Politicians and banks:

Political influences on government-owned banks in the emerging markets

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Outline

- Introduction
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Introduction

Election

Popularity
It is essential for politicians to gain more votes to win next election.

Policies
The politicians launch new campaigns to boost the economy and popularity such as popularist policies and fiscal stimulus.

Finance
But to do such policies they need a source of fund.

Power
They use their current political power to dominate banks lending especially government-owned banks.

Our focus in this paper
Are the action of these banks motivated by political concerns? Possessing power may induce them to use government-owned banks for politic.

Approach
- Do banks behave differently in election year?
- Comparing the actions between government-owned banks with those of private banks around elections in1944-2000

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Data

Political influences on government-owned banks in the emerging markets

Data

- ◦Year 1944-2000
- ◦36 countries with free or partially-free election (emerging:19 & developed:17)
- ◦Top 10 largest banks in each countries based on book value of assets
- ◦It must contain at least one of each type of bank.
- ◦Government owned if government controls at least 20%

Sample: 36 countries

	Private	GovtBank	Total
Emerging markets			
Argentina	6	4	10
Brazil	6	4	10
Chile	9	1	10
Colombia	5	5	10
Czech Republic	5	5	10
Hungary	2	8	10
Israel	4	6	10
South Korea	5	5	10
Malaysia	7	3	10
Mexico	6	4	10
Peru	8	2	10
Philippines	8	2	10
Poland	1	9	10
Russia	7	3	10
Singapore	8	2	10
South Africa	7	3	10
Thailand	5	5	10
Turkey	5	5	10
Venezuela	7	3	10
Total	111	79	190
Developed economies			
Australia	7	3	10
Austria	4	6	10
Belgium	8	2	10
Finland	5	3	8
France	8	2	10
Germany	6	4	10
Greece	5	5	10
Iceland	2	2	4
Ireland	8	2	10
Italy	5	5	10
Luxembourg	9	1	10
Netherlands	7	3	10
Norway	5	5	10
Portugal	3	7	10
Spain	5	5	10
Sweden	6	4	10
Switzerland	5	5	10
Total	98	64	162

Unbalance panel

◦Exit banks are fail and acquired.

	World (36 countries)		Emerging markets (19 countries)		Developed economies (17 countries)	
	Bank	Bank-year	Bank	Bank-year	Bank	Bank-year
Largest possible sample Ten banks in each country for seven years	360	2520	190	1330	170	1190
Lost due to fewer than ten banks in Finland and Iceland	8	56	—	—	8	56
Lost due to mergers, acquisitions, closings	—	296	—	170	—	126
Missing data		110	1	93	2	17
Remaining (unbalanced) panel	349	2058	189	1067	160	991

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Methodology

Political influences on government-owned banks in the emerging markets

◦ 3 issues to be considered

I. *An event must be identified.*
II. *Institutional differences across countries are controlled*
III. *Difference in efficiencies between institutions.*

Methodology

- Level of study: Firm-level study

  +Prevent false significant to a country specific factor due to omitted variables.

  - create the problems in institutions' efficiencies.

- "Difference-in-differences methodology"
  - ✓ distinguish the differences(actions) due to political motivation from differences in other years.

Methodology: Model

$$y_{it} = \boldsymbol{\beta}'\mathbf{x}_{it} + \boldsymbol{\gamma}'\mathbf{w}_{it-1} + election_{it} + election_{it} * govtbank_{it} + \theta_t + \alpha_i + u_{it}$$

- Y_{it} = $(Loan_t - Loan_{t-1})/total\ asset_{t-1}$
- X_{it} = strictly exogenous variables (Macroeconomic variables)
- W_{it-1} = sequentially exogenous variables (bank size and capital ratio)
- $election_{it}$= dummy, 1 if it is an election year
- $election_{it} * govtbank_{it}$= dummy, 1 if it is government-owned bank
- θ_t= time dummy
- α_i= bank fixed effect(constant)
- u_{it}= error term

Results

Emerging government-owned banks increase lending in election years

Results: overall

◦Interaction term is positive and significant for emerging market while negative for the developed markets

	world			Emerging markets			Developed economies		
	1	2	3	1	2	3	1	2	3
Total Assets/GDP	−0.000	−0.001	−0.000	0.001*	0.001	0.001*	−0.081	−0.037	−0.036
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(1.259)	(1.153)	(1.148)
Capital Ratio	2.696*	2.688*	2.693*	0.100	0.089	0.112	6.385***	6.416***	6.417***
	(1.524)	(1.528)	(1.525)	(0.399)	(0.399)	(0.387)	(0.527)	(0.490)	(0.491)
Election		−0.009	−0.020*		−0.009	−0.031*		−0.015	−0.013
		(0.008)	(0.010)		(0.014)	(0.015)		(0.011)	(0.015)
Election∗GovtBank			0.027*			0.055**			−0.005
			(0.015)			(0.023)			(0.023)
Ln (GDP per capita)	0.244**	0.254***	0.251***	0.337***	0.346***	0.342***	0.303	0.332*	0.333*
	(0.094)	(0.092)	(0.092)	(0.106)	(0.100)	(0.100)	(0.191)	(0.180)	(0.182)
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of banks	349	349	349	189	189	189	160	160	160
Number of bank-years	2058	2058	2058	1067	1067	1067	991	991	991
p-value of *F*-test	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Test the robustness of the emerging markets

1. Macroeconomic variables
   - Macroeconomic variables with election dummy
   - Macroeconomic variables with government bank dummy
2. Slope
3. Election time
4. Different samples
5. Non-election years

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Robustness: Macroeconomic variables

Panel A. Macroeconomic variables

Total assets/GDP	0.001*	0.000	0.001	−0.094	−0.000
	(0.001)	(0.000)	(0.001)	(0.118)	(0.001)
Capital ratio	0.112	−0.158	−0.249	−0.126	−0.146
	(0.387)	(0.328)	(0.274)	(0.332)	(0.334)
Election	−0.031*	−0.024	−0.008	−0.015	−0.020
	(0.015)	(0.015)	(0.020)	(0.018)	(0.018)
Election∗Govtbank	0.055**	0.057**	0.048**	0.057**	0.058**
	(0.023)	(0.025)	(0.022)	(0.025)	(0.025)
Ln (Gdp per capita)	0.342***				
	(0.100)				
GDP growth		0.009***			
		(0.002)			
Budget surplus			0.873*		
			(0.460)		
Inflation rate				0.042	
				(0.155)	
Exchange rate change (u.s.dollar)					0.015***
					(0.004)
Bank fixed effects	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes
Number of banks	189	189	185	189	189
Number of bank-years	1067	1067	988	1067	1061
p-value of *F*-test	0.000	0.000	0.000	0.000	0.000

Robustness: Macroeconomic variables with election dummy

1.1.

Panel B. Macroeconomic variables interacted with the Election dummy

Total assets/GDP	0.001	0.000	0.001	−0.162	0.001
	(0.001)	(0.000)	(0.001)	(0.157)	(0.001)
Capital ratio	0.111	−0.155	−0.257	−0.249	−0.132
	(0.385)	(0.328)	(0.276)	(0.367)	(0.331)
Election	−0.176	−0.027	−0.004	−0.033**	2.142***
	(0.142)	(0.019)	(0.022)	(0.016)	(0.709)
Election∗Govtbank	0.055**	0.056**	0.050**	0.056**	0.062**
	(0.023)	(0.025)	(0.023)	(0.025)	(0.022)
Ln (Gdp per capita)	0.340***				
	(0.099)				
Ln (Gdp per capita)∗Election	0.017				
	(0.016)				
GDP growth		0.008***			
		(0.002)			
GDP growth∗Election		0.001			
		(0.004)			
Budget surplus			0.868*		
			(0.452)		
Budget surplus∗Election			0.220		
			(0.435)		
Inflation rate				0.123	
				(0.107)	
Inflation rate∗Election				−0.462***	
				(0.149)	
Exchange rate change					0.092**
					(0.035)
Exchange rate change∗Election					−0.081**
					(0.033)
Bank fixed effects	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes
Number of banks	189	189	185	189	189
Number of bank-years	1067	1067	988	1067	1061
p-value of *F*-test	0.000	0.000	0.000	0.000	0.000

1.2.

Robustness: Macroeconomic variables with GovtBank dummy

Panel C. Macroeconomic variables interacted with government ownership

Election	−0.032**	−0.025	−0.007	−0.015	−0.021
	(0.015)	(0.015)	(0.020)	(0.018)	(0.018)
Election∗Govtbank	0.057**	0.058**	0.045*	0.057**	0.060**
	(0.023)	(0.025)	(0.022)	(0.025)	(0.025)
Ln (Gdp per capita)	0.342***				
	(0.100)				
Ln (Gdp per capita)∗Govtbank	−0.003				
	(0.004)				
GDP growth		0.010***			
		(0.003)			
GDP growth∗Govtbank		−0.004			
		(0.002)			
Budget surplus			1.001*		
			(0.549)		
Budget surplus∗Govtbank			−0.410		
			(0.485)		
Inflation rate				0.042	
				(0.155)	
Inflation rate∗Govtbank				−0.006	
				(0.009)	
Exchange rate change					0.015***
					(0.004)
Exchange rate change∗Govtbank					0.001
					(0.014)
Bank fixed effects	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes
Number of banks	189	189	185	189	189
Number of bank-years	1067	1067	988	1067	1061
p-value of *F*-test	0.000	0.000	0.000	0.000	0.000

- Election*Government is positive and significant.
- Increase in lending is not just a macroeconomic reflection but the bank type.

2.

Robustness: Different slopes for government-owned banks

Total assets/GDP	0.005	0.004	0.002	0.001	0.001	0.001
	(0.003)	(0.004)	(0.004)	(0.001)	(0.001)	(0.001)
(Total assets/GDP)∗Govtbank	−0.004	−0.004	−0.001			
	(0.003)	(0.003)	(0.003)			
Capital ratio	0.084	0.075	0.109	1.524**	1.516**	1.533**
	(0.408)	(0.409)	(0.396)	(0.619)	(0.617)	(0.603)
Capital ratio∗Govtbank				−1.790***	−1.788***	−1.782***
				(0.551)	(0.554)	(0.547)
Election		−0.009	−0.031*		−0.005	−0.026
		(0.014)	(0.016)		(0.014)	(0.016)
Election∗Govtbank			0.055**			0.051**
			(0.023)			(0.024)
Ln (GDP per capita)	0.338***	0.348***	0.343***	0.299**	0.305**	0.301**
	(0.107)	(0.101)	(0.101)	(0.114)	(0.109)	(0.109)
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Number of banks	189	189	189	189	189	189
Number of bank-years	1067	1067	1067	1067	1067	1067
Prob > F	0.000	0.000	0.000	0.000	0.000	0.000

different slope &significant

different slope for election

◦Bank fixed effect cannot capture the difference in slope

◦We allow to have a different coefficient for government bank

◦As election*govtbank is the same, size and capital do not have any additional role in explaining the lending (even we incorporate the dif slope for govtbank)

3.

Robustness: Election time

- Time is matter when the election is in the early of a year. The lending would increase before that year.
- The lending is spent closely to the elections

	April–March Election Year		July–June Election Year	
Total assets/GDP	0.001	0.001*	0.001**	0.002**
	(0.001)	(0.001)	(0.001)	(0.001)
Capital ratio	0.085	0.093	0.085	0.042
	(0.396)	(0.385)	(0.400)	(0.408)
Election	−0.008	−0.037**	0.008	−0.009
	(0.012)	(0.014)	(0.013)	(0.014)
Election∗Govtbank		0.070**	> Normal= 0.055 >	0.040*
		(0.026)		(0.023)
Ln (GDP per capita)	0.344***	0.341***		0.339***
	(0.103)	(0.102)	(0.103)	(0.103)
Bank fixed effects	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Number of banks	189	189	189	189
Number of bank-years	1067	1067	1067	1067
p-value of *F*-test	0.000	0.000	0.000	0.000

4.

Robustness: Different samples

	Sampling with replacement			Balanced panel			Same number of private and government-owned bank		
Total assets/GDP	0.001**	0.001**	0.001**	0.001***	0.001*	0.001**	0.001*	0.001	0.001*
	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Capital ratio	0.655	0.649	0.662	0.308	0.302	0.338	0.059	0.064	0.091
	(0.577)	(0.572)	(0.568)	(0.293)	(0.292)	(0.276)	(0.341)	(0.333)	(0.319)
Election		−0.005	−0.020		−0.013	−0.043***		0.004	−0.015
		(0.014)	(0.017)		(0.013)	(0.011)		(0.014)	(0.019)
Election∗Govtbank			0.038			0.071**			0.041
			(0.024)			(0.026)			(0.028)
Ln (GDP per capita)	0.441***	0.447***	0.445***	0.326***	0.340***	0.329***	0.310***	0.306***	0.304***
	(0.091)	(0.095)	(0.095)	(0.074)	(0.071)	(0.068)	(0.097)	(0.092)	(0.091)
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of banks	231	231	231	135	135	135	156	156	156
Number of bank-years	1204	1204	1204	886	886	886	925	925	925
p-value of F-test	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Replacing the exit with the largest bank, not already in the sample

▫<u>Advantage</u>: Adding the sample size

▫<u>Disadvantage</u>: lagged variables in the model required previous two years

Only bank surviving till 2000

▫<u>Advantage</u>: no missing data (longer time series)

▫<u>Disadvantage</u> : small sample size

Five largest banks from each type

▫<u>Advantage</u>: equal representation(5:5)

▫<u>Disadvantage</u>: some bank are much smaller and more specialize

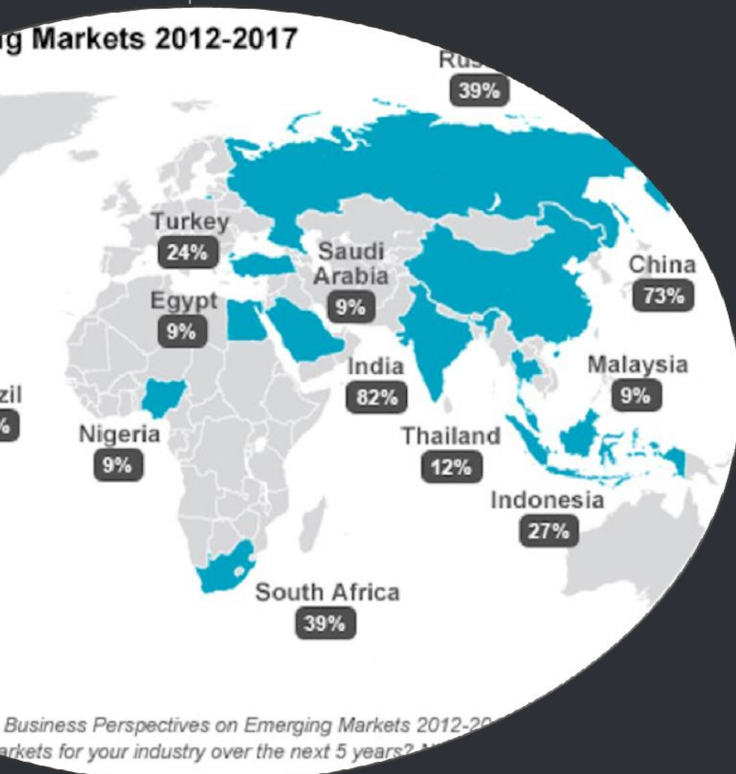
5.

Robustness: Non-election year

◦Election year does not impact non-election year for government-owned bank

	Pre-election		Post-election	
Total assets/GDP	0.001	0.001	−0.006	−0.006
	(0.001)	(0.001)	(0.122)	(0.122)
Capital ratio	0.105	0.127	0.159	0.151
	(0.401)	(0.395)	(0.288)	(0.289)
Pre-election	0.014	0.024		
	(0.012)	(0.016)		
Pre-election∗Govtbank		−0.021		
		(0.023)		
Post-election			−0.007	−0.001
			(0.012)	(0.013)
Post-election∗Govtbank				−0.013
				(0.019)
Ln (GDP per capita)	0.343***	0.340***	0.331***	0.331***
	(0.104)	(0.103)	(0.103)	(0.103)
Bank fixed effects	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Number of banks	189	189	189	189
Number of bank-years	1063	1063	1067	1067
p-value of *F*-test	0.000	0.000	0.000	0.000

Conclusion



- Political motivations influence the lending, not contributed to other differences(efficiency and objective) between both parties
- In emerging markets, government owned banks increase their lending in the election year comparing to private banks
  - Lending increase 11% of total loans, on average, of a government-owned bank.
- Underestimated results: The influence of government can be during non-election year and on private banks

Thank you!

QUESTIONS?