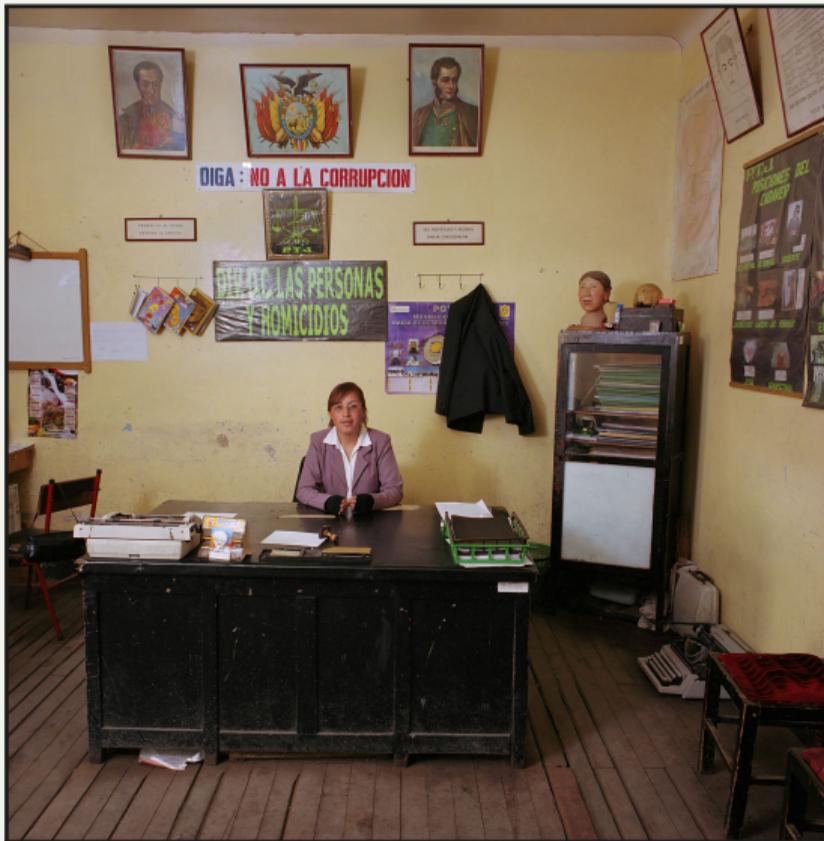


Bureaucracy and Development

Part 4: Authority



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"Bureaucrats" © Jan Banning courtesy Galerie Fontana, Amsterdam

Recap: Monitoring, coordinating, supervising

From previous week: the issue of managers.

- ▶ Romero, Sandefur, and Sandholtz (2020) is not about public vs. private services;
- ▶ Schools were public, teachers were still civil servants;
- ▶ A priori, the only thing changing was the *management*;
- ▶ This study (and others) reinforce the case that managers matter.

But why? What is their economic contribution the the organization?

- ▶ *What do organizations try to achieve with managers?*
- ▶ *Under what conditions does it work? When does it backfire?*

Gibbons and Henderson (2013)

What do managers do?

The “PPDs among SSEs” puzzle in the private sector.

- ▶ Persistent Performance Differences among Seemingly Similar Enterprises.

Management can explain it, but hard to pin down why good managers are good.

- ▶ “Use your good judgment in all situations” (Nordstrom)
- ▶ “Continuously improve the production process” (Toyota)

The incomplete rule book strikes again: “The state-dependent actions necessary to meet these expectations cannot be the subject of a formal contract” (p. 681)

Gibbons and Henderson (2013)

Proposed alternative: “relational contracts”

“Understandings that the parties share about their roles in and rewards from cooperating together, but understandings so rooted in the details of the parties’ relationship that they cannot be shared with a court” (p. 68)

What do you think of that proposition?

Gibbons and Henderson (2013)

A promising distinction: analysis vs. administration

We might want to split a managers' role in the organization into:

- ▶ **Analysis:** deciding what to do;
- ▶ **Administration:** getting the organization to do it.

As a footnote, remember the privately managed schools in Liberia:

- ▶ Teachers were more likely to be in school (60%, versus 40% in control);
- ▶ And to be engaged in instruction during class time (50%, versus 35% in control).

Why (or when) do workers behave as their bosses tell them to?

Simon (1951)

The issue of authority

Consider a manager B (for “boss”) and a worker W

► W can perform a range of actions x on the job.

“We will say that B exercises authority over W if W permits B to select x . That is, W accepts authority when his behavior is determined by B 's decision. In general, W will accept authority only if x_0 , the x chosen by B , is restricted to some given subset (W 's “area of acceptance”) of all the possible values” (p. 294).

What shapes the “area of acceptance”?

Arrow (1974)

Employment as an authority relationship

“Indeed, as Herbert Simon has emphasized, an employment contract is precisely a contract on the part of the employee to accept authority. It differs, therefore, from a contract to purchase a commodity; what is bought and sold is not a definite object thing but rather a personal relation. (...) Of course, the scope of this authority will be limited by the terms of the contract, and, more fundamentally, it is limited by the freedom with each an employee can leave the job. But since there is normally some cost to the exercise of this freedom, the scope of this authority is not trivial.” (p. 64)

Implications?

Aghion and Tirole (1997)

Formal and real authority

Authority: the right to select actions affecting part of an organization.

- ▶ Sources of formal authority: asset ownership, formal contracts.
- ▶ But *formal authority* is not the same as *real authority*.

“Weber notes that officials, employees, and workers attached to the administrative staff of a bureaucracy do not themselves own the nonhuman means of production and administration, yet they may exert substantial control over the bureaucratic machinery” (p. 2)

Where does real authority come from?

Aghion and Tirole (1997)

A model for new solutions in an organization

Subordinate is asked to propose a solution, a project, a course of action.

- ▶ They choose to invest effort in learning about potential solutions;
- ▶ They may not propose the first-best solution (from the superior's perspective); *Why?*
- ▶ They know that they do not have the final word on that.

The superior needs to decide whether to approve it.

- ▶ They choose to invest effort in learning about potential solutions;
- ▶ They weakly prefer some relevant solution to no solution at all;
- ▶ *What are the trade-offs here? Which other parameters would you add?*

Aghion and Tirole (1997)

The interaction between authority and information

Power to set the agenda comes from effort in information acquisition.

- ▶ Formal authority prevails if superior imposes her preferred solution;
- ▶ Real authority prevails if superior accepts the subordinates' proposal.

Insight:

- ▶ a poorly-informed superior will optimally rubber-stamp subordinates proposal...
- ▶ if they fear imposing an even worse solution.

Monitoring vs. authority allocation

Note a distinction with standard models of costly state verification (i.e., monitoring)

- ▶ The undesirable action is known by both parties (cheating, embezzling, etc.);
- ▶ Increases in monitoring effort unambiguously increase agent's effort.

Authority discussion in Aghion and Tirole (1997)

- ▶ Increase in principal's effort (in info acquisition) may lower agent's effort. *Why?*

Aghion and Tirole (1997)

Internalizing the real authority

“Suppose now that for some ‘exogenous’ reason (e.g., because of overload), the marginal cost of effort of the principal increases. The effect on the principal’s expected payoff is a priori ambiguous. On the one hand, ceteris paribus, the principal’s probability of becoming informed about the projects’ payoffs decreases; the principal thus loses real authority (i.e., control) over the choice of project, with a higher resulting risk of having to endorse suboptimal projects. On the other hand, the reduction in the principal’s intervention encourages initiative from the subordinate, which in turn raises the principal’s expected benefit.” (p. 11)

Aghion and Tirole (1997)

Implications for authority allocation

It might be better to delegate formal authority altogether.

- ▶ Transfer of authority will increase agent's incentive to acquire information; *Why?*
- ▶ Specially on decisions that are more relevant to agent than to principal. *E.g.?*

Which are the costs of formal authority delegation?

Rasul and Rogger (2018)

Back to empirical evaluations

Overarching challenge: measures that operationalize these concepts.

- ▶ Processes of project implementation is hard to quantify;
- ▶ Delivery of public goods is difficult to measure.

This paper: a particular moment in the Nigerian civil service.

- ▶ OPEN initiative tracked implementation of public sector projects;
- ▶ The scrutineers were independent engineers and members of civil society.

The researchers hand-coded completion rates for over 4,700 projects started in 2006/7.

- ▶ Building, electrification, dam, procurement, road, training, research, canal etc.

Rasul and Rogger (2018)

Input measurement strategy

Researchers collected data on management practices in 63 organizations.

- ▶ *What would you try to measure?*

They build an *incentives & monitoring index* capturing

- ▶ the extent to which they collected performance indicators;
- ▶ how these indicators were reviewed;
- ▶ whether bureaucrats were are rewarded for achievements.

And an *autonomy index* capturing

- ▶ bureaucrats input into policy formulation and implementation;
- ▶ flexibility to reorganize bureaucrats.

Rasul and Rogger (2018)

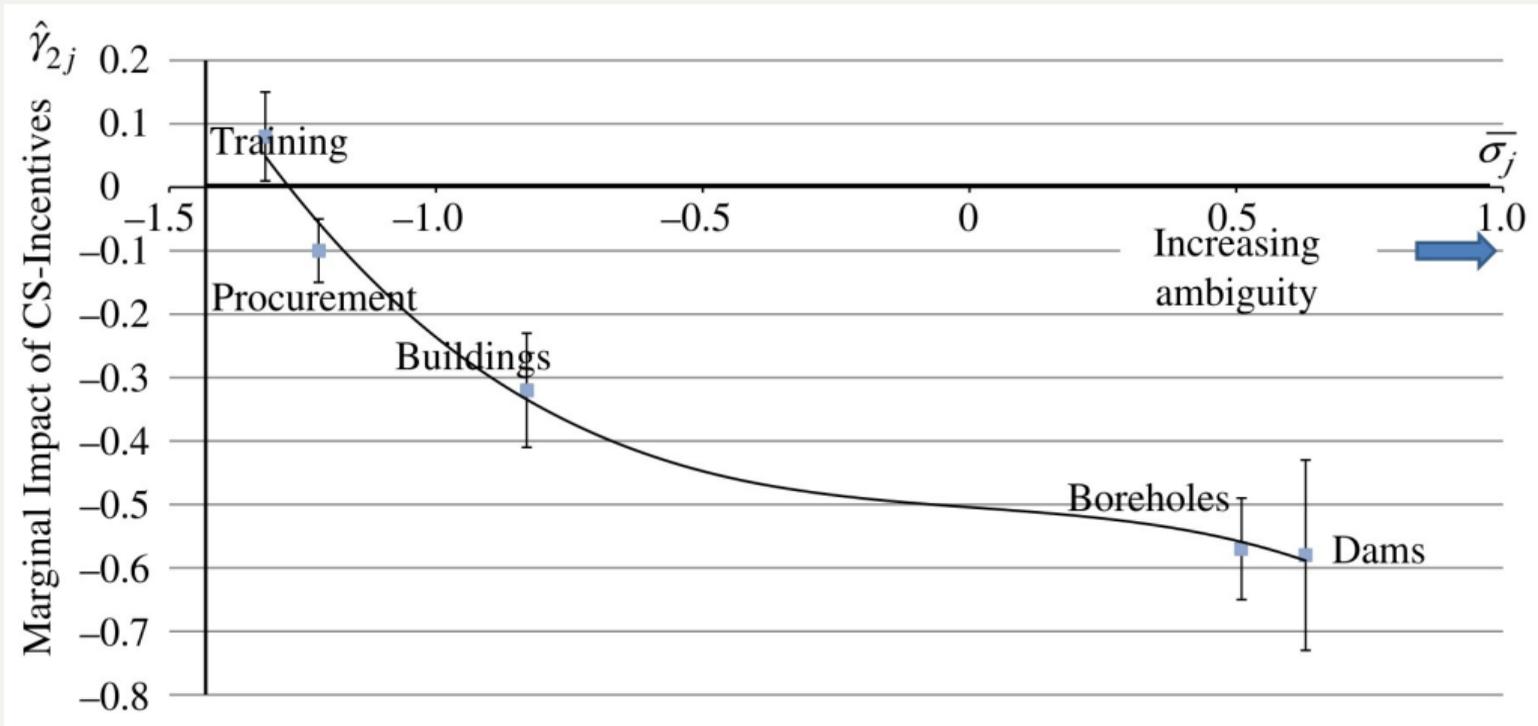
PPDs among SSEs in the public sector

“Our research design exploits the fact that multiple organisations conduct similar project activities. For example, small-scale dams are constructed by the Ministry of Water, the Ministry of Agriculture and the Ministry of the Environment. We therefore assess how the delivery of the same project type varies depending on the management practices in place for bureaucrats in the specific organisation responsible, holding constant project characteristics, such as their technical complexity and scale, as well as the characteristics of organisations and bureaucrats.” (p.416)

Management practices and service delivery (Rasul and Rogger 2018)

Standard errors: clustered by project type within organisation OLS estimates						
	(1) Unconditional	(2) Organisation controls	(3) Project controls	(4) Project type fixed effects	(5) Binary project initiation	(6) Quality-adjusted completion rate
CS-autonomy	0.11** (0.05)	0.18*** (0.03)	0.17*** (0.03)	0.18*** (0.03)	0.15*** (0.03)	0.11** (0.04)
CS-incentives/monitoring	-0.06* (0.03)	-0.11*** (0.02)	-0.11*** (0.02)	-0.14*** (0.02)	-0.16*** (0.02)	-0.08*** (0.02)
CS-other	0.10*** (0.04)	0.05 (0.03)	0.05 (0.03)	0.08*** (0.02)	0.06** (0.03)	0.08*** (0.02)
Organisation controls (capital, general, noise)	No	Yes	Yes	Yes	Yes	Yes
Project controls	No	No	Yes	Yes	Yes	Yes
Fixed effects	None	None	None	Project type	Project type	Project type
Adjusted R ²	0.07	0.29	0.29	0.32	0.36	0.17
Observations (clusters)	4,721 (201)	4,721 (201)	4,721 (201)	4,721 (201)	4,721 (201)	2,206 (144)

Incentives & monitoring and service complexity (Rasul and Rogger 2018)



Rasul and Rogger (2018)

Main results

More autonomy correlates to higher public goods delivery

- ▶ 1 sd increase in the index associated with 18% higher project completion rates.

Strong incentives & monitoring correlates to lower delivery

- ▶ 1 sd increase in the index associated with 14% lower project completion rates;
- ▶ Even worse for complex, uncertain projects. *Why?*

Limitations?

Bandiera et al. (2021)

Evidence from a randomized experiment

Context: government procurement in Pakistan.

- ▶ RCT with 600 procurement officers in 26 districts.

Procurement as crucial (and hard) issue

- ▶ Officers are tasked with buying goods they do not use with money they do not own.

Solutions?

Bandiera et al. (2021)

Randomization strategy

Design summary:

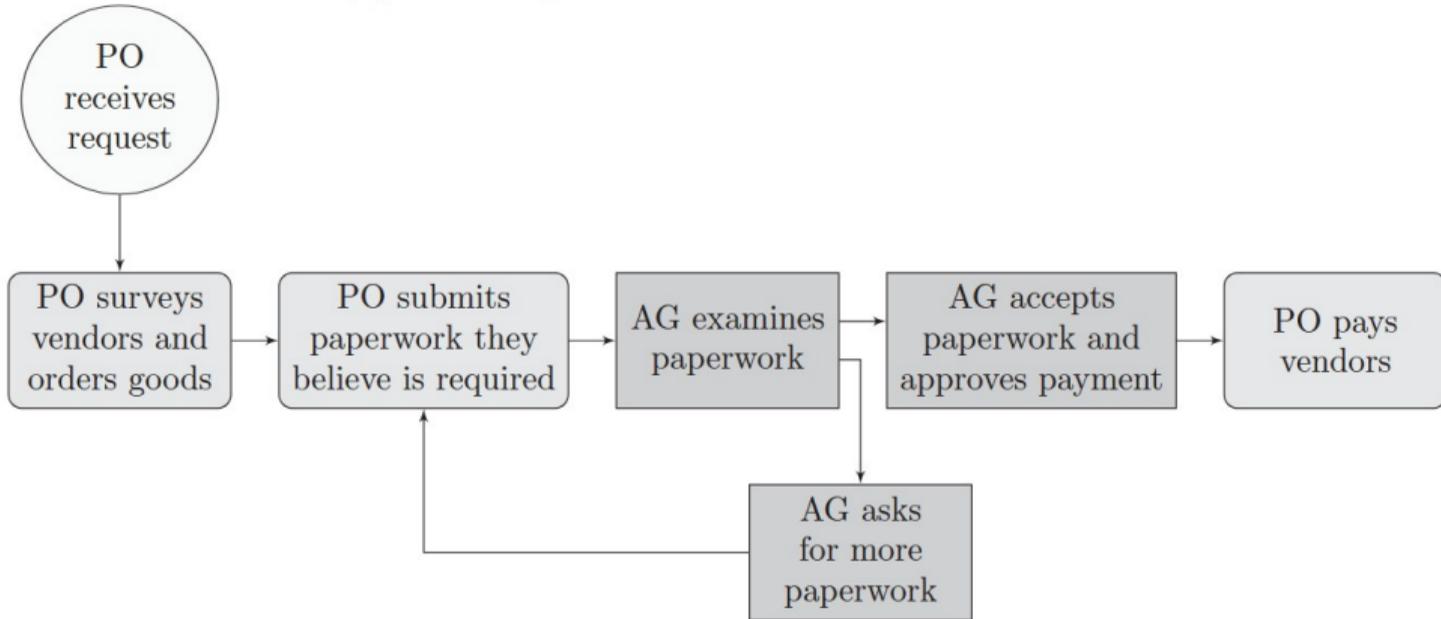
- ▶ Exogenous shift of authority from monitors to procurement officers;
- ▶ Introduction of financial incentives.

Procurement performance measure

- ▶ Price conditional on quantity and the precise nature of the good being purchased, including delivery speed and transport costs.

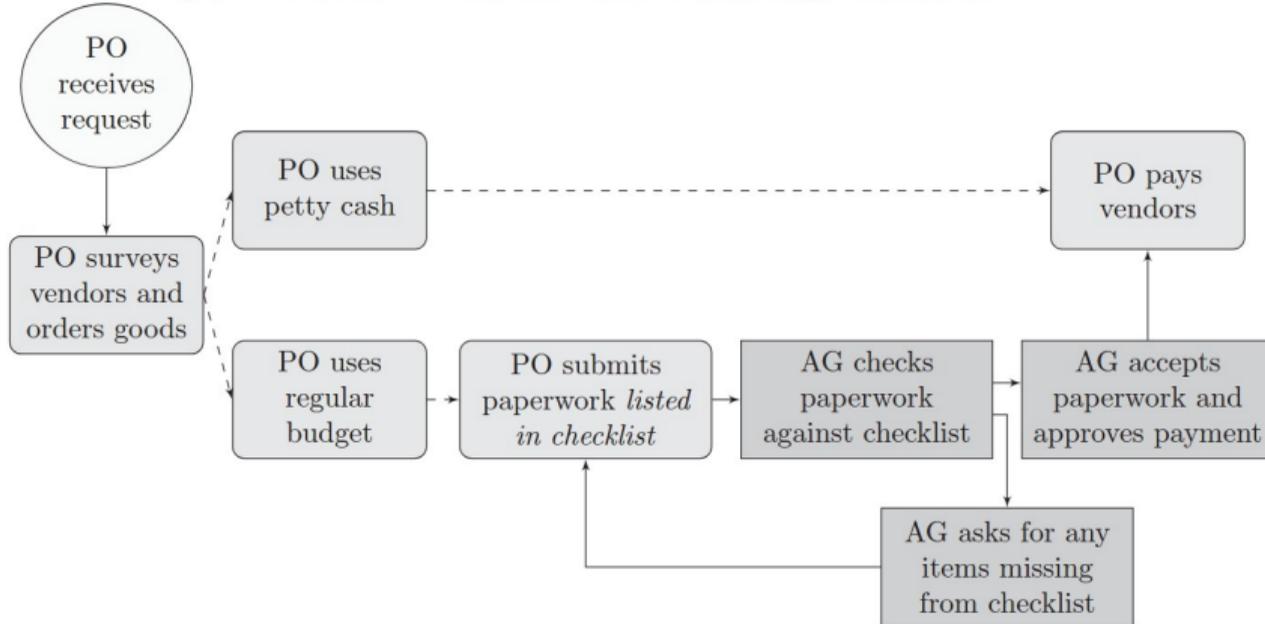
Summary of procurement process (Bandiera et al. 2021)

(A) Status Quo Procurement Process



Summary of procurement process (Bandiera et al. 2021)

(B) Procurement Process Under Autonomy Treatment



Bandiera et al. (2021)

Main results

Autonomy reduces prices by 9% without reducing quality

- ▶ Savings are sufficient to fund 5 schools or 75 hospital beds;
- ▶ But no statistically significant gains from performance pay.

Mechanism:

- ▶ Autonomy increases the time devoted to procurement;
- ▶ Gains are stronger if monitor tends to delay approvals.

Fornasari et al. (2025)

Ideas Generation in Hierarchical Bureaucracies: Evidence from a Field Experiment and Qualitative Data

[Student presentation]

Duflo et al. (2018)

The Value of Regulatory Discretion: Estimates From Environmental Inspections in India

[Student presentation]

Core Readings



Bandiera, Oriana, Michael Carlos Best, Adnan Qadir Khan, and Andrea Prat. 2021. “The Allocation of Authority in Organizations: A Field Experiment with Bureaucrats.” *The Quarterly Journal of Economics* 136 (4): 2195–2242. <https://doi.org/10.1093/qje/qjab029>.



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Further Readings (1/2)



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Further Readings (2/2)



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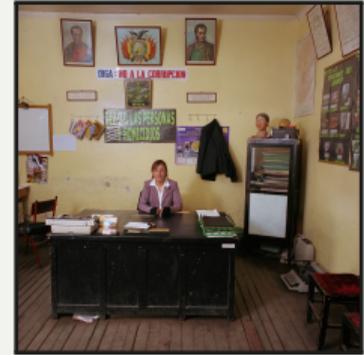
Sánchez de la Sierra, Raúl, Kristof Titeca, Haoyang (Stan) Xie, Aimable Amani Lameke, and Albert Malukisa Nkuku. 2024. “The Real State: Inside the Congo’s Traffic Police Agency.” *American Economic Review* 114 (12): 3976–4014. <https://doi.org/10.1257/aer.20220908>.



Simon, Herbert A. 1951. “A Formal Theory of the Employment Relationship.” *Econometrica* 19 (3): 293–305. <https://doi.org/10.2307/1906815>.

Marlene Abigahit Choque, detective at the Homicide Department in Potosi, Bolivia, in 2005. The department has only a broken typewriter — no computers, no copy machines, and no telephones. Monthly salary: about US\$ 115.

*“Bureaucrats” © Jan Banning courtesy Galerie Fontana, Amsterdam.
An expanded edition of the book will be published in March 2026, see janbanning.com/product/bureaucrats*



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