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 (e.g., cement to build bridges)
- Generics as final goods account for a 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 percentile is 55% (potential savings =2.1% of GDP)
  - most of this difference is due to “passive” waste—i.e., 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 ($\sim$ $260$

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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 (e.g., 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.