

# Politics, State Ownership, and Corporate Investment



*Shashwat Alok*  
*(Indian School of Business)*

*Meghana Ayyagari*  
*(GWU)*

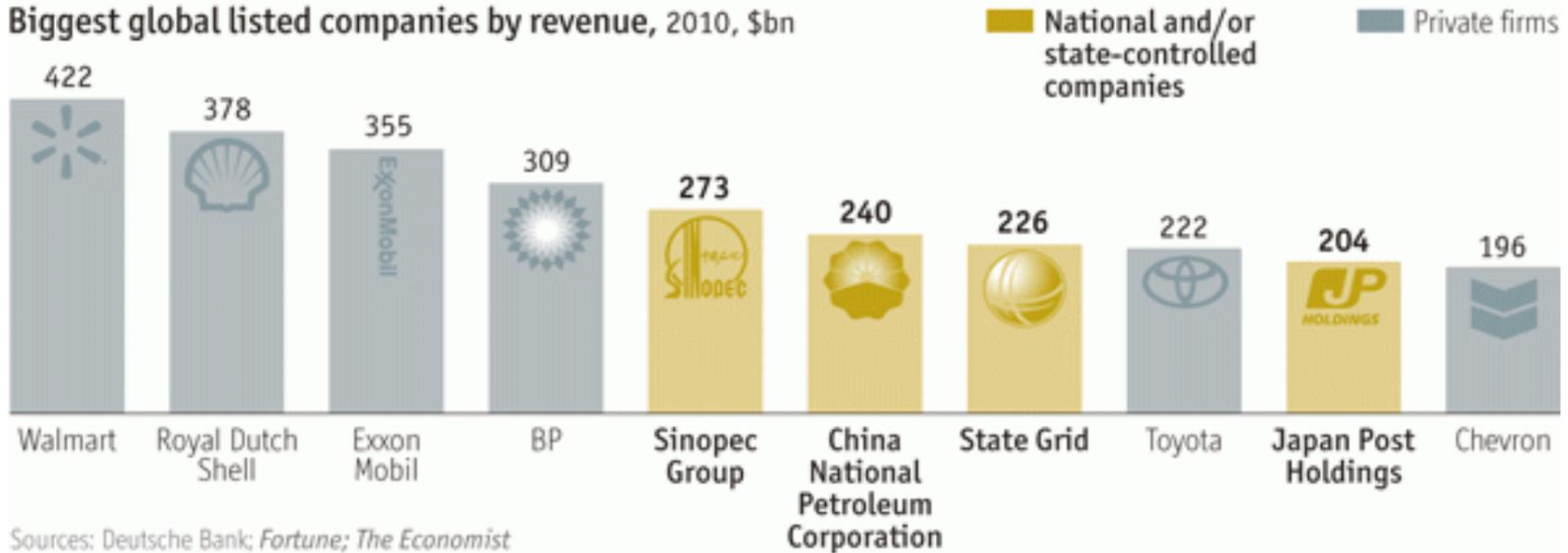
*6<sup>th</sup> Emerging Markets Finance Conference*  
*19<sup>th</sup> December, 2015*

# The power and the glory

Share of national/state-controlled companies' capitalisation on MSCI national stockmarket index  
June 2011, % of total



Biggest global listed companies by revenue, 2010, \$bn



Sources: Deutsche Bank; *Fortune*; *The Economist*

*Between 2004 through 2009, 120 state-owned companies made their debut on the Forbes list of the world's largest corporations.*

# Motivation

## *Headlines of 2012*

---

*“The Visible Hand: The crisis of Western liberal capitalism has coincided with the rise of a powerful new form of state capitalism”*

– Economist, 2012

*“Rise of Innovative State Capitalism: State-owned enterprises not just the answer to market failures but also leading innovation in emerging economies”*

– Business Week, 2012

# Motivation

*Not just an emerging market phenomenon*

---

- *“France and Germany lead a revival of state intervention” – Economist, Nov 2012*
  - *“Banque Publique d’Investissement-France”*
  
- **2012 OECD Report on SOEs**
  - Total employment by state owned enterprises in the OECD countries is over 6 million people and the value of the sector is close to \$3 trillion.

# Motivation

## *Hot Policy Debate*

---

- ``Avatars of liberal capitalism like the United States and the United Kingdom continued to perform anemically in 2012, while many Asian countries, relying on various versions of dirigisme, have not only grown rapidly and steadily over the last several decades, but have also weathered recent economic storms with surprising grace. - Acemoglu and Robinson (2012)
  - **“Is it time to revise our economic textbooks?”**
- “For emerging countries wanting to make their mark on the world, state capitalism has an obvious appeal. It gives them the clout that private-sector companies would take years to build. But its dangers outweigh its advantages”, The Economist, Jan 21,2012.
- **“Is state capitalism a remedy for the ills the West is facing today?”**, The Economist, Jan 15 2012

# What does economics theory have to say?

---

## □ **Politics of government ownership**

- Shleifer and Vishny (1994); Shleifer (1998)
- SOEs pursue political objectives at the cost of firm value maximization.

## □ **Social view of government ownership**

- Atkinson and Stiglitz (1980)
- SOEs maximize social welfare and cure market failures.

## □ **Emerging hybrid view**

- Musacchio (2012), Rodrik (2012)
- “National Champions” now becoming globally dominant players.

# Empirical Literature

---

## ❑ SOEs underperform their private sector counterparts

- Kikeri, Nellis, and Shirley (1994); La Porta and Lopez-de-Silanes (1999); D'Souza and Megginson (1999) and Bartel and Harrison (2005)
- Post-privatization improvements - Boukbakri and Cosset (1998); Gupta (2005)
- State-owned banks
  - ❑ Corrupt lending practices - Khwaja and Mian (2005)
  - ❑ Politically motivated lending - Dinc (2005); Cole (2009)

## ❑ Unanswered questions

- **How does politics affect real decisions of non-financial firms?**
  - ❑ Limited direct evidence on channels through which politics affects investments and other managerial decisions.



# In this paper we ask:

---

1. How do elections affect the timing of investments made by SOEs?
2. How do political variables affect location of new investments by SOEs?
  - Close contest
  - Political rank
3. Do politically motivated investment decisions destroy firm value?
  - Stock price reaction to project announcements.
4. Do voters reward the ruling party for such investments?

# What we find:

---

- SOEs announce greater number of projects in election years than non-election years
  - No such effect for private firms
  
- Political competition and authority affects the location of election year investments.
  
- Politically driven investments are costly
  - Back of the envelope calculation reveals that on average such investments erode 2.6% of the market cap of all listed SOEs.
  
- Project announcements are related to higher probability of victory of incumbent

# Data

## *Electoral*

---

- 1995-2009: 4 National and 93 state elections
  
- In each election, for each constituency, we hand collect data on
  - Name, political affiliation, and vote-share for all candidates in each constituency - [Election commission of India](#). (over 35000 electoral contests and 40000 unique candidates )
  - Federal ministers - Parliamentary debate archives
  
- **SOEs in our sample: Can be privately held or publicly listed.**

# Election Variables

---

- ❑ **Election Year** - Dummy variable that takes the value 1 in fiscal years immediately preceding an election.
- ❑ **Scheduled** - Dummy variable identifying if election is on schedule.
- ❑ **Measures of Political Competition**
  - **Absolute margin** - Absolute value of difference in percentage of votes received by incumbent coalition and opposition parties in a district.
  - **Swing** - Dummy variable that identifies district where absolute margin was less than 5%.
- ❑ **Measures of Political Rank**
  - **Federal Minister** - Dummy variable that takes the value 1 in districts where the MP is a federal minister.

# Data

## *Financial Data*

---

- ❑ Center for Monitoring the Indian Economy (CMIE).
- ❑ Data on new project announcements are from **CAPEX** database
  - Date of announcement, identity of promoter, district (location)
  - We drop all multi-district projects and those with missing date. This leaves us with **18,981** projects.
  - Data from firm's annual reports, news papers and other public sources
  - Capex follows the project from announcement date till completion
- ❑ Financial Data from **PROWESS** database
  - ROA, Leverage, Returns
  - Used in prior studies - Khanna and Palepu (2000), Bertrand et al. (2002), and Gopalan et al. (2007)
- ❑ State level per capita GDP growth – **Indiastat** database

# Investment Variables, $Y_{ijt}$

---

- **Number of Projects** - Total Number of projects announced in a district in a year
  - Defined separately for announcements by SOEs and Non-govt (Domestic and Foreign) firms
  
- **Percentage of government owned projects**
  - Central Government/Total, State Government/Total
  
- **Announcement dummy** - Dummy variable that take the value 1 if at least one project was announced in a district
  - Defined separately for announcements by SOEs and Private (Domestic and Foreign) firms

# Empirical Methodology

---

## □ Identification

- is based on exogenously specified schedule of elections.
  - Elections are scheduled to be held every 5 years.
- The nature of political variables.
- Non-govt firms as a control group.
- National election - District fixed effects
- State elections - District and Year fixed effects

# Research Questions

---

- **How do elections affect the timing of investments made by SOEs?**
- How do political variables affect location of new investments by SOEs?
  - Close contest
  - Political rank
- Do politically motivated investment decisions destroy firm value?
  - Stock price reaction to project announcements.
- Do voters reward the ruling party for such investments?

# Political Business Cycles

---

- ❑ Nordhaus (1975): Politicians boost short-term employment at the cost of ex-post inflation. But voters have short-term memory.
- ❑ Rogoff (1990): Politicians may engage in opportunistic election-time scale manipulations if there is information asymmetry regarding their ability.
- ❑ Shleifer and Vishny (1994):
  - Not just fiscal and monetary intervention. Also corporate sector.
  - Model the interests of politicians in having state-owned firms pay above-market wages and have excess employment to gain greater political support.

*Main prediction: Central (state) SOEs will announce greater number of projects during National (state) elections.*

# National Elections

TABLE A. NATIONAL ELECTIONS

	Number of projects		Percentage
	Central SOEs	Non-govt Firms	$\frac{\text{Central}}{\text{Total}}$
	(1)	(2)	(3)
Election year	.048 (.018)***	-.109 (.072)	.016 (.007)**
State level real gdp growth	.337 (.136)**	6.229 (.957)***	-.006 (.054)
Const.	.257 (.009)***	1.619 (.042)***	.074 (.003)***
Obs.	5039	5039	5039
$R^2$	.480	.552	.185

- Central SOEs announce **greater number of projects** during election years. Private firms announce fewer projects
- Mean value of Number of projects by Central SOEs is 0.238. So 0.048 coefficient is approximately **17% increase** in election year announcements<sup>18</sup>

# Identification

---

- Some elections are called early. Concern about potential endogeneity.
  - 1 of 4 National and 13 of 93 state elections held early.
  
- Use the five-year constitutional schedule as an instrument for actual state elections (Cole, 2009; Khemani, 2004). *Schedule* is a dummy variable that takes the value 1 if 5 years have passed since the previous election.
  - In the first stage regression of *Election* dummy on *Schedule* (controls included) *Schedule* is a very significant predictor of Elections (Coefficient is 0.95 (standard error 0.005) with  $R^2$  of 0.80)
  - *Schedule* should have no effect on SOE Investment except through the timing of actual election – satisfies exclusion restriction.

# State Elections (IV results)

	Number of projects		Percentage
	State SOEs	Non-govt Firms	$\frac{State}{Total}$
	(1)	(2)	(3)
Election	.109 (.054)**	.038 (.058)	.029 (.008)***
State level real gdp growth	-.807 (.172)***	.328 (.297)	-.202 (.049)***
Const.	-.389 (.045)***	-1.191 (.111)***	-.084 (.008)***
Obs.	8412	8412	8412
$R^2$	.315	.622	.192

- State SOEs announce greater number of projects (27.5% increase) during election years. Private firms announce fewer projects

# Specific Research Questions

---

- How do elections affect the timing of investments made by SOEs?
- **How do political variables affect location of new investments by SOEs?**
  - **Competitiveness of election**
  - **Rank of incumbent in party**
- Do politically motivated investment decisions destroy firm value?
  - Stock price reaction to project announcements.
- Do voters reward the ruling party for such investments?

## 2 views on the role of political competition

---

- **Tactical Redistribution:** The incentives to woo voters are higher when incumbents face stiff electoral competition.
  - Lindbeck and Weibull (1987) -“Swing Voters” can substantially alter re-election probabilities
- **Core Supporter:** Reward loyalists
  - Cox and McCubbins (1986) -“Core Supporter”
- **Who gets the pork?**
  - Dixit and Londregan (1996)
  - Analyze Swing vs. Core

*H0: SOE investments will be targeted towards politically competitive districts.*

*H1: SOE investments will be targeted towards district where incumbents won by a wide margin.*

# Political Competition

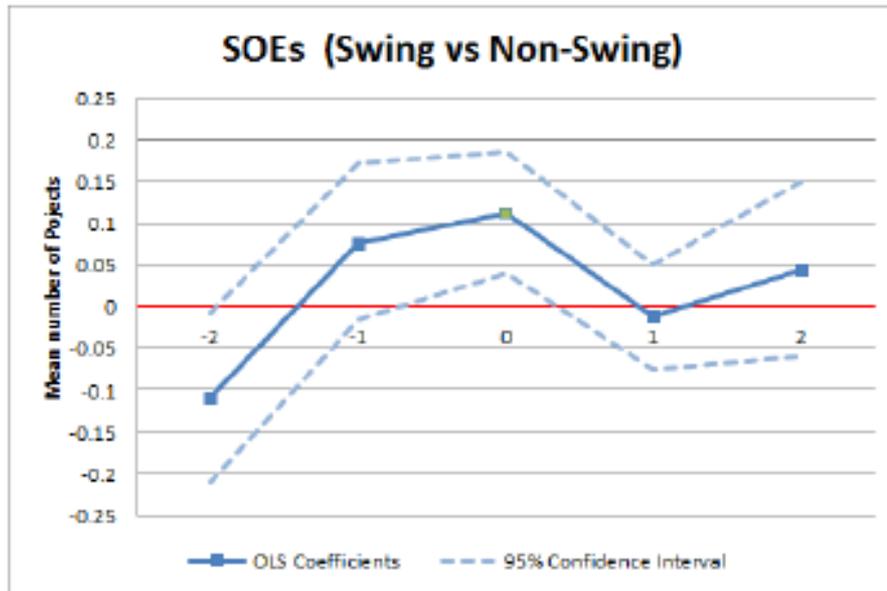
## *National Elections (Table 5)*

	Number of projects		Percentage
	Central SOEs	Non-govt Firms	<i>Central Total</i>
	(1)	(2)	(3)
Election	.020 (.021)	-.066 (.112)	.006 (.008)
Swing	.015 (.025)	.053 (.307)	.007 (.008)
Election X Swing	.098 (.039)**	-.156 (.307)	.016 (.016)**
State level real gdp growth	.353 (.136)***	6.231 (.959)***	.0009 (.053)
Const.	.252 (.011)***	1.605 (.094)***	.072 (.004)***
Obs.	5039	5039	5039
$R^2$	.481	.552	.187

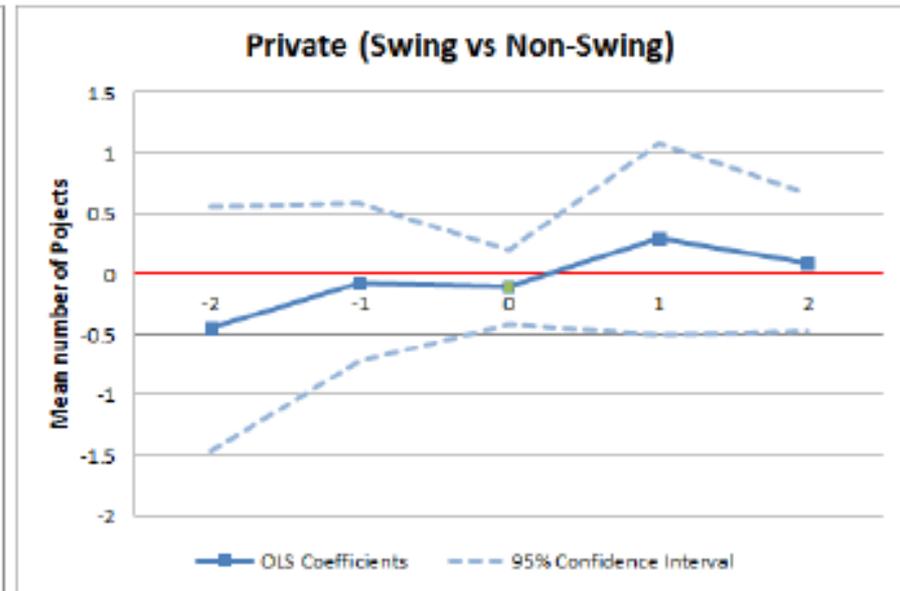
- Number of projects announced by Central SOEs are 35% higher in Swing districts
- Political competition does not affect the location choice of investments by Non-SOEs.

# Political Competition over Election Cycle

## *National Elections (Figure 1)*



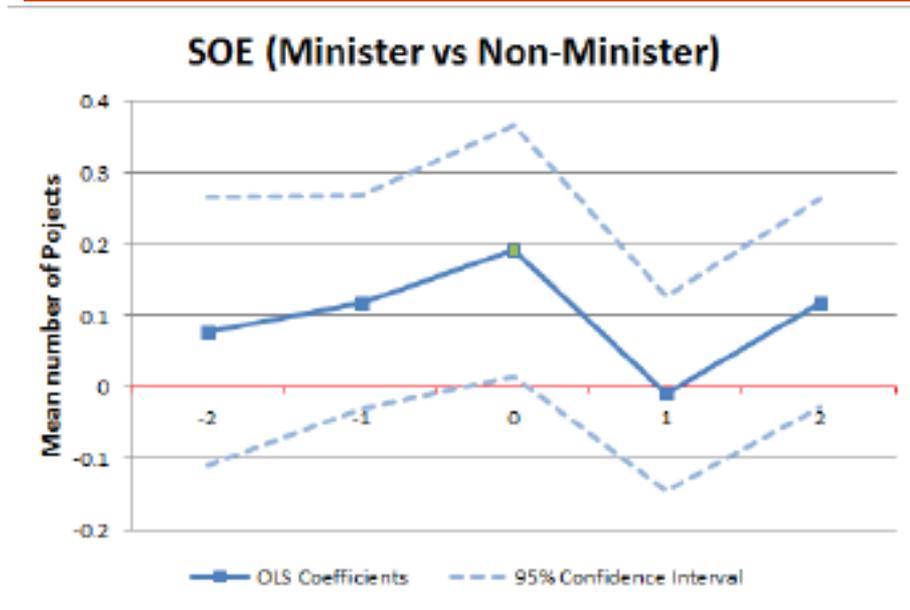
(a)



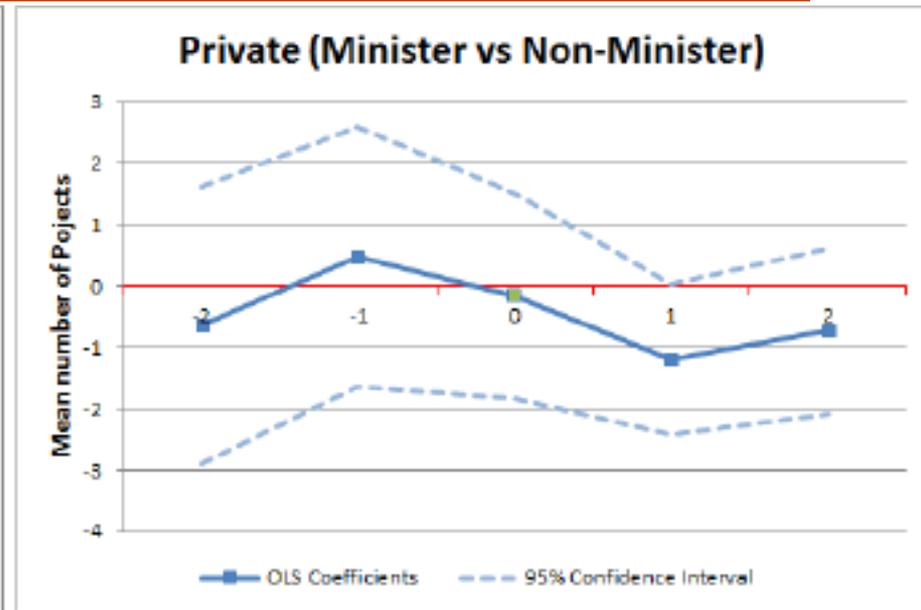
(b)

- ▶ Number of projects announced by **Central SOEs** are **36% higher** in **Swing districts** as compared to non-Swing districts.
- ▶ Political competition in a district **does not affect** the location choice of investments by **Non-SOEs**.

# Political Authority



(e)



(f)

- ▶ Investments **66%** greater in districts of union ministers

# Specific Research Questions

---

- How do elections affect the timing of investments made by SOEs?
- How do political variables affect location of new investments by SOEs?
  - Close contest
  - Political rank
- **Do politically motivated investment decisions destroy firm value?**
  - **Stock price reaction to project announcements.**
- Do voters reward the ruling party for such investments?

# Announcement Returns: Multivariate

	Excess Return		Abnormal Return	
	(1)	(2)	(3)	(4)
SOE	-.368 (1.042)	-.576 (.934)	-.669 (.999)	-.853 (.901)
Election	-.483 (.358)		-.340 (.345)	
Election X SOE	-1.549 (.790)**		-1.359 (.771)*	
Swing		.366 (.410)		.367 (.396)
Swing X SOE		-2.148 (.965)**		-1.835 (.837)**
ROA	-.173 (2.249)	.028 (2.243)	.790 (2.340)	.928 (2.320)
Debt/Assets	.456 (1.020)	.395 (1.031)	.873 (1.089)	.821 (1.102)
Const.	-.212 (1.341)	-.574 (1.339)	-.739 (1.473)	-1.014 (1.475)
Size Decile FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Obs.	2380	2380	2380	2380
R <sup>2</sup>	.234	.232	.240	.239

On Average Each Project is associated with **destruction** of \$600 Million in firm value (based On -1.5% announcement return).

# Dollar Value lost in election years

---

## ❑ Back of the envelope calculation

- Likely to underestimate true cost since we only look at listed SOEs, new project announcements
- ❑ Average increase in number of projects by Central SOEs in election years is 17%
  - Translates into 21 additional projects in election years
- ❑ Average announcement return = -1.5%
- ❑ Cost in 2009 elections = Number of Politically motivated investments(=21)  
x Average Market Value loss(= -1.5%)  
x Average Market Cap on day of announcement)  
= \$12.6 billion  
(2.6% of listed market cap of government firms)

# Specific Research Questions

---

- ❑ How do elections affect the timing of investments made by SOEs?
- ❑ How do political variables affect location of new investments by SOEs?
  - Close contest
  - Political rank
- ❑ Do politically motivated investment decisions destroy firm value?
  - Stock price reaction to project announcements.
- ❑ **Do voters reward the ruling party for such investments?**

# SOE Investment and Election Outcomes

	Constituencies Won	Margin of Victory	Constituencies Won	Margin of Victory
	(1)	(2)	(3)	(4)
Number of Projects Announced (SOE)	.072 (.035)**	.024 (.009)***		
Number of Projects Announced (Private)			-.002 (.008)	-.0008 (.001)
Lagged Margin of victory or loss	.418 (.125)***	.281 (.044)***	.437 (.125)***	.287 (.044)***
Const.	.566 (.012)***	-.026 (.003)***	.594 (.016)***	-.017 (.002)***
Obs.	1204	1204	1204	1204
R <sup>2</sup>	.431	.427	.427	.42

*Each additional project by an SOE is associated with a 2.4% gain in margin of victory.*

# What is the channel?

Dependent variable	High Employment Growth Industry		# Infrastructure Industry	
	# Central Projects	$\frac{\# \text{Central Employment}}{\# \text{Central total}}$	# Central Projects	$\frac{\# \text{Central infra}}{\# \text{Central total}}$
	(1)	(2)	(3)	(4)
Election year	.080 (.020)***	.036 (.010)***	.042 (.014)***	.021 (.008)**
State level real gdp growth	.072 (.090)	.208 (.094)**	.123 (.106)	.051 (.063)
Const.	.076 (.007)***	.162 (.006)***	.160 (.007)***	.102 (.004)***
Obs.	2936	2936	5039	5039
$R^2$	.365	.215	.296	.212

SOEs in High Employment Growth and Infrastructure industries announce Greater Number of Projects in election years.

# Robustness Tests

---

- Robust to alternate measures of dependent variables
  - Cost of Investment projects
  - Changes in net fixed assets over the election cycle.
- Longer windows for announcement returns – 5 and 7 day
- CARs instead of excess returns

# Conclusion

---

- ❑ First paper to analyze the role of political factors on timing and location choice of investment decisions of SOEs.
- ❑ SOEs announce greater number of projects in election years.
- ❑ Political competition and authority affects the location of election year investments.
- ❑ Such politically driven investments are associated with negative announcement returns but positively influence incumbent victory in elections

# Takeaway

---

- Political interference has “real” consequences
  - SOE investments are subject to political capture
  - Politically driven investments are value destroying