Political Influence, Bureaucratic Priorities, and Regulatory Process in India

JOB MARKET PAPER

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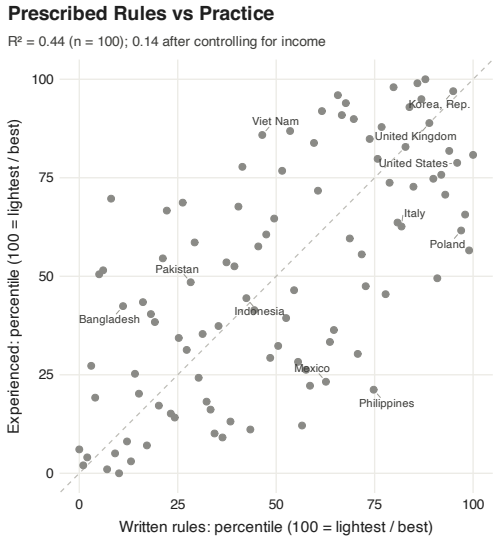
Motivation

- Regulatory reforms promote capital investment (and growth) Djankov et al. 2002, 2006 ▸ Old and new views ▸ India's investment

- However, the empirical evidence remains **mixed**:
  - Latin America Rodrik 2006
  - Mexico and Portugal Bruhn 2011 · Kaplan et al. 2011 · Branstetter et al. 2014
  - India Aghion et al. 2008

- Firm surveys: the **written rules** are a poor proxy for what firms actually experience Hallward-Driemeier & Pritchett 2015

Written rules and firms' experience



- Rules explain **less than half** of the variation in what firms experience across 100 economies
- And **about a seventh** once income is held fixed

World Bank B-READY 2025, percentile ranks

Regulations: rules and implementation

- Two sources of cost to firms:
  - **Actual rules**: the requirements a firm has to meet
  - **Delays** from the (lack of) **bureaucratic attention**: how long the state takes to check that it meets them
- The legislature writes the rules. The delay depends on the capacity of the state that is *deployed* for processing them.
- **This project:** uncovers a new mechanism behind the weak link between rules and practice: what drives variation in *deployed* state capacity.

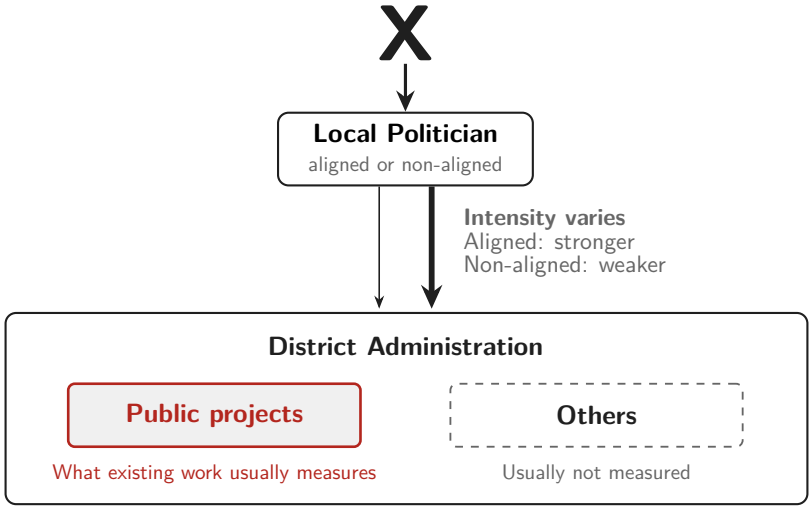
Research question

- Bureaucrats respond to career incentives, influenced by their **political principal**

Does political influence improve the regulatory process?

- **Yes**, if bureaucrats improve their performance: closer monitoring, sharper incentives
- **No**, if it diverts their attention away from regulatory processing, towards politically salient tasks

- Existing political-economy research on bureaucracy often says **yes**, with assumptions and caveats (much more later)
  - The distinction between **single-task** and **multi-task** environments is crucial



- The total output should also include the "Others" category

This paper

- **Setting:** regulatory approvals of large investment projects in India
  - **New data:** interaction with bureaucracy in life-cycle records of large-scale projects
  - **Multi-task:** projects with competing priorities: public and private
  - **District-year panel + two independent research designs:** isolate variation in political influence

This paper

- **Setting:** regulatory approvals of large investment projects in India
- **Results:** political influence reduces the bureaucratic attention deployed for regulatory approvals of private projects
  - Outcomes for private projects move in the opposite direction to public projects
  - Total bureaucratic output does not change

This paper

- **Setting:** regulatory approvals of large investment projects in India
- **Results:** political influence reduces the bureaucratic attention deployed for regulatory approvals of private projects
- **Welfare measure:** success rate for private projects falls by around 55%
  - Delays: about 4 months per private project, up to 10 months
  - Employment: about 0.29 million jobs deferred in small and mid-size projects over sample period ▸ How computed

Contribution to the literature

- **Bureaucracy and state capacity:** from capability to its use
  - Recruitment, incentives and management build what a bureaucracy *can* do Finan, Olken & Pande 2017 · Best, Hjort & Szakonyi 2023 ▸ More papers
  - **This paper:** how much of it is *deployed*
  - The same offices and rules work faster for one project portfolio, slower for another

Contribution to the literature

- **Bureaucracy and state capacity:** from capability to its use
  - **This paper:** how much of it is *deployed*
- **Political economy of bureaucracy:** the implementation channel
  - Turnover, ideology, supervision and postings shape bureaucrats Iyer & Mani 2012 · Gulzar & Pasquale 2017 · Akhtari, Moreira & Trucco 2022 · Spenkuch, Teso & Xu 2023
  - Aligned representation brings benefits to the places it represents Arulampalam et al. 2009 · Brollo & Nannicini 2012 · Asher & Novosad 2017
  - **This paper:** a multi-task setting, where tasks compete for limited attention
  - The data show both the gain and its cost Holmström & Milgrom 1991 · Dasgupta & Kapur 2020

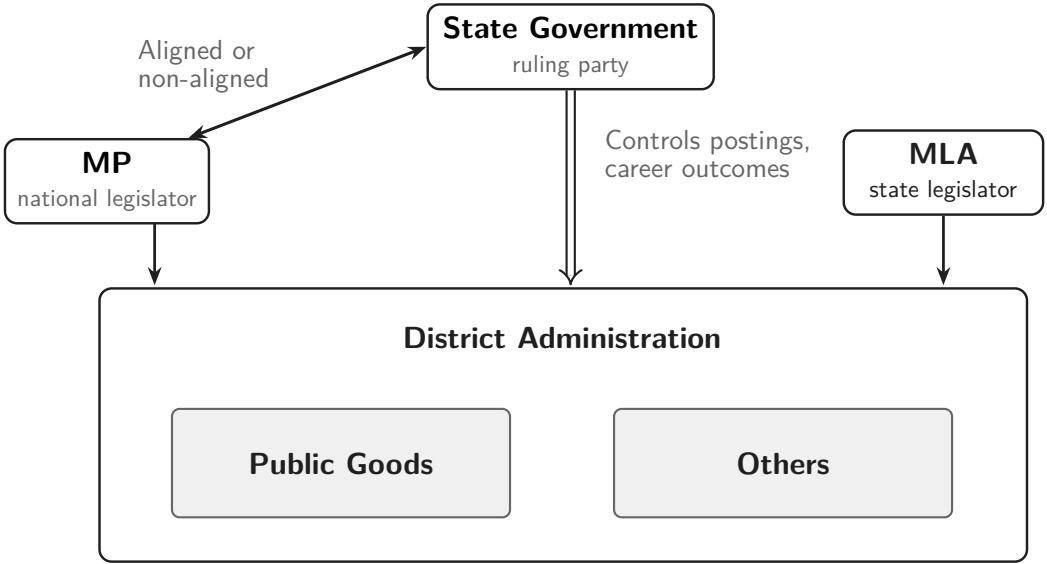
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- **Bureaucracy and state capacity:** from capability to its use
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- **Political economy of bureaucracy:** the implementation channel
  - **This paper:** a multi-task setting, where tasks compete for limited attention
- **Regulation and capital formation:** from the rulebook to the pipeline
  - De jure indices, firm surveys, enforcement Djankov et al. 2002 · Hallward-Driemeier & Pritchett 2015 · Duflo et al. 2018
  - **This paper:** first direct measure of all regulatory implementation at micro level
  - Instead of interpolating from written rules. A new source of regulatory cost, with no change in the rules

Contribution to the literature

- **Bureaucracy and state capacity:** from capability to its use
  - **This paper:** how much of it is *deployed*
- **Political economy of bureaucracy:** the implementation channel
  - **This paper:** a multi-task setting, where tasks compete for limited attention
- **Regulation and capital formation:** from the rulebook to the pipeline
  - **This paper:** first direct measure of all regulatory implementation at micro level
- **Autonomy for bureaucrats:** does it raise output, or move it?
  - Authority and local ties go with better delivery Rasul & Rogger 2018 · Bandiera, Best, Khan & Prat 2021 · Bhavnani & Lee 2018 ▸ Summaries
  - **This paper:** less political influence moves attention, not total output

Institutional setting


State Government
ruling party
Aligned or
non-aligned
MP
national legislator
Controls postings,
career outcomes
MLA
state legislator
District Administration
Public Goods
Others

Political and administrative setup

- **Political Structure:**
  - State and national legislature, with separate electoral cycles
  - Focus today: Members of Parliament (MPs)
- **Administrative Structure:**
  - Within each state, a district is an atomic field arm ▸ Compared with peers ▸ Cadre size
  - 640 districts; ~1.9 million people each; headed by a District Magistrate (DM)
- **Link:**
  - Legislators have no direct executive authority over the bureaucracy
  - E.g., a local MP's authority over the DM has to run through the state bureaucracy

Bureaucracy and Political Influence

- **De jure:** politicians have no power over postings. **De facto:** political influence in posting decisions is commonplace
- This influence is an open secret ▸ Details
- IAS officers use political connections as a substitute for performance and human capital investment Iyer & Mani 2012
- Promotions and good postings rely heavily on soft signals from politicians Raghunandan 2024

Key takeaway: aligned MPs are likely to have more ability to influence than non-aligned MPs

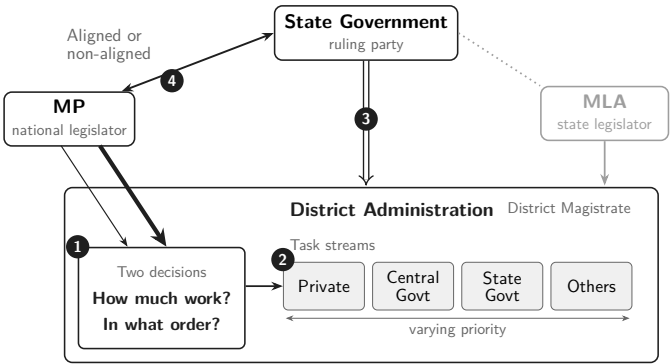


- A district chief on the chopping block **over a water tap** in a village.
- The **same** officer is responsible for a million-dollar investment project — and everything in between.

Regulatory process: the role of the district

- Suppose you want to start a manufacturing plant. From the point you commit an investment until you can actually start production, a number of events need to take place. The data I use capture these events, and many of them need bureaucratic input
- Environmental clearance, land access approvals and forest rights certifications are the three most common named regulatory events in my data
- Using administrative roles and responsibilities manuals, I argue that for these (and many others), the district's role is crucial and likely a bottleneck
- Even if a decision is made at higher levels of the bureaucracy, it rests on information that can only be collected at the district level
- Most activities in the operation manuals are designated to the district administration

Takeaway



1. Bureaucratic attention is scarce
2. Most regulatory approvals run through the district
3. Careers run through the state government
4. An aligned MP has a better channel

Data and the treatment variable

Data

- **Outcome**
  - Regulatory events from life-cycle records of large investment projects
  - Project owners, classified into: private, central government, state government
  - Checked against independent records of capital ▸ Validation

Data

- **Outcome**
- **Treatment**
  - Alignment status of the MP with respect to the state ruling party
  - National election: elects the MP; does not affect the state government
  - State election: elects the state government; does not affect the MP

Data

- **Outcome**
- **Treatment**
- **Validation**
  - Does this political influence reach the bureaucracy?
  - IAS officer career records: every posting, with dates, department and location
  - MGNREGA, rural employment guarantee: block-level reports, works completed
  - PMGSY, rural roads: road-level records, sanction, award and completion dates

Life cycle of an investment project

- ~98,000 projects · 1995–2022, geo-located to a district.
- Owner is recorded on almost every project, and clubs into three main categories — **Private · StateGov · CentralGov**.
- A project is vector of events: {announcement; seeking approval; *approval received*; land applied / *land approved*; finance; sub-contracting ; completion, or shelving}
- Median time to completion: about 4 years

The panel

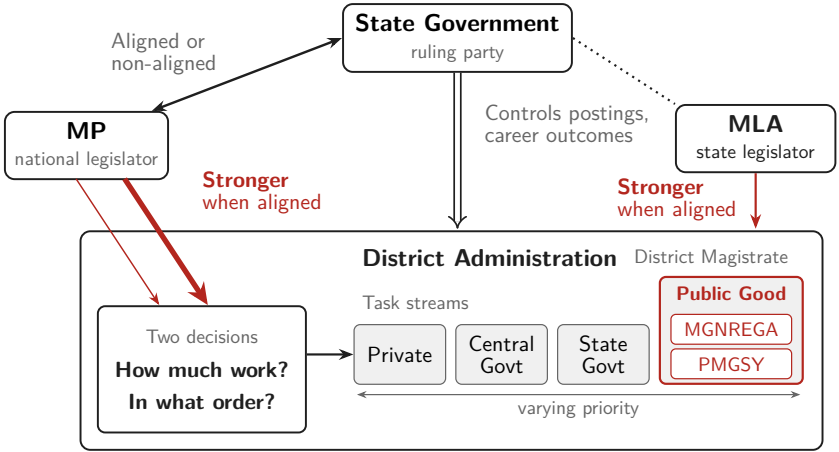
- District × year: **467 districts**, 28 states, 1999–2022

A district in the panel, 2005–22	Mean	Median
Population	1.8 m	1.6 m
Projects in the queue	20	11
private · central · state	9.5 · 4.7 · 5.5	3 · 3 · 4
Approval count, per year	5.6	3
private · central · state	3.2 · 1.1 · 1.2	1 · 1 · 1

- **Measures:** bureaucratic attention: each year, how many projects move, and whose
- **Political influence:** a binary indicator for each district-year

Validating political alignment

Does political influence reach the district?



First test: programmes where existing work finds alignment helps

Validating political alignment | MGNREGA

- **MGNREGA:** rural jobs guarantee; central outlay US$9 bn, FY2018–19
- **Works completed rise by about 40%** after the (close) election of aligned MLA.

Validating political alignment | PMGSY

- **PMGSY:** all-weather rural roads; central outlay US$2 bn, FY2018–19
- **Road completions fall by about 31%** over two years when the local politician loses influence.
- Alignment improves it by around 20%
- Also positive effects for full alignment: MP–CM–PM

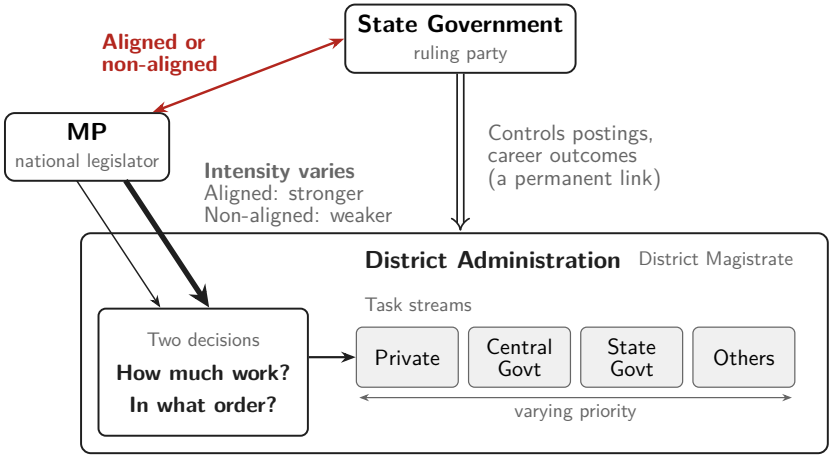
Validating political alignment | Takeaway

- Results hold controlling for **fiscal outlay**.
- Politicians do not execute these programs — that is the job of the **bureaucracy**.
- Alignment is a relevant instrument to **steer bureaucratic effort**.
- Bureaucrats also benefit from aligned and/or senior politicians ▸ Careers ▸ Postings
- Note: these outcomes from existing research are politically salient.

Asher & Novosad 2017 · Garg & Sedai 2026

Research design

The setting in one picture



Goal: isolate variation in alignment

Two designs

- **Design 1. Triggered by state elections:** event study estimator
  - The state government changes, and with it the MP's alignment
  - No change in the MP themselves
- **Design 2. Triggered by a change in the MP:** RDD estimator
  - A close national election decides the MP, and with it the alignment
  - The state government does not change around the election

Different elections, same mechanism

Why MPs and not MLAs

- **Two kinds of local politician:** MPs in the national parliament, MLAs in the state assemblies. The main analysis uses MPs, for two reasons
- **Two independent sources of variation**
  - National elections follow their own calendar, independent of state elections
  - So the MP's alignment can change in two independent ways, with a design for each
- **A cleaner map to the district**
  - The main outcome is at the district level, and an MP constituency maps to a district much more cleanly
  - MLA constituencies are much smaller than a district: taking them to a district-level outcome needs a specific functional form, with many researcher degrees of freedom

Outcomes

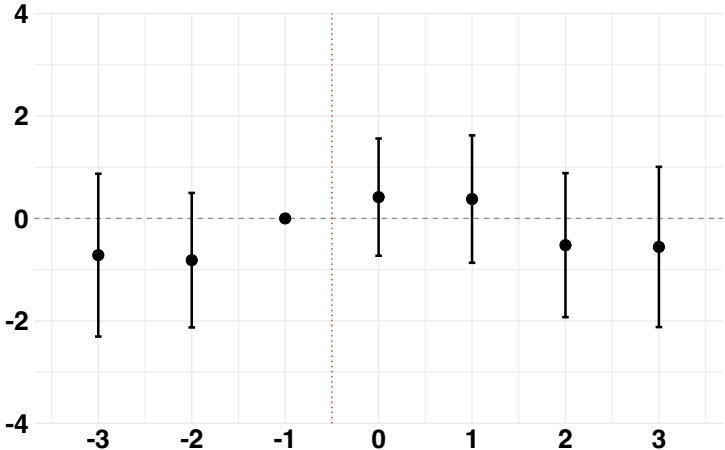
For district d, year t and owner $k \in \{\text{Private, Central Govt, State Govt}\}$:

Outcome	Definition
Throughput	Thr^k_{dt}: projects reaching a first approval, a first land acquisition or completion in t
Owner share	$s^k_{dt} = \text{Thr}^k_{dt}/\text{Thr}_{dt}$
Active stock	S^k_{dt}: announced in the last ten years, not yet completed or shelved
Success Rate	$R^k_{dt} = \text{Thr}^k_{dt}/S_{d,t-1}$, over all owners' stock at the end of $t-1$

Total throughput measures capacity; its composition measures allocation.

Design I: Event study

Total bureaucratic output - No effect



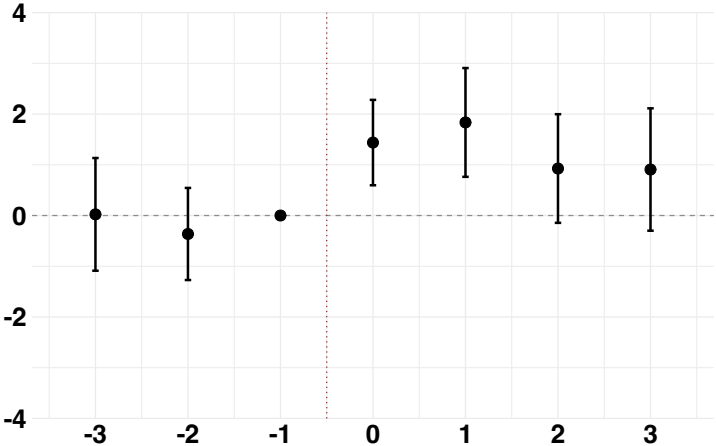
- Callaway–Sant'Anna estimator
- 6 stacked cohorts
- 111 treated, 138 control districts
- Doubly robust; clustered on the district
- Treatment: aligned to non-aligned

Outcome

Bureaucratic output — for specific owners (private / CG / SG)

Does increasing politician's influence (ability to monitor) shift bureaucratic output towards/away from some category?

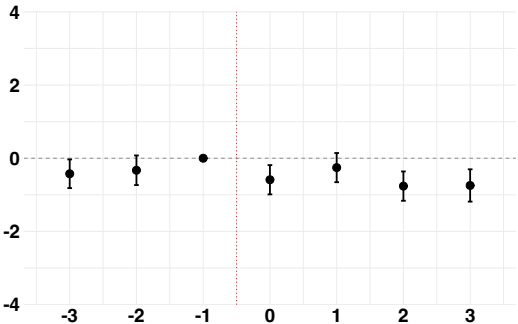
Bureaucratic output - Composition change Private



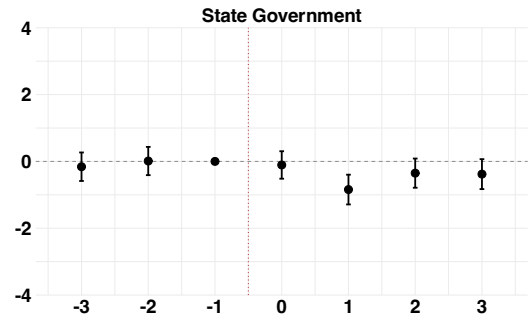
Private projects only. Mean base rate: 3.2 approvals per district-year (panel, 2005–22). Ticks 0–3: the election year and the three years after.

Bureaucratic output - composition change Central + State Govt

CentralGov



StateGov



The total does not move; its **composition** does. Mean base rate: central 1.1, state 1.2 approvals per district-year (panel, 2005–22). Ticks 0–3: the election year and the three years after it. [t65_v1_thr-cg_atn_csdid · t65_v1_thr-sg_atn_csdid]

Preferred outcomes

A count of approvals can rise simply because more projects entered the queue. So the preferred outcomes scale approvals by the work waiting, and by the work done:

- **Success Rate:** an owner's approvals in the year, per project in the district's total active queue at the end of the year before
- **Share of outcome:** an owner's share of all the approvals the district makes in the year

Entry and the active queue

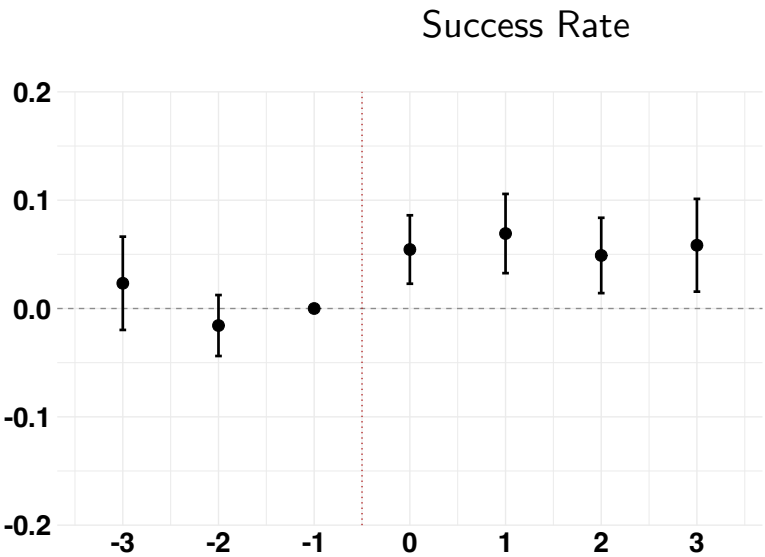
- **No effect on entry:** new project announcements do not move ▸ Entry
- **No measurable change in the active queue (stock) at the district level:** all owners, and private + central government ▸ Active queue

No endogenous response in entry or in the existing stock

Outcome

Success Rate — for specific owners (private / CG / SG)

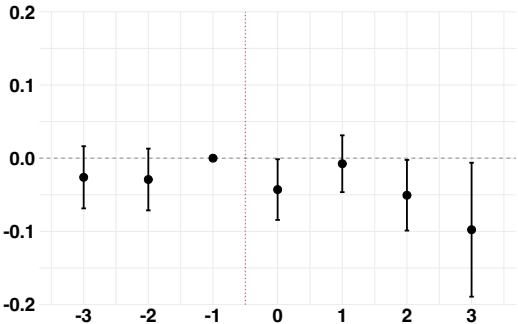
Controlling for total count of projects waiting for bureaucratic attention



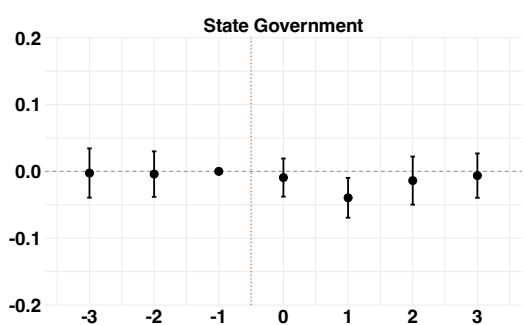
Private, per unit of total active queue. Ticks 0–3: the election year and the three years after.

Success Rate

CentralGov



StateGov



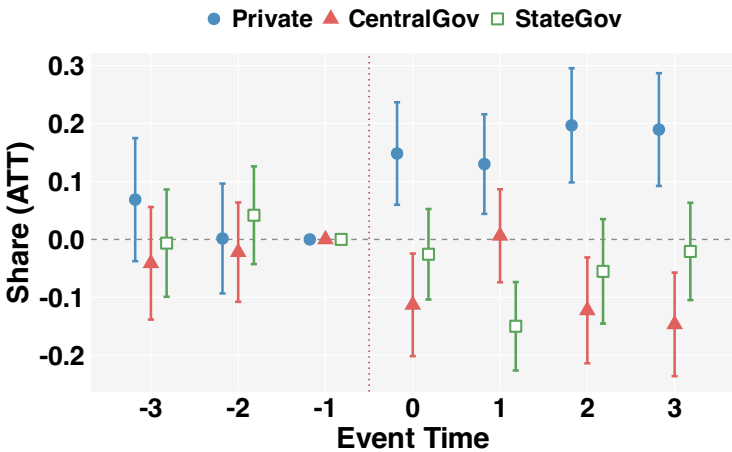
The same success rate for the two government owners. Ticks 0–3: the election year and the three years after it. [t65_v1_rate1-cg_atn_csdid · t65_v1_rate1-sg_atn_csdid]

Outcome

Share of effort — for specific owners (private / CG / SG)

Share of effort going towards each owner category

Share of effort



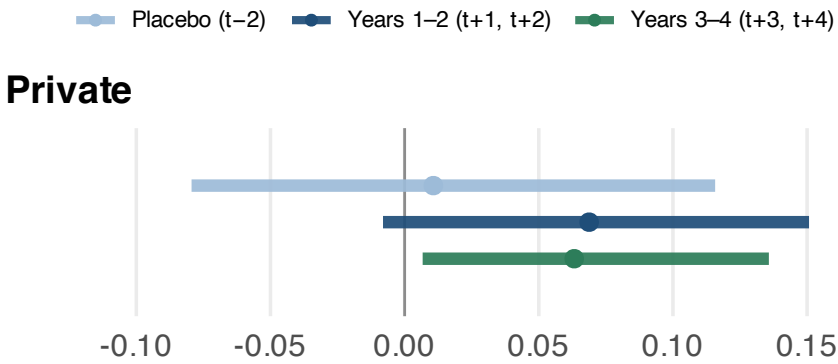
Share of Private project event increases by 16%, compared to counterfactual

Design II: Close-election RD

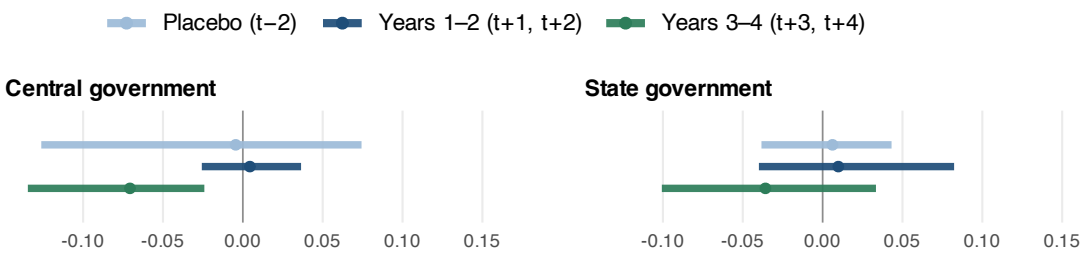
Close election RD | Design

- **Treatment**: non-aligned status due to close election outcome
- **Elections**: national parliamentary (Lok Sabha) general elections. The state government does not change around them.

Close election RD | Success Rate — Private



Close election RD | Success Rate — Central + State Govt



Similar effect for Share outcome ▸ Private ▸ Central + State Govt

Alternative Explanations

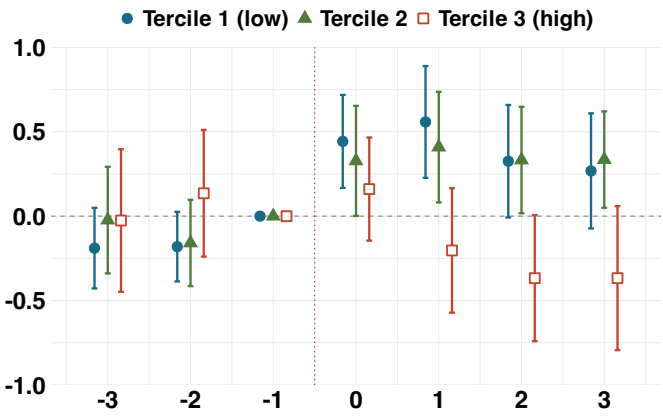
- **No entry response** ▸ Entry
  - New project announcements do not move
- **Not a state-level effect** ▸ Never-switching ▸ All non-treated
  - Districts of the same states whose alignment did not change: no detectable decline in government projects
- **No effect in bureaucratic structure** ▸ IAS officers
  - The number of IAS officers posted to the district does not change detectably

Heterogeneous effects

Heterogeneous effect | Which Private projects

- What kind of private projects are getting attention?

Heterogeneous effect | Private throughput by project cost



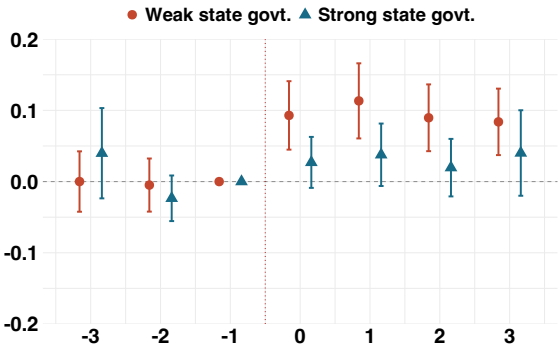
Red: 3rd tertile (highest cost) · Green: 2nd · Blue: 1st (lowest cost)

Private projects per district-year. Ticks 0–3: the election year and the three after.

Heterogeneous effect | Role of Political incentives

- What states are driving the effect?

Heterogeneous effect | Weak state government (success rate)



Weak state government + MP loses alignment: political influence at its lowest — and that is where private projects gain the most.

Red: weak state government · Blue: strong

Welfare

Aggregate cost | Framework

- **Structure:** districts are capacity bound, and an aligned MP's claim takes about a sixth of that capacity from private projects

$\rho_P \equiv 1 + \dfrac{\tau_P}{\mathsf{Thr}^P(1)}$	$h_c(0) = \rho_P\, h_c(1)$	$\Delta W = \dfrac{1}{h(1)} - \dfrac{1}{\rho_P\, h(1)}$
Private approvals rise by this factor when the channel is shut	**Queue:** the claim acts on the completion hazard h_c	**Waiting:** the extra wait when aligned, per project that clears

τ_P: effect of losing alignment on private throughput. (1): aligned, (0): not aligned

- **Three routes to aggregate** over 3,788 aligned district-years: **level** (same number of approvals lost), **proportional** (same fraction), **share** (same share of capacity)

Aggregate cost | Waiting and employment

- **Private approvals deferred:** 4,565 [1,410–7,780], 2005–22; 3,517 to 5,895 across three routes
- **Waiting**
  - 0.31 years per private project, about four months; up to 0.84 years
  - 2,977 project-years of excess waiting, 8% of the aligned private stock
- **Employment**, in the lowest and middle cost tertiles
  - 0.29 million jobs deferred, 2005–22
  - About 0.5% of the 2013 non-farm establishment workforce of the districts with an aligned year

Discussion and conclusion

Conclusion

- **Attention is moved, not created.** When the MP's party leaves the state government, about a sixth of the district's output moves from government projects to private ones. Total output does not change.

- **The gain comes with a shadow cost.** Aligned politicians do get more done on the projects they favour. Private projects competing for the same officials' time pay for it, and counting only the favoured outputs misses that.

- **The burden of regulation depends on where the state directs its officials,** not only on what the rules require. The allocation moves with elections that leave the rulebook untouched.

Other work | Where the state's capacity goes

- **Political Allocation of State Capacity**
  - India's 2008 redistricting quasi-randomly changed exposure to seats reserved for disadvantaged castes
  - When the local politician's value for careers falls, new postings fall by about half relative to controls in the first year, and the type of officer changes
- **Police Funding Inequality and Police Performance in the US** with Mitch Downey
  - The same kind of sorting: inequality in fragmented metro areas can move officers away from poorer jurisdictions

Other work | Firms, and new data on the state

- **Can the State Choose Winners?** Startup promotion in India; working title
  - GoI innovation policy to promote startup eco-system. Using shift-share design, preliminary results indicate policy selects already growing firms but no treatment effect.
- **Where the state is present:** a gazette panel, using large language models
  - Early results: the bureaucracy expanded into rural areas after the 1992 local-government reform
- **Indian cities:** built area and heights, from satellite imagery and footprints
  - Early results: much of the building stock in large cities is substandard

One agenda: how much capacity the state has, where it goes, and how politics shapes both

Thank you

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Appendix

Regulation: old and new views

Old view: correct market failures

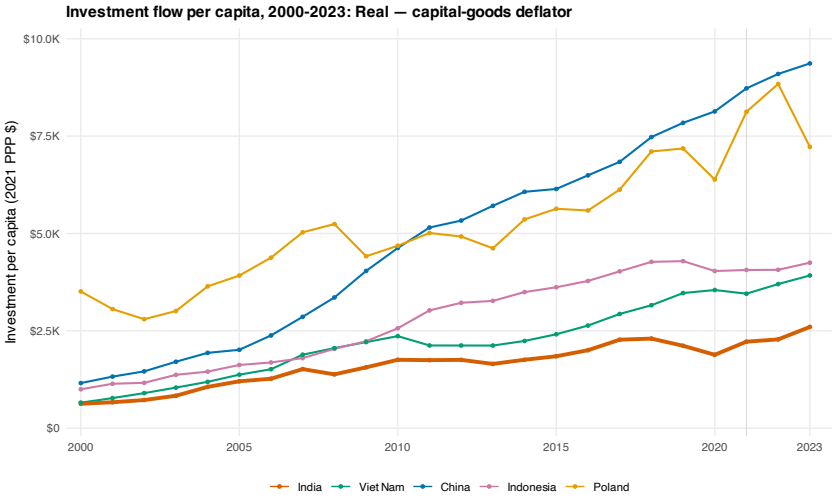
- Negative externalities and monopoly: a benevolent regulator protects the public Pigou 1920

New view: regulation creates rents

- Capture: rules serve incumbents Stigler 1971
- Permits let officials deny, and collect bribes Shleifer & Vishny 1993
- Heavier entry rules: more corruption, no better goods Djankov et al. 2002
- Red tape above the social optimum Guriev 2004

Both views turn on the rules. This paper: the same rules, and the bureaucratic attention behind them.

Investment per capita: India and peers



Source: PWT 11.0 (GGDC; DataverseNL DOI 10.34894/FABVLR, v2.0, 2025-10-10). Accessed 2026-07-15.
Flow = gross capital formation (incl. inventories). Market FX enters nowhere.

From the estimates to wait time and jobs

Aligned district-years, 2005–22	Central	Interval	Upper bound
Private clearances deferred	4,565	[1,410, 7,780]	
Extra wait per private project, years	0.31	[0, 0.70]	0.84
Excess queue, project-years	2,977	[0, 6,700]	7,998
Jobs deferred (small, mid-size), million	0.29	[0.14, 0.44]	
Job-years lost to the delay, million	0.19		0.50

- An accounting on the event-study estimates, not a new estimate: 1.28 clearances a year $\times$ 3,788 aligned district-years $\times$ 0.944 (projects in several districts).
- Jobs are promoters' estimates. The highest-cost projects go the other way, so the sign of the net employment effect is not identified.

Literature

- **Incentives matter**
  - Khan, Khwaja & Olken (2016, 2019) · Bertrand, Burgess, Chawla & Xu (2020) · Fisman & Wang (2017)
- **Selection matters**
  - Dal Bó, Finan & Rossi (2013) · Colonnelli, Prem & Teso (2020) · Xu (2018) · Weaver (2021) · Estrada (2019)

Autonomy for bureaucrats: the papers

- **Rasul & Rogger (2018), Nigeria:** 4,700 public projects, 63 organizations. One s.d. more autonomy goes with 18% higher completion, one s.d. more incentives and monitoring with 14% lower. Multitasking is one reason they suggest
- **Bandiera, Best, Khan & Prat (2021), Pakistan:** field experiment, about 600 procurement officers. Moving authority from monitors to officers cuts prices by 9%, with no loss of quality, mainly where monitors delay approvals
- **Bhavnani & Lee (2018), India:** IAS officers serving their home state raise the share of villages with a high school, only where conditions favour accountability. Local ties, against autonomy from local elites
- **Best, Hjort & Szakonyi (2023), Russia:** 16 million purchases. 39% of the variation in prices paid is due to the individual bureaucrats and organizations. On who matters, not on autonomy

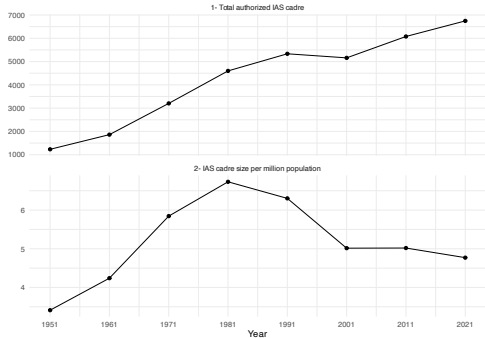
Few representatives, few public servants

	Political · people per national legislator	**Administrative** · public employees per 1,000 people
Vietnam	0.20 m	90
China	0.47 m	82
United States	0.77 m	63
Brazil	0.41 m	54
Indonesia	0.48 m	46
India	**2.62 m**	**28**

- **Political** — legislative power sits high up
- **Administrative** — the fewest public employees per capita among peers.

Seats: IPU Parline, 2022 · population: WDI, 2022 · public employees: WWBI v3.0

Indian Administrative Services - II



Per-capita count peaked in 1981 and falling ever since, from ~7 to ~4.7.

Around 25% of postings are double postings - 2+ department/ministries at the same time.

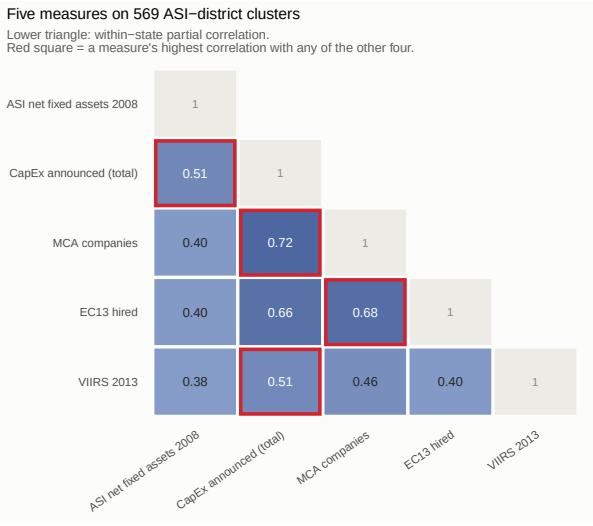
An open secret: the Supreme Court, 2013

- *T.S.R. Subramanian v. Union of India*, 31 October 2013, brought by retired civil servants
- On postings in the states: made "at the whims and fancies of the executive head for political and other considerations and not in public interest" para 30
- The Court directed the Centre and the states, within three months, to:
  - Set up Civil Services Boards to advise on transfers and postings para 29
  - Provide a minimum tenure para 31
  - Record oral instructions: civil servants cannot act on them unrecorded paras 33, 35
- Its limit: the political executive can overrule a board, by recording its reasons para 28

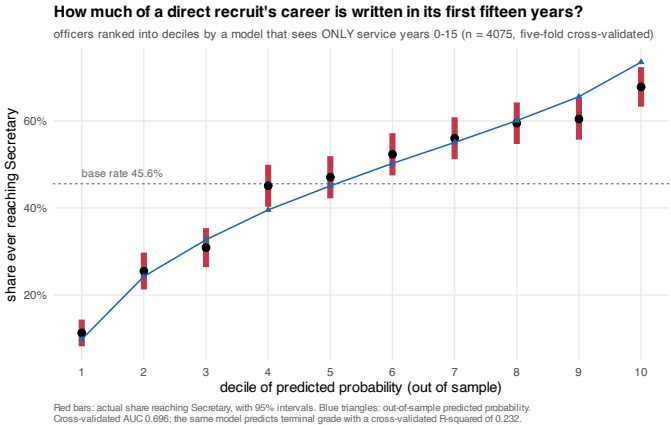
An open secret: states' efforts to limit it

- **Before the ruling:** 13 states accepted a two-year minimum tenure for IAS posts; others did not Judgment, pp. 6–7
- **In court:** some states' replies were "neither consistent nor positive"; governments saw a board as an intrusion into the executive's function paras 19–20
- **After it:** IAS Cadre Rules amended in 2014, with a two-year minimum and a board for early transfers Ranganathan 2022
- **By statute:** Maharashtra's 2005 Act sets a three-year tenure, All India Service officers included
- **In practice:** several states set up no board Ranganathan 2022. Kerala went to court against a tribunal order to transfer only on a board's recommendation. Haryana reported about 120 early transfers in 2025 Tribune 2026

Validating CapEx data



Career Concerns | First Stage



A posting is not just this year's job.

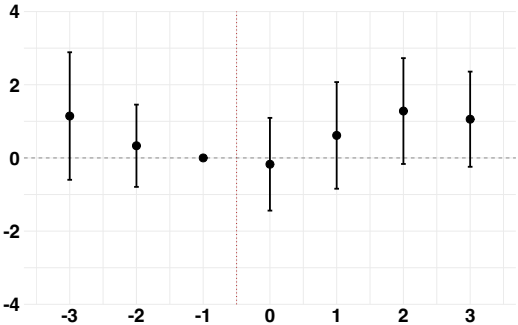
Career Concerns 2 | First Stage



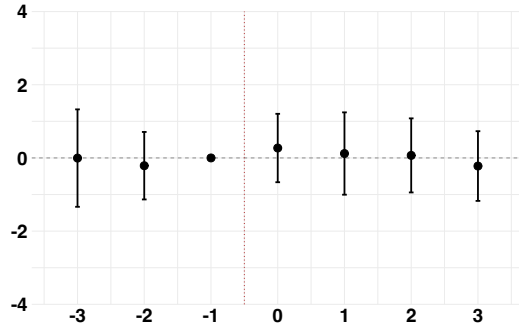
This is the reason an officer's expected return to servicing a connected MP's requests is higher. It is **supporting evidence for plausibility, not an identified incentive contract** .

Entry: new project announcements

All owners



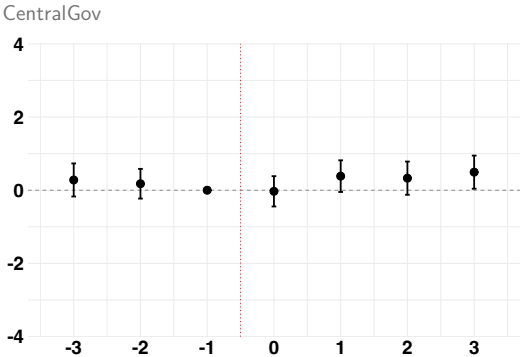
Private

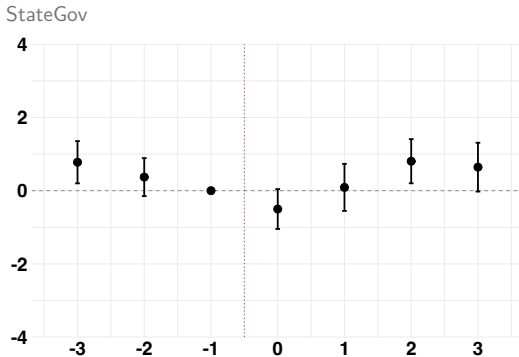


Projects newly announced in the year that enter the active queue in that year. Mean over 0–3: all owners +0.70 (0.61), private +0.06 (0.44). Central and state on the next slide.

To Alternative Explanations

Entry: central and state government

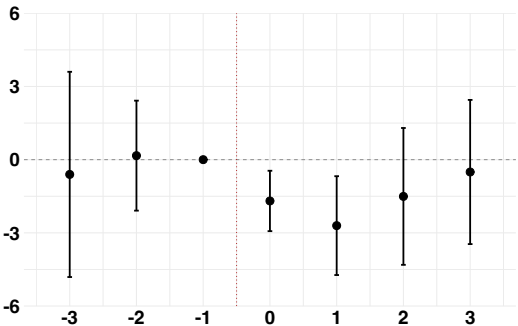




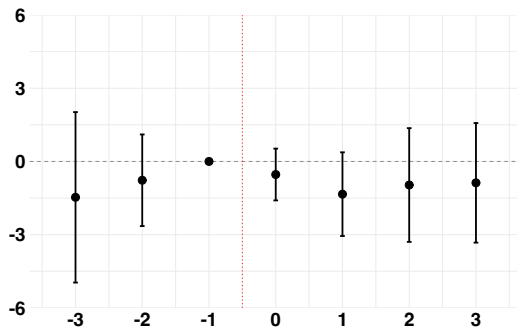
Projects newly announced in the year that enter the active queue in that year. Mean over 0–3: central +0.29 (0.19), state +0.26 (0.26).

The active queue (stock)

All owners

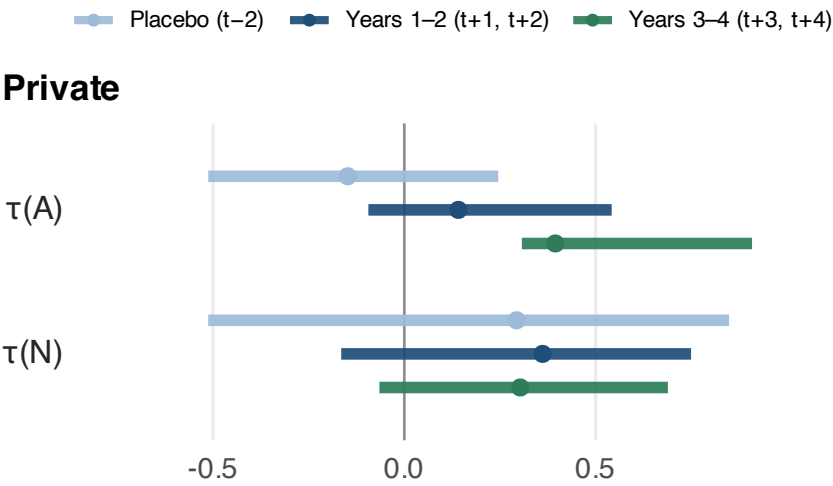


Private + Central Govt

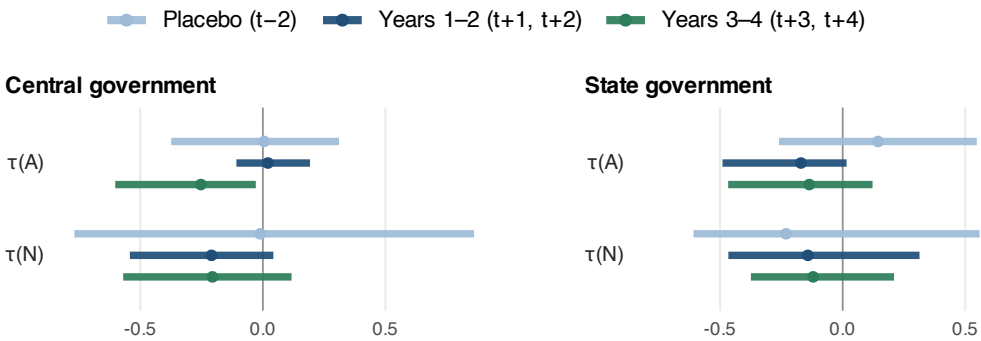


Projects announced in the last ten years, not yet completed or shelved. Mean over 0–3: all owners −1.60 (1.05), on a pre-switch mean of 25.1; private + central −0.93 (0.88), on 17.7.

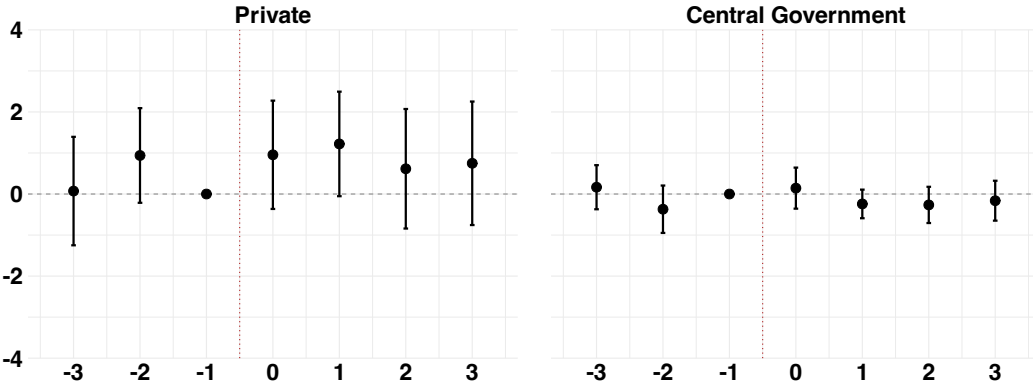
Close election RD | Heterogeneity — Private share



Close election RD | Heterogeneity — Central + State Govt share

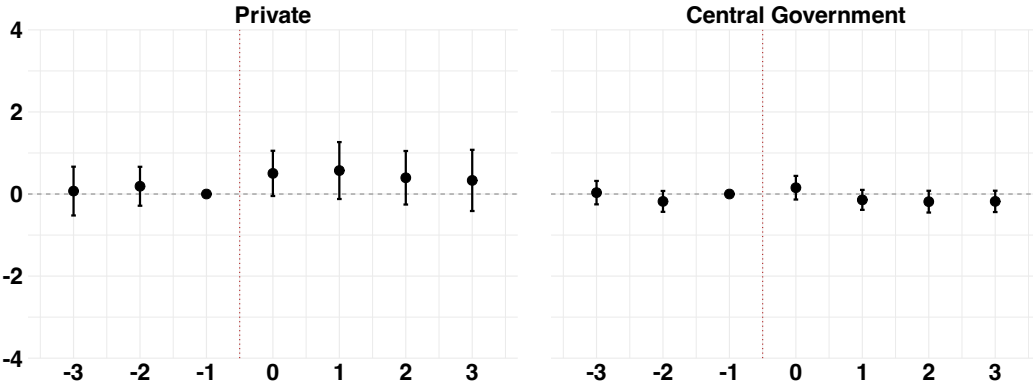


Same-state comparison | Never-switching districts



Districts of the treated states whose alignment did not change in the window, in the treated slot against the same controls: 43 district-cohort units in four cohorts. Mean over 0–3: private +0.89 (0.59), central −0.13 (0.17). In the switching districts: +1.28 (0.46), −0.59 (0.16).

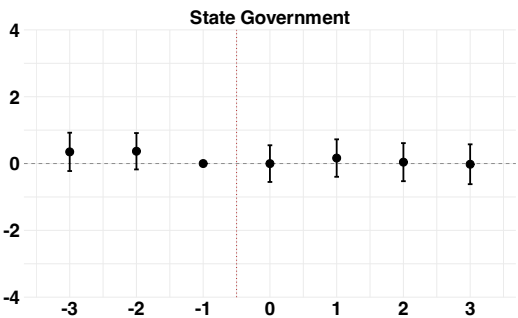
Same-state comparison | All non-treated districts



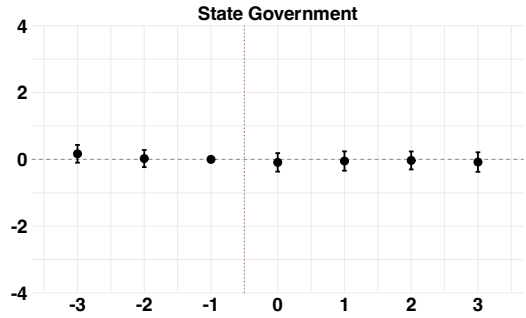
Every district of the treated states outside the treated set: 148 district-cohort units in six cohorts, 105 of which switch alignment the other way in the window. Mean over 0–3: private $+0.45$ (0.29), central -0.09 (0.10).

Same-state comparison | State government projects

Never-switching

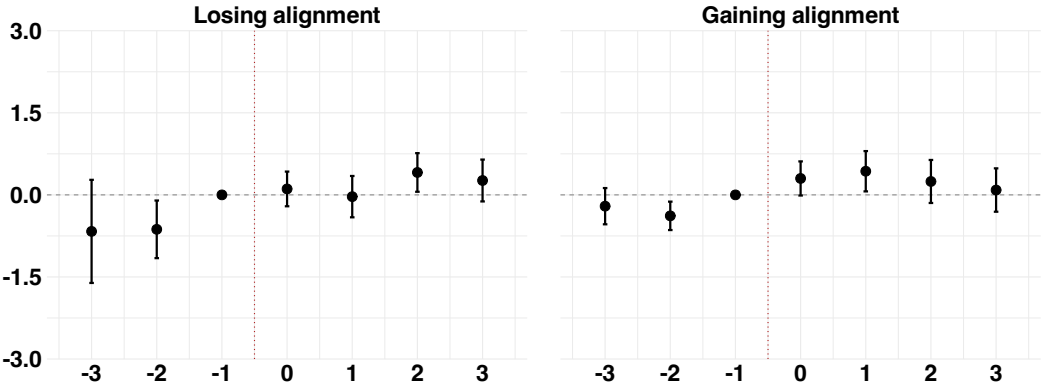


All non-treated



Mean over 0–3: never-switching $+0.05$ (0.24), all non-treated -0.06 (0.12). In the switching districts: -0.42 (0.18).

IAS officers posted to the district



Distinct IAS officers with a recorded posting in the district during the year. Mean over 0–3: losing alignment +0.19 (0.15), 5% of the pre-switch mean; gaining +0.27 (0.16).

Reference: the papers on the Motivation slide

Motivation, the papers: regulation and growth I

BUILD

Djankov, La Porta, Lopez-de-Silanes & Shleifer (2002), "The Regulation of Entry", *QJE* 117(1)

- **Data:** the procedures, official time and official cost a start-up bears before it can operate legally, in 85 countries.
- **Facts:** the world average is about 10 procedures, 47 business days and 47% of annual income per capita.
- **Finding:** heavier entry regulation goes with higher corruption and larger unofficial economies, but not with better public or private goods. More democratic and limited governments regulate entry more lightly.
- **Their reading:** evidence against public-interest theories of regulation, and for the public-choice view that entry regulation benefits politicians and bureaucrats.

Djankov, McLiesh & Ramalho (2006), "Regulation and Growth", *Economics Letters* 92(3)

- **Data:** an index of Doing Business rankings in seven areas of business regulation, in 135 countries, against growth of GDP per capita, 1993–2002.
- **Finding:** countries with better regulations grow faster. Moving from the worst quartile to the best implies +2.3 percentage points of annual growth (OLS, Table 3). The effect stays positive and significant in 2SLS, using legal origin, latitude, initial income, religion and language, but is weaker.

Neither paper estimates the effect of a reform, and neither has investment as its outcome. Both are cross-country comparisons. The slide's first line, "regulatory reforms promote capital investment", is a step beyond them.

Read: Djankov et al. (2002), abstract and section I, `papers/Regulations/reg_entry.pdf`. Djankov et al. (2006), the World Bank version of 17 March 2006, in full.

Motivation, the papers: the evidence on reform is mixed I

BUILD

Rodrik (2006), "Goodbye Washington Consensus, Hello Washington Confusion?", *JEL* 44(4)

- A review essay on the World Bank's *Economic Growth in the 1990s*, not an estimate. It covers market reform broadly: privatization, deregulation, trade and financial liberalization.
- **Latin America:** the recovery of the early 1990s proved short-lived, and per capita growth over the decade was below 1950–80, even though the old state-led regimes had been dismantled. Argentina collapsed in 2002.
- **Argument:** reformers and skeptics now agree that the original policy list did not deliver. Since binding constraints differ across settings, he proposes a diagnostic approach.

Bruhn (2011), "License to Sell", *REStat* 93(1): Mexico

- **Design:** a reform simplifying business entry, rolled out across municipalities at different times.
- **Finding:** registered businesses +5%, because former wage earners opened businesses. Unregistered owners did not formalize. Wage employment +2.2%. Incumbents' income −3%.

Kaplan, Piedra & Seira (2011), "Entry Regulation and Business Start-Ups", *JPubE* 95(11–12): Mexico

- **Finding:** the same reform raised start-ups by about 5% a month in eligible industries. Most of the effect was temporary, concentrated in the first 15 months, and well below what the World Bank and the Mexican authorities claimed.

Branstetter, Lima, Taylor & Venâncio (2014), "Do Entry Regulations Deter Entrepreneurship and Job Creation?", *EJ* 124(577): Portugal

- **Design:** one-stop shops ("On the Spot Firm") opened county by county; matched employer-employee data.

Motivation, the papers: the evidence on reform is mixed II

- **Finding:** in the short run, start-ups +17% and about 7 new jobs per 100,000 county inhabitants a month in eligible industries. The marginal firms were small and low-tech, their owners less educated, and they were less likely to survive two years.

Aghion, Burgess, Redding & Zilibotti (2008), "The Unequal Effects of Liberalization", *AER* 98(4): India

- **Data:** dismantling the License Raj; a three-digit state-industry panel from the Annual Survey of Industries, 16 main states, 1980–1997.
- **Finding:** after delicensing, industries in states with pro-employer labor rules grew faster than those in pro-worker states. By 1997 output was about 15% above the no-reform level in Andhra Pradesh and Tamil Nadu, and about 20% below it in West Bengal. The average effect is small.

Read: Rodrik, section 2 and the introduction. Bruhn, the published abstract for the numbers and the 2008 working paper's abstract for who entered (its numbers are +2.8% and −3.2%). Kaplan et al., the published abstract. Branstetter et al.: abstract and the numbers from NBER WP 16473, not the published tables. Aghion et al.: the numbers from the December 2005 discussion paper, not the published tables.

Motivation, the papers: rules and firms' experience I

BUILD

Hallward-Driemeier & Pritchett (2015), "How Business Is Done in the Developing World: Deals versus Rules", *JEP* 29(3)

- **Data:** the legally required time in Doing Business (de jure), against the times firms report in the World Bank's Enterprise Surveys (de facto): construction permits, operating licenses and customs, in non-OECD countries.
- **Finding 1:** firm-reported times are far shorter. For a construction permit the median Doing Business time is 177 days and the median of country medians is 30 days, a gap of about five months.
- **Finding 2:** across countries, the correlation between the Doing Business number and firms' reports is almost zero.
- **Finding 3:** variation within a country is larger than between countries. For construction permits the median gap between a country's 90th and 10th percentile firm is 116 days, against 46 days between slow and fast countries.
- **Finding 4:** changes do not line up either. Where Doing Business times fell, firms' reported times did not fall with them, and if anything rose.
- **Their reading:** where strict rules meet weak implementation, regulation creates a space for "deals" rather than rules to be followed. Winners and losers emerge among both firms and officials.

Their answer to the variation is firm-level deals. This paper's is the bureaucracy's attention. A firm's own influence is an alternative a question could raise.

Read: `papers/hallward-driemeier-pritchett-2015-how-business-is-done-in-the-developing-world-deals-versus-rules.pdf`, the introduction and the sections on construction permits and within-country variance.