Patronage in Rural Punjab: Evidence from a New Household Survey Dataset

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Introduction

- Political economy analyses of incidence of public spending and services typically focus on geographic level, not HH level.

- However in many developing country contexts where social networks play a major role in politics, targeted spending at the individual level may play a major role
  - e.g. Fafchamps and Labonne (2012) (Philippines); Caeyers and Dercon (2011) (Ethiopia) find evidence of public spending (government jobs; food aid) targeted along social networks lines

Why is this important?

- In fact many state-provided goods and services typically thought of as local public goods may be rationed / targeted at the individual level and thus influenced by these kinds of processes:

    – Cheema and Mohmand (2006): village building of sewage drains in Pakistan politicized (despite obvious figurative - and literal - spillovers)

    – Jacoby and Mansuri (2011) find evidence suggesting children in Pakistan are actively excluded from higher-quality public schools on clan basis

The Big Picture

- Literature limited on whether and how different government programs are affected differentially / whether program design can help avoid this.

- Implications for design of new programs: e.g. has Pakistan's new proxy means targeted cash transfer program (Benazir Income Support Program) actually reduced capture compared to pre-existing programs?

- Results from our work to date show numerically and statistically significant effects of identity of official in HH FE models;

- Very different results for educational programs (targeted through schools; captured at geographic / political level but not at individual / clan level) and cash transfer programs (captured at individual / clan level).

The Pakistani Context: Too many cooks?

- A wide variety of programs administered at many levels:
  - Zakat and marriage grants (administered by local committees).
  - Subsistence allowance and Sasta Rashan (administered at provincial level).
  - Girls stipend program and free textbooks for primary students (administered at the provincial level).
  - And the Crown Jewel: Benazir income Support Program, or BISP (administered at the federal level).

Our Surveys: First round

- First Round: Panel dataset: 2007-8 and 2011

  - ~1,000 households in Punjab, Pakistan

  - Asks about HH receipt of public goods
    - social safety nets,
    - cash transfers,
    - scholarships,
    - public employment,
    - electric and telephone connections,
    - obtaining national identity card

  - Also includes module on HH relationship and interactions with a range of possible patrons
    - Household and patron caste/clan,
    - identification of landlords, elected officials, appointed officials, religious and NGO leaders,
    - questions on assistance from patron to client and vice versa in a range of areas)

Our Surveys: Second round

- Second round is in the field as we speak:
  - building on existing survey data collected in 2011.

  - collecting data from both patrons and clients.

  - household survey of approximately 1000 households as well as village level census of approximately 15,000 households.

Patron Categories when any Assistance was Reported

	Any Assistance given by Patron
Position Category	**Number Assisted**
Landlords	96
Politicians	391
Local officials	542
Tehsil to National leaders	99
NGO and religious leaders	350
Other	52
Total	**1,530**

Some simple but important results

- We found that the landless have a lower chance of receiving assistance from a patron.

- Female headed households have the same chance of receiving assistance as other households (important in the context of the Benazir Income Support Program).

- So there is some evidence that vulnerable households appear less likely to receive assistance from patrons, suggesting that patronage activity could increase inequality of outcomes.

VARIABLES	(1) Poisson Number of situations with which HH reported receiving assistance from any patron	(2) Poisson Number of situations with which HH reported receiving assistance from any patron	(3) Poisson Number of situations with which HH reported receiving assistance from any patron	(4) Probit HH reported receiving any assistance from any patron	(5) Probit HH reported receiving any assistance from any patron	(6) Probit HH reported receiving any assistance from any patron
Landless	-0.473**		-0.0684	-0.399***		-0.168
	(0.197)		(0.245)	(0.127)		(0.180)
Acres of land owned by HH	0.0130		0.00440	-0.0199		-0.0332
	(0.0242)		(0.00922)	(0.0151)		(0.0210)
Acres of land squared	-7.71e-05			0.000402		0.000554*
	(0.000337)			(0.000255)		(0.000309)
How long has this household owned land in this village?		0.00489**	0.00406		0.00352*	0.00332
		(0.00217)	(0.00247)		(0.00197)	(0.00204)
Constant	-0.398**	-0.544***	-0.499**	-0.381***	-0.595***	-0.438**
	(0.179)	(0.129)	(0.232)	(0.116)	(0.0916)	(0.175)
Observations	1,022	546	545	1,022	546	545

Cluster-robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

VARIABLES	(1) Poisson Number of situations with which HH reported receiving assistance from any patron	(2) Probit HH reported receiving any assistance from any patron
Female headed household	-0.559	-0.158
	(0.341)	(0.209)
Constant	-0.598***	-0.633***
	(0.107)	(0.0662)
Observations	1,012	1,012

Cluster Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

VARIABLES	(1) Poisson Number of situations with which HH reported receiving assistance from any patron	(2) Probit HH reported receiving any assistance from any patron
Patron is same biradari as household	0.214	0.156
	(0.136)	(0.101)
Constant	-1.672***	-0.886***
	(0.089)	(0.062)
Observations	1,765	1,765

Cluster Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

a. p=0.01

More interesting results

- 35% of those households that reported receiving any assistance from a patron shared the same biradari (caste) as the patron.

- Patrons may have known about voting behavior because of clientelist election campaigning pursued by local politicians.

Has the Patron Recommended who to Vote for in the Last Election (2008)?

Position Category	Yes	No	Total
Landlords	42	54	96
Politicians	161	230	391
Local officials	242	301	544
Tehsil to National leaders	43	57	100
NGO and religious leaders	27	324	351
Other	19	33	52
Total	534	999	1,534

Pearson chi^2(10) = 151.7429   Pr = 0.000

How Often do you Meet the Patron?

Position Category	At Least Once a Month	Once or Twice a Year	Never	Total
Landlords	68	13	8	89
Politicians	49	160	172	381
Local officials	391	66	36	493
Tehsil to National leaders	62	11	16	89
NGO and religious leaders	315	11	12	338
Other	42	6	1	49
Total	927	267	245	1,439

Local political Capture: common caste matters for <u>needs-based cash transfers</u>

- There is a significantly higher chance of receiving needs based cash transfers if the household and the patron are of the same caste/clan.

    – Controlling for acres of land owned, a landless dummy, house value, years lived in village, and being a member of a privileged class:

Local political Capture:
but <u>educational benefits</u> were a different story

- On the other hand scholarships and other educational benefits were not significantly affected by caste/clan links.

VARIABLES	(1)	(2)	(3)	(4)
	Needs-based cash transfers			
			RE with caste/clan	
	RE	RE	FE	HH FE
HH and elected official same caste / clan	**0.0222****	**0.0242****	**0.0242****	**0.0407****
	(0.00903)	(0.00955)	(0.00955)	(0.0170)
Privileged caste/clan dummy		-0.00631	-0.00631	
		(0.00705)	(0.00705)	
Observations	1,945	1,945	1,945	1,949
R-squared	0.005	0.005	0.005	0.006

Robust standard errors in parentheses

Controls omitted from table: acres of land, landless dummy, house value, years lived in village, constant

*** p<0.01, ** p<0.05, * p<0.1

VARIABLES	(5)	(6)	(7)	(8)
		Scholarships & other ed benefits		
	RE	RE	RE with caste/clan FE	HH FE
Household and elected official same caste / clan	-0.0453	-0.0446	-0.0446	0
	(0.0298)	(0.0305)	(0.0305)	(0.103)
Privileged caste/clan dummy		-0.00241	-0.00241	
		(0.0196)	(0.0196)	
Observations	1,945	1,945	1,945	1,949
R-squared	0.004	0.004	0.004	0.000

Robust standard errors in parentheses

Controls omitted from table: acres of land, landless dummy, house value, years lived in village, constant

*** p<0.01, ** p<0.05, * p<0.1

What does this mean?

- Cash transfer programs targeted directly to households are targeted at legislator's own caste/clan, while education programs targeted through schools not affected.

- One idea could be that this is because of caste based voting blocs and the perception that cash transfer programs are a form of direct assistance.

What about having well-connected patrons?

- We find that for needs-based cash transfers the probability of receiving assistance is:

    - Not affected by the fact that the member of the national assembly (MNA) elected locally is of the same party as that of the provincial government.
    - Not affected by the fact that the member of the national (MNA) assembly elected locally is of the same party as that of the federal government.
    - <u>But is affected if the member of the nationally assembly elected locally is the same caste/clan as the household.</u>

Better to be well-connected than smart?

- On the other hand, the probability of receiving scholarships and other educational benefits is:

  - <u>Significantly higher if the member of the national assembly (MNA) elected locally and the provincial government are of the same party.</u>
  - <u>Significantly higher if the member of the national assembly (MNA) elected locally and the federal government are of the same party.</u>
  - But is unaffected if the member of the nationally assembly (MNA) elected locally is the same caste/clan as the household.

Why are the results different in this case?

- So we find that in the case of educational assistance programs (which are primarily implemented at the provincial level) party connections are more important than local connections.

- Could this be because educational programs are associated less with individual politicians and more with parties?

	(1)	(2)	(3)	(4)
	LPM with HH Fixed Effects			
	Needs-based Cash transfers		Scholarship or edu benefits	
MNA shares party of provincial government	0.0123		0.238***	
	(0.0146)		(0.0626)	
Household and MNA same caste / clan	0.0474*	0.0425**	0.0716	0.0684
	(0.0245)	(0.0197)	(0.106)	(0.126)
MNA party of provincial govt X HH and MNA share caste/clan	-0.00849		-0.0520	
	(0.0262)		(0.0723)	
MNA shares party of central government		-0.0137		0.143**
		(0.0114)		(0.0702)
MNA party of central govt X HH and MNA share caste/clan		-0.0168		-0.0868
		(0.0339)		(0.130)
Observations	1,949	1,949	1,949	1,949
R-squared	0.007	0.009	0.062	0.027
Number of HHs	1,024	1,024	1,024	1,024

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Do Roads Make a Difference?

- Lahore-Islamabad Motorway was constructed at end of 1990s.

- Qualitative work (Shami 2010) argues access to motorway increased outside option of clients and thus improved bargaining power of clients vis-a-vis patrons, leading to more assistance from patrons

- Let's check if patrons have less power for areas closer to the motorway.

- Use straight line between two major cities as IV for endogenous motorway placement

How are we going to measure this?

- We're going to look at the relative assistance . This will be measured by the # of reported areas of assistance from client to patron minus the # of reported areas of assistance from patron to client.

- And we want to see if this decreases if area is closer to the motorway.

- Look at this for a variety of patrons:
  - Member of National Assembly (MNA)
  - Member of Provincial Assembly (MPA)
  - Local administrator (numberdar)
  - Local landlord (zamindar)
  - Local land revenue official (patwari)

Do Roads Make a Difference: In some cases they do

- We find a very significant *decrease* in the relative assistance for members of the national assembly (MNAs) elected locally in areas near the Motorway.

- We also find a significant *decrease* in the relative assistance for members of the provincial assembly (MPAs) elected locally.

- And for the local land revenue official (patwari).

Some Conclusions and Areas for further research

- Evidence supports proposition 1: officials direct public assistance towards those linked to them by common caste/clan

  - Some programs affected and others not.

  - (Not shown today) reported assistance does NOT seem to be the channel: develop better understanding of channel

SUMMARY TABLE

Relative assistance: Coefficients on instrumented distance from motorway (1000 km)

	2SLS relative assistance = # events assistance from patron - # events assistance to patron		
	IV no controls	**IV HH controls only**	**Controls + caste/clan FE**
MNA	**-1.046****	**-1.030****	**-1.349****
	(0.524)	(0.507)	(0.679)
MPA	-0.120	-0.108	**-0.795****
	(0.230)	(0.237)	(0.325)
Traditional local admin official (numberdar)	-0.182	-0.202	-1.098
	(0.809)	(0.837)	(0.977)
Landlord	1.908	1.827	-0.0906
	(1.374)	(1.386)	(1.098)
Land revenue official (patwari)	-0.339	-0.363	**-0.677***
	(0.234)	(0.252)	(0.379)

Controls: acres of land, landless dummy, years in village, value of dwelling

Some Conclusions and Areas for further research

- Supports proposition 2 for some programs: patrons with greater connections to central party (greater power) deliver more programs

  - What design mechanisms differentiate them – why are some programs captured at a political level, others captured at a caste/clan level?

Some Conclusions and Areas for further research

- Supports proposition 3:
  - clients in less remote areas (better outside options) get more assistance from patrons for less work

Thank You