Media Ownership, Concentration, and Corruption in Bank Lending

Written by Joel F. Houston, Chen Lin, Yue Ma

One summary sentence:
One of determinants in banking corruption is the effectiveness of media activities.

Russia

Media Control in Russia

러시아 내 반정부 언론인 피살 일지

1994.10
드미트리 홀로도프 '모스코프스키 콤소몰레츠' 기자, 당시 파벨 그라쵸프 국방장관의 정책에 반대했다가 피살(모스크바)

1995.3
블라디슬라프 리스티예프 러시아 제1TV 보도국장 피살 (사유 불명·모스크바)

1998.6
라리사 유지나 '소비에츠카야 칼미키야 시보드냐' 편집장, 러시아 내 인종갈등 보도 후 피살 (칼미크공화국)

2000.3
아르템 보로비크 '사베르센노 시크리예트노(완전비밀)' 사장, 반정부 활동에 가담했다는 혐의 받은 뒤 피살(모스크바 세레메치예보 공항)

2004.7
파벨 흘레브니코프 '포브스' 러시아판 편집장, 러시아 갑부 100명 보도 후 총격 피살 (모스크바)

Anna Politkovskaya was shot and killed on 7 Oct 2006.

Reference: http://www.chosun.com/international/news/200610/200610080431.html

Without freedom of media,
media firms **CANNOT** monitor.

Bank Corruption in Russia

- Corruption and institution in Russia, written by Mark Levin and Georgy Satarov on European Journal of Political Economy in 2000.

*"The cooperation of state officials with commercial banks allowed a form of bribery to become formalized that was almost legitimate. **The traditional envelopes and later briefcases filled with cash** were replaced by low-interest credits, or for lenders, **interest rates 10 times higher than regular rates**, and other more sophisticated forms of expressing gratitude.*

*In 1996, the General Prosecutor's office reported its concern about the situation in the Central Bank of Russia and its territorial branches. **The number of criminal cases** launched against employees of credit and financial institutions who were charged with accepting bribes in the period from 1993 to 1995 was growing: 48 cases in 1993, 93 in 1994 and 143 in 1995."*

Contents

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  - Russia example
  - Background
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  - Six Results
  - Robustness Tests
- Conclusion
  - Summary
  - Contribution

Background

No doubt!

- Banking System is important to economic development.

(Levine, 1997 and 2005)

- Corruption is bad for banking system.

What is the determinant of bank corruption?

1. Beck, Demirguc-Kunk, and Levine, 2006:
   + regulator with strong regulatory power
   + private monitoring
   + transparency in lending

2. Barth, Lin, Lin and Song, 2009:
   + banking competition
   + information sharing

3. Houston, Lin, Ma, 2011:
   + media ownership and concentration

Why media is so important to prevent bank corruption?

1. Brunetti and Weder, 2003:
   - free press work > overall corruption ↓
2. Miller, 2006:
   - incentive to uncover corruption

Datasets

Effective media firms
expose and deter corruption in banking.

1. The World Business Environment Survey (WBES) for corruption
2. Djankov, McLiesh, Nenova, and Shleifer (2003) dataset on media ownership and concentration
3. Barth, Caprio, and Levine (2006) dataset on bank supervision and regulation
4. The Press freedom index for country-level variables, robustness tests
5. The Word Development Indicator for the same as above
6. The World Governance Indicator for the same as above

Media ownership and corruption in lending

- Regression model:

$$
\begin{aligned}
Bank\ Corruption_{\{i,j\}} = \alpha + \beta' Media\ State\ Ownership_j \\
+\theta' Banking\ Sector\ Controls_j \\
+\gamma' FirmControls_{\{i,j\}} \\
+\delta' Industry\ Dummies_{\{i,j\}} \\
+\psi' Macro\ Controls + \epsilon_{\{i,j\}}
\end{aligned}
$$

- The ordered probit model
- Heteroskedasticity-robust standard errors for country-level standard errors

Result 1

	1	2	3	4	5	6	7	8
Press state ownership	0.168			0.162	0.107	0.134	0.138	0.104
	[0.006]***			[0.016]**	[0.019]**	[0.008]***	[0.015]**	[0.018]**
TV state ownership		0.193		0.192	0.209	0.276	0.301	0.416
		[0.017]**		[0.038]**	[0.042]**	[0.030]**	[0.021]**	[0.025]**
State-owned radio			0.152	0.150	0.104	0.101	0.158	0.169
			[0.012]**	[0.029]**	[0.024]**	[0.031]**	[0.039]**	[0.038]**
Government bank ownership	0.004	0.004	0.005	0.004	0.005	0.004	0.003	0.003
	[0.015]**	[0.014]**	[0.015]**	[0.015]**	[0.018]**	[0.028]**	[0.052]*	[0.054]*
Official supervisory power	0.135	0.105	0.104	0.104	0.097	0.107	0.120	0.110

Press State Ownership (by count): % (state-owned) of five largest (circulation) daily newspaper.
"Press State Ownership (by share): market share of five largest (circulation) daily newspaper."

TV State Ownership (by count): % (state-owned) of five largest (viewership) TV stations.
"TV State Ownership (by share): market share of five largest (circulation) TV stations."

"Radio State Ownership: one for the top radio station is state-owned, zero for otherwise."

Besley, Burgess, and Prat (2002) and Besley and Prat (2006):
Political pressure may reduce the media's incentive. The likelihood of this type of political pressure occurring depends on the extent to which the media are politically controlled.

Djankov, McLiesh, Nenova, and Shleifer (2003) and Beck, Demirguc-kunt, and Levine (2006):
Political suppression for private benefit

Walden(2002)'s cases: (insult laws)
Media managers may be concerned about retaining their job and future employability.

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	[0.015]**	[0.014]**	[0.015]**	[0.015]**	[0.018]**	[0.028]**	[0.052]*	[0.054]*
	[0.007]***	[0.018]**	[0.014]**	[0.021]**	[0.016]**	[0.018]**	[0.009]***	[0.014]**
HHI of banking sector	0.733	0.693	0.682	0.723	0.744	0.736	0.783	0.847
	[0.065]*	[0.032]**	[0.053]*	[0.022]**	[0.019]**	[0.066]*	[0.019]**	[0.014]**
Info sharing	−0.208	−0.152	−0.179	−0.194	−0.210	−0.193	−0.204	−0.243
	[0.030]**	[0.067]*	[0.040]**	[0.042]**	[0.020]**	[0.015]**	[0.144]	[0.087]*
Official supervisory power	0.135	0.105	0.104	0.104	0.097	0.107	0.120	0.110
	[0.022]**	[0.039]**	[0.072]*	[0.035]**	[0.163]	[0.039]**	[0.025]**	[0.041]**
Private monitoring	−0.277	−0.303	−0.310	−0.278	−0.290	−0.225	−0.176	−0.141
	[0.035]**	[0.034]**	[0.032]**	[0.037]**	[0.035]**	[0.031]**	[0.127]	[0.132]
Government	−0.323	−0.325	−0.350	−0.334	−0.335	−0.339	−0.344	−0.337
	[0.167]	[0.024]**	[0.045]**	[0.038]**	[0.062]*	[0.178]	[0.027]**	[0.256]
Foreign	−0.204	−0.205	−0.211	−0.206	−0.207	−0.204	−0.210	−0.210
	[0.033]**	[0.039]**	[0.032]**	[0.193]	[0.193]	[0.038]**	[0.073]*	[0.160]
Exporter	−0.110	−0.107	−0.108	−0.113	−0.116	−0.110	−0.112	−0.116
	[0.073]*	[0.184]	[0.172]	[0.184]	[0.066]*	[0.020]**	[0.226]	[0.258]
Firm size	−0.009	−0.008	−0.013	−0.008	−0.008	−0.008	−0.006	−0.005
	[0.052]*	[0.051]*	[0.165]	[0.034]**	[0.034]**	[0.188]	[0.215]	[0.037]**
Competitors	0.014	0.022	0.023	0.025	0.021	0.028	0.034	0.029
	[0.807]	[0.676]	[0.660]	[0.628]	[0.692]	[0.582]	[0.524]	[0.591]
Other macro-controls	yes	yes	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes	yes	yes
Observations	5,108	5,108	5,050	5,002	5,002	5,002	5,002	5,002
Countries	59	59	59	58	58	58	58	58
Pseudo R^2	0.084	0.083	0.085	0.086	0.087	0.086	0.088	0.089

Media state ownership ~ Corruption in lending:
Politicians or supervisors might suppress the government-controlled media in reporting bank corruption cases to entrench their position, preclude public oversight, and maximize their own private benefits.

Result 1*

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Government bank ownership	0.004	0.004	0.005	0.004	0.005	0.004	0.003	0.003
	[0.015]**	[0.014]**	[0.015]**	[0.015]**	[0.018]**	[0.028]**	[0.052]*	[0.054]*
Press state ownership × Government bank ownership					0.003			0.003
					[0.032]**			[0.035]**
TV state ownership × Government bank ownership						0.003		0.002
						[0.012]**		[0.019]**
State-owned radio × Government bank ownership							0.002	0.002
							[0.036]**	[0.034]**
General financing obstacle	0.274	0.270	0.271	0.272	0.275	0.274	0.273	0.275
Official supervisory power	0.135	0.105	0.104	0.104	0.097	0.107	0.120	0.110
	[0.033]**	[0.039]**	[0.032]**	[0.193]	[0.193]	[0.038]**	[0.073]*	[0.160]
Other macro-controls	yes	yes	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes	yes	yes
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Government bank ownership: obtained from Barth, Caprio, and Levine (2006)
the fraction of the banking system's assets in banks that are 50% or more owned by government.

From Dinc (2005):
Government-owned banks are more prune to political pressures.

State ownership of the media is likely to result in even more corruption in those countries that also have a state-controlled banking sector.

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Control of corruption	−0.282	−0.263	−0.268	−0.254	−0.251	−0.252	−0.271	−0.266
	[0.007]***	[0.018]**	[0.014]**	[0.021]**	[0.016]**	[0.018]**	[0.009]***	[0.014]**
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	[0.073]*	[0.184]	[0.172]	[0.184]	[0.066]*	[0.020]**	[0.226]	[0.258]
Firm size	−0.009	−0.008	−0.013	−0.008	−0.008	−0.008	−0.006	−0.005
	[0.052]*	[0.051]*	[0.165]	[0.034]**	[0.034]**	[0.188]	[0.215]	[0.037]**
Competitors	0.014	0.022	0.023	0.025	0.021	0.028	0.034	0.029
	[0.807]	[0.676]	[0.660]	[0.628]	[0.692]	[0.582]	[0.524]	[0.591]
Other macro-controls	yes	yes	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes	yes	yes
Observations	5,108	5,108	5,050	5,002	5,002	5,002	5,002	5,002
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Pseudo R^2	0.084	0.083	0.085	0.086	0.087	0.086	0.088	0.089

Barth, Lin, Lin, and Song (2009):
+ banking competition, Herfindahl Hirschman Index (HHI)= sum of mkt shr (deposit)
+ information sharing = one for an information sharing agency

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	[0.007]***	[0.018]**	[0.014]**	[0.021]**	[0.016]**	[0.018]**	[0.009]***	[0.014]**
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Pseudo R^2	0.084	0.083	0.085	0.086	0.087	0.086	0.088	0.089

Beck, Demirguc-kunt, and Levine (2006) :

+ strong regulatory power = one for the authority of bank supervisors to take actions
+ private monitoring = one for a compulsory external audit by certified or licensed auditors

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	[0.022]**	[0.039]**	[0.072]*	[0.035]**	[0.163]	[0.039]**	[0.025]**	[0.041]**
Private monitoring	−0.277	−0.303	−0.310	−0.278	−0.290	−0.225	−0.176	−0.141
	[0.035]**	[0.034]**	[0.032]**	[0.037]**	[0.035]**	[0.031]**	[0.127]	[0.132]
Government	−0.323	−0.325	−0.350	−0.334	−0.335	−0.339	−0.344	−0.337
	[0.167]	[0.024]**	[0.045]**	[0.038]**	[0.062]*	[0.178]	[0.027]**	[0.256]
Foreign	−0.204	−0.205	−0.211	−0.206	−0.207	−0.204	−0.210	−0.210
	[0.033]**	[0.039]**	[0.032]**	[0.193]	[0.193]	[0.038]**	[0.073]*	[0.160]
Exporter	−0.110	−0.107	−0.108	−0.113	−0.116	−0.110	−0.112	−0.116
	[0.073]*	[0.184]	[0.172]	[0.184]	[0.066]*	[0.020]**	[0.226]	[0.258]
Firm size	−0.009	−0.008	−0.013	−0.008	−0.008	−0.008	−0.006	−0.005
	[0.052]*	[0.051]*	[0.165]	[0.034]**	[0.034]**	[0.188]	[0.215]	[0.037]**
Competitors	0.014	0.022	0.023	0.025	0.021	0.028	0.034	0.029
	[0.807]	[0.676]	[0.660]	[0.628]	[0.692]	[0.582]	[0.524]	[0.591]
Other macro-controls	yes	yes	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes	yes	yes
Observations	5,108	5,108	5,050	5,002	5,002	5,002	5,002	5,002
Countries	59	59	59	58	58	58	58	58
Pseudo R^2	0.084	0.083	0.085	0.086	0.087	0.086	0.088	0.089

Beck, Demirguc-kunt, and Levine (2006) and Barth, Lin, Lin, and Song (2009):

Media ownership, concentration, and corruption in lending

- Regression model:

$$
\begin{aligned}
Bank\ Corruption_{\{i,j\}} = \alpha &+ \beta' Media\ State\ Ownership_j \\
&+ \nu' Media\ Concentration_j \\
&+ \theta' Banking\ Sector\ Controls_j \\
&+ \gamma' FirmControls_{\{i,j\}} \\
&+ \delta' Industry\ Dummies_{\{i,j\}} \\
&+ \psi' Macro\ Controls + \epsilon_{\{i,j\}}
\end{aligned}
$$

- The ordered probit model
- Heteroskedasticity-robust standard errors for country-level standard errors

Result 2

	1	2	3	4	5	6
Press top 5 concentration	0.184		0.179			
	[0.025]**		[0.038]**			
TV top 5 concentration		0.286	0.259			
		[0.008]***	[0.014]**			
Press top 3 concentration				0.212		0.186
				[0.026]**		[0.029]**
TV top 3 concentration					0.362	0.323
					[0.014]**	[0.027]**
Press state ownership	0.109	0.088	0.081	0.097	0.114	0.116
	[0.027]**	[0.052]*	[0.027]**	[0.027]**	[0.048]**	[0.056]*
Competitors	0.027	0.030	0.029	0.028	0.034	0.034
	[0.593]	[0.571]	[0.579]	[0.585]	[0.517]	[0.518]
Other macro-controls	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes
Observations	5,002	4,909	4,909	5,002	4,909	4,909
Countries	58	57	57	58	57	57
Pseudo R^2	0.086	0.089	0.089	0.086	0.089	0.089

Press top 5(3) concentration: market share of the 5(3) largest daily newspapers.
TV top 5(3) concentration: market share of the 5(3) largest TV stations.

Shleifer and Vishny (1993):
Corruption observation is costly.

Reuter and Zitzewitz (2006):
Bank facing media scrutiny and criticism reduces their advertising in media outlets.

Media competition ~ Corruption in lending:
Competition in the media market provides stronger incentives for media firms to actively investigate newsworthy events such as bank corruption cases.

Result 1x2

	1	2	3	4	5
Press state ownership	0.137	0.169	0.201	0.153	0.151
	[0.032]**	[0.041]**	[0.029]**	[0.019]**	[0.039]**
TV state ownership	0.186	0.198	0.266	0.274	0.287
	[0.038]**	[0.031]**	[0.017]**	[0.004]***	[0.004]***
State-owned radio	0.105	0.105	0.110	0.084	0.079
	[0.030]**	[0.024]**	[0.013]**	[0.041]**	[0.043]**
Press top 5 concentration	0.196				
	[0.030]**				
Press state ownership × Press top 5 concentration	0.164				
	[0.021]**				
Press top 3 concentration		0.197			0.183
		[0.023]**			[0.026]**
Press state ownership × Press top 3 concentration		0.242			0.232
		[0.019]**			[0.018]**
TV top 5 concentration			0.255		
			[0.017]**		
TV state ownership × TV top 5 concentration			0.359		
			[0.029]**		
TV top 3 concentration				0.411	0.400
				[0.018]**	[0.036]**
TV state ownership × TV top 3 concentration				0.404	0.397
				[0.013]**	[0.024]**
Government bank ownership	0.002	0.003	0.003	0.003	0.003
	[0.058]*	[0.011]**	[0.024]**	[0.023]**	[0.018]**
Private monitoring	−0.262	−0.281	−0.253	−0.238	−0.253
	[0.004]***	[0.012]**	[0.055]*	[0.053]*	[0.029]**
Government	−0.340	−0.341	−0.347	−0.345	−0.346
	[0.075]*	[0.027]**	[0.178]	[0.039]**	[0.029]**
Foreign	−0.208	−0.208	−0.200	−0.197	−0.196
	[0.078]*	[0.115]	[0.041]**	[0.128]	[0.036]**
Exporter	−0.106	−0.108	−0.122	−0.126	−0.126
	[0.066]*	[0.035]**	[0.113]	[0.064]*	[0.100]*
Firm size	−0.012	−0.014	−0.011	−0.011	−0.008
	[0.031]**	[0.032]**	[0.126]	[0.156]	[0.141]
Competitors	0.044	0.042	0.026	0.028	0.037
	[0.423]	[0.439]	[0.613]	[0.602]	[0.496]
Other macro-controls	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes
Observations	5,002	5,002	4,909	4,909	4,909
Countries	58	58	57	57	57
Pseudo R^2	0.087	0.086	0.092	0.092	0.093

Media state ownership x Media competition ~ Corruption in lending:
Corruption in lending is more pervasive in countries with a state-controlled and concentrated media sector.

Result 3 and 4

	1	2	3	4	5
Press state ownership	0.101	0.144	0.086	0.115	0.144
	[0.003]***	[0.028]**	[0.021]**	[0.007]***	[0.016]**
Press top 3 concentration	0.116	0.245	0.268	0.200	0.174
	[0.013]**	[0.015]**	[0.027]**	[0.023]**	[0.041]**
TV state ownership	0.326	0.325	0.269	0.209	0.257
	[0.020]**	[0.018]**	[0.026]**	[0.026]**	[0.023]**
TV top 3 concentration	0.233	0.387	0.345	0.438	0.376
	[0.026]**	[0.038]**	[0.030]**	[0.016]**	[0.039]**
State-owned radio	0.106	0.149	0.103	0.093	0.148
	[0.045]**	[0.025]**	[0.016]**	[0.031]**	[0.016]**
Official supervisory power	0.144	0.091	0.092	0.161	0.132
	[0.015]**	[0.053]*	[0.057]*	[0.024]**	[0.016]**
Private monitoring	−0.362	−0.276	−0.298	−0.334	−0.266
	[0.016]**	[0.051]*	[0.037]**	[0.011]**	[0.054]*
Press state ownership × Official supervisory power	0.056				
	[0.017]**				
Press state ownership × Private monitoring	0.036				
	[0.013]**				
Press top 3 concentration × Official supervisory power		0.050			
		[0.090]*			
Press top 3 concentration × Private monitoring		0.184			
		[0.027]**			
TV state ownership × Official supervisory power			0.051		
			[0.033]**		
TV state ownership × Private monitoring			0.044		
			[0.028]**		
TV top 3 concentration × Official supervisory power				0.058	
				[0.037]**	
TV top 3 concentration × Private monitoring				0.135	
				[0.006]***	
State-owned radio × Official supervisory power					0.069
					[0.121]
State-owned radio × Private monitoring					0.024
					[0.025]**
Government bank ownership	0.004	0.003	0.003	0.002	0.002
	[0.021]**	[0.023]**	[0.023]**	[0.023]**	[0.017]**
General financing obstacle	0.277	0.280	0.277	0.283	0.280
	[0.030]**	[0.019]**	[0.019]**	[0.005]***	[0.027]**
Observations	4,909	4,909	4,909	4,909	4,909
Countries	57	57	57	57	57
Pseudo R^2	0.092	0.089	0.091	0.092	0.089

Media state ownership (concentration) x supervisory power (private monitoring)~Corruption:

1. Official supervisory power results in more corruption in lending in the countries with concentrated and state-controlled media sectors
2. A concentrated and state-controlled media sector weakens the anticorruption role of private monitoring because of little way to announce the result of private monitoring.

Result 5

	1	2	3	4	5
Press state ownership	0.155	0.116	0.089	0.100	0.097
	[0.014]**	[0.028]**	[0.030]**	[0.029]**	[0.029]**
TV state ownership	0.277	0.260	0.186	0.264	0.240
	[0.023]**	[0.031]**	[0.030]**	[0.029]**	[0.028]**
State-owned radio	0.035	0.033	0.035	0.030	0.041
	[0.033]**	[0.035]**	[0.033]**	[0.056]*	[0.028]**
Press top 3 concentration	0.121	0.198	0.138	0.195	0.201
	[0.038]**	[0.025]**	[0.037]**	[0.032]**	[0.030]**
TV top 3 concentration	0.233	0.396	0.290	0.364	0.352
	[0.039]**	[0.022]**	[0.030]**	[0.029]**	[0.027]**
HHI of banking sector	1.009	0.646	0.981	0.680	0.720
	[0.014]**	[0.061]*	[0.017]**	[0.052]*	[0.028]*
Press state ownership × HHI of banking sector	0.492				
	[0.022]**				
Press top 3 concentration × HHI of banking sector		0.295			
		[0.029]**			
TV state ownership × HHI of banking sector			0.590		
			[0.002]***		
TV top 3 concentration × HHI of banking sector				0.360	
				[0.036]**	
State-owned radio × HHI of banking sector					0.302
					[0.041]**
Government bank ownership	0.003	0.002	0.002	0.002	0.002
	[0.022]**	[0.057]*	[0.029]**	[0.054]*	[0.033]**
General financing obstacle	0.282	0.287	0.280	0.281	0.282
	[0.014]**	[0.007]***	[0.012]**	[0.014]**	[0.019]**
Control of corruption	−0.217	−0.226	−0.212	−0.232	−0.260
	[0.026]**	[0.029]**	[0.028]**	[0.016]**	[0.006]***
Info sharing	−0.189	−0.230	−0.162	−0.189	−0.192
	[0.034]**	[0.018]**	[0.061]*	[0.037]**	[0.037]**
Official supervisory power	0.104	0.100	0.092	0.100	0.085
	[0.028]**	[0.031]**	[0.033]**	[0.028]**	[0.053]*
Countries	57	57	57	57	57
Pseudo R^2	0.089	0.086	0.091	0.087	0.089

Media state ownership (concentration) x banking concentration ~ Corruption in lending:
The media firms in concentrated and state-controlled media countries face strong business pressure and lack the incentives to report bank corruption cases.

※ business pressure: payback effects where the bank facing media scrutiny choose to reduce their advertising in media outlets.

Result 6

	1	2	3	4	5
Press state ownership	0.157	0.132	0.140	0.136	0.138
	[0.013]**	[0.015]**	[0.022]**	[0.021]**	[0.030]**
TV state ownership	0.255	0.256	0.310	0.255	0.256
	[0.017]**	[0.013]**	[0.027]**	[0.029]**	[0.017]**
State-owned radio	0.101	0.100	0.105	0.103	0.119
	[0.028]**	[0.075]*	[0.018]**	[0.013]**	[0.031]**
Press top 3 concentration	0.152	0.261	0.150	0.153	0.154
	[0.034]**	[0.037]**	[0.027]**	[0.021]**	[0.019]**
TV top 3 concentration	0.404	0.408	0.403	0.383	0.403
	[0.029]**	[0.032]**	[0.025]**	[0.034]**	[0.039]**
Private firm	0.271	0.164	0.215	0.271	0.256
	[0.031]**	[0.045]**	[0.027]**	[0.029]**	[0.024]**
Press state ownership × Private firm	0.097				
	[0.024]**				
Press top 3 concentration × Private firm		0.240			
		[0.009]***			
TV state ownership × Private firm			0.152		
			[0.030]**		
TV top 3 concentration × Private firm				0.132	
				[0.036]**	
State-owned radio × Private firm					0.116
					[0.019]**
Government bank ownership	0.002	0.001	0.002	0.002	0.002
	[0.029]**	[0.011]**	[0.024]**	[0.028]**	[0.066]*
HHI of banking sector	0.755	0.743	0.755	0.756	0.757
Firm size	−0.011	−0.010	−0.009	−0.012	−0.011

Private firm: one for neither government nor foreign firm

Barth, Lin, Lin, and Song (2009):
Because of its political influence, state owned enterprises may have stronger bargaining power in negotiating with lending officers on loan terms. Overall the strong bargaining power will lead to less bribery in lending.

Media state ownership (concentration) x private firm ~ Corruption in lending:
Private firms are subject to more corruption in lending in the countries with concentrated and state-controlled media sectors.

Robustness Tests

- Probit analysis:
  - Corruption dummy: one for otherwise, zero for no obstacle.
- Endogeneity-related problems:
  - Oil reserve of the economy ~ Egorov, Guriev, and Sonin (2009)
  - Percentage of years that he country has been independent since 1776 ~ Levine (1997), BDL (2006), BLLS (2009)
  - Latitude ~ Levine (1997), BDL (2006), BLLS (2009)
  - Ethnic fractionalization ~ Levine (1997), BDL (2006), BLLS (2009)
  - Democracy indexes ~ Brunetti and Weder (2003)
- Omitted variable problems:
  - Variables from Press Freedom Index, World Government Index

Robustness Test 1

	1 Probit	2 Probit	3 Probit	4 IV Probit	5 IV Probit	6 IV Probit
Press state ownership	0.136			0.335		
	[0.018]**			[0.017]**		
Press top 3 concentration	0.135			0.320		
	[0.027]**			[0.005]***		
TV state ownership		0.221			0.507	
		[0.023]**			[0.003]***	
TV top 3 concentration		0.286			0.641	
		[0.012]**			[0.018]**	
State-owned radio			0.113			0.323
			[0.023]**			[0.009]***
Government bank ownership	0.004	0.004	0.007	0.004	0.006	0.005
	[0.026]**	[0.028]**	[0.030]**	[0.017]**	[0.028]**	[0.035]**
General financing obstacle	0.099	0.100	0.101	0.099	0.108	0.101
	[0.020]**	[0.027]**	[0.024]**	[0.015]**	[0.007]***	[0.029]**
Control of corruption	−0.093	−0.086	−0.080	−0.112	−0.086	−0.083
	[0.008]***	[0.027]**	[0.031]**	[0.005]***	[0.027]**	[0.026]**
HHI of banking sector	0.764	0.675	0.750	0.819	0.626	0.403
	[0.008]***	[0.053]*	[0.016]**	[0.010]**	[0.039]**	[0.026]**
Info sharing	−0.199	−0.177	−0.207	−0.229	−0.322	−0.241
	[0.029]**	[0.071]*	[0.031]**	[0.042]**	[0.020]**	[0.029]**
Official supervisory power	0.139	0.126	0.133	0.181	0.117	0.096
	[0.056]*	[0.018]**	[0.027]**	[0.017]**	[0.062]*	[0.033]**
Private monitoring	−0.305	−0.304	−0.275	−0.234	−0.151	−0.327
	[0.030]**	[0.039]**	[0.064]*	[0.030]**	[0.032]**	[0.038]**
Government	−0.357	−0.362	−0.372	−0.353	−0.359	−0.336
	[0.078]*	[0.128]	[0.068]*	[0.139]	[0.040]**	[0.080]*
Foreign	−0.220	−0.229	−0.218	−0.217	−0.223	−0.258
	[0.214]	[0.072]*	[0.035]**	[0.006]***	[0.158]	[0.065]*
Exporter	−0.096	−0.098	−0.122	−0.102	−0.098	−0.087
	[0.080]*	[0.040]**	[0.145]	[0.093]*	[0.049]**	[0.162]
Firm size	−0.008	−0.009	−0.006	−0.009	−0.013	−0.014
	[0.016]**	[0.014]**	[0.154]	[0.116]	[0.018]**	[0.030]**
Competitors	0.032	0.040	0.040	0.036	0.018	0.033
	[0.547]	[0.467]	[0.341]	[0.072]*	[0.801]	[0.126]
Other macro-controls	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes
Observations	5,108	5,015	4,909	5,108	5,015	4,909
Countries	59	58	57	59	58	57
1st-stage *F*-test (*p*-value)				0.000	0.000	0.000
P-value of Hansen's overidentification *J* test				0.232	0.241	0.284
Pseudo R^2	0.119	0.121	0.125	0.119	0.121	0.126

Robustness Test 2

	1	2	3	4	5	6
Press state ownership		0.189	0.128	0.094	0.090	0.162
		[0.021]**	[0.017]**	[0.025]**	[0.038]**	[0.031]**
Press top 3 concentration		0.104	0.181	0.162	0.188	0.195
		[0.039]**	[0.045]**	[0.013]**	[0.006]***	[0.012]**
TV state ownership		0.139	0.215	0.270	0.202	0.232
		[0.006]***	[0.031]**	[0.038]**	[0.013]**	[0.033]**
TV top 3 concentration		0.299	0.353	0.407	0.306	0.314
		[0.031]**	[0.035]**	[0.022]**	[0.024]**	[0.026]**
State-owned radio		0.083	0.082	0.057	0.084	0.087
		[0.059]*	[0.004]***	[0.020]**	[0.026]**	[0.059]*
Government bank ownership	0.002	0.001	0.002	0.002	0.003	0.003
	[0.036]**	[0.072]*	[0.054]*	[0.031]**	[0.030]**	[0.031]**
General financing obstacle	0.273	0.278	0.281	0.280	0.283	0.280
	[0.014]**	[0.018]**	[0.025]**	[0.013]**	[0.006]***	[0.012]**
Control of corruption	−0.220	−0.362	−0.211	−0.340	−0.312	−0.218
	[0.041]**	[0.007]***	[0.031]**	[0.006]***	[0.021]**	[0.027]**
HHI of banking sector	0.734	0.812	0.831	0.757	0.829	0.729
	[0.014]**	[0.021]**	[0.024]**	[0.055]*	[0.028]**	[0.057]*
Info sharing	−0.160	−0.177	−0.187	−0.192	−0.171	−0.150
	[0.024]**	[0.046]**	[0.035]**	[0.035]**	[0.042]**	[0.061]*
Official supervisory power	0.106	0.086	0.105	0.095	0.099	0.103
	[0.025]**	[0.075]*	[0.013]**	[0.067]*	[0.061]*	[0.022]**
Private monitoring	−0.201	−0.227	−0.202	−0.242	−0.248	−0.242
	[0.053]*	[0.034]**	[0.059]*	[0.046]**	[0.037]**	[0.031]**
Government	−0.287	−0.351	−0.346	−0.340	−0.358	−0.343
	[0.074]*	[0.154]	[0.120]	[0.048]**	[0.144]	[0.031]**
Foreign	−0.137	−0.208	−0.204	−0.208	−0.208	−0.194
	[0.077]*	[0.023]**	[0.044]**	[0.138]	[0.101]	[0.164]
Exporter	−0.132	−0.118	−0.117	−0.126	−0.123	−0.108
	[0.066]*	[0.155]	[0.147]	[0.036]**	[0.067]*	[0.043]**
Firm size	−0.008	−0.007	−0.010	−0.009	−0.007	−0.013
	[0.363]	[0.044]**	[0.035]**	[0.096]*	[0.212]	[0.183]
Competitors	0.033	0.044	0.040	0.035	0.045	0.052
	[0.481]	[0.420]	[0.458]	[0.508]	[0.387]	[0.327]
Control of press freedom	0.275					
	[0.021]**					
Government effectiveness		−0.278				
		[0.017]**				
Political stability			−0.133			
			[0.136]			
Quality and regulation				−0.068		
				[0.483]		
Rule of law					−0.228	
					[0.032]**	
Voice and accountability						−0.293
						[0.024]**
Other macro-controls	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes
Observations	6,555	4,909	4,909	4,909	4,909	4,909
Countries	74	57	57	57	57	57
Pseudo R^2	0.075	0.089	0.089	0.091	0.092	0.090

Conclusion

- Results
  - Positive link btw media state ownership and banking corruption
  - Positive link btw media concentration and banking corruption
  - Media ownership and concentration strengthen positive link btw official supervisory power and banking corruption
  - Media ownership and concentration weaken negative link btw private monitoring and banking corruption
  - Result 1 and 2 are stronger in privately owned firms

- Contribution
  - Determinant of corruption after BDL (2006) and BLLS (2009)
  - Corruption and investor protection literature of corporate finance
  - Media and economic/finance literature