

Policy Uncertainty in Hybrid Regimes

Evidence from Firm-level Surveys

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Why are we interested?

- ❑ Economics literature claims policy uncertainty impedes investment & growth (Brunetti et al. etc.)
 - ❑ Surveys show uncertainty appears to matter more to firms than macroeconomic instability, taxation etc.
 - ❑ Existing literature uses survey data on uncertainty as a *proxy* of for actual level of policy instability.
 - ❑ But what does “policy uncertainty” *mean*? Can we trust the data? Can we say what *causes* policy uncertainty?
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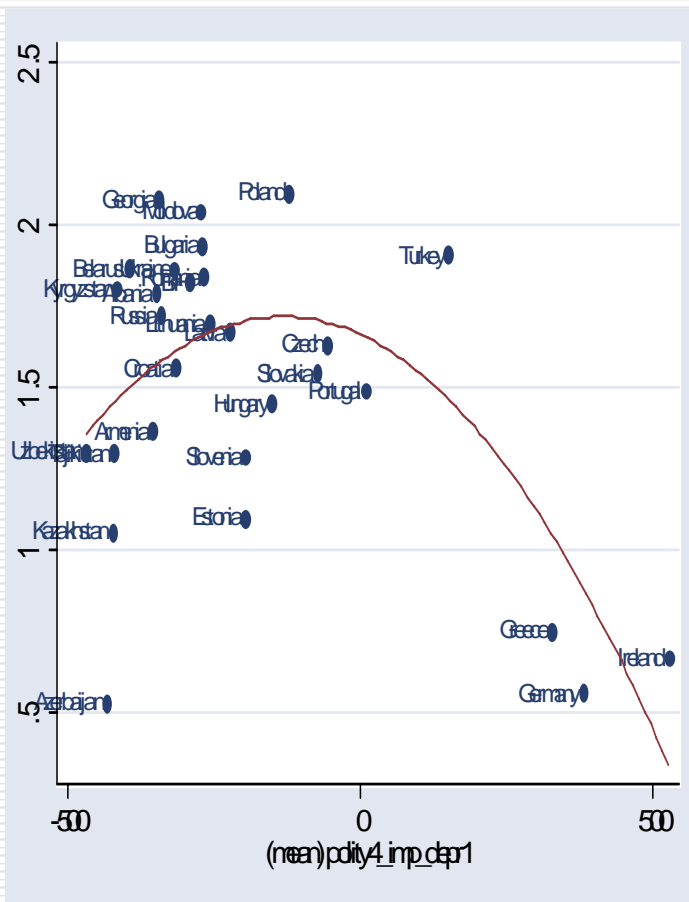
Our Contribution

- We identify polity and firm-level sources of economic and regulatory policy uncertainty using World Bank firm-level survey data
 - We develop a method for identifying and controlling for firm-level reporting biases in polities with limited freedom of speech
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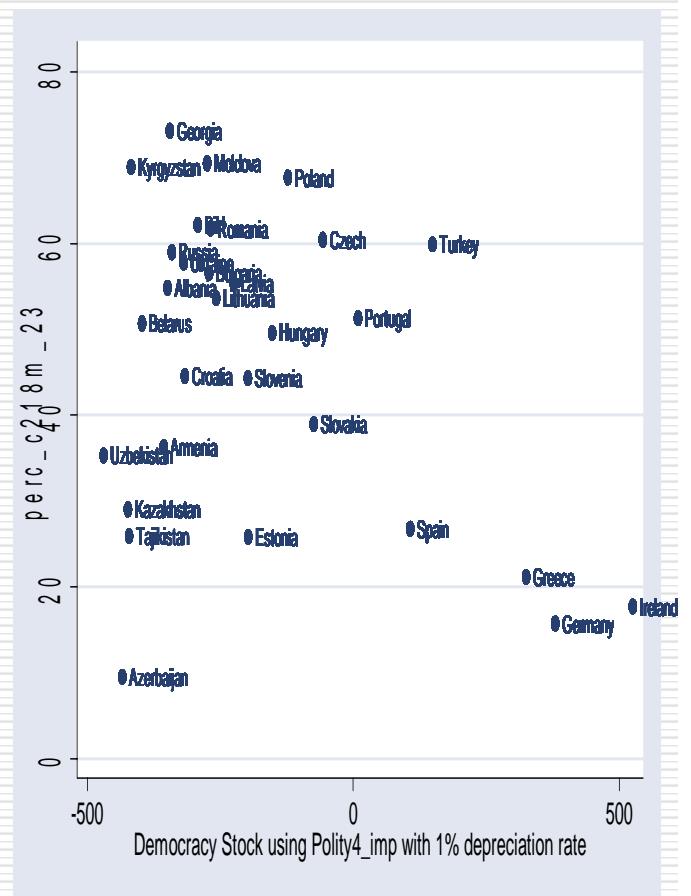
Principal Data Source

- ☐ World Bank-EBRD BEEPS data: around 20,000 firms in 24 transition economies (1999, 2002, 2005)
 - ☐ Main variable of interest:
 - ☐ “To what extent is economic and regulatory policy uncertainty is an obstacle to the operation and growth of your business?”
 - ☐ 0=‘No obstacle’, 1=‘Minor obstacle’, 2=‘Moderate obstacle’, 3=‘Major obstacle’
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The Puzzle – Democracy Stock and Policy Uncertainty



Y axis: mean score for policy uncertainty variable



Y axis: percentage of firms that responded 2='Moderate obstacle', 3='Major obstacle'

Explanations?

- ☐ Increasing uncertainty as endemic to democratization (Hirschman, Przeworski)?
 - ☐ Or, the effect of simultaneous economic and political transitions (McDermott)?
 - ☐ Or, a figment of the data: the effect of exclusion, suppression and lack of anchoring?
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How might we model firms' responses?

$$Y(\text{firm's response}) = Y(\text{objective}) + Y(\text{subjective}) + \epsilon$$

	Country-level	Firm-level
Actual level of policy uncertainty	Volatility in economic policy Political regimes Electoral polarization	Sector Ownership Exporters Asset Specificity
Perceived/reported level of uncertainty	Freedom of expression and press	Manager's level of education [information] Firm age, ownership (foreign vs. domestic) [basis for comparison]
Immeasurable/lack data	Culture, risk-taking attitudes, etc.	Manager's personality, gender, experience, nationality

Macro-Politics & Policy

Uncertainty

- Hypothesize that policy uncertainty is related to nature of elite contestation in hybrid regimes:
 - Expect reported uncertainty to be lower when incumbent stays in office
 - Expect reported uncertainty to be higher when contestation is programmatic as opposed to personalized
 - Data on incumbency from Hale (2005) and media reports
 - Data on political competition from media reports and expert opinion (Freedom House etc.)
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Main Results

Polity and Firm-level Sources of Policy Uncertainty (Ordered Probit)

	(1)	(2)	(3)	(4)
Incumbent	-0.228 (10.56)**	-0.214 (9.87)**	-0.235 (6.12)**	-0.126 (3.14)**
Democracy Stock	0.073 (3.93)**	0.085 (4.56)**	-0.010 (0.26)	0.046 (1.17)
<i>Incumbent Changed Due to:</i>				
Programmatic	0.217 (8.73)**	0.231 (9.28)**	0.272 (4.73)**	0.312 (4.21)**
Corruption	0.006 (0.28)	0.005 (0.21)	0.042 (0.81)	0.037 (0.52)
<i>Firm and Industry-level Attributes:</i>				
Export	-0.077 (3.20)**	-0.065 (2.69)**	-0.058 (1.50)	-0.127 (2.85)**
No Lobbying	-0.259 (10.41)**	-0.321 (7.63)**	-0.249 (5.03)**	
Ownership	-0.020 (0.74)	-0.007 (0.28)	0.100 (2.22)*	0.076 (1.44)
Prev. Govt-owned			-0.085 (2.13)*	0.072 (1.45)
% Govt-owned				-0.006 (1.31)
Firm Size	-0.003 (0.25)	-0.025 (1.92)	-0.017 (0.75)	0.026 (1.02)
Firm Age	0.001 (2.61)**	0.001 (1.58)	0.000 (0.40)	0.002 (1.84)
Asset Specificity 1 (Training)			-0.000 (1.74)	
Asset Specificity 2 (R&D)				0.006 (0.15)
Observations	14962	14941	4647	4641

Absolute value of z statistics in parentheses

* significant at 5%; ** significant at 1%

Main Results (controlling for economic policy volatility)

Polity and Firm-level Sources of Policy Uncertainty (Controlling for Economic Policy Volatility)				
	(1)	(2)	(3)	(4)
Incumbent Stays	-0.142 (5.07) **	-0.129 (4.59) **	-0.185 (5.02) **	-0.170 (3.38) **
Democracy Stock	0.221 (9.84) **	0.238 (10.57) **	0.181 (5.60) **	0.147 (3.21) **
<i>Incumbent Changed Due to:</i>				
Programmatic	0.408 (14.77) **	0.429 (15.44) **	0.581 (10.70) **	0.473 (7.24) **
Corruption	0.036 (1.43)	0.036 (1.43)	-0.080 (1.67)	0.006 (0.11)
Volatility	2.473 (12.73) **	2.506 (12.88) **	2.276 (8.16) **	2.262 (5.92) **
Export	-0.119 (4.18) **	-0.112 (3.95) **	-0.145 (3.96) **	-0.125 (2.74) **
Ownership	-0.014 (0.42)	-0.002 (0.06)	0.062 (1.42)	0.105 (1.95)
Prev. Govt-owned			-0.110 (2.67) **	-0.132 (2.64) **
Firm Size	-0.036 (2.36) *	-0.061 (3.92) **	-0.012 (0.57)	-0.017 (0.62)
Firm Age	0.002 (3.23) **	0.001 (2.24) *	0.002 (2.51) *	0.002 (1.37)
No Lobbying		-0.293 (9.74) **		
Asset Specificity				-0.088 (1.83)
Observations	10224	10213	6131	3142
Absolute value of z statistics in parentheses				
* significant at 5%; ** significant at 1%				

Other Results

- Reported level of uncertainty does not systematically differ between foreign vs. domestic firms.
 - More established firms express greater concern over policy uncertainty; but sector and asset specificity have no significant impact
 - Privatization does not have systematic effects on reported level of uncertainty
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But - Beware Potential Biases!

- ❑ *Anchoring:*

- ❑ respondents genuinely mean different things - ‘differential item functioning’ (DIF)
- ❑ solution: use vignettes to anchor responses (King et al. 2003)

- ❑ *Exclusion:*

- ❑ respondents don’t answer sensitive questions – missing data bias
- ❑ solution: triangulate using proxies (Berinsky 2002)

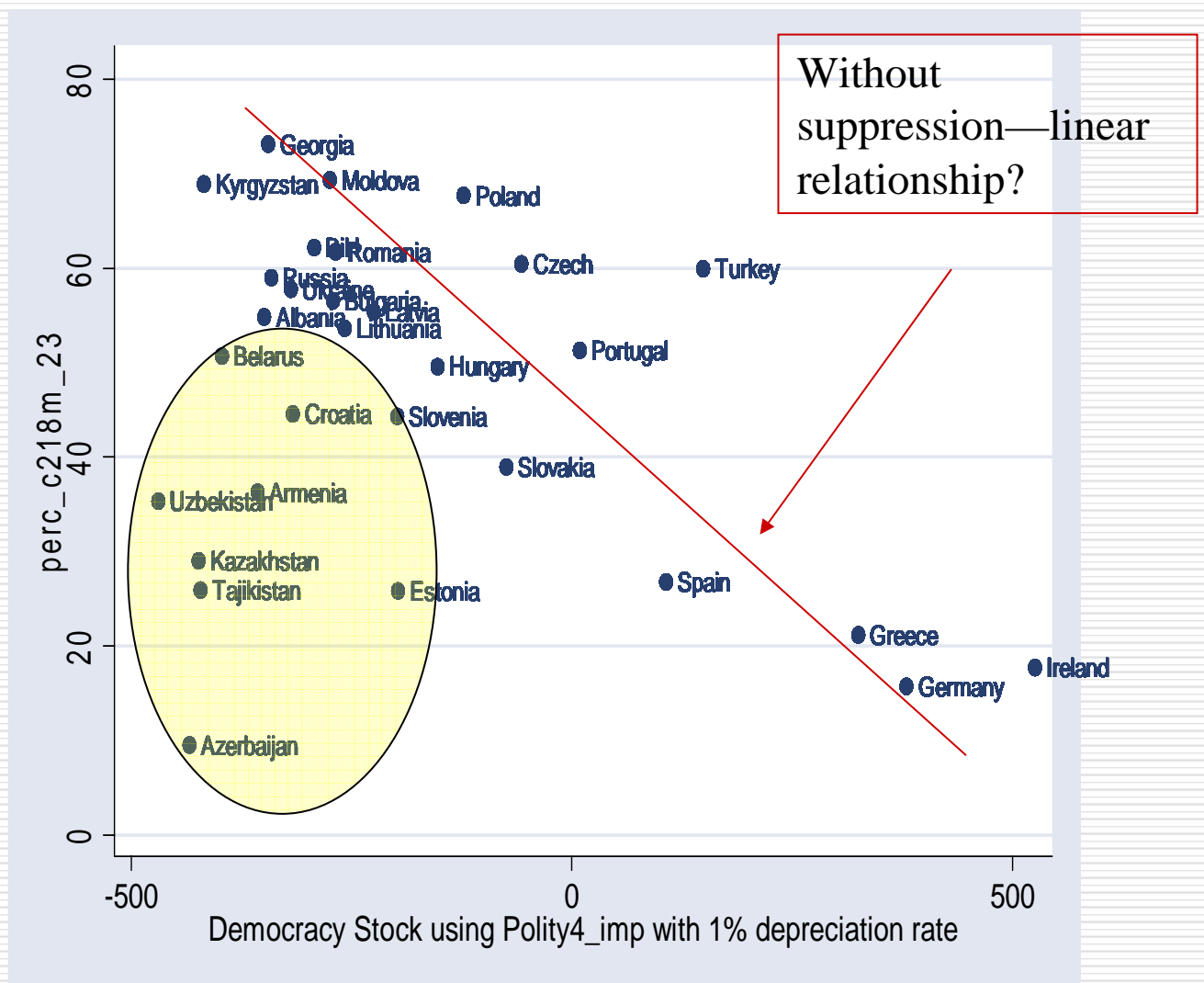
- ❑ *Suppression:*

- ❑ respondents deliberately give misleading replies (out of fear etc.)
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Identifying Suppression Bias

- ☐ Select politically sensitive questions in BEEPs (tax evasion, policy uncertainty, quality of government service)
 - ☐ Regress firms' subjective responses on 'objective' outcome-based proxies, controlling for firm level/managerial attributes
 - ☐ Correlate residuals with measures of press freedom & civil liberties
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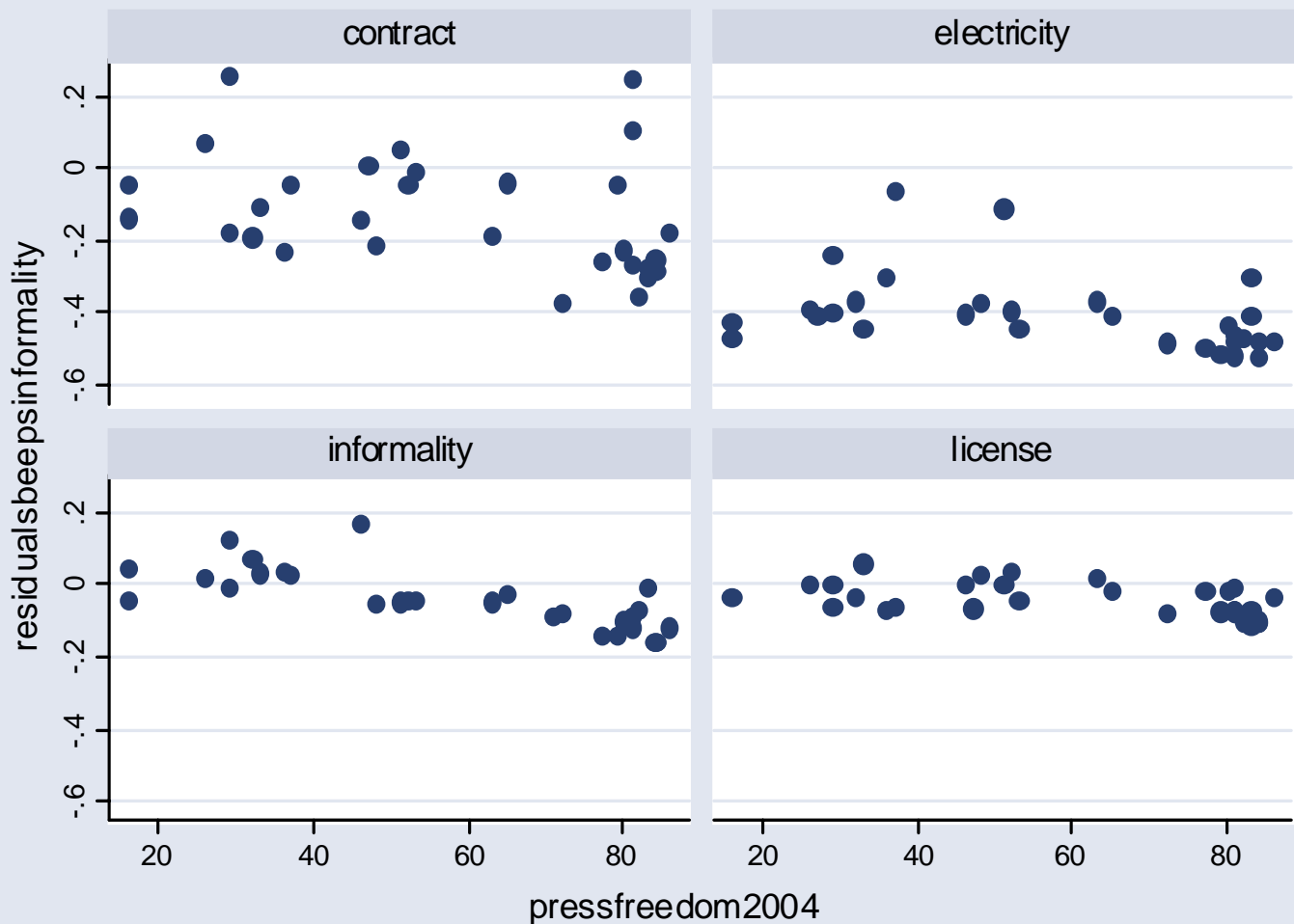
For example—suppose there is suppression bias



Matching subjective & objective data

<i>'Subjective' variable</i>	<i>'Objective' variable</i>
Percent sales declared for tax purposes (i.e., tax evasion)	Size of informal economy (Schneider)
'Business licenses' as obstacle to investment	Obtaining licenses (days) (DB)
'Judiciary' as obstacle to investment	Enforcing contracts (days) (DB)
'Electricity' as obstacle to investment	Percent electricity losses during transmission (WDI)

Suppression Bias- Residuals



Remember: if residuals are randomly distributed along the zero line, there is no systematic suppression bias. Positive relationship would indicate expected bias.

Residuals & Political Environment

	Civil Liberties	Press Freedom
Informality	0.16 (0.52)	0.19 (0.44)
Contract	0.63** (0.00)	0.46* (0.05)
License	-0.05 (0.81)	-0.24 (0.33)
Electricity	-0.01 (0.97)	-0.01 (0.95)

To Recap...

- ❑ Reported policy uncertainty higher in hybrid regimes; positively associated with programmatic incumbent turnover
 - ❑ No clear evidence of suppression bias: firms in authoritarian regimes can be “over critical”
 - ❑ Inverted U-shaped relationship *may* be genuine, though cannot rule out other biases
 - ❑ Better educated managers provide more ‘objective’ assessments of IC constraints
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What's Next?

- ☐ More systematic coding of programmatic vs. personalized competition.
 - ☐ Take into account time between surveys and elections (daily data)
 - ☐ Apply this objective-subjective matching to other issue areas (quality of government, property rights protection)
 - ☐ The role of information, such as media.
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