Learning within the State: A research agenda

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An astonishing divergence between India and China

- Chinese per capita incomes have grown 4.5 times as fast as India’s

- Competing, substantiated explanations
  - Factors: Human capital, capital allocation, cheap land
  - Productivity: Managerial capabilities, infrastructure
  - Instruments: Exchange rate, industrial policy

- Call for a more general, structural reason: State capacity, in particular, the ability of the State to learn.
India and China display different learning capabilities

- Adaptation: Special economic zones adjusted quickly in China, slowly in India
- Reforms: Education and public administration reforms way more frequent in China.

The initial policies selected in China were not necessarily better, but the ability to improve policies faster fed back into improved outcome

- Why, how does China’s policy process do this?
Differential learning capabilities can explain long-run outcomes

- **Different institutions impact learning capabilities…**: 
  - Centralization affects experimentation (Cai and Treisman 2009)
  - Transparency affects communication (Prat 2005)
  - Electoral competition affect implementation (Morelli and van Weelden 2011)

- … **And learning matters at the country-level**: 
  - Qualitative research on income support (Heclo 1974), service delivery in health and education (Foresti et al. 2013)
  - Formal models show the link between adaptation and development (Hausmann and Rodrik 2003)

- … **And learning matters at the micro level**: acquisition of capabilities by various actors (Greenwald and Stiglitz 2014, Bloom et al. 2013)
We need to better understand how states learn

- Attention to how private firms can improve their capacity to learn starts far back in the management literature
  - Recently started being systematized in the literature on economics of organization, but with little attention to public institutions

- Scattered results in political science literature (as above), and in some of the classical works of political economy (e.g., Hirschman)

- Lack even basic data – e.g., how often policies change – and to fill the gap will be labour intensive

- Motivates the construction of an initial framework, to guide subsequent investigations and data collection, and hint at possible answers
Policy systems and flows of information
A Taxonomy of Policy Systems

- Three operational levels...
  - The formulation of goals, e.g. via legislation
  - The definition of tasks, e.g. via higher-level bureaucrats
  - The execution of tasks, e.g. via lower-level bureaucrats

- ...distributed over geographic divisions
  - From the nation to the neighborhood
  - Institutions define the geographic distribution of operations
Information flows – How to learn?

- **Generating information**
  - Maintain the status-quo or experiment?
  - Actors: Local politicians or bureaucrats, national leaders, external orgs?
  - Institutions matter, e.g. (de)centralization

- **Transmitting information**
  - How is the information communicated to decision-makers?
  - Actors: the information generators, the monitors, other intermediaries?
  - Institutions matter, e.g. monitoring, transparency, communication costs

- **Implementing information**
  - How is the information acted upon?
  - Actors: local or national, politicians or bureaucrats?
  - Institutions matter, e.g. veto points
Institutional structures
Institutional structures

- **Separation of Powers, Centralization**

  - Veto points can hamper flexibility but prevent errors, incentives can be misaligned, spillovers might occur
  - Trade-off between Type I ("missed opportunity") and Type II ("bad idea") errors (Sah and Stiglitz 1988): decentralized "laboratories" means more experimentation but more errors
  - Internalizing externalities (Cai and Treisman 2009): a centralized institution can internalize benefits of local experimentation
Institutional aspects

- **Monitoring, Transparency**
  - More accurate, accountable transmission of realized information
  - But can lead to pandering or conservatism in experimentation or communication (Prat 2005, Che and Kartik 2013)
  - Effectiveness depends on actors on inside being prone to act on information received from outside

- **Career Concerns**
  - Weighting of incentives for risk-taking v. discipline has direct impact on experimentation
  - Thus the incentive structure matters (monetary, reputation and prestige, autonomy) (See Wilson 1989, Rasul and Rogger 2013)
A stylized comparison: China and India
## Policy exploration (generating information)

<table>
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<tr>
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<th>China</th>
<th>India</th>
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<tbody>
<tr>
<td>Cursus honorum</td>
<td>Five years as local leader pre-condition for elevation</td>
<td>No recent PMs have been successful province leaders before ascending</td>
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<tr>
<td>Structure of political parties</td>
<td>National-level party absorbs externalities</td>
<td>Increasing weight of purely regional parties removes positive externalities</td>
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<td>Bureaucratic promotion</td>
<td>Mix of province and national, mix of performance thresholds and connections</td>
<td>Province-level, incentive on conservatism</td>
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<td>Average tenures and transfers</td>
<td>Five years or more (Party Congress cycle)</td>
<td>Sixteen months</td>
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Policy communication (transmitting information)

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<tr>
<td>Information intermediaries</td>
<td>Well-funded high-level schools, think tanks, science bureaus</td>
<td>Several academies, think tanks, but shallow presence in provinces</td>
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<td>Intermediaries’ focus</td>
<td>Local policy experimentation, iterative partial optimizations, forums and conferences</td>
<td>At least as much theory as practice, full optimizations, producing papers</td>
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<td>Think tanks</td>
<td>Cascading local chapters, research centers in every province</td>
<td>Mostly central or foreign, few with strong links into policy system</td>
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<td>Rotation of provincial leaders</td>
<td>Every 5/10 years; moving from ‘easy’ to ‘hard’ province a step up</td>
<td>Increasingly difficult with strength of regional parties</td>
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<td>Rotation of bureaucrats</td>
<td>Possible on occasion, particularly if bureaucrat is innovative</td>
<td>Impossible, state allocation remains throughout career</td>
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<td>Conference tone</td>
<td>“My province has problem X, does yours? Can you teach us?”</td>
<td>“Our state is doing amazing things, our problems will soon be solved”</td>
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## Policy decision (implementing information)

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<tr>
<td><strong>Balance of power, national level</strong></td>
<td>Few veto wielders, albeit partial factionalism</td>
<td>Multiple veto players, political coalitions since 1990s, independent &amp; activist judiciary</td>
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<tr>
<td><strong>Balance of power, local level</strong></td>
<td>Even fewer veto wielders, though greater informal authority (corruption, influence peddling)</td>
<td>Lots of variation in executive's stability, and activism from interest groups and judiciary</td>
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<td><strong>Implementation</strong></td>
<td>Integrated, centralized process with deep roots in the state ('point to surface')</td>
<td>Fractured for lack of communication, provincial parties with different incentives</td>
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Stylized comparison --- initial thoughts

- Performance legitimacy vs process legitimacy? (Zhao and Yang 2013)

- The importance of learning by doing, and allowing for errors:
  - Traditions of learning through action in China
  - Problem on incentives towards conservatism in India
  - Other successful examples: US States, Malaysia – “change by doing”

- Need to create institutions and incentives that work within overall structure (“more provincial competition” doesn’t cut it).

- Compounded with decentralization and provincialism of politics, yielding misaligned incentives
  - Increase rotation and change promotion process and supervision structure
Where next?
Formal modeling

- Sharpen implications by further improving models to capture trade-offs and differential weight of key variables.

- In doing so, need to construct simple models of “just one thing” at a time – strategy is to do sequential, simple models.

- Accumulate one result at a time, generating a series of insights into relative trade-offs, linking to economics of organization literature.

- Example is series of results by Sah and Stiglitz in 1986-88 on decision making, comparing hierarchy, polyarchy, committees.
Data collection

- Currently working with limited information

- Situation is comparable to macroeconomics in early 19th century, or microeconomics in mid 20th century

- For example, no consolidated datasets on outputs as basic as frequency of policy changes, or inputs like forms of bureaucrat promotion

- Will be heavily labor intensive to compile big datasets

- Even qualitative is difficult – much is buried in tacit knowledge, depends on personal contact with policymaking, implementation
Areas for guidance

- **Modeling versus data**
  - Construct the models first, and use them to guide data collection, or
  - Find the data / expand the cases first, and use that to guide modeling

- **Going deep versus going broad**
  - Deepen treatment of China and India first (e.g., deep process tracing of a few key areas of policy, quantitative data compilation), or
  - Expand to other cases, e.g., developing world (e.g., Brazil, Sub-Saharan Africa), newly industrialized (Korea), and Europe (Italy vs Nordic)?

- Areas of framework for focus – politicians or bureaucrats; number of agents or agent incentives; generation, transmission or decision?