together with a distribution of resources that would facilitate poverty alleviation through growth of neglected sectors. That is the litmus test of efforts made thus far at reform process. Since front line items of reforms have been implemented and their objectives have largely been accomplished, managing growth and maintaining economic and financial stability has become more pressing. At institutional level, while concerns with financial strength and profitability dominate over the short term horizon, there is an innate tussle if not a conflict among driving forces at system level versus institutional level which makes the task of maintaining stability more intricate.

23. In managing financial system during post-reform era, the main challenge will be ***maintaining stability*** and sustaining high levels of economic growth both over short run and the long run. Short term stability is to be interpreted to mean financial system stability as well as economic stability since these are intrinsically intertwined. Financial system stability encompasses a viable market-based interest rate structure free of short term volatile movements; strength and resilience of financial institutions to

withstand market swings and external shocks; stable financial markets free of asset bubbles and gyrations in stock prices. Economic stability is understood as price stability, interest rate and exchange rate stability.

24. The pursuit of stability in a ***liberalized and deregulated environment*** is a greater challenge than it was under a regulated and centrally directed financial regime that prevailed in Pakistan for a long period. The regulated regime saw its heyday during the period of nationalized banking from early 1970s through late 1990s where government regulated interest rate structure and controlled size and allocation of credit down to enterprise level, not only through the DFCs but also through major nationalized banks. The credit plan survived until mid-2000s and was finally abandoned, because it was no longer needed in a deregulated environment. In those days it was easier for monetary authority to open or shut down monetary taps; it is more difficult to do now in the era of indirect controls through liquidity control or moral suasion, while managing competing pressures to keep credit flow intact.

25. Generally, stability of financial system is understood as stability of banking system. Seldom it crosses over to concerns of stability of financial markets. One of the reasons is that while something can be done to maintain stability of banking system, and to some extent stability of money and short debt markets through monetary mechanisms, hardly anything can be done to ensure that capital markets remain stable beyond creating conditions necessary to sustain it, if that. This is true among most countries across the spectrum, not just developing countries.

26. The central banks are preoccupied with monetary system and shy away from capital markets, known to be fickle and having a mind-set of their own, but they can not easily get away from doing the needful for financial market stability. In Pakistan, SBP is deeply involved with operations of money markets as most central banks are, and its operations are intertwined with or shaped by interest rate policies. The same is true of capital markets, because capital markets are as sensitive to interest rate adjustments as any. In this scenario, role of SECP is limited. As regulator of securities markets SECP has the clout, but it does not have resources like SBP or any central bank has; nor it has levers of control or mechanisms to mobilize and deploy those resources. Therefore, when issues of stability arise, SBP does the needful for smooth functioning of money and bond markets, if not equity markets.

27. In securities markets, in spite of a vast apparatus of information flow, computing prowess and analytical capabilities available, and access to sophisticated risk mitigating instruments at the disposal of investors, capital

market participants find themselves upstaged time and again with large stock price swings, mounting and exploding bubbles and portfolio losses. They have yet to discover ways to foresee market trends, much less devise ways to ensure stability. There is much hand wringing and a paelothra of post crisis insights, but hardly ever a pre-crisis prognosis, much less warning; and if there is, it goes unheeded in the frenzy of herd behavior characterized by *irrational exuberance* cited earlier.

28. During the first half of 2000s, in Pakistan there was a tremendous asset price growth in equity markets. By early 2007, it was evident that stock prices are rising because of speculation and that market has entered bubble stage, the same way it happened in other developing countries at a similar stages of opening up and liberalization. There were muted concerns, but there were no warnings from regulators or authorities that market has reached a threshold where a pull back is imminent, just not a market correction. Stock market investors were in a typical cycle of frenzied investing driven by speculators. The market eventually crashed, and halting trading did the rest. The regulators got blamed for market failure; but this was not failure of those responsible for maintaining stability of financial markets in Pakistan.

29. In current times, maintaining stability and fostering economic growth in Pakistan will be more difficult to achieve given the overlapping and often contradictory requirements of stability; limitations of instruments available to monetary authority; rigidities faced by fiscal authorities; and intensified attempts by financial institutions to maintain current levels of profitability, though record profits can not be sustained for a prolonged period. Credit system will sooner or later will face asymmetries that will test limits of stability, and will not behave as intended by monetary authorities. Already credit growth in Pakistan has slowed down, so has economic growth. Much of the blame is being placed on energy crisis and ongoing socio-religious upheavals, wars and conflicts.

30. Comparative experience shows that banking system and financial markets both have faced instabilities if not crises. The history of three decades of post-reform era in many developing countries is replete with such instabilities originating from liquidity shortages. This is not to suggest that Pakistan's financial system is ripe for a similar crisis. The sensitivity tests have established that there are no imminent threats of instability to banking system. It seems that end of financial repression leads to weaknesses once directed system is transformed into a market-based system together its fragilities that were previously hidden beneath state ownership, summed up as asymmetries built into newly liberalized financial system.

Section 2: Monetary Management and *Financial System Management*

1. Monetary management has been good over past years. As monetary authority, SBP has been attuned to needs of monetary stability during transformation of banking system and financial markets. The post reform era has been rather trying times, but SBP has achieved a skillful switch-over from a system of direct monetary controls that prevailed until late 1990s to a system of indirect monetary control in a liberalized environment, such as cash reserve requirements (CRR), statutory liquidity requirements (SLR), SBP discount rates and open market operations. While much of net domestic assets of SBP comprise of advances to government, money supply has finally acquired backing of large foreign exchange reserve which was not the case in previous years. Role of interest rate has been enhanced after withdrawal of credit deposit ratio (CDR) as instrument of credit control. Therein lies the shift from direct to indirect system of monetary management.

2. How good monetary management has been is gauged by monetary stability. There are no hard and fast targets of stability that must be adhered to at all times. For some developing countries price stability means maintaining inflation rates between in lower 6 to 9 percent per year; but for front line comparator countries that would mean a crisis because their targets are anywhere between 2 to 3 percent inflation per year; no more. Hence, monetary stability and growth are mostly qualitative standards. SBP has been successful in steering tight or easy monetary policy stances during the past years as warranted by short term trends and has established good operational mechanisms. The movements in structure of interest rates have followed monetary policy stance by and large, led by SBP policy rate which has been a powerful tool of monetary management. The banking system is responsive to signals conveyed by the monetary authority though there are periodic slack in the speed of adjustments owing to rigidities in the system.

3. A clarification as to what is being managed is essential. The core objective of monetary management is to control growth of aggregate demand; which in turn means controlling growth of banking system credit extended to the private sector. In theory, monetary controls are supposed to have impact on SBP credit to government, but in practice, credit to public sector is not affected much, or, the impact is marginal. Banking system credit is affected the most by monetary controls, not SBP credit. Besides, SBP net lending to financial system is fairly limited. The mechanism of control works primarily through modulating size of non-borrowed banking reserves, the

mainspring of money creation in the economy. In parallel, interest rate changes work though raising cost of banking credit, hence it is the primary tool for controlling growth of aggregate demand. Monetary management has precious little adjust regarding banking deposits; these deposits are not the target of monetary management; banking credit is the target.

4. Monetary management of SBP has been responsive to the short term needs of the economy. This has helped to keep inflation under control and maintain price stability, though price level has been under severe pressure for the past couple of years. In Pakistan, historically, inflationary pressures originated from fiscal deficits and consequent monetary expansion by the banking system to meet public sector borrowing needs, and the same pattern prevails today with some adjustments. In good part increase in the price level during much of the 2000s occurred from a mix of factors mainly excess aggregate demand, imported inflation and steady depreciation of exchange rate. These pressures were mild previously but now have re-emerged as fiscal deficits and current account deficits have continued to rise substantially. The issue is what are the threats to price stability and how monetary management can cope with these threats in the future.

Soft Landing vs Hard

5. In a market based regime, with reasonably free floating interest and exchange rates and in absence of direct instruments of monetary control, if instabilities were to occur the attempt of the central bank is to adopt corrective actions in a mix of such proportions that economy returns to its sustainable state of equilibrium, i.e., a ***soft landing*** without overshooting the targets of stabilization, and ending up with ***hard landing***. This needs to be explained further. These two endings are a classis pair of opposites. They characterize impact of corrective measures taken by a central bank over the short-run. In the context of macro-financial management, soft landing refers to how smoothly economy settles down after monetary controls have been applied to counter a variety of destabilizing trends as shown by leading indicators, such as rising inflationary pressures and overheating of the economy. This may occur owing to high growth rates in major sectors of the economy, with ever tightening labor markets and consequent pressures on wage levels in advanced economies.

6. It may also result from low interest rates causing an expansion of banking credit, thereby compromising aggregate money demand balances, encouraging excessive consumer spending. The same may transpire when low interest rates prevail; whereby low cost of margin borrowings may be fuelling unsound investor expectations, leading to a ballooning of stock market and speculative bubbles. These trends may put pressures on exchange rate that may destabilize or cause reversals in capital flows and also major imbalances in foreign trade over a short period. In circumstances like these if there are fragilities in over-extended banking system, and if central bank were to raise interest rates or tighten liquidity, in doing so it must maintain a balance in twisting these levers so that it cools down the economy or ease inflationary pressures.

7. It may even lead to a temporary recession, but it would help achieve ***soft landing***; a much sought after outcome. If monetary controls turns out to be too harsh, they may not stop at rectifying economic imbalances that prompted them to begin with, or if authorities overshoot targeted macro-financial balances through higher interest rates it may jolt the economy into a precipitous down turn. It may cause a recession deeper than anticipated. It may shake investor confidence to the point where it may lead to a stock market reversal, causing wide spread losses.

8. This is ***hard landing***, an unintended instability of reverse kind that may not be preventable if destabilizing trends gather momentum of their own. There are limitations on a central bank, especially in a deregulated regime and globally linked financial markets which restrict its freedom of action, presenting central bank policy management dilemma of classic variety; viz, if the central bank were to be focused on achieving domestic price and interest rate stability to fine tune the domestic economy, it cannot simultaneously maintain exchange rate stability and thereby stability in capital flows and foreign trade, which may derail the efforts of soft lending.

Monetary Stability-
How Elusive it is ?

9. In a classic sense, as regards ***price stability***, the two gap model analysis will reaffirm that twin deficits, namely fiscal deficit and current account deficits, are ultimate source of pressures on domestic price level in Pakistan as in many countries. The instruments of direct monetary control that were used in pre-reform days, namely raise the rate of interest by fiat and devalue

currency outright or through dirty float, are no longer available. There seems to be no cure of inflationary pressures, except raise policy rate or raise utility prices, thus contributing to inflation; or impress upon the government the need to curtail its borrowings, while those governing remain unimpressed. No one would urge choking out flow of borrowed finance to government because that is not feasible, and may choke off economic growth.

10. Inflationary pressures are mostly traced to fiscal deficits, but fiscal deficit are not the sole cause of inflation. A part of inflation is traceable to imported inflation and foreign trade deficits, that were supposed to moderate once trade and exchange regime was fully market based. Such a regime has now been in operation for nearly a decade; exchange rate is free floating, almost; SBP does not intervene in forex markets because it does not have the kind of forex reserves needed to try to intervene in open currency markets though it keeps threatening to do so. If it does, SBP is likely to meet same outcome as other central banks did when they intervened to bring about a desirable exchange rate in the past. There is precious little SBP or any central bank can do to try to smother inflationary pressures emerging from external sector.

11. In Pakistan most of the time, SBP has been alone in its fight against inflation and keep exchange rate stable, because the government kept on borrowing at fairly high levels as it did over the past decades, and therefore has not been a party to counter anti-inflationary pressures, proclamations aside. Financial market participants, namely the investors do not have much stake and little leverage to counter inflationary trends, though they are aware that it would lead to raising rates of interests sooner or later, thus negatively impacting on the price of securities and dwindling market value of investment portfolio they own.

12. If we add societal concerns to all the above, the task of monetary management becomes even more complicated. Whatever anti-inflation remedies have been tried thus far, their impact has shown a gross imbalance in the burden of adjustments borne by lower income groups, or those in fixed income groups caught in the tax net. For example, a large number of electric power users are believed to escape increases in electric tariff rates. To compensate for their losses and to cover their genuine cost increases, power companies keep raising their charges because they have to recoup their losses from documented users, though undocumented users never get caught in any kind of ***net*** announced with all the fanfare.

13. The undocumented economy that escapes burden of belt tightening is thought to be 50 percent to 200 percent larger than documented economy of Pakistan. This thriving parallel economy chugs along without much evidence of burden carrying called upon by the government. As long as undocumented economy is able to shift the burden, it will be difficult to control inflation by tweaking interest rates alone. As it is, government borrowing is not sensitive to cost of borrowing because it is sovereign borrowing. SBP policy rate has little impact on sovereign borrowings; but a rise in policy rate will choke off corporate sector and business expansion, which is not large enough to absorb the costs. Its potential to lift the economy out of recession gets subdued in the process.

14. In such circumstances, if monetary authority were to ***target money supply*** to control inflation, it impinges upon banking system liquidity. For credit markets it means tightening supply of credit; for money markets the same results obtain, leading to rising interest rates and hence cost of investing. Lowering liquidity may contain inflation and take off pressure on exchange rate, but it has a cost for investors. If interest rates were to follow monetary tightening, it will lower market value of debt securities if not stocks. How this transpires depends on how investors foresee portfolio returns. They may finance their investments by shifting their money balances held with banking system to securities market, if these returns are higher and are worth switching, but such trade-off becomes rather complex quickly and is hazardous.

15. These perceptions are fairly common among investors, but how the mechanism operates and what are intervening stages are not well known. Comparative experience has shown that interest rate changes exert significant impact on general price level and hence they are a powerful tool of monetary control. This has little to do with differences of operative mechanisms underlying interest rate changes, or underlying conceptual feud between monetarists and Keynesians. The implication is that since interest rate structure is sensitive to changes in ***bank rate,*** therefore, an in increase in bank rate is an effective tools of monetary tightening.

16. The next issue, is should monetary authority ***target interest rate,*** or should it target money supply? The answer is that in times of stress in real sector of economy, they target money supply. In times of financial shocks, they target interest rates. In Pakistan this issue has been debated and is well known to monetary manger. Both money supply and interest rates were targeted at different times, depending on exigencies of short term

developments. The ***transmission mechanisms*** of monetary instruments operate primarily through money markets and primary tool of monetary control is ***interest rate***, while treasury bills rate serves as the base rate for financial instruments of short term maturity. To the extent treasury bills market is open as it is in Pakistan, interest rate on treasury bill is determined by the cut-off yield rate at primary market auctions. This yield rate serves as base rate in interbank market for funds.

17. In general, when central bank pursues ***easy monetary policy,*** the yield curve of short term securities like T-bills shifts downwards and interest rate declines; when it pursues tight monetary policy, yield curve shifts upwards and interest rate rises. Since changes in interest rate are pivotal instrument of monetary control, how effectively desired changes in interest rates occur pursuant to any change in policy rate, depends on transmission mechanism between SBP's discount rate and bank lending rates, the pass through interbank rate and KIBOR. How effectively changes in KIBOR are translated into lending rate of banking system is critical. Past experience has shown that swings in KIBOR are not so quickly translated into lending rates an do not impact on deposit rates, exhibiting rigidities of transmission mechanism.

18. No matter what mix of control instruments is deployed, the impact is rising costs of borrowings or reduced levels of liquidity or both, with consequences for financial market operations. The impact of a change in the bank rate on financial markets, even a fraction of one percent, is almost instantaneous in daily trading in advanced securities markets. An increase in interest rate lowers price of security, a bad news for leveraged investors. It would dampen demand for securities in general. A decline in bank rate has opposite impact because it increases availability of credit and improves corporate earnings, thereby enhancing market value of their stocks.

19. The function of money markets as a conduit for short term funding is two-fold. The first is to ***provide liquidity*** to its participants, be they financial institutions or government and furnish funds for their short-term liability management. Operations of treasury bills market provide bridge finance to the government for its budgetary operations during a fiscal year. For investors, namely the banking system, T-bills provide decent returns, a guaranteed income flow, and a mechanism for discounting which ensures ready availability of liquidity to the banks whenever cash needs arise. Similarly, operations of interbank markets provide bridge finance for short term liquidity to the banks at call money rates or some variant thereof, besides providing market based returns.

20. The second function is to provide mechanisms of monetary control for ***stabilization.*** Typically, central bank intervenes to regulate liquidity levels of the banking system so through markets for treasury bills and its repo market. From the vantage point of financial system operations, It provides an operational mechanism to the monetary authority to stabilize interest rate and price level. Interventions of the central bank in money markets are conducted through open market operations (OMOs) mainly through T-bills and partly through trading of government bonds.

……. In Pakistan

21. Experience with monetary management in Pakistan shows when tight monetary policy was pursued, as during early years of the decade while price level was stable, it was intended to maintain exchange rate stability by keeping a lid on short term volatility in exchange rate. With the accumulation of foreign exchange reserves to historically high levels and stabilization of exchange rate, easy monetary policy was pursued through middle years to boost private sector credit. The injections of money through SBP purchases of foreign exchange, in spite of sterilization and open market operations, led to a substantial increase in liquidity of the banking system during this period. In parallel, with a dramatic plunge in SBP discount rate from 14 percent to 7.5 percent in early years, interest rates plunged to an all time low which gave a boost to private sector credit leading during the past years.

22. This monetary expansion was substantial and led to upward pressures on price level and on exchange rate as witnessed during 2005-10. The rate of inflation remained low during first half of decade. SBP recognized that the approach to partial sterilization is not sustainable because sooner or later, growth of money supply would lead to inflationary pressures. Later on, a rise of inflation caught everyone by surprise; particularly the increase in food prices from 3 percent to 12 percent in during 2005. Thereafter, inflation began to rise and jumped to 9.3 percent in FY05, nearly twice the level that prevailed a year earlier. This was blamed on a reversal of monetary policy stance. What remained muted was that most of the time monetary stance has been beholden to financing needs of the government, much the same as it has been during 2007-10. Inflationary pressures originated from fiscal deficits and consequent monetary expansion and in part from imported inflation, even though exchange rate has been fairly steady during middle years. These pressures were muted during middle years, but have returned with force. Will price stability return is a question being debated.

23. In such circumstances, SBP had no option but to pursue tight monetary policy, which it has since then through end of the decade, and this monetary stance continues. SBP does realizes that it has to strike a balance between inflation and growth; keeping interest rates stable though with moderate pressures on exchange rate. At the same time SBP has to manage banking liquidity levels consistent with the mushrooming needs of government borrowings, mostly short-term, given soaring levels of fiscal deficits from Rs 375 billion during middle years to Rs 1185 billion in FY10. In times of swiftly rising deficits together with undocumented ***informal inflows*** fueling stock market, a restrictive monetary stance can go only so far in maintaining short term price stability together with exchange rate and interest rate stability.

24. Thus far in Pakistan, banking system has withstood short term ***volatility*** of interest rates and has been able to manage interest rate risks. As for lending, it is unclear how much of the banking system loan portfolio has been rebalanced with current structure of interest rates – the financial liability related turnover of credit, because borrowers effectively recycle the shorter loan maturities relatively easily than their medium to long term maturities which are a small proportion of commercial banks' portfolio. Banking system has absorbed the impact of volatile interest rates and has emerged with stronger earnings and profitability.

25. This perception of monetary policy management amidst somewhat conflicting objectives is familiar among countries at similar stages of financial reforms. After era of control regime is over, monetary authorities can pursue either domestic price stability or exchange rate stability, but not both with same degree of success. Once financial system is liberalized and large inflows from overseas begin to occur with open trade and capital accounts, be they remittances, FDIs or FPIs, price and exchange rate stability become competing objectives.

26. Besides, opening of capital accounts reduces influence of monetary authorities on interest rates. In such circumstances, if authorities pursue exchange rate stability to stabilize foreign exchange inflows and keep current account balance intact, domestic interest rate and price stability comes under pressure because of sterilization of FDI and other foreign currency inflows, no matter how it is done. Conversely, if authorities shift to maintain interest rate and price stability, sooner or later exchange rate comes under pressure. In times of inflation, if monetary authority were to raise interest rates and they become higher than international rates, it will encourage capital inflows and will drop real exchange rates; and *vice-versa.* Has this threshold arrived in Pakistan; that needs to be assessed.

27. Comparative experience shows that interventions in currency markets to achieve a desirable level of exchange rates has brought losses to central banks in the past, be they in emerging market countries or in developed countries. Further, past experience has also established that instability of price level does impact strongly on exchange rate. A central bank can pursue only one objective or the other at a time, not both.

28. The central bank can pursue interest rate and price stability, but not exchange rate stability at the same time. If it pursues price stability, exchange rate stability can not be ensured. If it pursues exchange rate stability, it may compromise domestic price stability, provided money, debt and capital markets, are reasonably developed, are largely open and market-based; while both the current account and capital accounts of the BoP in the country are open to foreign markets and capital inflows; a strong proviso indeed. How to reconciling these in a real world setting is indeed a challenge for monetary authority, specially in the era of liberalized and open markets, with free floating exchange rate and market determined interest rates and price level.

29. Interest rate and price stability may turn out to be at the expense of stability over the long term. This seems rather incongruous, but often such has been the experiences. The reason is that raising rates of interest may jeopardize banking system profitability and may hasten insolvency of those banks, saddled with rising NPLs in the wake of financial distress extenuated by rising interest rates in case of over-extended business corporations. This is not far fetched; if a few major clients were at the brink, they may get bowled over with a rise in interest rate causing losses to creditor banks.

Sustainability Issues

30. Review and analysis of financial reforms in Pakistan has been done in Financial Sector Assessment (FSA) reports, Banking System Review (BSR) and Quarterly Performance reports of SBP since early in the decade. These reviews are sufficient for the task at hand. These are too dense for beginners getting acquainted with this subject matter. Earlier on, the focus was on the impact of reforms; it has now shifted to current developments concerning soundness of the banking system as viewed through CAMEL-S indicators together with and evaluation improvements in the system of banking supervision and regulation. The FSA report of SBP also provides periodic in-depth reviews of financial market developments and analysis of major components of NBFIs such as insurance companies and Islamic finance.

31. This preoccupation of authorities in Pakistan with the issues of ***sustainability*** and their recent experience are in the mainstream of similar efforts in other countries as well. Among these, a joint group of IMF and World Bank has developed financial sector stability assessment (IMF-FSSA) guidelines and has conducted a large number of country specific studies over the past four to five years, including Pakistan, which provide a wealth of analysis and information on sustainability issues. These studies are not limited to developing countries only, rather a number of them have been done for developed countries as well for the reason that financial crisis is prone to occur anywhere as it has in the past, and financial system fragility is not exclusive to developing financial systems alone. It can erupt in any market-based system with open capital accounts, floating exchange rates and globalized financial flows as it has in the past.

32. The focus of IMF-FSSA studies has been sustainability of financial system using stress testing tools and techniques, assessment methodologies and modalities. The core of these techniques is focused on qualitative evaluation of various types of banking risks, together with assessment of banking supervision and market regulation. The IMF-FSSA studies have stayed away from model building and heavy quantitative techniques because in their experience, analysis of sustainability issues does not lend itself to meaningful evaluation at the system level owing to aggregation problems and differences in underlying assumptions, though it can be helpful at institutional level where regression analysis has been used to detect sustainability responses to exogenous shocks.

33. The same approach was adopted by SBP in its FSA studies and BSR reviews. In these early years, the focus was on the impact of reforms on the financial system; it has now shifted to maintain soundness of the banking system as viewed through CAMEL-S indicators together with and evaluation improvements in the system of banking supervision and regulation. Their results are similar to those reached earlier on in IMF studies. The difference is that of outlook. SBP reports are generally more ebullient in their outlook, in the perspective of chronically chaotic period during the nationalized era and also during much of the reform era that they lived through. FSSA results are cut and dried version of a technocratic view of what a financial system ought to be, unbridled by intricacies of ground realities that prevail. The reform process in any country never runs straight on parallel tracks and this is well established from comparative experience of the past three decades.

Section 3: Financial System *and the External Sector*

1. Foreign exchange inflows in Pakistan are not of such magnitudes as to cause concern from the angle of solvency or stability, nor the balance of payments position is strong enough to lead to such pressures as mentioned above. In spite of an open foreign trade regime, liberal incentives for exporting, market determined exchange rate and large foreign exchange reserve position, the current account deficits have returned to levels reminiscent of old days, ranging around $5 billion in the second half of the decade. The silver lining is that foreign exchange reserves of about U$16 to $18 billion are sufficient for nearly a year of imports rather than for just a few weeks in the past. The domestic markets are relatively open both for exports and imports with open current and capital accounts. The trade account is still negative but the gap is widening in spite of high export growth of about 10 percent during early years the past decade, the fastest growth recorded ever.

2. There is now evidence of a shift in external sector, though the issue is whether these trends are indicative of a ***structural shift*** in the external sector or are they a cyclical phenomenon? There seems to be a mixed pattern. Some of the changes are structural, such as the open foreign trade regime and liberalized foreign exchange market, and these are unlikely to be reversed. Much of the export growth, however, is coming from the same export manufacturing structure that has prevailed for quite some time, namely textiles. Large investment were made for modernization of textile units owing to pressures of foreign competition, but this trend has not spread to other exporting industries.

3. The shift of remittances from informal transfers to banking system at current levels of about US$ 11 billion is a new trend. This shift to formal transfers is unlikely to make an about-turn to informal transfers, given international pressures on informal transfers, and a negligible differential between formal and informal transfers. Large inflows of remittances seem to have reached a plateau and further growth may not be as spectacular. Most other inflows have dwindled, including lending by international financial institutions on concessionary terms for BoP support, bilateral logistical support and debt write-offs.

4. In early years after free float of exchange rate was successful; SBP's view was that given the newfound strength of external sector, a gradual upward adjustment in foreign exchange rate would not hurt much exporter's competitiveness overseas despite rising domestic inflation relative to those of trading partners. As it turned out, rupee appreciated, a one-time historical phenomenon that may not get repeated again. This appreciation of exchange rate compromised competitiveness of exporters; but a significant depreciation of rupee during second half of the decade does not seem have boosted competitiveness either. In those years, exporters had much going for them as their borrowing costs kept declining at least for credits that benefited from SBP's refinancing facility. Thereafter, began a long slide of rupee and a significant devaluations, obviating the need for financial inducements to exporters.

5. Much depreciation of Pakistani rupee owes to reversal of financial flows, borrowings, large external debt, and emergence of inflationary pressures. Given these trends, ***exchange rate stability*** has been compromised in spite of a good foreign exchange reserve position. This position began building up from a modest level of US$ 1.35 billion in 2000 under unified exchange rate, to US$ 15 billion by June 2010 under free floating foreign exchange rate in inter-bank foreign exchange market. For a few years, Pakistan experienced high levels of FDIs, but those were one time inflows owing to privatization proceeds that will not recur. Inflows of foreign portfolio investments have been meager for the decade as a whole, and are negligible in comparison with levels of FPI that occurred in East Asian or Latin American countries.

6. There are no FDI of FPI ***induced bubbles*** to cause worry as regards stability concerns. Most of the threats to the stability of external sector are of 'what if' variety, linked with a slow down of major economies, an increases in oil prices and other global uncertainties. Since rationalization of real sectors of economy is incomplete, and since investment growth has been erratic over the past years and did not revive appreciably, nor did it respond to measures taken by authorities, the concerns of economic management have grown but not those of financial system performance.

7. Financial reforms and restructuring during 1990s occurred not so much because governments were keen to reform financial system as such, or because there was a sense of urgency to stop further deterioration. There was no abiding interest to revitalize financial system, much less a consensus to revamp financial system, particularly its transformation from a nationalized and directed system to an open market based system. Reforms occurred

more as part of conditionality embedded in stabilization and restructuring loan packages of international financial institutions. The assistance was needed by government for foreign and domestic liquidity purposes just as it is now at the close of decade. It is the same scenario being repeated again, one more time.

8. The government did not have much choice in these circumstances. Under financial pressures owing to shortfalls in revenues and to finance large budgetary deficits, together with lack of foreign exchange for imports, and precariously low foreign exchange reserves, governments agreed to IFI's conditionalities. They grudgingly began to introduce reforms, but they did so in hopes of garnering large assistance loans from IFIs to extend their short revolving tenure. They started reforms in ad-hoc fashion without regard to its proper sequencing critical for success of stabilization and structural change as accumulated from comparative experiences. In parallel, public posturing of righteousness continued, blaming al but their own ineptitude, including the same IFIs they were begging to lend. It was deeply ironic.

9. During 1987-98, government signed on nearly a dozen IMF stabilization programs and none of them were completed. After first couple of tranches were drawn down and as soon as foreign exchange liquidity crunch was mitigated somewhat, there was non-performance on stipulated program items, leading to its cancellation or abeyance until the next round. The pressures of IFIs for reforms and restructuring were intensive because the BoP and budget deficits were seen by IFIs a direct result of public sector's financial operations.

10. For most years of 1990s until FY02, Pakistan borrowed as much as it could through program loans, that is cash loans, form the IMF, World Bank and ADB to secure long term foreign finance primarily for budgetary support and balance of payments support, with commitment to undertake reforms and structural adjustments as there was no other alternative but to accept their conditionalities and embark upon reforms and restructuring. Since there was no earnest commitment, a large number of these conditionalities were not fulfilled and support programs were terminated after withdrawls of early tranches.

11. Since 1998 upto mid-2000s, international financial institutions extended about US$ 3.2 billion in various cash loans to support financial system reforms and development mostly in the form of BoP assistance and budgetary support together with technical assistance for specific purposes. These cash loans were extended to strengthen sectoral finance and capital

market development with institution building components and guarantee arrangements. During first half of the decade, given strong macroeconomic performance, need for assistance from IFIs was no longer there and there was concern like 'what if ' past patterns return.

12. In second half of the decade, this situation seems to have come back full circle. Pakistan is back to borrow from IMF to tide over foreign liquidity needs and also for domestic budgetary support, with similar conditionalities of standby agreement as in previous ones. It is a replay of the same past events. There is specter of truncation of the agreement in case performance is deemed unsatisfactory. We need not get into clauses of standby agreement, but the point is that if Pakistan's economic and financial performance falls short there would be a repeat of the same as in previous years.

13. Therefore, issues of stability, soundness and strength of financial system are to be viewed from perspectives of domestic sector operations rather than external sector. If there are any threats to stability and solvency they are likely to emerge from weaknesses from within, not from outside. External financial flows are simply not there on the scale that may threaten system wide insolvency. The interlinks of Pakistan's financial system with international finance are marginal and are unlikely to reach a critical level in the near future to cause concerns that have occupied us in this chapter.

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Glossary

Access to Capital Markets: is the ability of a company to raise long-term funds from capital markets as equity or loan finance, based on its capital structure, financial strength, its current debt-equity ratio, management and ownership, its future performance outlook and potential profitability, and allied factors like industry or sector risks; access also means the ability to operate or do business in capital markets.

Accrual Basis: a system of accounting where receipts and payments are entered into accounts at the time of transaction instead of the time when cash settlement takes place. For example, revenues are recognized and entered into accounts when goods or services are sold independent of the actual cash inflows or cash receipts for the sale. Likewise, expenses are recorded at the time an expense is incurred, instead of the time of actual cash payment. This is in contrast to cash basis of accounting, where the transactions are recorded on the basis of receipts and payments or actual cash inflows/outflows which may distort the financial position for the accounting period concerned. The accrual basis of accounting is widely used in financial reporting and is part of GAAP (Generally Accepted Accounting Principles).

Arbitrage: is to take advantage of the difference in prices prevailing in two markets; for example, a purchase of a currency, a commodity or a security in one market for sale at another market for higher prices; or, borrowing at a lower rate in one market and lending at a higher rate in another; arbitrage is of several types such as interest rate arbitrage, risk arbitrage, or maturity arbitrage, depending on the type of transaction conducted.

Asset Classification: classification of assets based on the type, title, maturity, reliability or recoverability of the asset, or their risks; for balance sheet purpose assets are reported as current and non-current assets.

Authorized Dealers: are banks and money changers authorized by the central bank to hold and deal in foreign exchange; also, banks and some brokerage houses authorized to deal in primary market for government securities.

Balance Sheet Risks: are risks to which balance sheet items of a bank like loans and deposits are exposed to because of changes in interest rates, or exchange rates, or due to a mismatch of their maturities, or loan defaults that need to be mitigated.

Bank's Capital: is valued as follows:

- for ***statutory and regulatory purposes***, a bank's capital is the share holder's equity in paid-up share capital held as preferred or common stocks and is the statutory minimum capital requirement for investiture and licensing imposed by the government or the central bank. This share holder's equity plus declared reserves of a bank, deposited with the central bank is *core capital,* also called ***shareholder's funds*** and designated as

Tier 1capital for regulatory purposes; the amount of undisclosed reserves, revaluation reserves, hybrid debt capital instruments bank, provisions for loan losses and subordinated debt not exceeding 50 percent of core capital is called *supplementary capital* or Tier 2 capital which together with Tier 1 capital constitutes capital of a bank as per prudential guidelines and requirements.

- These statutory or regulatory definitions aside, if the bank is established as a limited liability or joint stock company which in almost all cases it is, the commonly used figure to denote capital is the ***capitalized value*** of bank's shares outstanding with investors which are being traded in the stock markets. Thus, bank's capital is the market value of original equity plus replenishments of equity if any, the paid up capital, held as preferred or common stocks issued and held by the owners or other investors. For market valuation purposes, ***the net-worth of the bank*** is more relevant though it is not the same as it's capital. The networth of a bank is denoted by current market value of ***all assets*** of a bank, including its capital plus loans and credits outstanding and other assets declared in the balance sheet of a bank, *plus* off-balance-sheet assets, if any, ***less all liabilities*** including deposits, borrowings and other liabilities lodged in the balance sheet of a bank, but does not include its franchise value, namely potential value of business growth of the bank in future.

Banking Risks: various types of banking risks broadly classified as:

first, risks associated with lending activities of a bank such as credit risks or borrower risks, interest rate risks, loan portfolio risks concerning loan losses, credit concentration and overexposure risks, foreign exchange risks in case of loans advanced in foreign currencies.

second, risks inherent in funding activities concerning deposits, borrowings, mismatch of maturity structure between loan portfolio and deposit or borrowing portfolio, and cost of borrowings.

third, operational risks such as liquidity risks, risks in payments and settlements, risks of fraud, and risk associated with off-balance sheet activities; management of these risks depend on operational policies, procedures and practices, balancing of risks and returns, control system, reporting and information system.

Banking System: consists of commercial banks, investment banks, and other banking institutions such as trade financing banks, or savings banks, organized, established, *licensed and chartered under the banking law,* rendering a range of banking services under supervision, regulation and statutory control of a central bank to ensure compliance with rules and regulations governing banking operations and activities. In this sense, banking system may not include financial institutions organized and established outside the banking law; are not licensed as a bank, and thus are outside the statutory or regulatory control and supervision of the central bank, even though these institutions may be operating like a bank, and may be engaged in financial

intermediation activities similar to those of regular banks. *(see Financial System)*

Bank Rate: is the rate of discount of the central bank; it is the rate used by the central bank for the rediscounting of treasury bills and other approved financial papers; it is the interest rate charged by the central bank on advances to banks against specified collateral; it is a benchmark rate affecting the entire structure of interest rates, and thus it is a very important tool of monetary control, affecting banking credit, money supply, prices and inflation.

Base Rate: is an interest rate used as the starting base or point of pricing of bank credit; for example, prime rate or LIBOR, or in Pakistan KIBOR is taken as the base rate and a margin is added to price a bank loan or a credit facility.

Bid-and-Asked Quotations: are price quotations in currency markets, or securities markets; bid price is the highest price a dealer or a purchaser is willing to pay for a security or a currency, whereas asked price is the lowest price a dealer is willing to accept for a security or a currency; the differential is the trading margin of the broker or the dealer; trading in these markets take place on the basis of these quotations, made by sellers or buyers.

Bond Indenture Agreement: is an agreement tendered by a bond issuer specifying its contractual obligations concerning a bond issue such as interest rate and date of maturity, repayment schedule, collateral, protective covenants, and call provisions of the bond, and stating type of the bond being issued; a contract of a bond issue outlining the covenants.

Bond Market: is the secondary market where bonds are traded among the final investors, who may be large institutional investors or individual investors, through bond dealers or distributors who specialize in trading a variety of fixed income securities; the secondary market is further segmented into markets for government bonds, corporate bonds, or zeros market, each with its own coupon rate, yields and risk characteristics; however, the primary market for bonds precedes secondary market and consist of all the institutional players involved in the processes of bond inception and issue all the way through when the bond is finally traded in the secondary market. These are institutional players; bond issuer may be government or a corporation; issuers' bank, who carries out the market survey for the size of the issue and the interest rate; syndicate of underwriters, usually investment banks or underwriting companies who buy the bond issue at face value, and thus become owners of the bond assuming market risks until bond is floated and sold in the secondary market to final investors through firms and dealers engaged in the business of fixed income securities; these distributors assign portions of the bond issue to final buyers either directly or through brokerage firms who collect the intent to purchase from potential investors as to the amount and the price of the bond which provides a test to underwriters whether the bond issue is priced correctly; therefore, in primary bond market, there is no bond trading of the type that occurs in secondary market. Bond markets are less volatile for top grade bonds such as treasury bonds, and top rated corporate bonds, but is highly volatile for other types of bonds such as junk bonds; thus investments in top rated bonds may be less risky than stocks, but at times bonds

could be as risky as stocks, specially long-term bonds which are relatively more interest sensitive; in general, when interest rates rise, bond prices fall; and conversely, if interest rates decline, bond prices increase; stock and bond market may fluctuate independently of each other thus offsetting investor's risks, provided investor's portfolio is diversified into bonds and stocks in adequate proportions, and his exposure is such that losses in one market are offset by gains in another.

Bond Market Risk: is the risk of decline in bond prices since the market value of bond is inversely related to interest rate; therefore, if interest rates are likely to raise, then bond holder faces the risk of reduction in the market value of bond; typically, bond market is less volatile for top grade bonds are such as treasury bonds, and top rated corporate bonds, but highly volatile for other types of bonds, specially the co-called junk bonds; therefore investment in top rated bonds may be less risky than stocks, but at times, bonds could be as risky as stocks, specially long-term bonds which are relatively more interest sensitive. The stock and bond market may fluctuate independently of each other, thus offsetting investor's risks, provided investor's portfolio is diversified into bonds and stocks in adequate proportions, and his exposure is such that losses in one market are offset by gains in another.

Book Value: is the stated or recorded value of an asset in the books of accounts of a company; the book value of depreciable assets is reduced every year by the amount of depreciation applied; but book value may increase in case of plant and machinery if spent amounts are enhancing and adding to the value of the assets and increasing their production capacity; thus the book value of an asset may increase or decrease with the passage of time and it may be different from their resale or market value; on sale or disposal of an asset, if the amount realized is less than its book value, the loss is to be absorbed by the company; and if the value realized is higher than the book value, then the realized difference is profit.

Borrowing: the term *borrowing* in daily usage is regarded synonymous to terms like *credit, debt,* and *loan,* but is interpreted somewhat differently depending on the context; it is commonly meant to obtain a *loan* or a *credit,* or to enter into a debt liability in the amount of money obtained as a *loan* or a *credit* from a lender for a period of time at a rate of interest and at terms of repayments as agreed between the borrower and the lender, backed by a collateral or loan security; while the term *borrowings* is interpreted as the total amount of *debt* outstanding with a single borrower, the total value of the loan portfolio of the borrower; hence these two terms are not the same as *credit* or *loan*.

Call: this term has several meanings depending on the context such as:

- in banking business, a bank may demand repayment of a loan before the due date if the borrower has not met the conditions specified in the loan agreement such as obtaining insurance for collateral tendered.
- in securities market operations, call is a type of option authorizing the buyer to buy a specific quantity of asset at a fixed price within a stated period for a fee or premium.

Capital Flight: is a massive outflow of funds in foreign currency from the host country caused by the fear of adverse exchange rate or interest rate movements, or to take advantage of higher returns abroad, or in anticipation of adverse rules and regulations affecting foreign investment, or enhanced insecurity due to political or economic upheavals and to avoid risk of being frozen in an unstable country; this transfer of funds may be legal or illegal, but in most cases, it involves currency transactions through the banking system, if allowed, or through informal barter or swap arrangements, or through *hundi* system, or through over-invoicing of imports and under-invoicing of exports.

Capital Gain or Loss: capital gain is the increase in the market value of an asset held over its acquisition cost which is the original price plus cost of transaction paid by the investor; conversely, capital loss is the decrease in the market value of an asset over its acquisition cost during the accounting or the reporting period. The assessment of possible capital gain and their expectations are central to any investment activity and is the main element in wealth creation.

Capitalization: for companies and businesses capitalization is issue of shares to raise equity finance; or conversion of retained earnings into capital by issuing bonus shares; or capitalization of costs by charging an expenditure to the cost of an asset, or adding expenses on the improvements and modernization of existing assets to the cost of the assets; involves determining the market value of assets based on costs incurred less depreciation, or cost of replacement; it is not the same as investment.

Capitalization Issues: is the issue of shares of common stock, or preferred stock to raise equity finance; or it is the issue of additional shares to the existing shareholders; or it is a transfer of funds from retained earnings or reserves to the share capital account, and therefore in effect it is capitalization of retained earnings or reserves.

Commercial Paper: are unsecured promissory notes of relatively low risk and short maturity of 3 to 6 months, issued by highly rated large corporations who usually maintain backup credit lines with their banks to ensure payment at maturity; notes, bills, and acceptances arising out of commercial, industrial or agricultural transactions of short term maturity, self-liquidating and used as trade financing instruments for non-speculative purposes.

Central Bank: is the apex institution of the banking and financial system and is entrusted with its management with the prime objective of maintaining its soundness and stability, vital for the economy as a whole. Foremost, a central bank is a monetary authority as well as a regulatory authority; both these roles are critical in modern times to ensure a sound and stable banking and financial system. As for the traditional view of the role of a central bank regarding currency issue, banker to banks, banker to the government and lender of the last resort, all those are subsumed under these two pivotal roles, empowering the central bank to carryout a range of functions to ensure financial soundness, stability and growth of the banking and financial system, but thus stability and growth of the economy.

- As the ***monetary authority*** and as a custodian of the public confidence in the currency and its value both domestically and abroad, the main function of a central bank is to maintain price

stability and exchange rate stability. For price stability, the central bank articulates and implements monetary policy; manages supply of money and banking credit; conducts open market operations and thus affects liquidity of the banking system; and sets the discount rate which serves as the peg rate for short term interest rates in money markets. Central bank issues its own currency backed by gold and reserves under a fractional reserve system which is not a legal tender, rather it is a promissory note, but it is widely treated by the public as good as a legal tender. As banker to the government, the central bank provides credit to the government and manages government's borrowings operations, domestically and abroad. All these actions of a central bank, collectively, affect availability of credit and interest rates, which affect the level and direction of economic activity and in turn have an impact on the general price level, thus on the rate of inflation in the country and growth of its economy. Central bank manages foreign exchange system of the country, and in most developing countries it is the prime holder of foreign exchange reserves. The central bank actively intervenes in the foreign exchange market as feasible, in attempts to stabilize or maintain a desired level of exchange rate with significant consequences for international trade, transfers and capital flows which materially impact on the balance of payments of the country.

- As the ***regulatory authority***, and as the custodian of public confidence in the banking and financial system, the central bank operates a system of banking supervision and regulation and takes appropriate actions to maintain financial strength, soundness and solvency of the banking system. As banker to the banks, central bank is the lender of the last resort to banks in financial distress and takes actions based on its early warning system well before their financial distress degenerate into wide-spread banking crisis or insolvency of concerned banks. On their part, banks are required to follow the rules, regulations and guidelines as stipulated by the central bank concerning capital adequacy, liquidity, risk management, defaults and non-performing loans in their portfolio and have to make mandatory provisions for bad loans as classified under these rules and guidelines. These stipulations have a direct impact on the quality of the portfolio and profitability of banks as well other financial institutions whose supervision is entrusted to the central bank.

Central Bank Rediscount: is the rediscounting mechanism of the central bank operated mainly to regulate liquidity and money supply, or to affect the level of interest rates through changes in the rediscount rate; involves discounting by the central bank of a treasury bill or a bill of exchange for a bank which has earlier discounted that bill for its client.

Conversion: in finance, it is conversion of an asset into another asset through trade or exchange; in bank lending, conversion of an expired loan into a new loan; in deposit accounts, conversion of a current account to a term deposit account; in foreign exchange trading, it is conversion of a currency into another at an exchange rate, like converting dollars into rupees or otherwise; in dealing with maturity dates, conversion is transformation of maturity of one asset into another, such as converting a fixed deposit

into saving or current account; in securities market transactions, conversion of stock or bond for a specified numbers of shares or stock provided conversion price of securities is the same; in manufacturing, conversion of raw material into finished goods.

Cost of Capital: it has various components including, cost of preferred stock, cost of common equity, cost of retained earnings, and cost of debts; when the cost of capital is determined on the basis of the relative proportions of these components in a capital structure, it is weighted average cost of capital; also interpreted as the minimum rate of return a company must earn in order to satisfy the rate of return expected by investors; also the discount rate used for capital budgeting decisions.

Core and Supplementary Capital: is calculated mainly to assess the capital adequacy of a bank; it needs to be uniformly defined and adopted by all banks to allow meaningful comparisons of networth of banks and their cross section analysis. The Basle Capital Accord of 1988 and its subsequent amendments and updates being adopted by several countries since then define core and supplementary capital as follows.

- ***Core Capital:*** also called **Tier 1** capital constituting shareholders' equity in paid-up share capital or common stock held, plus disclosed reserves. For purposes of bank supervision, the Basle Accord prescribes that core capital should be 50 per cent of the capital base of the bank, and the other 50 per cent may be supplementary capital as defined below.
- ***Supplementary Capital:*** also called **Tier 2** capital, consists of undisclosed reserves, revaluation reserves, hybrid debt capital instruments, general provisions or reserves for loan loss, and subordinated debt limited to 50 per cent of tier 1 items. *(see Capital Adequacy)*

Coupon: is the interest certificate attached to bearer bonds, which can be detached and presented for payment on respective due dates.

Coupon Bond: a bond paying the bond holder a regular amount on specified dates as coupon payment through its maturity.

Coupon Payment: the periodic payment received by the coupon bond holder as part of the bond indenture agreement.

Coupon Rate: is the interest rate paid on bond's par value; or the rate of interest stated on the face of a security; or the ratio of the annual coupon payments on a bond to its par value; it is the interest rate on par value of the bond fixed for maturity period of the bond; it is the obligation of bond issuer, the borrower of long-term funds in capital markets; for bond investors, coupon rate is a fixed rate of return but it is only a part of the total return on a bond, the other part being capital gain or loss at the time of sale based on the market price relative to purchase price or issue price of the bond paid by purchaser at the time of purchase; coupon rate is determined by market conditions as assessed by the underwriters at the time of bond issue, such as long-term interest rates on comparable borrowings, the size of bond issue, maturity of the bond, and above all financial depth of the borrower.

Credit Risk: is the risk of default by a borrower to a lending bank; the risk of nonperformance by the borrower, or non-repayment of a loan, forcing the bank to make provisions from current income, hence causing a reduction in current profits or eventual loss; credit risk may emerge from a market downturn, or a recession, or a slack in business and financial activities, causing losses to the borrowers, and transmitting these losses to nonperformance on credit obligations; or may emerge from an unrealistic assessment of future income and profitability used as the basis of credit appraisal; or may emerge from an insufficient collateral base or illiquidity of collateral; or may emerge from an outright and deliberate default by the borrower, if the borrower is able to get loan write-offs; or fraudulent lending and borrowing practices.

Creditworthiness: of a borrower depends on the assessment of the credit risk associated with the borrower, focusing on the character, business capability, financial strength and collateral value, and capital of the borrower; together with an assessment of industry risks associated with the borrower's business activities; creditworthiness of a bank, similarly is based on the financial strength of the bank, its track record and business success, it's client base; and its capital and shareholders; creditworthiness of a country is the ability and willingness of a country to repay its debts which are based on an assessment of country risk, sovereign risk, and transfer risk with prime concern for the country's overall external financial accounts.

Default: in banking, it is failure of the borrower to repay principal amount and interest due on the debt outstanding; it is declared after the lender and the borrower have exhausted all possible means to clear the overdue payments and there are no further prospects of repayment, and the only resource left to the lender is to proceed for liquidation of collateral, and if the realized value of collateral is insufficient to cover the amount of overdue payments, then take a loan loss on its balance sheet against shareholders' funds. The default may be caused major losses in the business of the borrower, persistent downturn sales, revenues and income, that is, a genuine default; or the default may be willful, with the intent of defrauding the lender and may have no link with the financial position of the borrower. There are several types of default, some of these are:

- ***loan default*** is the same as above but pertaining to a specific loan; that is, the repayments on a single loan may be overdue, but the borrower may still be current on his other loan obligations and other debts outstanding.
- ***repayment default*** is the failure of the borrower to make repayments of principal and interest due on dates specified in the loan agreement; at this point the borrower may not be declared in default, but if several repayments accumulate, and are overdue, the borrower may be declared in default.
- ***contract default*** is the non-compliance of contractual obligations by the parties concerned; these may be obligations, or performance clauses of the contract.
- ***systemic default*** is the wide- spread default of borrowers affecting the entire banking system.

Default Risk: is the risk that a borrower will not repay the debt outstanding, or the interest and principal due on a loan; same as the credit risk and hence the most important

risk in the banking business that needs to be covered primarily through ascertaining the quality of the collateral tendered. In the evaluation of credit-worthiness of the borrower, default risk is the over-riding concern, and is evaluated as a composite of collateral, credit performance history, potential of the line of business of the borrower, financial strength, third party recourse, and other considerations pertinent to the borrower to qualify for the loan.

Deficit Financing: is the extra-budgetary finance secured by the government; if government's budget exceeds estimated budget deficit already included in the budget, the government will have to access items beyond the budget to cover the amount of excess deficit, mostly through domestic borrowing from the central bank or from the banking system, usually below the market costs through short-term instruments such as treasury bills and treasury certificates or long-term instruments such as governments bonds; deficit financing is the major source of increase in money supply and thus a major source of inflation; the central bank, as banker to the government, may extend credit to the government, or to the government agencies or government owned enterprises to fill in their financing gap; since these credits are asset items on the balance sheet of the central bank, these assets provide the backing for bank notes, the currency or the legal tender, the liability of the central bank, promoting the central bank to issue new currency; hence the term deficit financing is usually interpreted as printing money with significant inflationary consequences; to the extent the government borrowing is done from the banking system, and the banks become the holders of treasury bills, certificates or bonds, or advance credit to the government, its agencies or enterprises, the deficit financing may not be entirely inflationary; since it depends how the credit system absorbs deficit financing.

Effective Interest: is realized interest cost or interest income of a financial instrument or a financial asset over a specific time period based on nominal interest rate, maturity, and transaction costs.

Equity Finance: is the amount of capital invested as equity in a business venture with profit or loss sharing obligation on the part of the investor as against loan finance.

Exchange Rate Risk: is the risk associated with changes in exchange rate depending on the type and size of exposure of those engaged in foreign finance such as the borrowers or lenders of foreign loans, dealers in foreign exchange, traders engaged in imports or exports, guarantors of obligations denominated in foreign currencies, and, in general, the foreign currency holders.

- ***for the borrower;*** in case of depreciation of the local currency against the currency of the foreign loan obligation, the borrower may face a substantial increase in debt servicing burden, because the borrower's business operations, and turnover, sales, and profits are in the local currency; generally a devaluation will increase the domestic currency costs of repayment due on a foreign loan, and will increase the equivalent amount of external debt liability.
- ***for the lender;*** it is the reverse of the borrower's risk, if the lender has accepted to receive repayment in a currency other than the currency of the loan, without a risk cover charge; if the loan is in a hard currency, a

depreciation of exchange rate in borrowers' home country, may enhance risk of default or non-payment, but this does not constitute exchange rate risk.

- ***for the guarantor;*** the exchange rate risk on a foreign loan is similar to that of the borrower, but may occur only in the case of default by the borrower covered by the loan guarantee.

Financial Instruments: are financial papers and documents acknowledging financial commitments or obligations; contractual agreements specifying legally enforceable financial liability; papers facilitating financial transactions, transfers, payments and settlements. In banking these are**:**

- savings or ***deposit instruments***, which are assets of the depositors, but the liabilities of the deposit money banks and other deposit taking institutions.

- ***credit instruments*****,** or instruments of indebtedness, which are liabilities of the borrowers, but assets of lending institutions.
- ***transfer instruments.***
- ***payments and settlements instruments.***
- ***financial markets instruments*** for investment and equity finance, such as stock, shares, bonds, and bills.

Financial Market Risks: various types of risk facing investor both in money markets and capital markets, classified as:

- ***market risk*** that the price or value of assets may decrease at the time of sale resulting in capital loss.
- ***interest rate risk****,* that an increase in interest rate will cause a decline in the market price of a bond or a debt security or stocks and shares.
- ***default risk*** that the issuer of a bond may default on repayment or redemption of the bond.
- ***inflation risk*** that increase in general price level will reduce the real value of financial asset.
- ***currency risk****,* that changes in exchange rate of domestic currency will adversely affect the rate of return on financial assets held in foreign currency.

Financial Futures: are standardized futures contracts whose market price is established at trading in a regulated commodity exchange; financial futures represent a commitment to buy or sell a specified quantity of a specific financial instrument in the future. like all other futures contracts.

Financial Markets: consist of money and capital markets; the money market segment deals in short-term financial instruments, mostly debt instruments to cover short-term financial needs issued by banks, companies and government such as deposit certificates, bills of exchange, commercial papers, and treasury bills; the capital market segment deals in long term financial instruments, both for long-term debt financing or equity finance issued by companies, financial institutions, or the government. In general, these are markets for financial instruments or financial assets of various maturities, risk and return characteristics involving savers, investors and intermediaries conducting transaction to facilitate the flow of household and institutional savings in to short and long term debt or equity instruments at prices determined by supply and demand conditions and interest rates.

Financial Market Risks: various types of risk facing investor both in money markets and capital markets, classified as:

- ***market risk*** that the price or value of assets may decrease at the time of sale resulting in capital loss.
- ***interest rate risk***, that an increase in interest rate will cause a decline in the market price of a bond or a debt security or stocks and shares.
- ***default risk*** that the issuer of a bond may default on repayment or redemption of the bond.
- ***inflation risk*** that increase in general price level will reduce the real value of financial asset.
- ***currency risk***, that changes in exchange rate of domestic currency will adversely affect the rate of return on financial assets held in foreign currency.

Floating Exchange Rate: a system whereby the exchange rate is allowed to adjust according to the market forces of supply and demand, and there is no intervention by the central bank or the government to maintain the exchange rate at a target level, as is the case with fixed exchange rate system. There are various types of floating exchange rate: *(see Fixed Exchange Rate)*

- A ***free floating*** exchange rate system is without any intervention by the authorities in the foreign exchange market; currently, major international currencies such as US dollar, Japanese yen, German mark and a few others are in a free float and their exchange rates are determined by international markets in foreign exchange.
- A ***managed float*** system, also called dirty float, is a system of exchange rate determination when market forces are only partially operative and are mixed with interventions to maintain a desired level of exchange rate.
- A ***band float*** is a system of formally specified or designated range of an exchange rate; within the range, exchange rate movements are allowed to occur almost freely; but if the exchange rate moves out of the band, the authorities may intervene.
- A ***snake float*** is a system where exchange rates of several currencies in the basket move together with in a band in a harmonious fashion, maintaining their relative position, more or less, with each other.

Financial System: of a country consists of a vast institutional and market mechanism of mobilization, allocation and transfer of financial resources between suppliers and users; suppliers of financial resources are savers, mainly households but also businesses and corporations, while users are mainly businesses, investors, and government, whose activities lead to economic growth depending on how successful investors are in their ventures and how efficient the financial system is in helping them to do so. There are two major operational structures within a financial system; one structure is devoted to the system of ***indirect finance*** involving mobilization, allocation and transfer of resources by financial intermediaries of a large variety, mainly banks and non-bank ***financial institutions*** who are engaged in financial intermediation between users of financial resources, the borrowers, be in public sector or private sector, and suppliers of financial resources, the savers, mainly households; these intermediation activities and operations are overseen by a regulatory authority, typically the central bank,

responsible for maintaining confidence of the public in the currency and the banking system through ensuring stability and solvency of the banking system. The second structure is devoted to a system of ***direct finance*** through financial markets between suppliers of funds, the savers and who are investors mainly households, and also businesses and corporations who invest in private or public securities, private or public bonds and stocks of companies listed on stock exchanges through operations of a variety of ***financial markets***, mainly money markets, foreign exchange markets, bonds and stocks markets; their operations are regulated by securities and exchange commission responsible for ensuring public confidence mainly by insuring transparency in listing and trading of securities transacted in these markets. Besides, financial system consists of ***financial infrastructure*** facilitating operations of financial institutions and a variety of markets both for direct and indirect transfers such as deposit markets, credit markets, funds markets, debt markets, securities markets and their infrastructure such as rating and reporting systems; the ***payment and settlement system*** and securities depositories facilitating transactions and transfers; also a ***safety net*** and institutions such as deposit insurance corporations, or risk mitigation mechanisms that reduce volatility in the operations of credit markets or financial markets. Operations of financial, institutions and markets are governed by a legal framework and are facilitated by an efficient ***legal infrastructure*** including a body of laws rules and regulations pertaining to every aspect of financial intermediation, trading and transaction, together with an enforcement mechanism and a system of courts for adjudication and arbitration of financial disputes, debt recovery, bankruptcy, liquidation and foreclosure.

Foreign Exchange (currency) Trading Risks: there are several types of risks as listed below:

- ***Market Risk;*** the risk that the market exchange rate moves against the position held by the trader.
- ***Counterparty Risk;*** the risk that the party with whom the trader has entered into an agreement cannot honor the agreement.
- ***Transfer Risk;*** more a function of country risk, that rules and regulations may change preventing the international transfer of funds; new exchange restrictions or embargo in a crisis situation.
- ***Settlement Risk;*** arising from trading with counterparties where settlement may not occur immediately and the exchange rate may move within the value date of settlement, causing a loss or gain; a counterparty may default on the agreement within the value date; to counter the risk, the effective value date (time) may be advanced, or a limit may be stipulated per trading day.
- ***Interest Rate Risk;*** for some currency transactions, like a swap, the real exposure may not be to currency rate movements, but to interest rate changes for the currencies or countries involved, since it is the key difference between spot and forward positions.

Foreign Exchange Reserves: are the balances held by a central bank in major international currencies like US dollars, Japanese yen, British pound sterling, with other central banks abroad, to ensure payment and settlement due in foreign currencies on account of payment

obligations arising from imports, repatriation to foreign investors, or repayments on external debt whether government or private foreign loans; these reserves are a critical indicator of foreign exchange position expressed in terms of coverage for x-months of imports.

Foreign Private Investment: is undertaken by foreign private investors such as financial institutions, major investment funds, investment banks, multinational companies, corporations and businesses, without sovereign guarantee tendered by the government or the central bank, but with reasonable assurance for transfer of profits and repatriation of principal amount invested in an internationally convertible currency; this transfer commitment is critical in maintaining investors' confidence and amounts to an implicit guarantee for stable exchange rate since the investor undertakes the foreign exchange risk and transfer risk, in addition to usual business risks in an investment; these foreign private investments are recorded as gross capital inflow in the balance of payment accounts, and are financing item net of repatriation of profits and capital; there are two types of foreign investment:

- ***Direct Foreign Private Investment:*** is capital contribution in a local business, opening of subsidiaries by multinational companies, installation of local manufacturing facilities by foreign firms, franchises and distribution outlets of foreign firms.
- ***Foreign Private Portfolio Investment:*** is the equity investment, or shareholdings in a local company; by far the largest part of foreign private investment undertaken through securities markets, domestic and international, involving purchase of stocks, shares, corporate bonds and securities, and other financial market instruments; there has been a phenomenal growth in foreign private portfolio investment since the late 1980s, and governments of many countries have borrowed heavily through bonds and securities specifically issued and targeted for private portfolio investment.

Formal Finance: is finance arranged by formal financial institutions; in contrast to informal finance, formal finance is arranged through financial facilities made available under standardized arrangements that create contractual obligations between the parties extending and receiving finances, namely the lender and the borrower, and therefore are legally enforceable, with well defined and widely acknowledged recourse and remedies; these financial facilities are loans and credits provided by formal financial institutions such as banks, specialized financial institutions, finance companies or non-bank financial institutions; whereas informal finance is provided by money lenders, friends or relatives which also entails financial liabilities but carries a mixture of financial and social obligation and are not so easily enforceable through legal measures in the event of non-performance or default by the borrower.

Industry or Sector Risk: are lending risks pertaining to a specific line of business activity or to an industry due to concentration of lending activities of the bank; such over-exposure of the bank in relatively risky industries or sectors is risky, because adverse business and financial trends associated with the sector may seriously affect bank's borrowers and impair their ability to repay their loans, causing loan losses or lowering the quality of loan

portfolio of the bank; for example, if a bank's lending is concentrated in textile sector, and if the local textile industry is facing business adversities in its markets overseas, this may jeopardize local textile manufacturers or traders, thus transmitting industry risk into a credit risk faced by the lending bank.

Hedging: is the use of financial market mechanisms, instruments or techniques such as swaps, options and futures contract to protect against loss caused by price or interest rate fluctuations; for example, borrowers may buy or sell interest rate futures to protect against changes in short term interest rates; investors may similarly protect themselves against price changes; they may sell a forward contract in the futures market to protect against a fall in the price; or they may buy forward contract to protect against a price rise.

High Grade Securities: securities issued by government authorities; or by companies of good reputation and earning capabilities; or securities backed or guaranteed by financially strong parties or institutions with good return with low or reasonable risks.

Indexed Securities: are short to medium term debt securities whose value at maturity or interest rate on the security is linked to a major interest rate, or an index of commodity prices, exchange rate, or other such indicators; these securities may be positively or negatively indexed, i.e. their value may increase or decrease if the reference index or the value of underlying instrument changes; indexed securities may have return characteristics similar to direct investments in the underlying instrument, but may be more volatile than the underlying instruments.

Inflation: is a persistent increase in the price level, thus enhancing expensiveness; it is measured by the consumer price index (CPI), or the wholesale price index (WPI), or the general price index (GPI). Price increase results in a corresponding decrease in the *real value* of a unit of money, and thus a decrease in the real purchasing power of income, salaries, and wages. Inflation causes a decrease in the real net worth of financial assets, such as money balances and deposits with the banking system, and inexorably distorts consumption and savings in an economy with far reaching and severe consequences that may take years to overcome. Inflation is of various types; it may be cost-push inflation, stemming from rising prices of raw materials, indexed wages, or increase in energy costs; or it may be demand pull inflation, if domestic supply of goods and services is inadequate to meet the demand; or it may be foreign inflation if import prices rise as happens in the wake of massive devaluations provided imports are a substantial portion of domestic supplies and are critical to the domestic economy such as oil imports. Thus, in an economy, inflation may emerge from various sources; however, the root cause of inflation is the excess of aggregate demand over aggregate supply; that is, a persistent excess of expenditures over production and income levels, financed from savings or borrowings, whether domestic or foreign. The excess demand may originate in the private sector or the public sector, or both. For the private sector, there are various limitations on excess of expenditures specially on consumption expenditures since it depends on income levels, taxes, and costs of borrowing, whereas excessive investment expenditures depend on private asset base, profitability and expectations related to investment. For the public sector, such

limitations are not binding, and therefore, public sector can incur persistent budget deficits, and as sovereign borrower, it can finance its deficits-- the excess demand -- both from domestic and foreign borrowings. Further, if the excess demand, originating mainly from the public sector, is funded through deficit financing and borrowings from the central bank, it involves creation of money and excessive issue of currency, without sufficient backing of central bank's reserves of gold and foreign exchange. This results in excessive money supply, in a proper sense of this term, leading to an increase in the general price level. In this sense, excessive money supply, often described as the phenomenon of "too much money chasing too few goods", is a critical link in the chain of consequence of excessive and wasteful expenditures in the first place; but it is not the basic cause of inflation nor its starting point. If the excess demand of public sector is financed from borrowings form domestic banking system, or from the general public, or from overseas, the inflationary impact will not be the same as in the first case, though it will result in expansion of banking credit and money supply and hence inflation. Inflation is a common feature almost in all countries at moderate levels, but persistently higher rates of inflation cause economic and financial chaos, a rapid erosion of purchasing power, a depreciation of nominal and real exchange rates, and a redistribution of real income and wealth against fixed income group who invariably suffer a major loss in their real income. Hence, inflation is seen as a regressive tax which affects the fixed income and lower income groups much harshly than others, with devastating social consequences.

Inflation Risk (portfolio): is the risk of erosion of real net worth of an investment portfolio; a decline in the real return on securities held in the portfolio. Inflation us a major risk to even a well diversified investment portfolio because inflation erodes away real return of an investment in securities, through some types of securities may be more exposed to such a loss; for example real returns on bonds and reserves may be less than real returns on stocks in inflationary times, thereby providing a relative edge in stocks to portfolio investors; for a portfolio investor safeguarding the net asset value of the portfolio is the main element in risk diversification, than holding a particular type of stock or bond.

Initial Public Offer (IPO): is the sale of shares by a company which has gone public, that is, opened its shareholdings and equity base to general public for the first time to increase its market capitalization, and has newly listed on stock exchange to offer its shares for sale to the general public; a time-honored process of enhancing capital base of a company well beyond the equity of original owners of the company.

Insolvency: of an enterprise, a business, a company, or a bank occurs when the shareholders' funds including capital and reserves are insufficient to cover losses accumulated over a period because of sustained losses of the business. In this sense, insolvency gradually builds up over time and is rooted into the structure of business operations; it does not occur overnight owing to contingencies or sudden adversities of the market trends; the only recourse is substantial re-capitalization by the owners, or by new investors if they could be persuaded to invest; otherwise the business may end-up in receivership for re-organization and restructuring. If none of these recourses are feasible, then insolvency

may lead to bankruptcy and closure, spreading the losses beyond owners to the creditors or clients.

Instability of Financial Markets: is characterized by fluctuations in key interest rates or in market price of securities, stocks, shares, bonds and other financial instruments, adversely affecting financial returns and upsetting financial flows and market balance; or in commodity prices affecting, turnover, sales, liquidity and profitability; or in money and credit markets affecting availability of loan finance or investment finance, thereby adversely affecting businesses and companies, causing a reduction in their level of operations and profitability; or in foreign exchange markets affecting foreign trade and foreign capital inflows.

Institutional Investor: may be a bank; or it may be a finance company, an insurance company, an investment fund or unit trust, a provident fund, a mutual fund, or a business company undertaking large portfolio investment in the financial markets, often exercising considerable influence over the market trends owing to their size and presence in the market; managing large amounts of deposits or savings, collected on retail basis, and investing them in money markets or securities markets; employing sophisticated market techniques, investment strategies, and exercising financial leverage, beyond the capacity of a single investor.

Inter-Bank Market: is a market where banks amongst themselves raise or place funds usually for short-term at a rate of interest determined by market forces reflecting scarcity of funds, but usually higher than the prime rate, either to meet their liquidity requirements or to deploy surplus liquidity; banks may also discount securities and commercial papers in inter-bank markets.

Inter-Bank Rate: is the interest rate prevailing in inter-bank money market; a short-term rate determined on the basis of market forces; it may change on a daily basis and is outside the direct purview of the controlling agencies such as the central bank; a good indicator of short-term bank liquidity levels.

Interest Rate Futures: are financial contracts designed to hedge against interest rate risk by transferring the risk to investors willing to accept it for a return; these interest rate risks are covered with forward contracts, where the purchaser of the contract loses or gains if interest rates fluctuate; however, in several developing countries, futures market are still in infancy and have long ways to go before they become a viable market.

Interest Rate Options: are forward contracts to buy or sell a financial instruments at a price and at a future rate stipulated in the contract; also called fixed income option since the rate of interest of the financial instruments is fixed which pays fixed interest income to the holder of the instrument; the contract provides only an option, a right to buy and sell, rather than a binding obligation; the options are traded on securities exchanges, or over-the-counter market if issued by banks for government bonds, money market instruments or mortgage backed securities.

Interest Rate Risk: the risk arising from fluctuations in the market rate of interest as against a fixed rate of interest stipulated in a financial contract or embedded in a financial instrument, thereby causing a major change in the costs or returns.

- ***for the borrower,*** the interest rate risk arises if the loan is obtained on floating rate of interest, pegged to a benchmark or an index of market based interest rate; if the market rates rise, the cost of borrowing will increase proportionally.
- ***for the lender,*** the opposite of borrowers' risk; namely, the risk in variable interest loans is that market interest rate will decrease over the period of loan repayment, causing a loss to the lender.
- ***for the investor,*** the risk that fluctuations in interest rates my adversely affect market value of the security; for example bond, prices fall when interest rates rise, and vice-versa; or the return on investment may decrease in line with a decrease in market interest rate depending on the type of investment, maturity, size of differential and the type of exposure.
- ***for the saver,*** the risk that a decline in interest rate will cause a loss if the saving instrument stipulates fluctuating instead of fixed interest rate and savers are unable to move funds into other types of saving instruments or actively participate in other segments of financial markets.

Interest Rate Spread: is the difference between interest rate on two opposite transactions; for example, if the interest rate on deposits is 10 per cent per annum and on lending is 15 per cent, then the spread is 5 per cent; if 12 per cent interest is charged to the borrower for a re-finance facility and the funds are reimbursed by the central bank at 9 per cent, then the spread for the lending bank is 3 per cent.

Leverage: is use of borrowed funds to increase return on equity and is measured by the proportion of debt to equity in a firm's capitalization, the leverage ratio; leveraging affects the structure of capitalization through the use of senior capital and other assets of the company for borrowings, and it causes a faster growth in the assets of a company relative to equity, and faster growth in the debt outstanding which ranks ahead of junior equity in claims on returns; leveraging enables a company to enhance its business operations, thus it enhances profitability, return and dividends on originally invested capital, as long as the future rate of return turns out to be higher than the interest cost of borrowed funds. Leveraging also enhances company's exposure to financial risk consisting of business and market risks, and specially interest rate risk; if the rate of returns falters because of a market downturn, or if it is below the average interest cost of borrowed funds, a high degree of leveraging may force the company into bankruptcy.

Financial Leverage: is use of borrowed funds to enhance overall return on the original equity of investors, provided funds thus borrowed through issue of long-term bonds or other debt instruments enable the company to earn higher profits and returns relative to interest paid on borrowings;

- ***Operating Leverage:*** is the extent to which changes in EBIT are caused by changes in sales; when a production process becomes more capital-intensive, becomes more modernized or

automated, fixed costs rise whereas variable cost per unit declines;

- ***Total Combined Leverage (DTL):*** is the composite of financial and operating leverages, and is measured by percentage change in earnings per share divided by percentage change in sales; total combined leverage indicates a firm's ability to use both operating and financial fixed costs to magnify the effect of changes in sales on a firm's earning per share.

Limit: in banking and finance**,** there are several types of limits such as:

- ***Lending Limits:*** *(see Limitations on Lending Activities)*
- ***Loan Limits:*** specified by the lending bank for a single loan, or a line of credit for a borrower.
- ***Exposure Limits:*** to various types of risks in lending or in portfolios management, as prudential guidelines or safeguard.
- ***Foreign Exchange Limits:*** stipulated by the central bank to control or regulate dealings in foreign exchange by banks whereby a bank's open position cannot exceed specified limits; or, foreign exchange trading limits specified by a bank on daily basis to its foreign exchange trading department, or to each foreign exchange trader that cannot be exceeded at a close of the day.
- ***Inter-bank Borrowing Limits:*** stipulated by banks on borrowings from each other for various types of inter-bank loans.
- ***Securities Trading Limits:*** in various layers, stipulated by the institutions concerned to manage exposure in securities portfolio.

Macro-financial Analysis: concerns with the study, analysis, evaluation and assessment of performance of the financial system and its major components at the system level, the aggregate level; for the ***system of indirect finance*** concerning financial intermediation, it involves macro-financial aggregates, money supply, banking deposits, credit, reserves, liquidity; structure of interest rates and exchange rates; borrowings of public sector and private sectors; operations of the central bank, its system of control on banking operations, levers of control, and banking regulation and supervision as conducted by the central bank; structure of interest rates both on the deposit side and the lending side; operations and mechanisms of the banking system and other components of financial system such as nonbank financial institutions; the system of foreign exchange, its market operations and control mechanisms of the central bank; institutional aspects such as the legal infrastructure, the system of entry and exit of financial institutions, operations of payment and settlement system for the banking system, operations and evaluation of regulatory mechanisms. For the ***system of direct finance***, macro-financial analysis involves evaluations and assessments of the operations of financial markets, benchmarks and pricing, impact of changes in the interest rates and exchange rate on money and stock markets, interlinks with the system of indirect finance based on macro-financial aggregates such as size and depth of money markets, specially market for treasury bills; analysis of the size, structure, depth and trends of capital markets and its major components like bond and stock

markets; levels of market capitalization; size, structure and impact of foreign portfolio investments, or direct foreign investment and corresponding capital inflows; evaluation of stock exchanges, over-the-counter and futures markets if any; analysis of the activities of market participants, brokers, dealers, market makers, and major segments of investors, operations and evaluation of listing and trading mechanisms, rules and requirements; evaluations of the mechanisms of payment, settlement, transfer, recording and safekeeping by depositories of stocks and shares traded in the capital markets.

Margin Call: in portfolio investment, margin call is made by the lender on an investor's account with a stockbroker or a dealer in securities if the investor has borrowed funds from them to buy securities by pledging the same securities as collateral, and the market value of the pledged securities has plunged down below a pre-agreed level thereby, impairing this collateral; in such a situation under the agreement of margin loan, the lending broker issues a recall of the margin loan in full or in some proportion of the amount outstanding which has to be repaid in cash by the borrower; failing that, the lender has the right to liquidate part of investor's portfolio to satisfy margin call requirements; this eventually arises mostly due to market volatility and adverse movement in the market value of securities thus acquired; or due to over-exposure of the investor to risky stocks compromising the soundness of investor's portfolio; or due to lack of liquidity depth in the investor's portfolio with the broker or the securities dealer.

Margin for Collateral: is the excess of the market value of collateral over the amount of loan; lenders typically prefer to provide loan amount less than the assessed value of collateral, because in the event of default, there are costs in loan recovery and these are substantial losses in distress forced sale, even with performing collateral; hence a margin for collateral is maintained.

Margin Loan: in portfolio investment, it is the loan secured on market rates of interest by an investor from the brokerage firm or the securities dealer with whom the investor is maintaining his portfolio account, to buy securities as an addition to his portfolio on the margin; the collateral for the margin loan are the new securities acquired, or a combination of new securities thus acquired as well as other securities held in the portfolio; the amount borrowed is based on some proportion of net worth of the portfolio held under terms and conditions called margin maintenance requirements; the most important one among these requirements concerns the value of the securities, the margin positions tendered as collateral, typically specifying that if the market value of margin securities were to decrease, say by one third, owing to adverse stock market movements, the margin loan will be recalled and is payable in cash or securities of equal value; the margin maintenance requirements are higher for volatile securities, otherwise typically it is one third of the purchase value; in times of booming securities markets, investors borrow margin loans in anticipation of quick capital gains well above the cost of margin loans; but if these anticipations turn sour owing to a market reversal, or a market decline, the investor faces huge losses plus the margin loan recalls; it is like borrowing costly funds to finance losses; hence in portfolio investment, margin loans may be seen an easy way to finance large capital gains at market costs, but they are also an

easy way to incur losses on borrowed money; therefore prudent investing requires a tight discipline; part of it is built into the exposure limits on margin loans and its recall stipulations, but a more important part concerns investors own investment actions and policies.

Maturity Mismatch: for a financial institution a mismatch occurs when the maturity structure of liabilities and their underlying financial obligations no longer correspond with the maturity structure of assets and their underlying financial inflows and stream of income, causing illiquidity, eventually financial distress if a financial institution is unable to cope with the mismatch.

Maturity Structure: is the time period of assets and liabilities based on their classification according to their maturity period or the maturity dates; it reveals concentration of financing or funding requirements of liabilities falling due at carious intervals; it shows availability of financial resources for assets maturing at various intervals; he maturity structure and its analysis provides a vital dimension to funding or financing decisions and portfolio management; a mismatch in maturity structure may cause serious illiquidity and losses if not properly managed.

- ***of deposits:*** is the time profile of deposits held by a bank consisting of various types of deposits classified by their maturity period; it shows deposit funds available to the bank for specific period for its lending operations
- ***of liabilities:*** is the time profile of liabilities in order of their due dates; for a bank, it mainly consists of deposits, and borrowings.
- ***of loans:*** the time profile of loans outstanding; the loan portfolio of a bank classified according to the period of time for which loans are extended.
- ***of payments:*** the time profile of payments as per dates they are due.

Money: *in classic sense* money is defined as a measure of value, a medium of exchange, and a store of value; while this definition holds true it is insufficient for several reasons such as cash is not normally used now a days to store value beyond immediate transactional needs since it is a poor medium of storing value which erodes away over time with inflation; besides, keeping cash is hazardous, and there are superior instruments of short term savings available than cash savings. In economic sense, cash or nominal money is a unit of account and it does not have any intrinsic value of its own, being *fiat* money except for its command over real goods and services represented by the *real* value of money, essentially its purchasing power, the real money balances held whether for consumption or savings by the cash holders depending on their intertemporal time preferences; since real value of money always keeps changing because of movements in prices, therefore in economic sense real money balances are all that matters arrived at by adjusting nominal money balances for changes in the price level; in so far as real money balances reflect command over resources like goods and services, there are costs and returns associated with these resources and these costs and returns are attributable in the transfer of real money balances, and a step removed in the transfer of underlying nominal money balances represented by

interest rates through operations of financial system; therefore the classic definition of money is insufficient characterization of money unless the real value of money is reference with time line inclusive of changes in the price level. In finance, money or cash is a liquid asset; it commands a premium and provides a return, howsoever small or large to the cash holder like any other liquid asset; for those seeking cash for temporary liquidity, this liquid asset has a cost in the money market which often is higher than prime rate of interest in times of tight liquidity.

Moral Hazard: in banking refers to the risk of operational conduct contrary to the sound banking practices, prudential lending, or contrary to the intent underlying banking regulations or procedures while avoiding outright contravention of those rules and regulations; for example, a system of deposit insurance, may encourage banks to undertake excessive lending risks beyond the norms of prudent lending practices, since deposits are guaranteed by the deposit insurance institution, the major liability of the banks, though the purpose of deposit insurance to protect depositors, rather than encourage risky lending.

Money Laundering: is to convert illegal money or black money into legal money; if funneled through banks, it involves a series of very sophisticated domestic or international transactions in such a way that the illegal origins of the funds and its criminality is not traceable. The size of money laundering operations is very large, estimated into billions of dollars per year, originating mainly form trafficking in drugs and other contrabands, illegal gambling, large pay-offs in bribes or extortions, or plainly stolen funds in large amounts, held in numbered accounts or third party accounts where regulatory controls do not require adequate disclosure, and usually denominated in major convertible currencies.

Net Interest Margin(NIM): in its simple version, NIM is measured as interest incomes less interest expenses divided by interest earning assets and expressed as a percentage; that is the difference between the interest income and interest expense expressed as a ratio of weighted average of interest earning assets over a specific period held in the portfolio of a financial institution; thus NIM can be expressed as the difference between total interest income divided by total interest earning assets, and total interest expenses divided by total interest earning assets where interest expense ratio also represents the break-even point on the costs of interest earning assets of a financial institution; in this sense NIM represents a critical benchmark of a bank's profitability.

Off-Balance Sheet:

- ***Liabilities:*** for banks, these are financial commitments extended or accepted arising out of their business activities but not reported in the balance sheet because these are not acceptable routine banking operations, but may be needed to facilitate or finalize banking transactions; these include items like third party general guarantees of

indebtedness extended to their established clients; or hedging activities for portfolio risk management such as swaps and options for various types of interest rate exposures, or currency market exposures.

- ***Conversion Factors:*** are ratios applied to determine the credit equivalents based on the credit risk or exposure to determine capital adequacy of a bank; most of these items such as standby letter of credit, sale and repurchase agreement, underwriting agreements, interest rate swaps or Repo agreements, have 100 per cent or full credit equivalence, whereas transaction related contingent items have 50 per cent and self-liquidating trade-related contingencies have 20 per cent credit equivalence.
- ***Finance:*** for a banking institution those items of finance that are not recorded on the balance sheet of the bank even though they may be sizable and involve major implications for overall financing, balance and liquidity.
- ***Guarantee:*** the liability of a company incurred by issuing a guarantee which is not reported in the balance sheet but may involve future payment for a claim against the guarantee.
- ***Income:*** commission, fee or charges derived from off-balance sheet items.
- ***Operations:*** transactions or activities of a company in relation to off-balance sheet items which are not reflected in the balance sheet; for example, underwriting arrangement, issuance of standby credit and counter trade.
- ***Risks:*** risks in banking or business which are not reflected in the balance sheet because these risks are associated with off-balance sheet activities such as currency transactions; their exclusion however, is in contravention of sound banking practices because it does not mitigate the overall risks faced by a financial institution.

Peg Rate: a benchmark rate or a reference rate used as an anchor for stipulating effective rates; for example in case of foreign exchange rates, a major currency like US dollar, may be used as a peg to define Rupee exchange rate on a daily basis; the peg rate may be fixed for a defined period; or it may be a floating rate thus dragging the pegged rate in line with its own fluctuations.

Prime Rate: is the rate of interest charged by a bank to its prime borrowers; the base lending rate of major banks charged to large creditworthy borrowers; a reference rate or peg rate for other lending rates in a banking system, thus providing an anchor to the structure of interest rates on the lending side; a closely watched major indicator for the market for borrowed funds.

Pyramid (Financial): is a fraudulent financial scheme, a swindle, where clients are lured into investing with the promise of large returns over short periods in multiples of market based returns; returns are typically paid from new inflows to the old investors who may have reached the payout threshold in the pyramid structure; as the pyramid scheme grows, the number of "investors increases", but the amount needed for payout grows exponentially and the pyramid collapses under its own weight, leaving a large number of late entrants unpaid. Since the swindler is perched on top of the pyramid, and collects a fee for each transaction, may even be a participant in earlier rounds, he collects an immense

pay-off; financial swindles like these have occurred in several countries, developed or otherwise.

Real Value: is the nominal or the current value adjusted for inflation with respect to a base period; for example, real value of income, salary or wages received in the current year and expressed in constant prices, or expressed in terms of a base year prices; real value reflects the real purchasing power of income, wages or salaries; likewise, measures of real income, real investment, real savings or real expenditures reflect values of these variables in terms of constant prices or base year prices.

Recapitalization: usually it is the increase in the paid-up capital or equity base of a business or a financial institution concerned; involves changes in equity base or providing additional equity thus increasing shareholder's funds and altering capital structure and long term debts of a company a business or a financial institution through exchange of shares, new issue or replacement of bonds or exchange of bonds with shares.

Repurchase Agreement (Repo): is a contract of sale of securities with a simultaneous commitment to repurchase the same at a specified date and price; it is an arrangement to raise short term liquidity from the money market; also provide a means to maximize earnings on treasury bills and government securities if the banks and financial institutions enter into Repo with the central bank or other players of money market; for the counterparty, investment in a Repo transaction enables short term placement of excess liquidity for earning a return.

Reserves, banking: at the aggregate level, it is the sum of both statutory and excess reserves held by a central bank on the deposit base of banking system; these are amounts deposited by the banks in their reserve accounts with the central bank free of interest charge; for a single bank, it is that portion of deposits which a bank sets aside and deposits it with the central bank to meet the statutory reserve ratio requirement stipulated by the central bank; in addition to these statutory reserves, banks also maintain additional reserves or excess reserves with the central bank determined by several factors such as the structure and type of deposits, the extent of use of cheques, and the amounts needed for the settlement of all types of liabilities and debts.

Reserve Ratio: is the prescribed ratio of cash reserve balances to deposits and liabilities that are subject to reserve requirement of central bank; typically reserve ratio in most countries is around 5 to 7 percent of a bank's time and demand deposit liabilities whose components are stipulated by the central bank.

Reverse Repurchase Agreement (reverse Repo): is the opposite of repurchase (Repo) agreement; it occurs when a bank or money market player having surplus funds purchases securities from the holder with a simultaneous agreement for resale of such securities to the seller at a future date and specified price; repos are used by money market institutions for securing short term investment income; or used by the central bank as a monetary policy and control tool,

where repo transactions are fully collateralized by the government securities.

Reverse Swap: a transaction in the secondary swap market entered into with the original counterparty or a new counterparty offsetting the interest rate or currency exposure on an existing swap resulting in capital gains.

Risk Diversification: is to curtail or minimize risk of loss in the value of assets or investments, loan portfolio, or deposits held through diversification; a common method is to diversify investments in an investment portfolio in such a way that a decline in the value of one or few investments remains within tolerance limits, and is compensated by gains on other investments.

Securities (finance): in finance, a security is a financial asset such as a preferred stock or common stock, shares, bonds, commercial or treasury bills constituting portfolio investment; the counterpart of the security is the financial instrument to the issuer of stocks, bonds or bills to obtain medium long term debt or equity finance for an investment undertaking or capitalization; also security may be short term financing instrument for working capital and other financing needs.

Securities Market: is a market for stocks, bonds and other securities, composed of buyers and sellers of securities, and market makers who may conduct their transactions at a stock exchange, or over the counter market, OTC, not necessarily tied to a specific location or specific place; generally, the original issuers of securities are corporations, governments or other institutions, and purchasers are investors who may be individuals, businesses or financial institutions; subsequent trading of securities is however, conducted at the stock exchanges, trading houses, and OTC markets.

- ***Primary Market:*** consists of institutional investors, financial intermediaries, underwriters, and investment banks for the issue of a new security; afterwards, these buyers of a new security in the primary market may offer it for resale to the general public and to the investors in the secondary market. For example, in debt markets the public issue of corporate bonds or debentures is primarily purchased by the investment banks, the underwriters, and then resold to the public in the secondary market, mainly over the counter market (OTC); likewise, a new issue of treasury bills and government bonds is sold first to primary dealers registered with central bank, mostly banks and other financial institutions; in equities market, whether it involves floating a new issue of stocks or an initial public offering, the primary sale is to the underwriters or to broker-dealer firms, and then resale to the general public or investors in the secondary market.

- ***Secondary Market:*** are markets for outstanding securities, stocks, bonds and other financial assets for trading by a variety of investors, or markets where institutional investors who initially bought the new issue from underwriters sell it to the public; the principal secondary market for securities is the stock exchange, over the counter market, and the network of dealers, brokers, clearing agents, market makers and individual buyers and sellers; for example, a marketable debt instrument, such as a bond is resold to new investor after the original issue is purchased by

the institutional investors; such a resale may be made directly or through an intermediary.

Securities Markets, Dealer Abuse: major types of dealer abuse are insider trading ahead of sensitive announcements known only to insiders which are likely to affect the market price of the security; false trade reports creating an impression contrary to the market behavior; false market positions at artificially depressed or inflated prices; backing off or not executing order or refuse to deal in a timely fashion, specially in volatile market conditions.

Securities Markets, Facilities: consist of facilities for listing, dealing and trading in various types of securities; securities depository and registration; payments, clearing and settlement facilities; ratings and standards; quotes and information; and financial services; these core facilities are supplemented by a network of brokers, traders, intermediaries; operating under a legal and regulatory framework, self regulation arrangements, together with monitoring and compliance mechanisms.

Securities Markets, Functions: the core function of securities market is intermediation between debt and equity finance needs of the borrowers, such as companies, businesses, and government, and opportunities for decent returns on securities portfolio of investors; the process of intermediation reconciles these needs; for example, the borrowers in the securities markets usually need large amounts of capital, beyond the capacity of a single investor, relying small household savings, or even beyond the capacity of institutional investors; further, the borrowers need long term debt or equity finance, whereas investors may not wish to lock-in for long term commitments and may wish to maintain reasonable liquidity; borrowers would like to minimize the cost of capital while investors want to maximize their returns; securities market bridge this gap between the two parties.

Securities Markets, Laws and Regulations: are laws, rules and regulations concerning issue and listing of securities such as stocks, shares, bonds, or bills and routine operations of securities markets and stock exchanges; rules and regulations governing transactions and activities of brokers, dealers, and OTC market operators; this legal infrastructure is established to regulate, control and monitor activities of issuers, buyers and sellers and brokers in the secondary market.

Securities Market Makers: at stock exchanges market makers are broker-dealers, as member firms of stock exchange who are designated by the stock exchange, often called specialists, to trade on the floor not only with clients but also with other brokers and dealers for their own account; they may also be floor brokers or floor dealers. In OTC markets, securities dealers are market makers, trading and executing buy and sell orders for brokers who may be trading on their own behalf or on behalf of investors and clients.

Securitisation: is a modern banking process; involves conversion of bank loans and other assets into marketable securities for sale to investors to diversify banking risks and to enhance its financial leverage; the process of obtaining security against a credit or a bank transaction such as issue of guarantee.

Segmentation of Financial Markets: is a feature of new or emerging financial markets where terms of transactions in

certain types of financial instruments and securities is differentiated by categories of market participants or market segments; however, in mature and well functioning financial markets, segmentation may still occur through the unregulated activities of market intermediaries, or through hybrid financial instruments.

Self Regulation, Securities Market: are rules, regulations, directives and procedures enacted by stock exchanges to govern their market operations, binding on members of stock exchanges, dealers, brokers and market makers.

Soft Landing: is the opposites of *hard landing*; the two are a pair of opposites, characterizing the impact of corrective measures taken by a central bank over the short-run; in the context of macro-financial management, soft landing refers to how smoothly the economy settles down after monetary controls have been applied to counter a variety of destabilizing trends as shown by leading indicators, such as rising inflationary pressures and overheating of the economy owing to high growth rates in the major sectors, with ever tightening labor markets and consequent pressures on wage levels; or untenably low interest rates contributing to expansion of banking credit and liquidity, thereby compromising aggregate money demand balances, encouraging excessive consumer spending; or low interest rates, low cost of margin borrowings fuelling unsound investor expectations, leading to a ballooning of stock markets and emergence of speculative bubbles; or pressures on exchange rate that may destabilize or cause swift reversals in the capital flows and also cause major imbalances in foreign trade over a relatively short period. In circumstances like these, particularly if there are fragilities in an over-extended or over-exposed banking system, if the central bank were to raise interest rates or tighten liquidity and credit controls, in doing so it must maintain a delicate balance in twisting these levers of controls that will cause a cooling down of the economy or an easing up of inflationary pressures, or even a mild recession as confirmed by leading indicators and thus achieve a soft lending; but if the application of monetary controls turns out to be too harsh, they may not stop simply at rectifying the economic imbalances that prompted monetary actions to begin with, or if the authorities overshoot the targeted macro-financial balances through higher interest rates in situations like above this may result in a jolting economic down turn, a recession deeper than anticipated with potential for deflation or shaking the investors confidence to the point where it may lead to stock market crash, causing wide spread losses; then it is a *hard landing*, an unintended economic and financial instability of reverse kind that may not be preventable if the destabilizing trends gather momentum of their own. Thus, there are severe limitations on corrective measures taken by a central bank, especially in a deregulated environment with globally linked financial markets, which restrict its degree of freedom, even presenting the central bank with monetary policy management dilemma of classic variety; viz, if the monetary authority were to be focused on achieving domestic price and interest rate stability to fine tune the domestic economy, the central bank cannot simultaneously maintain exchange rate stability and thereby stability in capital flows and foreign trade, which may derail the efforts of soft lending.

Solvency, financial: a bank or financial institution is considered solvent if its capital base and overall financial strength is sufficiently strong to sustain any losses if they emerge at its current level of operations; its loan portfolio is healthy and reasonably free of nonperforming loans; its asset portfolio is sufficiently diversified and balanced with regard to risk-return characteristics; and its liabilities are manageable from its own asset base.

Stock Markets: are markets for listed stocks and shares, comprising of stock exchanges, over the counter markets, a network of dealers, brokers, intermediaries investment funds and investment trusts, and financial institutions; it also consists of facilities of listing, trading and dealing, clearing and settlements, payments, rating and standards, and information services; stock markets facilitate trading of stocks originally issued in the primary market by companies and corporations through their intermediaries to raise equity finance, and resold to investors and the general public in the secondary markets; buttressed by legal and regulatory framework; together with self regulation system and are routinely supervised by regulatory and oversight agencies; since trading in secondary market is in stocks already issued, it involves a transfer of sources of equity finance, freeing up resources of intermediaries to provide funding for issue of new stocks.

Sterilization *(money balances):* these are actions taken by a central bank to neutralize monetary impact of rising foreign currency balances held by domestic financial institutions, mainly as a consequence of rapid foreign capital inflows in the form of portfolio investment by foreign investors; the purpose of sterilization in the wake of rapid foreign capital inflows is to prevent undue appreciation of the exchange rate, or control rising domestic liquidity and an increase in monetary aggregates owing to increase in foreign assets of banking system or build up of reserves beyond the level deemed appropriate by central bank; for example, if exchange rate were to appreciate beyond appropriate levels because of rapid capital inflows, it may hurt exports and may lead to enlarged foreign trade deficits; or the rising liquidity and other monetary aggregates may jeopardize domestic price stability and enhance inflationary pressures; for these reasons, sterilization of large money balances may be deemed essential and the central bank may simply place all these money balances in overseas reserve account; but that is an extreme measure negating the very purpose of attracting capital inflows; yet some central banks do just that type of sterilization.

Systemic Risk: for a banking system it is the potential risk that failure of a bank may trigger insolvency or failure of other banks if the bank is too big and is dominant institution in the banking system; or if there is a system wide financial weakness with regard to capital adequacy; or if a number of banks have unmanageably large, nonperforming assets; or if the size of impaired portfolio is substantial in the assets held by the banking system; or if the regulatory framework and the safety net is too weak to cope with a system-wide banking crises; systematic risks emerge after a prolonged period of mismanagement by the banks at the unit level, and a neglect on the part of the regulatory authority to redress the underlying weaknesses of the financial institutions concerned.

Tenor: is maturity of a note or financial instrument; designates the time when a

draft is payable on sight when presented or a given number of days after it is presented, or a given number of days after the date of the draft; it also means terms set for payment of a draft, that is, when presented it is a sight draft, or if payable at a future date, it is a time draft.

Term: in finance, *term* in strict sense of the word is the contractual time period, or the maturity period, or the number of years of validity or effectiveness of financial contract or a financial instrument; for example the term of a deposit refers to the number of years for which a deposit is made; or term of a loan is the number of years for which a loan is obtained; or the term of annuity is the number of year an annuity is paid; or term of a CD is the maturity period of a CD acquired; likewise, the expressions *term loan* or *term deposit* mean long-term loan or deposit with a maturity period of a number of years; but expressions like terms of a loan or terms of deposits or terms of a CD are used as short form for the full expression of all conditions attached, and are expected to mean not only their time period, that is, the maturity period, but also the interest rate and other conditions as stipulated in the financial contract.

Term Transformation: are financial intermediation activities of banks that provide a mechanism for matching of the term structure of deposits, mostly short term, to the term structure of loans, especially medium to long term loans; it is the central process of financial intermediation by the banking system and involves transforming the term structure of loanable funds, through lending mechanisms and instruments within acceptable levels of risk and costs, into term financing facilities to the borrowers; term transformation is critical for the growth of investment finance, equity finance or capitalization; the more efficient the banking system is in term transformation the stronger is the base for term lending and investment financing.

Translation of Foreign Exchange, Foreign Currency: is to convert and express accounting items, or a balance sheet, denominated in one currency in terms of another currency by using the exchange rate between the currencies prevailing on the date of the balance sheet; or the weighted average exchange rate over a period in case of income statement items; the translation gain or loss is usually reported separately in the equity section.

Treasury Auction: is the public sale by the Treasury of a new issue of government securities such as treasury bills of maturities of 3 months or less than a year, treasury notes of medium term maturities of 2 to 5 or 7 years, and treasury bonds of medium and long term with maturities of 5 to 10 years or more; these are regularly scheduled auctions but the size of the offering may differ depending on the amount the government needs to borrow; the auctions may be:

- **Single Price Auction:** is an auction where all investors submit a non competitive bid, specifying the amount of the securities they want to buy and the specific yield they want to receive; the auction begins at the lowest yield and keeps increasing until the entire offering is sold; but at the end, all investors receive the same yield rate, which is the highest accepted rate.

- **Multiple Price Auction:** is an auction where investors submit competitive bids of both the amount and the yield they

would accept, and at the end of the auction they are awarded the same; however, this is true only for large size investors, usually institutional investors; but small investors are awarded the weighted average of all yields accepted from large investors.

Treasury Bills (T-bills): short term debt instruments issued by the government treasury to raise funds for the government or to regulate money supply through open market operation of the central bank; their market transactions are managed by the central bank on behalf of the Treasury.

Treasury Bill Rate: is the rate of yield on treasury bills calculated on discount basis; also the rate at which treasury bills are being sold in the secondary market.

Underwriter: is an investment bank, or a group or syndicate of investment banks who undertake an underwriting commitment for a fee to handle the sale of a new issue of a security such as a bond or a debenture on behalf of the issuer and with compliance to registration, listing and rating requirements.

Underwriting: involves purchase of a new issue of a security by the underwriter from the issuer for resale to the public under an agreement and for an underwriting fee; the underwriting commitment involves purchase of the entire issue or part of it, designated for resale to the public with an underwriting spread, which is the difference between the cost of purchase and the resale price of the security; there are several types of underwriting arrangements such as private placement, public offering, negotiated underwriting, or standby underwriting.

Underwriting Risks and Costs: are of two types; first, the market risk that the new security may be perceived more risky and may be priced lower than the issue price causing a loss to the underwriter; second, the interest rate risk, or the risk that the interest rate may rise and may thus lower the price of the security on the bond during the intervening period when the underwriter purchases the security and offers for resale to the public; the underwriting fee includes a premium for these risks together with the cost of underwriting.

Valuation of Stock: involves determining present value of the stock through discounting the stream of dividends, even or uneven, by a suitable discount rate for perpetuity, where the discount rate includes the risk factor associated with the stock and an expected rate of return, or the required rate of return; in this sense, the value of the stock is the present value of future dividends or future income on the stock, and may not be the same as the market value of stock traded on a stock exchange.

Vostro Account: means 'your account'; an account of a foreign bank or correspondent with another bank, usually in the local currency of account-holding bank, or in a hard currency.

End: Glossary

Dr Shakil Faruqi completed his MA (Econ) from Panjab University in 1962 with distinction and taught there for a few years. Later on he proceeded to the US and completed MA (Econ) from University of Pennsylvania and taught at Wilkes College. He completed PhD (Econ) from Rutgers University in 1972, and joined the World Bank the same year. During his long career with World Bank, he worked in many countries including Mexico, Greece, Cyprus, Turkey, Iran, Nigeria, and several East Asian countries. During 1991-95, he led training programs in banking and finance in Russia and Central Asian countries. He also conducted senior policy seminars for Latin American and East Asian Countries on their experiences with financial system reforms. He was editor of proceedings of these seminars published by EDI/World Bank. He retired from the World Bank in 1997 and worked for couple of years on assignments concerning Pakistan. He joined State Bank of Pakistan as Advisor to Governor (2000-02) where he designed and led training of SBP officers and Change Management programs. He also conducted a program for judges of banking courts of Pakistan. He published a bilingual ***Glossary on Banking and Finance, English-Urdu*** in 2000. Since 2005, he has been with Lahore School of Economics as Professor of Financial System. This book reflects experiences of nearly three decades with operations of financial systems in comparative setting.

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