

Making Policy with Data

An Introductory Course on Policy Evaluation

Policy Briefing

Instructor: Prof Yiqing Xu
April 25

Monitoring Corruption (Olken 2007)

- Corruption is a major problem in developing countries
- Little evidence of how to fight corruption
 - Does monitoring work?
 - Top-down or bottom up?
- Main challenges
 - Causal identification
 - **Measuring** corruption

A Field Experiment in Indonesia



Monitoring Corruption (Olken 2007)

- Funding public projects
- Villagers use the money to build roads
- **Treatment:** Audition by an independent agency



Randomization

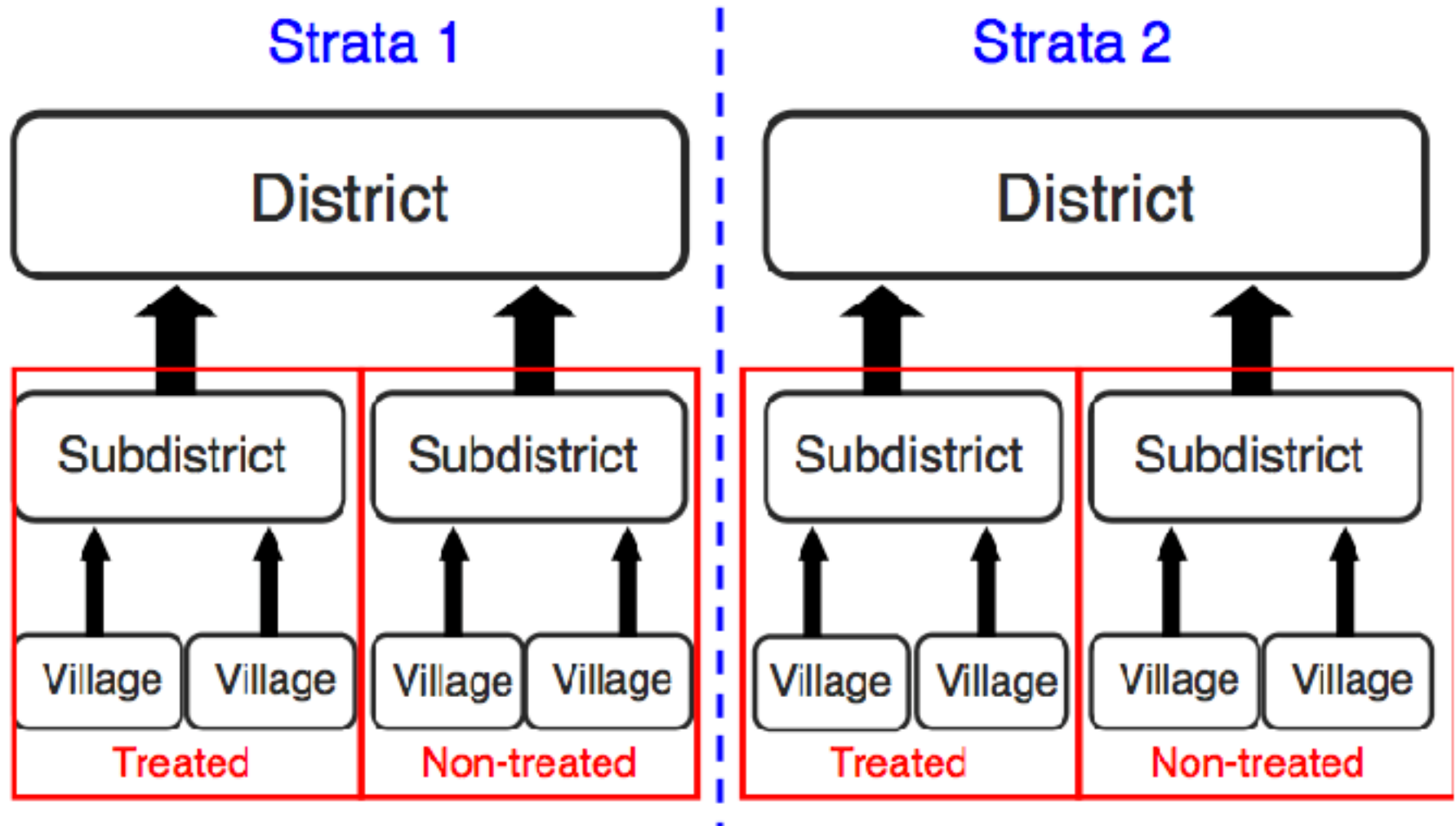


Figure by Kreibaum and Lesquoy

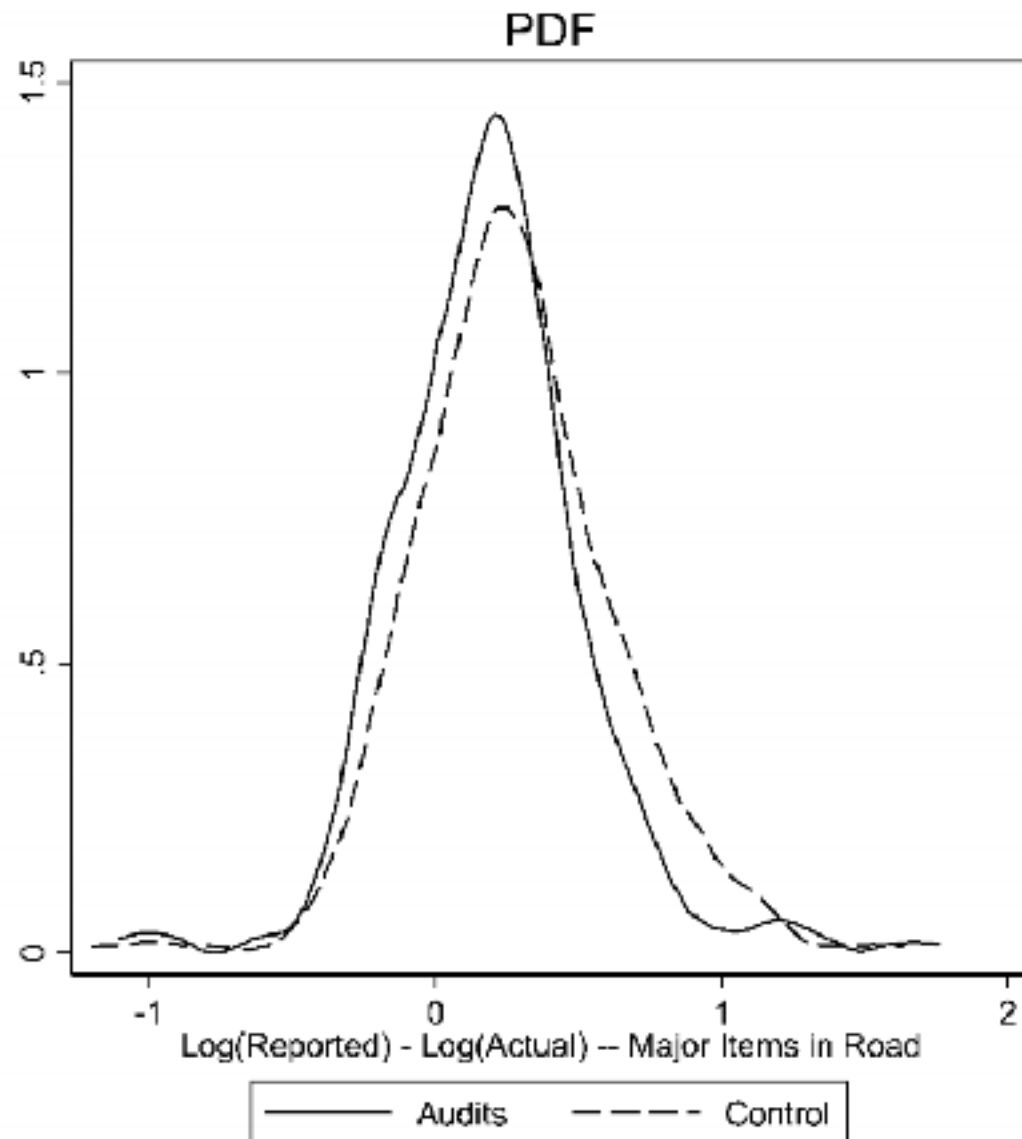
Measurement

- The difference between
 - (1) Cost reported by village implementation teams
 - (2) Cost estimated by independent engineers and surveyors
 - taking samples; build test roads
- Calculate **percentage of missing**

Results: Less Over-reporting

	CONTROL MEAN (1)	TREATMENT MEAN: AUDITS (2)	NO FIXED EFFECTS	
			Audit Effect (3)	p-Value (4)
PERCENT MISSING ^a				
Major items in roads (<i>N</i> = 477)	.277 (.033)	.192 (.029)	-.085* (.044)	.058
Major items in roads and ancillary projects (<i>N</i> = 538)	.291 (.030)	.199 (.030)	-.091** (.043)	.034
Breakdown of roads:				
Materials	.240 (.038)	.162 (.036)	-.078 (.053)	.143
Unskilled labor	.312 (.080)	.231 (.072)	-.077 (.108)	.477

Results: Less Over-reporting



Buzzword:
Domain Knowledge

Domain Knowledge

- **Domain:** an area a specific group of experts work in
- **Domain Knowledge:**
 - Knowledge/know-hows specific to that area
- When people say “domain knowledge is required for a data analytical problem,” it means that we need knowledge beyond statistics or data science
 - Eg. medical expertise, legal expertise, knowledge of government procedures

House-keeping

- **Midterm:** May 4 (next Thursday)
- PSet 2 deadline: May 2
- Midterm review: May 2
- More suggestions on the course?