



Nanyang Business School

# Political Corruption and Accounting Choices

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**Presumptive Republican nominee Donald Trump has called Hillary Clinton the most corrupt candidate in US history. (BBC, June 2016)**



**Former national security adviser Mike Flynn is facing questions from the special counsel over allegations that he improperly concealed his financial ties to Turkey and Russia. (Wall Street Journal Nov 24, 2017)**



- Singapore is one of the least corrupt countries.
- Edwin Yeo – Head of Field Research and Technical Support for the Corrupt Practices Investigation Bureau (CPIB)
- Between 2008 and 2013, Edwin stole \$1.76 million dollars from a CPIB bank account.

# Political corruption is pervasive.

- In addition to the anecdotal evidence,
  - Gallop survey results show that the majority of adults being surveyed believe that political corruption is a serious problem, in 108 out of 129 countries.
  - 1 out of 5 firms worldwide have been asked to pay bribes.

# Research question

- How does political corruption affect firms' accounting choices?

# What's political corruption?

- We define political corruption as agency issues between elected or appointed government officials and their constituents, which manifest in rent-seeking by government officials.

# Hypothesis

- We hypothesize that firms facing high corruption are incentivized to manipulate earnings downwards.
  - Corrupt officials extract rents through additional regulations and targeted taxation.
  - Lower accounting profits weaken these officials' abilities to do so (Watts and Zimmerman, 1986) .

# Our hypothesis is not without tension

- Executives are motivated to manage earnings upwards (Healy, 1985; Murphy and Zimmerman, 1993; Ball 2001; Watts 2003; Graham et al., 2005; Lafond and Roychowdhury 2008).
- Political corruption may influence local social norms and encourage corporate managers to manipulate earnings upwards more aggressively.

# We use data from the U.S. to empirically test our hypothesis

- First, using data from one single country alleviates the concern that myriad international differences in institutional settings are responsible for our empirical results.
- Second, there exist substantial variations in the severity of political corruption across the states in the U.S., allowing us to conduct cross-sectional analyses under a homogenous nation-wide environment.
- Third, the U.S. is typically deemed a low corruption country. If we are able to document a meaningful effect of political corruption in the U.S., our results highlight the profound influence of political corruption on firms' accounting choices.

# Measure of corruption

- It is based on the U.S. Department of Justice (DOJ) data on the number of corruption convictions of public officials in each of the 94 federal judicial districts.
- The data are used numerous studies to measure political corruption in the U.S.: Fisman and Gatti (2002), Fredricksson et al., (2003), Glaeser and Saks (2006), Butler et al. (2009), Campante and Do (2014), and Smith (2016).
- The data are objective and verifiable, and therefore they are superior to survey data, which are based on subjective assessment.
- The number of convictions per capita in each state is our main measure of political corruption, with a higher value indicating a more corrupt environment.

# Concern with the DOJ data

- The number of corruption convictions is determined not only by the existence of corruption, but also by the detection of the misdeed.
- A lower number of cases can reflect weak oversight and law enforcement, rather than a less corrupt environment.

# Several points to alleviate the concern

- Federal judicial system, which is responsible for the cases, should be above the influence of local corruption and therefore, the enforcement effort is about the same across the country.
- Smith (2016) shows that the number of conviction is aligned with intuition and anecdotal evidence in identifying the most and least corrupt areas in the U.S.
- Our results are robust to the use of alternative perception-based corruption measures.

# Measure of earnings management

- Performance-matched discretionary accruals per Kothari (2005).
- We run the modified Jones (1991) model as described in Dechow et al. (1995) for each two-digit SIC-year combination:

$$\frac{ACCRUAL_{it}}{ASSETS_{i,t-1}} = \beta_0 + \beta_1 \frac{1}{ASSETS_{i,t-1}} + \beta_2 \frac{\Delta REV_{it} - \Delta AR_{it}}{ASSETS_{i,t-1}} + \beta_3 \frac{PPE_{it}}{ASSETS_{i,t-1}} + \varepsilon_{it} \quad (2),$$

# Model specification

$$DA_{ist} = \alpha_0 + \alpha_1 \text{Corruption}_{st} + \alpha_2 \text{Firm Characteristics}_{ist} + \alpha_3 \text{State Characteristics}_{st} + \text{Industry FE} + \text{Year FE} + \varepsilon_{ist} \quad (1),$$

# Sample formation

- We only include companies that are incorporated and headquartered in the U.S.
- We exclude firms in financial industries (SIC codes 6000-6999) or utility industries (SIC codes 4900-4999).
- We require at least 10 observations in each industry-year combination (industry is based on a two-digit SIC code).
- We require non-negative book value and all variables non-missing.
- The final sample consists of 56,096 firm-year observations from 1987 to 2011.

# Descriptive statistics of corruption (# of corruption convictions per 100,000 for each state)

State	Firm-year in state	Median	Mean	Std. Dev	Min	Max
District of Columbia	166	6.29	6.92	3.19	2.04	14.16
Louisiana	412	0.81	0.79	0.28	0.12	1.37
North Dakota	12	0.69	0.54	0.39	0.00	0.94
Kentucky	309	0.63	0.56	0.21	0.03	0.95
Mississippi	146	0.56	0.68	0.43	0.17	2.13
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Utah	471	0.09	0.12	0.12	0.00	0.35
Oregon	741	0.08	0.09	0.08	0.00	0.30
New Hampshire	214	0.08	0.09	0.10	0.00	0.39
Colorado	1,204	0.08	0.13	0.14	0.00	0.50
Nebraska	253	0.06	0.12	0.13	0.00	0.57

# Comparison between corrupt (top quartile) and non-corrupt (bottom quartile states)

	Corrupt Group (1)	Non-Corrupt Group (2)	Difference (Column 1-Column 2)
<i>DA</i>	-2.12%	-1.52%	-0.599%*
<i>Corruption</i>	0.61	0.11	0.500***
<i>Ln(total assets)</i>	5.89	5.63	0.251***
<i>CFO</i>	7.82%	6.61%	1.208%***
<i>ROA</i>	3.07%	0.16%	2.909%***
<i>R&amp;D</i>	4.75%	6.75%	-2.000%***
<i>R&amp;D Missing</i>	0.40	0.33	0.071***
<i>Acquisition</i>	0.20	0.19	0.018***
<i>Issuance</i>	0.29	0.28	0.010*
<i>Institution</i>	49.23%	48.83%	0.401%
<i>Ln(Analyst)</i>	1.67	1.69	-0.013
<i>Tight covenant</i>	0.12	0.10	0.019***
<i>Meet/Beat</i>	0.16	0.16	0.001
<i>Sales growth</i>	21.46%	22.43%	-0.967%
<i>MB</i>	3.19	3.12	0.074*
<i>Net operating assets</i>	0.69	0.76	-0.065***
<i>Sales volatility</i>	21.30%	21.57%	-0.272%
<i>Ln(operating cycle)</i>	4.65	4.63	0.019**
<i>Big N</i>	0.90	0.90	0.004
<i>Leverage</i>	26.12%	21.80%	4.316%***
<i>Per capita Income (\$10,000)</i>	3.01	3.06	-0.047***
<i>Hightech</i>	11.98%	16.47%	-4.488%***
<i>Education</i>	27.96%	27.19%	0.779%***

# Baseline regression

	(1)	(2)	(3)
	<i>DA</i>	<i>DA</i>	<i>DA</i>
<i>Corruption</i>	-0.023*** (-3.341)	-0.021*** (-3.055)	-0.021*** (-3.027)
<i>Ln (total assets)</i>	-0.001 (-0.919)	-0.001 (-0.973)	0.001 (0.400)
<i>CFO</i>	-0.805*** (-40.221)	-0.810*** (-40.660)	-0.840*** (-40.687)
<i>ROA</i>	0.558*** (31.597)	0.564*** (32.184)	0.581*** (32.740)
<i>R&amp;D</i>	-0.097*** (-4.814)	-0.096*** (-4.736)	-0.096*** (-4.314)
<i>R&amp;D Missing</i>	0.012*** (4.124)	0.012*** (4.020)	0.011*** (3.139)
<i>Acquisition</i>	-0.011*** (-2.777)	-0.010*** (-2.618)	-0.011*** (-2.746)
<i>Issuance</i>	-0.001 (-0.447)	-0.001 (-0.223)	-0.001 (-0.274)
<i>Institution</i>	-0.004 (-0.570)	-0.006 (-0.844)	-0.003 (-0.469)
<i>Ln(Analyst)</i>	-0.003 (-1.323)	-0.003 (-1.319)	-0.006*** (-2.743)
<i>Tight covenant</i>	0.004 (0.947)	0.003 (0.584)	0.004 (0.922)
<i>Meet/Beat</i>	0.000 (0.137)	0.001 (0.243)	0.001 (0.179)
<i>Sales growth</i>	-0.006 (-1.429)	-0.005 (-1.137)	-0.004 (-0.896)
<i>MB</i>	-0.001 (-1.417)	-0.001 (-1.255)	-0.001 (-1.421)
<i>Net operating assets</i>	0.004 (1.593)	0.003 (1.467)	0.001 (0.476)
<i>Sales volatility</i>	-0.015* (-1.796)	-0.017** (-2.071)	-0.012 (-1.491)
<i>Ln (operating cycle)</i>	-0.017*** (-7.897)	-0.017*** (-7.856)	-0.011*** (-3.628)
<i>Big N</i>	-0.012** (-2.542)	-0.012** (-2.311)	-0.013** (-2.557)
<i>Leverage</i>	0.041*** (4.539)	0.041*** (4.552)	0.047*** (5.064)
<i>Per capita income</i>	0.000 (0.056)	-0.016** (-2.563)	-0.014** (-2.262)
<i>Hightech</i>	-0.052** (-2.309)	-0.043** (-2.027)	-0.048** (-2.253)
<i>Education</i>	-0.013 (-0.289)	0.074 (1.481)	0.076 (1.517)
Year Fixed Effects	No	Yes	Yes
Industry Fixed Effects	No	No	Yes
N	56,096	56,096	56,096
Adj_R <sup>2</sup>	0.100	0.101	0.104

# Alternative Measures Based on Corruption Convictions

	(1)	(2)	(3)	(4)
	<i>DA</i>	<i>DA</i>	<i>DA</i>	<i>DA</i>
<i>Average Corruption</i>	-0.024*** (-2.704)			
<i>Corruption per Government Employee</i>		-0.001*** (-2.848)		
<i>Weighted Corruption</i>			-0.029** (-2.560)	
<i>Number of Conviction</i>				-0.116*** (-2.924)
<i>Ln (total assets)</i>	0.001 (0.452)	0.001 (0.389)	0.001 (0.665)	0.001 (0.486)
<i>CFO</i>	-0.840*** (-40.652)	-0.840*** (-40.683)	-0.844*** (-37.479)	-0.840*** (-40.672)
<i>ROA</i>	0.580*** (32.725)	0.580*** (32.736)	0.588*** (30.969)	0.581*** (32.704)
<i>R&amp;D</i>	-0.096*** (-4.313)	-0.096*** (-4.314)	-0.090*** (-3.760)	-0.095*** (-4.268)
<i>R&amp;D Missing</i>	0.011*** (3.122)	0.011*** (3.118)	0.011*** (2.950)	0.011*** (3.202)
<i>Acquisition</i>	-0.011*** (-2.731)	-0.011*** (-2.752)	-0.012*** (-2.803)	-0.011*** (-2.739)
<i>Issuance</i>	-0.001 (-0.274)	-0.001 (-0.280)	-0.000 (-0.142)	-0.001 (-0.294)
<i>Institution</i>	-0.003 (-0.493)	-0.003 (-0.462)	-0.006 (-0.751)	-0.003 (-0.473)
<i>Ln(Analyst)</i>	-0.006*** (-2.787)	-0.006*** (-2.736)	-0.007*** (-3.157)	-0.006*** (-2.815)
<i>Tight covenant</i>	0.004 (0.952)	0.004 (0.927)	0.004 (0.965)	0.004 (0.940)
<i>Meet/Beat</i>	0.001 (0.181)	0.001 (0.182)	0.002 (0.753)	0.001 (0.195)

# Alternative Perception-based Measures of Corruption

	(1)	(2)	(3)
	<i>DA</i>	<i>DA</i>	<i>DA</i>
<i>Low Integrity_BGA</i>	-0.014*** (-2.861)		
<i>Low Integrity_SII</i>		-0.008* (-1.664)	
<i>Perceived Corruption</i>			-0.007** (-2.482)
<i>Ln (total assets)</i>	0.000 (0.313)	0.000 (0.299)	-0.000 (-0.325)
<i>CFO</i>	-0.840*** (-40.571)	-0.840*** (-40.569)	-0.834*** (-36.910)
<i>ROA</i>	0.580*** (32.668)	0.580*** (32.642)	0.582*** (31.031)
<i>R&amp;D</i>	-0.097*** (-4.336)	-0.098*** (-4.383)	-0.104*** (-4.136)
<i>R&amp;D Missing</i>	0.010*** (3.040)	0.011*** (3.072)	0.011*** (3.053)
<i>Acquisition</i>	-0.011*** (-2.697)	-0.010*** (-2.687)	-0.010** (-2.477)
<i>Issuance</i>	-0.001 (-0.193)	-0.001 (-0.172)	-0.001 (-0.397)
<i>Institution</i>	-0.003 (-0.480)	-0.004 (-0.519)	-0.009 (-1.248)
<i>Ln(Analyst)</i>	-0.005*** (-2.634)	-0.005*** (-2.602)	-0.004* (-1.775)
<i>Tight covenant</i>	0.004 (0.898)	0.004 (0.889)	0.005 (1.042)
<i>Meet/Beat</i>	0.001 (0.278)	0.001 (0.250)	0.000 (0.012)
<i>Sales growth</i>	-0.004 (-0.864)	-0.004 (-0.851)	-0.005 (-1.134)
<i>MB</i>	-0.001 (-1.544)	-0.001 (-1.512)	-0.001* (-1.773)
<i>Net operating assets</i>	0.001 (0.430)	0.001 (0.450)	0.002 (0.656)
<i>Sales volatility</i>	-0.012 (-1.444)	-0.012 (-1.433)	-0.012 (-1.374)
<i>Ln (operating cycle)</i>	-0.011*** (-3.650)	-0.011*** (-3.633)	-0.011*** (-3.750)

# Restatement-based earnings management measure

	(1)	(2)
	% of Firms Understating Income	% of Firms Overstating Income
<i>Corruption</i>	0.003* (1.766)	0.006 (1.292)
<i>Per capita income</i>	-0.006* (-1.863)	-0.002 (-0.198)
<i>Hightech</i>	0.018 (0.956)	0.117** (2.483)
<i>Education</i>	-0.041 (-1.526)	0.038 (0.531)
Year Fixed Effects	Yes	Yes
State Fixed Effects	Yes	Yes
N	1,275	1,275
Adj_R <sup>2</sup>	0.175	0.309

# Accounting policy analyses

- We investigate whether firms headquartered in more corrupt states are more likely to choose income-decreasing accounting methods.
- Income is lower when firms use LIFO instead of FIFO, when there is inflation.
- LIFO reserve captures the difference in the carrying amount of ending inventory between LIFO and FIFO. A higher LIFO reserve means that the choice of LIFO results in a greater decrease in cumulative earnings, relative to the choice of FIFO.
- Income is lower when firms use accelerated depreciation instead of straight-line depreciation, if firms keep replenishing their depreciable assets.
- Depreciation reserve captures the amount of excess depreciation relative to the industry median.
- A lower depreciable life estimate results in lower income.

# Accounting Policy Analyses

	(1)	(2)	(3)	(4)	(5)
	<i>INV method</i>	<i>LIFO reserve</i>	<i>DEP method</i>	<i>DEP reserve</i>	<i>DEP life</i>
<i>Corruption</i>	0.100 (0.964)	0.009*** (4.123)	0.423* (1.712)	0.005* (1.937)	-0.035*** (-2.845)
<i>Ln (total assets)</i>	-0.378*** (-32.286)	-0.000 (-0.345)	0.362*** (9.202)	0.004*** (8.363)	0.064*** (31.499)
<i>CFO</i>	-0.113 (-0.825)	-0.002 (-0.225)	0.944** (2.343)	0.007 (1.551)	-0.164*** (-6.747)
<i>ROA</i>	0.378*** (2.733)	0.010 (0.953)	-0.131 (-0.364)	-0.025*** (-5.083)	0.380*** (13.942)
<i>R&amp;D</i>	2.906*** (9.291)	-0.092*** (-3.938)	1.595*** (3.143)	0.032*** (4.909)	-0.261*** (-7.342)
<i>R&amp;D Missing</i>	0.117*** (3.658)	-0.003*** (-2.700)	-0.445*** (-4.416)	-0.010*** (-9.362)	0.016*** (3.156)
<i>Acquisition</i>	0.157*** (4.628)	-0.003*** (-2.648)	-0.178 (-1.494)	-0.016*** (-13.615)	-0.025*** (-4.162)
<i>Issuance</i>	0.013 (0.449)	-0.000 (-0.026)	-0.126 (-1.290)	-0.020*** (-18.642)	0.014*** (3.339)
<i>Institution</i>	0.320*** (4.491)	-0.001 (-0.448)	-1.103*** (-5.901)	0.011*** (5.016)	0.033*** (2.743)
<i>Ln(Analyst)</i>	0.160*** (8.558)	-0.004*** (-5.923)	-0.074 (-1.040)	-0.015*** (-22.473)	-0.077*** (-20.940)
<i>Tight covenant</i>	0.013 (0.354)	-0.005*** (-4.657)	-0.021 (-0.134)	-0.002 (-1.168)	-0.015** (-2.532)
<i>Meet/Beat</i>	-0.011 (-0.359)	0.000 (0.051)	-0.131 (-1.193)	-0.002* (-1.664)	0.011** (2.349)
<i>Sales growth</i>	0.237*** (5.381)	0.013*** (4.497)	-0.087 (-0.951)	-0.027*** (-19.314)	-0.044*** (-7.286)
<i>MB</i>	-0.003 (-0.627)	-0.001*** (-3.304)	0.015 (1.037)	0.001*** (6.994)	0.001 (0.891)
<i>Net operating assets</i>	0.023 (0.838)	-0.025*** (-15.548)	0.181*** (4.177)	-0.018*** (-17.837)	0.014*** (3.443)
<i>Sales volatility</i>	0.492*** (7.006)	-0.001 (-0.332)	0.654*** (3.078)	-0.029*** (-15.625)	-0.277*** (-21.916)
<i>Ln (operating cycle)</i>	0.193*** (6.711)	0.002* (1.780)	-0.190** (-2.259)	0.004*** (4.968)	-0.027*** (-5.374)
<i>Big N</i>	-0.198*** (-3.944)	0.002 (0.817)	-0.663*** (-5.046)	0.003** (2.109)	-0.030*** (-4.234)
<i>Leverage</i>	0.249*** (3.691)	-0.024*** (-8.546)	-1.197*** (-4.648)	-0.094*** (-36.311)	0.157*** (15.040)
<i>Per capita income</i>	-0.100	-0.006***	-0.347*	-0.000	-0.014

# Instrumental variable

- The instrumental variable is the isolation of state capitol from its populace.
- Campante and Do (2014) find that states with isolated capital cities have greater political corruption, as a result of lack of oversight and monitoring.
- This instrumental variable is positively related with political corruption but is unlikely to be correlated with local firms' earnings management except through the channel of corruption.

# Instrument Variable Approach Based on Population Concentration

	(1)
	<i>DA</i>
<i>Corruption (instrumented)</i>	-0.042** (-2.049)
<i>Ln (total assets)</i>	0.001 (0.568)
<i>CFO</i>	-0.841*** (-40.639)
<i>ROA</i>	0.581*** (32.750)
<i>R&amp;D</i>	-0.096*** (-4.283)
<i>R&amp;D Missing</i>	0.011*** (3.280)
<i>Acquisition</i>	-0.011*** (-2.721)
<i>Issuance</i>	-0.001 (-0.191)
<i>Institution</i>	-0.003 (-0.433)
<i>Ln(Analyst)</i>	-0.006*** (-2.747)
<i>Tight covenant</i>	0.004 (0.856)
<i>Meet/Beat</i>	0.001 (0.230)
<i>Sales growth</i>	-0.004 (-0.850)
<i>MB</i>	-0.001 (-1.512)
<i>Net operating assets</i>	0.001 (0.412)
<i>Sales volatility</i>	-0.011 (-1.304)
<i>Ln (operating cycle)</i>	-0.010*** (-3.557)
<i>Big N</i>	-0.013*** (-2.661)
<i>Leverage</i>	0.047*** (5.028)
<i>Per capita income</i>	-0.014**

# DiD approach

- We compare the change in discretionary accruals between movers and stayers. Movers refer to firms that move between corrupt and non-corrupt states.
- Specifically, a state is deemed as corrupt (non-corrupt), if the mean value of Corruption in the state across years is above (below) the median of all the states.
- For each treatment company that moves between corrupt and non-corrupt states, we match it to a control company (i.e., a firm that does not move) which is in the same 2-digit SIC industry, located in the same state, and with most similar ROA. For each matched pair, we keep the observations from five years before to five years after the move.
- This test effectively controls for non-time-varying firm characteristics and time-series trends having similar influences on treatment and control firms.

# Difference-in-Differences Analyses Based on Re-Location

	(1) <i>DA</i>	(2) <i>DA</i>
	Treatment Companies Moves from Non-Corrupt to Corrupt States	Treatment Companies Moves from Corrupt to Non-Corrupt States
<i>Treat * Post</i>	-0.108** (-2.136)	0.057** (1.996)
<i>Treat</i>	0.014 (0.477)	0.010 (0.569)
<i>Post</i>	0.057* (1.757)	-0.048* (-1.699)
<i>Ln (total assets)</i>	0.012 (0.760)	0.014 (1.484)
<i>CFO</i>	-0.982*** (-7.660)	-0.885*** (-10.038)
<i>ROA</i>	0.619*** (5.913)	0.648*** (7.592)
<i>R&amp;D</i>	-0.195 (-1.073)	-0.283 (-1.525)
<i>R&amp;D Missing</i>	0.020 (0.499)	-0.004 (-0.161)
<i>Acquisition</i>	-0.020 (-0.652)	-0.040* (-1.960)
<i>Issuance</i>	-0.021 (-0.662)	-0.000 (-0.023)
<i>Institution</i>	0.096 (1.209)	0.026 (0.506)
<i>Ln(Analyst)</i>	-0.021 (-1.057)	-0.018 (-1.362)
<i>Tight covenant</i>	0.007 (0.127)	0.028 (0.883)
<i>Meet/Beat</i>	0.010 (0.367)	0.004 (0.204)
<i>Sales growth</i>	-0.030 (-0.847)	0.008 (0.264)
<i>MB</i>	-0.003 (-0.562)	-0.003 (-0.593)
<i>Net operating assets</i>	0.025** (2.147)	0.008 (0.448)
<i>Sales volatility</i>	-0.029 (-0.464)	0.030 (0.485)
<i>Ln (operating cycle)</i>	-0.033	-0.001

# Subsample analysis I

- Geographically dispersed companies face lower costs when they shift operations to low-corrupt areas (Bai et al., 2015). The low costs of shifting increase a firm's bargaining power when it is faced with bribe solicitation (Svensson, 2003).
- A firm is deemed as a concentrated (dispersed) firm if the proportion of operations in its headquarter state is above (below) sample median in the year.

# Subsample analysis based on geographic concentration

	(1)	(2)
	<i>DA</i>	<i>DA</i>
	Concentrated	Dispersed
<i>Corruption</i>	-0.035*** (-3.023)	-0.007 (-0.778)
<i>Ln (total assets)</i>	0.003 (1.389)	-0.000 (-0.244)
<i>CFO</i>	-0.871*** (-36.314)	-0.812*** (-25.981)
<i>ROA</i>	0.587*** (24.560)	0.607*** (22.538)
<i>R&amp;D</i>	-0.053* (-1.876)	-0.142*** (-3.225)
<i>R&amp;D Missing</i>	0.013** (2.333)	0.009* (1.896)
<i>Acquisition</i>	-0.012** (-2.060)	-0.012** (-2.142)
<i>Issuance</i>	-0.002 (-0.406)	-0.001 (-0.234)
<i>Institution</i>	0.002 (0.229)	-0.012 (-1.081)
<i>Ln(Analyst)</i>	-0.013*** (-3.998)	-0.001 (-0.437)
<i>Tight covenant</i>	0.014** (2.020)	-0.004 (-0.664)
<i>Meet/Beat</i>	0.004 (0.824)	0.001 (0.249)
<i>Sales growth</i>	-0.004 (-0.621)	0.000 (0.067)
<i>MB</i>	-0.001 (-0.998)	-0.001 (-1.252)
<i>Net operating assets</i>	0.005 (1.439)	-0.004 (-0.934)
<i>Sales volatility</i>	0.006 (0.473)	-0.036*** (-2.919)
<i>Ln (operating cycle)</i>	0.000 (0.096)	-0.025*** (-5.481)
<i>Big N</i>	-0.022*** (-3.148)	-0.006 (-0.712)
<i>Leverage</i>	0.040*** (2.706)	0.052*** (4.551)
<i>Per capita income</i>	-0.031*** (-3.322)	-0.005 (-0.552)

# Subsample analysis II

- We hypothesize that the impact of corruption on earnings management is less pronounced for firms with political connections.
- Political connections protect these firm from local officials' expropriations and these firms are less incentivized to manage earnings downwards (Clarke and Xu, 2006).
- Following Cooper et al. (2010) and Kim and Zhang (2015), we use the establishment of corporate political action committee (PAC) to measure political connection.

# Subsample analysis based on political connection

	(1)	(2)
	<i>DA</i>	<i>DA</i>
	With a PAC	Without a PAC
<i>Corruption</i>	0.005 (0.320)	-0.024*** (-3.127)
<i>Ln (total assets)</i>	0.003 (1.127)	-0.000 (-0.146)
<i>CFO</i>	-0.834*** (-15.713)	-0.840*** (-38.582)
<i>ROA</i>	0.523*** (9.207)	0.587*** (32.562)
<i>R&amp;D</i>	-0.076 (-0.895)	-0.093*** (-4.019)
<i>R&amp;D Missing</i>	0.030*** (3.615)	0.009** (2.354)
<i>Acquisition</i>	-0.012 (-1.378)	-0.011*** (-2.696)
<i>Issuance</i>	-0.003 (-0.430)	-0.001 (-0.267)
<i>Institution</i>	-0.020 (-1.017)	-0.001 (-0.156)
<i>Ln(Analyst)</i>	0.001 (0.140)	-0.006*** (-2.859)
<i>Tight covenant</i>	0.003 (0.252)	0.004 (0.896)
<i>Meet/Beat</i>	-0.002 (-0.303)	0.001 (0.416)
<i>Sales growth</i>	0.016 (0.918)	-0.005 (-1.069)
<i>MB</i>	-0.002 (-1.369)	-0.001 (-1.060)
<i>Net operating assets</i>	-0.034*** (-3.441)	0.004 (1.372)
<i>Sales volatility</i>	-0.014 (-0.512)	-0.014* (-1.708)
<i>Ln (operating cycle)</i>	-0.011 (-1.359)	-0.010*** (-3.224)
<i>Big N</i>	-0.014 (-0.681)	-0.012** (-2.299)
<i>Leverage</i>	0.048**	0.049***

# Summary

- We find that firms located in more corrupt states report lower discretionary accruals.
- The negative relation between corruption and discretionary accruals is robust to alternative measures of corruption, restatement-based earnings management measure, the instrumental variable approach, and the difference-in-differences test.
- Firms headquartered in more corrupt states are more likely to choose the accelerated depreciation method, report higher LIFO reserve and depreciation reserve, and have a lower depreciable life estimate.
- The effect of corruption on earnings management is more pronounced for firms whose operations concentrate in their headquarter states and for firms without political connections

# Limitation

- We assume that the choice of headquarter state is exogenous.
- However, since this choice is not a random decision, we can't completely rule out the possibility that the relation between political corruption and earnings management is driven by omitted correlated variables.

Thank you!