

ANNUAL REPORT | 2017-18

The State of Pakistan's Economy



STATE BANK OF PAKISTAN

09549

REVENUE
DOMESTIC DEBT OVERVIEW
FISCAL ACCOUNTS
EDUCATION
AGRICULTURE
FISCAL POLICY
INFLATION
ECONOMIC GROWTH
SOCIAL SECTOR
MANUFACTURING
GLOBAL ECONOMIC REVIEW
BALANCE OF PAYMENTS
EXPENDITURES
COMMODITY OPERATIONS
LIVES TOCK
ECONOMIC REVIEW
SERVICES SUSTAINABILITY
MONETARY POLICY
DIGITIZATION
DEVELOPMENT
INDUSTRY
NET FOREIGN ASSETS
CURRENT

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TRC-4

ANNUAL REPORT 2017 - 18

THE STATE OF PAKISTAN'S ECONOMY



STATE BANK OF PAKISTAN

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Complementary

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LETTER OF TRANSMITTAL

October 18, 2018

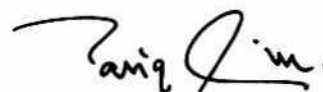
Dear Mr. Chairman,

As Salam-o-Alaikum.

In terms of section 9A(2) of the State Bank of Pakistan Act, 1956, the Annual Report on the State of the Economy which includes the review of fourth quarter on the State of the Economy for the year 2017-18 is hereby enclosed for submission to the Majlis-e-Shoora (Parliament), by the Board of State Bank of Pakistan.

With warm regards,

Yours sincerely,



(Tariq Bajwa)
Governor
Chairman Board of Directors

Muhammad Sadiq Sanjrani
Chairman
Senate
Islamabad

LETTER OF TRANSMITTAL

October 18, 2018

Dear Mr. Speaker,

Asalam-o-Alaikum.

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With warm regards,

Yours sincerely,



(Tariq Bajwa)

Governor

Chairman Board of Directors

Asad Qaiser
Speaker
National Assembly
Islamabad

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1 Economic Review

1.1 Overview

The FY18 ended with a mixed performance of the economy. The real economic activity gained further momentum and inflation remained below the target for the fourth consecutive year. In the same vein, growth in private sector credit was strong and investment edged up in terms of GDP. At the same time, however, sharp deceleration in revenue growth compared to expenditure and increased dependence on imports to meet growing domestic demand led to widening in the twin deficits to unsustainable levels. In fact, persistent increase in imports overshadowed a recovery in exports. The resulting record current account deficit led to increased pressures on foreign exchange reserves and exchange rate. Similarly, the fiscal deficit was highest during the last five years. Together these led to a faster accumulation in public debt, especially the external debt (**Table 1.1**).

The real GDP growth was broad-based, as all the three sectors – agriculture, industry and services – contributed to acceleration in growth. The agriculture sector, in particular, performed quite well on the back of record contribution from crops and livestock sub-sectors. Besides higher agriculture production, buoyant manufacturing and construction activities – sustained by improved energy supply, CPEC projects, and strong domestic demand – played a key role in pushing up industrial sector growth.

However, looking from the demand side, like previous expansionary cycles, the growth was led by a surge in consumption.¹ A number of factors, including low interest rate environment, increased fiscal spending, and improved real incomes, provided a boost to domestic demand. More specifically, lower borrowing cost continued to encourage businesses to borrow for both working capital and fixed investment purposes during the last couple of years. On the supply side, the banks had sufficient liquidity due to net retirement of long-term debt by the government. Moreover, increased government reliance on SBP borrowing to finance higher fiscal deficit also added to liquidity with the banks.

A persistent increase in the fiscal deficit during the last two years has been an important factor adding to demand pressures in the economy. During FY18, there was also an unwelcome deviation from past trends. Against a sustained increase in development spending and containment of current expenditures observed in previous years, FY18 saw a reversal: development expenditures declined, while growth in current expenditures accelerated. Thus, the composition of expenditure shifted from investment to more consumption.

In this backdrop of higher economic activity and domestic demand, the growth in imports remained strong. Though all the major commodity groups except for food recorded strong growth, the major contribution to higher imports came from petroleum, machinery, metals, and chemicals. Moreover,

Table 1.1: Selected Macroeconomic Indicators

	FY15	FY16	FY17 ^R	FY18	
				Target	Actual ^P
	<i>percent growth</i>				
Real GDP ¹	4.1	4.6	5.4	6.0	5.8
Agriculture	2.1	0.2	2.1	3.5	3.8
Industry	5.2	5.7	5.4	7.3	5.8
Services	4.4	5.7	6.5	6.4	6.4
Private sector credit ²	5.9	11.2	16.8	-	14.9
CPI inflation ¹	4.5	2.9	4.2	6.0	3.9
	<i>percent of GDP</i>				
Current account balance ²	-1.0	-1.7	-4.1	-2.6	-5.8
Fiscal balance ³	-5.3	-4.6	-5.8	-4.1	-6.6
Gross public debt ³	63.3	67.6	67.0	61.4	72.5

P: Provisional; R: Revised

Data sources: ¹ Pakistan Bureau of Statistics; ² State Bank of Pakistan; ³ Ministry of Finance.

¹ The share of consumption in the real GDP increased to 93.2 percent during FY18 from 91.7 percent in FY17. This is significantly higher when compared to the average share of 88.7 percent during the previous five years.

increase in commodity prices, especially of oil and steel, was the major factor that pushed up the import bill. In fact, the price impact was almost twice the quantum impact in increase in imports during FY18.

Encouragingly, exports recorded a broad-based recovery, supported by improved energy supplies at the time of gradually picking up global demand. Moreover, export of surplus wheat and sugar and higher commodity prices in international market also contributed to a double-digit growth in exports. Despite this, imports were still 2.3 times of exports in absolute terms. In addition, interest payments on external debt and repatriation of profits also increased considerably during FY18, whereas absence of CSF weighed on the services account. The deficit in these accounts could not be offset by remittances, which grew moderately. Thus, the current account deficit reached a record US\$ 18.1 billion in FY18.

Financing of this large current account deficit necessitated increased reliance on external borrowings, leading to a considerably higher accumulation in external debt during FY18. Another worrisome development was heavy reliance on commercial loans, which entail both higher interest rates and lower maturity relative to borrowing from multilateral and bilateral sources. As a result, the average time to maturity of external loans fell to nearly 10 years in FY18 from over 20 years in FY14. The overall official and private inflows fell short of financing the current account deficit, resulting in more than US\$ 6 billion decline in the SBP reserves during FY18. These pressures prompted multiple episodes of exchange rate depreciation during the year.

The pass-through of exchange rate depreciation and higher international commodity prices, in addition to strong underlying demand pressures, started to reflect in higher year-on-year inflation from May 2018. The core inflation – excluding volatile food and energy prices – after remaining sticky around 5.5 percent, picked up pace from March 2018 onwards. Yet, the average inflation was slightly lower during the year, primarily due to low food inflation on the back of more than sufficient food stocks available in the country. Closely watching these developments and the likely impact of an expansionary fiscal policy and worsening external accounts on the macroeconomic stability, especially the future inflation path, the MPC raised the policy rate in January 2018, reversing the multi-year easy monetary policy.

In sum, Pakistan's economy is again at a familiar juncture, with imbalances emerging as the growth picked up, making it challenging to maintain the virtuous equilibrium of low inflation and higher growth. The only difference this time is heavy investment is underway in energy and infrastructure. Nonetheless, the main reason for repeat of such cycles now and often has been low investment and the economy's limited capacity to produce. On the other hand, most of the growth spurts have been consumption-driven. Therefore, as domestic demand grows above the economy's capacity, it leads to build-up of imbalances and ultimately overheating of the economy. This, in turn, warrants immediate action, and most often in the past, introduced short-term stopgap measures. These provided relief for the time being, but made it less expedient to take more painstaking structural reforms to address the underlying issues.

This time too, several measures have been taken to reduce the pressures on external account and manage inflation expectations. Increase in interest rate, adjustments in exchange rate, restriction on advance payments and imports on open account, increase in regulatory and custom duty, and imposition of cash margins on selected non-essential goods are aimed at containing imports and narrowing current account deficit. However, expansionary fiscal policy in an election year and increase in oil prices have partially offset the expected impact of these measures.

To address the structural constraints, however, broad-based and deep structural reforms are needed in key areas of the economy. Pakistan has already implemented several reforms related to financial sector and monetary and exchange rate policies. In particular, the reforms related to improving monetary policy framework, gradually moving to a more competitive exchange rate policy, and enhancing financial inclusion and access to finance of otherwise underserved sectors including SMEs, women and young entrepreneurs, and small farmers, are already in progress.

However, these have to be complemented by reforms aimed at addressing longstanding structural issues impeding investment, industrialization, trade, and resource mobilization. More specifically, Pakistan needs to increase investment through enhanced savings by promoting a saving culture, introducing new financial products and increasing public savings. The resulting decrease in overall consumption would help lower import demand in the short to medium term. In the long-run, Pakistan can reduce its dependence on imports by shifting power generation to renewable sources, switching to more cost-efficient ways of transportation, and promoting the domestic production of oilseeds. Concurrently, the export base as well as value addition needs to be enhanced in order to keep the current account deficit at sustainable levels over the medium term. Exports can particularly be facilitated through reduction in the cost of production, especially by lowering energy and transportation costs; enhancing productivity by improving the quality of labor through vocational training; and exploiting the untapped export potential of non-traditional items and markets.

In the case of revenue generation, Pakistan can enhance its tax base by exploiting the potential of direct taxes.² Currently, the share of direct taxes in total taxes is significantly lower compared to its peer countries. This can be enhanced by removing exemptions, bringing the untaxed segments under tax through amendment in the Income Tax Act, and rationalizing the minimum taxable income vis-à-vis per capita income. Furthermore, the digitization of the revenue collection system can both facilitate taxpayers and control leakages by reducing human interface. It is also important to note that reforms in any particular area of the economy may not be effective unless coordinated with reforms in other sectors. Finally, it can hardly be overemphasized that the success of reforms would crucially depend on an improvement in governance.

1.2 Review of Developments during FY18

Real Sector

The real GDP growth accelerated from 5.4 percent in FY17 to 5.8 percent in FY18, the highest during the past 13 years. The growth was also broad-based, with all the three sectors showing robust performance. A number of factors contributed to this improved performance, including capacity expansion in some industries, low interest rate environment, higher public spending (particularly on CPEC related projects) and increase in energy supply.

Specifically, the agriculture sector recorded strong growth of 3.8 percent in FY18, considerably higher than the 3.5 percent target and 2.1 percent growth achieved in FY17. A rebound in the production of crops and higher growth in livestock played a key role in improved performance of the sector. Record production of rice and sugarcane, besides improvement in cotton crop, resulted in 3.8 percent growth in crop subsector during FY18 compared to 0.9 percent in FY17. Moreover, there was a turnaround in the performance of other crops (pulses, oilseeds etc.), showing 3.3 percent increase in production during FY18 against a decline of 2.7 percent in FY17. Crop pricing (in case of sugarcane and wheat), continuing subsidies on inputs, increased access to credit, and favorable weather conditions, contributed to this healthy performance. The livestock sub-sector, which accounts for nearly 60 percent of the value addition by agriculture, grew by 3.8 percent during FY18 compared to

² See Box 4.2 in Chapter 4 for more detail.

3.0 percent increase in FY17, with the major push coming from various projects initiated by the provincial governments and increasing trend of dairy farming on modern lines.

The industrial sector grew by 5.8 percent during FY18, slightly higher than the 5.4 percent growth achieved in FY17. This modest acceleration was mainly brought about by continued robust construction activities and improved performance of the manufacturing sector, while growth in value addition by electricity generation and distribution and gas distribution saw a considerable deceleration. The construction sector continued to benefit from CPEC-related infrastructure projects, while large-scale manufacturing (LSM) growth was supported by strong demand consumer durables and construction-allied industries. However, fertilizer and sugar industries could not maintain last year's performance. In the case of fertilizer, the suspension of domestic gas to smaller manufacturing units affected their performance as the use of imported RLNG was more costly. The decline in sugar production, despite a record sugarcane crop, was due to the delayed start of crushing by mills due to a pricing dispute, which diverted sugarcane to alternative usage.

Notwithstanding the improved performance of the commodity producing sectors, the value addition by the services sector grew by 6.4 percent in FY18, slightly lower than the 6.5 percent growth in FY17. This was due to the slower growth of finance and insurance, transport, storage and communication, and other private services. The major boost, nevertheless, came from wholesale and retail trade, largely in line with the performance of agriculture and industry, and general government services.

Monetary Policy and Inflation

Mounting pressures on foreign exchange reserves, along with the projected trajectory of external account and medium-term inflation, led the MPC to increase the policy rate by a cumulative 75 basis points (bps) during the year, after keeping it unchanged for the last two years. The main factors that led to this reversal in the policy rate included: (i) growing macroeconomic imbalances; (ii) likely impact of exchange rate depreciation on inflation; (iii) insufficient financial inflows; (iv) sharp increase in global oil prices in H2-FY18; and, (v) higher-than-expected fiscal expansion.

Despite the hike in policy rate by 75 bps, weighted average lending rates (WALRs) inched up by only 39 bps during FY18. Apart from typical lags involved in the transmission, this low pass-through mainly represented two broad developments. First, banks had sufficient liquidity at their disposal to cater to the demand of the private sector. Although occasional liquidity pressures emerged in the interbank market during the course of the year, these were subsided by SBP's proactive management in the interbank market via open market operations, which are conducted to keep the overnight rates close to the policy rate (**Chapter 3**). The overall ease in the liquidity during FY18 was evident from lower volume of commercial banks' borrowing from SBP's reverse repo facility in FY18, as compared to FY17. Second, ongoing competition across banks to extend funds to credit worthy borrowers, as reflected in improved asset quality, led the banks to place their funds in higher-yielding private loans rather than in government securities.

Thus, while WALR remained stable throughout, the demand for bank credit continued to grow at a rapid pace. The momentum in working capital loans was particularly strong, and was visible across a large number of sectors, including textiles, cement, electrical machinery, iron and steel, edible oil and ghee, basic chemicals and rice processors. This growth was attributed to increased industrial capacities; buoyant activity; as well as increased prices of raw materials.

However, expansion in loans for fixed investment remained lower in FY18 compared to FY17. The slowdown came primarily from the fertilizer sector, as scheduled retirements of earlier loans were made, and also from the power sector where fresh capacity installations remained subdued. SBP's

subsidized financing schemes for export-oriented sectors also played an important role in encouraging capacity expansion activities in some sectors, such as textiles. As for the power sector, although fixed investment activity remained dull in H1-FY18, it picked up pace during the second half of the year as firms expedited ongoing projects in the wake of imposition of ban on new power projects. In overall terms, the economy witnessed a healthy increase in private credit of Rs 775.5 billion in FY18 compared to Rs 747.9 billion in the previous year.

This took the private sector credit to GDP ratio to an 8-year high of 17.4 percent. It is important to note that despite the increase in recent years, private sector credit to GDP ratio in Pakistan at end FY18 is much lower than the peak of 27.2 percent just a decade ago. Importantly, it also stands lower compared to regional economies, such as India (49.5 percent), Bangladesh (47.6 percent), and Sri Lanka (45.7 percent).

Meanwhile, budgetary borrowings from the banking system remained elevated during FY18. Not only did the government rely on SBP financing and borrowed around Rs 2.2 trillion in Q3-FY18 alone, it also breached the ‘zero quarterly borrowing’ limit as prescribed under the SBP Act. Public sector entities also borrowed heavily, especially energy-related entities as well as those involved in commodity operations. As a result, the overall net domestic assets grew by 15.9 percent in FY18. However, its impact on overall monetary expansion was partially diluted by a sharp contraction in net foreign assets (NFA) on the back of growing external account deficit. The overall money supply grew by 9.7 percent, lower than the 13.7 percent growth recorded last year. Similarly, reserve money rose 12.7 percent during FY18 due to sharp fall in SBP’s NFA, offsetting the impact of huge budgetary borrowings from the central bank in the year.

One of the reasons for increased government borrowing from SBP was scheduled banks’ lack of interest in longer tenor bonds, as the market expected an increase in interest rates in view of stronger inflation expectations. In most auctions, scheduled banks had a clear preference for 3-month T-bills and took less interest in PIBs, which led to scrapping of eight successive PIB auctions between Aug-Mar FY18. However, the PIB auctions during Q4-FY18 were more successful, as the government managed to raise Rs 46.1 billion from fixed-rate coupon bonds. Another highlight of FY18 was the launch of 10-year floating rate coupon PIBs, which attracted a considerable degree of interest; market participants offered Rs 296.1 billion in two such auctions against the combined target of Rs 100 billion. However, only Rs 43.1 billion was accepted in these auctions.

Meanwhile, an increase in global commodity prices and demand-driven pressures drove up non-food inflation. However, their combined impact was more than offset by a sharp fall in food inflation. The impact of improved supplies of key food staples and a change in the duty regime for cigarettes persisted throughout the year. CPI inflation stayed below the annual target for the fourth consecutive year during FY18, and clocked in at its second lowest level since FY03. The overall inflation was 3.9 percent in FY18, compared to 4.2 percent last year.

After falling for three consecutive years, domestic prices of petroleum, diesel and LPG recorded double digit growth as international prices soared and exchange rate depreciated during FY18. Similarly, the non-food non-energy (NFNE) core inflation reached the peak of 7.1 percent in June 2018 – highest level since October 2014. On the other hand, house rent, education, clothing, health and readymade food inflation rose at almost their usual pace. Nevertheless, education inflation continued to grow by double digits – mainly due to upward revisions in fees of both government and private institutions. Likewise, health inflation rose by 8.1 percent in FY18 due to increase in drug prices and doctors’ fee, both of which have traditionally maintained consistent uptrend in their price level.

Fiscal Policy

Fiscal accounts continued to deteriorate for the second consecutive year, with the deficit rising to its highest in the last five years. Though the pace of increase in both revenue collection and expenditure slowed, the growth in expenditure outpaced revenue mobilization. As a result, the fiscal deficit rose to 6.6 percent of GDP during FY18, surpassing both the 4.1 percent target for the year and 5.8 percent deficit in the previous year. The primary deficit increased to 2.2 percent of GDP from 1.6 percent realized last year, indicating a much faster increase in non-interest expenditure. Similarly, the revenue deficit increased to 1.8 percent in FY18 from 0.8 percent in FY17, which suggests the increase in the fiscal deficit was more due to a sharp increase in current expenditure.

Current expenditure grew by 12.6 percent during FY18 compared to a 10.7 percent increase in the previous year, with the major impetus coming from higher provincial current expenditure. However, growth in federal current expenditure decelerated slightly to 9.1 percent in FY18 from 10.4 percent in the previous year. Development spending, on the other hand, declined by 6.5 percent. This was mainly due to a sharp contraction in federal development spending by 20.6 percent, while growth in provincial development expenditure also slowed down to 3.3 percent during FY18 from 43.8 percent in FY17.

Meanwhile, revenue growth decelerated to 5.9 percent in FY18 from 11.0 percent in FY17. This deceleration was mainly led by a sharp contraction in non-tax revenue. Against this, the growth in the tax revenue was broad based with both the FBR and provincial taxes picking up pace significantly during FY18.

The FBR tax collection grew by 14.3 percent in FY18 compared to an 8.0 percent increase in the previous year. This also reflects one-off receipts from the tax amnesty scheme announced for the registration of undeclared domestic and foreign assets. Besides the improvement in direct taxes, the indirect tax collection remained robust on the back of buoyant economic activity, strong domestic demand, and the pass-through of increases in international commodity prices to domestic prices. In the case of provinces' own tax revenue, the major contribution came from persistently rising collection from General Sales Tax on Services (GSTS), followed by stamp duty and excise duty. As a result, the total tax to GDP ratio increased to 13.0 percent in FY18 from 12.4 percent in FY17.

The higher fiscal deficit was financed through increased borrowing from both the external and domestic sources. In case of external finance, the government heavily relied on bilateral and commercial loans and Eurobonds/Sukuk. On the domestic front, the government increased its recourse to SBP borrowing, not only to meet its fresh borrowing requirements but also to retire the maturing long-term debt owed to banks.

Domestic and External Debt

The widening of both fiscal and current account deficits along with depreciation of exchange rate, led to increase in public debt accumulation during FY18. Compared to an 8.8 percent increase in FY17, public debt grew by 16.5 percent during FY18. Out of the Rs 3.5 trillion accumulation during FY18, Rs 1.1 trillion was due to revaluation losses on account of the depreciation of US dollar against major currencies and the depreciation of PKR against US dollar. As a result, the gross public debt rose to 72.5 percent of GDP as of end-June 2018 from 67.0 percent at end-June 2017, remaining significantly higher than the 60 percent limit envisaged in the Fiscal Responsibility & Debt Limitation Act, 2005.

Unlike in FY17 when around 70 percent of the increase in public debt was driven by domestic debt, more than half of the increase in public debt during FY18 was contributed by external debt. The major contribution to increase in external debt came from bilateral and commercial sources (borrowing from foreign banks and proceeds from Eurobonds and Sukuk). Importantly, most of the

fresh loans were on floating rates and of relatively short maturity. This shortened the overall maturity profile of the public debt, and therefore, increased rollover and interest rates risks.

Within the domestic debt, the entire increase was due to short-term debt as the government retired most of the maturing long-term debt during FY18. Moreover, the hefty retirement in PIBs were met through SBP borrowings. These developments worsened the maturity profile of domestic debt during the year. In addition to the increase in public debt, PSE debt and external and domestic liabilities also increased considerably. As a result, Pakistan's total debt and liabilities (TDL) increased to 86.8 percent of GDP at end-Jun 2018 from 78.6 percent as of end-Jun 2017.

External Sector

A double-digit growth in exports and a modest recovery in remittances notwithstanding, the strong growth in imports pushed the current account deficit (CAD) to a historic high of US\$ 18.1 billion during FY18. Though financial inflows were higher during FY18, these remained insufficient to finance the elevated CAD. Resultantly, SBP's foreign exchange reserves declined by US\$ 6.4 billion in the year, reaching US\$ 9.8 billion by end-June 2018. This led to increased pressure on the PKR, which depreciated by 13.7 percent against the US dollar during the year.

The higher CAD was primarily a result of a record-high merchandise trade deficit, which widened by 16.5 percent to US\$ 31.1 billion in FY18. Even though export receipts rebounded strongly, rising 12.6 percent, these were not sufficient to offset the 14.7 percent uptick in import payments. With international oil prices staying 32.0 percent higher on average during FY18, the energy import bill increased sharply by 25.0 percent to US\$ 13.3 billion, accounting for 37.1 percent of overall import payments. At the same time, rising industrial activity, an increase in power generation, infrastructure development, and capacity expansion in some industries boosted demand for imported raw materials and capital goods. In particular, import of machinery remained strong, increasing by 17.4 percent to US\$ 8.7 billion in FY18.

Meanwhile, net capital and financial inflows stood at US\$ 12.4 billion during FY18 compared to US\$ 10.6 billion in FY17. This was largely contributed by official inflows on account of issuance of Eurobonds and Sukuk, commercial borrowings, and loans from multilateral and bilateral sources. On the other hand, private inflows were lower compared to last year.

Digitization of Services in Pakistan - Emerging Trends and Future Outlook

Advances in technology and its increased use in businesses in recent years has increasingly gained prominence globally. It is particularly reshaping the services business models, by making the service delivery more cost-efficient and improving the customer experience. The changing global trends in the services is creating new opportunities, and Pakistan is no exception.

In Pakistan, the services sector has contributed 67.6 percent to the country's GDP growth on average during last five years. The overall share of the sector reached 56.0 percent in nominal GDP by end-FY18, higher than the South Asian average. Digitization of services, in line with global trends, can further boost services' contribution to GDP. According to a study, Pakistan can push up its GDP growth by a cumulative 7.0 percentage points (roughly US\$ 36.0 billion) and create around 4.0 million new jobs during 2016-2025, by increasing the use of digital financial services (DFS) alone.³

Though still at an early stage of development, e-commerce, fintech, and e-government have started to have a far-reaching impact on the macro-economy. Over the past couple of years, growing internet penetration and lower transaction costs have led to a rapid growth of e-commerce in Pakistan.

³ McKinsey Global Institute, 2016, 'Digital Finance for All: Powering Inclusive Growth in Emerging Economies' [mckinsey.com].

According to SBP data, sales of local and international e-commerce merchants reached Rs 40.1 billion in FY18, up from Rs 20.7 billion in FY17. Importantly, this does not include postpaid cash on delivery (COD) settlements that, according to market estimates, account for around 80 to 90 percent of the total volume, and about 60 percent of the total value of e-commerce in Pakistan.

Despite the consumer's strong preferences for cash and low financial and digital literacy, the digital payment infrastructure is gradually evolving in Pakistan. A rapid rise in the branchless banking accounts (mobile wallets), and a continuous increase in 3G/4G penetration, led to improved integration of the e-retailers and online marketplaces in the services sector business models.

Specifically, branchless and mobile banking, with the number of active accounts reaching 21.7 million by June 2018, have played a vital role in providing basic banking facilities to the people. In order to plug gaps in terms of coverage and affordability, nascent fintech firms are facilitating the large unbanked population of the country. If utilized appropriately, information and communication technology (ICT) and IT-enabled Services (ITeS) could substantially reduce the overall size of the informal economy and play a crucial role in increasing revenue generation. Given its potential and widespread outreach, ICT could also equip the governments to improve public service delivery through e-government. Punjab provides a good example, where the Punjab Information Technology Board (PITB) has delivered over 270 ICT-related projects (and has also facilitated the Agriculture E-credit Scheme of the Punjab government) over the past six years, which has improved the quality of public services delivery.

In addition, the government has been supportive of digitization over the past couple of years. In May 2018, the cabinet approved the first Digital Pakistan Policy, which provides a roadmap for the development of the sector to harness socio-economic growth in the country. More importantly, the digitization of financial services lies at the forefront of achieving the objective of providing access to formal financial services to 50 percent of the adult population, as laid out in the National Financial Inclusion Strategy. The strategy further aspires to having universal access to formal accounts, especially digital transactional accounts such as branchless banking accounts/M-wallets. Moreover, the strategy also envisages a shift from cash to digital platforms for large payment streams, including wages in the public and private sectors, government-to-business payments, and social cash transfers.

1.3 Economic Outlook

Recent policy measures and developments including monetary tightening, exchange rate depreciation and changes in import and custom duties are all likely to dampen domestic demand, especially imports. The additional revenue measures and a cut in federal development spending proposed in the Finance Supplementary (Amendment) Bill, 2018 might contain fiscal deficit as well. However, these developments will have implications for growth and inflation going forward.

In this context, the real GDP growth target of 6.2 percent for FY19 appears ambitious. The industrial sector, in particular, may witness a slowdown due to an expected reduction in consumer demand. More specifically, construction-allied and consumer durable industries may see slower growth in production. The former may be affected by a contraction in development spending, while the latter could be hit by rising domestic prices due to exchange rate depreciation and higher borrowing cost. Moreover, lower sugar production on account of expected decline in sugarcane crop may also dampen the food group's contribution to LSM growth.

Decline in the area under sugarcane crop, water shortages at the time of sowing of kharif crops – especially cotton – and weak trends in the off-take of fertilizer indicate that agriculture sector may not repeat last year's extraordinary performance. Recent rains and improved water availability as well as increased area under rice and cotton crops, however, may provide some support. Therefore, growth in

agriculture may fall below the target as well as the last year’s level of 3.8 percent. Slower growth in both industrial and agriculture sectors will also affect performance of the services sector. In this background, the real GDP growth is projected in the range of 4.7 to 5.2 percent during FY19 (**Table 1.2**).

In addition to slower economic activity, exchange rate depreciation and other administrative measures, especially the increase in import duties, would help moderate growth in imports barring any major shock to international oil prices. Meanwhile exports are expected to maintain the FY18 momentum into FY19 as well; though uncertainties due to growing global trade tensions could pose some downside risks to this momentum. Besides the lagged impact of depreciation, improved energy supply, better availability of raw materials (especially cotton, rice and hides), and continuation of the incentive package for export-oriented industries are the key factors supporting prospects of higher growth in exports. In addition, Pakistan can also benefit from a likely increase in food prices in international market. Persistence of drought-like conditions in major wheat producing countries could lead to higher wheat prices, increasing prospects for Pakistan to offload surplus wheat stock.

Moreover, workers’ remittances are expected to increase moderately during FY19 on account of an uptick in international oil prices, steady economic activity in advanced economies, and various steps taken to facilitate remittances through official channels like m-wallet and asan remittance account. Incorporating these developments, the current account deficit is projected to be in the range of 5 to 6 percent of GDP for FY19.

In addition to the earlier policy measures aimed to contain imports, recent changes in income tax – partial reversal of the tax relief announced in the FY19 budget, administrative revenue measures, and further increase in regulatory and federal excise duties would help maintain a higher growth in tax collection. Similarly, the announced reduction in development spending and austerity measures are likely to relatively slower the growth in overall fiscal spending. These measures are expected to contain the fiscal deficit in the range of 5 to 6 percent of GDP during FY19.

The overall assessment, therefore, suggests that underlying inflationary pressures may persist. Increase in gas tariffs, import duties and excise duty would further add to inflation both directly and indirectly. Moreover, pass-through of higher oil prices and exchange rate depreciation would keep inflation expectations high. Some of the impact of these factors, however, is likely to be offset by the increase in policy rate and lower food inflation, which is expected to remain subdued in FY19 as well in view of sufficient stocks of staple food items. With these developments in the background, average inflation is projected in the range of 6.5 to 7.5 percent during FY19, against 3.9 percent recorded in FY18 and 6.0 percent target for the year. However, there are risks to this assessment emanating particularly from volatile energy price. Moreover, global food prices may also increase in case drought-like conditions persist in major wheat producing countries.

Table 1.2: Key Macroeconomic Targets and Projections

	FY18	FY19	
		Target ¹	SBP Projections ²
		<i>percent growth</i>	
Real GDP	5.8	6.2	4.7 - 5.2
CPI (average)	3.9	6.0	6.5 - 7.5
		<i>billion US\$</i>	
Remittances	19.6	21.2	20.0 - 21.0
Exports (fob)	24.8	27.9	27.0 - 28.0
Imports (fob)	55.8	58.5	59.5 - 60.5
		<i>percent of GDP</i>	
Fiscal deficit	6.6	4.9	5.0 - 6.0
Current a/c deficit	5.8	4.0	5.0 - 6.0

Data sources: ¹ Ministry of Finance and Planning Commission; ² State Bank of Pakistan;

2 Economic Growth

2.1 Overview

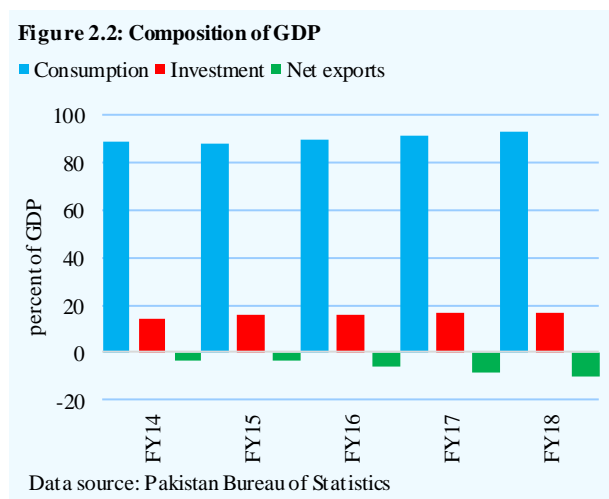
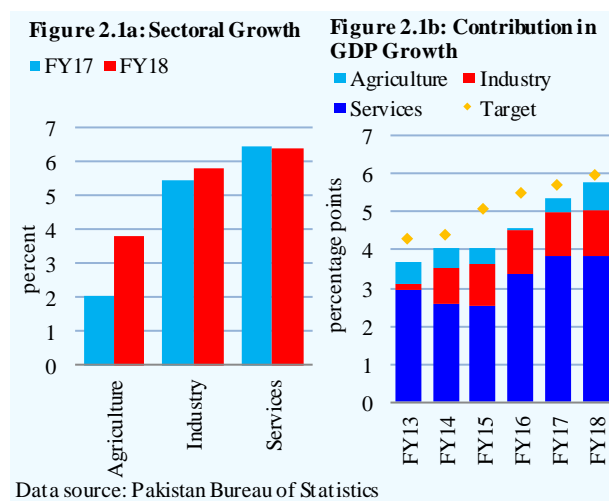
The real GDP growth picked-up further in FY18, reaching 5.8 percent compared to 5.4 percent last year. The growth not only remained broad-based, but was also the highest during the last 13 years and remained close to the target set for FY18. A healthy performance by agriculture, sustained growth in services and an uptick in large-scale manufacturing output contributed to this positive outcome (Figure 2.1).¹

The GDP growth was supported by a host of factors, namely: low cost of financing, fiscal incentives through subsidies, favorable business sentiments, and enhanced access to bank lending. Also, high public spending and progress on CPEC-related projects stimulated economic activities besides inducing firms to enhance their production capacities.

That said, despite considerable investment undertakings in both public and private sectors, Pakistan's investment to GDP ratio remains low compared to peer countries. In fact, the dominant part of the recent increase in economic growth is attributable to boom in consumption – with its share in GDP rising to 93 percent in FY18. Higher consumption has also stimulated demand for imported consumer goods, which has led to further deterioration in net exports (Figure 2.2).

The sector-wise analysis reveals that growth in agriculture exceeded its target for FY18 on the back of record production of rice and sugarcane, and impetus from livestock segment. The crop sector performed well despite inadequate water availability and lower fertilizer off-take. The negative impact of these factors was offset by improvements in other inputs, such as certified seeds and pesticides, increased mechanization, and an uptick in credit disbursement. In case of wheat and sugarcane, continued price incentives kept growers' interest intact, while livestock and forestry revitalized due to various projects initiated at the provincial level.

The industrial sector recorded growth of 5.8 percent in FY18, missing the target of 7.3 percent; this was mainly due to below par growth of *electricity generation and gas distribution*. The large-scale manufacturing, however, remained a key driver to the industrial growth. Within LSM, cement, steel and petroleum sectors continued to benefit from robust domestic demand, while the performance of



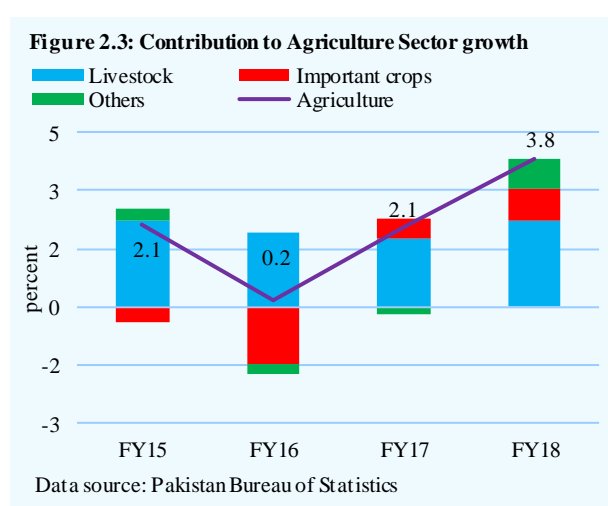
¹ The GDP estimates for FY18, presented in National Income Accounts, are based on projected LSM growth of 6.1 percent.

cigarettes and auto industries built upon higher capacity utilizations. However, sugar and fertilizer industries, unlike FY17, could not fully utilize capacities owing to issues related to sugarcane pricing and higher RLNG costs, respectively. With regards to consumer durables, improvement in power supply and build-up in consumer demand due to spillover effect of healthy agriculture harvest and rising real incomes led to robust growth in the segment. Similarly, the construction sector showed better performance owing to upsurge in private housing construction and high infrastructure spending.

The services sector, with more than 60 percent share in GDP, achieved its growth target for the year, building upon last year's performance. While *wholesale & retail trade* and *general government services* contributed positively to growth, the deceleration in *transport, storage & communication* was a strain on the sector's performance. Strong agriculture performance, growing manufacturing activities and persistent growth in import quantum resulted in achieving the sectoral growth target of 6.4 percent.

2.2 Agriculture:

The agriculture sector continued to exhibit a better performance in FY18, as it grew by 3.8 percent compared to 2.1 percent last year. The performance of livestock- the heavy weight within agriculture- remained high on the back of a broad-based contribution from all its sub-sectors. Similarly, the crop sector contributed substantially to agricultural growth (**Figure 2.3**). Within crop sector, sugarcane and rice recorded historic harvests, while minor crops also exhibited robust growth. This performance was attributed to higher crop yields, favorable weather conditions, subsidies on inputs, indicative pricing, and increased adoption of technology. In this backdrop, FY18 marked another year of sugar and wheat stock buildups – with production exceeding domestic consumption needs. Nonetheless, water shortages remain a risk to the sustainability of agricultural growth, and the situation is unlikely to improve substantially since temperatures continue to rise as global warming is impacting precipitation patterns.²



Inputs:

Irrigation water availability dropped 2.0 percent and 19.0 percent in *kharif* and *rabi* seasons, respectively. Growers resorted to groundwater pumping, especially in rain-fed areas where the issue of water availability worsened. Given the wide scale implications of water scarcity for the country, approval of the “National Water Policy” in April 2018 is a welcome step.

In case of fertilizer, urea off-take receded by 8.6 percent, whereas DAP off-take improved by 4.6 percent in FY18, resulting in 5.1 percent overall contraction in fertilizer off-take during FY18 compared to 36.4 percent growth in FY17. The demand for DAP increased during *kharif* season as off-take grew 48 percent, crossing the 1 million ton mark. Against this, the DAP off-take recorded 12.7 percent contraction during the *rabi* season, partly due to increase in prices. The off-take of all nutrients also improved during *kharif* season, while *rabi* season witnessed a decline in demand for

² In line with global climate change, average temperatures have increased by 0.35 degree Celsius since 1960s [Pakistan Food Security Bulletin (2016), Issue 4, World Food Programme]. Temperatures have increased throughout the country with steeper rise in Sindh and Balochistan, [F. Saeed, K.M. Salik, S. Ishfaq (2016), *Climate Induced Rural to Urban Migration in Pakistan*, SPDI Working Paper, Islamabad: SPDI]

nitrogen and phosphate products.

Encouragingly, potash off-take grew during the season. In order to encourage usage of potash-based products, Punjab government provided the growers a subsidy worth Rs 800 and Rs 500 per bag for SOP and MOP,³ which led to a substantial increase in the sales in September and October 2017, compared to same period in FY17 (**Figure 2.4**).

Meanwhile, agricultural credit disbursement stood at Rs 972.6 billion in FY18, registering a healthy growth of 38.1 percent,⁴ on top of 17.8 percent increase seen during FY17. More importantly, the disbursement remained broad-based, as production loans increased by 38.5 percent, while development loans grew 32.4 percent. Bank-wise analysis reveals that five major banks performed well, with credit disbursements exceeding their respective targets. However, specialized institutions in the sector, namely ZTBL and PPCBL, achieved only 66.6 percent and 71.5 percent of their targets and recorded a contraction in the disbursement amount as well. As for domestic private banks and Islamic banks, even though the disbursement fell short of their respective targets by 7.6 percent and 18 percent, their growth of around 33 percent in the year was a welcome development (**Table 2.1**).

The overall credit outreach of the banks dropped by 5.1 percent during FY18, as the number of borrowers marginally reduced to 0.94 million by end FY18, from 0.99 million at end FY17. Sector-wise breakdown reveals that in FY18 the focus of banks' lending remained tilted towards non-farm sector with 50.4 percent share in overall agriculture lending. The banks' increased lending to non-farm sector was attributable to ongoing developments in livestock and poultry segments in the country. However, the focus of specialized banks still remained on the farm sector, with more than 70 percent share in their credit disbursement.

Microfinance banks and institutions/RSPs also performed well, as their credit disbursements in the entire agriculture sector exceeded their targets by 12.5 percent and 11.5 percent respectively. Their aggregate credit outreach also witnessed substantial growth of 28.5 percent, with the number of borrowers for microfinance banks and institutions reaching 2.8 million by end of FY18, increasing from 2.2 million at end FY17. This was mainly attributed to disbursement of small amount of loans without any credible collateral. The attention of these institutions also remained in favor of non-farm sector, representing 51.8 percent share in their overall agriculture lending.

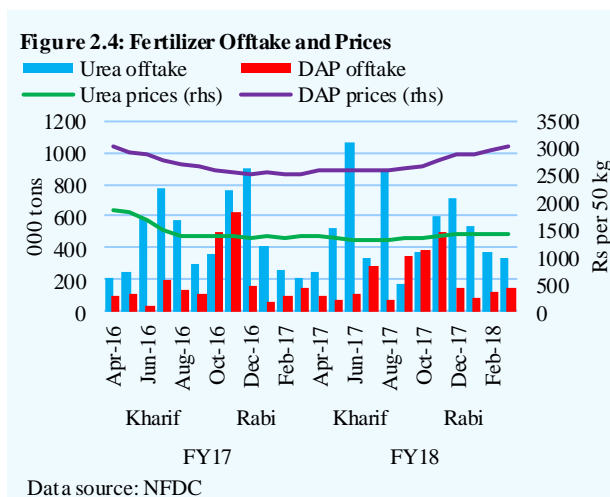


Table 2.1: Institution-wise Agriculture Credit Disbursement
million rupees

	FY17	FY18	Growth
I. Banks			
Five major commercial banks	342,068	523,930	53.2
ZTBL	92,451	83,187	-10
PPCBL	10,880	10,724	-1.4
Domestic private banks	139,061	184,863	32.9
Islamic banks	12,326	16,392	33
Sub-Total	596,786	819,096	37.3
II. Microfinance			
Microfinance banks	87,772	124,756	42.1
Microfinance institutions/RSPs	19,930	28,754	44.3
Sub-Total	107,702	153,510	42.5
Grand Total (I+II)	704,488	972,606	38.1

Data source: State Bank of Pakistan and Pakistan Microfinance Network

³ Sulfate of Potash (SOP) and Muriate of Potash (MOP).

⁴ The total disbursements were 2.92 percent lower than the target of Rs 1.0 trillion.

To improve growers' access to agri financial services, the provincial governments have introduced several schemes. For example, the Punjab Agriculture Department launched an interest-free e-credit scheme mainly to provide small farmers agri financing and farm technical advisory services.⁵ In FY18, Rs 28.6 billion was disbursed to 392,658 borrowers through various banks, such as NRSP, ZTBL, etc.⁶ Scope of the scheme was expanded recently to large farmlands of 25 and 50 acres, which is expected to enhance credit access in rural areas while utilizing branchless banking in transfer of funds through easy-paisa.⁷ Even though the formal credit institutions have increased their footprint, the role of informal lenders such as Aartis and commission agents in catering to the needs of small farmers still remains effective in rural society (**Chapter 7**).⁸

Major crops:

Cotton:

Cotton production increased to 11.9 million bales in FY18 compared to 10.7 million bales last year. This improvement was largely attributed to an increase in area under cultivation in the cotton belt of Punjab (**Table 2.2**). Furthermore, the farmers' confidence grew as the domestic market remained substantially shielded from cotton imports.⁹ In case of Sindh, cotton production also rose due to productivity gains of 9.2 percent in FY18, despite reduction in cultivable area due to water shortages in early sowing period, especially in lower part of the province. The high yield owed to better awareness and application of pesticides.

Table 2.2: Share in Area under Major Kharif Crops in the Dominant Cotton Districts of Punjab*
percent

	Cotton	Sugarcane	Rice	Maize
FY13	76.5	10.1	7.8	5.6
FY14	72.6	11.1	9.5	6.8
FY15	70.0	9.6	10.5	9.9
FY16	70.2	10.5	10.8	8.5
FY17	64.9	13.7	13.0	8.4
FY18	68.3	14.5	12.0	5.2

Data Source: Provincial Crop Reporting Centres
*Districts include: Bahawalpur, Rahimyar Khan, Bahawalnagar, Vehari, Lodhran, Khanewal, Rajanpur, Multan, Muzaffargarh, D.G.Khan, Sahiwal.

Yet, cotton production not only missed the target of 13.6 million bales, but also stood lower than the textile industry's need of 13.2 million bales.¹⁰ Two key factors are behind this performance: a) attractive profitability of competing crops which led to shifting in area under cotton cultivation over the last several years, especially in the cotton producing districts of Punjab; and b) the cotton per hectare yields is still lower than FY15 level, which indicates the possibility of further improvement in yields. These factors, together with lower quality of lint, have also encouraged imports of better quality cotton to augment production of value-added textile items: raw cotton imports stood at 3.6 million bales in FY18 compared to 2.9 million bales in FY17.

Sugarcane:

Sugarcane production reached a record 82.1 million tons during FY18. High comparative profitability due to indicative pricing, timely payments to growers by millers in FY17, and resilient nature of crop, resulted in a shift of area from competing major *kharif* crops to sugarcane. An analysis of last 6 *kharif* crops shows that in major cotton producing areas, the share of area under sugarcane increased from 10.1 percent in FY13 to 14.5 percent in FY18. Overall, better crop performance was achieved

⁵ Source: Department of Agriculture, Government of Punjab.

⁶ Till May 2018.

⁷ The terms of subsidy and selection criteria vary for land holdings of up to 50 acres. Only 20 percent of the selected farmers will be from landholdings between 12.5 to 50 acres while rest will be from below 12.5 acres.

⁸ According to SBP estimates, the banks met 72 percent of agriculture credit demand in FY18 compared to 57 percent last year.

⁹ During July to December 2017, the government imposed a tariff of 4 percent and sales tax of 5 percent on imported cotton. These measures were removed after the conclusion of domestic crop harvest in January 2018.

¹⁰ Monthly Cotton Review, June 2018, Pakistan Central Cotton Committee.

through enhanced area under cultivation by all the provinces, largely in southern districts of Punjab (Table 2.3).

Nonetheless, the policy of indicative pricing and the resultant bumper crops in preceding years has led to a consistent buildup of sugar stocks with mills. The stocks with provinces stood at 4.9 million tons by end-June 2018 compared to 4.5 million tons by June 2017.¹¹ The sugar stocks piled up further as domestic sugar consumption remained below production level and sugar exports remained uncompetitive without subsidy. The sugar mills in Sindh also suspended their operations for some time in expectations of downward revision in sugarcane prices. Consequently, the post-harvest season witnessed delays in payments to farmers. Also, the growers faced significant losses as they were paid as low as Rs 120 per 40 kg in Punjab with the official rate being Rs 180 per 40 kg.¹² Therefore, keeping in view delay in payments to farmers and the high cost of the export subsidy on sugar, a rationalization of indicative pricing mechanism is needed. Issues of non-payment in FY18 cane season and the resultant dispute between growers and millers may also affect the performance of sugarcane crop in FY19.

Rice:

The rice crop grew by 8.8 percent, with production reaching a record of 7.5 million tons and comfortably surpassing the target of 6.8 million tons for FY18. Being a major export commodity, rice emerged as an attractive crop for farmers in FY18, as witnessed from the increased area under cultivation (especially in Sindh, where crop area saw a double-digit growth). Area under cultivation also increased for basmati in Punjab's northeast zone. Furthermore, increased area was allocated in Sindh for a new hybrid variety developed under joint research undertakings with Chinese enterprises, which helped boost yields in the province (Table 2.4).

The exports of rice remained encouraging this year on the back of high global prices and improved investment in processing and packaging (Chapter 6). Going forward, acceleration in production will be needed to meet rising domestic demand for premium rice and to exploit export opportunity in the EU, which has restricted rice imports from India due to excessive use of tricyclazole (fungicide) spray on rice farms.

Wheat:

Wheat production reached 25.5 million tons in FY18, down 4.4 percent from FY17. Delays in sugarcane harvest resulted in late sowing of wheat crop in Punjab and Sindh, which led to decline in

Table 2.3: Sugarcane Crop Performance

	Area (million hectares)		Production (million tons)		Yield (kg per hectare)	
	FY17	FY18	FY17	FY18	FY17	FY18
Punjab	0.8	0.9	49.6	55.1	63,786	64,099
Sindh	0.3	0.3	18.2	20.6	56,660	61,842
KP	0.1	0.1	5.6	6.4	47,460	43,131
Pakistan	1.2	1.3	73.4	82.1	60,309	61,207

Data source: Ministry of National Food Security and Research

Table 2.4: Rice Crop Variety-wise Area and Production

	Punjab			Sindh		
	FY17	FY18	Growth	FY17	FY18	Growth
<i>Area (million hectares)</i>						
Basmati	1.35	1.42	4.70	0.05	0.06	8.24
Irri	0.15	0.13	-7.23	0.33	0.35	5.46
Hybrid	-	-	-	0.34	0.39	14.61
Total	1.74	1.84	6.01	0.75	0.83	10.38
<i>Production (million tons)</i>						
Basmati	2.52	2.82	11.58	0.08	0.08	-1.80
Irri	0.39	0.36	-7.48	0.93	0.88	-5.54
Hybrid	-	-	-	1.63	1.86	14.30
Total	3.48	3.90	12.17	2.66	2.85	7.08

Data source: Pakistan Bureau of Statistics

¹¹ Ministry of Industries and Production. The figures are as of 12th July 2018.

¹² Pakistan SUPARCO, Monthly Bulletin, Vol 8 Issue 3, May 2018.

area under crop by 2.5 percent.¹³ Furthermore, scanty rainfall affected production in the rain-fed districts of Punjab, while lower than average water availability adversely affected output in irrigated districts. Similarly, low phosphate application reduced crop yields in many areas of Punjab.

Nonetheless, the production in FY18 was more than sufficient to meet domestic demand. After the procurement of 5.92 million tons in FY18,¹⁴ end-June 2018 stocks reached 10.7 million tons compared to 9.3 million tons at the same time last year.¹⁵ Subsidized wheat export slightly reduced the overall stocks position towards the end of FY18, as exports rose to 1.2 million tons compared to just 4 thousand tons in FY17. In the upcoming months, more exports opportunities are expected in the wake of rise in wheat demand from Asia and Africa. Furthermore, amid forecast of lower production in major exporting countries (such as Australia, Russia and EU), international wheat price is expected to increase, which will provide Pakistan an export opportunity to sell its excessive stocks at good rates.¹⁶

Maize:

The production of maize crop declined by 7.1 percent to 5.7 million tons in FY18. Despite this, the targets for area and crop production were achieved. The major reduction in the crop production was witnessed in core maize producing districts of Punjab, namely Chiniot, Kasur, Okara, Sahiwal, Pakpattan and Vehari (Figure 2.5). This happened due to shift in area allocation towards competing crops, such as rice, cotton and sugarcane.

Despite a reduction in area under the crop, yields improved largely because of planting of a hybrid-seed variant, which was sown in 65 percent of total planted area. Given maize output is consumed mainly as poultry and dairy feed (65 percent of corn is used in poultry feed), rising poultry demand is expected to galvanize higher output in future.

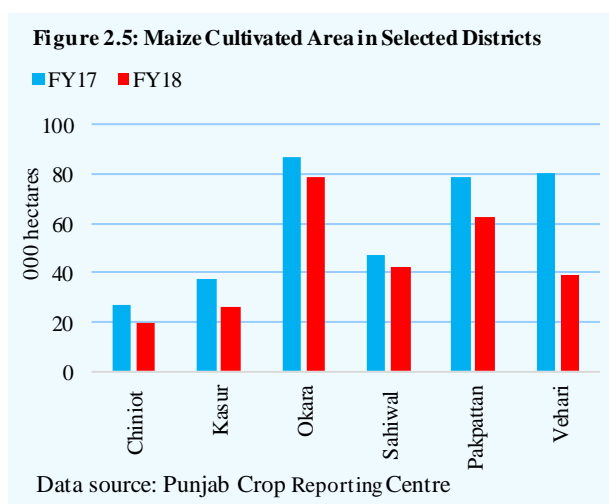
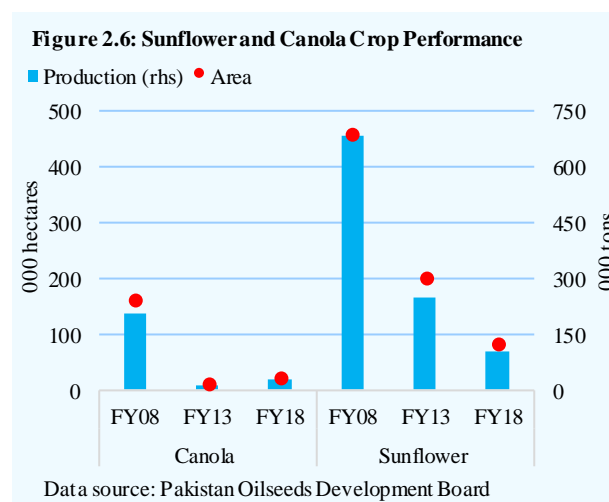


Table 2.5: Pulses Performance

	Production (000 tons)		Area (000 hectares)	
	Gram	Other pulses	Gram	Other pulses
FY09	741	185	1081	247
FY11	496	101	1054	188
FY13	751	111	992	178
FY15	379	115	942	166
FY17	330	144	971	211
FY18	341	136	967	192

Data source: Ministry of National Food Security and Research



¹³ Wheat area reduction was witnessed in major sugar producing areas such as Bahawalpur division (Bahawalpur, Rahim Yar Khan, Bahawalnagar).

¹⁴ Source: Annual Plan, Provincial Food Departments and PASSCO.

¹⁵ Provincial Food Authorities and PASSCO.

¹⁶ Source: USDA, FAS, 'Grain: World Markets and Trade' report, July 12, 2018.

Other Crops:

Within other crops, pulses and oilseeds performed comparatively better. Gram, the largest pulse crop, witnessed an encouraging increase of 3.5 percent in production, mainly owing to improved yields despite reduction in area under cultivation. Production of pulses, including mash, mung and masoor, have dwindled over the last few years due to changes in cultivated area and productivity variations (Table 2.5). Being a major food item, pulses demand is largely met through imports, which drains foreign exchange.¹⁷ Hence, there is need for a policy support to encourage local production.

In case of oilseeds, canola production rose from 16,000 tons in FY17 to 30,000 tons in FY18, as area under crop doubled given the cash subsidies in place. This has been the highest production in the last six years. On the other hand, sunflower production marginally declined, as area under sunflower reduced 4.7 percent (Figure 2.6). This was also attributed to shift in area allocation towards more profitable crops.

Livestock:

The livestock sector - which contributes 59 percent in the agriculture sector's value addition - grew by 3.8 percent in FY18 compared to 2.9 percent in FY17. The better performance was attributed to livestock products (milk, meat, wool, hides, etc) and poultry products (eggs and poultry meat), which grew by 2.9 percent and 7.8 percent respectively on the back of rising demand (Table 2.6). In the context of livestock production, the initiatives for import of cattle for cross breeding and programs related to animal health and prevention of major diseases played an important role. In particular, the National Progressive Control of FMD, worth Rs 726 million, was launched to control the Foot and Mouth Disease and improve animal health.¹⁸ The program is also aimed at strengthening diagnostic capabilities and curbing a major cattle disease in the country.

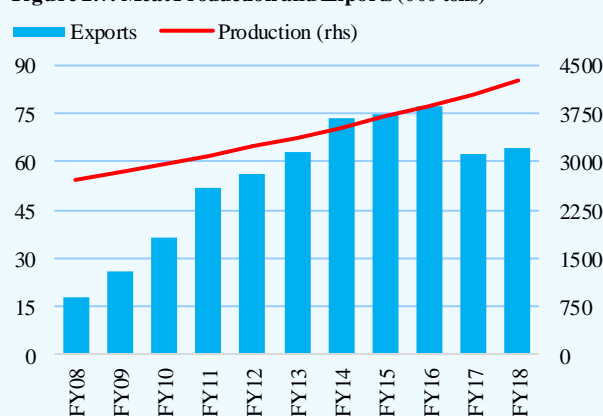
The increase in livestock production also created export opportunities. Especially, the export of meat and meat products witnessed slight improvement of 3.7 percent in FY18 against a contraction of 19.5 percent last year (Figure 2.7). The exporters were able to explore some of the GCC markets, especially Bahrain, Kuwait, Oman and UAE as the Halal certification process strengthened.¹⁹ Going forward, the export volumes of meat products can further be enhanced by diverting more attention towards improvement in product quality and taking more

Table 2.6: Value Added in Livestock

	FY1 ^R	FY18 ^P	Growth	
			FY17	FY18
A. Gross output	1,611	1,666	3.4	3.4
Animal sold for slaughtering	370	381	2.9	2.9
Natural growth & regeneration	231	238	2.9	3.0
Livestock products	847	872	2.9	2.9
Poultry products	163	175	7.7	7.8
B. Intermediate consumption	292	299	5.6	2.7
C. Gross value added (A-B)	1,319	1,367	2.9	3.6
D. Other GVA*	8	10	14.6	31.1
E. Total GVA	1,327	1,377	2.9	3.8

R: Revised, P: Provisional, * hunting & animal husbandry
Data source: Pakistan Bureau of Statistics

Figure 2.7: Meat Production and Exports (000 tons)



Data source: Pakistan Bureau of Statistics and Economic Survey

¹⁷ The import value for pulses on average during FY14-FY18 is US\$ 0.6 billion.

¹⁸ Livestock Wing, Ministry of National Food Security and Research

¹⁹ In FY18, the livestock department and private firms reached out to markets of China and Russia for future exports of meat and meat products. As regards to poultry, lifting of ban by the UAE on Pakistan's imports in FY18 is another opportunity worth exploiting.

initiatives to reach out to diversified markets abroad. Moreover, there is a need for provision of real time information on animal population, which is crucial for developing appropriate policies at the federal/provincial level. On this front, a livestock census in 2018 for Punjab is a welcome development which reveals information regarding animal fertility, per day milk availability and provides reliable data on animal head count and health.²⁰

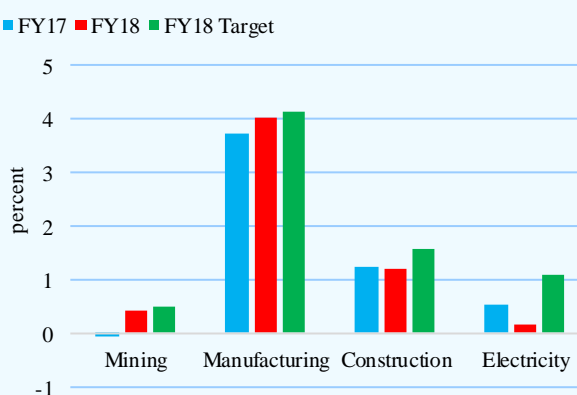
2.3 Industry:

Growth in the industrial sector improved to 5.8 percent in FY18 from 5.4 percent in FY17; however, it remained lower than the target of 7.3 percent. Encouragingly, the uptick in growth remained broad-based. In particular, manufacturing and construction contributed considerably to the overall growth. Meanwhile, major drag came from the *electricity generation and gas distribution* subsector, which contributed only 0.2 percent to industrial sector growth against 1.1 percent envisaged in the Annual Plan for FY18 (**Figure 2.8**). This happened despite an improvement in electricity generation. The substantial rise in input prices led to an increase in cost of production of this sub-sector. On the other hand, growth in revenues was hampered by a partial adjustment in power prices. Consequentially, increased intermediate consumption cost coupled with depressed output (i.e. electricity) prices resulted in lower gross value addition (GVA) of this sub-sector.

The accelerated growth in manufacturing sector was attributed to a host of factors, including smooth energy supplies, lower cost of financing, improved business sentiments and high development spending. In particular, the enhanced public spending on power and infrastructure projects stimulated the growth in construction-allied sectors of cement and steel. Besides, an increase in rural income - due to better agriculture harvest – added to demand for consumer durables.

The large-scale manufacturing sector remained the key driver of growth in industrial production. Cement, steel and petroleum industries took advantage of enhanced capacity and robust demand, while cigarette and auto

Figure 2.8: Contribution to Industrial Growth



Data source: Pakistan Bureau of Statistics

Table 2.7: Growth in LSM

	weight	Growth		Contribution in Growth	
		FY17	FY18	FY17	FY18
LSM	70.3	5.8	5.4	-	-
Textile	20.9	0.8	0.4	0.2	0.1
Cotton yarn	13.0	0.7	0.1	0.1	0.0
Cotton cloth	7.2	0.4	0.0	0.0	0.0
Jute goods	0.3	8.1	23.9	0.0	0.0
Food	12.4	11.7	2.8	2.4	0.6
Sugar	3.5	37.8	-6.8	2.5	-0.6
Cigarettes	2.1	-35.8	72.0	-0.7	0.8
Vegetable ghee	1.1	3.1	2.1	0.0	0.0
Cooking oil	2.2	2.7	0.0	0.1	0.0
Soft drinks	0.9	13.7	8.4	0.4	0.2
POL	5.5	2.8	13.2	0.2	0.8
Steel	5.4	20.5	21.8	0.7	0.8
Non-metallic minerals	5.4	4.4	11.0	0.5	1.2
Cement	5.3	4.5	11.1	0.5	1.2
Automobile	4.6	11.2	17.8	0.7	1.2
Jeeps and cars	2.8	5.4	21.4	0.2	0.7
Fertilizer	4.4	1.7	-9.9	0.1	-0.6
Pharmaceutical	3.6	9.1	2.9	0.8	0.3
Paper	2.3	9.6	9.4	0.3	0.3
Electronics	2.0	21.6	32.4	0.4	0.6
Chemicals	1.7	-2.3	-0.2	-0.1	0.0
Caustic soda	0.4	-0.6	20.7	0.0	0.1
Leather products	0.9	-16.5	-0.2	-0.3	0.0
Excluding sugar	66.8	3.5	6.5		

Source: Pakistan Bureau of Statistics

²⁰ Conducted through the virtual governance program, where real-time data was provided to the system. The 9211 Virtual Governance System is a database of millions of livestock farmers across Punjab that captures details of livestock and mapping of services provided by the Livestock and Dairy Development department. The application also connects farmers to livestock specialists who provide technical advice regarding various animals.

industries benefited from higher capacity utilization. The two prime exceptions in the otherwise favorable performance in FY18 were the fertilizer and sugar industries. Smaller fertilizer units did not receive domestic gas supplies and production on imported RLNG became unprofitable for them. This led to almost closer of operations of these units. Meanwhile, lower international sugar price had a knock-on effect on the domestic sugar industry. The producers, already flush with a substantial stockpile, were not willing to crush sugarcane excessively under the prevalent indicative price of sugarcane, that made the domestic industry uncompetitive in the international market.

Large-scale manufacturing:

Large scale manufacturing (LSM) exhibited a growth of 5.4 percent during FY18 on top of 5.8 percent growth observed during FY17 (**Table 2.7**). The factors which facilitated LSM growth mainly included increased capacity utilization due to ease in energy supplies, high credit off-take owing to low financing cost, output stimulus in associated industries due to spillover impact of widespread construction activities and supportive business environment.

Overall, the LSM presented encouraging performance with notable contribution coming from construction allied and consumer durable industries. However, sugar industry was not able to capitalize on record sugarcane production. This was in stark contrast to last year, when sugar was the main contributor to overall LSM growth. Resultantly, LSM growth excluding sugar stands at an appreciable level of 6.5 percent during FY18, compared to 3.5 percent last year.

Steel:

The steel industry posted a notable growth of 21.8 percent during FY18 on top of 20.5 percent growth last year. Both the demand and supply side factors contributed to this performance. From the demand side, steel needs of infrastructure projects, housing schemes and auto and appliances industries stayed elevated. While, from the supply side, the imposition of anti-dumping-duties last year led major players to take the opportunity to increase their market share through capacity enhancements. In addition to capacity increases, other factors also influenced the market (for instance, improved electricity situation proved beneficial for the energy intensive industry). **Box 2.1** expands on this narrative to provide an overview of recent developments in the sector.

Box 2.1: Developments in the Steel Sector of Pakistan

Pakistan's steel manufacturers are undertaking significant investment to expand operational capacity and enhance product quality. This is mainly due to continuous rise in domestic demand. The industry has recovered from a contractionary phase that started with the closure of operations of Pakistan Steel Mills in FY15, and posted an encouraging growth of over 20 percent during FY17 and FY18.

Table 2.1.1: Major Players in the Domestic Steel Industry

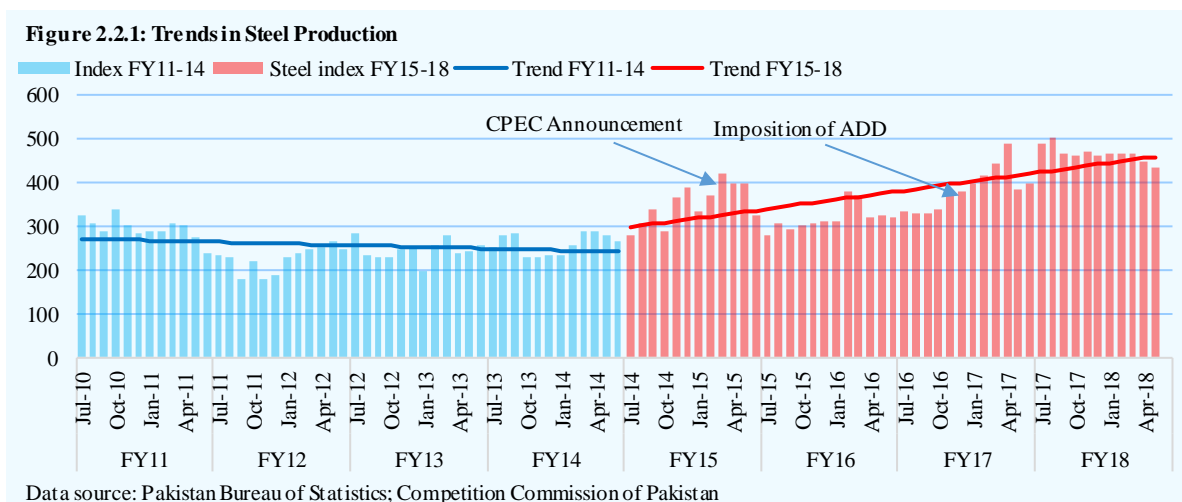
Major Players	Main Products	Capacity Utilization in FY18 (percent)	Existing Capacity (thousand tons)	Expected Capacity after Expansion (thousand tons)	Online Date of new capacity
Aisha Steel Mills Limited	CRC and planned galvanized coils	95	220 CRC 425 Steel Re-Bars; 100 Billets	450 CRC; 250 galvanized	mid-2019
Amreli Steels Limited	Bars and Billets	85	66.7 piped; 85 billets	85	mid-2020
Crescent Steel & Allied Products Limited	Steel Pipes (road networks)	161	462 galvanized; 550 CRC; 84 color coated	462 Galvanized; 1000 CRC; 84 color coated	end-2018
International Steels Limited	Galvanized Coils, CRC, color-coated	72	120	120 (no plans)	-
Ittefaq Iron Industries Limited	Billets and de-formed bars	44	688	1000	early-2019
Mughal Iron & Steel Industries Limited	Long-rolled Bars and Billets	68			

Data Source: Companies' financials; Pakistan Stock Exchange

Steel products are generally classified into four broad categories: long steel products (re-rolled bars); flat steel products such as Hot Rolled Coils (HRC), Cold Rolled Coils (CRC), and Hot Dipped Galvanized Coils (HDGC); piped products for use in road construction, etc.; and semi-finished products that are sold to other manufacturers or consumed internally for processing into finished products. **Table 2.1.1** lists the major private sector steel manufacturers and details their products. Cumulatively, the domestic manufacturers cater around 50 and 60 percent of the total domestic demand for galvanized and CRC, respectively. High imports, even after record domestic production, illustrate high demand for steel products. On the demand side, four factors stand out. First, there is now a dynamic customer base for steel commodities in automotive, defense, transportation and appliances sectors. Second, an increase in overall industrial activities has created further room, as most of the construction-allied industries are investing heavily in expansions. Third, population surge has created a housing shortage and the private housing projects are gearing up to cater to this shortfall. Fourth, higher public spending and CPEC related infrastructure undertakings are fueling further demand for steel. Going forward, these four developments would continue to increase overall demand for steel.

From the supply side, the domestic manufacturers face tough competition from imported finished products, particularly from China. Competitive in terms of both price and quality, the imported products are especially impacting sales of domestic small players, who are unable to compete due to high costs of doing business and double taxation across the industry. Recently, the industry has had some respite after the government imposed anti-dumping duty (ADD) on top of already imposed regulatory duties on finished steel products (**Figure 2.2.1**).

This favorable interplay between the demand and supply dynamics has incentivized the domestic industry to invest in capacity expansions and product diversification. International Steel, for instance, increased its CRC capacity from 250,000 to 550,000 during FY15 and FY16 after converting their compact cold rolling mill to a twin-stand reversing mill. Similarly, their galvanizing capacity increased from 150,000 tons to around 460,000 tons after adding a second galvanizing line. They are currently in the process of upgrading their CRC capacity from 550,000 tons to 1.0 million tons at an estimated cost of Rs 5.6 billion. Amreli Steels, meanwhile, has diversified its product base, producing billets as well as rebars. Their capacity for rebar production has grown from 180,000 to first 300,000 and eventually 425,000 and for billets from 100,000 to 600,000. Going forward, it intends to expand the CRC capacity to 750,000.



Aisha Steels is also vertically expanding its operations. It plans to produce galvanizing products as well as CRC. An investment of Rs 3.9 billion would take its capacity from 220,000 to 450,000 for CRC while introducing new capacity of 250,000 for galvanized coils. Lastly, Mughal Steel is investing around Rs 1 billion to increase its total capacity from around 690,000 to 1 million tons.

The industry is also focusing on extensive BMR activities to achieve efficiency gains. For example, Aisha Steels has installed a roll grinder procured from Germany to improve the thin gauge CRC quality, while an electrostatic oiler has also been installed to strengthen the products' resistance to corrosion. Amreli Steels also has plans to start using the multi-slit rolling technology acquired through Primetals, a leading global engineering and plant construction company. Meanwhile, some players are enhancing their own electricity production capacities to cater to the growing demand. Mughal Iron and Steel, for instance, has restarted operations of 9.3 MW gas-fired captive power plant. It has obtained approval for further captive power generation from SNGPL for 2.8 MMCFD of gas, up from 1.8 MMCFD.

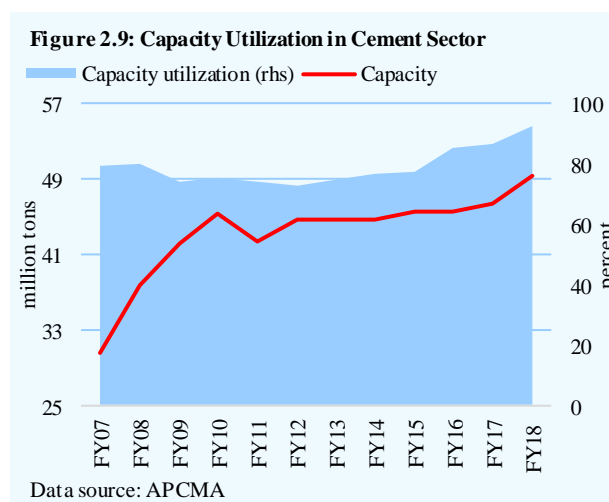
In the piped steel segment, a key industry player is working overtime to cash in on the rising demand. There are also instances where companies are investing in other industrial activities (such as fragmentation and cotton yarn spinning) and then intending to use the surplus profits to invest in the steel segment. The fabrication unit of Crescent Steel manufactures

and supplies products as diverse as cane-shredders, centrifugal machines, stainless steel spray clusters, multi-jet condensers, and high voltage condenser tanks, etc.

The sector is also intensifying efforts to reduce import dependence on raw materials. While scrap imports would continue to increase (given that the domestic scrap materials do not yield quality products), the industry players have started expanding their billet manufacturing, which is further processed into long bar products by the manufacturers. Overall, the domestic steel industry is benefiting from an encouraging investment and operational stimulus. However, as the new capacity comes online, the profitability of the manufacturers would depend on the overall activities in real and construction sectors going forward.

Cement:

The cement industry, with more than one-fifth share in overall LSM growth, registered a growth of 11.1 percent during FY18 compared to 4.5 percent last year (**Figure 2.9**). The industry benefited from improvements in capacity utilization as well as increase in production potential. While industrial capacity grew 6.6 percent to reach 49.4 million tons during FY18, the utilization levels also reached historical high of 93.0 percent. This facilitated the industry to meet demand of widespread construction activities, as reflected by strong figures of local dispatches, which surged 15.4 percent during the year. Encouragingly, quantum of cement exports also witnessed an increase of 1.8 percent after eight consecutive years of contraction (average contraction of 10 percent during last eight years). This occurred on the back of significant rise witnessed in shipments to Afghanistan, South Africa, Madagascar and Senegal during the period (**Chapter 6**).



However, the domestic demand for cement has far outpaced exports in recent years. It may be noted that the industry used to export around a quarter of its annual output during FY01-09, the share of which has now come down to only a tenth. This decline in exports share is conceivable due to installation of industrial units in the key cement export destinations such as South Africa and Afghanistan that may impose high tariffs on cement imports to protect their own industries.

Similar to steel, the growth in cement industry is also driven by CPEC related projects, public sector development spending and the ongoing construction of private housing schemes. Anticipating further demand in the years ahead, the industry players are investing heavily in capacity expansions, mainly to consolidate their positions in a high margin domestic market as well as major export destinations.²¹

Nevertheless, the absorption of excess cement output in future would depend on: a) the continued work on housing schemes to bridge the housing deficit, especially in urban areas; b) the demand emanating from public sector projects which also rely on the utilization of budgeted PSDP, and c) the continuity of projects and special economic zones under the CPEC umbrella. Furthermore, the enhanced capacities of the industry may also lead to improving external competitiveness and induce cement industry to explore new markets.

²¹ For more information, refer to Special Section 1 titled “Cement Industry-Current Dynamics and Future Prospects” in SBP’s Third Quarterly Report on the State of Pakistan Economy for FY18.

Automobile:

The growth momentum of the automobile industry continued in FY18, with production rising by 17.8 percent, on top of the 11.2 percent growth observed during FY17 (**Table 2.8**). A double-digit growth was recorded in almost all the sub categories. The sector's robust performance is indicative of rising auto demand in the country. Despite increased capacity utilization by local manufacturers, the industry could not fully meet the demand. Resultantly, increase in imports of used cars was observed during the year.

Table 2.8: Automobile Production

	FY16	FY17	FY18	Growth	
				FY17	FY18
All Cars	179,944	186,936	217,774	3.9	16.5
Cars <800 cc	66,957	57,842	69,078	-13.6	19.4
Cars between 800-1000 cc	26,276	35,313	49,848	34.4	41.2
Cars >1000cc	86,711	93,781	98,848	8.2	5.4
Trucks	5,666	7,712	9,187	36.1	19.1
Buses	1,070	1,118	784	4.5	-29.9
Light commercial vehicles	35,836	24,265	29,055	-32.3	19.7
Sports utility vehicles	773	3,530	13,364	356.7	278.6
Tractors	34,914	53,975	71,894	54.6	33.2
Motorbikes	1,362,096	1,632,965	1,926,688	19.9	18.0

Data Source: Pakistan Automobile Manufacturing Association

Several factors have contributed to the robust demand for automobiles. First, the low interest rate environment has made purchase of cars on credit more affordable. The increase in auto and personal loans is indicative of this development.²² Second, ride hailing services have made further inroads in the domestic market, creating additional demand, especially for the fuel efficient hatchbacks. After a lackluster performance of this segment in FY17, the hatchbacks made a commendable recovery in FY18, posting a growth of 28 percent. Third, the previously untapped and under-marketed SUV segment continued to garner widespread popularity resulting in noteworthy growth for this sub-sector. Fourth, impressive growth of agriculture led to an increase in rural incomes, which in turn created substantial demand for tractors and motorbikes. Finally, increase in overall business activities - substantiated by continued growth in commercial vehicles – created room for widespread demand for variety of automobiles in the country.

In spite of this, the existing players hardly added to their existing capacity while entry of new manufacturers is still awaited. The existing players have resorted to double shifts to meet the increasing demand. However, lack of capacity expansions led to an increase in vehicle delivery times. For some models, the customers had to wait for more than 6 months for deliveries after the initial booking.²³

Although automobiles exhibited record production figures, the reliance on imported vehicles was high. Imported vehicles, especially hatchbacks, are popular due to higher fuel efficiency and standard security features that the local producers do not provide. Moreover, the demand for imported vehicles remained strong despite substantial PKR depreciation. Moving forward, further PKR depreciation, tariff and non-tariff barriers and restrictions on purchase of new vehicles for non-tax filers is expected to hamper demand for vehicles.

²² Refer to **Chapter 3** for more detail.

²³ In the case of Toyota Corolla, Honda City and Civic, the delivery times were upto nine months.

Electronics:

Electronics sector gained further traction as production rose sharply by 32.4 percent during FY18 on top of 21.6 percent increase in FY17. This result can be attributed solely to increase in production of electric motors, which surged by 132.6 percent in FY18 compared to 25.8 percent in FY17. This performance was attributable to improvement in power supplies on the back of increased public investment in the electricity generation and distribution. Besides electric motors, the usual contributors like refrigerators, deep freezers, and air conditioners have recorded either slowdown or contractions during the year.

POL:

The POL sector grew by 13.2 percent during FY18 compared to 2.8 percent in FY17- outshining last year's performance by a significant margin of 10.4 percent. Both the demand and supply side factors helped keep the POL production high. From the demand side, enhanced power generation, improved trade and commercial activities, higher income levels, and rising demand for private transportation, especially through ride hailing services, aided this growth. On the supply side, capacity expansions, upgradation of technology, and recovering international oil prices played a key role.

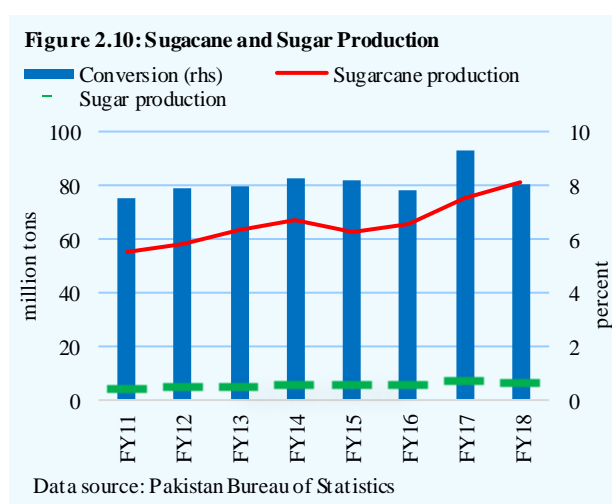
While overall performance of the sector was commendable, it could have been even better, had the government not ordered the closure of inefficient and costly furnace oil-based power plants. This measure created an indirect impact on the performance of the POL industry, as furnace oil is one of the major products of oil refineries. Ad hoc closure of furnace oil-based power plants led to a build-up of furnace oil stockpile for which there was no significant domestic buyer except the power generation industry. Therefore, some refineries had to cease their operation during Q2-FY18, and this negatively affected the performance of the POL industry.

Food:

Growth in the food sector remained subdued during FY18. It was mainly a contraction in the production of sugar that held back the otherwise promising recoveries witnessed in cigarette and edible oil segments. Overall, the sector managed to grow by 2.8 percent in FY18 against growth of 11.7 percent in FY17, during which the food group, owing to sugar, was the key contributor towards LSM growth.

Sugar:

Sugar industry recorded a decline of 6.8 percent in production during FY18. Last year was an outlier, as the industry had yielded 7 million tons from the then record sugarcane output of 75.5 million tons, which points to a historic conversion rate of 9.3 percent. For FY18, this rate fell to 8.1 percent from a record high sugarcane harvest of 81.1 million tons, in line with historical trend (**Figure 2.10**). This year, the sugar industry was not able to crush all the raw material that was on offer owing to a number of factors. Primary reason was sugarcane pricing. After the 18th Amendment, provincial governments announce sugarcane procurement prices for the sugar mills based on market fundamentals in conjunction with the



growers and sugar mills representatives.²⁴ In the international market, the sugar price remained depressed since February 2017, while locally the provincial authorities set a high procurement price. The contrast set the tone for this year's performance of the sector.

In Sindh, sugar mills suspended their operations for a few weeks to put pressure on regulatory authorities to revise the sugarcane prices downward. The mill owners were eventually successful as a provincial judicial court revised sugarcane price downwards.

Meanwhile, in Punjab, the court ordered suspension of crushing at a few sugar mills on the basis of unlawful relocation. The affected mills were later allowed to resume their operations. However, the sector's overall crushing activity was severely affected by then. Consequently, growers had to bear significant losses: with record harvest, they had to sell their output at massive discounts.

From the millers' perspective, surplus stock amid low international sugar prices and limited export quota remained major concerns. In fact, the sugar industry has been producing surplus sugar for the past few years, which led to build up of stocks. For the last two years, on average, the country produced about 7 million tons of sugar, two million tons more than domestic consumption. With depressed international prices, exports were not possible without subsidy.

The country was able to export 1.5 million tons out of allowed quota of 2.0 million tons, on the back of hefty subsidies by the federal and provincial governments. The subsidy at the rate of Rs 10.7 per kg put an extra burden of Rs 16.0 billion on the national exchequer. Rationalizing the prices more in line with the international prices would not only reduce the fiscal strain but also induce allocative efficiency in the agriculture sector. Artificial profitability created by the indicative sugarcane pricing has adversely affected production of other crops like cotton and edible oil.

Cigarette:

The cigarette industry experienced a turnaround in FY18. The impact of three-tier structure of federal excise duties was felt strongly, as the industry posted a growth of 72.0 percent in FY18 in stark contrast to a contraction of 35.8 percent in the preceding year. Introduction of the third tier for cheaper cigarettes allowed domestic variants to compete with low-priced illicit foreign brands. A further impetus came from crackdown by the government on counterfeits, smuggling and tax evasion. The impact of this substitution was observed during the year, as financial returns of the major players increased substantially.

While the initiatives have worked well, the same may not be true regarding the welfare cost to the society. Cheaper cigarettes may plug the revenue shortfall to some extent, but a desirable way would be to reduce cigarette consumption regardless of the fact that supplies come from formal or informal sources. A crackdown on illicit/smuggled cigarette trade should continue for the benefit of the domestic formal industry, while tax rates may be increased across the tiers to discourage overall consumption of cigarettes from a health point of view.

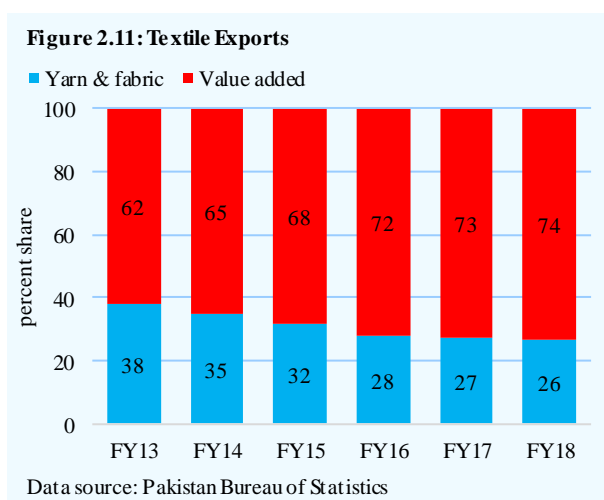
Textile:

Textile sector could only manage a growth of 0.4 percent during FY18 compared to preceding year's growth of 0.8 percent. The production of cotton yarn and cotton cloth, with a combined weight of 20 percent in LSM, remained stagnant during the year, and this was a deciding factor behind below par performance of textile manufacturing. Although the non-cotton based products such as jute and woolen products showed marginal growth, they could not bring any change in the performance of the sector as a whole. This lackluster performance took place despite an increase in cotton production and enhanced focus by the government to revive the ailing textile sector via the exports package. The

²⁴ This includes domestic cost of sugarcane production, area under the crop, international prices etc.

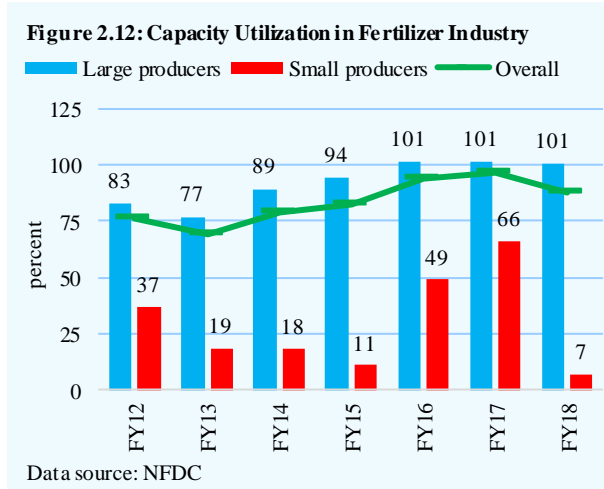
government further relaxed the custom duties and sales tax, while lowering the threshold of performance-based duty drawback concessions during the course of FY18 from 10 percent to 5 percent.

Encouragingly, textile exports grew by 8.6 percent in FY18. This happened despite a marginal growth witnessed in textile manufacturing. The discrepancy in these numbers is primarily attributed to low coverage of textiles in LSM, which reports yarn and cloth items. While export data is more intensive that also includes value-added items mainly manufactured in the SME sector such as hosiery, knitwear, towels, readymade garments etc. (**Figure 2.11**).



Fertilizer:

Fertilizer production declined by 9.9 percent in FY18 against a modest growth of 1.7 percent last year. The detailed data suggests that the decline was primarily due to suspension of production activities by smaller fertilizer units, as production of larger firms remained at previous year's level. It is worth highlighting that smaller units do not have access to domestic gas supplies, and operating the plants on imported RLNG is unviable due to its high cost.



As more natural gas-fired power plants came online, domestic gas supplies were diverted from smaller fertilizer producing units. As a result, capacity utilization of small producers fell from 66.0 percent to just 7.0 percent in FY18, whereas larger players were not affected (**Figure 2.12**). Another likely factor that affected fertilizer production was the uncertainty regarding subsidies at the start of the fiscal year. The manufacturers had faced delays in receiving subsidy payments while the alteration in the mechanism of the subsidy payment and relaxation in applicable tax rates created ambiguities for the manufacturers.

Furthermore, the international prices of the commodity registered substantial increase due to upsurge in the prices of key input; coal and RLNG. High demand and lower domestic supplies created a situation where imports were inevitable in FY18. During FY18, the country imported 37.0 percent more fertilizer products – at a higher price – in order to fill the deficit in the domestic market. This is pertinent to note, as the industry was exporting surplus stocks during last year.

2.4 Services:

The services sector almost repeated its last year's performance, posting 6.4 percent growth compared to 6.5 percent in FY17 (**Figure 2.13**). While the sector benefitted from healthy performances of the *wholesale & retail trade and general government services* subsectors, the *finance & insurance, transport, storage and communication, and other private services* witnessed deceleration during the year (**Table 2.9**).

A detailed analysis of the sub-sectors reveals that the *wholesale and retail trade* performed well on the back of strong showing of the commodity-producing segment and a continued increase in import quantum. This led to an impressive growth of 7.5 percent during FY18 – the highest in the last 12 years.

Meanwhile, value-addition in the *transport, storage & communication* sub-sector slowed down to 3.6 percent during FY18, from 4.4 percent last year. This was due to a subdued showing of the communication segment owing to a lower increase in PTCL profits compared to last year.

However, Pakistan Railways experienced a turnaround, showing an increase of 167.4 percent in the gross value addition (GVA) in FY18 after witnessing a contraction of 74.6 percent during FY17.²⁵ Improved performance in passenger and freight traffic resulted in an increase of 26.7 percent in earnings during H1-FY18 - the latest information available (**Table 2.10**). Going forward, the growth trend is likely to continue, with Pakistan Railways implementing the second phase of its Vision 2026 that focuses on financial stability and improved quality of service. The enterprise is planning to import 205 wagons from China, while 595 units are to be built domestically. The aim is to enhance the share of railways in the transport sector.

In case of *finance & insurance*, a deceleration in the gross value addition by commercial banks – the segment having an 82.5 percent share – slowed down the sub-sector’s growth to 6.1 percent after witnessing a 10.8 percent growth during the previous year (**Table 2.11**). The slower pace of deposit generation in particular is a worrying development. During FY18, the growth in deposits fell to 8.8 percent as opposed to 12.4 percent during FY17 and the five-year average of 13.6 percent during CY12-15. Major reasons behind this slowdown in deposit growth has been the falling growth of domestic remunerative deposits and a scaling back of operations by some banks in the overseas market. This has led to increased inter-bank borrowings in order to match the growth on the assets front. The profitability of the sector has also been constrained due to the low interest rate environment, falling non-interest incomes, and a one-off settlement by a major bank on its foreign operations during Q1-FY18.

The *other private services* sub-sector grew 6.1 percent on top of the 8.0 percent growth experienced during FY17. An encouraging development in this sub-sector has been the surge in exports of the

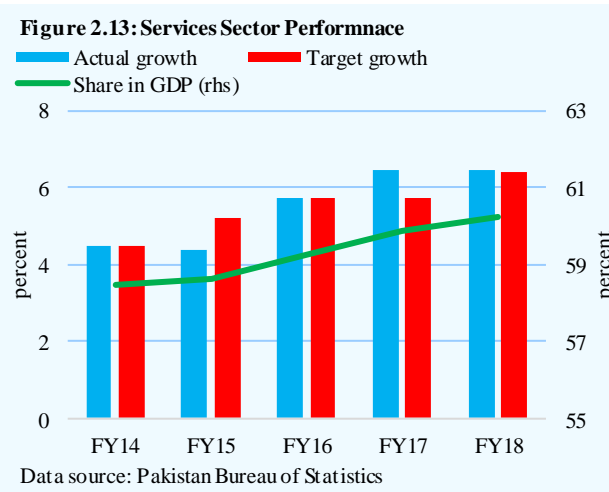


Table 2.9: Performance of the Services Sector

	Share in GDP	Growth		Contr. to Services Growth	
		FY17 ^R	FY18 ^P	FY17 ^R	FY18 ^P
Wholesale & retail trade	19.0	7.5	7.5	35.7	36.4
Transport, storage & com.	13.0	4.4	3.6	15.6	12.4
Finance and insurance	3.4	10.8	6.1	9.0	5.4
Housing services	6.5	4.0	4.0	7.0	6.9
General govt. services	7.9	5.9	11.4	11.6	22.3
Other private services	10.4	8.0	6.1	21.0	16.5
Services	60.2	6.5	6.4	100	100

Data source: Pakistan Bureau of Statistics

Table 2.10: Performance of Pakistan Railways

	H1-FY17	H1-FY18	Growth (percent)
Number of passengers carried	26.6	27.9	4.9
Passenger traffic kms	12,132	12,785	5.4
Freight carried (million tons)	2.4	3.8	58.3
Freight carried kms	2,160.1	3,501.3	62.1
Gross earnings	1,8548.1	2,3505.5	26.7

Data source: Ministry of Railways

²⁵ Source: Pakistan Economic Survey 2017-18.

computer related activities segment. During FY18, the official ICT exports of Pakistan crossed US\$ 1.0 billion mark for the first time, with handsome contribution coming from an increase in the consultancy services provided abroad by the domestic industry.

Overall, the services sector of Pakistan has now crossed the 60 percent mark in terms of its share in the real GDP. Furthermore, the sector is slowly witnessing the adoption of information technology (IT) on a wide scale, evident from the emerging digitization of activities in the fields of retailing, commerce, and governance. While the impact of this may not be evident from the national accounts of the economy, digitization is helping increase the efficiency of the sector while having a positive and noticeable impact on the rest of the economy. This trend is being complemented by the various public and private sector efforts to nurture and support the fledgling ecosystem. **Chapter 7** builds upon this discussion by highlighting the key emerging trends in the services sector: namely e-commerce, fintech, and e-government.

Table 2.11: Finance & Insurance

	Share in FY18	Growth	
		FY17	FY18
Central bank	1.9	-11.9	3.6
Other monetary intermediation	86.9	10.7	8.8
Scheduled banks	82.5	9.5	7.2
Non-scheduled banks	4.4	57.1	52.3
Other financial services	1.4	0.8	1.1
Insurance, reinsurance and pension fund	3.7	6.2	2.1
Activities auxiliary to financial services	6.1	24.8	-19.0
Finance and insurance	100.0	10.8	6.1

Data source: Pakistan Bureau of Statistics

3 Monetary Policy and Inflation

3.1 Policy Review

With growing imbalances in the economy, along with a challenging outlook, monetary policy in Pakistan shifted gears in FY18. The Monetary Policy Committee (MPC) increased the policy rate by a cumulative 75 basis points during the year, after keeping it unchanged at historic low levels for around 20 months. The key pressure point was the adequacy level of the country’s foreign exchange reserves (**Table 3.1**), as well as the future inflation path.

Importantly, SBP’s forecasts from January 2018 onwards suggested that persistent domestic demand pressures – evident in rising imports, twin deficits, and elevated level of core inflation – could potentially pose risks to the medium-term sustainability of economic growth. In fact, the forecast of headline inflation for FY19 highlighted the increased likelihood of exceeding the 6.0 percent target primarily due to lagged pass-through of the PKR depreciation and the upward trajectory of global oil prices.

The timing of the policy reversal represents shifting balance of risks during the course of the year. In all the three MPC meetings of H1-FY18, the policy rate was kept unchanged, as inflation remained low and its forecast was within the target. Although global commodity prices had begun to recover, and demand-driven pressures drove up non-food inflation, their combined impact was more than offset by a sharp fall in food inflation. This drop represented the impact of improved supplies of key staples and favorable duty regime for cigarettes – a similar trend persisted through the rest of the year (**Figure 3.1**). Nonetheless, inflation expectations crept up (as indicated by IBA-SBP consumer confidence surveys) due to the imposition of regulatory duties on a number of items and the increase in domestic prices of petrol and other fuels. As for the external sector, although trends were not comfortable throughout the first half of the year, the government’s plans to mobilize funds from the global capital market, lent some support to the outlook.

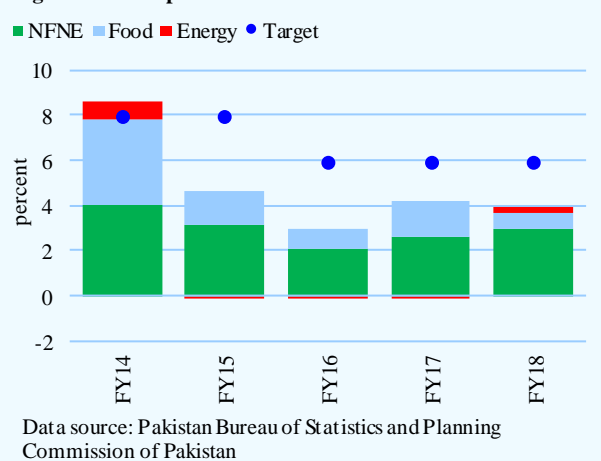
However, the outlook and the policy equation changed completely by the time the MPC met in January 2018. Four factors particularly fed into the decision to raise interest rates: (i) the Pak rupee’s 4.4 percent depreciation in December 2017, which was expected to have a lagged impact on headline inflation; (ii) a steady increase in global oil prices; (iii) narrowing of the interest rate differential between the Pak rupee with the rest of the world; and (iv) estimates of output gap hovering around the

Table 3.1: Major Policy Indicators

	FY16	FY17	FY18			
			Q1	Q2	Q3	Q4
Imports (billion US\$)	44.7	52.9	14.3	14.6	15.6	16.6
Current account/GDP (%)	-1.7	-4.1	-1.1	-1.4	-1.4	-1.9
Fiscal balance/GDP (%)	-4.6	-5.8	-1.3	-1.0	-2.0	-2.3
Import cover (months)	5.8	4.0	3.2	3.2	2.6	2.1
CPI inflation (% period avg.)	2.9	4.2	3.4	4.1	3.8	4.4
Core inflation (% period avg.)	4.2	5.2	5.5	5.4	5.4	7.0
PKR/USD (period avg.)	104.8	104.8	105.4	106.6	111.1	116.8

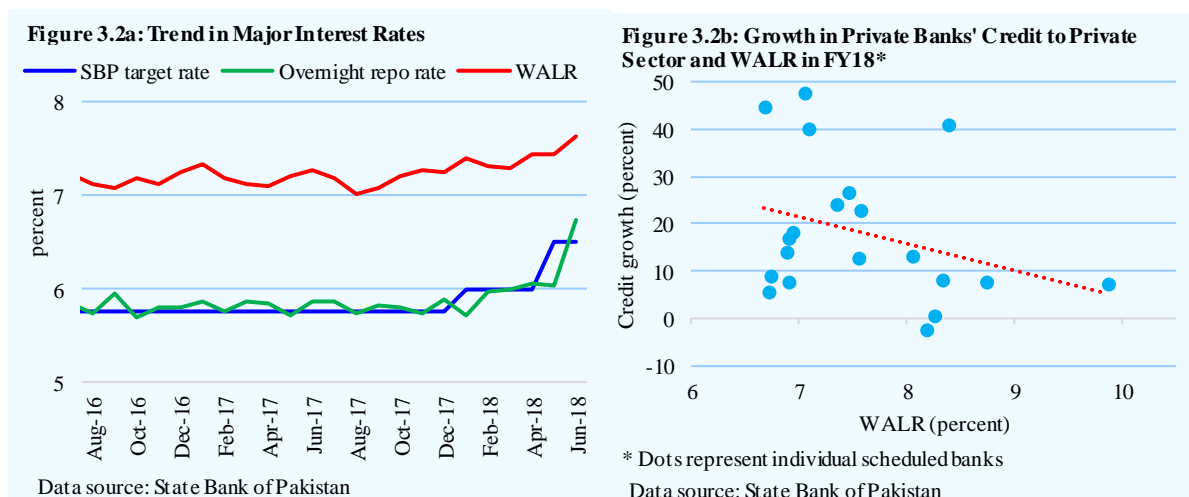
Data source: PBS; SBP; MoF

Figure 3.1: Composition of Headline CPI Inflation

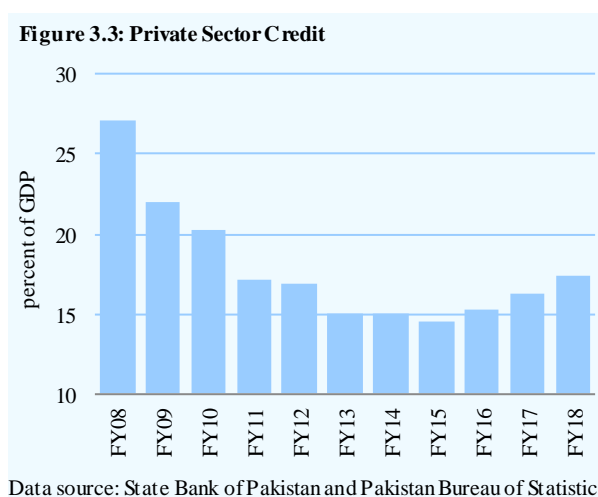


positive territory.¹ Therefore, the MPC decided to increase the policy rate by 25 bps in its January 2018 meeting.

In the subsequent review, the policy rate was kept unchanged to allow time for the impact of policy developments to unfold. However, by the time the MPC met again (in May 2018), the twin deficits were presenting a grimmer picture of the economy. First, limited financial inflows, coupled with a sharp increase in global oil prices largely offset the gains from an uptick in exports and a slowdown in non-oil imports. Second, higher-than-expected fiscal expansion was in contrast with the policy adopted by the central bank to counter demand pressures. As a result, a majority of the MPC members voted to raise the policy rate by 50 basis points.



Importantly, the cumulative 75 bps hike during H2-FY18 did not have a significant impact on the weighted average lending rates (WALRs), which inched up by only 39 bps during the same period (Figure 3.2a). Aside from typical lags involved in the pass-through, a modest increase in WALR also represented liquidity available in the interbank market, amid ongoing competition across banks to secure financially sound projects – some negative association has been observed in WALR offered by private banks and the credit expansion they were able to achieve (Figure 3.2b). It is important to reiterate here that low and stable WALR had a major contribution to the country achieving a 13-year high real GDP growth rate of 5.8 percent in FY18, as industries resorted increasingly towards bank borrowings to finance their expenses. This is also evident in the 8-year high level of private sector credit-to-GDP ratio (Figure 3.3).



The momentum in working capital loans was particularly visible in a large number of sectors, including textiles, cement, electrical machinery, iron and steel, edible oil & ghee, basic chemicals and

¹ A number of emerging and advanced economies raised their interest rates during end-2017. Particularly, the US Fed and the Bank of England increased their interest rates by 75 and 25 basis points respectively. Moreover, the Reserve Bank of India also raised the interest rate by 25 basis points in each of its last two monetary policy reviews in June and August 2018.

rice processors (**Section 3.3**). In addition to low interest rates, this growth was attributed primarily to increased production capacities, buoyant industrial activities, and also to input prices that continued to increase in FY18 – albeit at a slower pace compared to last year. As for fixed investment loans, the expansion remained lower than last year. The disaggregated data suggests that the slowdown came primarily from the fertilizer sector, as scheduled retirements of earlier loans fell due. In contrast, capacity expansions/ upgrades in major manufacturing sectors (including textiles, cement, edible oil & ghee and domestic appliances) continued to push up their fixed investment borrowings. SBP’s subsidized financing schemes for export-oriented sectors also played an important role in encouraging capex activities in some sectors, such as textiles. As for the power sector, although fixed investment activity remained dull in H1-FY18, it picked up some pace during the second half of the year as firms tried to expedite project closures in the wake of imposition of ban on new power projects.

On the supply side, banks had sufficient liquidity at their disposal to cater to the demand from the private sector. This liquidity ease was attributed mainly to SBP’s proactive liquidity management in the interbank market; open market operations, which are conducted with an objective to keep the overnight rates close to the policy rate, were particularly helpful. In FY18, these OMOs helped alleviate occasional liquidity pressures that emanated from: (i)

Table 3.2: Budgetary Borrowings from Scheduled Banks

billion rupees		
	FY17	FY18
Q1	-260.2	168.7
Q2	-210.3	147.2
Q3	373.0	-1706.8
Q4	276.9	1238.5

Data source: State Bank of Pakistan

(ii) budgetary borrowings from banks through most of the year (in 3 out of 4 quarters – **Table 3.2**); (ii) FX operations; and (iii) a slowdown in deposit growth. SBP’s liquidity support via open market operations was particularly strong in H1-FY18, when seasonal borrowings from the private sector were in full swing and deposit growth nearly halved compared to last year (**Box 3.1**). Subsequently, the liquidity position in the interbank market eased during the third quarter, amid sizable maturities of T-bills and PIBs, which the commercial banks were not keen to roll over – the government had to borrow Rs 2.2 trillion from SBP. The overall ease in liquidity during FY18 is evident from lower volume of commercial banks’ borrowing from SBP’s reverse repo facility as compared to FY17.

The impact of the overall private sector credit growth on monetary expansion was further reinforced by a sharp rise in public sector borrowings. Not only did the budgetary borrowings continue to grow at a rapid pace, but public sector agencies also borrowed heavily, especially for commodity operations. As a result, the overall net domestic assets grew by 15.9 percent in FY18. However, its impact was partially diluted by a sharp fall in net foreign assets of the country, which represented the growing external account deficit. The overall money supply grew by 9.7 percent, lower than the 13.7 percent growth recorded last year.

Despite this slowdown, the overall M2 as percent of GDP continued with its upward trajectory and crossed the previous high of FY08, by reaching 46.5 percent in FY18. The continuous increase in this ratio over the past few years had been contributing to domestic demand pressures in the economy. Although it is expected that the recent monetary tightening measures will help alleviate these pressures to a certain extent, the effectiveness of this policy change hinges upon coordinated attempts to maintain fiscal discipline.² Specifically, the composition of M2 to GDP shows that the bulk of the increase has come from public borrowings, as the contribution from the private credit has been fairly modest (**Figure 3.4**). This represents the risk that the multiplier effect of a strong and persistent fiscal expansion can potentially offset the contractionary impact of monetary tightening on domestic demand.

² After raising the policy rate by 75 bps in FY18, the MPC announced another rate hike of 100 bps in July 2018.

While posing a major challenge to monetary policy effectiveness, fiscal strains are also not favorable in terms of banking sector development and financial services deepening. In particular, the advances-to-deposit ratio is quite low in Pakistan, as banks typically invest heavily in government papers. Although the ratio has improved over the past couple of years and reached 53.1 percent in FY18, it remains low as compared to 73.9 percent for the Asia Pacific region. This suggests that as long as the government’s appetite for funding continues, banks would not be deploying the bulk of their liquidity in the private sector, especially in the underserved segments. A case in point is the SME sector. Credit offtake by SMEs remained subdued during FY18 over last year, as banks further increased their exposure on big corporates (**Table 3.3**). Not only did the share of SMEs in total advances shrink, the number of SME borrowers also declined. This implies that while private sector credit has grown appreciably over the past 3 years, some cross-sector substitution of banking fund allocation also took place. In other words, increased corporate lending has crowded out SME lending.

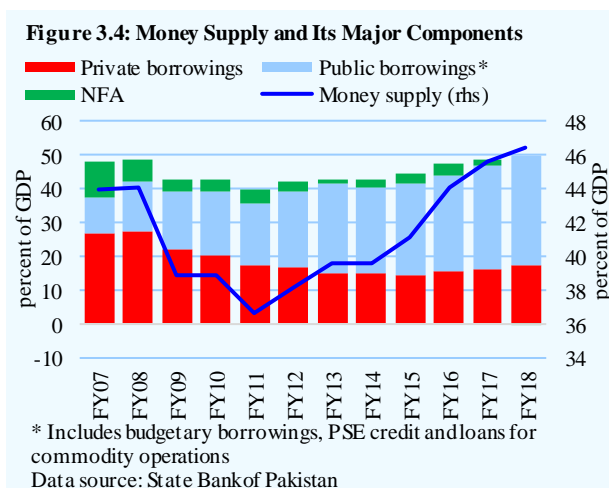


Table 3.3: Major Indicators of SME Financing

	Jun-16	Jun-17	Jun-18
SME finance (yearly flow bln Rs)	30.7	78.5	33.7
Share of SMEs in total advances (%)	5.4	5.9	5.4
SME borrowers (no.)	165,238	177,342	169,768
SMEs’ net NPLs to loan ratio (%)	26.5	20.5	17.8

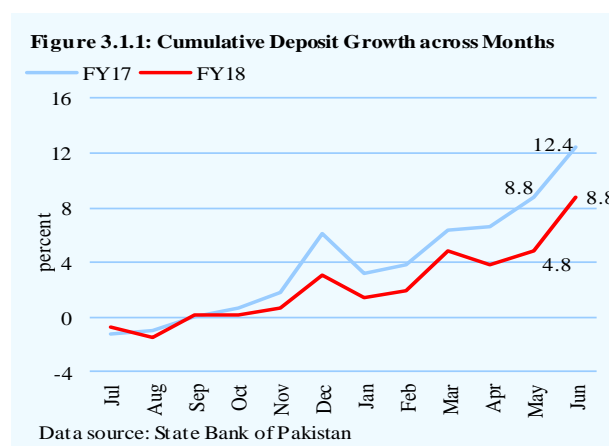
Data source: State Bank of Pakistan

To address this, SBP is undertaking efforts to ensure a more balanced distribution of bank loans across sectors. In FY18, it launched a comprehensive roadmap for the promotion of SME finance. The roadmap comprises 9 key pillars, including improving regulatory framework, upscaling microfinance banks, and simplifying procedures for SME financing. Similarly, SBP has also prepared a draft framework for the promotion of low-cost housing finance (**Box 3.2**). With such measures, the depth and access of private credit in Pakistan is expected to improve considerably. That said, it is also imperative to keep the fiscal policy aligned with the broader objective of ensuring monetary policy effectiveness and simultaneously achieving financial inclusion. Containing demand pressures is getting increasingly important, as cost-push pressures on inflation are expected to get stronger over the medium term. Importantly also, inflation expectations still appear high, as evident from the July 2018 edition of the Consumer Confidence Survey. Thus, SBP will continue to apprise the MPC about emerging risks to the economy, to ensure adoption of appropriate monetary policy stance.

Box 3.1: What has caused a slowdown in deposit mobilization?

Deposit growth slowed down to 8.8 percent in FY18 from 12.4 percent a year earlier. However, it is important to note that over 44.8 percent of the deposit increase during FY18 came in a single month – June; excluding this month, the slowdown in deposit growth is much sharper (see **Figure 3.1.1**). A common explanation is the presence of very low interest rates, which has created a disincentive for depositors to place their funds with banks. Moreover, since overall M2 growth has decelerated, a slowdown in deposits also seems logical.

However, in previous cycles of accommodative monetary policy, the growth in bank deposits had remained intact. Importantly, deposits to M2 ratio at end-June 2018 represents one of the lowest levels since the initiation of reforms in the early 1990s (**Figure 3.1.2**). This indicates



that the newly created money for general public and businesses is not re-entering the banking system. This has several disadvantages, including but not limited to, negative effects on economic growth and lower liquidity with banks to carry out financial intermediation.

Businesses took the major hit

The deposits of the banking system (including government deposits) grew by 13.7 percent in terms of compounded annual growth rate during FY12-FY15; the CAGR then declined to 11.4 percent during FY15-FY18 (see **Table 3.1.1**). Self-employed (i.e., small businesses) and ‘other personal’ deposits (excluding those of salaried persons) have the biggest share in deposits (36.3 percent by June 2018), and the growth in these deposits almost halved during FY15-FY18 as compared to FY12-FY15. With about a quarter share in total deposits, deposit placement by manufacturing, real estate, commerce and trade firms has also been lukewarm.

Withholding tax regime continues to hurt

The foremost reason that triggered the reversal of trend in deposits to M2 ratio a couple of years ago was the imposition of withholding tax on non-cash banking transactions (exceeding Rs 50,000) for non-filers, which went into effect from July 2015 (see **Special Section 1 of SBP’s Annual Report 2017** for details). Though the general perception is that bank deposits subsequently recovered in FY17 and FY18, data shows otherwise. The deposit-to-M2 ratio has continued to slide during FY17 and FY18, which indicates that the impact of withholding tax is still hindering the movement of cash back into the banking system.

Banks’ own strategy to avoid remunerative deposits

Banks’ efforts to mobilize deposits from the private sector have been weak in recent years, especially for remunerative deposits. This behavior can be traced to the imposition of floor on deposit rates that limits banks’ ability to cut their interest expenses. Anecdotal evidence suggests that bankers have been encouraging new customers to open current or savings accounts, instead of fixed/term deposits. A balance sheet review of a selective pool of banks also shows that adjusting deposit portfolios is a common strategy to minimize interest expenses. In fact, many banks have boasted in their annual and quarterly statements of “taper off”, “shed”, or “optimize” their high-cost deposits. Mobilization of low-cost current and savings account (CASA) deposits seems to be rampant amongst banks in hopes of keeping them profitable. Therefore, it is not surprising that the impact on term deposits (21.0 percent share) has been most severe (**Figure 3.1.3**).

Availability of alternative sources of bank liquidity

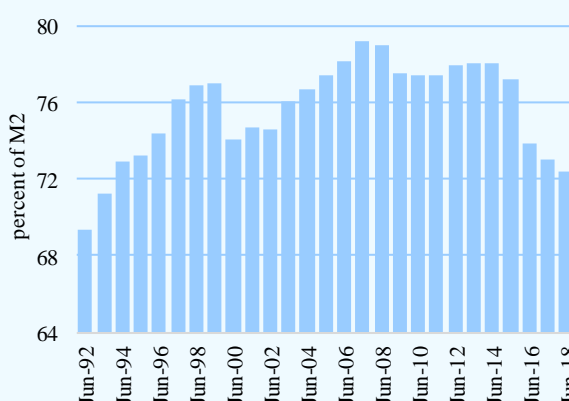
Ample availability of liquidity is another factor that has undermined banks’ deposit-taking efforts in recent years. First, OMO injections by SBP (to keep the overnight rate close to the target rate) have been quite helpful for banks in meeting their liquidity needs. Over the previous 3 years, the average volume of OMO injections has been similar to the increase in banks’ deposit base (**Figure 3.1.4**).

Table 3.1.1: Growth in Sector Wise Deposits

percent	Share in June 18	CAGR	
		FY12-FY15	FY15-FY18
Total	100.0	13.7	11.4
<i>of which:</i>			
I. Government	14.5	14.0	22.9
II. Non-financial PSEs	6.1	4.4	16.8
III. Non-bank FIs (NBFIs)	3.2	16.9	28.5
IV. Private sector business	23.6	15.0	5.9
V. Personal	47.8	15.2	9.3
a. Salaried persons	11.5	17.8	14.2
b. Self employed	21.9	14.3	7.8
c. Other personal	14.4	14.9	8.2
VI. Other	0.5	1.5	-2.6

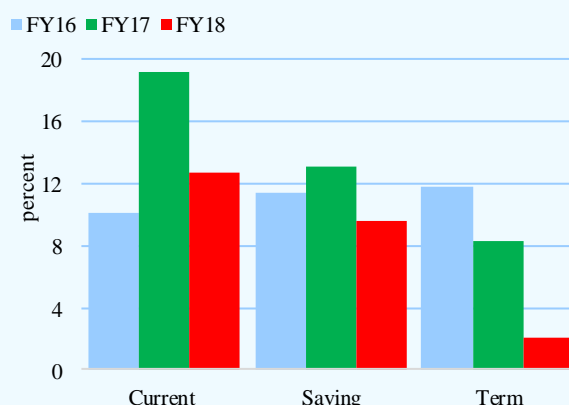
Data source: State Bank of Pakistan

Figure 3.1.2: Trend in Bank Deposits



Data source: State Bank of Pakistan

Figure 3.1.3: Category-wise Annual Growth in Deposits



Data source: State Bank of Pakistan

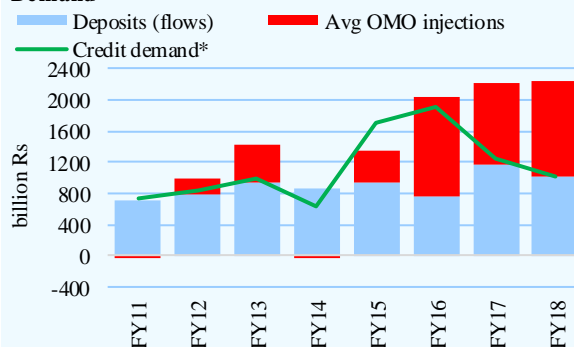
Similarly, SBP’s refinance schemes – that have attracted borrowers due to subsidized mark-ups – have been a source of

liquidity for commercial banks, especially for long-term funding. Over the last 3 years, banks received refinance from SBP against around 12 percent of total business loans.

Last but not least, public sector deposits (government as well as public sector enterprises) have emerged as an important source of bank liquidity. Over the last 3 years, these deposits have contributed, on average, 30 percent of the total increase in bank deposits. In outstanding stock of deposits, the share of the public sector has touched 20 percent by end-FY18, up from 16 percent 3 years earlier. Banks have been relying increasingly on these deposits to meet their operational requirements.

Measures should be taken to encourage savers to place their funds with banks. In this regard, while SBP has repeatedly advised banks to increase their deposits taking efforts and has also put in place floors on deposit rates, it is extremely important to reconsider the taxation regime. The removal of withholding tax on non-cash transactions will be particularly helpful. Importantly also, it is expected that with a reversal in monetary policy stance, liquidity dynamics may change in the interbank and this could induce banks to focus more on expanding the deposit base.

Figure 3.1.4: Major Sources of Banks' Funding and Credit Demand



* including demand from scheduled banks only, such as budgetary borrowings; credit to private sector, PSEs, and for commodity operations

Data source: State Bank of Pakistan

3.2 Monetary Aggregates

Broad money (M2) growth witnessed a slowdown in FY18 from a year earlier (Table 3.4), mainly due to a significant decline in SBP's NFA. Furthermore, the growth in NDA was also lower than last year.

Net Foreign Assets

With pressures developing in the external sector, the banking system NFA (stock) turned negative for the first time after FY00. The major drag came from SBP's NFA, which fell by Rs 817.3 billion in FY18 (Figure 3.5). By extension, the erosion of SBP's NFA was also behind the lower YoY growth of reserve money during FY18, despite elevated budgetary borrowings from the central bank in the year. As for the commercial banks, their NFA stock had already turned negative in FY16, as banks increasingly resorted to external borrowings to meet rising FX demand in the interbank market.

Budgetary borrowing and money market

In the backdrop of a 5-year high fiscal deficit, budgetary borrowing from the banking system remained elevated during FY18 (Figure 3.6). Within the banking system, the reliance on SBP financing became more pronounced during FY18. In Q3-FY18 alone, the government borrowed around Rs 2.2 trillion from SBP, against the limit of zero quarterly borrowing from the central bank prescribed under the SBP Act.

Table 3.4: Monetary Aggregates^P

billion rupees	Abs. change in stocks		Growth rate in percent	
	FY17	FY18	FY17	FY18
	M2 (A+B)	1,756.0	1,416.3	13.7
A. NFA	-405.5	-811.3	-40.2	-134.8*
B. NDA	2,161.6	2,227.6	18.3	15.9
<i>Government borrowing</i>	1,136.1	1,243.7	14.5	13.9
Budgetary borrowing	1,087.3	1,110.5	15.1	13.4
SBP	907.9	1,262.9	62.9	53.7
Scheduled banks	179.4	-152.4	3.1	-2.6
Commodity operations	49.9	133.2	7.8	19.4
<i>Non-government borrowing</i>	998.7	1,022.6	19.9	17.0
Private sector	747.9	775.5	16.8	14.9
PSEs	254.7	245.4	46.8	30.7
Reserve money	894.3	616.7	22.5	12.7

^P: Provisional

*Outstanding stock at end June 2017 was Rs 602.0 billion and at end June 2018 was Rs -209.3 billion.

Data source: State Bank of Pakistan

The government’s increased resort to SBP financing reflects its difficulties in rolling over its borrowings, let alone mobilization of additional financing, from scheduled banks in the perceived rising interest rate scenario. Within T-bills, this trend was particularly visible in case of 6- and 12-month tenor papers, as scheduled banks had a clear preference for the 3-month paper. Specifically, around 92 percent of offers (and acceptances) were concentrated in 3 month T-bills during FY18 (Figure 3.7a). Even the policy rate hikes in January (25 bps) and May 2018 (50 bps) did not prompt any significant change in this pattern, with up to 100 percent of the offers being placed for 3-month T-bills in multiple auctions (Figure 3.7b).

As for PIBs, participation by scheduled banks remained thin on the whole, underscored by lower offered amounts compared to a year earlier (Table 3.5); eight successive auctions were duly scrapped between Aug-Mar FY18. In effect, the government kept on defying market expectations about the trajectory of inflation and interest rates throughout this period, which not only distorted the money/domestic debt market, but also made the overall monetary management challenging. The following consequences are particularly notable: (i) the absence of supply of long-term PIBs led to a suppression of their yields in the secondary market – this made the yield curve less-representative of the market expectations; (ii) the maturity profile of domestic debt was shortened which led to an increase in refinancing risk; and (iii) the government had to fill the financing gap by borrowing increasingly from the central bank.

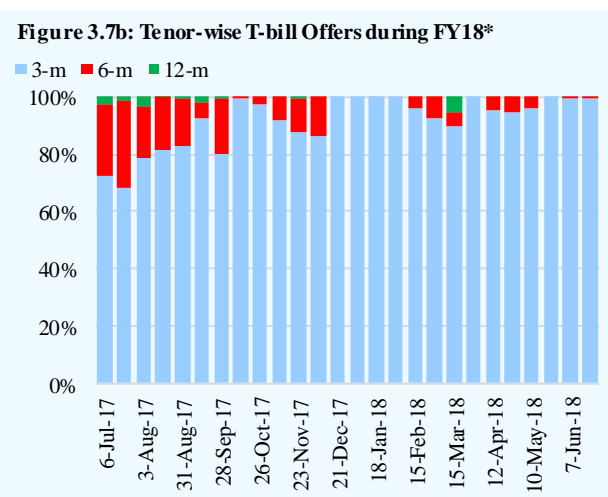
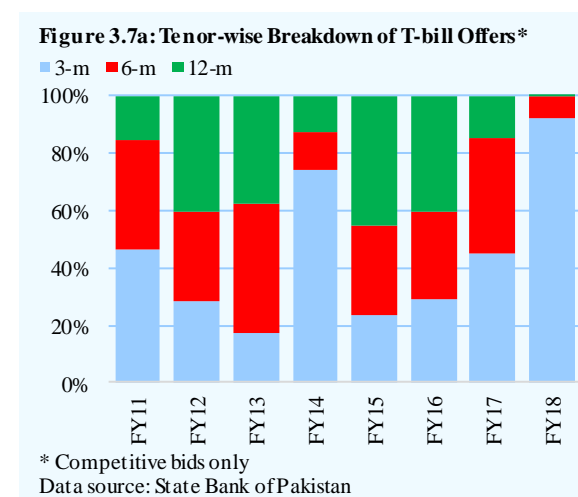
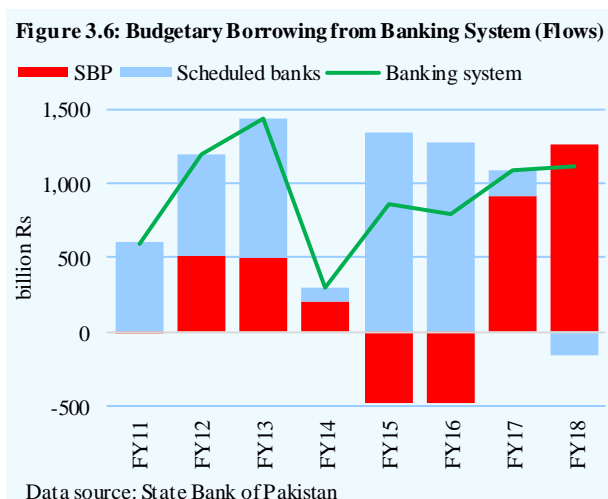
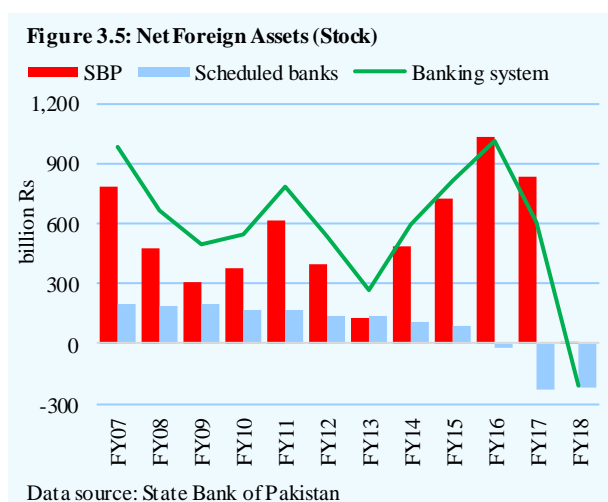


Table 3.5: Government Papers' Auction Profile (Face value)
billion Rupees

	Target	Maturity*	Total**		Net of maturity			Offered/ Target	Accepted/ Offered
			Offered	Accepted	Target	Offered	Accepted		
Market treasury bills									
FY17	7,200.0	6,430.7	11,350.9	7,733.5	769.3	4,920.2	1,302.9	1.58	0.68
FY18	16,925.0	16,388.0	21,105.2	17,550.6	537.0	4,717.2	1,162.6	1.25	0.83
PIBs - fixed rate									
FY17	800.0	1,427.3	1,757.9	894.0	-627.3	330.6	-533.3	2.20	0.51
FY18	900.0	1,123.4	347.5	101.7	-223.4	-775.9	-1,021.7	0.39	0.29
PIBs - floating rate***									
FY18	100.0	-	296.1	43.1	100.0	296.1	43.1	2.96	0.15

* For PIBs, the maturity column excludes PIB coupon payments.

** Only MTB Offered amount excludes non-competitive bids. For floating rate PIBs, "accepted" column includes non-competitive bids and short selling.

*** Floating rate PIBs were introduced in Q4-FY18, vide DMMD Circular No. 09 of 2018, dated May 7, 2018. Two auctions were duly conducted in May and June 2018 respectively.

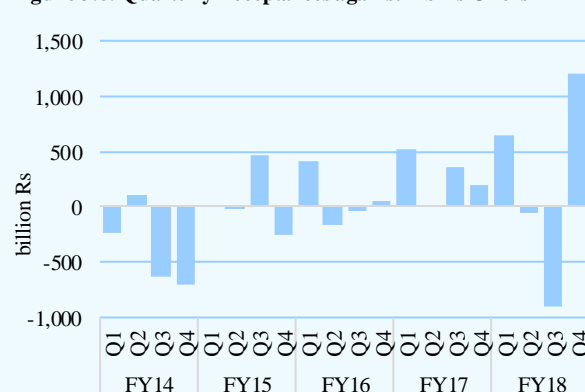
Data source: State Bank of Pakistan

However, the PIB auctions during Q4-FY18 were more eventful, as the government managed to raise Rs 46.1 billion from fixed-rate bonds. Furthermore, Q4-FY18 also marked the launch of 10-year floating rate PIBs, which attracted a considerable degree of interest from market participants. Specifically, in the two floating rate auctions of May and June 2018, offers worth Rs 296.1 billion were received against the combined target of Rs 100 billion. By comparison, the acceptances were low, with the government cumulatively raising Rs 43.1 billion from these securities.

Liquidity Management

The average deviation of weighted average overnight rates from the policy rate fell to 4 bps in FY18, from 6 bps a year earlier. The volume of commercial banks' borrowing from SBP's reverse repo facility was also lower as compared to FY17, while the number of occasions on which banks resorted to the SBP window was similar to last year.³ These developments collectively indicated an improvement in liquidity conditions in the interbank and a smoother transmission of monetary policy to the overnight rates.

The average deviation of overnight rates from the policy rate was quite contained throughout the year. As for its direction, the deviation remained positive in 3 out of 4 quarters; it was only the third quarter, when the deviation was a rare negative (3 bps). During this quarter, banks did not roll over a sizable volume of maturing government securities in the rising interest rate scenario (**Figure 3.8**). However, the level of deviation was contained as SBP temporarily unwound its outstanding stock of OMO injections and also conducted calibrated mop-ups.

Figure 3.8: Quarterly Acceptances against T-bills Offers*

* Net of maturity

Data source: State Bank of Pakistan

This dynamic was short-lived though: in the next quarter, T-bill acceptances touched a record high (in both gross and net-of-maturity terms). Specifically, the T-bill auction of 07-Jun-2018 witnessed net-of-maturity acceptance to the tune of nearly Rs 1.2 trillion. Further liquidity pressure in the interbank

³ Commercial banks borrowed Rs 838.9 billion via SBP's reverse repo facility in FY18, compared to Rs 935.7 billion a year earlier. The banks availed SBP's reverse repo facility on 37 occasions during FY18, compared to 35 visits during FY17.

emanated from FX interventions, which were particularly pronounced in Q4-FY18. These developments prompted an immediate response from the central bank to keep liquidity pressures at bay (**Figure 3.9**). As a result, the outstanding stock of OMO injections was ultimately hovering around the Rs 1.5 trillion-mark by end-June 2018.

In line with monetary tightening initiated in January 2018, the weighted average lending rates rose during H2-FY18. However, compared to the cumulative 75 bps hike in the policy rate, the rise in retail rates was quite modest (up only 39 bps). This may have come about because banks had ample liquidity at their disposal and were keen to lend to the private sector, given that investment in medium- to long-term government paper was not as lucrative under the circumstances.

Borrowings by Public Entities

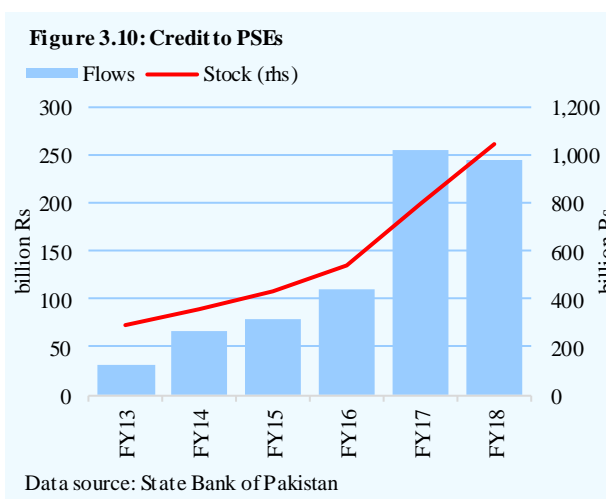
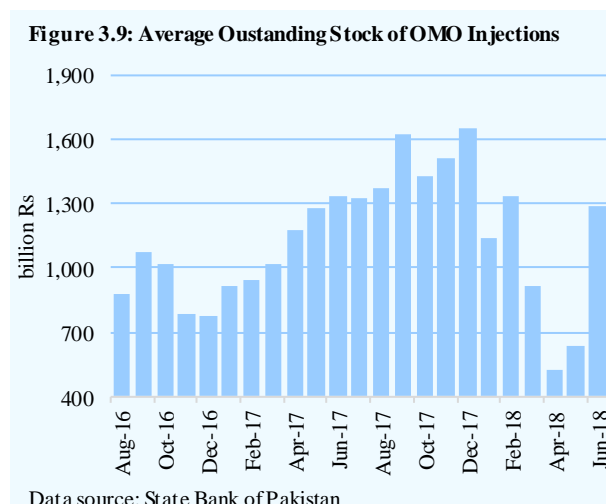
The overall financing under commodity operations grew by Rs 133.2 billion during FY18 compared to only Rs 49.9 billion last year. As far as composition of credit expansion is concerned, majority of the financing went to wheat procurement.

The first three quarters typically represent a season of net retirements, as the period is associated with the consumption cycle of wheat. This year, Rs 58.4 billion worth of net retirements were made during Jul-Mar FY18 as compared to Rs 137.9 billion a year earlier. In the fourth quarter, the overall credit offtake for commodity financing remained slightly higher vis-à-vis Q4-FY17 (**Chapter 2**).

The overall credit offtake by public sector enterprises remained slightly lower during FY18 as compared to a year earlier. During FY18, WAPDA and Power Holding Private Limited (PHPL) turned out to be the largest borrowers and accounted for almost 85 percent of total loans offtake by the segment.⁴ In fact, the bulk (48 percent) of the loans were taken by PHPL to settle circular debt-related payments. It is worth noting that the outstanding loans of PSEs have been growing consistently over the past couple of years, and soared to Rs 1 trillion by end-June 2018 (**Figure 3.10**). Since commercial banks' exposure has already risen significantly to the power sector, energy-related PSEs will have less room to get liquidity support from the banking system going forward.

3.3 Credit to Private Sector

Credit to private sector rose by Rs 775.5 billion in FY18 and surpassed the flow of Rs 747.9 billion for FY17. The overall dynamics of credit market in FY18 were not much different than the previous year. While the vibrancy in economic activities and increased industrial capacities kept the credit



⁴ For further details, refer to SBP's third quarterly report on 'State of Pakistan Economy' for the year 2017-18.

demand strong in general, especially as low financing costs continued to encourage businesses to leverage, supply side also remained favorable as banks continued to look for high yielding assets. What differentiates FY18 from FY17 is the relatively muted impact of input prices. Specifically, higher global commodity prices had a significant role in pushing the credit growth up in FY17, as these inflated the working capital requirements of businesses. However in FY18, the increase in input prices was quite modest and therefore credit growth in major manufacturing sectors was more activity-driven (**Table 3.6**).

Table 3.6: Trend in Major Input Prices

percent change	FY17	FY18
Cotton (domestic*)	23.4	6.8
Cotton (international)	17.2	5.9
Sugar crops (domestic*)	-3.9	-4.7
Coal (international)	50.0	21.7
Palm oil (international)	2.2	-1.5
Iron ore (China)	35.7	-3.1

*Wholesale Price Index

Data source: Pakistan Bureau of Statistics and Bloomberg

As for the supply side, while liquidity conditions remained supportive in general, banks were willing to expand their exposure to the private sector due to subdued credit risk. In particular, banks' non-performing loans as percent of their total loans continued to fall in FY18, as low financial cost and healthy earnings further improved the corporate sector's debt repayment capacity (**Table 3.7**).

Table 3.7: Segment-wise NPLs as Percent of Loans (end-period)

percent	FY15	FY16	FY17	FY18
Corporate	13.4	11.8	9.6	7.9
SMEs	31.6	26.5	20.5	17.8
Agriculture	16.6	15.5	17.9	19.4
Consumer	10.6	9.8	7.3	5.6
Gross NPLs/loans	12.4	11.1	9.3	7.9
Net NPLs/loans	1.6	1.6	1.2	1.1

Data source: State Bank of Pakistan

This improvement in asset quality was broad-based and was shared by nearly all the major sectors. Therefore, banks were more comfortable placing funds in high-yielding private loans than to lock their liquidity in government securities, especially with tenors higher than 3 months.

Increased capacities and activity drove up working capital loans

Private businesses took Rs 471.7 billion working capital loans in FY18, compared to Rs 367.4 billion last year. As usual, manufacturing concerns remained the main beneficiaries. Sectors which drove the higher credit expansion included, textiles, cement, electrical machinery, iron & steel, edible oil & ghee, basic chemicals and rice processors. All these sectors showed buoyancy throughout the year: cement dispatches rose by double digit (13.8 percent) to a historical high of 45.9 million MT in FY18; exports of textiles and rice also rose sharply in FY18.

Power sector was the second biggest user of working capital loans, as it increased its borrowings by Rs 62.1 billion compared to Rs 26.5 billion in FY17. In addition to increased capacity in the sector, three factors mainly explain higher borrowings (i) power generation rose by 12.8 percent in FY18, compared to 5.9 percent last year which increased the fuel needs of the industry; (ii) rise in fuel prices (oil & coal); and (iii) liquidity constraints of few private power producers due to accumulation of circular debt.

Meanwhile, raw material demand of steel manufacturers stimulated borrowing requirements in related businesses.⁵ The case in point was ship breaking industry, which borrowed around Rs 27 billion in FY18, compared to only Rs 0.1 billion last year (**Table 3.8**). Most of this borrowing was used for import financing needs, as the country imported 126 ships for breaking in FY18, compared to 111 ships in FY17 –when the sector retired some of its loans. But in FY18, Pakistan also resumed imports of tanker ships for breaking, as the same category was previously banned due to an explosion and

⁵ Production of steel recorded a double-digit growth of 21.8 percent in FY18, compared to 20.5 percent in the same period last year.

high number of labor casualties during the first half of FY17.

Table 3.8: Loans to Private Sector Businesses

flow in billion rupees

	Total Loans		Working Capital*		Fixed Investment	
	FY17	FY18	FY17	FY18	FY17	FY18
Private Sector Businesses	620.4	699.6	367.4	471.7	253.0	227.9
Manufacturing	384.3	421	251.7	307.2	132.7	113.8
Textiles	82.8	130.1	46.0	90.3	36.7	39.8
Cement	21.4	47.1	10.9	22.4	10.6	24.7
Sugar	82.1	36.5	67.5	25.3	14.6	11.2
Electrical machinery & apparatus	7.7	33.4	4.9	30.4	2.9	3.0
Iron & steel	19.0	30.1	15.9	31.1	3.1	-1.0
Bakery etc.	7.0	28.6	1.5	24.2	5.5	4.4
Edible oil and ghee	7.9	27.5	6.7	21.5	1.2	6.1
Basic chemicals	3.2	19.6	0.8	17.9	2.4	1.7
Rice processing	-0.9	13.4	-1.4	12.6	0.5	0.8
Domestic appliances	4.2	10.1	3.6	5.8	0.6	4.3
Paper	2.1	6.5	5.5	7.1	-3.4	-0.6
Fertilizer	9.8	-43.5	-1.0	-34.0	10.8	-9.4
Electricity, gas and water supply	55.6	87.5	26.0	60.4	29.6	27.1
Prod, trans and dist of electricity	55.0	85.7	26.5	62.1	28.5	23.5
Prod, trans and dist of gas	2.6	1.7	1.4	-1.8	1.1	3.5
Commerce and trade	42.7	68.7	39.4	51.3	3.4	17.4
Real estate & related	18.3	34.9	7.3	18.4	11.0	16.5
Construction	41	27.2	16.7	6.0	24.3	21.2
Ship breaking	0.1	26.8	-0.3	27.4	0.4	-0.7
Transport, storage & commerce	29.2	23.2	1.0	2.8	28.1	20.4
Agriculture	12.4	8.0	11.0	-0.2	1.4	8.2
Mining and quarrying	13.7	2.5	-0.1	-1.7	13.8	4.2

*includes trade financing

Data source: State Bank of Pakistan

Low borrowing appetite in sugar & fertilizer persisted during FY18

Sugar was the major manufacturing sector which borrowed less for working capital during FY18 compared to last year. Sugar production fell by 6.8 percent in FY18, compared to rise of 37.8 percent last year. Meanwhile, fertilizer retired Rs 34.0 billion during FY18, compared to only Rs 1.0 billion net retirement in FY17. Both demand and supply dynamics appeared to be less favorable for the sector during the year. On the one hand, fertilizer offtake fell by 5.0 percent in FY18 compared to rise of 36.4 percent last year, and on the other, the closure of three small plants due to unavailability of cheaper feedstock coupled with temporary disruption of LNG gas to few big firms, affected production. Resultantly, the sector opted to retire its short term borrowings in FY18.

Fixed investment loans continued to increase – albeit at a slower pace

Businesses continued to take long-term positions and borrowed considerably from banks to finance their capital expenditures. Fixed investment loans increased by another Rs 227.9 billion in FY18, as textiles, cement, sugar and power continued to increase/upgrade their capacities. It is important to note that despite a reversal in SBP policy rate, end-user mark-ups for LTFF and EFS were unchanged during the year.⁶ Textiles continued to borrow for its BMR activities at attractive rates on SBP long term refinance schemes such as LTFF, which were offered at 5 percent rate to the sector. In terms of flow, LTFF constituted more than 70 percent of textiles long term borrowing during FY18.

⁶ End-user rate for LTFF was 6 percent (5 percent for textile) while for Export Finance Scheme (EFS) it was 3 percent during FY18.

Cement was the second major manufacturing concern which increasingly borrowed to finance its ongoing capacity expansions in FY18. The sector has planned to increase capacity expansion by a total of 23.4 million MT by FY21. Though regulatory and environmental controls temporarily slowed down the progress on projects for some firms⁷, others were able to add around 3 million MT of capacity in FY18.⁸ The sector borrowed Rs 24.7 billion during FY18, compared to Rs 10.6 billion last year. Likewise, sugar manufacturers have secured long term borrowing for various purposes – BMR, capex on capacity expansion for ethanol, energy plants for self-use, and investment on better technology to reduce cost of production.

Apart from the manufacturing sector, borrowing momentum in the power sector accelerated in the latter part of FY18, when the government imposed ban on new projects in February 2018 and the pace of work on ongoing projects picked up. Resultantly, various entities borrowed to speed up progress on projects based on gas and coal, as well as on renewable sources (wind and solar).

Consumer financing kept on its growing trajectory

Low interest rates continued to positively influence consumer loans, which rose by Rs 86.5 billion in FY18, compared to Rs 70.5 billion last year (**Table 3.9**). This was the sixth consecutive year in a row when consumer financing kept its growing momentum – the current year’s flow was at 12-year high level.

Around a quarter of this increase came from housing finance, as medium-sized conventional banks aggressively took up this business. Like FY17, most of the loans were taken for outright purchases, followed by construction and a small fraction for renovation purposes in FY18. So far, the stock of housing finance has reached Rs 88.2 billion, which is only 0.26 percent of GDP. This ratio is quite low in comparison not just to advanced economies, but also to peer countries

like Bangladesh and India. Importantly, the housing deficit in Pakistan is estimated at 10 million units, which is growing every year not just because of the population bulge, but also due to depleting quality of existing housing stock. SBP has recently prepared and circulated a draft of policy for the promotion of housing finance amongst various stakeholders (**Box 3.2**). This policy aims to achieve the following benchmarks by end-June 2021: (i) increase the outstanding stock of housing finance from existing Rs 88.2 billion to Rs 250 billion; and (ii) increase number of borrowers from existing 62,062 to 200,000.

Table 3.9: Consumer Financing
flow in billion rupees

	FY17	FY18
Total	70.5	86.5
Auto	38.3	43.3
Housing	12.5	22.3
Personal loans	14.2	12.5
Credit cards	4.5	7.4
Consumer durables	0.9	1.1

Data source: State Bank of Pakistan

Box 3.2: Major Initiatives in the Draft Policy for Low-Cost Housing Finance

State Bank of Pakistan has recently formulated a draft of “Policy for Promotion of Low Cost Finance of Housing” and disseminated the same on its website on July 18, 2018 for soliciting public comments. The major highlights of the policy are as follows.

- Definition of low cost housing financing in Pakistan to be adopted as loan amount of up-to Rs 2 million with the property valuing up to Rs 2.5 million. The maximum monthly income of a low cost housing finance borrower should be up to Rs 60,000.

⁷ For details, see **Chapter 3** (Monetary Policy and Inflation) in SBP’s Second Quarterly Report on ‘The State of Pakistan’s Economy’ for the year 2017-18.

⁸ For instance, Attock Cement’s 1.2 million MT per annum plant was commissioned in January 2018. Similarly, Lucky Cement has completed its 1.3 million MT per annum expansion in December 2017. Bestway’s Farooqia Line II having capacity of 6,000 tons per day commenced production in May 2018. Pioneer Cement expanded its cement grinding capacity to 345 tons/hour. Gharibwal Cement’s 250 ton/hour production facility started operation in June 2018.

- SBP to introduce a subsidized financing facility for low cost housing by providing liquidity to the financial institutions at subsidized rate. SBP will provide refinance up to Rs 1 million or 50 percent of loan amount at a rate of 1 percent to banks/DFIs and the end borrower rate will be 5 percent. The remaining 50 percent of the loan / financing amount shall be provided by the banks/DFIs from their own sources at fixed rate of up to 12 percent or variable rate of 1 year KIBOR plus risk premium up to 4 percent. The facility will be provided for both individual house borrowers and housing builders/developers. Similar financing facility will also be provided through the Islamic Financial Institutions.
- Banks to be assigned housing finance targets with instructions to make these targets part of the overall business plan and departmental targets.
- The general reserve requirements against low cost housing finance portfolio of banks/DFIs to be waived.
- Bank/DFI's exposure in low cost housing to be exempted from the exposure limit of 10 percent for real estate sector.
- Microfinance banks to be allowed to increase housing finance amount up to Rs 1 million from Rs 500,000.
- A standardized loan application form is to be issued through PBA to streamline loan processing by banks/DFIs.

Reproduced from: "Draft Policy for Promotion of Low Cost Housing Finance", 2018., pp. i-ii. [sbp.org.pk/smeffd]

However, auto financing was still the dominant segment and accounted for half of the share of increase in consumer portfolio during FY18. This year, car sales hit a record of 216,786 units – reflecting a strong demand for passenger cars, and bank financing played an important role in this.⁹ Factors driving car loans include, low interest rates, introduction of new models by local assemblers in recent years, increasing popularity of small imported cars, growing urbanization and the lack of a reasonable public transportation in most parts of the country.¹⁰ Besides, anecdotal evidence suggests that some consumers are also using their cars for ride-hailing services, as entry and exit to these services are very quick and quite easy.

Within the banking industry, Islamic banking institutions (IBIs) were able to increase their share in auto financing to 46.2 percent by end FY18 from 43.1 percent a year earlier. However, their share remained almost the same in case of housing finance at around 60 percent by end FY18. Besides auto and housing finance, IBIs can design and offer innovative Shariah-compliant products for other consumer segments such as credit cards, personal loans and durables financing – these segments are almost entirely being served by conventional banks at present, with a market share of around 98 percent at end FY18.

3.4 Inflation

Headline CPI inflation stayed below the annual target for the fourth consecutive fiscal year during FY18, and clocked in at its second lowest level since FY03. While non-food inflation increased on the back of higher energy prices and strong domestic demand, a sharp fall in food prices kept the overall inflation low. In terms of dispersion, the majority of sub-indices (59 out of 89 – with about 70 percent share in CPI), showed higher inflation during FY18 compared to FY17.

Food inflation was mainly contained by cigarettes and pulses

Food inflation during FY18 shrank to more than half of its growth from preceding year, due to a sharp fall in cigarette prices (**Table 3.10**). The government changed the FED structure of domestically produced cigarettes by introducing a category with low duty on low price cigarettes, all of which are part of CPI index.¹¹ Excluding this item—that is, had the government not changed the FED structure — the growth in overall CPI index would have been slightly higher during FY18 (4.5 percent), compared to FY17 (4.0 percent).

The second dominant item in dragging the food inflation down was pulses. Due to a decline in local

⁹ Source: Pakistan Automotive Manufacturers Association

¹⁰ Pakistan's economy is typically a market for small cars, as cars up to 1000 cc account for around 52 percent of total sales, (on average during FY16-18).

¹¹ For details, see SBP's First Quarterly Report for FY18 on The State of Pakistan's Economy.

production of pulses, its price had risen during FY16 and part of FY17.¹² However, it has moderated since then due to a record import of the commodity to fill the demand and supply gap. In case of sugar, surplus stocks in the country attributed to record production of sugarcane for the last two consecutive years, as well as a glut-like situation in the global market, continued to depress its domestic prices.

Among other food items, supply factors remained dominant in determination of prices. For instance, chicken prices rose during FY18 due to the imposition of regulatory duty on maize—a key ingredient of poultry feed. Similarly, price of fresh milk drove up as fuel prices increased in the country. Moreover, onion prices too remained elevated through most of the year, due to supply disruptions between August 2017 and March 2018; however, its prices stabilized during Q4-FY18.

Table 3.10: Average CPI Inflation and Contribution

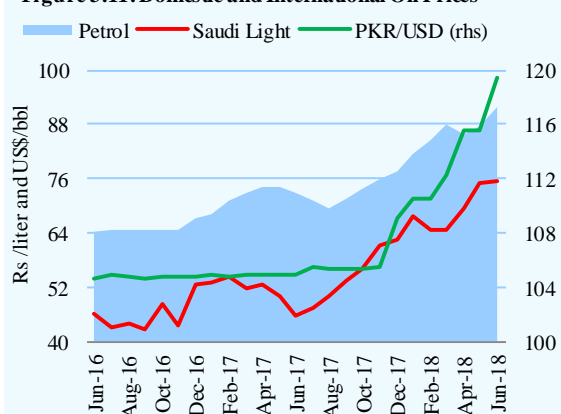
	Wt.	Avg. Inflation		Contribution	
		FY17	FY18	FY17	FY18
General	100	4.2	3.9	4.2	3.9
A. Food	37.5	3.8	1.8	1.6	0.7
Cigarette	1.4	12.1	-17.3	0.3	-0.4
Pulses	1.1	5.6	-16.8	0.1	-0.3
Sugar	1.0	4.3	-16.2	0.0	-0.2
Fresh vegetable	1.7	16.5	-3.9	0.3	-0.1
Meat/chicken	3.8	1.9	8.5	0.1	0.4
Milk fresh	6.7	3.9	3.8	0.3	0.3
Onion	0.5	-33.2	67.6	-0.2	0.3
B. Non-food	62.5	4.4	5.4	2.6	3.2
House rent	21.8	6.5	6.5	1.2	1.2
Education	3.9	10.6	12.4	0.4	0.5
Clothing	7.6	4.1	4.8	0.3	0.4
Health	2.2	10.5	8.1	0.2	0.2
Motor fuel	3.0	-2.1	11.2	0.0	0.2
Construction	0.9	3.7	6.0	0.0	0.1
Core (NFNE)	53.5	5.2	5.8	2.6	3.0

Data source: Pakistan Bureau of Statistics and SBP calculations

Motor fuel prices influenced by international oil prices and exchange rate

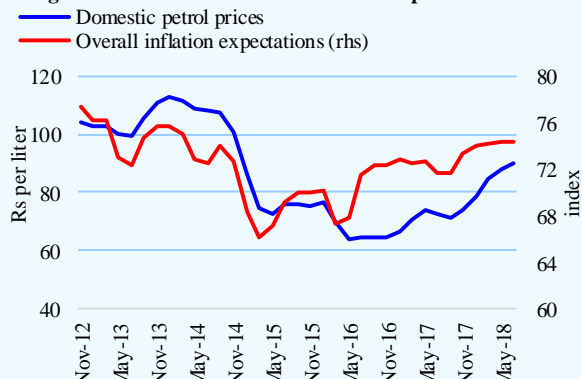
3.1 Motor fuel index that had contributed an average negative 0.3 percentage points during FY15-FY17 to changes in CPI, posted double-digit inflation in FY18. During FY18, prices of petroleum, diesel and LPG showed a double digit growth as international prices soared along with phases of exchange rate depreciations (**Figure 3.11**). As a result, the government passed on the impact by increasing the petrol prices by a cumulative Rs 24.5 per liter – on 9 separate occasions – during FY18. It must be recalled here that households’ perception of overall future prices are closely associated with retail petrol prices;¹³ this phenomenon is also evident in rising inflation expectation as depicted by IBA-SBP Consumer Confidence Surveys (**Figure 3.12**).

Figure 3.11: Domestic and International Oil Prices



Data source: Pakistan Bureau of Statistics and Bloomberg

Figure 3.12: Petrol Prices and Inflation Expectations



Data source: IBA-SBP Consumer Confidence Survey and Pakistan Bureau of Statistics

¹² The domestic production has been affected because the yield has been very volatile and low compared to other crops. Farmers have therefore moved on to more profitable crops, such as rice, wheat, maize, cotton and sugarcane (Source: Economic Survey of Pakistan, 2017-18).

¹³ Abbas, H., Beg, S., and Choudhary, M.A. (2015). Inflation Expectations in a Developing Country Setting. Unpublished Manuscript.

Increase in core inflation

The acceleration in non-food non-energy (NFNE) measure of core inflation continued for the second consecutive year in FY18. The declining YoY trend of NFNE had bottomed out in October 2015, after which it remained on an upward trajectory. As compared to FY16, core inflation stabilized at an elevated level during FY17. However, after a slight tapering during the first 8 months of FY18, the index showed a sudden rise during Q4-FY18 on YoY basis (Figure 3.13).

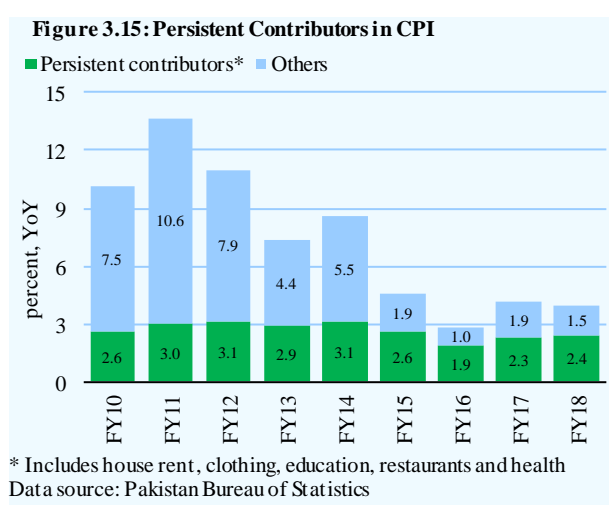
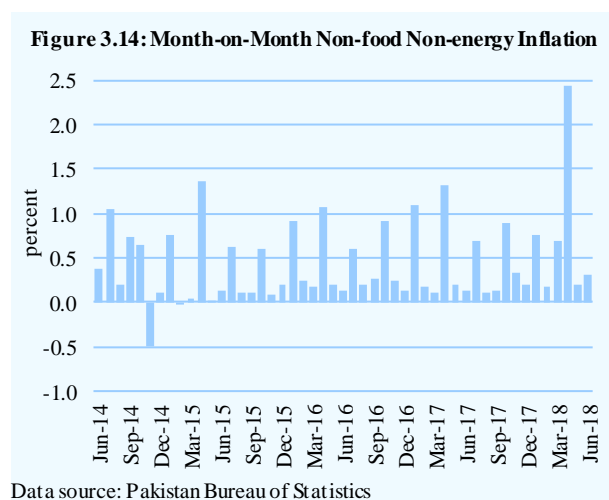
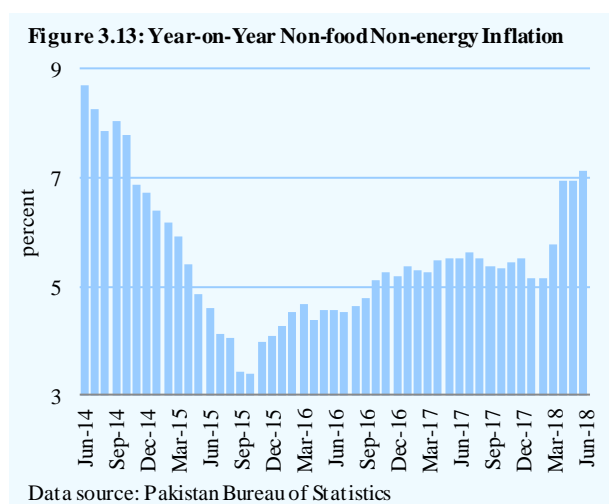
The rise was quite exceptional during April 2018, when the month on month (MoM) growth in NFNE touched 2.4 percent. This increase was far higher compared to other months of the fiscal year, during which the MoM inflation averaged only 0.4 percent (Figure 3.14).

Nearly 75 percent of the commodity groups within NFNE showed MoM inflation of over 1 percent in April 2018, whereas nearly half of the items showed MoM inflation of above 2 percent. The high (YoY) growth during April 2018 was the result of a steep increase in the price indices of clothing, footwear, house rent, furniture, medical tests, transport services, postal services, textbooks, stationery and cosmetic goods.

House rent, health and education contributed persistently

House rent, education, clothing & footwear, health and restaurants are the five indices within CPI, which persisted with their traditional contribution (Figure 3.15). An interesting observation is that the share is broadly unaffected by the overall movement in the index; that is, with headline inflation at 13.7 percent during FY11 and 3.9 percent during FY18, their contribution did not change.

Within education index, prices of 9 out of 16 underlying items had double digit inflation, including fees of both government and private institutions. Similarly, inflation in health index was due to revision in drug prices and doctors' fee, both of which traditionally maintain a consistent uptrend in their price level.



4 Fiscal Policy

4.1 Overview

A sharp deceleration in revenue growth compared to expenditure, led to an increase in the fiscal deficit to the highest level during the past five years (**Figure 4.1**). Other indicators of fiscal performance also saw a deterioration. For instance, increase in primary deficit shows higher growth in non-interest expenditures compared to revenue growth. Similarly, increase in revenue deficit points to higher growth in current expenditures vis-à-vis revenue.

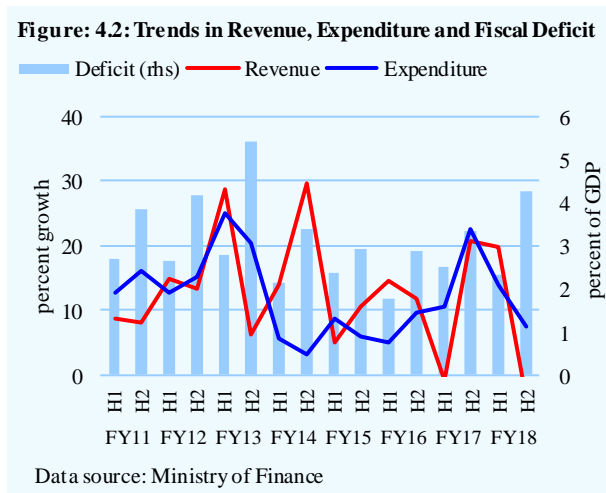
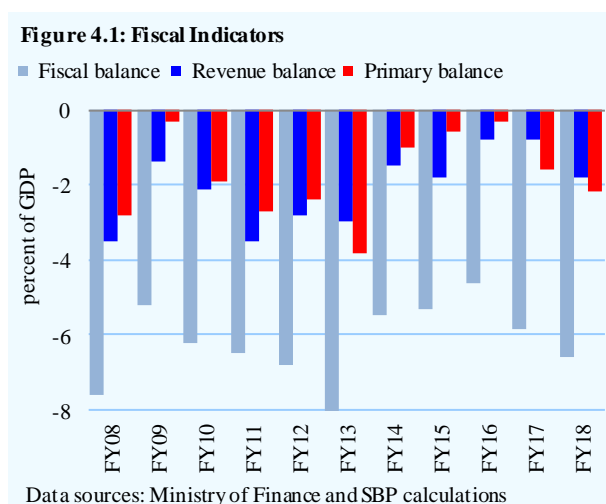
Half yearly break-up shows that fiscal deficit in the second half increased to almost twice that of first half of the FY18. Though the pace of increase in both the government expenditure and revenue slowed down, higher deficit in H2-FY18 was mainly due to slower revenue growth (**Figure 4.2**).

The drag in revenue collection came from a contraction in non-tax revenues. All the components, except for SBP profit and royalties/windfall levy from oil and gas production, recorded lower revenue in FY18. In particular, defense related revenue in the absence of Coalition Support Fund (CSF), mark-up/dividend income, and PTA/postal service profit recorded declines.

On the other hand, tax collection witnessed a broad-based acceleration in growth. The FBR tax collection, in particular, recorded a double-digit growth during FY18. This was despite a marked slowdown in the FBR tax collection within the year from 22.0 percent in the first quarter to 10.6 percent in the fourth quarter of FY18. This deceleration was primarily due to a sluggish growth in indirect taxes in the fourth quarter on account of slowdown in manufacturing activity, especially in the cement, cigarettes and beverages sectors.

Despite reduction in the corporate tax rate (other than banks) and low bank profitability, the direct tax collection grew at a higher pace and was supported by one-off receipt under the tax amnesty scheme. Moreover, provincial tax collection led by General Sales Tax on Services (GSTS), continued to maintain the momentum achieved during the last few years.

On the expenditure side, the deceleration was primarily due to a decline in development expenditure. This is opposite to the trends observed during the previous few years where fiscal policy focused on supporting economic growth through a sustained increase in development spending. The decline in



development expenditure was mainly due to slower PSDP releases towards the end of FY18, especially during the interim government period. The growth in current expenditures, as was expected in an election year, accelerated largely due to a sharp increase in provincial current spending.¹

The resulting higher financing requirements during FY18 were met through both domestic and external sources. In case of external, government heavily relied on commercial borrowing, bonds/Sukuk and bilateral loans. On the domestic front, borrowing increased from both the bank and non-bank sources. Within the bank borrowing, government primarily depended on SBP borrowing; this was not only to meet its additional financing requirements, but also to retire the maturing long-term debt owed to banks during the year.

Table 4.1: Summary of Fiscal Operations

billion rupees

	Budget FY18	Actual		% of GDP	
		FY17	FY18	FY17	FY18
A. Total revenue	6,167.2	4,936.7	5,228.0	15.4	15.2
Tax revenue	4,912.5	3,969.2	4,467.2	12.4	13.0
Non-tax revenue	1,254.7	967.5	760.9	3.0	2.2
B. Total expenditure	7,646.8	6,800.5	7,488.4	21.3	21.8
Current	5,393.9	5,197.9	5,854.3	16.3	17.0
Interest payments	1,363.0	1,348.4	1,499.9	4.2	4.4
Defence	920.2	888.1	1,030.4	2.8	3.0
Development	2,265.2	1,693.5	1,584.1	5.3	4.6
Net lending	-12.3	-12.8	37.6	0.0	0.1
Statistical discrepancy	0	-78.0	12.4	-0.2	0.0
Fiscal balance (A-B)	-1,479.6	-1,863.8	-2,260.4	-5.8	-6.6
Revenue balance	773.3	-261.1	-626.3	-0.8	-1.8
Primary balance	-116.6	-515.4	-760.5	-1.6	-2.2
<i>Financing</i>	1,479.6	1,863.8	2,260.4	5.8	6.6
External sources	511.4	541.4	785.2	1.7	2.3
Domestic sources	968.1	1,322.4	1,475.2	4.1	4.3
Banks	390.1	1,045.8	1,120.5	3.3	3.3
Non-bank	528.0	276.6	352.7	0.9	1.0
Privatization	50.0	0.0	0.0	0.0	0.0
<i>% Growth</i>					
Total revenue		11.0	5.9		
Tax revenue		8.4	12.5		
Non-tax revenue		23.0	-21.4		
Total expenditure		17.3	10.1		
Current		10.7	12.6		
Development		30.1	-6.5		

Data sources: Ministry of Finance and SBP calculations

4.2 Revenue

The total revenue grew by 5.9 percent during FY18, almost half of the 11.0 percent growth realized in the previous year. This deceleration was mainly caused by a drag in non-tax revenues. The growth in

¹ The growth in current expenditure was expected to increase like in previous election years. For instance, the growth in current expenditure accelerated to 35.1 percent in FY08 from 22.7 percent in FY07. Similarly, current expenditures grew by 17.2 percent in FY13 compared to 7.6 percent in FY12.

tax revenue, on the other hand, remained fairly broad-based as tax collection by both FBR and provinces accelerated during FY18.

FBR taxes

FBR tax collection was recorded at Rs 3,842 billion during FY18, showing a 14.3 percent increase during the year against 8.0 percent growth realized in the previous year (**Table 4.2**). Though higher than last year, the growth remained below the FY18 target (19.4 percent) despite a contribution of around Rs 89.6 billion collected under tax amnesty scheme up to 30th June 2018.²

Nevertheless, higher tax collection compared to last year provided necessary space to gear up tax refunds to ease cash constraints of the exporting industries. The tax authority cleared Rs 154.7 billion during FY18, compared to Rs 87.0 billion in the previous year.

Direct Taxes

The direct taxes grew by 14.4 percent during FY18 compared to a 12.7 percent increase observed during the last year (**Table 4.3**). The major contribution came from withholding taxes notwithstanding its slower growth. Within WHT, collection from rising trade volumes, contracts, salaries and dividend income increased while revenue from mobile recharge and subscription declined.³ The collection on demand (COD) also increased, though its share in total direct taxes is only 6.7 percent. This is an outcome of improvement in the audit process from random selection to risk based audit.

However, voluntary payments (VP), having a share of 25 percent in total direct taxes, increased by only 1.9 percent during FY18 compared to a growth of 8.7 percent in the previous year (**Table 4.3**). This was largely

Table 4.2: FBR Tax Collection

	Budget FY18	Collections		% Growth	
		FY17	FY18	FY17	FY18
Direct taxes	1,594.9	1,343.2	1,536.6	12.7	14.4
Indirect taxes	2,418.1	2,017.8	2,305.5	5.1	14.3
Customs duty	581.4	496.0	608.3	22.1	22.6
Sales tax	1,605.2	1,323.3	1,491.3	0.0	12.7
FED	231.5	198.6	205.9	4.2	3.7
Total taxes	4,013.0	3,361.0	3,842.1	8.0	14.3
Total taxes (% of GDP)	11.2	10.5	11.2	-	-

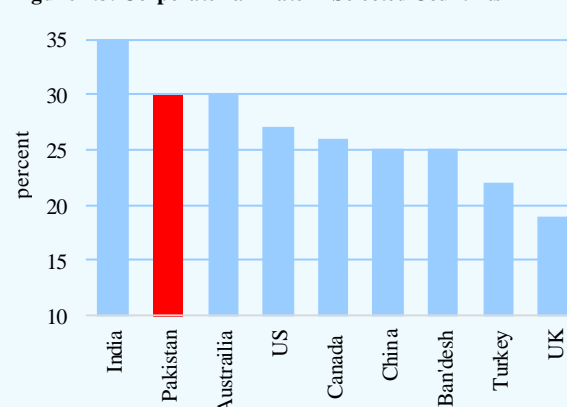
Data sources: Federal Board of Revenue and Ministry of Finance

Table 4.3: Break-up of Direct Taxes

	FY17	FY18	Growth (%)	
			FY 17	FY 18
A. Voluntary payments	370.5	377.4	8.7	1.9
B. Collection on demand	92.8	104.1	5.6	12.2
C. Withholding taxes	940.6	1,004.0	13.1	6.7
<i>of which</i>				
Imports and exports	221.3	247.0	8.1	11.6
Contracts	259.5	283.2	24.3	9.1
Salary	111.2	133.4	28.0	19.9
Interest & securities	42.6	45.6	11.6	7.2
Cash withdrawal	30.8	34.0	7.7	10.3
Dividends	49.5	57.8	17.7	16.9
Electric bills	25.8	33.8	1.2	30.9
Telephone	51.8	47.4	8.6	-8.5

Data source: Federal Board of Revenue and SBP calculations

Figure 4.3: Corporate Tax Rate in Selected Countries



Data source: KPMG International

² The amnesty scheme was introduced for the declaration of assets through two separate ordinances: Foreign Assets (Declaration and Repatriation) Act 2018 and Voluntary Declaration of Domestic Assets Act 2018. The scheme offered minimum tax rate of 2 to 5 percent depending on the nature of assets. The scheme helped add around 75,000 new tax payers into the formal system to raise the number of tax filers to 1.46 million. It is worth mentioning that the scheme was extended up to 31st July 2018.

³ This is due to reduction in WHT rate from 14.0 percent to 12.5 percent on mobile phone subscription and suspension of WHT on mobile phone recharge under Supreme Court orders in June 2018.

due to lower bank profitability and a reduction in corporate tax rate (other than banks) from 31 to 30 percent.⁴

It is important to mention here that the government has gradually scaled down the corporate tax rate from 35 percent to 30 percent over the span of five years. The move was critical in creating a competitive business environment in line with international practices (**Figure 4.3**). Going forward, it is planned to reduce the corporate tax rate further to 25 percent in next 5 years. The move is expected to encourage investment and increased voluntary payments, which will contribute to higher revenue collection along with better prospects for economic growth and employment generation. Nevertheless, encouraging digitization by avoiding human interface i.e. connecting people with revenue authority through the use of technology will be crucial in overcoming leakages (**Box 4.1**).

Box 4.1: Digitization of Tax Collection in Pakistan: A Welcome Initiative

State Bank of Pakistan and Federal Board of Revenue have jointly introduced the online collection of Government taxes and duties through one-link facility.⁵ This would be applicable for the payment of income tax, sales tax, excise, and custom duties. Such a scheme is aimed at improving payment systems especially in the context of revenue collection besides facilitating tax payers and minimizing incidence of leakages.

This move is also expected to contribute positively towards revenue generation by lowering the chances of inefficiencies in the tax collecting machinery. Empirical studies show a strong correlation between electronic tax collection and revenue growth. Therefore, advancements in tax collecting mechanism in terms of digitization is expected to facilitate tax payers and enhance revenue collection.

More importantly, the initiative would be helpful in minimizing the time involved in tax payments through traditional methods. For instance, many small and medium businessmen argue that there is a cost incurred on visiting banks and tax offices for the payment of various taxes hence exacerbating their overall tax compliance costs. Thus, it will reduce cost for the tax payers as well.

Figure 4.1.1: Overall Ranking in Paying Taxes 2018: Selected Economies in Asia Pacific

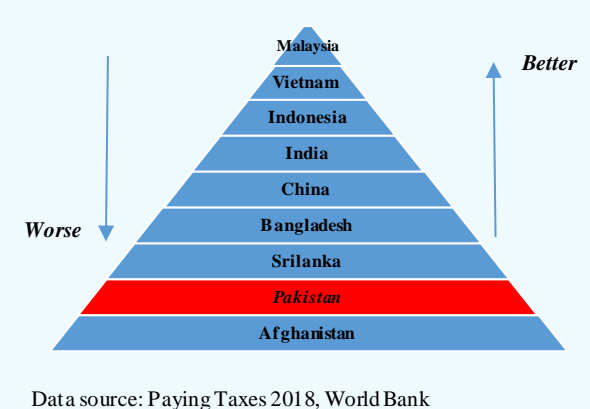
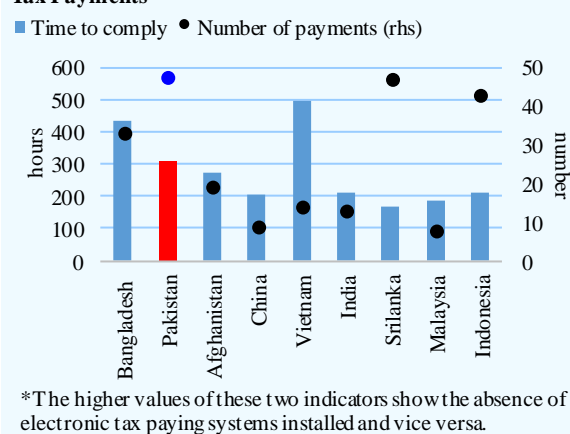


Figure 4.1.2: World Bank Indicators Regarding Electronic Tax Payments*



According to World Bank’s *Paying Taxes* report, the sub-indicators of the overall paying taxes’ measure such as *number of payments*⁶ and *time to comply*⁷ particularly assess the progress regarding online filing and tax payments. The lower the extent of these indicators, the higher the IT enabled procedures installed in the tax system. For instance, Estonian tax payers

⁴ Banking sector profit fell by 18.9 percent to Rs 245.0 billion during FY18 compared to Rs 302 billion in last year.

⁵ See “*Online Collection of Government Taxes and Duties Launched*”. Source: www.sbp.org.pk/press/2018/Pr-Online-Taxes-20-Mar-18.pdf

⁶ According to the *number of payments*’ indicator, the frequency of payments are counted keeping in view the mode of tax payments. A payment is counted as once where majority taxpayers use online tax filing and payment systems and even make frequent payments. Therefore, less number of payments means that the tax payers use the electronic systems for tax payment.

⁷ The indicator measures the time taken to prepare, file, and pay three major types of taxes and contributions.

spend only 81 hours per year in preparing, filing, and paying their taxes such as VAT and labor taxes including mandatory contributions.⁸

As per this report, Pakistan falls lower in the ranking among the Asian pacific countries in the overall tax paying category (**Figure 4.1.1**). In other words, absence of efficient IT based systems in tax collection mechanisms is reflected in higher magnitude of ‘number of payments’ and ‘time to comply’ indicators as in case of Pakistan (**Figure 4.1.2**). Therefore, the initiative holds the potential to improve Pakistan’s ranking in *paying taxes* and reflect better in terms of ease of doing business.

However, some concerns need to be taken care of to ensure the effective implementation of the system. From the tax payers’ side, “computer literacy” can be achieved by making every actor (tax payers and tax officials) capable of using the digitized processes through trainings. Whereas, digitization processes such as electronic payment and filing should be further simplified by the tax collecting authorities.

Furthermore, digital risks emanating from this system also need to be addressed carefully. Cyber security and privacy issues should be prudently tackled for developing taxpayers’ trust and making digitization more progressive.

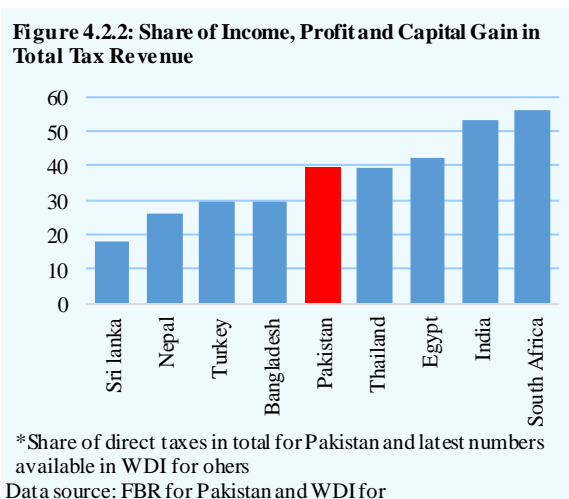
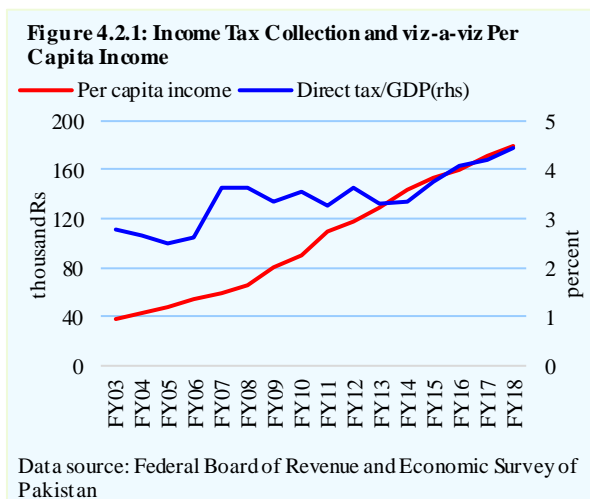
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- Bett, B.K., Yudah, O.A. (2017). Contribution of i-Tax System as a Strategy for Revenue Collection at Kenya Revenue Authority, Rift Valley Region, Kenya. *International Journal of Scientific and Research Publication*, 7(9), 389-396
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- Ndayisenga, E., Shukla, J. (2016). Effect of Electronic Tax Management System of Tax Collection in Rwanda: A Case Study of Rwanda Revenue Authority. *International Journal of Business and Management*, 4(5), 38-49

However, despite higher direct tax collection during FY18, its share in total taxes as well as in terms of GDP remains lower relative to rising income level and the actual potential.⁹ Besides bringing in the principle of equity in taxation, exploiting the direct tax potential would also contribute significantly to the overall tax revenue collection (**Box 4.2**).

Box 4.2: Exploiting Direct Tax Potential in Pakistan

Generally, direct taxes are considered as fair and equitable way of raising revenues for the governments. Direct taxes make the system more progressive through balancing income distribution and narrowing down the inequality gap. In Pakistan, the use of such redistributive tools has remained under-utilized and the tax structure remained tilted towards the regressive indirect taxes, contributing around 60 percent of total taxes.



In terms of GDP, the revenue from direct taxes reached 4.3 percent in FY18 from an average of 2.9 percent during FY03-FY17. However, the growth in tax collection was low, when compared to growing income levels in the country (**Figure**

⁸ World Bank Group; PwC. 2018. *Paying Taxes 2018*. World Bank, Washington, DC

⁹ According to a study by IMF, Pakistan’s tax potential is estimated at 22.3 percent of GDP; Source: Pessino, C., and R. Fenochietto (2013), “*Determining Countries’ Tax Effort*” IMF Working Paper 13/244, Washington DC; IMF.

4.2.1). In terms of its share in total taxes, Pakistan falls somewhere in middle, when compared with other emerging economies (**Figure 4.2.2**).

Within the direct taxes, around 70 percent comes from withholding taxes that sometimes becomes indirect when passed onto consumers. For example, around half of the WHT is collected through advance tax on imports and contracts that add to the final price of good and services.¹⁰ Excluding WHT, the share of direct taxes in total FBR Taxes falls to 12.5 percent from 40 percent.

Pakistan's low collection from direct taxes is primarily due to weak tax compliance and large number of exemptions

The main source of income tax is the personal and the corporate income tax, contributing about 92 percent in direct taxes. Though the number of active income tax payers increased to 1.46 million in FY18 from 0.98 million in FY14; it looks too small when compared to 57.4 million employed labor force. One of the reason is that out of the total employed labor force, 42.3 percent are dependent on the agriculture sector, which is either exempted from income tax or contributes very little.

The agriculture sector contributes 19.2 percent to GDP, but its share in taxes is negligible (**Table 4.2.1**). After the 18th amendment, the provinces were authorized to collect taxes from the agriculture sector. During FY17, the consolidated revenue from the agriculture income tax from the provinces stood at 0.03 percent of gross value addition (**Table 4.2.2**). In case of Punjab, which accounts for 73 percent of the cultivated land, agriculture income tax is charged either on the basis of per acre cultivated or income declared under income tax ordinance. As per Punjab Agricultural Income Tax Act 1997, the income is exempt for tax if cultivated area is less than 12.5 acres, charged Rs150 per acre if area is between 12.5 and 25 acres, and Rs 250 per acre for the area exceeding 25 acres. In case of declared agriculture income, the exemption limits is Rs 80000, and the rate increases with rising income. The World Bank study on revenue mobilization in Punjab reveals that the province collected agriculture income tax of Rs 1.4 billion during FY16, only 10 percent of its revenue potential of Rs 14 billion.

Table 4.2.1: Sectoral Share in GDP viz-a-viz Tax Collection
percent

	Share in GDP	Share in Tax
Agriculture	19.2	0.6
Industry	20.9	69.6
Services	59.9	29.8
Total	100	100

Data sources: PBS and MoF, Fiscal Policy Statement 2017-18

Table 4.2.2: Agriculture Income Tax

million rupees

	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Punjab	770.3	717.2	762.4	827.3	934	1,027.7	1,383.8	1,280.3
Sindh	200	210.2	122.8	406.5	276.4	341.5	410	650
KPK	15.7	17.5	20.1	22	24	49	80	88
Balochistan	0	1.5	0	0	0.5	1	9.4	12
All provinces	986	946.3	905.3	1,255.8	1,234.9	1,419.2	1,883.2	2,030.3
Total collection as percent of :								
Target	70.0	59.8	82.2	114.8	46.3	50.9	60.2	55.7
Agriculture GVA	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.03

Data source: Provincial Budget Documents & PBS

Table 4.2.3: Tax Expenditures

billion rupees

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Income tax	46.5	69.6	82.4	96.6	83.6	67.3	14	61.8
Sales tax	33.7	24.3	37.4	249	225.4	207.3	250	281.1
Custom duty	94.9	91.5	119.7	131.5	103	120	151.7	198.2
Total	175.2	185.5	239.5	477.1	412	394.6	415.8	541.0

Memorandum Item

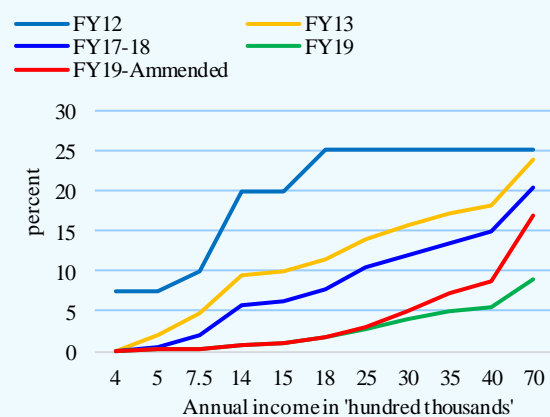
Total as % of GDP	1.0	0.9	1.1	1.9	1.5	1.4	1.3	1.6
Total as % of FBR taxes	11.2	9.9	12.3	21.2	15.9	12.7	12.3	14.2

Data source: Economic Surveys

¹⁰ Section 148 of the income tax ordinance provide comprehensive list of imported goods eligible for advance tax in addition to custom duties. Similarly advance tax on sales of good, services and the execution of contract are charged at different rates specifies under section 153 of the Income Tax ordinance.

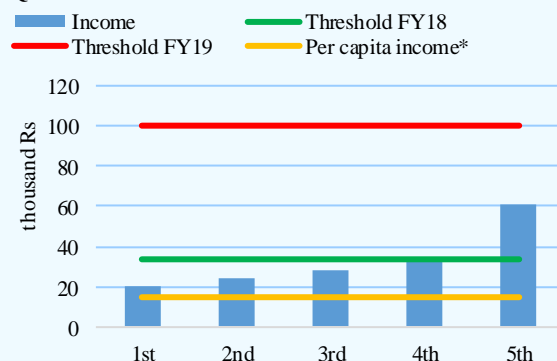
Moreover, the Income Tax Ordinance provides exemptions and preferential treatments to different segments of the society. These are called tax expenditures and their annual loss stood at 1.6 percent of GDP or around 14 percent of total FBR taxes in FY18 (**Table 4.2.3**). To the extent of income tax, the second schedule of the Income tax ordinance gives comprehensive list of exemption both for individuals and the corporates. Importantly, 56 percent of the total expenditure were made under section 56/B of the income tax ordinance 2002 during FY18, which provides the tax exemption on the payable tax by the companies on investment made for the purchase of plant and machinery, and the extension, expansion, balancing, modernization and replacement of the plant.

Figure 4.2.3: Income Tax Rates for Different Income Groups



Data source: Finance Acts

Figure 4.2.4: Average Monthly Household Income by Quintiles viz-a-viz Income Tax Threshold



* Calculated on monthly basis from yearly per capita income
Data source: Household Integrated Economic Survey 2015-16, Pakistan Economic Survey 2017-18 and Finance Acts

Recently, the minimum taxable income has been increased, leaving out a number of potential taxpayers

The Finance Act 2018 made substantial changes to taxes in Pakistan. The personal income tax rate was reduced for various tax brackets for the salaried class. The threshold level was raised from 0.4 million to 1.2 million for the salaried class and households having income from 14 to 70 hundred thousand (**Figure 4.2.3**).¹¹ The Finance Supplementary (Amendment) Act, 2018 has maintained the threshold but partially reversed this benefit for the upper slabs.

Now, the threshold level stands six times of the GDP per capita and three times that of FY18. These changes have resulted in exempting sizeable population relative to FY18 threshold that was hardly touching top two quantile average monthly income in FY18 (**Figure 4.2.4**). As per IMF estimates, the average tax rate for a number of economies was 15 percent at per capita income level and becomes flat at 25 percent, when income reaches three to four times of GDP per capita. In addition, the government also cut corporate income tax (other than banks) to 30 percent from 35 percent five years ago, while remained same at 35 percent for the banking sector. Again this trend is in contrast to the emerging economies, where average corporate income tax stood 22.3 percent for 2015.

Conclusion

In Pakistan, the tax reform must be aimed at increasing tax bases, rather than imposing taxes on existing tax payers. The recent reduction in tax rates is a welcome development that may encourage voluntary tax payments, however, this might exclude a large number of potential tax payers. On the flip side, the reduction in rates would help increase savings or consumption that would, in turn, support higher economic activity. Given the large tax gap, provinces must enhance their efforts to bring untapped sources into tax net in order to reduce reliance on federal transfers. Moreover, Pakistan income tax system is based on universal self-assessment schemes and revenue capacity is limited due to the large informal sector. In FY13, 73.3 percent of employment was generated by informal sector, which means only a part of the remaining quarter would be paying taxes. A well thought policy aiming to improve tax compliance across existing sectors and bringing the informal sector into tax net can make the system more progressive.

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¹¹ However, there is a nominal tax payable of Rs 1,000 for the taxable income between 0.4 million and 0.8 million, and Rs 2,000 for the taxable income between Rs 0.8 million and 1.2 million.

- Martinez-Vazquez, Jorge, and Kaspar Richter (2009). Pakistan Tax Policy Report: Tapping Tax Bases for Development. No. paper0908. International Center for Public Policy, Andrew Young School of Policy Studies, Georgia State University.

Indirect taxes

The indirect tax collection grew by 14.3 percent during FY18, compared to a subdued growth of 5.1 percent last year. Buoyant domestic demand helped mobilize revenue from healthy manufacturing activity, increase in domestic sales and a surge in import volume. Meanwhile, increase in international commodity prices as well as the depreciation of exchange rate also supported higher revenue collection, especially from customs and sales tax on imported goods.

Sales tax

Sales tax collection rebounded with 12.7 percent increase recorded during FY18 against collection showing no change in FY17 (Table 4.4). This recovery in sales tax collection was in line with the rise in domestic demand bolstered by growing income level in the country. Moreover, pass through of increased global oil prices also helped to generate higher sales tax revenue from this source given ad-valorem tax structure.¹² However, some increase in POL prices was absorbed by the government through lowering sales tax rates with an objective to ensure stability and to give a relief to domestic consumers.

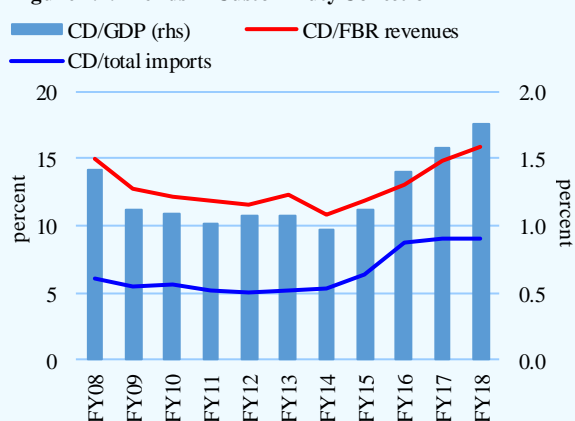
Table 4.4: Sales Tax on Domestic and Import Stage*

	FY17	FY18	Growth	
			FY17	FY18
Domestic				
POL products	225.8	283.0	-18.0	25.3
Electrical energy	45.7	45.3	22.3	-0.9
Cement	29.7	24.1	5.0	-18.9
Beverages	18.7	17.7	42.0	-5.6
Cigarettes	17.6	20.5	-26.1	16.9
Natural gas	11.7	20.3	-35.9	73.7
Others	277.2	265.7	24.4	-4.1
Total	626.4	676.6	1.2	8.0
Imports				
POL products	212.0	264.2	-3.2	24.6
Iron and steel	55.3	68.3	2.5	23.5
Mech. machinery	62.9	68.6	24.2	9.2
Elec. machinery	50.0	51.7	18.1	3.5
Vehicles	53.0	66.8	25.6	25.9
Plastic resins etc.	35.6	45.1	6.4	26.8
Organic chemicals	13.4	17.6	0.9	31.0
Others	219.8	232.4	1.7	5.7
Gross	702.0	814.7	4.6	16.1

*: Break-up is based on provisional data

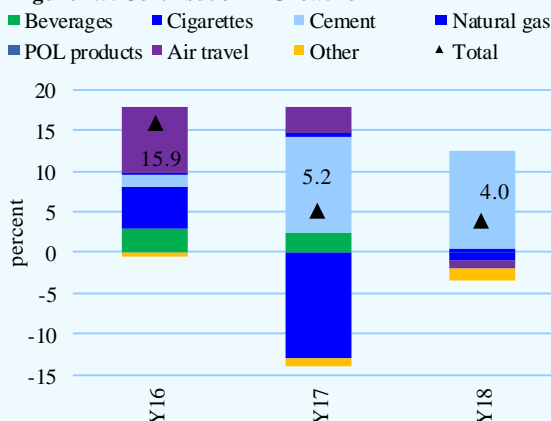
Data source: Federal Board of Revenue

Figure 4.4: Trends in Custom Duty Collection



Data source: Federal Board of Revenue and SBP calculations

Figure 4.5: Contribution in Growth of FED



Data source: Federal Board of Revenue and SBP calculations

Custom duty

The custom duty collection grew by 22.6 percent in FY18, slightly higher than 22.1 percent growth in last year. This persistent higher growth during the last few years reflects rising imports, a sustained

¹² According to IMF commodity prices data, the international POL prices bottomed out in August 2017, and started inching up from September 2017 onwards.

improvement in economic activity, rise in general income level, increase in additional custom duty by 1 percent and regulatory duty on a number of non-essential items. In particular, import of vehicles, POL products, iron and steel in particular contributed significantly to custom duty collection during FY18. In addition, higher commodity prices combined with depreciation of rupee, which pushed up the landed price of imported items, also added to custom duty collection. As an outcome, the share of custom duty in FBR taxes rose to 16.0 percent and around 1.8 percent of GDP in FY18 (Figure 4.4).

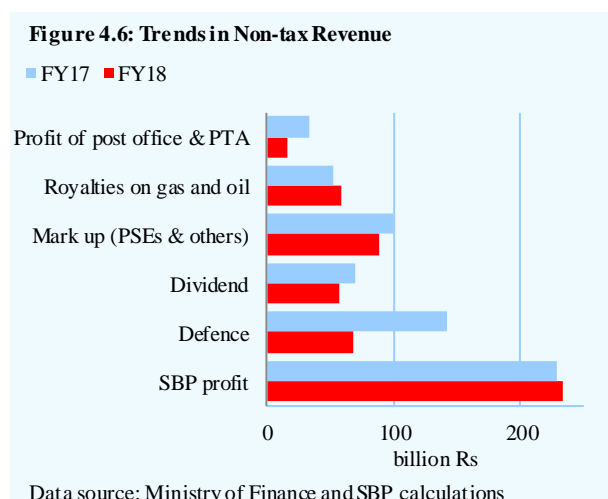


Table 4.5: Fiscal Spending
billion rupees

	FY17	FY18	Abs. change	Growth	
				FY17	FY18
Current expenditures	5197.9	5,854.3	656.4	10.7	12.6
Federal	3,472.2	3,789.8	317.6	10.4	9.1
<i>of which</i>					
Interest payments	1,348.4	1,499.9	151.5	6.7	11.2
(i) Domestic	1,220.3	1,322.6	102.4	6.0	8.4
(ii) Foreign	128.2	177.3	49.1	13.9	38.3
Defense	888.1	1,030.4	142.3	17.2	16.0
Public order and safety	127.8	124.7	-3.2	32.8	-2.5
Others	1107.8	1134.8	27.0	7.9	2.4
Provincial	1,725.7	2,064.5	338.8	11.3	19.6
Development expenditures	1,693.5	1,584.1	-109.4	30.1	-6.5
PSDP	1,577.7	1,456.2	-121.5	33.1	-7.7
Federal	725.6	576.1	-149.5	22.3	-20.6
Provincial	852.2	880.1	28.0	43.8	3.3
Others (including BISP)	115.7	127.8	12.1	0.1	10.4
Net lending	-12.8	37.6	50.4	-201.5	-393.6
Total Expenditure*	6,878.5	7,475.9	597.4	14.5	8.7

* Excluding statistical discrepancy

Data sources: Ministry of Finance and SBP calculations

Federal Excise Duty

Federal excise duty grew by 4.0 percent during FY18 compared to 5.2 percent increase in the previous year (Figure 4.5). The deceleration in FED collection was due to a decline in collection from cigarettes and a slowdown in manufacturing activity especially of cement, cigarettes and beverages sectors during Q4-FY18. Particularly in cigarettes, a reduction in FED rate on lower tier cigarettes dragged FED collection without a proportionate increase in revenue. The situation warrants an upward revision in tariff structure to achieve the dual objective of higher revenue along with better health outcomes. Nevertheless, an increase in collection from cement helped offset the drag in FED collection for FY18.

Non-tax revenues

The non-tax revenues declined by 21.4 percent during FY18 compared to a 23.0 percent increase in the previous year. This contraction was broad-based except for SBP profit, which almost maintained the last year's level. Moreover, an uptick in royalties on oil and gas and windfall levy on crude oil, which have relatively smaller share, could not offset the drag in non-tax revenues (Figure 4.6). That

said, the decline in non-tax revenue is largely attributed to decline in defense related revenue, especially CSF.

4.3 Expenditure

The growth in consolidated fiscal spending decelerated to 8.7 percent during FY18 as compared to 14.5 percent observed in FY17. This was primarily due to a decline in development spending as growth in current expenditure accelerated (Table 4.5). This was in contrast to the past trends, where growth in current expenditures was contained to enhance development spending (Figure 4.7). This might be a consequence of government’s concern regarding containment of fiscal deficit amid weak revenue position.

The disaggregated data shows that decline in development spending was due to a substantial reduction in federal PSDP because of slower releases during the interim government’s term towards the end of FY18. Provinces, nonetheless, saw some growth but lower than that of the previous corresponding period (Table 4.5). Notwithstanding this decline, infrastructure spending followed by power and energy and special development program remained the priority areas during FY18 (Figure 4.8). Likewise, Rs 122.7 billion were spent out of Rs 187.3 billion allocated for CPEC projects under PSDP (Figure 4.9).

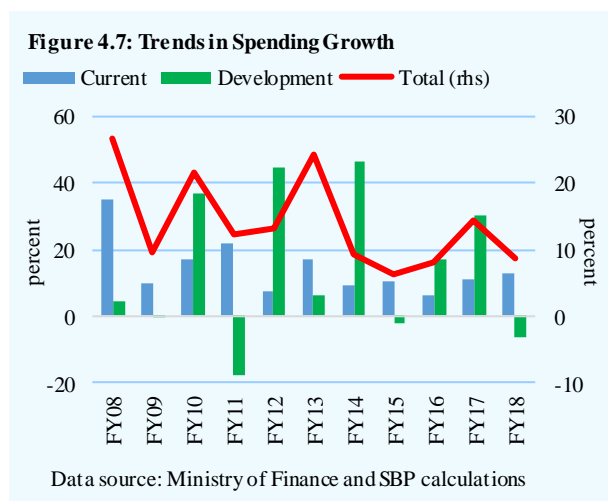
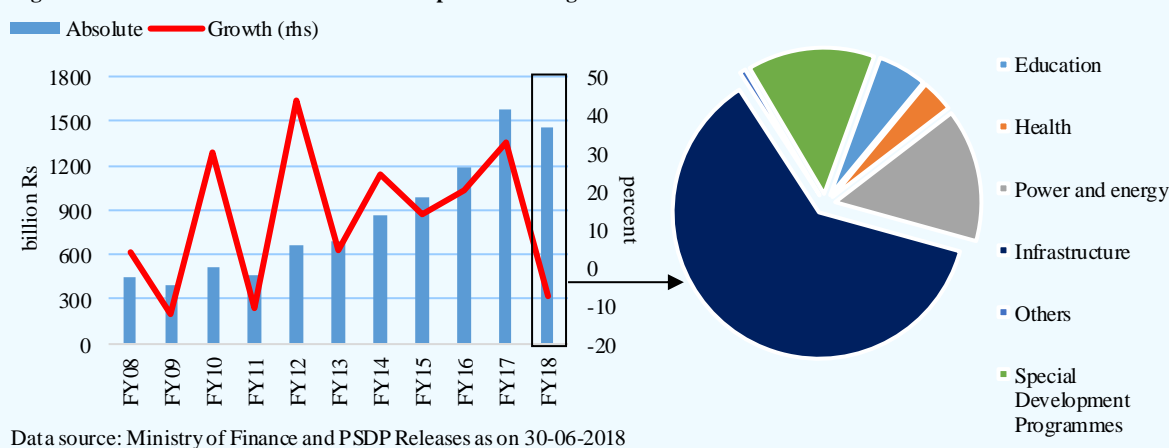


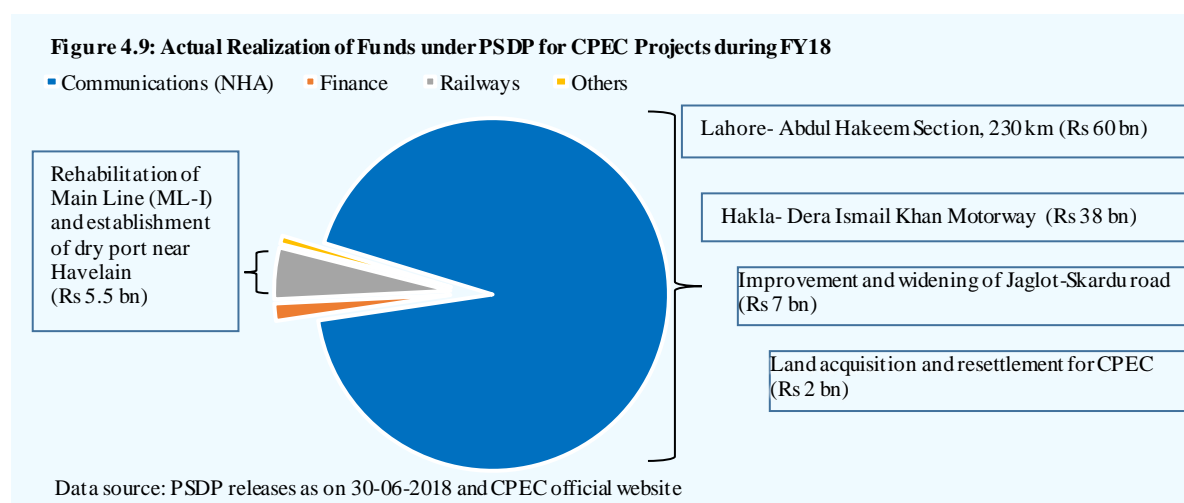
Figure 4.8: PSDP Growth Trends and its Composition during FY18



The other development expenditure including Benazir Income Support Program (BISP) and Poverty Reduction Strategy Paper (PRSP), however, stayed robust and grew by 10.4 percent to Rs 127.8 billion during FY18.

The current expenditures, on the other hand, grew by 12.6 percent during FY18 as compared to 10.7 percent in previous year. The growth in federal current expenditure, albeit increase in interest payments and defense expense, decelerated (Table 4.5). This was largely due to decline in

expenditure related to public order and safety affairs. However, provincial current expenditure grew sharply during FY18.



4.4 Provincial Fiscal Operations

Despite a slower pace of provincial spending vis-à-vis revenue growth, the provincial fiscal situation turned out to be opposite to that envisaged in the FY18 budget. The provinces posted a consolidated deficit of Rs 17.5 billion against the target surplus of Rs 347 billion which was also higher than the previous year's deficit of Rs 15.9 billion (Table 4.6). This was mainly contributed by Sindh and

Table 4.6: Provincial Fiscal Operations
billion rupees

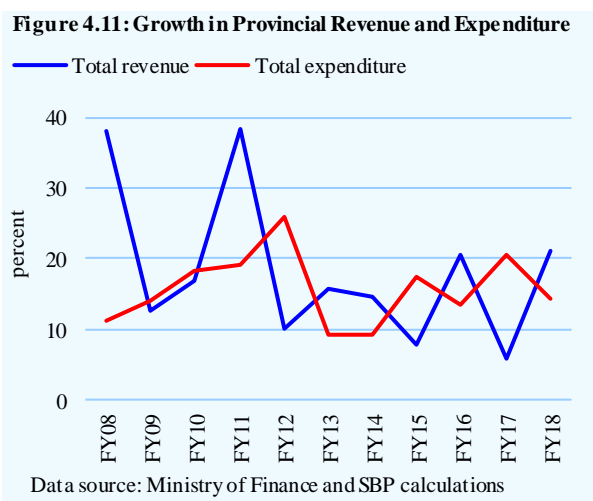
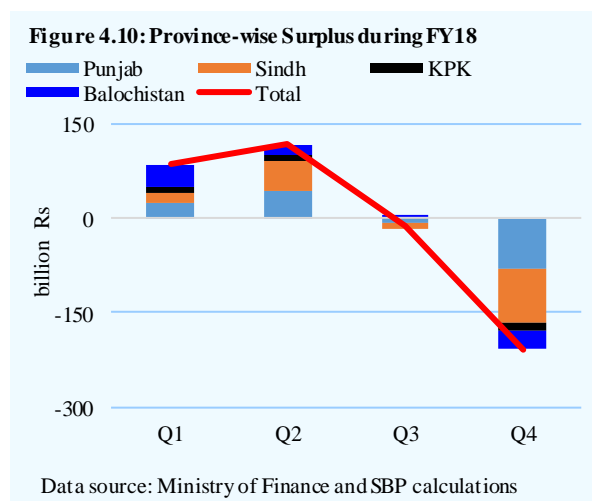
	Punjab	Sindh	KP	Balochistan	Total	Growth
<i>FY18</i>						
A. Total Revenue	1,412.0	802.8	481.5	242.3	2,938.5	21.0
Provincial share in federal revenue	1,078.8	562.3	363.5	212.9	2,217.4	12.8
Provincial Revenue (I+II)	259.1	192.7	82.2	14.0	548.1	36.6
I. Taxes	197.5	176.1	18.3	9.4	401.4	24.7
II. Non-tax revenue	61.6	16.6	63.9	4.6	146.7	84.5
Fed loans and transfers	74.1	47.8	35.8	15.3	173.0	182.9
B. Total expenditure	1,418.6	845.1	447.1	250.1	2,960.9	14.3
Current**	948.8	619.7	329.7	182.5	2,080.7	19.6
Development	469.8	225.4	117.4	67.6	880.1	3.3
Gap (A-B)	-6.6	-42.3	34.4	-7.8	-22.4	-86.3
Financing* (overall balance)	17.4	34.7	-10.1	-24.4	17.5	10.5
<i>FY17</i>						
A. Total Revenue	1,149.5	692.6	361.8	224.3	2,428.2	5.9
Provincial share in federal revenue	928.8	516.9	315.2	204.9	1,965.8	5.6
Provincial Revenue (I+II)	187.7	153.1	49.7	10.9	401.3	6.6
I. Taxes	155.4	144.5	15.7	6.3	321.8	13.6
II. Non-tax revenue	32.3	8.6	34.0	4.6	79.5	-14.8
Fed loans and transfers	33.0	22.7	-3.1	8.6	61.2	11.0
B. Total expenditure	1,154.5	754.1	436.7	246.2	2,591.5	20.4
Current**	716.1	550.9	299.0	173.3	1,739.3	11.5
Development	438.4	203.2	137.7	73.0	852.2	43.8
Gap (A-B)	-5.0	-61.5	-74.9	-21.9	-163.2	-215.2
Financing* (overall balance)	-15.7	39.0	-13.5	6.0	15.9	-107.7

*Negative sign in financing means surplus. ** Current expenditure data may not match with those given in Table 4.5 as numbers reported here include the markup payments to federal government.

Data source: Ministry of Finance and SBP calculations

Punjab; whereas KP and Balochistan reported surpluses. However, the quarter wise analysis reveals that all the provinces recorded deficits in the last quarter of FY18 (**Figure 4.10**).

Though expenditures grew at a slower rate compared to last year, total expenditures rose to Rs 2,960.9 billion. This was still higher compared to the provincial revenue, which grew at a relatively higher rate of 21.0 percent but reached to Rs 2938.5 billion. Thus, the revenue-expenditure gap has been narrowed during FY18. Nevertheless, the time lag involved in realization and settlement of funds allocated for spending purposes during the whole year has, therefore, made provinces the *net-borrower* at end June FY18 (**Table 4.6**).



Higher growth in overall provincial revenue also reflects provinces' efforts to enhance their own revenue collection. This is particularly reflected in a sustained increase in GSTS that improved by Rs 223.9 billion during FY18 on top of Rs 170.8 billion increase in FY17. A sharp 64.4 percent growth in collection from stamp duties with the introduction of e-stamping, especially in Punjab, also contributed handsomely to provincial tax collection.¹³ However, property taxes declined by 21.1 percent mainly due to lower collection from Punjab, where it fell to almost half of the amount collected in the previous year.

The provincial non-tax revenue rose to Rs 146.7 billion as compared to Rs 79.5 billion in previous year as a result of higher revenue generated from *profits from hydroelectricity* mainly from KP and Punjab; Sindh also collected Rs 16.6 billion. In addition, *federal loans and transfers* recorded a decade high increase mainly to finance development projects especially Orange Line Train (OLT) in Punjab.

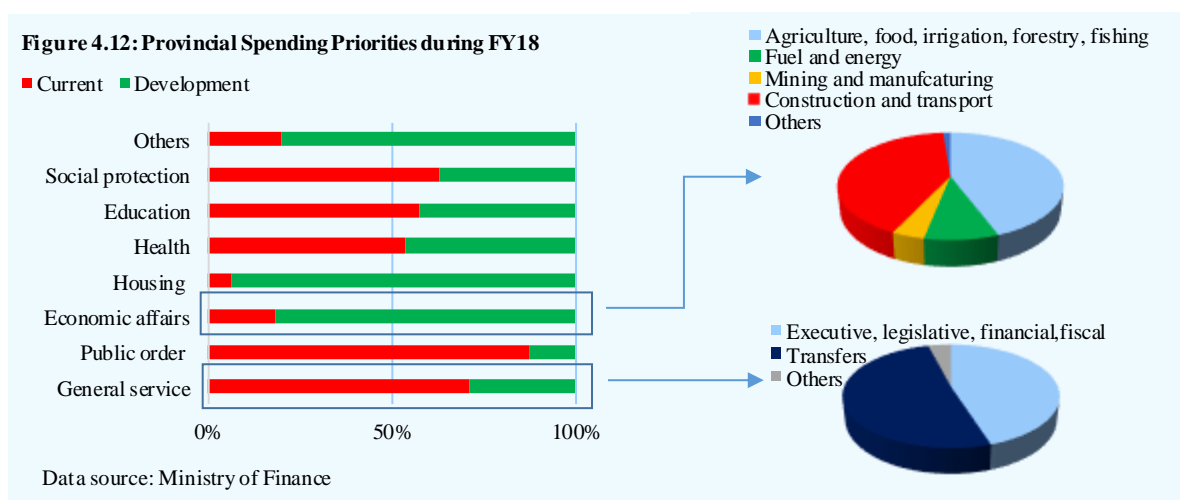
The growth in provincial spending slowed down to 14.3 percent as compared to 20.4 percent last year (**Figure 4.11**). This is mainly attributed to considerably slower growth in development spending mainly on account of Balochistan and KP. However, growth in provincial current expenditures accelerated to 19.6 percent during FY18 from 11.5 percent in the previous year. The current provincial spending preferences continued to be inclined towards public order and general public services; however, a higher spending was noted in social protection (**Figure 4.12**).

Even with a slight growth in development expenditure, provinces spent more on housing, community development, and economic affairs. Within economic affairs, priority was given to agriculture, livestock, and construction (**Figure 4.12**). For instance, Punjab provincial development working

¹³ In 2016, PITB collaborated with Punjab government and introduced e-stamping facilities in order to minimize the leakages out of long procedures for legal requirements.

party (PDWP) has approved various projects regarding irrigation, construction, health, and education sectors¹⁴. In the case of KP, the main focus was agriculture, livestock, manufacturing, and construction.¹⁵

In broader terms, provincial governments increased their current and development spending on health and education during FY18. On a positive note, Sindh in collaboration with the World Bank started a program aimed at reducing child stunting and malnutrition from 48 percent to 30 percent by year 2021.¹⁶



Having said that, the provincial deficit situation has put further burden on the stressed federal position. This happened in two ways. First, the total provincial revenue has always been supported by higher provincial share (57.5 percent) as per NFC Award; also, the federal government is liable to transfer funds and federal transfers and grants to provinces. Second, the provincial deficit further debilitates the overall deficit situation instead of providing some cushion for containing fiscal deficit. Therefore, institutional reforms in the context of provincial revenue maximization by tapping the unexplored avenues (such as agriculture and property taxes) and expenditure management should be aligned with the provision of funds.

¹⁴ Project highlights, Planning and Development Department, Government of Punjab.

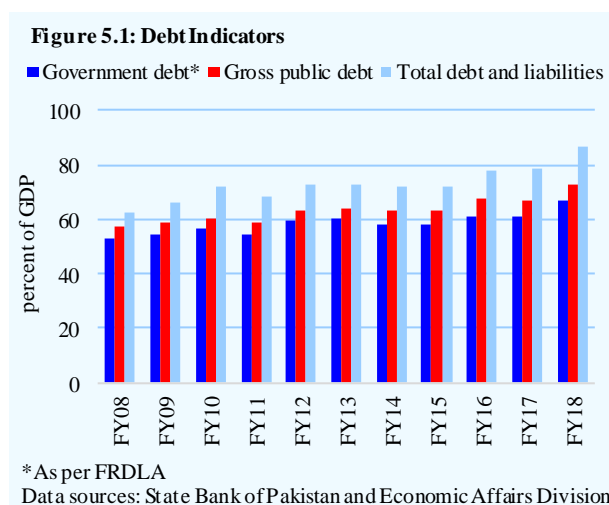
¹⁵ Reclaiming Prosperity in Khyber Pakhtunkhwa, Medium Term Inclusive Growth Strategy 2015-18

¹⁶ *Sindh Enhancing Response to Reduce Stunting Project (2018)*, Urban Policy and Strategic Planning, Planning and Development Department, Government of Sindh.

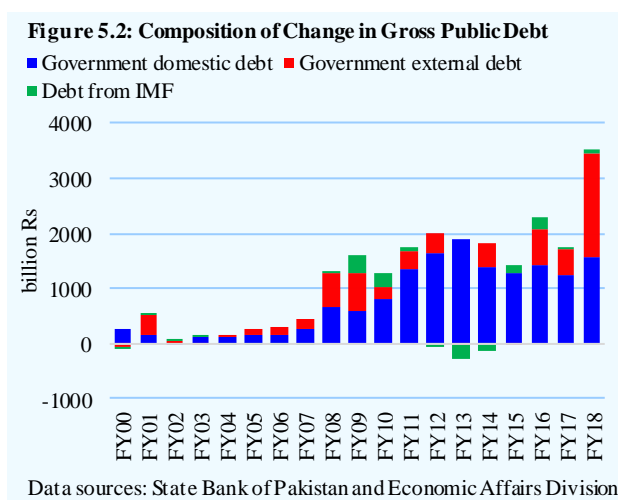
5 Domestic and External Debt

5.1 Overview

The rising macroeconomic imbalances, the widening of twin deficits in particular, quickened the pace of debt accumulation. The gross public debt grew by 16.6 percent during FY18, almost twice the rate of increase recorded in FY17. As a result, the gross public debt rose by 5.6 percentage points to 72.5 percent of GDP by end-June 2018. Similar trends were observed in government debt – public debt minus government deposits held with the banking system. Thus, debt-to-GDP ratio remained higher than the 60 percent limit envisaged in the Fiscal Responsibility & Debt Limitation Act (FRDLA), 2005 (**Figure 5.1**).¹



In absolute terms, gross public debt reached Rs 25.0 trillion by end-June 2018, showing an increase of Rs 3.5 trillion during FY18. More than half of this record accumulation in gross public debt in a single year was contributed by public external debt, which grew by 30.1 percent (**Figure 5.2**). Most of the rise in public external debt came from fresh disbursements from China, foreign commercial banks and proceeds from Eurobond/ Sukuk issuance. Besides, revaluation losses due to appreciation of international currencies against US dollar and depreciation of PKR against US dollar, explain this high growth in public external debt during FY18. Out of Rs 2.0 trillion expansion in external public debt, around Rs 1.1 trillion was due to PKR depreciation against dollar and appreciation of major currencies against dollar.²



Most of the fresh external loans were contracted on floating interest rates. Though a large share of external debt still comprises of concessionary loans from multilateral agencies, it may pose challenges for future debt servicing when looked in the context of the rising global interest rates and stressed external account position. In addition, the rising share of external debt may intensify the revaluation impact in case of excessive exchange rate fluctuations. Interest payments on external debt have already started to rise owing to increase in stock of external debt and upward trend in LIBOR. From the sustainability perspective, the solvency and liquidity ratios show deterioration, while indicators

¹ FRDL Act, 2005, as amended in June 2016, requires government to contain the fiscal deficit at 4.0 percent and public debt to GDP ratio at 60 percent in FY18. Moreover, the debt of the government, defined as public debt minus government deposits held with the banking system stood at 67.0 percent at end-June 2018.

² The impact of other currencies' appreciation against US dollar on the external public debt recorded at US\$ 407 million in FY18.

measuring servicing capacity show improvement due to both increase in exports and decline in debt servicing (**Section 5.4**).

In terms of maturity structure, the government continued to rely on short-term borrowing during FY18. In particular, the short-term domestic borrowing of central government was almost 1.5 times higher in FY18 than in FY17 (**Figure 5.3**). In the case of external debt, the average time to maturity of new loans also shortened in FY18 relative to FY17.³ The rising share of short-term instrument in outstanding debt stock has increased the government exposure to refinancing and interest rate risk.⁴ The risk indicators including the share of domestic debt maturing in 1-year and average time to maturity deteriorated further in FY18 (**Section 5.2**).

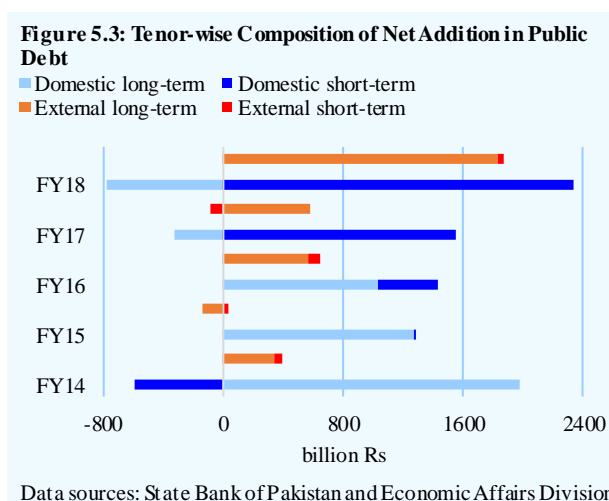


Table 5.1: Summary of Pakistan's Debt and Liabilities
billion rupees

	Stock			Absolute change		Percent of GDP	
	FY16	FY17	FY18	FY17	FY18	FY17	FY18
A. Total debt and liabilities (sum I to IX)	22,577.1	25,109.3	29,861.2	2,532.2	4,751.9	78.6	86.8
B. Gross public debt (sum I to III)	19,676.6	21,408.7	24,951.8	1,732.0	3,543.1	67.0	72.5
Total debt of the government (I+II+III-X)	17,823.2	19,635.4	23,050.5	1,812.2	3,415.1	61.4	67.0
I. Government domestic debt	13,625.9	14,849.2	16,415.2	1,223.3	1,566.0	46.5	47.7
II. Government external debt	5,417.6	5,918.7	7,795.8	501.1	1,877.0	18.5	22.7
III. Debt from IMF	633.1	640.8	740.8	7.7	100.0	2.0	2.2
IV. External liabilities	377.1	373.8	622.3	-3.3	248.5	1.2	1.8
V. Private sector external debt	709.1	1,171.2	1,600.6	462.1	429.5	3.7	4.7
VI. PSEs external debt	294.0	285.2	325.2	-8.9	40.0	0.9	0.9
VII. PSEs domestic debt	568.1	822.8	1068.2	254.7	245.4	2.6	3.1
VIII. Commodity operations	636.6	686.5	819.7	49.9	133.2	2.1	2.4
IX. Intercompany external debt	315.6	361.2	473.4	45.5	112.2	1.1	1.4
X. Deposits with banking system	1,853.5	1,773.3	1,901.3	-80.2	128.0	5.5	5.5

Data sources: State Bank of Pakistan and External Affairs Division

In addition to public debt, considerable increase in PSEs debt, loans for commodity operations and external liabilities pushed Pakistan's total debt and liabilities (TDL) to 86.8 percent of GDP at end-Jun 2018 from 78.6 percent as of end-Jun 2017 (**Table 5.1**).

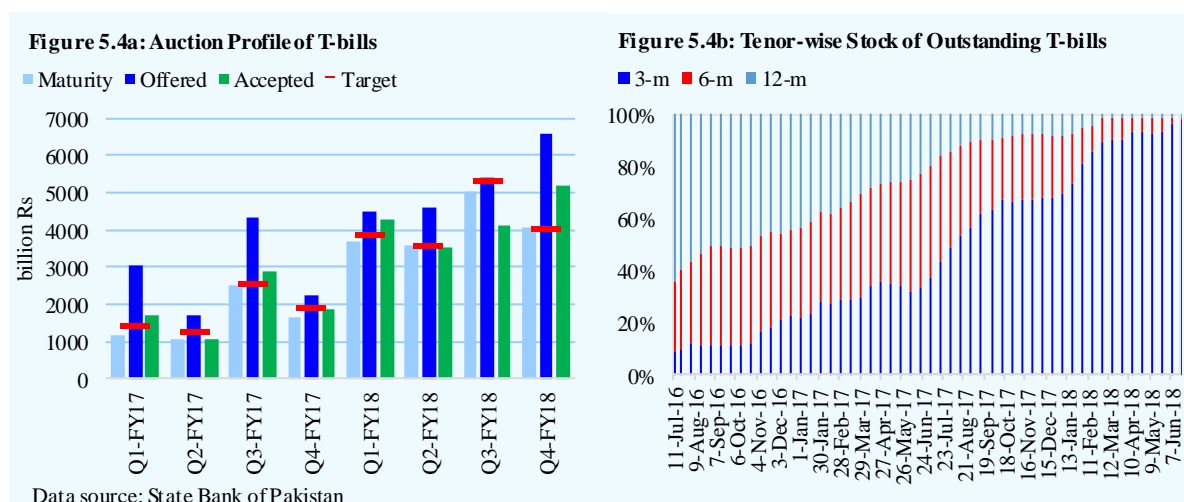
5.2 Domestic Debt

Notwithstanding the increased external financing, the government had to rely on domestic sources to finance increased fiscal deficit during FY18. The domestic debt grew by 10.5 percent during FY18 compared to 9.0 percent increase in FY17 (**Table 5.2**). Similar to last year, entire increase in domestic debt came from short-term debt, as the government continued to retire its long-term debt.⁵

³ As shown in **Figure 5.3**, the extraordinarily high increase in long-term external debt (in rupee terms) was mainly due to currency revaluation changes.

⁴ The share of short-term debt in domestic debt reached 54.2 percent in June 2018 from 44.1 percent in June 2017

⁵ The government retired PIBs worth Rs 1.5 trillion and 12-month T-bills worth 1.8 trillion during last two years.

**Table 5.2: Government Domestic Debt**

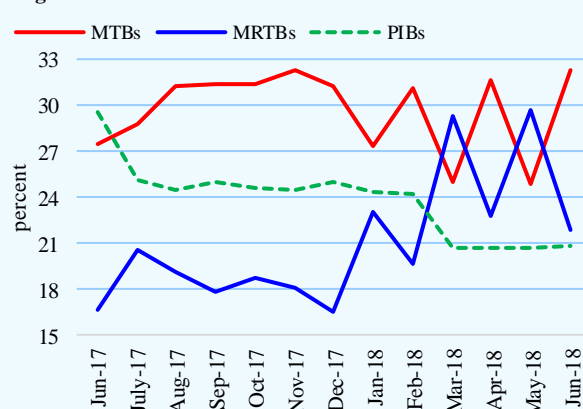
billion rupees

	Stock			Flow		Growth (percent)	
	FY16	FY17	FY18	FY17	FY18	FY17	FY18
Domestic debt	13,625.9	14,849.2	16,415.2	1,223.3	1,566.0	9.0	10.5
I. Permanent debt: <i>of which</i>	5,935.9	5,528.4	4,653.8	-407.5	-874.6	-6.9	-15.8
PIBs	4,921.4	4,391.8	3,413.3	-529.6	-978.5	-10.8	-22.3
Ijara Sukuk	363.9	385.4	385.4	21.5	0.0	5.9	0.0
Prize bonds	646.4	747.1	851.0	100.7	103.9	15.6	13.9
II. Floating debt: <i>of which</i>	5,001.7	6,550.9	8,889.1	1,549.2	2,338.2	31.0	35.7
MTBs	2,771.4	4,082.0	5,294.9	1,310.5	1,212.9	47.3	29.7
MRTBs	2,017.6	2,468.9	3,594.2	451.3	1,125.3	22.4	45.6
III. Unfunded debt	2,683.7	2,765.3	2,867.0	81.6	101.7	3.0	3.7

Data source: State Bank of Pakistan

Expectations about higher inflation and concurrent rise in interest rate drove banks' bidding pattern towards short-term instruments (**Figure 5.4a**). Within T-bills, government borrowing was heavily tilted towards 3-months bill, as banks participation in 6-month and 12 month T-bill auctions was quite low. This has pushed the share of 3-month T-bills to 97.7 percent at the end of Jun 18 from around 40 percent at the start of the fiscal year (**Figure 5.4b**). Similar trends were observed in case of non-bank holding of government securities, i.e. retirement of PIBs/Ijara and 12-month T-bills and new investment almost entirely going into 3-month T-bills.

The changing market dynamics made it difficult for the government to rollover long-term debt, and raise additional financing. In this backdrop, the government relied on the central bank borrowings. Hence, a record amount of MRTBs worth Rs 2.2 trillion was created in Q3-FY18 alone.⁶ A part of this deficit monetization was retired through

Figure 5.5: Instrument-wise Share in Domestic Debt

Data source: State Bank of Pakistan

⁶ However, government retired Rs 1.1 trillion to SBP during Q4-FY18, hence net addition to the central bank's borrowing remained at Rs 1.1 trillion during FY18.

borrowing from scheduled banks in the last quarter of FY18; still the share of MRTBs in domestic debt was recorded at around 22 percent in June 2018, higher than 16.6 percent June 2017 (**Figure 5.5**).

This has worsened the maturity profile of the domestic debt. The concentration of short-term debt has also increased refinancing risk. The latest available estimates show that share of domestic debt maturing in 1-year rose significantly from 52.7 percent in December 2016 to 60.1 percent in December 2017. Similarly average time to maturity reduced from 2.3 years in June 2015 to less than 2 years in December 2017 (**Table 5.3**).

Table 5.3: Refinancing Risk for Domestic Debt

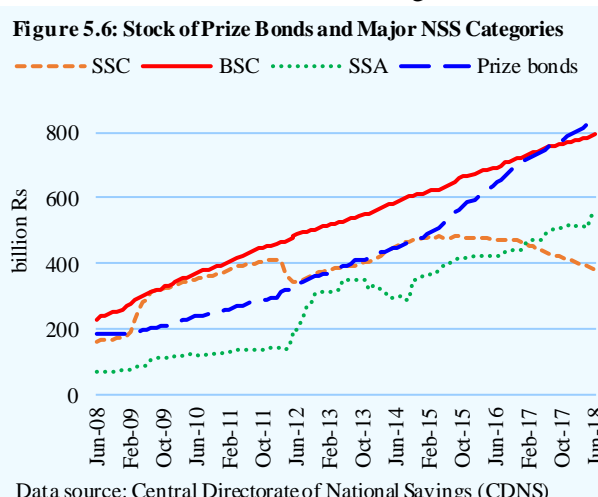
	Debt maturing in 1 year (% of total)	Average time to maturity (years)
Jun-15	47.3	2.3
Mar-16	52.4	2.1
Jun-16	51.9	2.1
Dec-16	52.7	2.1
Jun-17	55.6	2.0
Dec-17	60.1	1.8

Data source: Ministry of Finance

Inflows in NSS remained low

Net inflow in National Saving Schemes (NSS) was recorded at Rs 98.0 billion in FY18, marginally lower than Rs 104.1 billion realized in FY17. In fact, the inflows have been falling persistently for the past three years. This falling trend mainly reflects lower profit rates and higher incidence of withholding tax on non-filers. A disaggregated analysis shows that gross inflows in major schemes increased; however, considerable retirements led to a fall in net terms. In the case of SSC and SSA in particular, net mobilization declined sharply despite substantial increase recorded in gross inflows.

Prize bonds witnessed a marginal rise in net mobilization during FY18 compared to the previous year. This was despite introduction of the premium prize bond in April 201, which offered an additional profit rate of 1.5 percent on biannual basis in addition to the traditional prize money (**Figure 5.6**).

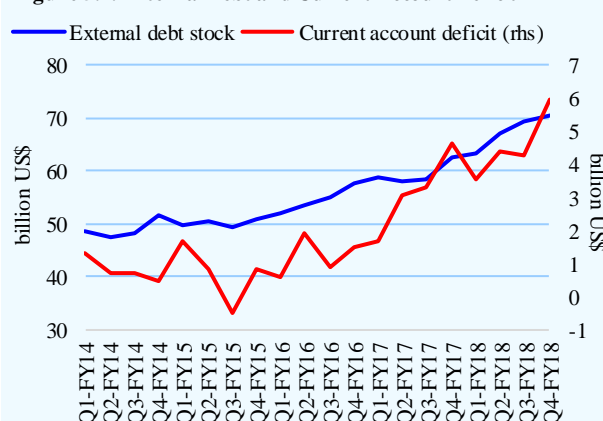


5.3 External Debt and Liabilities

Total external debt and liabilities (TEDL) reached US\$ 95.1 billion by end June 2018, an increase of US\$ 11.7 billion during FY18 (**Table 5.4**). Most of this increase was driven by the public component, which contributed two-thirds of the total increase in EDL. Widening of the current account deficit led to a considerable increase in external financing needs and thus accumulation in external debt during FY18 (**Figure 5.7**). The increase in the external public debt primarily came from disbursements from China, foreign commercial banks and the Eurobond/Sukuk proceeds.

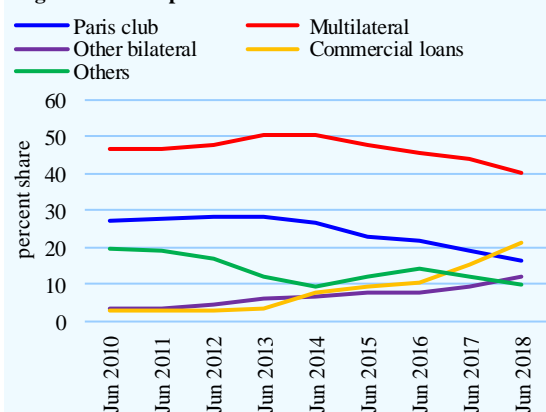
Along with higher external borrowings, revaluation losses due to appreciation of major currencies against US dollar also added around US\$ 407 million to country’s external debt. The revaluation loss has come down from US\$ 1.7 billion, as reported for Jul-Mar period in

Figure 5.7: External Debt and Current Account Deficit



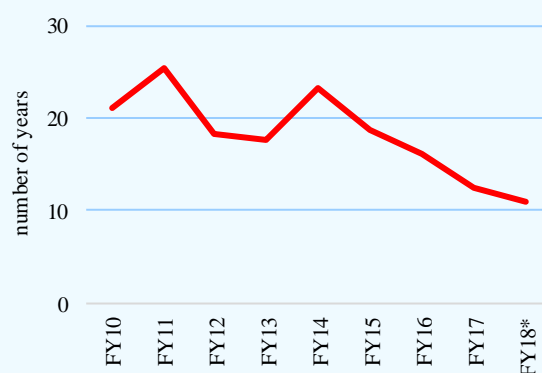
Third Quarterly Report for FY18, due to strengthening of US dollar against major currencies in Q4. In particular, the Japanese Yen and SDR – carrying out around 38 percent of Pakistan’s external debt – depreciated by 4.1 and 3.4 percent during fourth quarter, against appreciation of 5.2 and 4.3 percent during Jul-Mar period respectively.

Figure 5.8: Composition of Public External Debt



Data sources: State Bank of Pakistan and Economic Affairs Division

Figure 5.9: Average Time to Maturity of New Loans



*Based on Jul-Feb data
Data source: SBP calculations

Within the external borrowing, the reliance on commercial and other bilateral (mainly China) sources has increased considerably during the last couple of years (**Figure 5.8**). Importantly, the government borrowing from commercial lenders is relatively at higher rates and of shorter tenor compared to multilateral/bilateral loans. Average maturity of the new loan contracted is an important measure to gauge the refinancing risk. As shown in **Figure 5.9**, this has declined to 10.9 years in FY18 against 21.1 years in FY10 and is one of the reasons for increase in interest payments.

Table 5.4: Pakistan's External Debt and Liabilities

billion US dollars

	End-June stock			Absolute change		FY18			
	FY16	FY17	FY18	FY17	FY18	Q1	Q2	Q3	Q4
	Total external debt & liabilities (sum 1 to 7)	73.9	83.4	95.1	9.5	11.7	2.0	3.8	3.0
External public debt & liabilities (1+2+3)	61.4	66.1	75.4	4.7	9.3	0.9	3.5	2.5	2.3
External Public debt (1+2)	57.8	62.5	70.2	4.8	7.7	0.9	3.5	2.4	1.0
1. Government external debt	51.7	56.4	64.1	4.7	7.7	0.8	3.4	2.3	1.2
i) Long term (>1 year): <i>of which</i>	50.0	55.5	63.0	5.5	7.4	0.7	3.0	1.9	1.8
Paris club	12.7	12.0	11.6	-0.7	-0.3	0.1	-0.2	0.4	-0.7
Multilateral	26.4	27.6	28.1	1.2	0.5	0.3	0.0	0.5	-0.3
Other bilateral	5.4	6.3	8.7	0.9	2.3	0.4	0.2	0.7	1.0
Commercial loans/credits	0.9	4.8	7.3	3.9	2.4	-0.1	0.5	0.3	1.8
Euro/Sukuk global bonds	4.6	4.8	7.3	0.3	2.5	0.0	2.5	0.0	0.0
ii) Short term (<1 year)	1.7	0.9	1.2	-0.8	0.3	0.0	0.4	0.4	-0.5
2. From IMF	6.0	6.1	6.1	0.1	0.0	0.1	0.0	0.1	-0.2
3. Foreign exchange liabilities	3.6	3.6	5.1	0.0	1.6	0.0	0.0	0.1	1.4
4. Public sector enterprises (PSEs)	2.8	2.7	2.7	-0.1	0.0	0.3	-0.1	-0.1	-0.1
5. Banks: <i>of which</i>	2.7	4.5	4.4	1.8	-0.1	0.5	-0.3	-0.1	-0.2
Borrowing	1.6	3.3	3.0	1.7	-0.3	0.5	-0.3	-0.1	-0.4
6. Private sector	4.1	6.6	8.8	2.6	2.1	0.3	0.5	0.6	0.8
7. Debt liabilities to direct investors	3.0	3.4	3.9	0.4	0.5	0.1	0.2	0.1	0.2

Data sources: State Bank of Pakistan and Economic Affairs Division

External debt servicing declined

Despite increase in interest payments, Pakistan's external debt servicing declined during FY18, mainly due to lower principal repayment of public debt (**Table 5.5**). The decline in principal repayment was primarily due to absence of Euro/Sukuk bond repayment in FY18, as Pakistan repaid Eurobond worth \$750 million issued in 2007. However, repayment to Paris club and the multilateral donors recorded some increase during FY18, as repayment of the restructured debt began in FY18. In contrast, interest payments on external public debt continued to increase, mainly on account of higher interest payment made on sovereign bonds, multilateral debt, and commercial borrowings. Importantly, the interest payment on public debt almost doubled during FY18 compared to FY14. Both the higher external borrowings from commercial sources and rise in the benchmarks rates were responsible for this increase.

Table 5.5: External Debt Servicing

million US dollars

	Principal			Interest		
	FY16	FY17	FY18	FY16	FY17	FY18
1. External public debt	2,478.5	3,733.8	2,704.5	1,126.7	1,313.2	1,683.7
Paris club	219.9	411.8	611.2	243.8	242.0	240.3
Multilateral	1,220.9	1,255.2	1,316.6	239.2	295.3	357.4
Other bilateral	220.2	788.0	202.0	136.4	198.9	203.3
Euro/Sukuk global bonds	500.0	750.0	0.0	354.0	366.4	422.8
Commercial loans /credits	225.0	488.8	488.9	54.9	72.9	270.3
Others	92.6	40.0	85.9	98.4	137.6	189.6
2. External liabilities	0.0	0.0	0.0	87.2	86.6	102.8
3. PSEs debt	269.5	289.0	297.8	33.7	35.1	78.5
4. Scheduled banks' borrowing	2.9	0.0	1.0	8.3	23.2	61.3
5. Private sector debt	325.4	416.6	331.6	90.0	165.9	366.4
6. Total external debt and liabilities (sum 1 to 5)	3,076.2	4,439.4	3,335.0	1,345.9	1,623.9	2,292.7
<i>Memorandum Items</i>						
Short-term debt servicing - principal						
Government debt	734.5	1,392.9	1,486.3			
PSEs non-guaranteed debt	56.4	42.7	33.7			
Private non-guaranteed debt	104.7	647.6	331.8			

Data source: State Bank of Pakistan

However, the servicing of the external public debt is likely to increase in coming years as the repayment of rescheduled Paris Club debt and IMF's EFF would start to increase from FY19 onwards. Moreover, the commercial loans and 5-year sovereign bonds issued in FY14 and FY15 would be maturing in FY19 and FY20.

5.4 External Debt Sustainability

The assessment of external debt sustainability shows a deterioration in debt bearing capacity of the country, but servicing capacity improved with the recovery in exports as well decline in debt servicing during the year. The most common measure used to assess debt-bearing capacity is the external debt and liabilities to GDP ratio, which increased to 33.6 percent by end of June 2018, after remaining stable at an average of almost 26.0 percent over the last five years. Similarly, another measure of solvency, reserves to TDL, also deteriorated by around 8 percentage points, due to both higher external borrowings and a drawdown in reserves during FY18 (**Table 5.6**).⁷

All the liquidity measures, used to assess the ability to meet short-term obligations, also showed deterioration. Particularly, the ratio of short-term external public debt to reserves increased

⁷ Given the element of volatility due to exchange rate movement in debt to GDP ratio, solvency measured in terms of reserve to TEDL provide better inference.

significantly, mainly due to decline in reserves. Similarly, there was a moderate increase in the share of short-term debt in TEDL.

In contrast, both indicators used to assess servicing capacity, export earnings and total foreign exchange earnings, improved due to low debt servicing and revival in exports during FY18. The ratio of external debt servicing to government revenue, which shows resources available with government for servicing of external debt, also improved to 1.0 in FY18 from 1.3 in FY17. This suggests that government revenues during FY18 were just sufficient to repay the maturing external debt and interest expense.

Table 5.6: Indicators of External Debt Sustainability
percent

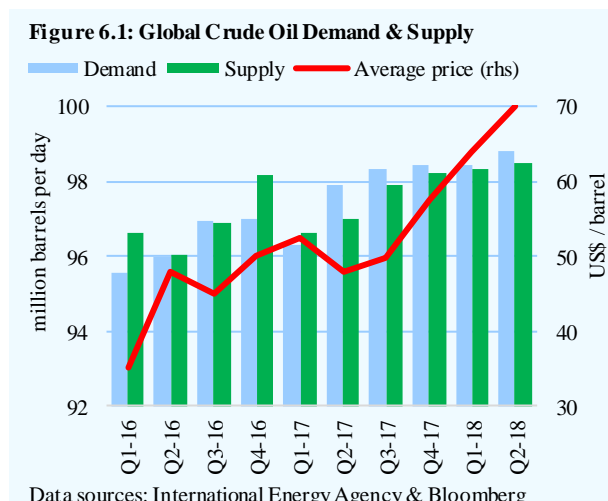
	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18
<u>Solvency indicators</u>						
Total external debt and liabilities/GDP	27.0	25.6	24.2	26.6	27.4	33.6
External public debt/GDP	21.3	20.2	18.9	20.8	20.5	24.8
Total reserves/total external debt & liabilities	18.1	21.7	28.7	31.2	25.7	17.3
SBP reserves/total external debt & liabilities	9.9	13.9	20.8	24.5	19.3	10.3
External debt servicing/FX earnings	12.9	13.7	10.2	10.4	15.7	13.7
External debt servicing/export earnings	20.6	23.0	18.0	19.4	29.6	25.0
<u>Liquidity indicators</u>						
Short-term external public debt/PEDL	0.5	1.3	1.9	2.8	1.3	1.9
Short-term external public debt/total reserves	2.4	5.2	5.4	7.3	4.1	7.1
Short-term external public debt/SBP reserves	4.4	8.0	7.5	9.3	5.5	11.9

Data source: State Bank of Pakistan calculations

6 External Sector

6.1 Global Economic Review

Developments in the international currency and commodity markets increased uncertainty in the global economy in FY18. Trade protectionism, regional frictions and deterioration in previously assumed stable economic blocks, such as EU and the GCC, swayed economic fundamentals in a way that increased volatility in crude oil prices and strengthened the US dollar against a wide range of currencies. At the same time, a number of developed and developing economies witnessed a resurgence of growth. While growth in advanced countries is a welcome development, the rise in the global oil prices and the US dollar pose risks for growth and macroeconomic stability, specifically in emerging and developing economies.



Importantly, oil prices crossed the US\$ 80 per barrel level for the first time in four years, as supplies were squeezed due to OPEC and Russian production cuts, disruptions in Venezuela and Libya, and the situation in the Middle East. At the same time, US withdrawal from the Iran nuclear deal further aggravated this situation. While this spelled mounting trouble for oil-importing countries, the US shale industry found itself back in the game, with domestic US oil production reaching a record-high by June 2018, and partially picking up the slack in supply from OPEC. With global supply falling behind only slightly, amid hefty build-up in inventories, demand continues to be roughly balanced, as shown in **Figure 6.1**. Nevertheless, external imbalances in many oil-importing EM economies deteriorated in FY18 with widening trade deficits (**Table 6.1**).

At the same time, the US adoption of a protectionist stance against its major trading partners led equities to their record-breaking run till January 31, 2018. Besides, the US economy experienced a 12-year high growth in 2017, which was instrumental in pushing up the global economic growth to its highest level since 2011. Passage of the Tax Cuts and Jobs Act 2017 stimulated firms to invest in the economy, whereas declining unemployment and rising disposable incomes led to healthy consumer and business sentiments. These factors led to higher import demand for consumer as well as capital goods by the US. In addition to the US, positive contribution came from the euro area, as continuation of easy monetary policy stimulated robust growth and higher import of capital and consumer goods. As a result, export performances of advanced economies, such as Germany, Japan, and of emerging markets (EMs) economies like China, India and Pakistan improved significantly.

Table 6.1: Current Account Balances of Selected EMEs

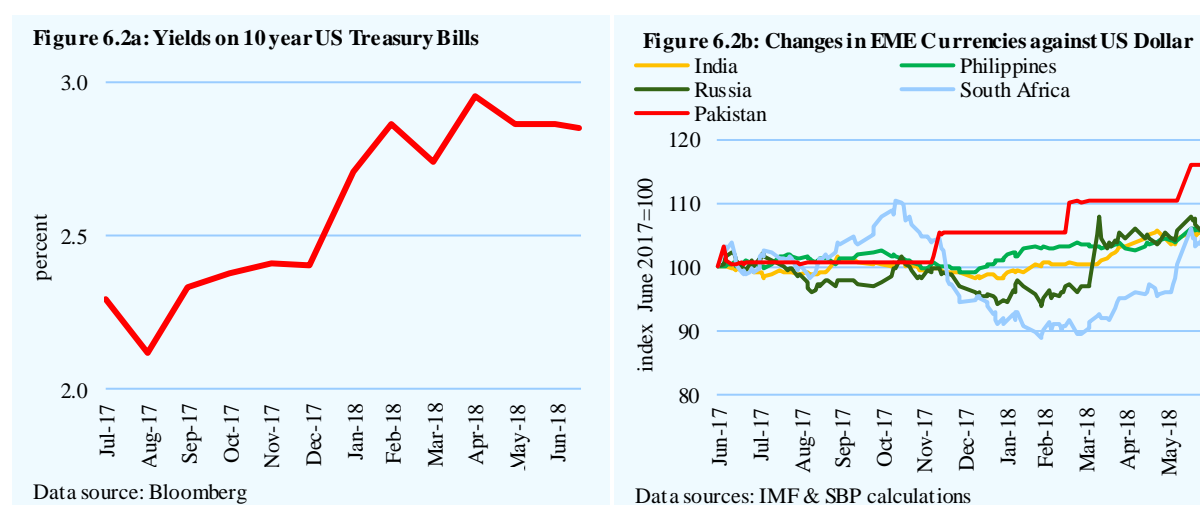
	FY17	FY18
India	-29.8	-49.5
Bangladesh	-1.3	-9.8
China	158.4	68.3
Indonesia	-13.6	-24.2
Turkey	-35.1	-57.4
Philippines	-0.8	-5.1

Data sources: Haver Analytics, Bangladesh Bank, Reserve Bank of India, Bangko Sentral NG Pilipinas

The recent growth streak in US, nonetheless, strengthened the expectation of sharp increase in domestic inflation. In response, the Federal Reserve further tightened monetary policy, raising interest

rates three times by a cumulative 75.0 basis points in FY18. The rate hikes were accompanied by asset restructuring by the Fed, where it started reducing the size of balance sheet. These twin actions led to a rising trend in 10-year US Treasury bill yields, which contributed to the increasing FX borrowing costs for EMs (**Figure 6.2a**), as their sovereign debt is widely benchmarked with this treasury rate.

Rising interest rates in the US also led to strengthening of the dollar against many EM currencies, and triggering capital outflows from some economies from Apr-Jun 2018 (**Figure 6.2b**). The consequences of this development for EM economies were adverse in terms of credit and FX liquidity risks, and debt repayment capacity (in local currency terms), as these economies often rely on external financing for BoP and budgetary support. The outflows hit the financial account balances of some EMs, and left them with no option but to finance their higher CADs by drawing down their FX reserves. This dilemma is most clearly visible in the case of Argentina, which was forced to seek a US\$ 50.0 billion bailout from the IMF in June 2018 after running high current account deficits and then witnessing sudden massive portfolio outflows from April 2018 onwards.



In this backdrop, the economies with sufficient external buffers could withstand this tide of global uncertainty. By FY17, the imbalances in Pakistan's external account had clearly become visible; but the country was able to withstand the pressure by borrowing from abroad and utilizing its FX reserves. However, in FY18, as average oil prices rose by around 30.0 percent and the pressure of CPEC-related machinery imports started falling on the interbank market, Pakistan's external sector came under severe strain.

6.2 Pakistan's BoP

In FY18, global economic changes affected Pakistan similar to other oil importing countries. But, insufficient foreign exchange inflows magnified the impact of these developments on Pakistan's economy. Oil prices, specifically, accentuated the country's external imbalance by exacerbating Pakistan's imports pressure. Had the unit value of the POL product stayed at FY17 level, Pakistan's energy import bill, excluding LNG, would have been lowered by US\$ 2.5 billion in FY18. As per customs data, rise in the oil prices contributed almost 55.8 percent to the increase in crude imports and 219.7 percent to increase in the petroleum products' import bills, as the quantum imports of latter actually declined.

The energy, together with the transport, food and metal imports pushed Pakistan's import bill to a record high in FY18, and led to a historic high current account deficit (**Table 6.2**). Exports, after three years of consecutive decline, witnessed a broad based increase in FY18 on the back of growth in the US, Euro area and in other emerging economies. This rise in export receipts was, however,

insufficient to finance the rising imports.

Besides the merchandise trade, the services trade balance also deteriorated further as its exports continued to decline while its imports kept rising. In addition, rising US dollar not only magnified the stock of debt but also that of the quantum of the interest payments, which increased by 33.5 percent in FY18.

Repatriation of higher profit by foreign firms', together with the rising interest payments, increased the primary income deficit that actually declined last year; adding further to the current account imbalance. On the contrary, the strengthening US dollar and growth in advanced economies did help the workers' remittance inflows; however, these inflows remained below record receipt of FY16. The growth of 1.4 percent in remittances in FY18 was insufficient to mitigate the persistent trade deficit.

Meanwhile, the inflows under foreign investment and loans were insufficient to finance the large current account deficit.

Similar to remittances, foreign direct investment also remained stagnant in FY18. However, the country was able to mobilize significant portfolio inflows by issuing Eurobonds and *Sukuk* in the international bond market. On the contrary, the net inflow of foreign loans remained lower than the previous year.

Both the private sector and government received lower net foreign loans, whereas the banks retired their short-term obligations during the period. Nevertheless, bilateral and commercial borrowings from China dominated official disbursements in FY18, with inflows coming mainly for the budgetary support and CPEC-related projects.

As these financial inflows proved inadequate to finance the current account deficit, SBP had to resort to utilising its foreign exchange reserves, which depleted by US\$ 6.4 billion during FY18. A number of measures undertaken by SBP, including putting restriction on the movement of the foreign currency within the country, led to significant appreciation of the exchange rate within a short span of time. Going forward, realigning of expectation would require significant build-up of reserves and credible policy actions.

6.3 Current Account

The current account deficit in FY18 reached a high of US\$ 18.1 billion compared to US\$ 12.6 billion recorded in FY17. Yet, in terms of GDP, the deficit remained much lower at 5.8 percent in FY18 compared to FY08, when CAD of 8.2 percent of GDP caused a full-blown BoP crisis (**Figure 6.3**). While merchandise imports remained the key driver, the import of services also added significantly to this widening of the current account deficit. Moreover, workers' remittances inflows remained stagnant and failed to offset the rising trade deficit.

Table 6.2: Balance of Payments

million US dollars

	FY16	FY17	FY18	Change in FY18
Current account balance	-4,867	-12,621	-18,130	-5,509
Trade balance	-19,283	-26,680	-31,074	-4,394
Exports	21,972	22,003	24,772	2,769
Imports	41,255	48,683	55,846	7,163
Energy	8,360	10,607	13,263	2,656
Non-Energy	32,895	38,076	42,583	4,507
Services balance	-3,406	-4,339	-5,311	-972
Primary income balance	-5,347	-5,048	-5,282	-234
Secondary income balance	23,169	23,446	23,537	91
Workers' remittances	19,917	19,351	19,625	274
Capital account balance	273	375	376	1
Financial account balance	-6,790	-10,198	-12,298	-2,100
FDI in Pakistan	2,305	2,749	2,770	21
FPI in Pakistan	-329	-251	2,211	2,462
Net incurrence of liab.	5,029	8,965	7,489	-1,476
Government	3,445	5,040	4,823	-217
Private (excl. banks)	1,173	2,298	1,240	-1,058
Banks	406	1,631	-122	-1,753
SBP's liquid reserves	18,143	16,145	9,789	-6,356
Current account (% of GDP)	-1.7	-4.1	-5.8	-
PKR app/dep. against USD (%)	-2.91	-0.02	-13.70	-

Data source: State Bank of Pakistan

Trade in Services¹

The services deficit worsened by 22.4 percent in FY18 and reached US\$ 5.3 billion. The services exports, weighed down by the absence of the Coalition Support Fund (CSF), fell 6.7 percent to US\$ 5.2 billion in FY18. The import growth, though decelerated, took the total services import bill to US\$ 10.5 billion (Table 6.3). The absence of CSF was only partially offset by higher receipts from telecom, transport and travel services exports (Figure 6.4).

The deficit in transport services in FY18, the largest contributor to the services deficit, rose by a small 3.7 percent as opposed to an increase of 36.7 percent observed last year. Within transport, the freight deficit grew by 12.4 percent, despite a higher jump in the country’s merchandise import bill and a significant uptick in international oil prices. In fact, increase in the freight services export kept the freight deficit exports in check. The telecom, computer & information services exports rose to US\$ 1.1 billion, up from US\$ 939.5 million in FY17. The telecom imports also increased by a quarter to US\$ 479.0 million.²

Primary income balance

In FY18, the primary income deficit increased to US\$ 5.3 billion registering a growth of 4.6 percent, after declining 5.6 percent in FY17. Increasing magnitude of outflows, which rose by 5.1 percent to US\$ 6.0 billion in FY18, dwarfed the US\$ 0.7 billion inflows under this head.

While both profit and interest payments have risen in FY18, the rise in the latter was more pronounced compared to the former (Figure 6.5). In FY18, Pakistan paid US\$ 2.7 billion in interest on foreign loans and bonds, 33.5 percent higher from FY17. Though rate of debt accumulation has increased this year, the rise in the US treasury rate and LIBOR is also driving current increase in the interest payments. Going forward, as the global interest rates are expected to rise further, the interest income payments may increase substantially.

A break up of the sector-wise profit repatriation shows that food, communication, oil and gas exploration, power, financial business, chemical, and automobile all remitted significant profits to their parent companies abroad. The

Figure 6.3: Current Account Balance

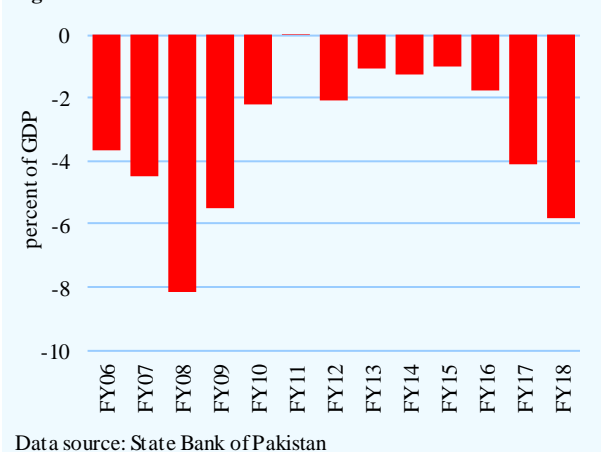
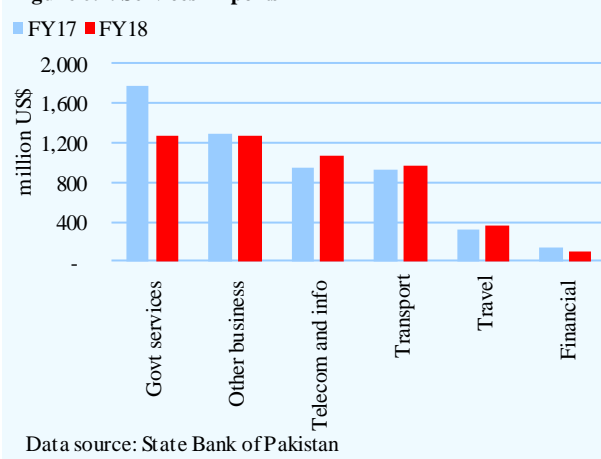


Table 6.3 Trade in Services

	Value (billion US\$)			Growth (percent)	
	FY16	FY17	FY18	FY17	FY18
Exports	5.5	5.6	5.2	1.8	-6.7
Imports	8.9	9.9	10.5	11.6	6.1
Trade Balance	-3.4	-4.3	-5.3	-27.4	-22.4

Data source: State Bank of Pakistan

Figure 6.4: Services' Exports



¹Analysis in this section is based on data compiled by State Bank of Pakistan. The data is compiled as per BPM6(EBOS-2010) classification and is aligned with MSITS-2010.

² Resultantly, net telecom sector exports rose to US\$585.6 million in FY18, from US\$ 555.4 million in FY17.

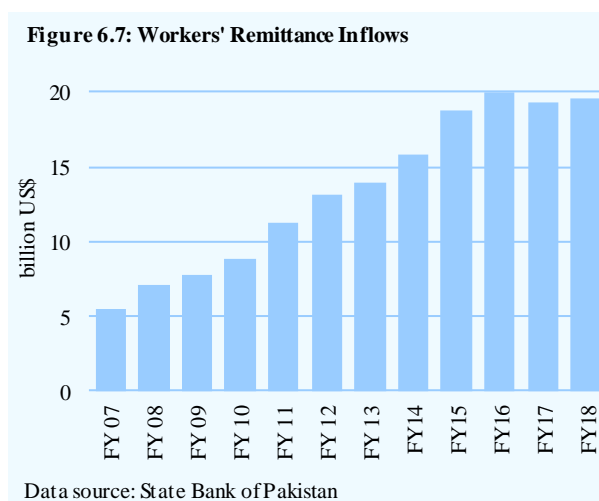
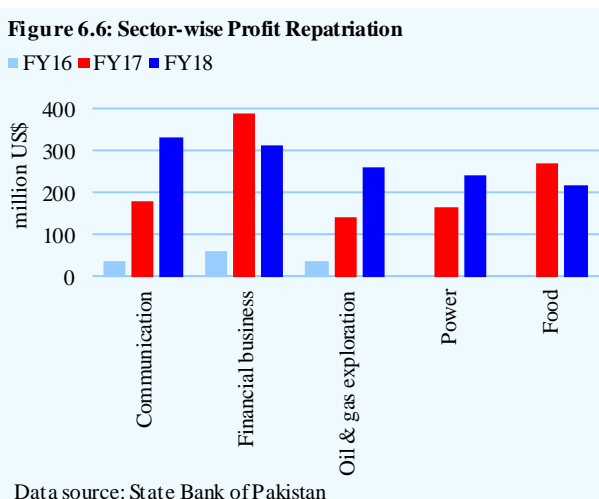
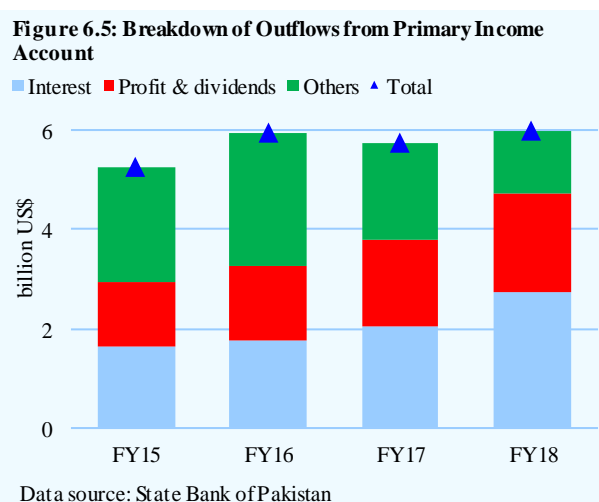
communications sector, specifically telecommunication, repatriated the highest profit of US\$ 327.8 million, whereas it had repatriated a much lower US\$ 177.8 million in FY17 (**Figure 6.6**).

Workers' remittances

Workers' remittances though increased marginally by 1.4 percent to US\$ 19.6 billion in FY18, remained short of the peak inflows of US\$ 19.9 billion recorded in FY16 (**Figure 6.7**). The marginal increase in FY18 shows that the downward trend that resulted in 2.8 percent decline in inflows in FY17, has apparently reversed. Various factors may have contributed to this.

First, the movement in oil prices played a key role. Not surprisingly, the increase in the GCC countries share in Pakistan's remittances inflows coincided with the increase in oil prices (**Figure 6.8**). Although oil prices peaked in FY14, remittance inflows from the GCC continued to increase until FY16. Only after FY16, when low oil prices resulted in fiscal imbalances in the GCC countries, did inflows from these economies decline. The GCC countries adopted various fiscal consolidation measures since then, including but not limited to, imposing value added tax (VAT) that squeezed the savings of the low-income unskilled foreign workers, and introducing job nationalization programs. These measures were more prominent in Saudi Arabia, which imposed various taxes on hiring and stay of expats and their families in KSA.³ As a result of these measures, remittances from the GCC have been declining since FY16.

Low oil prices, at the same time, also contributed to the ongoing recovery in the advanced economies, specifically the USA, UK and countries in European Union. Therefore, the remittances inflow gained momentum from these economies at a time when inflows from GCC corridors except UAE, started declining. Increase in share of the non-GCC countries in the Pakistan's remittances inflow is a good omen, as higher diversification lowers the risk of sudden drop in these inflows.



³ For details, please see Chapter 5 in SBP's Second Quarterly Report on The State of Pakistan's Economy FY18.

Second, even within GCC, the inflows from the UAE remained stable despite imposition of VAT in the emirate in tandem with KSA (Table 6.4). The UAE economy is least dependent on oil and therefore remittances from the country remained unaffected from the oil price decline. Moreover, the UAE government adopted a new anti-money laundering law in 2014. As informal inflows from UAE started entering Pakistan through formal channels, remittances from the UAE have persisted at around US\$ 4.3 billion⁴ since then.⁵

Importantly, the decline in remittances from the GCC corridor may reverse going forward as oil prices have recovered substantially in FY18. However, the job nationalization drive may pose significant hurdle for the emigration of workers to the GCC, specifically KSA. The number of Pakistanis going to the Kingdom fell by more than a half in FY18 as compared to FY17 (Table 6.5). To reverse this trend, the government's support for manpower export is required.

For example, the Bangladesh government got the ban on employment of Bangladeshi workers in KSA overturned, after prolong negotiations with the Kingdom.⁶ Similarly, the Pakistani government may ask for more quota for Pakistani workers in the KSA and other GCC countries. Qatar may be a good starting point in this context. Despite a widespread decline in the number of Pakistani workers going to most of the GCC for work, Qatar remained an exception and witnessed an increase of 67.9 percent emigration in FY18. The improvement in Pakistan's trade and diplomatic relationship with Qatar may have supported this increase.

6.4 Financial Account

The surplus in the financial account rose to US\$ 12.3 billion in FY18, from US\$ 10.2 billion in FY17, largely due to one-off official portfolio investment inflows. In FY18, Pakistan raised US\$ 2.5 billion in Eurobond and Sukuk. However, FDI inflows remained stagnant, rising by US\$ 21.0 million only. Besides, bilateral and commercial loans also declined in net terms.

⁴ For details, see Chapter 5 in SBP's Third Quarterly Report on The State of Pakistan's Economy FY18.

⁵ Anecdotal evidence suggests that there could be a third factor. A significant part of the proceeds from Pakistan's software exports are being received in personal accounts which, if true, may be causing an under reporting of software export proceeds, and at the same time, over reporting of workers' remittance. To circumvent this misreporting problem, government has incentivized reporting of software exports in Digital Pakistan Policy in 2017.

⁶ Source: World Bank, Migration and Development Brief 27, April 2017.

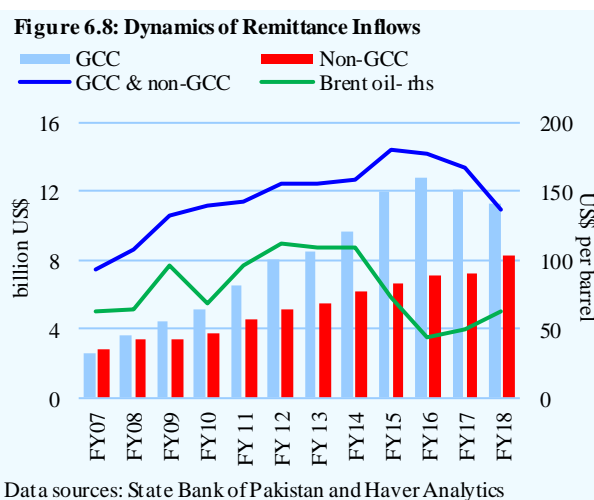


Table 6.4: Workers' Remittances by Source

	Value (million US dollar)			YoY growth (%)	
	FY16	FY17	FY18	FY17	FY18
GCC	12,756	12,123	11,351	-5.0	-6.4
KSA	5,968	5,470	4,859	-8.4	-11.2
UAE	4,365	4,328	4,333	-0.9	0.1
Kuwait	774	764	774	-1.3	1.4
Oman	819	761	657	-7.1	-13.6
Bahrain	448	396	356	-11.6	-10.3
Qatar	381	404	371	6.2	-8.2
USA	2,525	2,453	2,714	-2.8	10.6
UK	2,580	2,342	2,763	-9.2	18.0
EU	418	483	656	15.5	35.9
Others	1,638	1,951	2,140	19.1	9.7
Total	19,917	19,351	19,623	-2.8	1.4

Data source: State Bank of Pakistan

Table 6.5: Number of Pakistani Emigrants in Selected Countries

	Number (thousands)			Growth (percent)	
	FY16	FY17	FY18	FY17	FY18
Saudi Arabia	585	229	111	-60.8	-51.6
UAE	307	286	231	-7.0	-19.2
Qatar	10	11	18	1.2	67.9
Oman	49	44	33	-10.5	-24.5
Kuwait	0	1	1	125.1	-46.4

Data source: Bureau of Emigration and Overseas Employment

Net incurrence of liabilities

The net inflow of foreign liabilities into the country amounted to US\$ 7.5 billion in FY18, compared to US\$ 9.0 billion during the previous year. The decline in net inflows was seen in both government and private sectors. In fact, commercial banks retired their obligations during FY18 (**Figure 6.9**).

Net government loans amounted to US\$ 4.8 billion, slightly lower than last year. The share of short-term loans in the government's overall disbursement and amortization also rose significantly.⁷ It seems that the government continued to finance its short-term obligation by raising short-term commercial loans.

In terms of sources, the gross borrowings from China, both bilateral and commercial, dominated official disbursements in FY18, as inflows were recorded mainly for BoP support and CPEC related projects (**Table 6.6**).

Meanwhile in private loans, short-term repayments by commercial banks exceeded disbursements, leading to a net retirement of US\$ 122.0 million during FY18. However, in FY17, commercial banks were net borrowers of US\$ 1.6 billion.

Foreign direct investment

While FDI inflows to South Asia dropped in 2017, Pakistan continued to attract foreign investment, mainly from China for CPEC-related projects.⁸ During FY18, net FDI inflows to Pakistan increased, albeit marginally, to US\$ 2.8 billion from US\$ 2.7 billion last year. The power and construction sectors attracted more than half of the net FDI (**Table 6.7**). The telecommunications sector also witnessed higher inflows, due to the acquisition of telecom tower services by a Malaysian firm from a leading cellular service provider in Pakistan for US\$ 110.3 million.

China remained the top investor in Pakistan, with the bulk of its investments going into the power and construction sectors. Although China's outward direct investment has dropped for the second consecutive year since FY16, its share in Pakistan's net FDI inflows rose from around 44.1 percent in

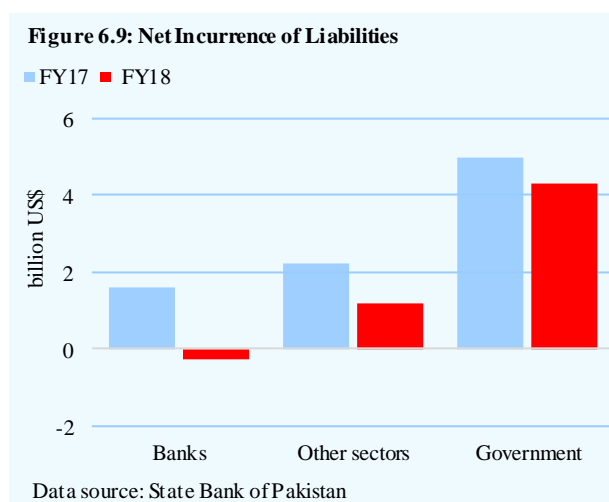


Table 6.6: Official Borrowings by Source

million US dollars*			
	FY17	FY18	Change
Total external loans	10,553	10,918	365
China	3,955	4,011	56
Bilateral	1,655	1,811	156
Commercial banks	2,300	2,200	-100
Bonds	1,000	2,500	1,500
Other commercial banks	2,270	1,516	-754
IDB (short-term)	456	987	531
ADB	1,495	871	-624
Others	1,377	1,033	-345

*Gross disbursements

Data source: Economic Affairs Division

Table 6.7: Sector-wise Inflow of Net FDI in Pakistan

million US dollars			
	FY17	FY18	Change
Power	700	885	185
Construction	466	707	241
Financial Business	296	276	-20
Oil & Gas Explorations	146	195	49
Food	526	106	-420
Telecommunications	-91	72	163
Electronics	145	51	-94
Others	558	476	-83
Total	2,747	2,778	21

Data source: SBP

⁷ The short-term gross borrowing recorded at US\$ 1.5 billion against disbursement of US\$ 1.2 billion in previous year, whereas gross amortization amount stood at US\$ 1.4 billion, against US\$ 1.4 billion in FY17.

⁸ The contraction in investment to South Asia was driven by lower FDI flows to India in 2017 (source: World Investment Report 2018, UNCTAD).

FY17 to 57.3 percent in FY18.⁹

Inflows from the US and UK remained almost unchanged in FY18 from last year. Interestingly, inflows from Hong Kong grew significantly, mainly due to a native firm's joint investment with a leading Chinese energy firm in Pakistan's power sector.

Foreign portfolio investment

Foreign portfolio investment in FY18 was dominated by public inflows, as the government mobilized US\$ 2.5 billion by issuing Eurobonds and Sukuk.¹⁰ On the contrary, foreign private investment witnessed an outflow of US\$ 240.7 million; this was almost half the level recorded last year. Foreign investors from mainly Luxembourg (US\$ 341.0), Hong Kong (US\$ 187.0), Egypt (US\$ 171.2) and the UK (US\$ 93.0) withdrew their funds from Pakistan. Meanwhile, portfolio investors from the US remained net contributors of US\$ 545.2 million during FY18.

Table 6.8: Performance of Major Asian Equity Markets
return in percent

	FY17	FY18
China	8.8	-10.8
Pakistan	23.2	-10.0
Philippines	0.6	-8.2
Malaysia	6.6	-4.1
Bangladesh	26.5	-4.4
Indonesia	16.2	-0.5
Thailand	8.9	1.3
India	14.5	14.6

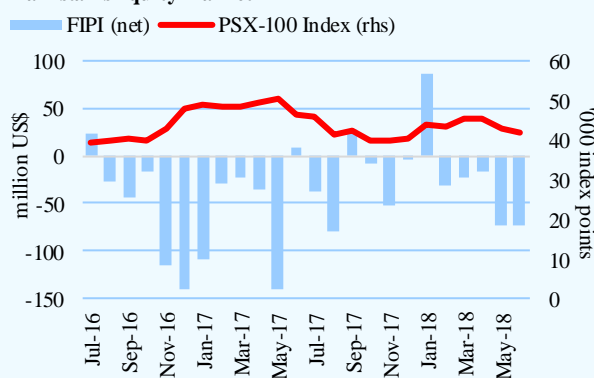
Data source: Bloomberg

The increase in the Fed's policy rate, amid healthy economic growth and higher inflation expectation in the US, and trade protectionist posture adopted by the US and China, instigated uncertainty in global portfolio flows. As a result, foreign investors relocated their funds from riskier emerging markets to US securities to bolster their portfolio yield. Most Asian equity markets, except India and Thailand, posted negative returns during FY18.

The Indian equity market remained relatively insulated from outflows as the local investors absorbed the equity sell-off by foreign investors (**Table 6.8**).

On the contrary, Pakistan's equity market witnessed net foreign selling of US\$ 288.6 million during FY18, compared to net selling of US\$ 652.1 million last year (**Figure 6.10**). Though the global financial landscape was experiencing increased uncertainty this year, the strategic alignment of portfolios by foreign investment firms kept the private equity-related outflows lower than last year.

Figure 6.10: Foreign Investors' Net Buying(+)/Selling(-) in Pakistan's Equity Market



Data source: National Clearing Company of Pakistan Ltd. & Pakistan Stock Exchange

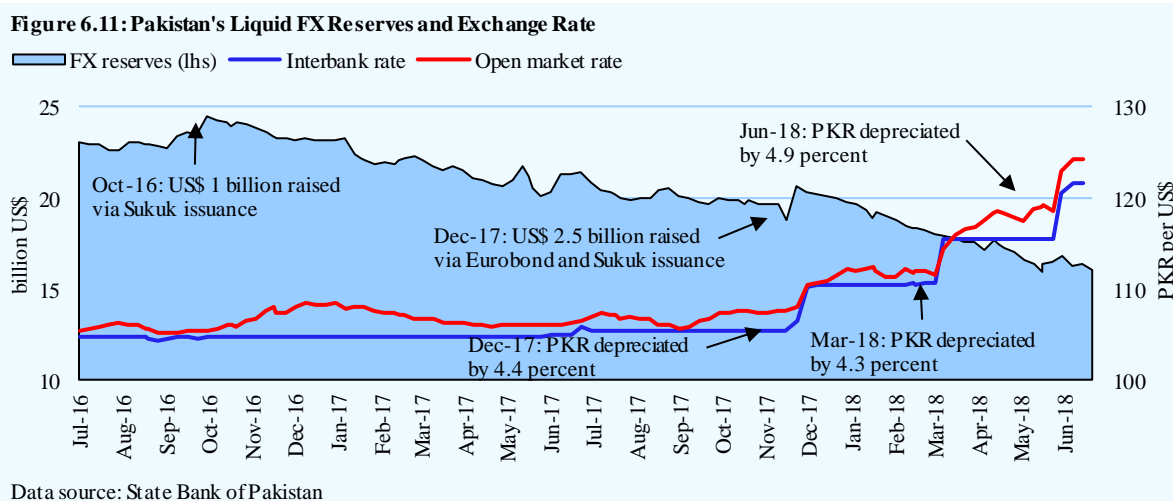
6.5 Exchange rate and reserves

Pakistan's deteriorating current account balance continued to exert pressure on the country's foreign exchange reserves in FY18. While the total liquid FX reserves dropped by US\$ 5.0 billion, Pak rupee depreciated *vis-à-vis* US dollar by 13.7 percent during FY18. The PKR-USD exchange rate adjusted in three episodes: 4.4 percent in December 2017, 4.3 percent in March 2018 and 4.9 percent in June 2018 (**Figure 6.11**).¹¹

⁹ China's total outward direct investment declined from US\$ 244 billion in FY16 to US\$ 107 billion in FY18 (source: Haver Analytics).

¹⁰ The government floated US\$ 1.5 billion worth of Eurobond and US\$ 1.0 billion of Sukuk in December 2017 at 5.625 and 6.875 percent returns respectively.

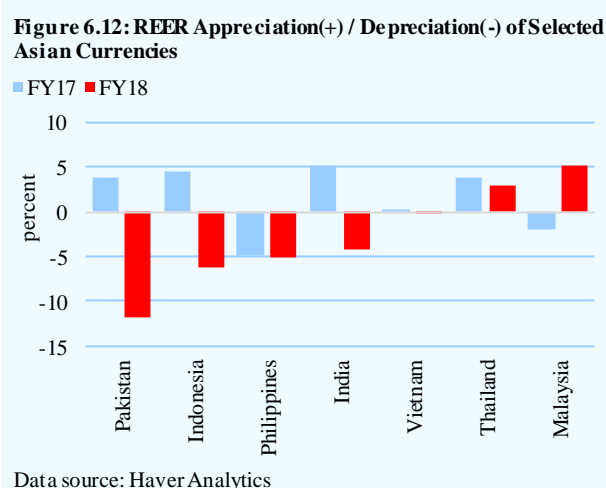
¹¹ Except one episode of July 2017, when rupee depreciated by 0.5 percent against the greenback during the month.



In fact, the country's forex reserves started to deplete after a month of completion of IMF's Extended Fund Facility arrangement in September 2016. Even the issuance of Eurobond and Sukuk in December 2017 was unable to arrest the downward trajectory in reserves, as the country's import payments outpaced FX receipts from exports, workers' remittances and FDI.

Amid global strengthening of US dollar, a persistent depletion in country's FX reserves strengthened the market's anticipation of PKR depreciation. Despite a stable exchange rate in the interbank market, the kerb market rate diverged frequently and significantly showing a mounting pressure on Pak rupee (**Figure 6.11**). Eventually, rupee depreciated but in phases which may have inculcated expectation of further depreciation.

Rupee weakness was broad based, as it also depreciated against other international currencies, such as Euro (-15.5 percent), British pound (-14.8 percent) and Japanese yen (-14.7 percent) during FY18. This led the Pak rupee REER to depreciation by 11.0 percent in FY18 – the highest among major Asian currencies. While some Asian currencies, such as Indonesian rupiah, Philippine peso and Indian rupee lost their values on the back of capital outflows, others like Malaysian ringgit and Thai baht managed to appreciate on improved growth outlook (**Figure 6.12**).¹²



Although the recent market-driven adjustment in PKR-USD exchange rate bodes well for Pakistan's export competitiveness, the persistent depletion in foreign exchange reserves poses a serious challenge for the country's balance of payment position in case of any external shock. Under the circumstances, it is important to assess the adequate level of foreign exchange reserves that the country needs to meet its payment obligations. **Box 6.1** briefly discusses the optimal level of foreign exchange reserves for developing countries, with special reference to Pakistan.

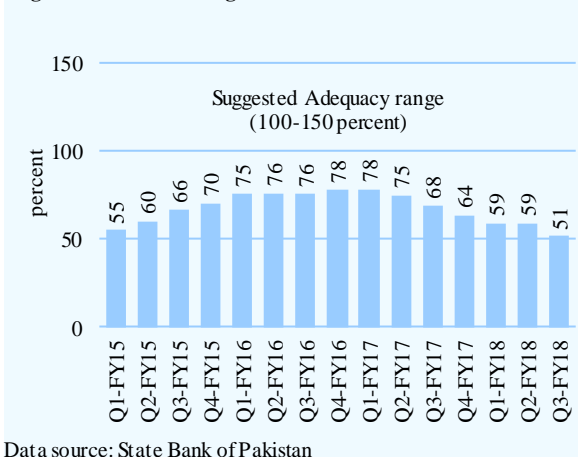
¹² During FY18, the Federal Reserve Bank raised interest rates three times: December 2017, March and June 2018, which led the US dollar to strengthen – mainly in the last quarter of FY18.

Box 6.1: Assessing Reserve Adequacy in Pakistan

While the East Asian Crisis, at the terminal of the last millennium, reinforced the importance of holding adequate level of foreign exchange reserves, there is little consensus on what constitutes this ‘adequate level’. Traditionally, level of reserves necessary to finance a certain number of months, say three months, of imports was viewed as adequate. More recently, the short-term payment obligations that in fact triggered the East Asian Crisis become an important constituent of the reserve’s adequacy benchmark in addition to the import coverage.

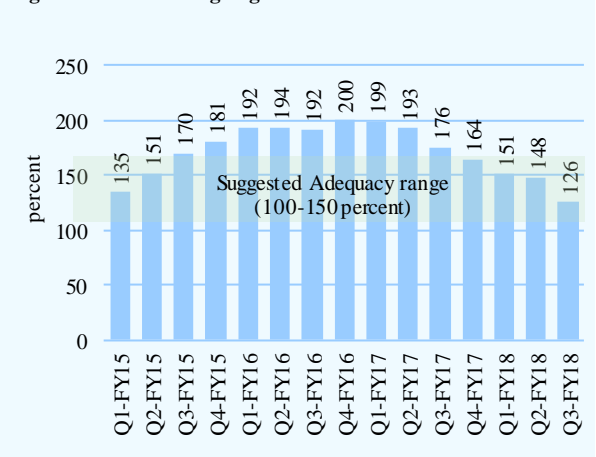
However, reserve adequacy accounting only for the import cover, say for three months, and short-term debt, say by 100 percent, are narrowly based and may often fail to provide necessary cover in case of external sector shock.

Figure 6.1.1a: Fixed Regime ARA and Pakistan's FX Reserves



Data source: State Bank of Pakistan

Figure 6.1.1b: Floating Regime ARA and Pakistan's FX Reserves



Consequently, IMF (2011), proposed an alternate approach for assessing the adequate level of FX reserves based on ARA (Assessing Reserve Adequacy) metric. Their composite model benefits from the regulatory requirement approach on the bank capital, in which potential source of risk is assigned weights to attain risk-weighted reserves. Therefore, these weights do not need to add to one.

Moreover, they have identified the four potential risky asset classes that could have a toll on foreign exchange reserves. These asset classes are, (a) potential loss of export income, (b) stock of liquid domestic asset that could be sold and transferred as a foreign asset, (c) rollover risks of short-term debt, and (d) risk of portfolio and long-term debt outflows.

Based on the historical experience of the external sector crisis, weights are assigned as per the exchange rate regime followed in a particular country (Table 6.1.1). Precisely, ARA metric for a country with fixed exchange rate regime will be calculated as follows:

$$ARA \text{ metric} = \text{short-term debt} (0.3) + \text{other liabilities} (0.2) + \text{broad money} (0.1) + \text{exports of goods and services} (0.1)$$

Table 6.1.1: Assessing Reserve Adequacy (ARA) - % weights

Exchange rate	Short-term debt	Other Liabilities	Broad money	Exports
Fixed	30	20	10	10
Floating	30	15	5	5

Data source: IMF

The IMF (2017) reported that Pakistan’s reserves were only 73.0 percent of ARA metric in Dec 2016, below a minimum adequate level of 100. Pakistan’s foreign exchange reserves were at comfortable levels until FY16. Since then, the pressure on country’s reserves magnified with growing demand for imports, slowdown in workers’ remittance inflows and lower export receipts. Consequently, the import cover dropped from over 5 months in end-June 2016 to below 3- months in end-March 2018. At the same time, reserves to ARA metric dropped from 78.0 percent in end-June 2016 to only 51.0 percent in end-March 2018.

Interestingly, calculation of ARA number is critically dependent on the assumption of exchange rate regime. IMF assumes Pakistan’s exchange rate regime as ‘fixed’ for calculation of ARA metric. However, assuming the country’s exchange rate regime as floating, the FX reserves as percent of ARA metric fell within the adequacy range in end-March 2018 (Figure 6.1.1 b).

References:

IMF (2011), Assessing Reserve Adequacy; Policy Paper, Washington D.C IMF, [imf.org/external]
 IMF (2017), Pakistan: Article IV Consultation Country Report No. 17/212, Washington D.C IMF.

6.5 Trade Account¹³

In FY18, Pakistan witnessed a record trade deficit of US\$ 37.6 billion; 15.7 percent higher from last year. The broad-based and quantum-led rebound in exports – after consecutive declines over the last three years – was overshadowed by surging imports, which almost touched the US\$ 61.0 billion mark. Adverse movement in global oil prices, coupled with strong demand for industrial raw materials - metals and allied products - was mainly responsible for the higher imports. Resultantly, the country's balance of payments came under severe strain during the year (**Section 6.2**).

Exports

After three years of successive decline, Pakistan's exports rose by 13.7 percent to US\$ 23.2 billion in FY18; nonetheless, in value terms, these were still below the level recorded in FY15. With favourable global demand dynamics in play, Pakistan finally joined the EM economies that all posted healthy export performances in the period (**Figure 6.13**).

While exports of both high and low value-added textile items dominated, those of non-traditional items like seafood, and POL also picked up. Importantly though, higher quantum played a dominant role in boosting Pakistan's exports, as unit prices of some key items, like sugar, wheat and cotton fabrics, were lower compared to last year (**Table 6.9**).

Food

Pakistan's food exports grew 29.3 percent to US\$ 4.8 billion in FY18 largely due to higher shipment of rice, wheat and sugar. While increased global demand supported rice, substantial subsidies announced by the government led to strong growth in sugar and wheat exports.

Figure 6.13: Export Performance of Emerging Market Economies

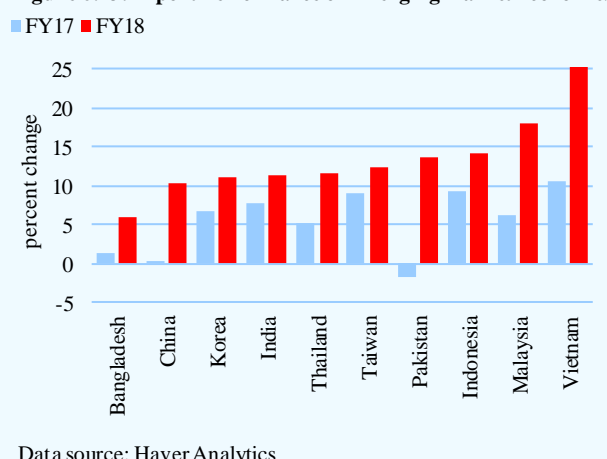


Table 6.9: Pakistan's Major Exports

	FY17	FY18	Abs. change	Quant impact	Price impact
Food group	3,711	4,798	1,087	-	-
Basmati rice	453	582	129	89	40
Non-basmati	1,153	1,454	300	182	119
Wheat	1	236	235	311	-75
Sugar	161	508	347	609	-262
Seafood	394	451	57	106	-49
Textile group	12,451	13,521	1,070	-	-
Raw cotton	44	58	15	17	-2
Cotton yarn	1,244	1,372	128	181	-53
Cotton fabrics	2,136	2,204	67	334	-267
Knitwear	2,362	2,711	350	34	315
Bedwear	2,138	2,261	123	116	7
Towels	801	797	-3	25	-28
Readymade garments	2,319	2,577	258	95	164
POL group	189	394	204	-	-
Crude oil	77	190	113	76	38
POL products	71	148	77	51	26
Other manufactures	3,097	3,399	303	-	-
Leather	346	330	-15	43	-58
Leather manufactures	491	523	32	-	-
Plastic	218	238	20	7	14
Pharma	214	195	-19	-19	0
Cement	238	223	-15	2	-17
Total exports	20,422	23,212	2,790	2,584	-121

Data source: Pakistan Bureau of Statistics

In fact, quantum sugar exports reached a record-high of 1.5 million MT, as exporters utilized a good share of the 2.0 million MT quota on which the government had announced subsidy.¹⁴ Similarly,

¹³ This section is based on customs data reported by the PBS. The information in this section does not tally with the payments record data, which is reported in **Section 6.1**. To understand the difference between these two data series, please see Annexure on data explanatory notes.

¹⁴ Despite delays in sugarcane crushing and an eventual decline in domestic sugar production, ample stocks were available in the country following record production last year (**Chapter 2**). Facing such a situation, the government allowed exports of 0.5 million MT of sugar in November 2017, at a subsidy of up to US\$ 97 per ton. Later, the export quota was enhanced to 2.0 million MT.

quantum wheat exports hit their second highest level in history, as the government allowed their exports at a heavy subsidy of US\$ 120-159 per MT;¹⁵ this, coupled with rising international prices in H2-FY18, pushed up wheat exports to US\$ 236.3 million.¹⁶

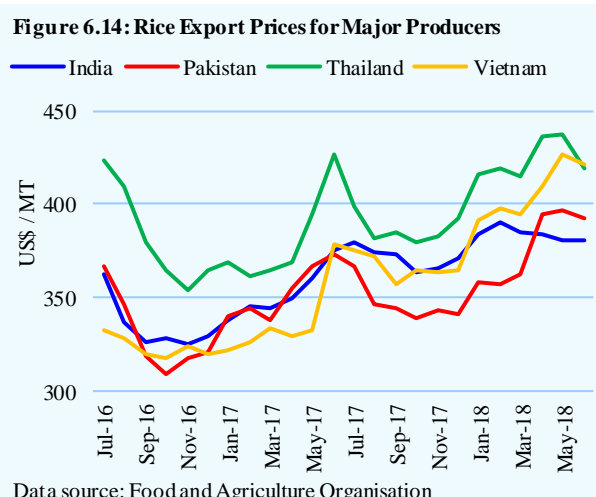
Meanwhile, rice exports, after declining for three years straight, rose by a solid 26.7 percent YoY and reached US\$ 2.0 billion in FY18, amid rising demand from key rice consuming countries in Asia and Africa.¹⁷ FX receipts from both basmati and non-basmati varieties rose by double digits, as Pakistani exporters along with competitors from India, Thailand, and Vietnam, benefitted from higher international prices as well as strong external demand (**Figure 6.14**).

In case of Pakistan's basmati exports, most of the quantum increase can be traced to higher demand from European countries like the UK, Belgium, Italy and Spain, from December 2017 onwards. Pakistani exporters boosted their presence in this lucrative market, after the EU banned basmati rice purchases from India due to its excessive application of certain pesticides.¹⁸

That said, Indian exporters were able to make up for their loss of access to the EU market (from December onwards) by entrenching their presence in some of the largest rice markets, namely Iran and Saudi Arabia. While Pakistan also exported more basmati rice to Saudi Arabia this year, its shipments to Iran declined sharply, owing to what industry channel checks suggest were banking bottlenecks. Pakistani exporters were said to face difficulty in finding local banks that were willing to transact with their Iranian counterparts. Indian exporters, on the other hand, did not face such constraints.¹⁹

Meanwhile, exports of non-basmati rice surged 15.8 percent in FY18 in quantum terms, owing to strong demand from African countries like Madagascar, Benin and Senegal. African countries are among the largest importers of broken and husk rice varieties due to rising demand of the staple. As a result, these countries played an important role in boosting rice exports of Thailand, India and Pakistan.²⁰

Apart from these countries, demand for non-basmati rice from Bangladesh and Indonesia also stayed



¹⁵ Source: Ministry of National Food Security and Research notification, dated January 3, 2018.

¹⁶ International wheat prices were, on average, 8.8 percent higher in H2-FY18 over H1-FY18 (source: Bloomberg).

¹⁷ These favorable global demand dynamics as well as higher domestic rice production also stimulated local rice processing mills to invest in their plants. Fixed investment borrowing by these mills rose 28.0 percent YoY in FY18.

¹⁸ For details regarding the imposition of the ban on Indian basmati rice imports by the EU, refer to Section 5.5, Chapter 5, of the State of Pakistan's Economy Report for Q3-FY18.

¹⁹ India has traditionally enjoyed strong trade linkages with Iran. During the previous round of sanctions on Iran, India got a waiver from the US on the condition that it will gradually reduce its oil imports from Iran. Initially, India used a Turkish bank to pay 55.0 percent of its imports from Iran in euros; the remaining 45 percent was credited into Iran's Indian Rupee (INR) account in India. When the sanctions were tightened in 2013, all of India's import payments were made in INR and credited into Iran's INR account. Iran used this account for its own import payments from India, which were mainly concentrated in food items, like rice and sugar.

²⁰ For instance, quantum rice imports by Benin have risen by 40.6 percent between 2013 and 2017. In fact, Benin was the third-largest rice importer in the world in 2017; it purchased 2.0 million MT of the staple from abroad in the year. Another African country, Mozambique, was the largest rice importer in the year (source: International Trade Centre).

elevated. In Bangladesh's case, lower domestic production in 2017 following heavy rains necessitated higher imports, whereas the impetus from Indonesia reflected the country's efforts to increase their strategic rice stock amid stable international prices.

Nevertheless, the outlook for rice exports looks a bit uncertain. Demand for rice imports in Bangladesh is expected to taper amid a recovery in domestic production. Similarly, Indonesia's rice-buying spree appears to be cooling of, as the country has stockpiled enough of the commodity to meet consumption requirements till March 2019.²¹

Textile

Pakistan's textile exports, after depicting a lacklustre performance in FY17, rebounded in FY18 by growing 8.6 percent to US\$ 13.5 billion. Almost all product categories earned higher foreign exchange than they did last year, with quantum playing a more dominant role than prices.

Higher demand from key advanced economies for finished textile and apparel products contributed to an uptick in their exports (Figure 6.15). While Pakistani exporters of high value added items met some of this demand directly, producers of low value-added items, like yarn and fabrics, supplied more of the raw materials to countries like China, Vietnam and Bangladesh, which stand higher up on the textile and apparel value chain. In the US, Pakistan joined other major apparel exporters in benefitting from robust consumer demand in the country (Figure 6.16).

While the revival in textile exports to the US is welcome, it is also worth noting that Pakistan's share in that country's textile and apparel imports has stagnated at around 0.7 percent over the past three years. In addition to concerted efforts to strike deals with bulk contractors supplying apparel to retail stores in the US, Pakistani exporters need to diversify their product profile away from cotton-centric

Figure 6.15: Retail Sale of Clothing and Accessories in US

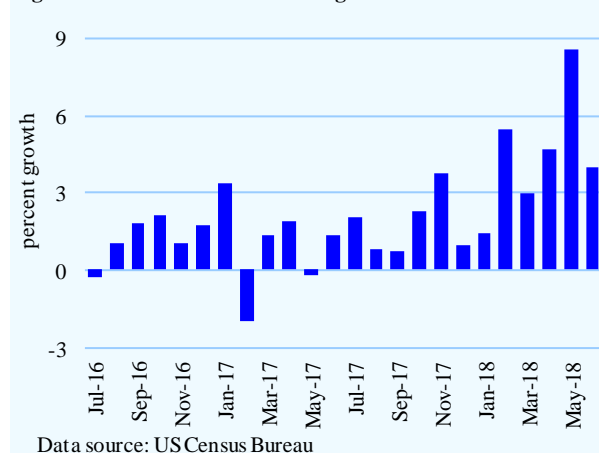


Figure 6.16: Quantum of Textile & Apparel Exports to US

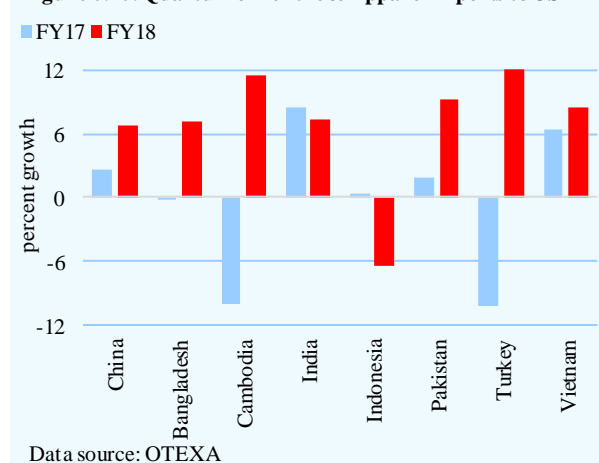
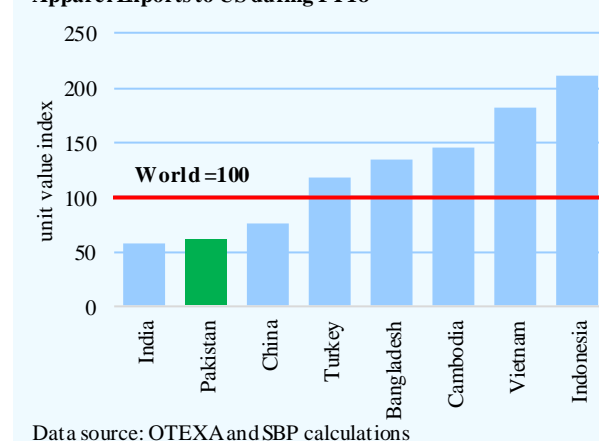


Figure 6.17: Comparison of Selected Economies' Textile and Apparel Exports to US during FY18



²¹ Source: Indonesia's Bureau of Logistics (BULOG) press release dated August 3, 2018. Pakistan exported 336,387 MT of rice to Indonesia in FY18, up 183.2 percent from last year. In value terms, rice exports to Indonesia yielded US\$ 138.8 million in foreign exchange this year, up significantly from US\$ 38.2 million earned last year.

items, towards higher concentration of man-made synthetic fibres, which are in demand in the advanced economies.²² Currently, Pakistan’s textile and apparel exports fetch much lower unit prices as compared to competitors’ (Figure 6.17), mainly due to their cotton-centric nature.

Meanwhile, in case of the EU, Pakistani exporters managed to increase their share in both the apparel and home textiles segments. At the same time, China’s gradual pullback from the segment created space for other countries, particularly those enjoying concessionary market access to the EU, like Pakistan and Bangladesh (Table 6.10a, b). As a result, Pakistan’s apparel and home textile exports to the EU continued on their rising trajectory this year as well, aided by the GSP Plus status as well as the PKR’s 13.0 percent average depreciation against the euro in FY18.

Other exports

Among other major categories, exports of seafood items hit their record high in FY18, fetching foreign exchange worth US\$ 451.0 million. While shipments of raw seafood items, like crabs, shrimp, lobsters, and clams rose significantly, those of semi-processed products, like fish filets, also witnessed an increase this year. Major markets for Pakistani seafood items included China, Korea, Thailand, Vietnam and the UAE.

Quantum cement exports, meanwhile, ended their four-year consecutive decline in FY18, rising by a 1.0 percent on YoY basis. Surplus availability of the material, in the wake of additional capacities coming online in H2-FY18 in the South region, seems to have stimulated some firms to look towards export markets through the sea, mostly to African markets.

At the same time, tightening of border controls with Afghanistan appears to have partially shifted the cement trade to formal channels. Customs data indicates that Afghanistan accounted for the highest YoY increase in Pakistan’s quantum cement exports in FY18. This, coupled with a strong rebound in shipments to African countries (particularly South Africa and Mozambique), offset the drag from lower exports to India and Sri Lanka in the year. In case of India, border tensions with the country in FY18 appear to have affected the cement trade, with dispatches declining by 3.2 percent YoY, after rising 26.3 percent in FY17.²³

Going forward, Pakistan’s cement exports to Afghanistan are expected to maintain their rising trend, as supply from Iran – a major supplier of the material to that country – may come under pressure due to re-imposition of financial sanctions by the US.

Table 6.10a: EU's Import of Clothing from Major Countries
percent

	Quantum Growth		Value Growth		Share in Quantum	
	FY17	FY18	FY17	FY18	FY17	FY18
China	1.4	-1.5	-4.9	2.8	37.9	35.7
Bangladesh	4.7	10.6	4.8	10.8	23.5	24.8
India	2.9	-0.3	-2.9	6.4	5.6	5.3
Cambodia	6.8	15.9	6.5	15.8	4.2	4.7
Pakistan	8.6	11.2	7.4	12.7	4.4	4.7
Turkey	-3.4	3.9	-5.5	12.4	8.9	8.8
Vietnam	2.9	13.3	3.4	10.9	2.8	3.1
Total	2.1	4.7	-1.1	8.8	-	-

Data source: Eurostat

Table 6.10b: EU's Import of Home Textile from Major Countries
percent

	Quantum Growth		Value Growth		Share in Quantum	
	FY17	FY18	FY17	FY18	FY17	FY18
China	6.8	7.2	1.2	8.5	39.7	39.8
Bangladesh	5.8	14.8	6.6	19.8	4.2	4.6
India	7.0	13.3	2.6	17.2	14.7	15.6
Cambodia	17.8	36.7	14.8	32.4	0.2	0.2
Pakistan	5.6	6.8	5.7	12.1	14.4	14.4
Turkey	0.6	-2.5	-1.8	6.5	9.4	8.6
Vietnam	6.0	10.6	7.2	13.1	2.8	2.9
Total	5.6	7.0	1.9	10.6	-	-

²² SBP has repeatedly highlighted this issue in its quarterly and annual publications on the State of Pakistan’s Economy, most recently through a special section titled “Synthetic Textiles is Key to Sustaining Export Growth Momentum” in the Q3-FY18 report.

²³ Source: All Pakistan Cement Manufacturers Association.

Imports

Pakistan's imports reached the unprecedented level of US\$ 60.8 billion in FY18, up 14.9 percent from last year. Rising international oil prices was the major driver, as it heavily contributed to the uptick in energy imports, and completely offset the drag from lower machinery imports in the year (Table 6.11). This is a reversal from last year, when non-oil imports - especially machinery - was driving the YoY growth in overall imports (Figure 6.18).

At the same time, it must be noted that the country still imports hundreds of consumer goods every year. These imports squeeze the amount of FX available to finance essential energy and capital goods imports. Both the government and SBP have taken regulatory measures, like hiking regulatory duty (RD) and imposing 100 percent cash margin requirement, to discourage these non-essential imports. In some cases – like shampoos and electric fans – the measures have worked, as indicated in Table 6.12. However, imports of other items, particularly cars, have continued to surge, indicating that it is difficult for measures, such as cash margins and RDs to achieve the desired results.

Energy imports

Pakistan's energy import bill shot up 32.1 percent to US\$ 14.4 billion in FY18, mainly due to a substantial increase in international oil prices. In fact, the higher prices not only led to a ballooning of the crude import bill, but also offset the impact of a YoY decline in quantum POL product imports. Besides, due to higher oil prices, the energy group emerged as the leading category, with 23.7 percent share, in Pakistan's total imports in FY18.

Importantly, quantum crude oil imports rose by a solid 29.2 percent in FY18, against the previous five years' growth of 5.6 percent. The increase mainly reflected higher demand from a local refinery, which underwent a capacity expansion in FY18. These higher quantum imports, coupled with rising international oil prices, pushed up crude imports by 66.0 percent to US\$ 4.2 billion in value terms.

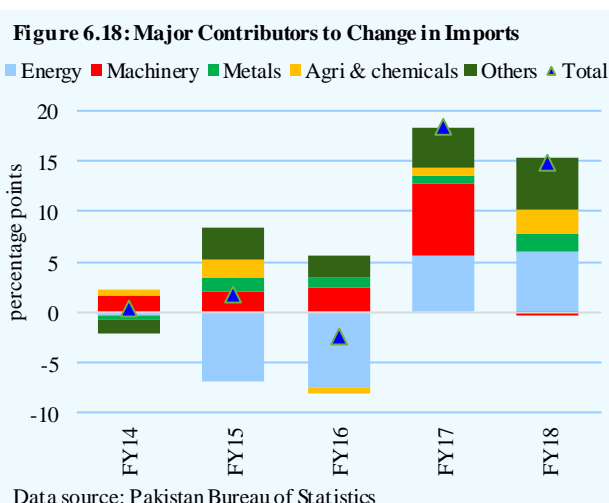


Table 6.11: Pakistan's Major Imports

	FY17	FY18	Abs. change	Quantum impact	Price impact
Energy group	10,923	14,430	3,507		
POL prod.	6,838	7,476	638	-764	1,402
Crude	2,547	4,229	1,682	744	938
LNG	1,313	2,454	1,141	799	342
Machinery group	11,755	11,562	-193		
Power gen	3,034	2,663	-371		
Electrical	2,322	2,184	-137		
Telecom	1,352	1,532	181		
Mobiles	710	764	56		
Other mach.	3,355	3,670	315		
Transport group	3,327	4,388	1,061		
Cars	1,091	1,264	173		
Trucks & buses	569	640	71		
Aircraft & ships	525	1,142	617		
Food group	6,143	6,184	41		
Tea	524	552	28	-35	63
Palm oil	1,905	2,040	135	173	-38
Pulses	952	535	-418	-340	-78
Textile group	3,358	3,664	306		
Raw cotton	810	1,078	268	148	120
Synthetic yarn	635	664	29	8	21
Agri and chemicals	7,583	8,918	1,335		
Fertilizer	641	833	192	168	24
Plastic material	1,919	2,347	428	408	20
Other chemicals	3,889	4,492	603		
Metals group	4,412	5,357	945		
Iron & steel scrap	1,121	1,584	463	273	190
Iron & steel	2,121	2,440	319	246	74
Total imports	52,910	60,795	7,885	2,234	2,941

Data source: Pakistan Bureau of Statistics

In FY18, quantum POL product imports declined by 11.9 percent, according to data from the Oil Companies Advisory Committee (OCAC); this mainly reflected a hefty 33.1 percent drop in furnace oil (FO) imports (**Table 6.13**). Besides an increase in local production, the government's policy decision to shift the power generation mix away from FO to LNG and coal also played role in lowering furnace oil imports.²⁴

Specifically, three LNG-based power projects, worth a cumulative installed capacity of 3,561 MW, which started contributing to the national grid in FY18. In addition, two coal-fired projects with installed capacity of 2,563 MW also commenced operations during the year.²⁵ Consequently, the share of gas and coal in power generation increased to 35 and 10 percent respectively in FY18, from 10 percent and an almost negligible amount in FY14. As expected, the completion of these projects boosted demand for both these fuels: quantum LNG imports rose 60.9 percent during FY18,²⁶ whereas quantum of coal purchases from abroad more than doubled in the same period.²⁷

Besides furnace oil, quantum petrol imports also slowdown this year. Similar to FO, local production of the fuel rose by 18.7 percent in FY18, which diluted the demand for imported fuel. Moreover, the government's decision to pass on the increase in international oil prices to domestic retail prices, led to muted growth in fuel sales, which further dampened demand for its imports (**Figure 6.19**).

Machinery

Pakistan's machinery imports declined 1.6 percent YoY to US\$ 11.6 billion in FY18. The decline was concentrated in power generation and electrical machinery, reflecting tapering demand as early harvest CPEC power projects progress towards completion. Major machinery items whose imports declined during the year included gas and steam turbines (and their parts), semiconductors and diodes, etc.

Meanwhile, as the number of cell phone subscribers continued to increase in the country, telecom sector imports – comprising cell phones as well as associated network equipment, such as voice and

Table 6.12: Import of Selected Consumer Goods
million US dollars

	FY16	FY17	FY18
Food items			
Cocoa & cocoa items	33.2	33.9	37.0
Pasta/bread/ cakes/ biscuits	13.8	15.0	18.9
Butter and cheese	12.1	15.8	16.7
Fish and seafood	15.3	20.4	15.7
Fresh apples and pears	33.0	36.0	32.8
Tea and coffee	517.1	528.4	556.9
Fruit juices	13.4	16.7	11.9
Electronics items			
Laptops, PCs and accessories	212.7	402.2	379.0
LCD TVs	62.8	74.9	81.6
Cellular phones	753.7	709.7	761.7
Earphones and loudspeakers	15.6	22.7	26.6
Air-conditioners (inc. parts)	132.1	194.4	184.6
Refrigerators / freezers (inc. parts)	81.5	98.4	112.2
Electric fans	18.5	36.0	14.5
Bulbs and lamps	109.6	97.0	121.8
SIM cards	16.6	13.2	15.7
Personal care items			
Perfumes and colognes	8.1	6.3	6.3
Make-up items and prep	23.3	27.5	30.0
Hair preparations (inc. shampoos)	43.3	46.6	29.6
After-shave, deodorants, bath salts	11.3	11.7	12.4
Soap and washing detergents	34.5	32.2	27.2
Total	2,161.5	2,439.0	2,382.9

Data source: Pakistan Bureau of Statistics

Table 6.13: Pakistan's Quantum Energy Imports

	Quantity (mil. tonnes)			Growth (%)	
	FY16	FY17	FY18	FY17	FY18
High speed diesel	3.1	3.9	3.8	26.2	-1.1
Furnace oil	6.0	6.6	4.4	10.4	-33.1
Petrol	4.2	4.9	5.1	16.5	4.9
Other	0.1	0.1	0.3	0.2	118.2
Total products*	13.4	15.5	13.7	15.9	-11.9
Crude oil*	8.5	8.7	10.5	2.5	20.1
LNG **	1.2	3.7	5.9	195.9	60.9

*Data sources: Oil Companies Advisory Council

** Pakistan Bureau of Statistics

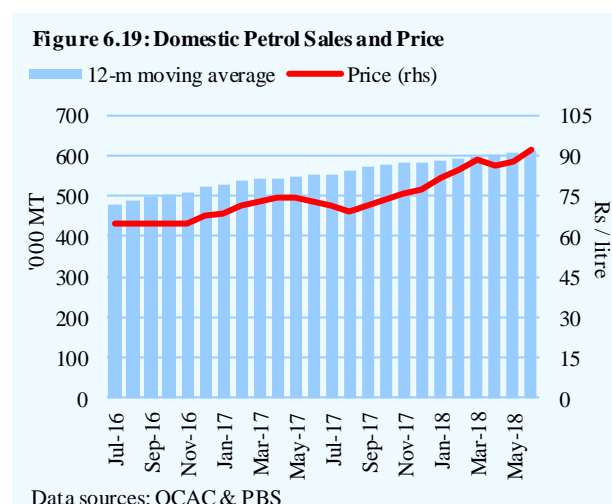
²⁴ Domestic furnace oil production grew 8.2 percent on YoY basis in FY18.

²⁵ Source: Economic Survey of Pakistan 2017-18.

²⁶ Over 60 percent of the imported LNG is consumed by the power sector (source: Economic Survey of Pakistan 2017-18).

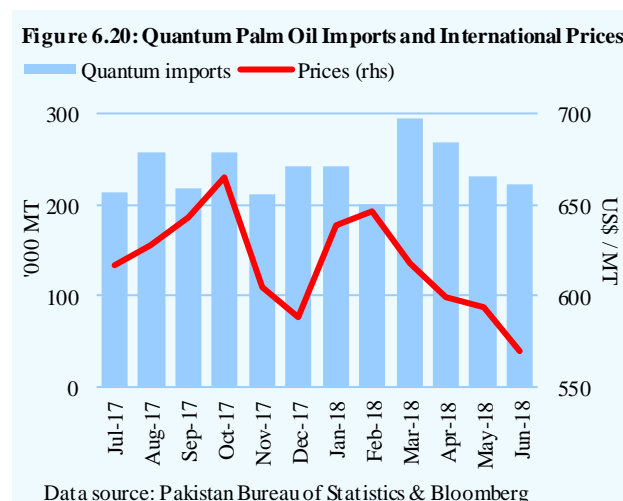
²⁷ The surge in coal imports is also a result of an 11.1 percent uptick in domestic cement production in the year. Coal is used as a raw material in cement manufacturing.

image transmitting and routing machines, etc – grew by a strong 13.4 percent.²⁸ Despite attracting customs duty and 100 percent cash margins, cellular phone imports surged 7.7 percent to US\$ 764.2 million in FY18. It must be noted that instead of imposing *ad volarem* customs duty on imported cell phone, the government imposed a flat Rs 250 duty on each mobile set, regardless of its price. As a result, even though the number of mobile phones imported declined by 28.7 percent during FY18, the value of the imported sets increased. One possible reason could be that consumers are increasingly opting for feature-rich smartphones, which cost more than simple mobile phones, and that a nominal Rs 250 increase in their prices did not affect their purchase preferences.²⁹



Food

Food imports stayed virtually stagnant at US\$ 6.2 billion in FY18, as an uptick in palm and soybean oil imports was offset by a decline in pulses purchases. With regards to palm and soybean oil, their import values remained high in H1-FY18, reflecting the trend in international prices at the time. However, international palm oil prices had peaked in September 2017, and closed June 2018 down 8.8 percent from their peak. This favorable trend in global prices, along with uncertainty surrounding the Pak rupee, encouraged domestic edible oil manufacturers to stockpile the raw material. As a result, quantum imports of palm oil rose 5.0 percent in H2-FY18, whereas its import value declined 5.6 percent during the period (**Figure 6.20**).



At the same time, due to rising competition in the edible oil industry as well as increasing consumer awareness about healthy eating, oil mills have turned their attention to soybean, canola and sunflower oil extracts and seeds.³⁰ Quantum soybean oil imports, though much lower than those of palm oil, grew by 70.3 percent in FY18 on YoY basis.

Meanwhile, quantum pulses imports normalized to 0.8 million MT, after crossing the 1.2 million MT-mark in each of the past two years. Ample domestic availability of carryover stock (amid virtually unchanged domestic production) not only lowered the demand for imports, but also translated into double-digit decline in average local prices of the staple.

²⁸ The total number of cell phone subscribers rose from 139.8 million at end-June 2017 to 150.2 million by end-June 2018 – depicting an increase of 7.5 percent (source: Pakistan Telecommunication Authority).

²⁹ Another reason could be that higher proportion of low-value cell phones are now coming into the country through informal channels, including through *khepias*.

³⁰ The number of edible oil mills (producing cooking oil, vegetable ghee and Vanaspati, etc) registered with the Securities and Exchange Commission of Pakistan increased from 458 by end-June 2017 to 473 by end-June 2018.

Transport

Pakistan's transport imports grew 31.9 percent to US\$ 4.4 billion in FY18. Almost half of the YoY increase came from the aircraft, ships and boat imports (**Table 6.14**). The higher ship imports reflected an uptick in demand for scraps from the steel industry, given the 22.2 percent YoY growth in domestic steel production in FY18. Old ships were imported for breaking at the Gadani ship-breaking yard to yield scrap for the steel industry. The country imported ships and vessels worth US\$ 706.1 million – a 78.6 percent increase over last year, mainly from Singapore, South Korea and the UAE.

Besides ships, aircraft imports (both parts and complete airplanes) also rose significantly and reached US\$ 147.5 million in the year.

Multiple private sector entities obtained

Regular Public Transport (RPT) license to enter Pakistan's aviation sector. One of the conditions for obtaining this license is possession of a minimum three aircrafts (for passenger travel, either on lease or ownership basis).³¹ At least one new airline commenced operations in the country in FY18, and others are expected to join the sector going forward.

Meanwhile, cars were the second-highest contributor to the increase in transport imports in FY18. Continually rising demand from consumers and ride-hailing services for fuel-efficient cars in the 600-1,000cc range, fuelled imports of both CBUs and CKDs. Launch of a new variant of a 1,000cc locally assembled car also contributed to uptick in CKD imports.

Interestingly, the government tried to limit CBU imports in October 2017 by tightening loopholes in the customs duty framework. Specifically, it required Pakistani nationals sending used cars of all engine capacities through the baggage and other schemes, or those receiving the vehicles, to essentially pay customs duty on their imports in foreign exchange.³² The senders of the vehicles had to provide banking documents proving that they had remitted the required amount of CD into either their or a family member's bank account in Pakistan, and that this FX had been converted into PKR and the equivalent customs duty paid. The requirement to provide paper trail would have curbed the use of illegal money transfers (i.e. hundi/hawala) to pay for these car imports, and therefore limited the amount of FX going out of the country through informal mode. And the measure seems to have worked: **Figure 6.21** shows that there was a sharp slowdown in the import of CBUs from October 2017 to February 2018. However, in February 2018, the Economic Coordination Committee reversed the decision, leading to a rebound in CBU imports.

Metals

Imports of the metals group grew by 21.4 percent to US\$ 5.4 billion in FY18, mainly due to higher imports of both finished iron and steel products and scraps. Ideally for a developing economy like Pakistan, higher scrap imports – as opposed to finished products' imports – suggests the presence of a

Table 6.14: Breakdown of Transport Imports

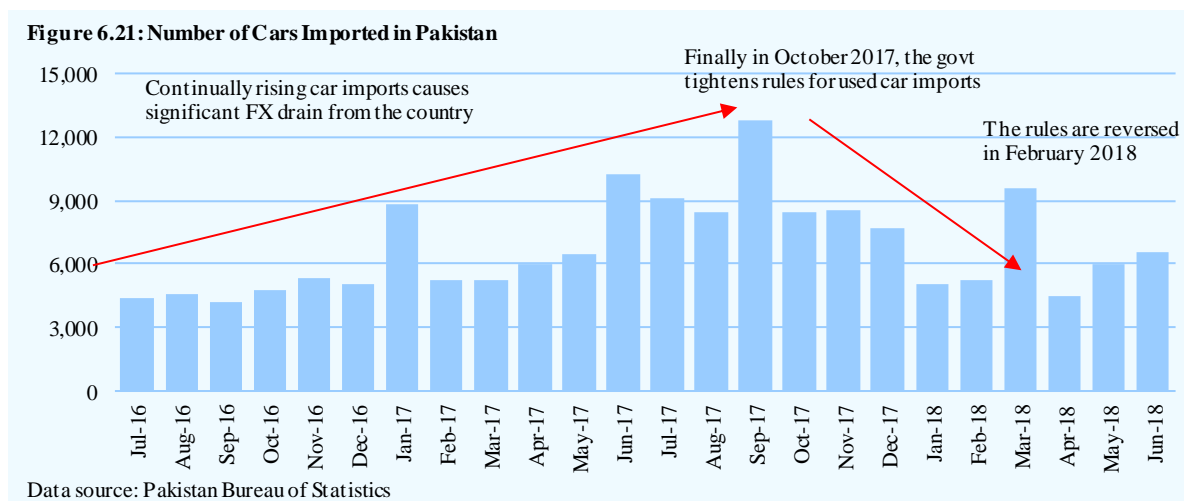
million US dollars	FY17	FY18	Abs. change
Aircrafts, ships and boats	525	1,146	621
Tankers		276	276
Aircraft (complete)	8	87	78
Aircraft (parts)	51	61	10
Ships for shipbreaking	395	706	311
Cars	1,091	1,264	173
CBU	432	455	24
CKD	660	809	149
Parts	500	604	104
Buses & trucks	569	640	71
CBU	316	242	-74
CKD	252	398	146
Other transport equipment	287	350	62
Motorcycles	96	112	16
Others	259	277	18
Transport group	3,327	4,388	1,061

Data source: Pakistan Bureau of Statistics

³¹ Source: Civil Aviation Authority (<https://www.caapakistan.com.pk/AT/AT-LC-RPT.aspx>).

³² Before October 2017, this rule only applied to the import of *new* vehicles of 1,800cc and above, and on 4x4 vehicles. The government amended this rule via SRO No. 1067(I)/2017 in October 2017, by stipulating that this rule was now applicable on "all vehicles in new/used condition". However, in February 2018, the government, via SRO 261(I)/2018, reversed the changes introduced in October 2017.

robust steel industry that is able to meet other domestic sectors' demand for this critical industrial raw material. In FY18, Pakistan's quantum scrap imports grew 24.4 percent and reached their highest level in history.³³ This corresponded with a 22.2 percent growth in domestic steel production, which was much higher than last year's comparable growth of 21.3 percent.



Yet, at the same time, the quality of locally manufactured steel products continues to be a concern for some industries that use these items as raw material. This is particularly true for the auto industry.³⁴ As newer and relatively more sophisticated cars are now being assembled in the country, automakers' demand for higher quality steel products has also increased – and this demand continues to be mostly met through imports. In FY18, imports of such items (like printed and varnished steel sheets) rose significantly over last year.³⁵

³³ In fact, Pakistan became the 28th largest steel producer in the world in 2017, up from 36th position just a year earlier (source: World Steel Association).

³⁴ Almost 60 percent of car bodies made worldwide comprise advanced high strength steel (source: World Steel Association).

³⁵ These particular type of steel sheets were the 7th highest contributor to the YoY increase in import payments for the metal group in FY18.

7 Digitization of Services in Pakistan:

Will the Emerging Trends Pave the Way for a Technology Revolution?¹

7.1 Introduction

The services sector can play a vital role in the development of an economy. Apart from its direct contribution to GDP, numerous services are inputs for other economic activities, and thus have potential indirect benefits; for instance, finance, telecommunications, and transport all tend to facilitate the commodity-producing sectors. Similarly, well-developed health and education services contribute to enhanced labor productivity and govern the overall social development of an economy.

Globally, the services sector has been witnessing a shift towards digitization. Growing internet penetration is revolutionizing the way consumers and businesses gain and share information, execute transactions, and manage their day-to-day operations. Improved digital connectivity is reshaping consumer behavior, which is increasingly tilted in favor of convenience, cost savings, and customized retail experiences. Businesses are also capitalizing on opportunities emerging from digitization, such as supply chain efficiency, lower transaction costs, and enhanced flexibility in addressing consumer needs. A spillover impact of such services has also been observed on the productivity of the commodity-producing sectors, through processes such as automation and data handling.

In Pakistan's case as well, the services sector has gathered much prominence of late, as domestic commerce has thrived and telecommunications and finance sectors have grown steadily.² The overall share of the sector in the country's real GDP reached 60 percent at end FY18, and around 56 percent in nominal GDP; the latter is higher than the South Asian average (**Figure 7.1**). While export orientation of the sector remains lower compared to commodity producing sectors, its contribution to employment – and better employment opportunities – is significant.^{3,4}

Figure 7.1: Share of Services by Type of Economy (2017)



Moreover, Pakistan is also among the economies where digitization is triggering changes in some components of the services sector. The shift is most prominent in domains like e-commerce, fintech, and e-government, where new ventures and approaches to deliver services are picking up. Specifically, the market size of e-commerce has grown significantly in Pakistan over the last few years, transforming the way consumers interact with – and especially pay – businesses. At the same time, fintech players are tackling broad imperfections

¹ This chapter draws heavily from our discussions with Pakistan Software Export Board; Pakistan Software Houses Association; Ignite (formerly National ICT R&D Fund); Planning Commission; National Incubation Centre, Islamabad; The Nest (I/O); Invest2Innovate; Daraz.pk; Karandaaz; and ePlanet. In addition, surveys conducted by Social Innovation Lab and Invest2Innovate were also useful in developing insights about the sector. Finally, we are also thankful to Payment Systems Department of SBP for providing regulatory insights about the sector.

² Over the last five years, the services sector has contributed 70 percent on average to the country's GDP growth.

³ Employment in services accounted for approximately 34 percent of total employment in Pakistan as of 2017, according to an estimate cited by the World Bank.

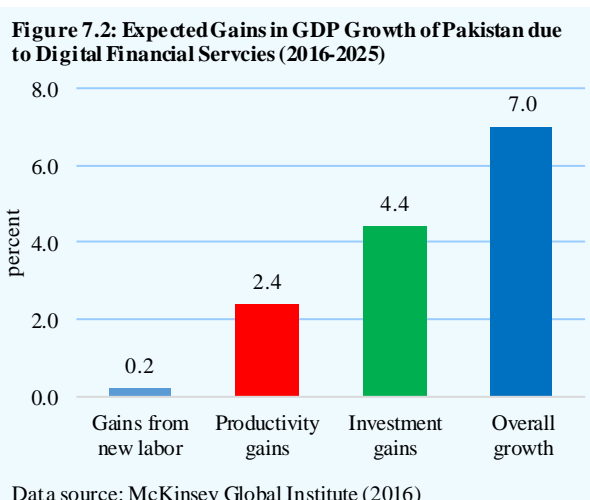
⁴ The average monthly income in the services sector is 129.1 percent higher than the overall national average. For males, the income is 54.6 percent higher, while for the women it is around nine times the national average. Data source: Household Integrated Economic Survey of Pakistan 2015-16.

in the credit market by devising innovative solutions, which are increasingly being embraced by the mainstream financial sector. Finally, at the government level, new possibilities to deliver services to citizens more efficiently are being explored by harnessing the power of technology, with e-government initiatives promising more convenience for the masses while simultaneously cutting the costs and leakages incurred by implementing authorities.

This chapter expands on the aforementioned developments. To set the context, it begins by identifying the broad channels through which the digitization of services is impacting the macroeconomy. For background, it also touches upon the key enablers of digitization in Pakistan, such as the role played by New Generation (3G/4G) Mobile Services. Subsequently, the emerging trends in e-commerce, fintech and e-government in the country are analyzed at length. In terms of the big picture, the future model of global economic growth is discussed in light of the fourth industrial revolution, and what Pakistan will have to do to keep up with the curve. Finally, the chapter concludes by recapping some relevant policy measures, as well as the future outlook for digitization.

7.2 Impact on Pakistan's Macroeconomy

The ongoing digitization in provision of services may be growth-enhancing from a macroeconomic perspective.⁵ This notion is supported by some gains that have already been made, as well as estimates of future potential. According to a McKinsey Global Institute (MGI) report, Pakistan can experience an increase in its GDP by a cumulative 7 percentage points (roughly US\$ 36 billion) and create around 4 million new jobs during 2016-2025 via an increase in the use of digital financial services (DFS) alone (Figure 7.2).⁶



Firstly, the impact of DFS through increased *investment* may occur via (a) increased credit to SMEs and households, and (b) a shift in savings from informal vehicles to formal digital accounts. Bearing in mind that bank lending to SMEs in the country is particularly low at present, the investment channel may represent the biggest untapped opportunity from which DFS gains can be realized in the next couple of years.⁷ At the moment, the *penetration and access to financial services* is showing some improvement, as digital technologies are being deployed for opening mobile accounts; carrying out funds transfers; introducing electronic payment systems; etc. In future, this may accelerate the shift in savings to digital accounts, and have further implications for policy goals like financial inclusion.

Secondly, even beyond the domain of DFS, the IT and data handling firms are already generating *productivity* gains across numerous sectors, by streamlining business processes and making them more efficient. The use of technology in the fields of commerce, finance, transport and communications is facilitating *cost effectiveness*, by providing convenient alternatives to consumers and producers. Similarly, in the retail business, growing broadband penetration is providing businesses new and cheaper ways of reaching out to customers and competing for market share.

⁵ Like most other economies across the world, national accounts of Pakistan partly cover the value addition of computer-related activities (CRA) in the services sector. However, the activities of the 'digital economy' as a whole (the process by which digitization enhances the value addition of all sectors of the economy) is not adequately covered.

⁶ Source: McKinsey Global Institute, 2016, 'Digital Finance for All: Powering Inclusive Growth in Emerging Economies' [mckinsey.com]

⁷ The savings rate for Pakistan was 11.4 percent for FY18. Meanwhile, the SME share in private sector credit was 8 percent, as of end-2017.

Thirdly, the impact on *employment generation and entrepreneurship* is quite evident. As the overall digital connectivity has improved, new services and industries have emerged and along with it, self-employment opportunities and entrepreneurial space for startups (**Box 7.1**).⁸ Commerce, transport and information sectors have benefited the most. The surge of mobile money has created a network of agents providing direct and indirect livelihood to thousands of people. Finally, in the domestic ICT sector, the presence of domestic freelancers and outsourcing firms is also growing.

Box 7.1: The Evolving Domestic Startup Ecosystem

Domestic startup activity in Pakistan is on the rise, attributed in part to a maturing support system. At present, around 52 'self-proclaimed' incubation and acceleration programs exist in the country⁹, from which 7-15 startups are graduating every year (**Table 7.1.1**).¹⁰ Thus, a conservative estimate would put the number of startups that came out in 2017 alone at around 500. In addition to incubators and accelerators, the startup ecosystem has been strengthened further by co-working spaces;¹¹ fellowship programs; growing scale of angel investment;¹² and the launch of local chapters of global initiatives like Startup Weekend, Startup Grind, Lean Startup Machine, and Startup Cup. Furthermore, Google Developer Group and Google Business Group meetings are now being held regularly in the country, and the launch of local chapters of the Organization of Pakistani Entrepreneurs (OPEN) and The Indus Entrepreneurs (TiE) has also added vibrancy to domestic startup activity.

Table 7.1.1: Noteworthy Accelerators and Incubators in Pakistan*

	Nature	Major Supporter	Portfolio firm(s)**
Plan X	Accelerator	Punjab IT Board (PITB)	Mangobaaz; BeautyHooked
Invest2Innovate	Accelerator	Dotzero; Pasha Fund for Social Innovation	Popinjay; DoctHers
10Xc	Accelerator	PlanetN	Labelcloud; Fix My Phone
The Nest I/O	Incubator	Google for Entrepreneurs, Samsung	Mandi Express; ConnectHear
NIC Lahore (formerly LCE)	Incubator	LUMS; Ignite; MOITT	InteraCta; AutoGenie.pk
Plan 9	Incubator	PITB	Patari; Bookme
Social Innovation Lab	Incubator	LUMS	FindMyAdventure; Tahafuz
Nspire	Incubator	Netsol	shopdesk; esurge
DotZero Ventures	Incubator	Foundation for Information Technology	dealtoday.pk; PerkUp
Founder Institute	Incubator		Approkers; Verifapp
Arpatech Hatchery	Incubator		EatOye; Sheops

* In some instances, the entities serve as both incubators and accelerators

** Only one or two associated startups are mentioned. At times, a startup may be associated with multiple incubators/accelerators

As majority of startups fail within the first 3 to 5 years of launch, risk is considerably high and investors can lose all of their money, unless some value can be salvaged from disposal of assets. That said, the startups that do survive and successfully scale up can give an extraordinary return on investment. This extremely high risk-reward proposition means that investment in startups is typically unfeasible for conventional lenders like commercial banks. Thus, globally, mature startup ecosystems tend to be funded by venture capital (VC) and private equity funds, as well as angel investment.

In terms of impact, domestic technology startups often hire from the local workforce and have significant operations based in the country. However, in many instances, the entities are formally registered outside Pakistan, e.g., UAE and US. Thus, even when the startup gets some traction, its Pakistani origins may not be prominently highlighted. One of the major reasons for this pattern is the fact that ICT startups typically require considerable venture capital as well as adequate patent protection, which despite some improvement lately, are challenging to acquire in Pakistan.¹³

⁸ A caveat is that the disruption that tends to accompany digitization can lead to the simultaneous creation of some jobs, while making other jobs redundant. Thus, the net impact on job creation in the long run is hard to quantify at this early stage.

⁹ Source: Social Innovation Lab, (2018): "Beyond the buzz: A Deep Dive into Pakistan's Startup Ecosystem". The report defines incubators as follows: 'Business incubators provide early or idea-stage startups with basic facilities such as office space, equipment, access to networks, mentorship, and possibly seed funding, that these startups require to develop their businesses.' Meanwhile, accelerators are 'the logical successors of incubators. They induct startups with proven business models and help them scale up their operations, primarily by helping them raise investments'.

¹⁰ That said, 'graduating' from an incubator or accelerator does not ensure that the startup remains a going concern.

¹¹ A startup ecosystem is 'formed by people, startups in their various stages and various types of organizations in a location (physical and/or virtual), interacting as a system to create new startup companies'. Source: Startup Commons

¹² Angel investment generally consists of investment of money and time by high net worth individuals in early stage startups.

¹³ Computer software is excluded from patentability in Pakistan, according to the Intellectual Property Organization (IPO) of Pakistan. Specifically, inventions that are of an intellectual, abstract or aesthetic character (including computer software, discoveries, artistic works, and methods for doing business) are excluded from Patentability under section 7 of the Patents

For Pakistani startups, it is easier to raise VC funding in developed markets than it is back home. This is primarily because venture capitalists tend to be more comfortable about their investment when the startup is incorporated in the developed economy. On this note, SECP has introduced regulations to streamline venture capital and private equity funding in Pakistan.¹⁴ As per SECP, there were two private equity funds and two private equity companies registered with the commission at end-May 2018, with total assets of around Rs 5 billion and Rs 170 million respectively. Going forward, sustained efforts to improve the regulatory framework and ease of doing business, better security situation, and macroeconomic stability could inspire further confidence in investors and see Pakistan's venture capital activity gather pace.

As a result of all these developments, investment in startups is gradually picking up in Pakistan. While the amount of funding received is undisclosed for a number of deals, the disclosed investment in 2015 alone was US\$ 155.4 million.¹⁵ Even if some of the larger deals in 2015 and 2016 are excluded (as outliers or one-off occurrences), these two years were quite promising, both in terms of the reported amount invested in startups, as well as the number of deals made with investors. Encouragingly, the amount of startup investment reported in 2017 was surpassed in just the first six months of the ongoing calendar year (i.e. H1-2018), indicating that a recovery in investor appetite may be underway.¹⁶

Mindful of these strong linkages and positive spillovers for the macroeconomy, policy-makers in Pakistan have prioritized the digitization agenda at the national level. In particular, the 2014 auction of next generation mobile services (NGMS) proved to be a decisive measure in terms of improving connectivity and enabling digitization (**Box 7.2**). Moreover, while factors like favorable demographics were more fortuitous, rather than a product of conscious policy design, they nevertheless came together to form an enabling environment in which digitization could take root.

Box 7.2: Key Enablers of Services Sector Digitization in Pakistan

Four factors have played a dominant role in the recent digitization spurt of the domestic services sector:

(i) A decent ICT base

From humble beginnings in early 1990s, Pakistan's ICT sector has steadily held its ground over the past three decades. In fact, the last decade has been a period of mushroom growth; the number of IT firms registered with the SECP has increased from less than 2,000 in 2007, to 4,600 firms at end 2017 (10 percent CAGR). Presently, the industry is providing various associated services in the domestic market, including software development, business analytics, gaming and animation, mobile applications, consulting, etc. The high potential of the domestic IT market is reflected by the presence of a large number of global enterprises. Also, big IT companies in Pakistan have recently begun to nurture and support new enterprises in the digital space, which bodes well for future prospects.

(ii) Connectivity and affordability

Regarding connectivity, while a steady improvement in telecom infrastructure was underway in Pakistan since 1991, the auction of NGMS in 2014 proved to be the most important trigger behind the recent wave of digital innovation (**Figure 7.3**). According to PTA, 3G cellular mobile signal covered more than 70 percent of the population as of end-March 2017; similarly, 4G LTE services were accessible to over 30 percent of the population. In addition, the affordability of smartphones and their operating systems in the country has been a boon. Presently, a large number of device manufacturers are eyeing the high growth potential in low-end smartphone space, especially in developing countries like Pakistan. As for operating systems, the launch of the Android One platform by Google in 2013 was a big game changer, which made smartphones easier and cheaper to produce. In Pakistan, nearly 85 percent of all cellular imports come from China¹⁷, with Android dominating the operating systems space.¹⁸

(iii) Favorable demographics

Around 64 percent of Pakistan's population is under the age of 29, and the country will continue to enjoy the youth bulge for another thirty years or so, according to the United Nations' National Human Development Report 2017. The fact that this young population is more open to embrace technology and smart-phones compared to the older generation represents optimism regarding the demand for ITeS and digital transformation. The supply side is equally supportive: according to the Digital Pakistan Policy 2018, the country produces more than 20,000 IT graduates and engineers every year and is home to

Ordinance 2000 (as amended in 2002 and 2006). The IPO can only grant copyrights and trademarks in the computer software domain. Source: IPO website.

¹⁴ For example, the Private Equity and Venture Capital Fund Regulations 2008, and the Private Funds Regulations 2015.

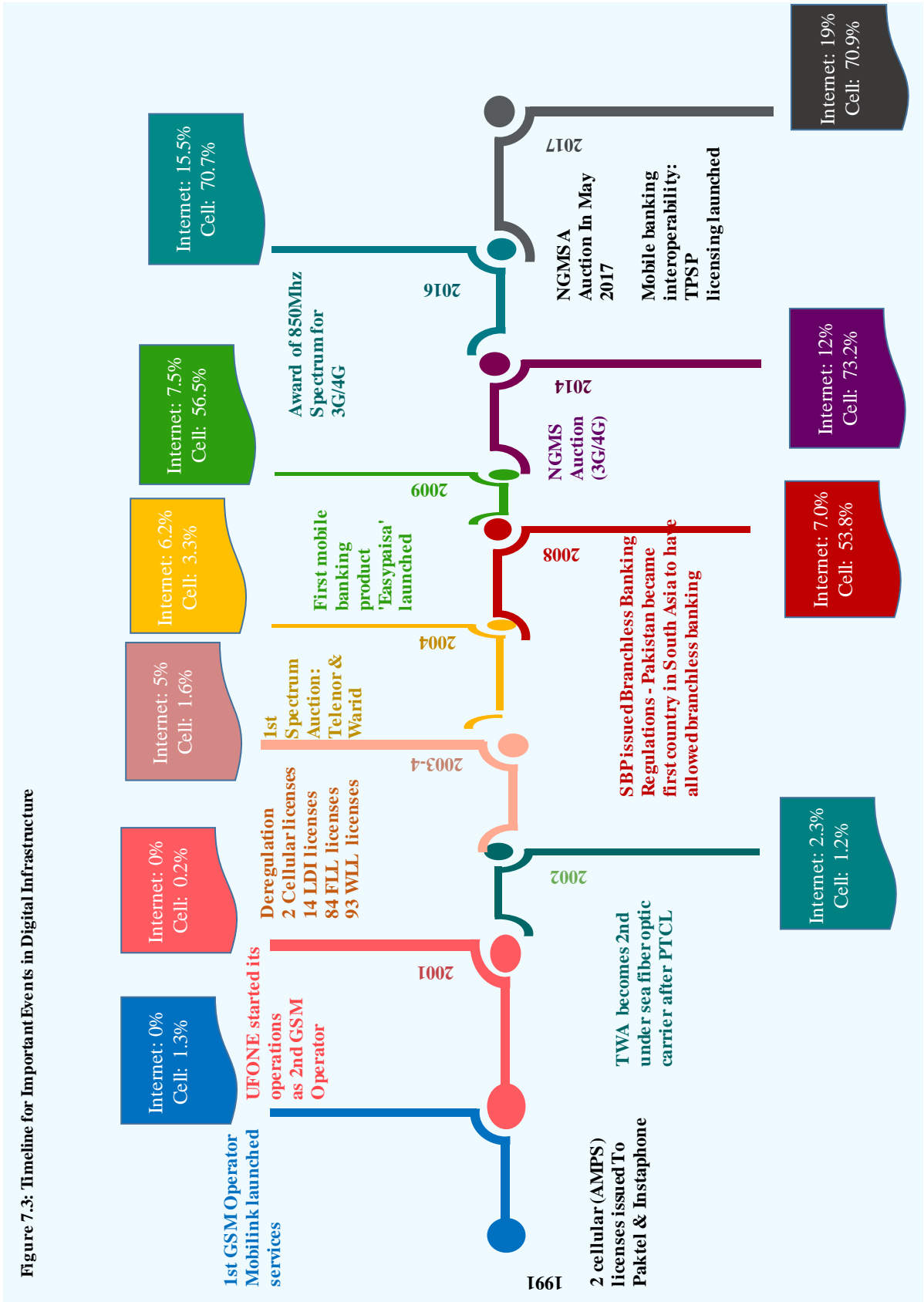
¹⁵ Source: i2i Industry Insights Newsletter, July 2018 issue.

¹⁶ Moreover, apart from angel and VC investment, domestic startups have raised funding via donor grants, and by winning startup competitions at home and abroad. Thus, reported investment deals account for only a portion of total funding raised.

¹⁷ Source: Pakistan Bureau of Statistics.

¹⁸ According to the statistics portal Statista, the market share of Android mobile operating systems was nearly 84 percent as of December 2017.

more than 300,000 English-speaking IT and BPO professionals with expertise in current and emerging IT products and technologies.



(iv) Support from the diaspora

A sizable contingent of Pakistani-Americans reside in Silicon Valley, working in established high-tech companies and startups alike. This large diaspora is helping in at least three ways:

- First impact comes from those IT professionals who have had exposure of working in Silicon Valley, but have chosen to return to Pakistan. Familiar with successful startup ecosystems, these individuals are at the forefront of new support initiatives. In addition to formalizing advocacy for policy change, they themselves are reinforcing the angel investor activity in Pakistan, and are also launching institutional vehicles to deploy their capital.
- Second impact comes from CEOs and tech innovators who are still working in the US, but their presence and networking is a major source of encouragement for global companies to invest in Pakistan’s technology sector.
- Finally, global business associations of Pakistani diaspora, like The Indus Entrepreneurs (TiE) and Organization of Pakistani Entrepreneurs (OPEN), have been active in encouraging Pakistan’s technology sector.

Having provided context and established the broad connections between digitization and the economy, the next three sections elaborate the detailed dynamics and emerging trends specific to e-commerce (Section 7.3), fintech (Section 7.4) and e-government (Section 7.5), respectively.

7.3 E-commerce: Transforming the Retail Paradigm

Pakistan has witnessed exponential growth in e-commerce activities over the past few years. Lured by lower transaction costs, convenience and expanding internet penetration, both enterprises and consumers have started shifting their transactions online (Figure 7.4). Thus far, business-to-consumer (B2C) side of the e-commerce has been the main beneficiary, though investments are underway to kick start the business-to-business (B2B) e-commerce on a large scale as well.

According to SBP data, the sales of local and international e-commerce merchants reached Rs 20.7 billion in FY17 and Rs 40.1 billion in FY18 – an encouraging growth of 93.7 percent. However, the data only covers transactions made via digital channels (credit/debit cards, interbank funds transfer (IBFT), prepaid cards, and mobile wallets). This is important to note,

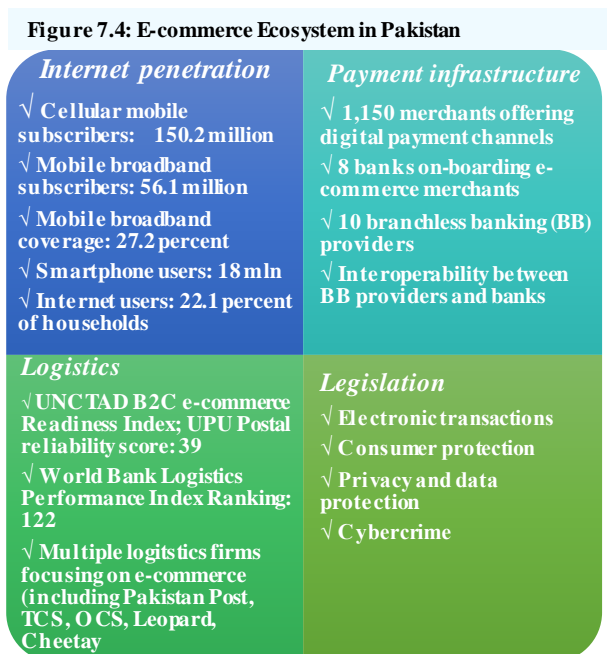
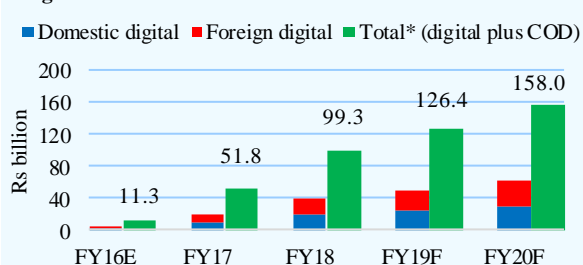
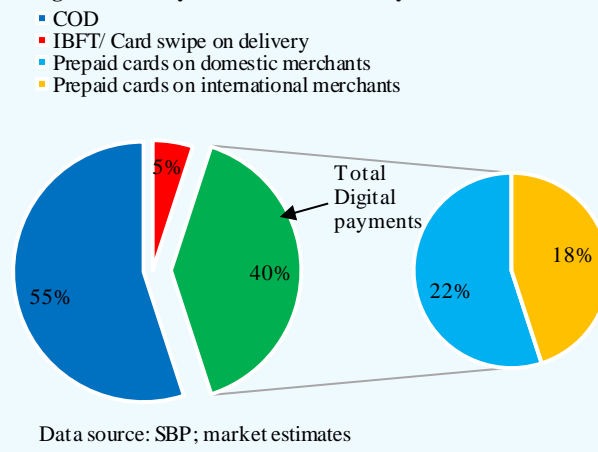


Figure 7.5a: Estimates of E-commerce in Pakistan



* If we go by market estimates, the share of digital payments is about 40 percent in the total e-commerce transactions by value. For FY19 and FY20, a YoY increase of 25 percent in digital sales is expected.
E: estimated; F: forecast
Data source: SBP for actual digital transactions; market estimates for forecast

Figure 7.5b: Payment Mode Selection by Value



as the market estimates put the share of postpaid cash on delivery (COD) settlements at around 80 to 90 percent of the total volume, and about 60 percent of the total value of e-commerce in Pakistan (Figure 7.5b). Extrapolating accordingly, the figures for total e-commerce activity in FY17 and FY18 may have touched Rs 51.8 billion and Rs 99.3 billion respectively (Figure 7.5a).

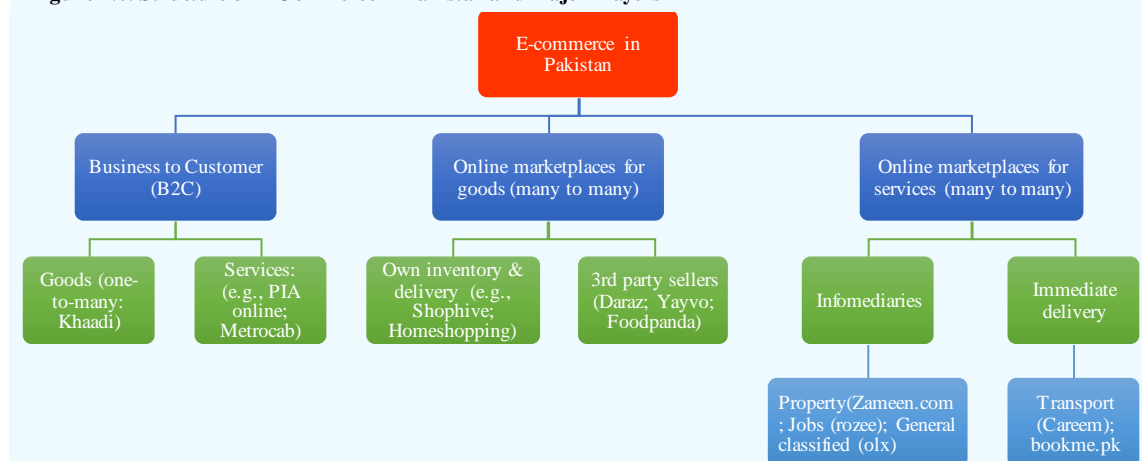
Increasing operational efficiency: from disintermediation to reintermediation

As mentioned above, digitization of commercial activities holds the potential to reduce transactional costs for businesses and consumers. A key enabler of this phenomenon is the concept of disintermediation and reintermediation. A conventional exchange would involve multiple agents such as producers, transporters, wholesalers, retailers, and consumers. E-commerce, however, allows the possibility to bypass the middle parties, thereby “disintermediating” the process and allowing direct dealing between a buyer and a supplier. In Pakistan, leading producers of apparel, smartphone, food, and electronics industries now have a one-to-many online “e-retailing” channel in place.

However, the more popular and established model of e-commerce is the online marketplace system. Online marketplaces are platforms that allow transactions and dealings between multiple buyers and sellers. Reducing search and contractual costs for the parties due to computerized systems and common digital infrastructure, they help increase efficiency by allowing swift transactions and providing co-sales services such as data analytics and payment platforms. In other words, they become the new intermediaries between producers and customers, except this time the “reintermediation” results in an overall improved experience for the parties involved.

In Pakistan, most of the major e-commerce players are either online marketplaces for goods - such as *Shophive*, *Daraz.pk* (for consumer electronics and apparel, etc.), and *FoodPanda* (for food delivery) – or online marketplaces for services via immediate delivery – like the ride-hailing platforms *Careem* and *Uber* (Figure 7.6). Then there are online information and financial intermediaries – or *infomediaries*, as they are often called – like *PakWheels* (for automobile sale and purchase), *Rozee.pk* (job hunting and recruitment), and *Zameen.Pk* (real estate business). These channels serve to fill information gaps and mostly earn profits through advertisements, contract making, and commission fees.

Figure 7.6: Structure of E-Commerce in Pakistan and Major Players



Incorporating logistics and inventory management into the mix

Longer delivery times are often cited as a major deterrent to the wider adoptability of the e-commerce channel. Delivery times are usually affected when either (a) third party logistics partners fail to deliver on time, and/or (b) the inventory management systems of the sellers prove inadequate to fulfill the flexible needs of the electronic channel.

In Pakistan, online marketplaces in particular have started focusing on this front. The venturing of leading logistic operator of the country, TCS, in the field of e-commerce provides a unique example. Its subsidiary, TCS E-com, launched its own online marketplace, *Yayvo.com* in 2015. Since *Yayvo.com* makes use of TCS's Hazir service, whereby selective commodities are delivered to customers in around 120 minutes, most part of the supply chain of this marketplace is vertically integrated. The outreach of the platform is also relatively wide, primarily owing to an extensive rural delivery system of TCS.

On the stock management front, most of the vendors selling their products through *Yayvo.com* are in the process of digitizing their inventory systems and integrating their warehouse database with that of the website's central domain. This enables the sellers to operate on a Just in Time (JIT) rather than on a Just in Case (JIC) basis,¹⁹ thereby reducing storage and processing costs and quickening the purchasing process. Other marketplaces also make use of inventory management systems of varying scope and design. These include simple email notifications about the growth in orders of a certain commodity and the corresponding required inventory requirements, to incentive based schemes requiring a certain order fulfillment ratio to ensure scale production expansion for any existing seller.

In addition to TCS, other logistic firms are also venturing to capitalize on the growing e-commerce market. On the public sector front, Pakistan Post – the largest and oldest postal service enterprise of the country – has recently embarked on a comprehensive rebranding agenda to expand and diversify its operational capabilities. In this regard, it has established a new entity by the name of Pakistan Post Logistics Company, with the aim to facilitate the expansion of e-commerce to the remote and rural areas of Pakistan. On parallel terms, Pakistan Post is aiming to launch a mobile payment transfer service, whereby activities such as COD for e-commerce, international remittances, branchless wallet cards, and pension transfers, etc. would be available for the public. Pakistan Post also handles the majority of deliveries of e-commerce orders made by Pakistanis on international merchant platforms such as AliExpress and Amazon.

Emergence of online payment infrastructure is helping increase documentation

Payments infrastructure in Pakistan is quite adequate to meet requirements of local and international e-commerce transactions for both customers and merchants. Still, approximately 90 percent of e-commerce transactions in Pakistan are cash on delivery (COD) due to multiple reasons.²⁰ From the consumer side, a preference for cash may be attributed to low financial and digital literacy,²¹ security of online payment channels and instruments, and availability of dispute resolution mechanism in case a wrong or substandard product is delivered to the customers. For businesses, upfront costs for developing an adequately secure and reliable infrastructure for payment processing, negotiating contracts with banks/PSO/PSPs, and stringent KYC requirements of banks for merchant on boarding²² prove to be the major deterrents. In this regard, COD (among other options) serves as a cheaper

¹⁹ Just in Case (JIC) inventory management refers to the technique of holding stock in bulk to meet the demand. This aim of firms following JIC is to minimize the risk of product shortfall. However, this also considerably increases the operating and warehousing costs of the companies. Just in Time (JIT) management on the other hand allows for stock keeping so long as the demand is there. This ensures higher efficiency and lower costs.

²⁰ Source: Pakistan Telecommunication Authority, Annual Report 2017.

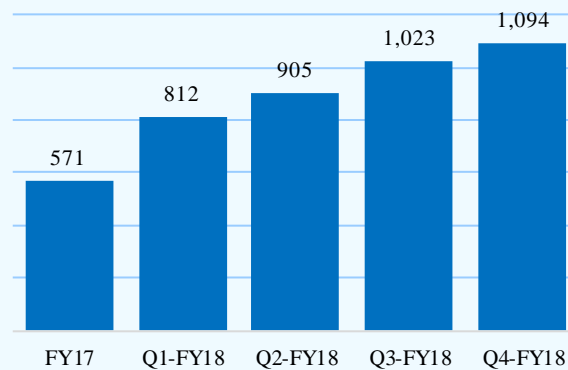
²¹ According to The Economist Intelligence Unit's Internet Inclusivity Index 2018, Pakistan ranks 68th out of 86 countries in terms of overall internet inclusion across the following four categories [individual category rankings are contained in parentheses]: 1. Availability (77th); 2. Affordability (43rd); 3. Relevance (70th); and 4. Readiness (68th). Moreover, within the Readiness category, the biggest drag comes from the literacy indicator ranking (85th), which reflects the level of education and preparedness to use the internet; essentially, the general level of literacy, as well as the support for digital literacy, are deemed to be particularly lacking. The silver lining is that the country fares relatively better on rankings for the remaining two indicators within the Readiness category, i.e. trust and safety (15th) and policy (48th).

²² Merchant on boarding refers to the process whereby banks add new merchants as their clients and integrate their payment systems with the banks' payment gateways and PSO service.

alternative – though it brings its own set of challenges. For example, businesses bear the risk of nonpayment, and their operations become geographically constrained.

Over past few years, the digital payment infrastructure in Pakistan has gradually evolved. Encouraged by a rapid rise in branchless banking accounts (also called mobile wallets) and a continuous increase in subscriptions of 3G/4G networks, both e-retailers and online marketplaces have started to integrate such systems into their models. This is resulting in better documentation of commercial activities, as captured in the financial statistics of the economy. In FY17, SBP started publishing transactional data for e-commerce separately, in addition to the Point of Sale (POS) figures that were previously being published. The coverage is anticipated to enhance further, as large merchants nationwide are now inclined towards providing online payment options to their customers using e-payment gateways. According to SBP's Payment Systems Review FY18, the total number of e-commerce merchants using e-payment gateway of banks have risen to 1,093, i.e. up 91.6 percent from FY17, when the figure stood at 571 (**Figure 7.7**).

Figure 7.7: Number of E-commerce Merchants Accepting Digital Payments in Pakistan



Data source: State Bank of Pakistan

Another enabling factor to this development has been the presence of an inter-operable payment platform, whereby all banks are connected to various switches for services such as ATMs, IBFT, card payments and bill payment etc. through SBP licensed Payment System Providers (PSPs) and Payment System Operators (PSOs) like 1-Link and international card schemes like VISA, Mastercard etc.^{23, 24} Furthermore, the regulatory environment is conducive for non-banks to venture in the payments space in Pakistan by offering innovative products and services. Apart from facilitating private sector participation, SBP has also issued guidelines that ensure standardization of payment instruments and ensure consumer protection through payment card security guidelines, security of internet banking etc.

Widening acceptance and adoption of digital payments can also help the government to deliver services and subsidies to the poor in a faster and more efficient manner, therefore meeting their social needs in a better way. In Pakistan, a large amount of social safety payments is done by the government to beneficiaries of BISP. Though these have largely been through cash in the past, a shift has been witnessed in recent years towards digital channels such as mobile wallets etc. In addition, these digital payments to beneficiaries also allow greater transparency in transactions. Also, the digital payments enable the government to identify tax evasion in a relatively easier manner. If complemented by stronger government enforcement efforts, the overall size of the informal economy can be substantially reduced, and crucial fiscal revenue may be generated.

²³ According to PSD Circular regarding Rules for Payment System Operators and Payment System Providers, PSO/PSP is defined as such Authorized Party that is a company registered under Companies Ordinance 1984 and is engaged in operating and/or providing Payment Systems related services like electronic payment gateway, payment scheme, clearing house, ATM Switch, POS Gateway, E-Commerce Gateway etc. PSOs/PSPs act as intermediaries for multilateral routing, switching, and processing of payment transactions.

²⁴ The interoperability incurs a per-use fee, which particularly impacts the operational costs of smaller e-commerce players.

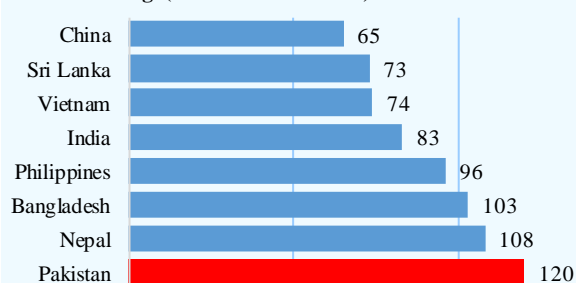
There is still room for improvement and expansion in the e-commerce landscape of Pakistan

Although the pace of increase in e-commerce adoption in Pakistan has been encouraging over the past few years, the country still lags behind regional and comparable economies in terms of digitization of its retail sector and efficiency of its logistics environment (Figure 7.8).

There are consumer protection laws at the federal and provincial levels of the government, and by virtue of functional equivalence provided to the electronic transactions by the Electronic Transactions Ordinance 2002, these laws are also applicable for e-commerce transactions. However, there is a problem of lack of awareness amongst the people about the rights they have when transacting online and about the scope and extent to which their activities are covered under the various protection acts.

Furthermore, absence of trust in online platforms and inadequate implementation of consumer protection laws pertaining to e-commerce, amid an already low digital literacy environment, become a deterrent to the rapid digitization envisioned by policymakers and industry players. Consumer protection is perceived to be weak in Pakistan, with an impression that end buyers may have little recourse available in case of payment disputes or instances requiring return of goods/services acquired via the e-commerce channel. In particular, consumers tend to be hesitant when transacting using online channels, as they worry that their personal information (such as credit card number, bank account number, address, etc.) may be leaked or misused by unauthorized persons.

Figure 7.8: UNCTAD B2C e-Commerce Readiness Index* 2017 Rankings (Out of 144 Countries)



* Reflects processes involved in an online shopping B2C transaction. It is calculated by using data pertaining to number of internet users; number of secure servers; the Findex account penetration score; and the postal reliability (logistics) score.

Data source: UN Conference on Trade and Development

With regulatory and infrastructural progress and advent of global players, the future is promising

The government is in the process of drafting an e-commerce policy framework for Pakistan, and a draft Trade Dispute Resolution (TDR) Act 2016-17 has already been developed in consultation with relevant stakeholders. These regulatory measures are particularly focused on establishing trusted and easier modes of payment; setting up of consumer protection bodies at federal and provincial levels; and launching a designated platform for trade dispute resolution based on international best practices. SBP has also mandated commercial banks to ensure “3-D” security on internet transactions involving credit and debit cards, whereby two-factor authentication (through SMS/email) is required before the amount is credited from the consumer’s bank account and a transaction gets completed.²⁵

Online marketplaces and e-retailers, on their part, must introduce comprehensive escrow facilities to safeguard the advance payments until a successful delivery and proper evaluation at customers’ end. Another mechanism by which the online platforms are vying to increase consumer confidence in digital channels in Pakistan is through the adoption of a *click-and-mortar* structure. Understanding that majority of consumers feel more secure and confident when shopping conventionally for certain

²⁵ However, the efficacy of this system gets diminished as many banks do not by default allow debit cards to be used for online transactions. Either the customers have to contact bank’s helpline to activate the debit cards for e-commerce for a set timeframe, or the debit cards simply cannot be used to transact online. In this regard, commercial banks should allow their consumers the option to pre-select at the time of issuance of debit cards the right of e-commerce application, alongside providing them due security and a Transaction Monitoring Systems protocol, which is already in place for credit cards.

products (such as apparel and electronics), the platforms have developed or are developing a physical presence alongside an electronic one.²⁶

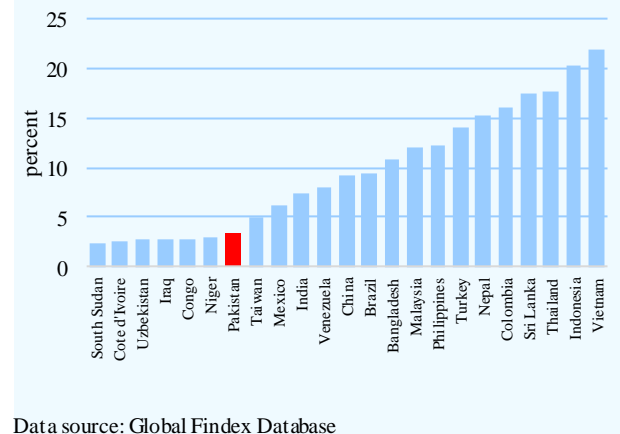
With the entrance of Chinese digital giants such as Alibaba (through acquisition of Daraz.pk) and Ant Financial (via a 45 percent stake investment in Telenor Microfinance Bank), the e-commerce landscape of Pakistan can be expected to evolve rapidly. Following the success of their technological products and services in China, these players are likely to introduce and inspire variants of the same in the digital landscape of Pakistan. For example, the marketplaces may give higher level of attention towards personalization and customization of their content and product recommendation protocols. The purchasers' history of browsing through the marketplace, and the record of their previous purchases would be used to improve marketing and sales experience. Secondly, thanks to advances in IT systems, the platforms would be able to provide comprehensive inventory and sales management systems to the suppliers. This would help bring down warehousing costs, while enhancing the speed of order processing via real-time interactive demand and supply data interfaces.

On the payments front, the market players would tap into the exponentially growing usage of e-commerce platforms on mobile phones (the phenomenon often referred to as m-commerce) and offer new modes of transaction settlements. The next step would be to use the consumers' purchasing history to devise a credit scoring mechanism to offer micro-loans for transactions and, eventually, savings.²⁷ The sellers can also expect small-scale lending facility to meet their running finance requirements in the near future.²⁸ Ant Financial and JD.com – the second largest online marketplace in China – lend to merchants, many of whom fall in the micro, small and medium enterprises category.

7.4 Fintech: Innovations are beyond E-commerce

The term fintech - short for financial technology- refers to technology-led innovation in financial services, which aims to exploit the gaps in coverage and affordability of the services offered by the mainstream financial sector. Emerging in the wake of the global financial crisis, fintech firms initially seemed to pose a genuine threat to established entities like commercial banks. However, in many cases, mainstream financial institutions now appear to be increasingly keen to forge partnerships with fintech firms in efforts to sharpen operational efficiency and respond to customer demands for more innovative services. Furthermore, the idea of fintech itself is evolving gradually and its scope has expanded from automation of support functions within financial institutions into platforms capable of providing end-to-end personal and commercial finance solutions. For instance, if small businesses or startups need funding, traditional banks often require collateral before sanctioning the loan; on the other hand,

Figure 7.9: People Who Borrowed From a Financial Institution (Age 25+), 2017



²⁶ For example, *Homeshopping.pk* and *Shophive.com*, two of the older online marketplaces of Pakistan, have set up physical stores in major urban regions to help improve their adoption and retention rates, marketing, and return mechanisms. Other marketplaces are following suit: *Daraz.pk* plans to open physical outlets across various urban and rural regions of Pakistan.

²⁷ The regulatory environment as of now does not allow deposit taking by non-bank institutions (which include e-commerce merchants and marketplaces). However, SBP is in the process of drafting a framework that would allow greater flexibility in this regard.

²⁸ Finja, a domestic fintech player, is already offering payment services via Quick Response codes and is aiming to start disbursing "nano-loans" (Rs 500-1500) through its SimSim platform, thereby establishing a trail for assessing big loans later.

fintech allows startups to raise capital through crowdfunding where they can raise money more cheaply and quickly without having a collateral pledged.²⁹

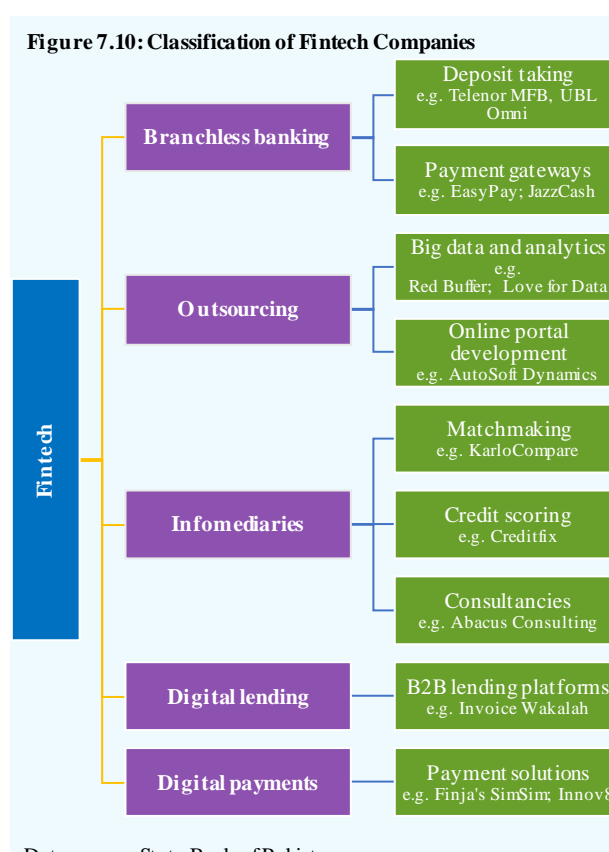
Pakistan is an ideal place for fintech services, given that the country has a huge unbanked population of around 100 million, according to the World Bank’s Global Findex 2017 database. Low levels of financial inclusion make it challenging for policymakers to devise and implement adequate social safety nets; for instance, disbursing welfare payments in a targeted manner is an uphill task when most poor people do not have access to a basic transaction account. This also considerably restricts individuals’ ability to borrow from formal channels (**Figure 7.9**). Fintech firms can help plug such gaps.

Of late, branchless banking has played an instrumental role in providing basic banking facilities, with the number of active accounts reaching 21.7 million as of end-June FY18 (**Table 7.1**). Fintech firms in this space are helping their clients develop cloud-based solutions, big data analytics etc., to help the banks provide more personalized services to their customers and enable them to expand their market share. Interestingly, branchless banking and associated outsourcing of services are just two of the five broad categories of fintech’s areas of impact; the other three being (a) infomediation (b) digital payments, and (c) digital lending (**Figure 7.10**).

(a) Infomediation

Infomediarries help their clients to capture insights related to potential customers, competitors, and market dynamics. Such firms can be broadly categorized into three main classes i.e. credit scoring, consultancy, and matchmaking.³⁰ Credit-scoring fintechs can thrive in countries like Pakistan, where credit scoring through traditional methods is difficult due to absence of credit history among the unbanked population. They may deploy a range of technologies to determine credit scores, ranging from the use of predictive modelling on digital data of thin-file customers to analysis of mobile phone calls and text messages.

Meanwhile, fintechs offering consultancy services typically assist their clients to optimize their business processes by using technology to make informed decisions. For example, a domestic fintech is trying to develop a niche in the agriculture sector by streamlining the entire value chain. This MIT-based Pakistani startup provides farmers with insights that help them produce a healthy crop; facilitates access to a variety of quality agri inputs (fertilizers, pesticides, etc.) at competitive rates; assists in selling their produce at best possible rates; and helps in getting access to credit, etc.



²⁹ Crowdfunding involves raising small amount of funds from a large number of people for a new venture or project. Some of the popular crowdfunding websites include Kickstarter, Crowdfunder and Fundly.

³⁰ To give just one example of a fintech infomediarry from each class that already exists in Pakistan, consider CreditFix (credit scoring), Ricult (consultancy), and KarloCompare (matchmaking). However, this is by no means an exhaustive list of domestic fintechs in each of these specialized niches.

The third class of infomediaries offers matchmaking services that help businesses and people to find relevant financial products. For instance, they may allow users to conveniently compare features of various credit cards, auto loans, insurance products etc. on their digital devices from the comfort of their homes or on the go, thereby saving a lot of time and effort in finding out the most feasible option available in the market.

Table 7.1: Key Branchless Banking Indicators

	FY12	FY13	FY14	FY15	FY16	FY17	FY18*	CAGR (%)**
Number (No.) of agents (end-Jun)	29,525	93,862	168,615	251,865	346,716	402,710	405,531	54.8
Active BB agents (end-Jun)	-	-	140,747	193,816	236,874	185,297	159,983	-
No. of accounts (end-Jun, in '000')	1,447.4	2,642.9	4,238.2	10,881.4	14,576.4	27,313.0	39,235.9	73.3
Active accounts (end-Jun, in '000')	-	-	-	-	6,693.6	13,158.3	21,737.7	-
Deposits (end-Jun, million Rs)	753	2,391	6,219	8,553	13,734	15,423	15,335	65.3
No. of transactions during year (in '000')	90,167	153,102	245,715	310,667	437,197	551,544	748,605	42.3
Value of transactions during year (billion Rs)	338.5	635.9	1,062.9	1,608.1	2,065.2	2,427.8	3,181.0	45.3

*provisional; **FY12-18

Data source: Branchless Banking Newsletter, State Bank of Pakistan

(b) Digital payment solutions

Until recently, consumers used to have limited payment options when transacting online. The online payment options through e-payment gateways were limited in terms of payment acceptance. For instance, some online retailers and marketplaces did not accept payment via branchless banking channels, and options were confined to plastic cards. Others accepted payment through branchless banking agents, but not via mobile wallets due to non-interoperability of BB service providers.

To bridge this gap, a number of Payment Service Operators and Payment Service Providers, along with banks/MFBs, are venturing into the payments arena. EasyPaisa by Telenor, for instance, has its own payment gateway called EasyPay, which allows consumers to transact online using any debit/credit card, their EasyPaisa account, or through an EasyPaisa agent. FonePay, another entrant, is taking things further by allowing payments through two mobile wallet accounts (e.g., EasyPaisa and JazzCash) and through Masterpass QR on merchant locations. Anecdotal evidence indicates that the mobile wallet channel now accounts for roughly 30-40 percent of total transactions carried out via electronic payment gateways (relative to 60-70 percent share of credit and debit cards).

Furthermore, trust in and usability of prepaid channels is rising, as evidenced from the fact that such transactions make up around 40 percent of the total value of e-commerce (as opposed to the 10-20 percent share in volume mentioned earlier) and that the usage of prepaid mode of payments rises as the cost of products increase. Going forward, SBP is working towards building a national payment infrastructure that facilitates electronic/digital payments for customers, especially at retail level.

(c) Digital lending

In its initial years, digital lending was more related to digitization of back office processes, which were done manually in financial institutions. With the increased popularity of machine learning and the Internet of Things, the concept of digital lending now involves complete digitization of the loan disbursement process, including the ability of the algorithms to make decisions of accepting or rejecting a loan application.³¹

Another area of digital lending includes peer to peer (P2P) lending, which has not been able to get any big names in Pakistan until recently. Peer to peer lending allows individuals to lend and borrow

³¹ Internet of Things (IoT) refers to the use of internet and digital devices to interconnect the machines, electronic devices, buildings, vehicles and other objects thereby establishing internetworking for machine-to-machine communication. Source of definition: PTA Annual Report 2017.

money without having a financial intermediary sharing risks and rewards. In contrast with crowdfunding, which is more related to funding for an innovative business idea, P2P lending has more to do with funding specific needs of consumers such as educational expenses, vacations or any medical expenses, etc. It benefits the borrower in terms of increasing their chances of getting an unsecured loan and at the same time benefits the investors to get a higher return compared to what they could have received from investing in a bank.

7.5 E-government

E-government harnesses the capabilities of ICT to improve the delivery of public services.³² There are four main delivery modes of e-government, namely: (i) government-to-citizen, which digitizes consumer-centric services (like obtaining certificates, passports, etc.); (ii) government-to-business, which caters to business-specific transactions (like procurement); (iii) government-to-employee, which consists of interactions involving guidelines, benefits, trainings etc. of government employees; and (iv) government-to-government, which involves data exchange and electronic transactions within and between national, provincial and local governments.

At the country level, Pakistan has some catching up to do with regional peers in terms of its e-government readiness and overall development. The country's e-government ranking dipped one place between 2014 and 2016, as measured by the United Nations' E-government Surveys (**Table 7.2**).

Decomposing the findings, it becomes clear that while India and Bangladesh have improved their e-government ranking by making gains in (i) the scope and quality of their online services and (ii) inherent human capital, Pakistan needs to do more work on these fronts.

Table 7.2: Relative Performance on E-government

Rank/index*	PAK		BGD		IND	
	2014	2016	2014	2016	2014	2016
E-government rank	158	159	148	124	118	107
E-government development	0.258	0.258	0.276	0.38	0.383	0.464
i. Online service	0.323	0.326	0.346	0.623	0.543	0.746
ii. Human capital	0.334	0.319	0.387	0.397	0.47	0.502
iii. Telecom infrastructure	0.117	0.13	0.094	0.119	0.137	0.143

* Rank out of 193 countries. Top rank = 1. Fall in numerical value of rank indicates an improvement (vice versa for index). Index values range from 0 to 1.

Data source: UN E-government Development Database

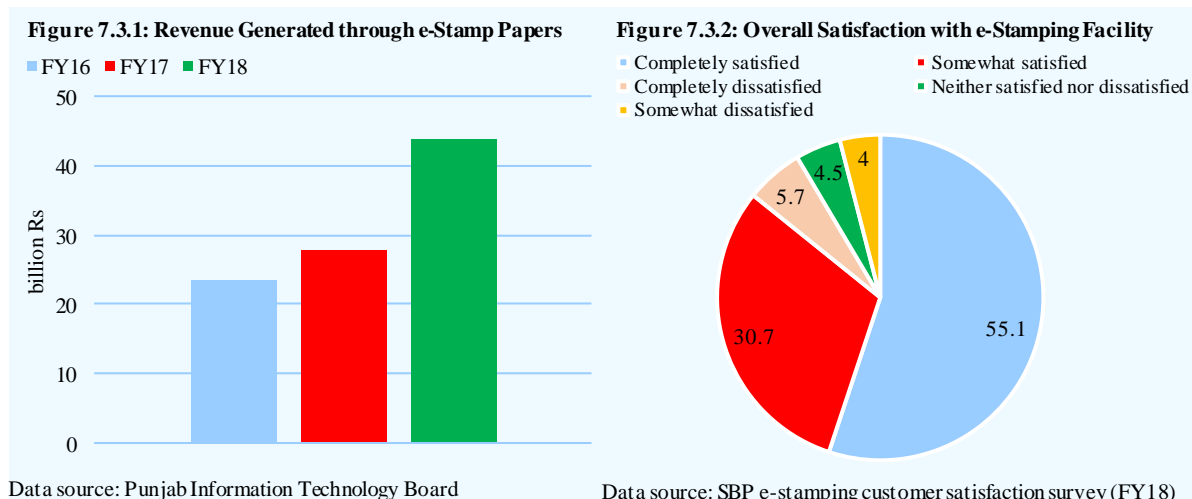
That said, at the provincial level, the Punjab Information Technology Board (PITB) has delivered over 270 ICT-related projects in the past six years. Examples of its e-government initiatives include:

- Land records: Full computerization of Punjab's land revenue system, involving digitization of land records of over 54 million rural landowners
- Police: Full computerization of all 713 police stations in Punjab
- E-stamping: Introduction of e-stamps in place of high value non-judicial and judicial stamp papers, with the aim of countering leakages (**Box 7.3**). Revenue collection from e-stamping amounted to Rs 48.9 billion in 2017-18, up from Rs 32.2 billion a year earlier.
- Education: Development of school monitoring system using low cost computer tablets, to counter ghost schools, teacher absenteeism, and bogus student enrolment, while also improving the overall quality of education outcomes
- Health: Launch of e-Vaccs program, which used a smartphone-based application to track vaccinators. As a result, geographical coverage rose from 22 percent to 92 percent over the last three years. Similarly, a dengue tracking system introduced in 2012 enabled real-time information on larvae prevention, dengue detection and public hygiene activities to be tracked across 36 districts, facilitating over 21 million anti-dengue surveillance activities to date.

³² The difference between e-government and e-governance is nuanced. According to a UNESCO publication, e-government is the use of ICT to promote efficient and effective government, and make it more accessible and accountable to citizens. By contrast, governance is the societal synthesis of politics, policies, and programs, and e-governance is the application of ICT to the system of governance to ensure a wider participation and deeper involvement of citizens, institutions, NGOs and private firms in the decision-making process. Source: E-government Toolkit for Developing Countries, UNESCO, 2005.

Box 7.3: The Impact and Customer Response to E-Stamping

The government of Punjab, in collaboration with PITB and Bank of Punjab (BOP), introduced e-stamping system for the first time in Pakistan in 2016.³³ The major objective behind this initiative was to provide a hassle-free and quick access to stamp papers and to prevent fraudulent activities. With the manual system, it used to take two to three days for someone to get judicial and non-judicial stamp papers issued; e stamping has reduced this process to few hours with two simple steps.³⁴ To counter fraud, the system allows online verification of the e-stamps and prevents reuse of stamp papers. In case of sale or purchase of a property, the value of stamp duty is determined through DC valuation tables based on the data of location, covered area and property type i.e. residential or commercial. This feature helps to prevent tax pilferage resulting from understatement of the property value, which used to be a common practice with manual stamping. As a result of these features, there has been a marked increase in collection of stamp duties since the inception of this system (**Figure 7.3.1**).



An e-stamping customer satisfaction survey conducted by SBP revealed that over 85 percent of the respondents were either “completely satisfied” or “somewhat satisfied” with the service (**Figure 7.3.2**). That said, a few concerns identified during the survey may be addressed going forward, such as the relatively limited knowledge and awareness of e-stamping; limited access, with only a few BOP branches providing the facility; and unavailability of an online payment option. There also appears to be room to make the online form more user-friendly, according to the survey.

Regarding the way forward for PITB, Goal 10 of the Punjab IT Policy 2018 touches upon how the government’s demonstrated commitment to a cause like digitization can give confidence to the private sector. However, anecdotal evidence suggests that some private sector stakeholders have reservations over the PITB’s massive footprint in the digital space, including e-government solutions. For these stakeholders, it would be preferable if PITB identified the prevailing gaps, outlined the solutions required, and then tasked the specialized private sector ICT firms to develop the relevant software and applications. Otherwise, PITB could inadvertently crowd out the private sector.

As for the other provinces, a noteworthy e-government initiative of the KP Information Technology Board (KPITB) is E-Ilaj, a telehealth facility whose pilot phase took off in October 2017 in Mansehra. In addition, the KP eCitizen portal, currently in pilot phase, enables citizens in Mardan to apply for e-domiciles online. More broadly, the KP government’s e-Recruitment portal is also an example of e-government, which enables online recruitment of employees.

Similarly, Sindh has implemented an agriculture policy under the World Bank-financed Sindh Agricultural Growth Project. One of the initiatives taken under the policy is the establishment of a digital marketplace (through a framework agreement) for farm machinery equipment (harvesters, tractor trolleys, and plastic baskets, etc.). Farmers make use of an Interactive Voice Response (IVR) system from their mobile phones to placing, tracking, and reviewing the orders. Since its

³³ Currently, this facility is only available for judicial (Rs 21- Rs 15,000) and high-value non-judicial stamp papers (i.e. worth more than Rs.1000), which will be extended to lower denominations as envisaged in Punjab’s IT Policy 2018.

³⁴ Namely, (1) fill the online form 32-A, and (2) get e-stamp paper on payment of stamp duty at any designated BOP branch.

inauguration, the submission and holding time orders for farmers for their share of the payment has declined from 4-6 months previously to 15-30 days.

As things stand, PITB has been assisting the other three provincial governments in setting up and upgrading their e-government platforms, especially in portfolios like police and health. While such inter-provincial collaboration is welcome to plug immediate gaps, in the long run each province needs to develop its own capacity to initiate and execute e-government projects. Beyond this, any collaboration – or healthy competition – among provincial IT boards and departments to deliver better e-government services would simply be a bonus.

7.6 What Lies Ahead? The Fourth Industrial Revolution and Pakistan's Potential

In developed economies, technological advances are galvanizing a paradigm shift known as the fourth industrial revolution. It encompasses cutting-edge technologies that had limited practical applications until some time back, but have come to pervade daily life in a short span of time. These include artificial intelligence, machine learning, robotics, 3D printing, blockchain, the internet of things, and neurotechnology, to name a few. The speed, breadth, and impact on entire systems that technology has unleashed since the advent of the 21st century – within and across companies, industries, and countries – sets this new era apart from the third industrial revolution.³⁵

A key feature of the fourth industrial revolution is the blurring of traditional boundaries between the services and industrial sector. Manufacturing processes are being re-engineered in a way that the hardware is optimized by technology or software components, which add significant value to the end-product. The automobile industry is a case in point, where consumer focus is shifting away from car ownership towards personal mobility, and features like self-driving capabilities, connectivity and automation are gaining prominence. Car and auto part manufacturers are responding accordingly, since their revenues are increasingly linked to technological innovations and embedded services.

Table 7.3: Rankings on 'Technology & Innovation' Driver
out of 100 sample countries

	Pakistan	Bangladesh	India	Philippines
'Technology & Innovation' driver ranking	88	86	34	59
(1) Technology platform	87	78	59	47
FDI and technology transfer	60	88	52	56
Cyber security commitment	66	55	26	39
Mobile-cellular telephone subscriptions	97	94	88	72
Internet users	98	97	86	65
(2) Ability to innovate	80	97	29	85
Govt. procurement of advanced tech products	26	69	7	68
Companies embracing disruptive ideas	39	83	12	35
Company investment in emerging technology	43	67	28	54
State of cluster development	47	57	29	54
Patent applications	86	87	54	68
Venture capital deal volume / size of economy	90	99	27	59

Data source: WEF Readiness for the Future of Production 2018 Report

While there is ample evidence to support the notion that the fourth industrial revolution is well underway in developed economies, it may be premature to say the same in Pakistan's case. This is evident from the country's profile in the WEF's inaugural Readiness for the Future of Production Report 2018, particularly with respect to its 'technology and innovation' driver (**Table 7.3**). In terms of technology and innovation, Pakistan is trailing far behind India and the Philippines, i.e. the two economies that have had great success in tapping the potential of ICT in South and Southeast Asia.

³⁵ The third industrial revolution, also known as the computer or digital revolution, extended from the 1960s to the 1990s.

Narrowing the focus to technology platforms, Pakistan's ranking for 'FDI and technology transfer' and 'cybersecurity commitment' is relatively better compared to other sub-indicators. However, its ranking in the cellular subscriptions and internet user categories comes as a surprise. Evidently, while the country has made gains in these aspects relative to its own past performance, other countries in the region have forged ahead faster.

Regarding ability to innovate, Pakistan's overall ranking is again unsatisfactory. The drag created by funding constraints for startups and gaps in patentability is reflected in the sub-indicators relating to 'venture capital deal volume per size of economy' (90th rank) and 'patent applications' (86th rank). That said, the 'government procurement of advanced technology products' offers some comfort. Viewed in conjunction with the 'state of cluster development', it signals that the public sector is making a conscious effort to facilitate innovation. Furthermore, the private sector's dynamism is captured in the sub-indicators relating to companies' receptiveness to embrace disruptive ideas and to make investments in emerging technologies.

Going forward, it will be imperative to build upon the current base of multi-stakeholder collaboration. Startup founders, VCs, incubation centers, regulators, tax authorities, large ICT firms, associations, ministries, academia, think tanks, and the Pakistani diaspora will need to complement each other's activities to ensure that the country does not miss the 'fourth industrial revolution' bus.

7.7 Future Outlook and Policy Direction

Industry experts are bullish regarding the future outlook of Pakistan's ICT sector.³⁶ This optimism is based on factors like the increasing pace of digitization in the country; stimulus from established foreign firms entering the domestic e-commerce space; gains in financial inclusion; and rise in consumerism. Initially, these developments may spur demand for IT and ITeS in the domestic economy, encouraging firms and developers to offer solutions and applications tailored to the needs of locals. Then, as firms mature and expand their outreach globally, ICT exports can really take off. The predominant export-orientation of the sector is an added bonus: for an economy like Pakistan, where pressures emanating from trade imbalances have all too often held back economic growth, the prospect of adding a new sector to the list of traditional export-oriented industries – like textile, leather, carpets, sports goods, and surgical instruments – is enticing.

That said, at the moment, many IT and ITeS stakeholders are guilty of gravitating in large part towards the low-value added segment of ICT, namely small, service-based firms.³⁷ While there is nothing wrong with small-scale service-based firms per se, their prospects and scope may be relatively limited in the long run. As things stand, country's service-based firms have largely been unable to attain the kind of scale that their regional peers have achieved over time.

Furthermore, industry experts maintain that firms in the ICT sector have increasingly faced issues in dealing with tax authorities.³⁸ The net impact of these developments is that the affected firms may need to invest time, effort, and possibly financial resources in order to extricate themselves. Thus, as the government turns its attention towards providing incentives and support to the ICT sector, it also needs to ensure that, going forward, the federal or provincial tax authorities do not create any unintended disincentives of doing business in this area.

³⁶ According to representatives of the Pakistan Software Houses Association for IT and ITeS (P@SHA), ICT may grow into a US\$ 6-8 billion sector in Pakistan in the next three to four years.

³⁷ Industry experts from P@SHA estimate that around 90 percent of Pakistan's IT and ITES industry consists of service-based firms, compared to only 10 percent of product-based firms.

³⁸ This may take the form of intimidating notices for tax compliance. In more extreme cases, it has reportedly resulted in bank accounts being frozen on the precept of alleged suspicious activity, and company funds remaining blocked for a long time even after the plaintiffs have won the associated court cases.

Some efforts to address the industry's concern are reflected in the Digital Pakistan Policy (**Box 7.4**). Going forward, this policy needs to be built upon, with specific deliverables, responsibilities, timelines and key performance indicators to be collaboratively agreed upon and owned by respective stakeholders. Furthermore, the Ministry of Information Technology and Telecommunication (MOITT) has recommended that the Board of Investment should extend Special Economic Zone (SEZ) incentives to the IT sector, by establishing technology SEZs.³⁹ In particular, the requirement for SEZs to have a minimum size of at least 50 acres may be revised downward for IT firms.

Box 7.4 Digital Pakistan Policy

Keeping in view the rapid expansion of IT sector in Pakistan, MOITT formulated the Digital Pakistan Policy, which was approved by the cabinet in May 2018. This policy provides a generic framework to synergize the expanding digital ecosystem and harness socio-economic growth in the country. The policy identifies key policy areas and relevant ministries and institutions that would be responsible for execution of these objectives. Currently, the federal government is already offering (or has proposed) several incentives for the IT industry including:

- (i) Extension of income tax holiday on IT exports till 2025
- (ii) Reduction in sales tax to 5 percent in Islamabad Capital Territory
- (iii) 5 percent cash reward on IT exports
- (iv) 100 percent foreign ownership and 100 percent repatriation of capital and dividends
- (v) 3-year tax exemption for IT startups
- (vi) Tax holiday for venture capital funds till June 2024

Among several other objectives, the policy aims to double the country's IT and ITeS exports by 2020, which may help the country to improve the external account imbalances while also creating employment opportunities. It envisages boosting foreign and domestic investment by making Pakistan an attractive location for IT/ITeS. To incentivize the sector, the policy clearly outlines the need for development of state of the art IT zones/technology parks, incubation centers for tech startups, and Telecenters in unserved and underserved areas in order to enhance mass adoption of ICT services. The goals also include the expansion of e-commerce industry, with an objective to triple the market size by 2020. Among other objectives, this involves establishment of an efficient e-commerce gateway with the help of SBP in order to provide enabling environment to key stakeholders and investors in trade and e-commerce industry.

Other noteworthy initiatives recently taken by MOITT and Ignite (formerly known as the National ICT R&D Fund) include the launch of National Incubation Centres (NICs) and the Digital Skills (DigiSkills) Training Program. The NICs have been set up in five major cities and are public-private partnerships established in collaboration with universities and corporations.⁴⁰ They are a welcome addition to the incubators and accelerators that were already functioning in the private sector. In fact, some NICs have positioned themselves as hubs of innovation that will cater to fourth industrial revolution applications, reflecting the progressive vision of entities like MOITT and Ignite.

Meanwhile, the DigiSkills initiative aims to train a million people in the future of work using technology. Building on Pakistan's standing among the top five providers of online freelancers, DigiSkills intends to equip the youth and students in particular to tap the full potential of the online job marketplace. In doing so, individuals would be able to earn a decent living, while the envisioned benefits for the macro economy include the creation of new job opportunities, financial inclusion, and foreign exchange in the form of IT export remittances.

As for the private sector, it has already shown a lot of dynamism in the ICT space. A number of Pakistani entities, including startups and more established firms, have made inroads in the global arena and received recognition for their accomplishments. The next frontier is for such firms to scale up and expand their footprint in a sustainable manner, both domestically and abroad. Given the resilience they have already displayed thus far, this aspiration appears well within reach.

³⁹ This may be achieved by modifying relevant clauses of the Special Economic Zone Act 2012.

⁴⁰ The NICs were launched in Islamabad, Lahore, Peshawar, Karachi and Quetta, in a six-month period between December 2017 to May 2018.

On a final note, the country's education system also needs an overhaul. All too often, stakeholders across the board express dissatisfaction with the quality of graduates. The shortcomings are perhaps more acute in technology institutes, where the curriculum needs to be frequently updated in order to equip students with the rapidly evolving needs of the market, regardless of whether they end up serving as employees or launch their own startups. The skillset needed to excel in a number of jobs in the future will be profoundly different from what was required before; indeed, in some cases, certain jobs may not have even existed a decade earlier. To this end, curriculum development and revision is another space where public-private partnership may be explored, so that the content is aligned with the needs of the private sector, with an eye towards both the domestic and global trends.

Special Section 1: CPEC LTP: Opportunities for Agricultural Advancement in Pakistan

Introduction:

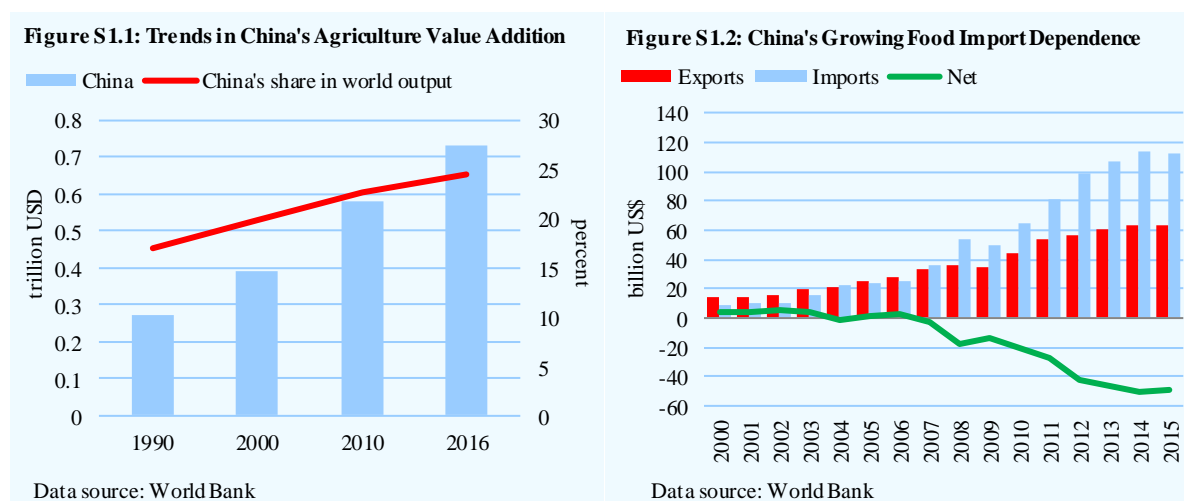
The CPEC Long Term Plan (LTP) envisages significant development of the agriculture sector of Pakistan – an often-overlooked area amidst the developments being made in the energy, infrastructure, and industrial sectors of the country. In the crop sector, there is a focus on increasing the use of modern machinery and synthetic fertilizers to enhance the yields, while food storage and processing zones would be constructed to reduce significant post-harvest losses. Similarly, the building of cold storage stations and meat processing plants is also being planned to enhance productivity of livestock and fisheries sectors besides making their output more competitive in the international market. These developments hold the potential to not only boost the agriculture output of the country, but also to narrow the trade imbalance between China and Pakistan by expanding food exports to the former.

However, it is important to note that the nature and direction of such a progress critically depends upon changes currently underway in the agriculture sector of the Chinese economy. China's food import dependence is rising amidst continued degradation of arable land and depletion of its livestock and fisheries resources. To address these concerns, it is investing heavily under the Belt and Road Initiative (BRI) by outsourcing its food supplies, while moving toward high value-added food products to contain its food trade deficit.

In this backdrop, this section intends to discuss and analyze: 1) the policy framework being adopted by China to address its growing food import dependence, particularly under the Belt and Road initiative (BRI); and 2) how Pakistan stands to benefit from the aforementioned transformation under the umbrella of CPEC.

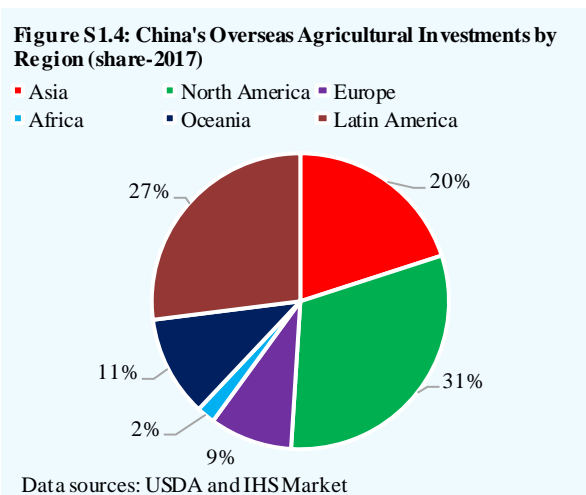
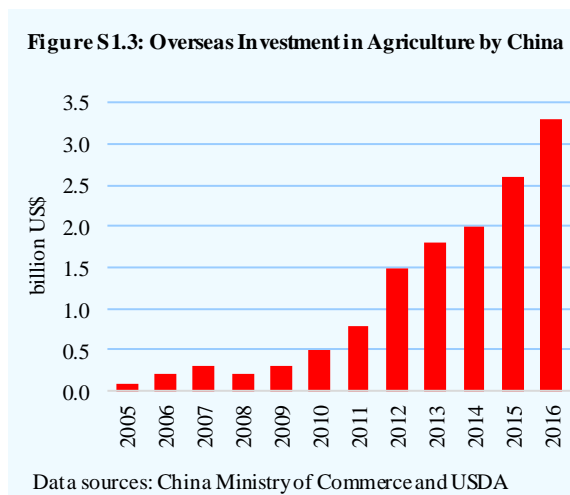
Food Security Concerns and Structural Transformation of the Agriculture Sector in China:

The farm output in China accounts for nearly a fourth of the total global agricultural production, up from 17 percent in 1990 (**Figure S1.1**). This remarkable performance, however, has come with a cost. For example, ample use of pesticides and fertilizers over the years has resulted in a gradual degradation of arable land. Meanwhile, rising population and a gradual shift towards consumption, fueled in part by growing incomes in the non-commodity sector, have amplified dependence on food imports (**Figure S1.2**).

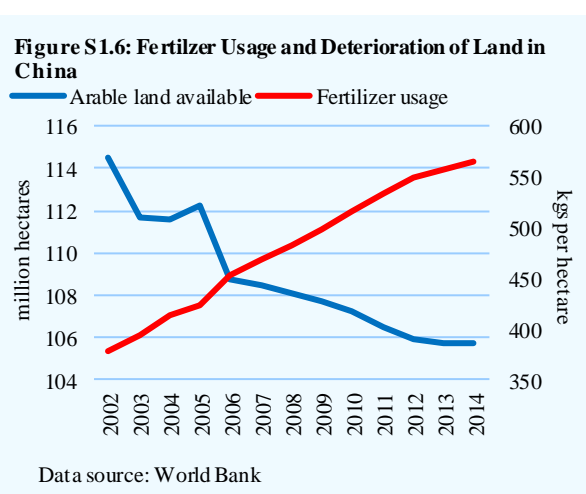
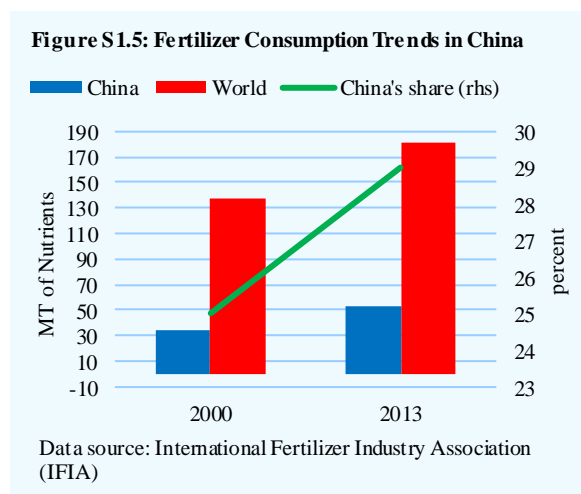


In this context, the year 2007-08 is considered a turning point when China's trade deficit in food products started widening at a substantial pace. This prompted a drastic policy drive towards tackling

food security. In this regard, a “going abroad” policy was drafted whereby China plans to tackle the negative trends affecting the agriculture sector through various initiatives and reforms.¹ While acknowledging the dependence on imports, the policymakers want to contain the vulnerability of domestic grain prices to international market. Resultantly, China intends to develop various food processing and storage stations across BRI economies to mitigate price fluctuations and increase supply of food products for the domestic market.² **Figures S1.3 and S1.4** detail the direct overseas investment originating from China in agriculture, forestry, and fishing.



Similarly, to address the rapid arable land degradation, China intends to move away from chemical usage by regulating the application of pesticides and synthetic fertilizers. At present, China’s fertilizer application rates are much higher compared to those in rest of the world (**Figure S1.5**).³ The excessive application, though increasing crop yields, has gradually resulted in the deterioration of the overall availability of arable land (**Figure S1.6**). To counter these trends, the government is encouraging the adoption of organic fertilizers in the agriculture sector.



¹ The aspirations referred to in this section stem from the First Policy Document (also known as the No. 1 Document) of China for CY17 and CY18.

² Various Chinese government policy documents and white papers use the term “zou chu qu” – “going/investing abroad” – when talking about the agricultural investments being made overseas.

³ This has resulted in the share of China in total global fertilizer consumption increasing from 25 percent to 29 percent during 2000 and 2013.

Simultaneously, the Chinese government plans to reduce the intensity of farming and provide adequate breeding space to the livestock and fisheries, mainly to mitigate pressure on the natural resources and obtain an overall sustainable growth in agriculture.⁴

Lastly, China is trying to enhance its presence in the high value-added spectrum of global supply chain to reduce the expanding food trade deficit. For this purpose, a number of initiatives are underway, which include the establishment of Research and Development (R&D) institutions and technological innovation centers in an effort to transition away from conventional farming towards production of commodities, such as coarse cereals, silkworm, edible fungus, and traditional medicine vegetables.⁵ The aim is to develop agricultural brands that would compete in the high-end international markets. To further promote the exports on a global scale, the country is striving to upgrade its agri-services sector to better market the commodities on a sustainable basis.

Potential Benefits arising for Pakistan:

Being one of the countries included in the BRI initiative, Pakistan can benefit from China's increased food import dependence and gradual transition towards high value addition in the agriculture sector. China is planning to outsource its agriculture supplies in the form of joint ventures by investing in and developing processing zones, warehouses, dairy farming, and cold storage stations in Pakistan. All of these developments hold the potential of narrowing the trade imbalance between Pakistan and China, which at present is tilted heavily towards the latter. CPEC stands to play a substantial part in this regard,⁶ and so would the geographic proximity.⁷ A few such opportunities are highlighted below:

a) Building of Storage Stations and Processing Zones

Pakistan is one of the countries where China would build its storage facilities and processing zones. **Table S1.1** details the various similar investments made by Chinese enterprises in other BRI and non-BRI economies. Local firms may take advantage by developing joint ventures with their Chinese counterparts. In this regard:

- This would help lower significant post-harvest losses experienced in the sector.⁸ According to MNFSR, the currently available storage facilities in the economy are sufficient to meet just one third of the total demand. Thus, private sector involvement in the segment would help mitigate the supply deficit. Furthermore, these joint ventures can provide learning opportunities and help transmit knowledge and improved storage knowhow amongst local farmers.

Table S1.1: Selected China's Overseas Agricultural Investments

Year	Company	Host Country	Commodity	Market
2008	Sukala Refinery	Mali	Sugar	Local
2008	N/A	Senegal	Sesame	China
2009	ZTE	Congo	Palm Oil	World
2009	Chongqing Seed Shanghai	Tanzania	Rice	Local
2012	Pengxin China Complete Engineering	New Zealand	Dairy	China
2012-13	Corporation	Ukraine South America	Corn	World
2014-15	COFCO**	/Europe	Soybeans	World
2017	Shandong Delisi	Australia	Beef	China

**COFCO=China National Cereals, Oils and Foodstuffs Corporation
Data sources: South African Institute of International Affairs; USDA

⁴ For instance, in order to address the dwindling biodiversity in Yangtze River Basin due to construction of dams and transport systems, the government is planning to develop new aquatic organism reserves, alongside maintaining existing ones.

⁵ This would also have a spillover impact of advancement in crop lifespan and animal husbandry techniques in general.

⁶ The comprehensive roadmap of agricultural mechanization and improvement mentioned under the CPEC LTP complements the changes sought after by China in its First Policy Document.

⁷ The Asian economies with food exports to China greater than those of Pakistan are (in descending order) Thailand, Malaysia, Singapore, Indonesia, and Vietnam. Four of these countries are geographically more distant to China relative to Pakistan (the exception being Vietnam). India is also a competitor, though its detachment from the BRI initiative makes it less likely a challenger in this regard.

⁸ Around one third of the produce is lost per annum in the agriculture sector due to inadequate post harvest facilities. Such losses in durables (cereals and pulses) and perishables (fruits and vegetables) are 10 percent and 22 percent respectively (Data source: MNFSR).

- Another positive spillover of this development would be in the government's efforts to achieve the "Zero hunger" Sustainable Development Goal (SDG). Pakistan ranks 106th out of 118 countries in the Global Hunger Index of 2017. Reduction in post-harvest losses of staple crops would help considerably in remedying this situation.
- The usability and accessibility of warehouse receipt finance in Pakistan would be enhanced. This would not only improve liquidity conditions of farmers but would also help resolve long standing issues to provide creditable collaterals to lending institutions.
- The local trading firms may gain by exploiting the potential transit arrangement between the two countries. The entrance of such firms may also bring much needed innovation in the domestic agricultural logistics system.
- This can also serve as an opportunity to modernize the processing segment of the agriculture sector. The sector can benefit in three ways. First, the presence of Chinese firms via joint ventures would ensure the adoption of modern processing machinery and methodologies. Second, the improved processing may potentially lead to higher earnings of food exports in the external markets. Third, it may help contain the spread of informal domestic processing plants by encouraging innovation and increasing margins (through mechanization, for instance). Currently, four out of nine proposed Special Economic Zones (the ICT Model Industrial Zone in Islamabad; Allama Iqbal Industrial City in Faisalabad; Bostan Industrial Zone in Balochistan; and Rashakai Economic Zone in Mardan) under CPEC would have food/fruit processing industry players participating in varying degrees.

b) *Enhancing the Share of Exports to China*

Out of around US\$ 99.6 billion food imports of China, Pakistan's share is only around 0.37 percent (roughly US\$ 0.4 billion). Pakistan can enhance its exports through various CPEC initiatives and by tapping into the growing import dependence of China in general. The Ministry of National Food Security and Research (MNFSR), in its 2018 Food Security Policy, envisages the development of nine agricultural development zones along the CPEC. By encouraging innovation, entrepreneurship, and collaboration, the zones could serve as platforms to develop clusters and infrastructure to nurture emerging rural businesses in an effort to produce commodities deemed exportable to China. These commodities include cereals, dairy, eggs, meat, honey, tobacco, seafood and fruits, etc.⁹

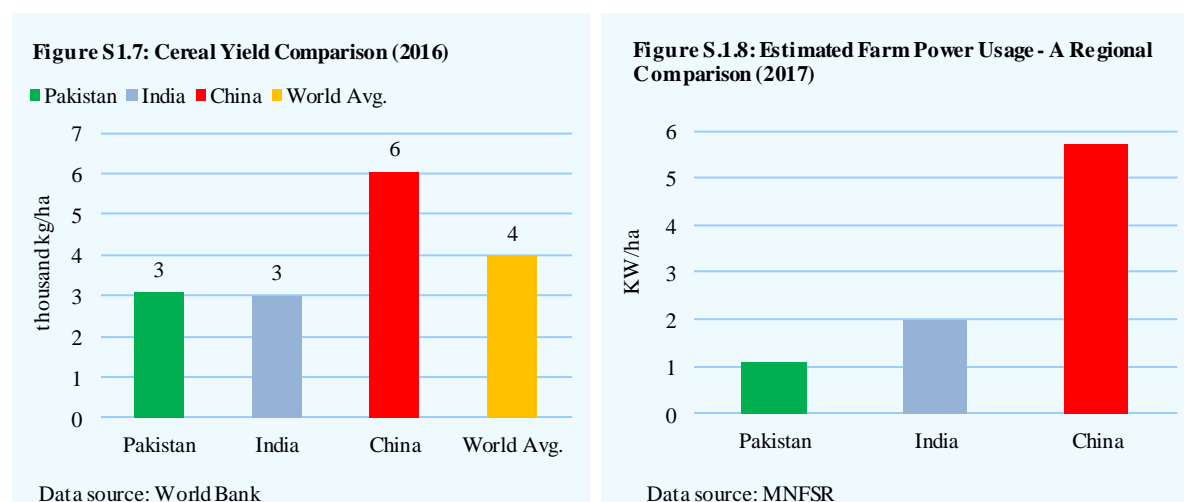
Although the import demand for these items is lower in China compared to commodities such as palm oil, soybean, and cassava, a low number of its importing partners indicate that a market share can be crafted and built upon.¹⁰ In this context, the Chinese No.1 document lists "diversification of agricultural import suppliers" as a policy objective and the agricultural investments envisioned under CPEC are meant to build upon that objective.

In this vein, the land remediation plans under CPEC would help increase productivity and efficiency of the crop sector by transforming low and medium yield lands into higher ones. The remediation efforts would also translate into usage of higher yield seed varieties and increased mechanization of agricultural operations. Pakistan lags behind regional economies in both these measures and a boost to yields would help enhance the production efficiency of farmland (**Figure S1.7 and S1.8**). Recently, Yuan Long Ping High-Tech Agriculture Co Ltd, one of the major Chinese hybrid seed

⁹ Chinese collaboration is expected, with private sector leading the initiative. The focus would be to harness the latest R&D to innovate and upgrade the processing techniques and post-harvest operations, and to develop marketing tools to better promote the produce.

¹⁰ Reference: Gooch, Elizabeth and Fred Gale. China's Foreign Agriculture Investments, EIB-192, U.S. Department of Agriculture, Economic Research Service, April 2018.

production companies, carried out a months long program in the areas of Swat, Mansehra, Sahiwal, and Larkana, etc. to develop a heat resistant rice seed variety that would enable the crop to be cultivated in all the four ecological zones of Pakistan. The company also provided training in local research institutions such as the Pakistan Agriculture Research Council (PARC) in hybrid seed breeding and field management skills. Market players predict that the hybrid seed varieties would also be exportable to economies such as Philippines in the near term.



c) Potential Investments in Livestock, Fisheries, and R&D

Fisheries and livestock sectors would also see potential investments, knowledge transfers, and relocations. Some opportunities include:

- Dairy Sector:** With increased focus on dairy under CPEP and an objective to export such commodities to China, private investments to modernize the sector are expected. Although the cattle population of Pakistan is around 72 million, currently only five percent of total milk production is used for the production of tetra-packed products.¹¹ Commodities such as dried milk and other dairy products can be manufactured to serve the needs of both domestic consumers and exporters. There is a precedent for it, as China has been investing in dairy plants across Asia (for instance in the Russian Far East) and, lately, in the continent of Australia.¹² Under the Friendly Khyber Pakhtunkhwa initiative (a project under the umbrella of CPEP), a joint venture with Chinese firms is set to be initiated in the dairy farming sector, with the eventual aim of exploiting the proximity to Afghanistan and Middle Eastern economies to increase the country's milk export share in the international markets. Moreover, on July 31 2018, Fauji Foods Ltd disclosed on the stock exchange that Inner Mongolia Yili Industrial Group Company Limited, a Chinese state-owned enterprise, has expressed interest in acquiring up to 51 percent of the voting shares and/or control in the former with the intention of expanding R&D operations and manufacturing high value added dairy products to be exported to China.
- Cold Storage Centers:** The fisheries sector would benefit by the proposed establishment of fish feed production units and hatcheries to meet the growing demand, promotion of aquaculture in saline inland and coastal areas of Sindh and Balochistan. As an example, Mufeng Biological Technology Co. has built a cold storage central near the Khunjerab Pass (which is active for eight months a year) from which seafood imports (such as squid, shrimp, pomfret and bonefish, etc.) to

¹¹ Data Source: MNFSR

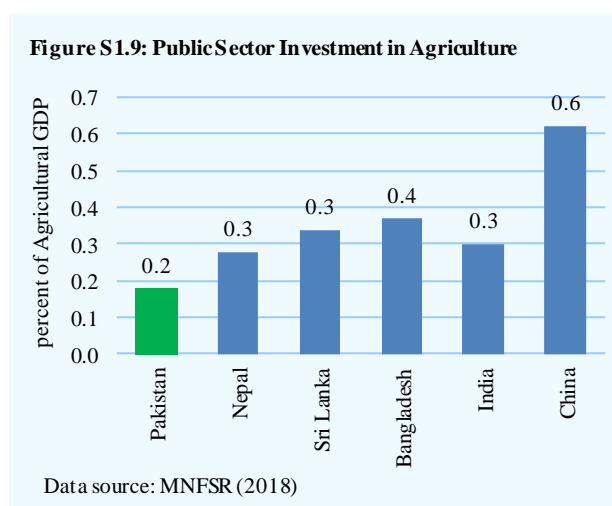
¹² China has also set up a dairy processing plant in Arkansas, United States as a joint venture between Dairy Farmers of America and China's Yili Group, while another Chinese firm – Bright Foods – acquired a US\$2.1 billion stake in an Israeli dairy firm Tnuva.

Xinjiang region and for sale in areas like Urumqi, Beijing, and Shanghai is managed. The storage center would also process orders that would arrive at Gwadar Port en-route to China.

- Animal Medicine and Vaccine Production:** Moreover, increased usage of and collaboration in animal medicine and vaccine production is listed as a policy objective under CPEC. This in turn would improve the lifespan and productivity of the livestock. The KP government website lists a plan for collaborative investment in biologics and vaccines, citing a substantial supply and demand deficit (annual production of 3.9 million doses as against an annual requirement of 132 million). The provincial government also states that the country has lost around US\$ 0.5 billion in the livestock sector due to animal diseases. In this regard, an initial investment worth US\$ 10 million has been earmarked. However, there is a need to ensure that Pakistan strengthens the regulatory mechanism to inspect the nature, intensity and frequency of such dosages to animals to ensure health and food safety standards are met. This is necessary as there has been an excessive application of vaccine dosages in China, which has left a lasting impact on its livestock population. Accordingly, the country is cutting down on production and application of animal vaccines and injections, and this is one of the reasons why relocations of such firms are planned across the BRI countries.

- Research Centers and Demonstration Plants:**

The establishment of joint venture Sino-Pakistan R&D operations dedicated to crops and livestock would aid in bringing innovation to the sector and increase productivity of the animals. Currently, Pakistan has a very low public sector agriculture investment rate compared to regional economies (**Figure S1.9**). Private sector involvement would hence help accelerate the modernization. China has a history of developing technology demonstration centers and training programs in African economies of Cameroon, Ethiopia, Liberia, Tanzania, and Uganda, etc., where Chinese experts share harvesting, breeding, and sowing



techniques with local partners and help the latter in research initiatives meant to improve productivity of the host countries' agriculture sectors. In addition to the hybrid seed-manufacturing project discussed above, numerous similar investments are expected in Pakistan under CPEC. Complementing the various agricultural investments in BRI economies by Chinese enterprises, China's Academy of Agricultural Sciences has launched a "Global Agricultural Big Data Information Services Alliance" in order to act as a dissemination and absorption center for information and data to support overseas investments by the Chinese agribusinesses.¹³

- Food Packaging and Marketing:** Under CPEC, a desire to innovate marketing and sales model of the agriculture sector is highlighted. This arrangement would be mutually beneficial and of a nature comparable to that of knowledge transfers. Chinese firms would be able to research on various marketing models, while Pakistan's agriculture would get a much-needed promotional boost. The Rashakai Economic Zone near Mardan, Khyber Pakhtunkhwa is expected to host firms working in the fruit and food packaging segments.

¹³ Reference: Ministry of Agriculture. 2016. "(Global agriculture big data and information service alliance established in Beijing)", Ministry of Agriculture Press Office. 16 November.

- **Meat Processing:** Lastly, the slaughtering and meat-processing sector would experience positive spillovers in the form of high value addition and exporting potential. Segments such as frozen foods would benefit from increased mechanization and improved marketing efforts. According to a USDA April, 2018 report on China’s foreign agricultural investments, China has approved 56 inspection, testing, and cold storage facilities dedicated to imported meat. The initiative is meant to standardize and modernize the monitoring and inspection of meat imported from the BRI partners.

To Maximize Returns, Structural Problems would need to be Addressed

The aspirations under CPEC and the opportunity provided by the structural changes underway in China generally bode well for the agriculture sector of Pakistan. However, Pakistan would have to tackle longstanding structural roadblocks in order to fully benefit from the potential technology transfers and relocations. In particular:

- **Addressing Farmers’ Illiteracy:** The automation, mechanization and general advancement desired under CPEC is challenged by the prevailing low literacy rate amongst local farmers and hence their willingness to adhere to conventional farming methods. There are some encouraging initiatives being undertaken to address this deficit, such as the DFID-Telenor joint venture Khushaal Zamindar,¹⁴ which aims to introduce mobile-based agricultural knowledge dissemination among cash crop farmers. However, the issue would need large-scale training and awareness measures to remedy the situation.
- **Bank Financing and New Product Directions:** Currently, the small-scale farmers face expensive informal lending, lack of proper incentives, and absence of any guidance and facilitation. The increasing participation of commercial banks in this regard is a welcome development, though the demand is still consistently higher than the supply of credit.¹⁵ The increased efforts of microfinance banks, fintech firms, and provincial departments (such as PITB and Sindh Agriculture Department) are also helping expand the coverage and of credit disbursement to small farmers with limited or negligible credit history (refer to **Chapter 7** for more discussion on digitization and e-governance).

In order for small scale corporate farming to flourish thus, these farmers would require cheap, accessible financing as well as new product directions (such as horticulture) to increase their competitiveness.

- **Innovation in the Seed Sector:** The existing trends in the crop seed segment paint a discouraging picture. Certified variants are available for certain crops only (such as wheat and rice), with fruits, vegetables, and grain counterparts almost exclusively imported. The increased yields and higher export incomes would be unachievable without due consideration to modernization and innovation in the sector.
- **Cluster Farming:** The vast majority of farmers in Pakistan have land units that are fragmented and are below 12.5 acres, which makes it difficult to generate economies of scale that would justify the use of mechanization and sophisticated cropping patterns. One possible solution is to encourage cooperative farming, which allows economy of scale by forming vibrant clusters of

¹⁴ For more detail, please refer to “Box 2.2: Khushaal Zamindar and Mobile Agriculture” in the SBP’s First Quarterly Report for FY18 on the State of Pakistan’s Economy.

¹⁵ During FY18, the SBP set banks’ credit disbursement target of Rs 1 trillion for agricultural sector as against an estimated demand of Rs 1343 billion. The banks met 72 percent of total demand for agri credit during the period. In view of rising demand for agri credit, the central bank has set a higher target of Rs 1250 billion for FY19.

farmers.¹⁶ Another problem is the lack of proper documentation of land records. Efforts to digitize such records would ameliorate the concerns of potential investors by offering greater transparency.

- Water Administration: Lastly, the issue of water availability is to be addressed in order to inhibit the adverse impacts of climate change. Issues such as limited storage capacity, trans-boundary disputes (concerning the Indus Water Treaty), outdated distribution systems, and depleting groundwater resources underline such concerns.¹⁷ Additionally, the vulnerable water supply is being threatened by rising demand due to a planned increase in industrial activity, rising population, and urbanization efforts associated with the CPEC.

¹⁶ For more information, refer to “Special Section 1: The growth of the processed food industry in Pakistan: Changing trends and key challenges” of the State Bank of Pakistan First Quarterly Report for FY17.

¹⁷ For more information, refer to Chapter 7: “Water Sustainability in Pakistan - Key Issues and Challenges” of the State Bank of Pakistan’s Annual Report for FY17.

Annexure A: Data Explanatory Notes

- 1) **GDP:** In case of an ongoing year, for which actual GDP data is yet not available, SBP uses the GDP target given in the Annual Plan by the Planning Commission in order to calculate the ratios of different variables with GDP, e.g., fiscal deficit, public debt, current account balance, trade balance, etc. SBP does not use its own projections of GDP to calculate these ratios in order to ensure consistency, as these projections may vary across different quarters of the year, with changing economic conditions. Moreover, different analysts may have their own projections; if everyone uses a unique projected GDP as the denominator, the debate on economic issues would become very confusing. Hence, the use of a common number helps in meaningful debate on economic issues, and the number given by the Planning Commission better serves this purpose.
- 2) **Inflation:** There are three numbers that are usually used for measuring inflation: (i) period average inflation; (ii) YoY or *yearly* inflation; and (iii) MoM or *monthly* inflation. Period average inflation refers to the percent change of the *average* CPI from July to a given month of the year over the corresponding period last year. YoY inflation is percent change in the CPI of a given month over the same month last year; and monthly inflation is percent change of CPI of a given month over the previous month. The formulae for these definitions of inflation are given below:

$$\text{Period average inflation } (\pi_{\text{Hi}}) = \left(\frac{\sum_{i=0}^{t-1} I_{t-i}}{\sum_{i=0}^{t-1} I_{t-12-i}} - 1 \right) \times 100$$

$$\text{YoY inflation } (\pi_{\text{YoYt}}) = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

$$\text{Monthly inflation } (\pi_{\text{MoMt}}) = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Where I_t is consumer price index in t^{th} month of a year.

- 3) **Change in debt stock vs. financing of fiscal deficit:** The change in the stock of gross public debt does not correspond with the fiscal financing data provided by the Ministry of Finance. This is because of multiple factors, including: (i) The stock of debt takes into account the gross value of government borrowing, whereas financing is calculated by adjusting the government borrowing with its deposits held with the banking system; (ii) changes in the stock of debt also occur due to movements in exchange rates, both PKR and other currencies against US Dollar, which affect the rupee value of external debt.
- 4) **Government borrowing:** Government borrowing from the banking system has different forms and every form has its own features and implications, as discussed here:
 - (a) Government borrowing for budgetary support:

Borrowing from State Bank: The federal government may borrow directly from SBP either through the “Ways and Means Advance” channel or through the purchase (by SBP) of Market Related Treasury Bills (MRTBs). Ways and Means Advance allows government to borrow up to Rs 100 million in a year at an interest rate of 4 percent per annum; higher amounts are realized through the purchase of 6-month MTBs by SBP at the weighted average yield determined in the most recent fortnightly auction of treasury bills.

Provincial governments and the Government of Azad Jammu & Kashmir may also borrow directly from SBP by raising their debtor balances (overdrafts) within limits defined for them. The interest rate charged on the borrowings is the three month average yield of 6-month MTBs. If the overdraft limits are breached, the provinces are penalized by charging an incremental rate of 4 percent per annum.

Borrowing from scheduled banks: This is mainly through the fortnightly auction of 3, 6 and 12-month Market Treasury Bills (MTBs). The Government of Pakistan also borrows by a quarterly auction of 3, 5, 10, 15, 20 and 30 year Pakistan Investment Bonds (PIBs). However, provincial governments are not allowed to borrow from scheduled banks.

(b) Commodity finance:

Both federal and provincial governments borrow from scheduled banks to finance their purchases of commodities e.g., wheat, sugar, etc. The proceeds from the sale of these commodities are subsequently used to retire commodity borrowing.

5) Differences in different data sources: SBP data for a number of variables, such as government borrowing, foreign trade, etc – often do not match with the information provided by MoF and PBS. This is because of differences in data definitions, coverage, etc. Some of the typical cases have been given below.

- (a) **Financing of budget deficit (numbers reported by MoF vs. SBP):** There is often a discrepancy in the financing numbers provided by MoF in its quarterly tables of fiscal operations and those reported by SBP in its monetary survey. This is because MoF reports government bank borrowing on a cash basis, while SBP's monetary survey is compiled on an accrual basis, i.e., by taking into account accrued interest payments on T-bills.
- (b) **Foreign trade (SBP vs PBS):** The trade figures reported by SBP in the *balance of payments* do not match with the information provided by the Pakistan Bureau of Statistics. This is because the trade statistics compiled by SBP are based on exchange record data, which depend on the actual receipt and payment of foreign exchange, whereas the PBS records data on the physical movement of goods (customs record).

List of Acronyms

A

A/C	Air Conditioned/Air conditioning
ACPL	Attock Cement Pakistan Limited
ADB	Asian Development Bank
ADD	Anti-Dumping Duty
ADP	Automotive Development Policy
AML	Anti-Money Laundering
AMPS	Advanced Mobile Phone System
APCMA	All Pakistan Cement Manufacturers Association
APEDA	Agricultural and Processed Food Products Export Development Authority, India
APP	Asset Purchase Program
ARA	Assessing Reserve Adequacy
ARPU	Average Revenue Per User
ATF	Anti-Terrorist Financing
ATM	Automated Teller Machine
Avg.	Average

B

B2B	Business-to-business
B2C	Business-to-consumer
BB	Branchless Banking
bbbl	billion barrels
BEOE	Bureau of Emigration and Overseas Employment
BGD	Bangladesh
BHU	Basic Health Unit
BISP	Benazir Income Support Program
BMR	Balancing, Modernization and Replacement
BoJ	Bank of Japan
BoP	Balance of Payments
BOP	Bank of Punjab
BPO	Business Process Outsourcing
bps	basis points
Brexit	Britain's planned exit from the EU
BRI	Belt and Road Initiative
BRIC	Brazil, Russia, India, China
BSC	Behbood Savings Certificate
BULOG	Bureau of Logistics, Indonesia

C

CA	Current Account
CAD	Current Account Deficit
CAGR	Compound Annual Growth Rate
CASA	Current and Saving Account
CBN	Cost of Basic Needs
CBOT	Chicago Board of Trade
CBU	Complete Built Unit

CCAC	Cotton Crop Assessment Committee
CD	Civil Dispensary Custom Duty
CDNS	Central Directorate Of National Savings
CDPI	Centre for Peace and Development Initiatives
CFT	Combating the Financing of Terrorism
CHCC	Cherat Cement Company Ltd
CIDA	Canadian International Development Agency
CKD	Completely Knocked Down
CNG	Compressed Natural Gas
CoD	Collection on Demand
COD	Cash on Delivery
CPEC	China Pakistan Economic Corridor
CPI	Consumer Price Index
CPL	Cherat Packaging Limited
CPS	Credit to Private Sector
CR	Cold Rolled
CRA	Computer-Related Activities
CRC	Cold Rolled Coil
CSF	Coalition Support Fund
CSPP	Corporate Sector Purchase Program
CY	Calendar Year
D	
DAP	Di Ammonium Phosphate
DC	Deputy Commissioner
DFI	Development Financial Institution
DFS	Digital Financial Services
DG Khan	Dera Ghazi Khan
DGKC	D G Khan Cement Company Ltd
DigiSkills	Digital Skills Training Programme
DMMD	Domestic Market and Monetary Management Department, SBP
DNP	Duty-Non-Paid
DPBs	Deposit Protection Bureaus
DRAP	Drug Regulatory Authority of Pakistan
DSC	Defence Savings Certificate
DSL	Digital Subscriber Line
E	
E&P	Exploration and production
EBA	Everything but arms
ED	External Debt
ECB	European Central Bank
EFS	Export Finance Scheme
EIF	Electronic Import Form
EFF	Extended Fund Facility

EVFTA	European Union Vietnam Free Trade Agreement
EM	Emerging Markets
ERRA	Earthquake Reconstruction and Rehabilitation Authority
EOBI	Employees Old-Age Benefits Institution
EDL	External Debt and Liabilities
EU	European Union
F	
FAO	Food and Agriculture Organization
FATA	Federally Administered Tribal areas
FBR	Federal Board of Revenue
FCA	Foreign Currency Accounts
FDI	Foreign Direct Investment
FED	Federal Excise Duty
FED	Federal Excise duty
Fed	Federal Reserve
FEE	Foreign Exchange Earnings
FEI	Food Energy Intake
FFC	Fauji Fertilizer Company
FIPI	Foreign Investors Portfolio Investment
FIs	Financial Institutions
FLL	Fixed Local Loop
FMCG	Fast -Moving Consumer Goods
FML	Fauji Meat Limited
FO	Furnace Oil
fob	Free on Board
FRDLA	Fiscal Responsibility and Debt Limitation Act
FTA	Free Trade Agreement
FX	Foreign Exchange
FY	Fiscal Year (July to June)
G	
G2P	Government-to-Person
GBP	Great British Pound
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GIDC	Gas Infrastructure Development Cess
GIS	Government Ijara Sukuk
GSM	Global System for Mobile communication
GSP	Generalised Scheme of Preferences
GST	Goods and Services Tax
GSTS	General Sales Tax on Services
GVA	Gross Value Addition
Gw/h	Gigawatt per hour

H

H1-FY	First half of fiscal year
H2-FY	Second half of fiscal year
HDI	Human Development Index
HGDC	Hot Dipped Galvanized Coil
HIES	Household Integrated Economic Survey
HOBC	High Octane Blending Component
HR	Hot Rolled
HRC	Hot Rolled Coil
HRI	House Rent Index
HS Codes	Harmonized System Codes
HSD	High Speed Diesel
Hydel	Hydroelectric

I

IBA	Institute of Business Administration
IBFT	Interbank Funds Transfer
IBIs	Islamic Banking Institutions
IBIs	Islamic Banking Institutions
IBPAP	Information Technology and Business Process Association of the Philippines
IBRD	International Bank for Reconstruction and Development
ICI	ICI Pakistan Limited
ICRI	International Rice Research Institute
ICT	Information Communication Technology
ICT	Information and communication technologies
IDA	International Development Assistance
IDB	Islamic Development Bank
IDBP	Industrial Development Bank of Pakistan
IEA	International Energy Agency
IFEM	Inland Freight Equalization Margin
IFI	International Financial Institutions
IH&SMEFD	Infrastructure, Housing & SME Finance Department
ILO	International Labour Organization
IMF	International Monetary Fund
IND	India
INR	Indian Rupee
IoT	Internet of Things
IPO	Initial public offering
IPO-Pakistan	Intellectual Property Organization
IPP	Independent Power Producer
IPR	Intellectual Property Rights
IRSA	Indus River System Authority
ISOM	Isomerization
IT	Information Technology
ITC	International Trade Centre

	ITeS	Information Technology Enabled Services
	IVR	Interactive Voice Response
J		
	JIC	Just in case
	JIT	Just in time
	JPY	Japanese Yuan
K		
	KIBOR	Karachi Interbank Offer Rate
	KOHC	Kohat Cement Company Ltd
	KP	Khyber Pakhtunkhwa
	KPITB	Khyber Pakhtunkhwa Information Technology Board
	KPT	Karachi Port Trust
	KSA	Kingdom of Saudi Arabia
	KSE	Karachi Stock Exchange
	KYC	Know your customer
L		
	LARMIS	Land Administration and Revenue Management Information System
	LCE	Lahore Centre of Entrepreneurship
	LCV	Light Commercial Vehicle
	LDI	Long Distance and International
	LDO	Light Diesel Oil
	LIBOR	London Interbank Offer Rate
	LNG	Liquefied Natural Gas
	LPG	Liquefied Petroleum Gas
	LSM	Large Scale Manufacturing
	LTE	Local Tax Evaded Long Term Evolution (Telecom)
	LTFF	Long-term Financing Facility
	LTP	Long Term Plan
	LUMS	Lahore University of Management Sciences
M		
	M2	Broad Money
	MAF	Million Acre-Feet
	mb/d	Million Barrels Per Day
	MCHC	Mother and Child Health Center
	MCR	Minimum Capital Requirement
	MDGs	Millennium Development Goals
	MENA	Middle East and North Africa
	MENAP	Middle East and North Africa Perspectives
	MFBI	Microfinance Banks and Institutions
	MFIs	Microfinance Institutions
	MGI	McKinsey Global Institute
	MHz	Mega Hertz

MIT	Massachusetts Institute of Technology
ML	Main Line
MLCF	Maple Leaf Cement
MMBTU	One million British Thermal Units
mmcf	Million cubic feet
mmcfd	Million cubic feet per day
MNC	Multinational Corporation
MNC	Multinational Corporation
MNFSR	Ministry of National Food Security and Research
MoF	Ministry of Finance
MOITT	Ministry of Information Technology and Telecommunication
MoM	Month-on-Month
MPC	Monetary Policy Committee
MRL	Maximum Residue Limit
MRTBs	Market Related Treasury Bills
MS	Motor Spirit
MSCI	Morgan Stanley Capital International
MT	Metric Tonnes
MTBs	Market Treasury Bills
MTDS	Medium Term Debt Strategy
MUFAP	Mutual Fund Association of Pakistan
MW	Mega Watt
N	
NA	Not Applicable
NADRA	National Database and Registration Authority
NATO	North Atlantic Treaty Organization
NAVTTTC	National Vocational and Technical Training Commission
NBFI	Non-Banking Financial Institutions
NHA	National Highway Authority
NCCPL	National Clearing Company of Pakistan Limited
NDA	Net Domestic Asset
NDFC	National Development Finance Corporation
NEPRA	National Electric Power Regulatory Authority
NER	Net Enrolment Rate
NFA	Net Foreign Asset
NFC	National Finance Commission
NFDC	National Fertilizer Development Center
NFIS	National Financial Inclusion Strategy
NFNE	Non-Food Non-Energy
NGMS	Next Generation Mobile Services
NIC	National Incubation Centre
NMCHP	National Maternal Newborn and Child Health Program
NP	Nitro Phosphate
NPK	Nitrogen-Phosphorus-Potassium

NPL	Non-Performing Loan
NRL	National Refinery Limited
NRSP	National Rural Support Programme
NSS	National Saving Scheme
NTC	National Telecommunication Corporation
O	
O & M	Operation and Maintenance
OCAC	Oil Companies Advisory Committee
OCS	Overseas Courier Services
ODA	Official Development Assistance
OGDCL	Oil and Gas Development Company
OGRA	Oil and Gas Regulatory Authority
OICCI	Overseas Investors Chamber of Commerce and Industry
OLT	Orange Line Train
OMCs	Oil Marketing Companies
OMO	Open Market Operation
OPEC	Organization of the Petroleum Exporting Countries
OPEN	Organization of Pakistani Entrepreneurs
OTEXA	Office of Textiles and Apparel
P	
P2P	Peer-to-peer
PAI	Pakistan Automotive Institute
Pak.	Pakistan
PAMA	Pakistan Automotive Manufacturers Association
PARC	Pakistan Agriculture Research Council
PASSCO	Pakistan Agricultural Storage and Services Corporation
PBA	Pensioner's Benefit Account
PBA	Pakistan Banks Association
PBS	Pakistan Bureau of Statistics
PCGA	Pakistan Cotton Ginners Association
PCMA	Pakistan Chemical Manufacturers' Association
PDHS	Pakistan Demographic and Health Survey
PEDL	Public External Debt and Liabilities
PEZA	Philippine Economic Zone Authority
PFA	Punjab Food Authority
PHC	Punjab Healthcare Commission
PHPL	Power Holding Private Limited
PIA	Pakistan International Airlines
PIB	Pakistan Investment Bond
PICIC	Pakistan Industrial Credit and Investment Corporation
PIOC	Pioneer Cement Ltd
PITB	Punjab Information Technology Board
PKR	Pakistani Rupee

PL	Petroleum Levy
PMG	Premium Motor Gasoline
PMG	Premium Motor Gas
PMRC	Pakistan Mortgage Refinancing Company
PNSC	Pakistan National Shipping Corporation
POL	Petroleum, Oil and Lubricants
POS	Point of Sale
PPCBL	Punjab Provincial Cooperative Bank Ltd.
PR	Pakistan Railways
PRI	Pakistan Remittance Initiative
PRSP	Poverty Reduction Strategy Paper
PSC	Private Sector Credit
PSD	Payment Systems Department
PSDP	Public Sector Development Program
PSE	Public Sector Enterprise
PSEL	Pakistan Services Limited
PSLM	Pakistan Social and Living Standards Measurement Survey
PSM	Pakistan Steel Mill
PSO	Payment System Operator
PSO	Pakistan State Oil
PSP	Payment System Provider
PSPC	Pakistan Security Printing Corporation
PSX	Pakistan Stock Exchange
PTA	Pakistan Telecommunication Authority
PTCL	Pakistan Telecommunication Company Limited
PVC	Polyvinyl chloride
Q	
Q1	First quarter
Q2	Second quarter
Q3	Third quarter
Q4	Fourth quarter
QQE	Quantitative and Qualitative Easing
QR	Quick Response
R	
R&D	Research and Development
RD	Regulatory Duty
RDF	refused-derived fuel
REER	Real Effective Exchange Rate
rhs	Right Hand Side
RIC	Regular Income Certificate
RLNG	Regasified Liquefied Natural Gas
RON	Research Octane Number
RPT	Regular Public Transport
Rs	Rupees

RSC-CPI	Relatively Stable Component of Consumer Price Index
S	
SAMA	Saudi Arabian Monetary Agency
SBP	State Bank of Pakistan
SDGs	Sustainable Development Goals
SDRs	Special Drawing Rights
SECP	Security Exchange Commission of Pakistan
SEZ	Special Economic Zone
SIL	Social Innovation Lab
SIM	Subscriber identity module
SKDs	Semi knocked down units
SME	Small and Medium Enterprise
SMS	Short Message Service
SNGPL	Sui Northern Gas Pipelines Limited
SOE	State Owned Enterprises
SRO	Statutory Regulatory Order
SSA	Special Saving Account
SSC	Special Saving Certificate
SSGCL	Sui Southern Gas Company Limited
SSP	Single Superphosphate
STP	Software Technology Park
STPF	Strategic Trade Policy Framework
T	
T-bills	Treasury Bills
TCS	Tranzum Courier Services
TDF	and tyre-derived fuel
TDL	Total Debt and Liabilities
TDPs	Temporarily Dislocated Persons
TDR	Trade Dispute Resolution
TEVTA	Technical Education and Vocational Training Authority
TFR	Total Fertility Rate
TiE	The Indus Entrepreneurs
TOKTEN	Transfer of Knowledge through Expatriate Nationals
TPP	Trans Pacific Partnership
TPSP	Third Party Service Provider
TWA	Transworld Associates
U	
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UPU	United Postal Union
US\$	US Dollar
USA	United States of America
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
UVM	Unit Value of Imports
V	
VAT	Value Added Tax
VC	Venture Capital
VP	Voluntary Payments
VTCS	Voluntary Tax Compliance Scheme
W	
WA	Weighted Average
WALR	Weighted Average Lending Rate
WAPDA	Water and Power Development Authority
WASA	Water and Sanitation Authority
WB	World Bank
WDI	World Development Indicators
WeBOC	Web-Based-One-Customs
WEF	World Economic Forum
WHO	World Health Organization
WHT	Withholding Tax
WLL	Wireless Local Loop
WP.29	World Forum for Harmonization of Vehicle Regulations - Working Party
WPI	Wholesale Price Index
WTI	West Texas Intermediate
Y	
YoY	Year on Year
Z	
ZTBL	Zarai Taraqati Bank Ltd.