Political Corruption and Firm Access to the Initial Public Market

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Abstract

The study examines the causal effect of political corruption on firms access to capital. Politically corrupt environment increases underpricing and thereby imposes costs on firms. The effect intensifies with increased percentage of a firm's operations concentrated around the headquarter locations. Underwriters play a vital role in promoting IPOs and lowering information asymmetry in a corrupt environment. Political corruption does not diminish the likelihood of pre-IPO shareholders' achieving wealth gains. Overall, empirical evidence supports the notion that political corruption causes business uncertainty and a high degree of information asymmetry in the market.

Background and research questions

Corruption is pervasive in the world which negatively affects the whole society and economies. When corruption takes the form of rent seeking, it can establish barriers for firms that wish to conduct business (e.g., Athanasouli and Goujard (2015); Paunov (2016); Huang and Yuan (2019)). Indeed, the World Economic Forum has pointed out that corruption raises the cost of business for firms by 10% on average worldwide (OECD, 2013). However, surprisingly little is known about how the rent-seeking behaviour affects the Initial Public Offering (IPO), as going public is an important source for firms to access the capital market. In this study, we address this gap by investigating the relation between IPO outcomes and politically corrupt environments in the US.

We aim to answer the flowing questions:

1. Does political corruption have an impact on firms' access to public capital markets when the firms decide to go public?

2. If so, do prestigious investment banks that act as intermediaries in the financial market provide help?

3. How does a corrupt environment affect pre-IPO shareholders' benefits?

Theoretical framework

The resource redistribution model, which addresses the relationship between rent seeking (corruption), production, and the economy was first modeled in the classic work by Murphy et al. (1993). According to their study, if rent seekers from the public or private sectors attempt to misappropriate values from society, such actions reduce the returns of production because more resources are allocated to rent seekers (e.g., corrupt public officials). Alternatively, misappropriation results in a third party losing an opportunity to share the resources in a market.

Contribution to the literature

1. We provide the first study to present empirical evidence that political corruption imposes additional costs on firms in the IPO context by revealing that newly listed firms raise less capital than they are potentially able to raise.

2. We take corrupt environments into account to show the economic consequences for IPOs that result from political uncertainty.

3. Unlike previous studies which argue that IPO firms benefit from political activities (e.g., political money contribution), we provide contrasting evidence that IPO firms suffer from political corruption by incurring a higher level of IPO underpricing.
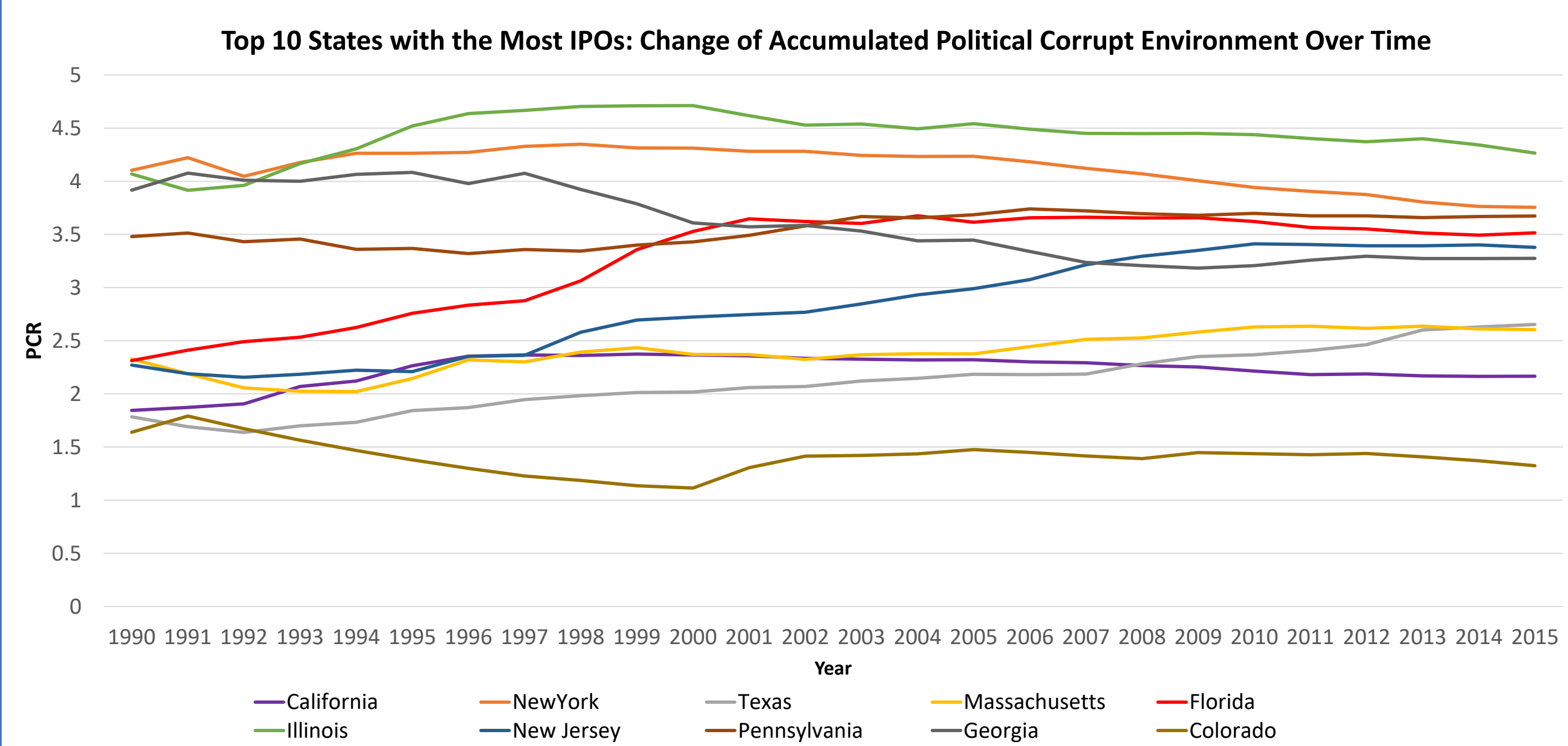
Hypotheses

1. Since IPO underpricing is highly correlated to the level of information asymmetry, and political corruption increases market uncertainty and causes information disparity in the market.

   H1: IPOs in an environment with notable political corruption are associated with higher first-day returns.

2. Underwriters are frequent market players. They possess superior resources in the market over firms and investors. In a corrupt environment, underwriter would work harder to help issuers to reduce the level of IPO underpricing.

   H2: Prestigious investment banks can price issues more accurately in politically corrupt environments.

3. IPO revision is treated as an effective means for underwriters to collect private information from informed investors and induce them to reveal it. Thus, if a corruption environment aggregates information asymmetry and market uncertainty, the underwriters need to collect more information from investors.

   H3: The demand for collecting information in corrupt environments is higher and is reflected by a greater number of offer price revisions.

Data and methodology

1. **IPO data:** 4655 U.S. IPOs between 1990 and 2015 are collected from Thomson One.

2. **Corruption data:** We obtain the number of public corruption convictions at the state level from the Department of Justice's (DOJ) Public Integrity Section (PIN).

3. **Measure of corruption:** We use the number of corruption convictions divided by the population, in terms of millions of people, in each state. For each IPO issuer, this measure is at the firm headquarter state level.

4. **Endogeneity concern:** We use a two-stage least squares (2SLS) analysis and a Propensity Score Matching (PSM) to mitigate the endogenous concern that IPO firm's headquarter location is not randomly selected.

5. **Model:** IPO underpricing = β_0 + β_1 PCR + β_2Firm Age + β_3Total Assets + β_4Leverage + β_5High-tech +β_6Top-tier + β_7Venture capital +β_8Auditor +β_9Nasdaq +β_{10}Share overhang +β_{11}No. of bookrunners +β_{12}Hot market + β_{13}Year+ β_{14} Industry +β_{15} Region+ ε_i

   Where IPO underpricing is measured as the percentage change from the stock price on the first day of trading to the offer price. PCR stands for Political Corruption Rate, representing the corruption measure for each state.

Top 10 States with the Most IPOs: Change of Accumulated Political Corrupt Environment Over Time

Results (OLS)

	Baseline (1)	Omitted variable concern (2)	(3)	(4)	Fixed effects analysis (5)	(6)
PCR	1.327*** (2.77)	1.056** (2.20)	1.685*** (2.62)	1.471** (2.14)	0.329** (2.02)	0.677** (2.53)
Intercept	7.363 (1.44)	5.707 (0.83)	-3.806 (-0.36)	-3.115 (-0.14)	2.942 (0.57)	-0.933 (-0.14)
Ln (GDP)		0.330 (0.47)		-0.732 (-0.17)		
Unemployment		0.398 (0.65)		0.571 (0.71)		
Education attainment		-0.068 (-0.47)		-0.125 (-0.68)		
Ln (Police)			-3.422 (-0.92)	-2.930 (-0.63)		
Ln (Judicial)			4.015 (1.09)	3.797 (1.00)		
Baseline controls	Yes	Yes	Yes	Yes	Yes	Yes
Year/Industry/Region controls	Yes	Yes	Yes	Yes	No	No
State-year control	No	No	No	No	Yes	Yes
State-Year-Industry control	No	No	No	No	No	Yes
Adjusted R2	0.2095	0.2093	0.2248	0.2243	0.1602	0.0827
Obs.	4655	4655	3078	3078	4655	4655

*PCR in columns 5 and 6 are measured at district level.

Results (Endogeneity concern)

Panel A 2SLS: Dependent variable:	PCR First stage	IPO underpricing Second stage	**Panel B** PSM ATET	IPO underprcing
GCISC	-0.575*** (12.09)		High corrupt environment vs. Low corrupt environment	3.686** (2.29)
FOIA	-0.326** (2.50)		Year/Industry/Region controls	Yes
Voting	0.003*** (3.62)		Obs.	4655
PCR		3.579*** (3.44)		
Intercept	3.427*** (11.31)	1.749 (0.30)		
Baseline controls	Yes	Yes		
Year/Industry/Region controls	Yes	Yes		
Weak identification F-statistics		52.50		
Overidentification J-statistic (p-value)		0.167		
Adjusted R2	0.4065	0.2148		
Obs.	4650	4650		

*GCISC: Gravity-based Centered Index for Spatial Concentration ranging from 0 to 1, with zero indicates citizens in a state live far from capital and with one indicate citizens in a state live in the capital; FOIA: Dummy variable taking one if an IPO firm's headquarter state was transitioned from weak to strong FOIA laws at least 7 years ago before going public; Voting: The number of days for a citizen to be eligible to vote in a state as measured in 1970.
An IPO firm is in a high corrupt environment if the PCR is above the median value in the issuing year, otherwise is in a low corrupt environment.

Results (Underwriter, IPO revision)

Panel A: Underwriter repuation			**Panel B:** IPO revision	
PCR	2.222*** (3.54)	2.967*** (3.15)	PCR	0.405** (2.20)
PCR*Top-tier	-1.539** (-2.22)		Intercept	-3.699* (-1.74)
PCR*Underwriter Rank		-0.251** (-2.31)	Baseline control	Yes
Intercept	-0.936 (-0.12)	-2.921 (-0.46)	Year/Industry/Region controls	Yes
			Adjusted R2	0.1203
Baseline control	Yes	Yes	Obs.	4655
Year/Industry/Region controls	Yes	Yes		
Adjusted R2	0.2028	0.2030		
Obs.	4655	4655		

Results (operation concentration and underwriter compensation)

Panel A Business operation concentration		**Panel B** underwriter's compensation	
	IPO underpricing		Ln ($Gross Spread)
PCR	-0.163 (-0.36)	PCR	0.023*** (2.88)
Operation CONC%	-7.186** (-2.72)	Intercept	0.515*** (3.67)
PCR*Operation CONC%	2.856*** (3.09)	Other controls	Yes
Intercept	-10.214 (-1.13)	Year/Industry/Region controls	Yes
Baseline controls	Yes	Adjusted R2	0.5436
Year/Industry/Region controls	Yes	Obs.	4650
Adjusted R2	0.2150		
Obs.	3026		

* *Operation CONC%* is an IPO firm's operation concertation in the HQ state measured as the ratio of how many times that the headquarter location is mentioned over all states mentions in the 10-K report. The variable ranges from 0 (IPO firm has zero business in the HQ state) to 1 (IPO firm has fully concentrated businesses in the HQ state) (Garcia and Norli 2012).

Key findings and main implications

1. Political corruption increase the level of IPO underpricing, thereby imposes burdens on issuing firms. The evidence is robust to addressing omitted variable and endogeneity concerns.

2. Underwriters are frequent market players and able to help firms to reduce IPO underpricing.

3. The results imply that a high demand exists for underwriters to induce private information from investors in a corrupt environment, resulting in more IPO offer price revisions.

4. Further empirical evidence suggests that reputable underwriters charge higher fees for taking firms to go public in politically corrupt environments, which explains underwriters give their best-effort service to issuers.

5. Political corruption has a stronger positive impact on IPO underpricing if firms have more operations concentrated in the headquarter location. This evidence supports the main finding that corruption matters for firms going public.

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