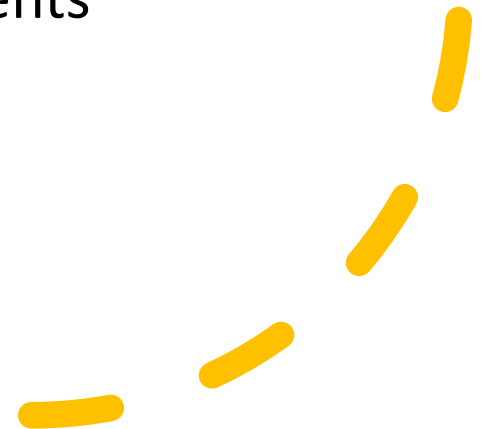- What Makes Local Governments in Autocracies Accountable?

- Evidence from China"

- World Bank

- Annual Development Conference

- June 2023

- Daniel Berkowitz, University of Pittsburgh

- Yi Lu, Tsinghua University

- Mingqin Wu, South China Normal University

Local Governments in Developing Countries

- Responsible for investing in education, infrastructure, health services, welfare, new business development

- Often ignore constituent interests and engage in rent seeking activities (Olken and Pande, 2012)

- What can make local governments more accountable to their constituents?

China – County Government Website Reform in 2012

- There about 2,800 counties under jurisdiction of 32 higher level governments (provinces)

- Reform standardizes and upgrades the existing Mayor's Mailbox for 100 pilot counties

- Increases transparency (availability of data)

- Improves information flows between citizens and county officials

- Reduces information frictions between county governments and higher up governments

Findings

- Mismanagement based on county audits decline

- Bribe-giving proxied by "business entertainment" spending decline

- Firm entry increases

Literature on Citizen-Led Accountability for Local Governments

- Focus on "bottom-up" accountability where citizens vote for local governments
- Keefer and Khemani (2014), Andrabi, Das and Khwajas (2017), Pandey, Goyal and Sundararaman (2009), Barr et al. (2012), Mansuri and Rao (2013), Molina et al. (2016), Dube, Haushofer and Siddiqi (2018), Fiala and Premand (2018), Reinikka and Svensson (2004), Raᵆer, Posner and Parkerson (2020); Banerjee et al. (2010)
- China is different – citizens do not vote for county officials

Mayor's Mailbox

- Institutional overview (Chen, Pan and Xu, 2016)
- April 2007, the "Open Government Information Ordinance" (OGI), county governments required to be more transparent.
- Most counties set up websites containing forums where citizens can submit queries
- Website not standardized – county-variations how and what information is released and how citizens communicate with county governments.
- Chen, Pan and Xu (2016) field experiment - **one-third of counties** respond to online citizen requests for social benefits

2012 Website Reform

- 3-4 counties in each province required to standardize and upgrade their websites
- Citizens can more easily communicate with county government with communication links
- There is an online link where citizens can reveal events of corruption by uploading material directly (but there is no record or public discussion)
- There is more flow of information to higher level governments who shape promotions of county officials
- Prediction: County governments should become more accountable
- => test for a decline in corruption and better public services in pilot versus other counties

Identification Issues

1. Treatment not randomly assigned => use methods from Li et al (2016) that build on Gentzkow (2006) and Agarwal and Qian (2014) and account for rules that provincial governments use to select pilot counties

2. Reform occurs around the time that the Communist Party is running a massive anti-corruption campaign => control for county-level inspections and turnover of higher up governments that oversee counties associated with campaign

3. MAJOR CONCERN – Selection on ambitious and competent county leaders into pilot counties => what can matter is who leads the county and websites are not important - we deal with this issue using several strategies

Table 2. Balance Tests

Variable	Treatment	Control	Unconditional Difference	Conditional difference
Panel A. Selection variables				
Public deficit, 2009	0.027	0.059	-0.032***	
	(0.035)	(0.091)	(0.005)	
Keywords, 2010	1.588	0.746	0.842***	
	(1.576)	(1.063)	(0.193)	
Website construction, 2010	6.018	5.115	0.903***	
	(2.697)	(3.149)	(0.334)	
Telephone users, 2010	11.449	9.672	1.777***	
	(0.911)	(3.447)	(0.134)	
Length of highway, 2010	2.785	1.712	1.074***	
	(2.078)	(2.073)	(0.256)	
Slope, 2010	0.689	1.030	**-0.341***	
	(0.839)	(1.174)	**(0.105)**	
Panel B. County level economic variables				
Agricultural grain output (log), 2010	8.034	8.062	-0.028	-0.078
	(0.649)	(0.582)	(0.080)	(0.080)
Industrial output value (log), 2010	7.857	8.098	-0.241***	-0.041
	(0.679)	(0.743)	(0.084)	(0.071)
Average urban wage (log), 2010	10.358	10.254	0.104*	0.097
	(0.477)	(0.367)	(0.061)	(0.061)
Average firm's assets (millions of yuan, log), 2010	9.361	9.113	0.248***	0.089
	(2.369)	(2.347)	(0.020)	(0.200)
Average firm's output (millions of yuan, log), 2010	7.768	7.295	0.473***	-0.211
	(4.510)	(4.535)	(0.039)	(0.484)
Average firm's net profit (millions of yuan, log), 2010	5.840	5.494	0.346***	0.177
	(2.695)	(2.761)	(0.027)	(0.266)
Total firm employees (log), 2010	3.983	3.800	0.183***	0.009
	(1.427)	(1.426)	(0.012)	(0.119)
County under provincial capital, 2010	0.090	0.077	0.013	-0.007
	(0.288)	(0.267)	(0.035)	(0.035)
Coastal county, 2010	0.104	0.089	0.015	-0.011
	(0.308)	(0.285)	(0.038)	(0.038)
Mountainous county, 2010	0.328	0.382	-0.054	0.011
	(0.473)	(0.486)	(0.058)	(0.053)
County government employees, 2009	9.639	9.365	0.274***	0.071
	(0.521)	(0.579)	(0.066)	(0.051)

Panel C: County leader characteristics

Age, 2010	47.761	48.079	-0.318	-0.511
	(3.482)	(3.804)	(0.432)	(0.442)
Education, 2010	1.515	1.579	-0.064	-0.124
	(0.638)	(0.638)	(0.080)	(0.083)
Newly assigned county leaders, 2010	0.254	0.225	0.028	0.013
	(0.438)	(0.418)	(0.054)	(0.056)
Job tenure, 2010	2.925	3.450	-0.524***	-0.292
	(1.521)	(2.129)	(0.191)	(0.202)
Political connections, 2010	0.134	0.123	0.011	0.016
	(0.344)	(0.329)	(0.042)	(0.044)
Economic performance of party secretary, 2010	1.295	0.481	0.814	0.264
	(5.414)	(4.075)	(0.663)	(0.641)

Panel D: Pre-treatment dependent variables

Corruption-mismanagement, 2010	0.134	0.178	-0.044	-0.024
	(0.231)	(0.373)	(0.030)	(0.031)
Entertainment expenses, 2010	0.555	0.594	-0.039***	-0.013
	(0.935)	(0.975)	(0.008)	(0.009)
Firm entries, 2010	9.474	9.372	0.103	-0.085
	(0.701)	(0.743)	(0.089)	(0.077)

Notes: Robust standard errors, clustered at the county level, are in parentheses: *** $p<0.01$, ** $p<0.05$, * $p<0.1$. The balance tests are cross-sectional and do not include fixed effects.
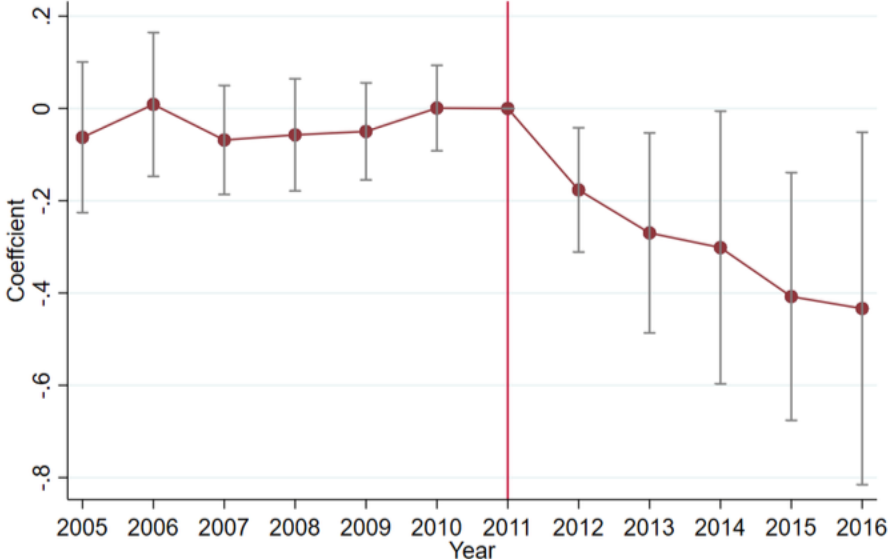
Estimating Equation

- $Y_{it} = \alpha + \beta Treat_i * Post_t + County_i + Year_t + \gamma Inspections_{it} + Turnover_{it} + Selection_{it}$

  $+ Leader_j + \varepsilon_{it}.$ where $\quad$ i = county, $\;$ t = year, j = county leader

- Y_{it} = outomces including corruption and new firms

- $Treat_{it}$ = 1 for pilot counties, 0 otherwise; $Post_t$ = 1 for 2012 and later, 0 otherwise

- $County_i$, $Year_t$ = county and year fixed effects

- $Inspections_{it}$ = anti-corruption campaign

- $Turnover_{it}$ = turnover of higher-level government leaders

- $Selection_{it}$ = Selection function (rules that provinces to select pilot counties)

- $Leader_j$ = county leader fixed effects

- ε_{it} = stochastic error term
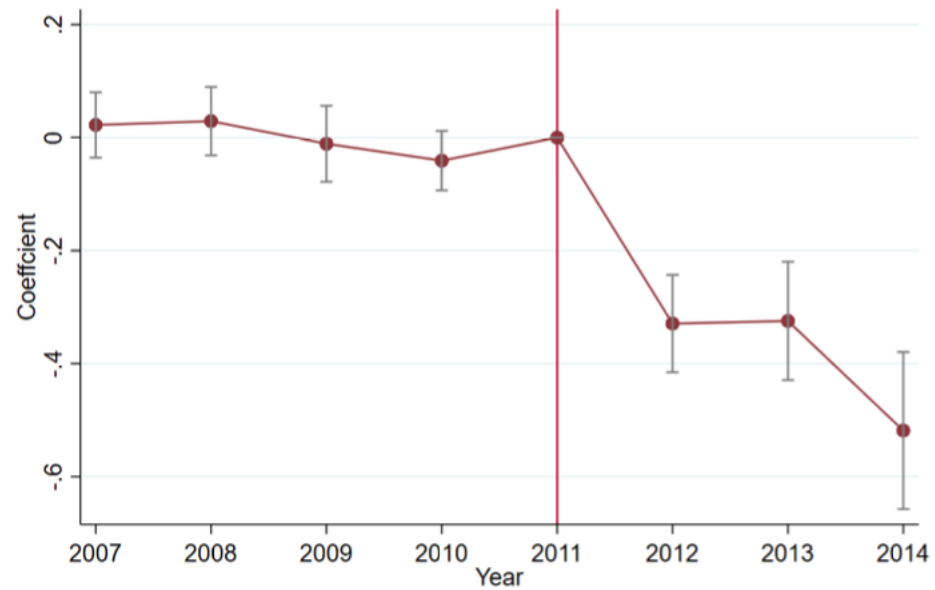
Event Study – Corruption Mismanagement
Decline of 16% of a sample standard deviation

Figure 2. Estimated Coefficients for Corruption Outcomes

Business Entertainment Expenses
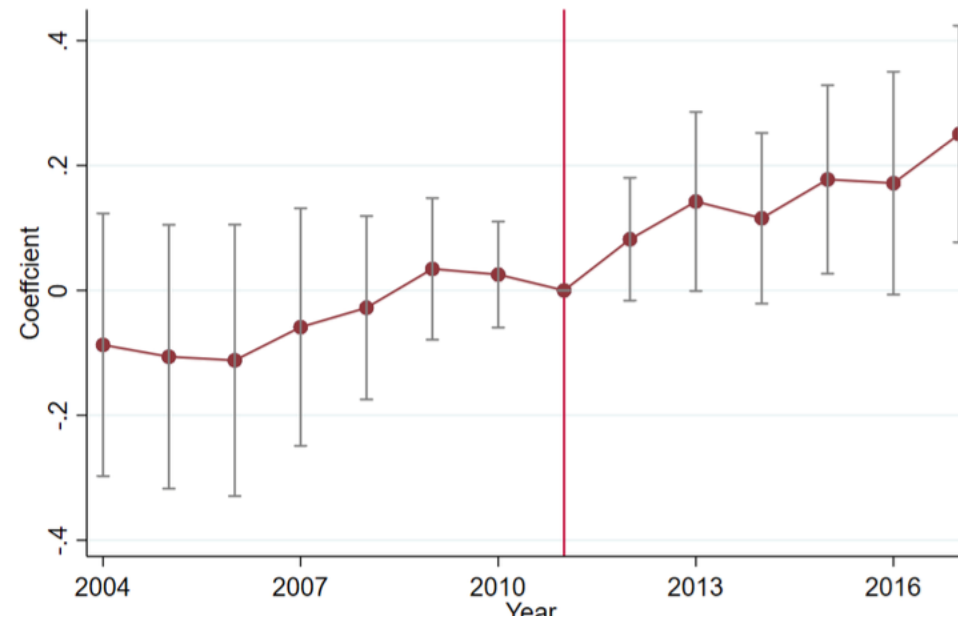## Decline of 16% of a sample standard deviation

Figure 3. Estimated Coefficients for Corruption Outcomes: Entertainment expenses

New Firms
Increase of 10% of a sample standard deviation

Figure 4. Estimated Coefficients for Firm entries

Information and Citizen-Led Accountability

Communication channels on websites give citizens more voice because
1. It easier to file queries and grievances and
2. higher level officials, who influence promotions of county leaders, collect more information from the standardized county websites

In addition

3. citizens are better informed and can file more effective grievances and queries

Evidence indicates that websites and not county leader drive these improvements

- Leaders in the pilot and other counties are "balanced"

- Our empirical work controls for county-leader fixed effects

- There is no evidence that county-leaders who had stronger promotion incentives cut corruption and increased firm entry more than county leaders with weaker promotion incentives, where

- Indicators of high promotion incentives include younger age, better education, better prior performance

- Additional evidence below

Pilot versus other counties improve their websites

Table 6. Effect of Treatment on Website Construction and Quality of Pre-Treatment Websites

Dependent variable
Number of words, links and images on the front page of
county website(log)

	(1)	(2)
Treatment × post	0.156*	0.155*
	(0.093)	(0.094)
Inspection	-0.220*	-0.227*
	(0.126)	(0.126)
Turnover of city leaders		-0.042**
		(0.020)
Turnover of provincial leaders		-0.003
		(0.094)
County fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
County-leader fixed effects	Yes	Yes
Province-year fixed effects	Yes	No
Selection for treatment	Yes	Yes
Observations	5,765	5,765
R-squared	0.818	0.819
Number of clusters	1,411	1,411

Reform associated with more Baidu searches in pilot versus other counties

Table 9. Baidu Searches

	(1)	(2)
Dependent Variable	Keyword searches	Placebo: Weather
Treatment × post	0.429**	0.235
	(0.170)	(0.168)
Year fixed effect	Yes	Yes
City fixed effect	Yes	Yes
Observations	1,668	1,668
R-squared	0.145	0.401
Number of clusters	278	278

Sina Weibo posts

- Posts are rare events: include a keyword and the county name

- Use a simple indicator for their occurrence in a county-year

- They 16% more likely in treated v. control counties post v. pre-treatment

- Suggests that there is more interest in websites in treated versus control counties

Conclusions

- Reform causes a decline in corruption and provision of more public services in treated v. control counties

- Preponderance of evidence suggests that standardized county websites drives these improvement

- Similar to Bravo et al (2022), more citizen voice in China can cause local governments to be more accountable to their citizens

- Caveat – there is no evidence that county websites are a good substitute for citizen voting