Bottom-Up Institutional Change and Growth in China

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Overview

- Question: how important were bottom-up reforms in driving China's economic growth?

- This paper:
  - Identify 1.8 million major events from the universe of county gazetteers
  - Focus on 25 most significant reforms
  - Findings: bottom-up reforms more associated with productivity growth, while top-down reforms more associated with capital accumulation

- Overall assessment: super important topic, tremendous data collection effort
  - Most of my comments are about how to make best use of the impressive data

top-down reforms
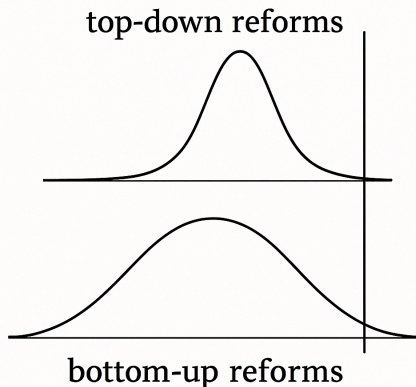
bottom-up reforms

- The data generating process is basically selecting the right-tail reforms
- Does this necessarily reflect the overall effectiveness of top-down vs. bottom-up reforms?

Comment 2: Alternative policy goals?

Table 1: Key Economic Reforms

Reforms	Year when Central Govt. Gave Partial Consent (1)	Year when Central Govt. Endorsed Nationwide Reform (2)	Bottom-Up Reform Index (3)
Household Responsibility System (家庭联产承包制)	1980	1982	3.033
Privatization of SOEs (国企私有化)	1995	1997	1.888
Urban Credit Coorporative Development (城市信用社发展)	1986	1986	1.792
Developing Township and Village Enterprises (发展乡镇企业)	1979	1984	1.102
Setting Up A Modern Enterprise System (建立现代企业制度)	1993	1999	1.036
Rural Financial Reform (农村金融改革)	1980	1984	0.885
Importing Tech and Complete Sets of Equip (引进新技术和成套设备)	1978	1984	0.707
Hukou Reform (户籍制度改革)	1984	2001	0.671
Labor Contract System (劳动合同制)	1983	1994	0.605
Horizontal Economic Cooperation (横向经济联合)	1980	1986	0.285
Development of Private Economy (发展私营经济)	1988	1997	0.283
Urban Pension System Reform (城镇养老制度改革)	1983	1991	0.278
Transformation of SOEs into Shareholding Companies (企业股份制)	1984	1992	0.127
Land Use System Reform (土地使用制度改革)	1988	1992	-0.028
SOE Managerial Responsibility Contract (经营责任承包制)	1979	1987	-0.137
Development of Individual Economy (发展个体经济)	1979	1982	-0.444
Advancing Western Development (西部大开发)	1999	1999	-0.684
FDI and Special Economic Zones (外资，经济特区)	1980	1992	-0.783
Price Reform (价格改革)	1984	1992	-0.844
Housing Reform (住房制度改革)	1979	1998	-1.001
Bankruptcy Reform (破产制度改革)	1984	2006	-1.078
Wage System Reform (工资体制改革)	1978	1985	-1.119
Rural Tax and Fee Reform (农村税费改革)	1993	2004	-1.565
Substitution of Profit with Taxes (利改税)	1980	1983	-2.138
Tax Sharing Reform (分税制改革)	1992	1994	-2.874

- Many top-down reforms weren't necessarily trying to maximize growth?
  - Other goals: reducing regional inequality, providing amenities, mitigating rural-urban gap, strengthening central authority, etc.
- Is growth always the right criterion in comparing central vs. local reforms?

Comment 3: Empirical strategy

- The data collection effort exhausting all county gazetteers to find 1.8 million major events is truly impressive!

  - Identifying the policy universe is challenging task even today

- But it is not clear to me that the empirical exercise does justice to such tremendous data collection effort:

  - Instead of utilizing all policies, only 25 major reforms are studied

  - Data effort and empirical analysis felt a bit disconnected

  - For the 25 reforms, the data contains very detailed roll-out schedule of each reform, a level of granularity uncommon for this era. But by aggregating all reforms at the province-year level

Comment 3: Empirical strategy (continued)

Table 2: Reform Policy Innovation, Adoption, and Economic Growth

Dependent Variable:	$\Delta \ln GDP$ per worker$_{pr}$ (1)	$\Delta \ln GDP$ per worker$_{pr}$ (2)	$\Delta \ln TFP_{pr}$ ($\alpha = 0.5$) (3)	$\Delta Investment$ Rate$_{pr}$ (4)
Policy Innovator$_{pr}$	0.0878***	0.0608**	0.0595**	0.0458*
	(0.0317)	(0.0287)	(0.0280)	(0.0229)
Policy Follower$_{pr}$	0.0077	0.0170**	0.0175**	-0.0384***
	(0.0105)	(0.0083)	(0.0080)	(0.0098)
$\Delta \ln Capital$ per worker$_{pr}$		0.4764***		
		(0.0592)		
Province Baseline Characteristics×Period	Y	Y	Y	Y
Province	Y	Y	Y	Y
Year	Y	Y	Y	Y
Observations	232	232	232	232
R-squared	0.7230	0.8007	0.7324	0.6354

Personally, I find the provincial baseline regressions less informative:

1. Y is growth rate, in a TWFE model, this is estimating the second derivative?

2. If peripheral regions are more likely to initiate reform (as shown later), could the findings be explained by regression to the mean?

3. Identifying variation: a province becoming marginally more innovative. Given diminishing marginal return to innovation, if the goal is to understand the overall role of innovation in China's growth, is this the right LATE that we care about?

Comment 4: Conduct 25 case studies?

Personally, I find the following framing to be a bit more natural:

- For many of the most high-stakes reforms in the 80s and 90s, granular info on roll-out schedule is missing, making it hard to quantify their actual effectiveness

- The comprehensive examination of county gazetteers allows one to actually treat each reform very seriously, and credibly estimate 25 separate treatment effects

- In addition to being a nice contribution to econ history, one can draw further comparisons between top-down vs. bottom-up policies

- Maybe one can even do this for all the "major events" collected? Would be cool to verify whether the 25 most highly-regarded reforms are indeed the most important contributors to growth

Comment 5: Remoteness and reform

- Section 4 reports that remote/peripheral regions initiate more reform policies, which the authors interpret as reflecting "reduced visibility and political risk"
    - Alternative interpretation: desperate regions initiate reform as they have nothing to lose

- I find this result very interesting. Important implications for today:
    - With higher state capacity and reduced central-local info asymmetry, central has temptations to micro-manage local, thereby hindering innovation and growth

- When we say "the mountain is high and the emperor is faraway," that is usually referring to concerns about agency problems
    - Under what conditions would P-A problems be beneficial?

Thank you!