

Efficient Public Procurement? Looking for Answers in Punjab

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The issue with procurement

- ▶ The aim of procurement is that it *“brings value for money to the agency and the procurement process is efficient and economical”* (Public Procurement Regulatory Act, 2009, Punjab)
- ▶ Yet most evaluations of procurement effectiveness focus on procedural, legalistic evaluations. *“Were the rules followed?”*

The issue with procurement

- ▶ Most existing rules designed to curtail corruption– based on the (unproven) assumption that corruption is the main source of inefficiency
- ▶ Efficiency typically hard to measure, hence:
 - ▶ cannot identify the source of inefficiency (eg corruption vs lack of information)
 - ▶ cannot provide incentives to reward efficiency
 - ▶ cannot design rules that promote efficiency

Measuring efficiency

- ▶ Measuring value for money notoriously tricky, especially for occasional purchases
 - ▶ every bridge is different
- ▶ Measuring efficiency is simpler for generic goods purchased by many public bodies- e.g. computers:
 - ▶ quality defined by limited number of *observable* characteristics
 - ▶ price comparison of identical goods is a clean measure of efficiency

Who cares about pens and paper?

- ▶ Not just for statistical convenience
- ▶ Generics as intermediate goods account for a large share of the cost of specific goods (eg cement to build bridges)
- ▶ Generics as final goods account for large share of expenditure
 - ▶ In FY2010-11, 17% of transactions and 43% of operating expenses, purchases of physical assets and repair & maintenance.
- ▶ Lessons apply more broadly...common challenge with asymmetry of information and incentives

Existing evidence

- ▶ In earlier work (Bandiera, Prat, Valletti 09) we analyse purchases of 21 generic goods by 200+ Italian public bodies.
- ▶ We find that:
 - ▶ prices paid for exactly the same good are very different- average difference between 10th and 90th pctile is 55% (potential savings =2.1% of GDP)
 - ▶ most of this difference is due to “passive” waste- ie waste that does not benefit procurement officials
 - ▶ indeed when they are offered a hassle-free way to buy at lower prices, they accept

Key challenges: information and incentives

- ▶ Procurement officers:
 - ▶ typically lack information on where to get good deals
 - ▶ have no incentive to look for it
- ▶ Their supervisors lack information on the officers' performance- hence can't reward or punish

This project

- ▶ Design and test alternative information and incentive schemes to improve procurement efficiency in Punjab
- ▶ In brief:
 - ▶ focus on a subset of generic goods
 - ▶ study price dispersion across PB
 - ▶ assign PBs to different incentive/information schemes
 - ▶ see which, if any, improves effectiveness
 - ▶ shed light on the constraints and incentives faced by procurement officers

Government Partners

- ▶ Public Procurement Regulatory Authority (PPRA)
- ▶ Accountant General Punjab (AG)
- ▶ Punjab Resource Management Program (PRMP)
- ▶ Pakistan Information Technology Board (PITB)

Choosing a Sample of Public Bodies

- ▶ Sample of 523 “Cost Centers” from both provincial and district government cost centers
- ▶ Top 5 districts and top 3 departments by expenditure
- ▶ Within department \times level of government cells, randomly sample 100 cost centers from cost centers with expenditure $>$ Rs. 25,000 (\sim \$260)

Department	Universe			Sample		
	Level of Government		Total	Level of Government		Total
	District	Provincial		District	Provincial	
Agriculture	55	156	211	55	100	155
Education	759	208	967	100	100	200
Health	134	68	202	100	68	168
Total	948	432	1,380	255	268	523

Choosing a Sample of Public Bodies

Table: Districts and Departments

District	Universe				Sample			
	Department			Total	Department			Total
	Agriculture	Education	Health		Agriculture	Education	Health	
Faisalabad	71	271	34	376	42	52	26	120
Gujranwala	16	61	27	104	14	22	19	55
Lahore	67	381	83	531	50	78	80	208
Okara	15	159	25	199	15	21	21	57
Rawal Pindi	42	95	33	170	34	27	22	83
Total	211	967	202	1,380	155	200	168	523

Year 1: Baseline Data Collection

- ▶ Designing and implementing a dynamic database of transaction characteristics
- ▶ 5 RAs with smartphones fill in pre-designed questionnaire forms linked to database at LSE
- ▶ Forms are flexible enough to expand the set of characteristics in real time
- ▶ Collect characteristics of item procured, unit price, procurement officer, procuring agency etc.
- ▶ These data sufficient to make comparisons across public bodies in procurement effectiveness by comparing unit price while controlling for characteristics of the item being purchased and the purchasing body.

Year 2: Policy Reform Experiments

- ▶ Based on analysis of baseline data and ideas generated through engagement with partners in Punjab, design policy reforms that can improve procurement effectiveness.
- ▶ Evaluate the impact of the reforms through random assignment of subsets of the 523 cost centers to different policies
- ▶ Possible policies include
 - ▶ Carrots: Reward good performance based on quality-adjusted price improvements
 - ▶ Sticks: use unit price information in audit decisions
 - ▶ Information treatments: provide regular information to cost centers on relative performance (eg price paid by others for the same good)
- ▶ Others?

Year 3? Using Lessons from Year 2

- ▶ Lessons from Year 2 about how procurement officers respond to changes in their environment
- ▶ Use these lessons to design an “optimal mechanism” for procurement of generic goods and services in Punjab.
- ▶ Scale up from 523 cost centers and evaluate impact of different possible environments.