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The political economy of macroprudential policy

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Macroprudential policy –Research frontier

Limited research; predominantly focused on the **effects and efficacy of measures**

- "little assessment of the institutional impact of macroprudential policy [...],despite the strong likelihood that **regulated entities** will resist tighter regulation and that conflicts over macroprudential policy will be **politically mediated**"(Goodhart2014:281)
- Macroprudential policy redefines the role of public authority over private interest by **increasing the powers of technocratic regulators** to intervene in financial market activities (Baker 2015; Persaud2009; Alessandri& Haldane2009; Turner 2011
- **Interactions** of macroprudential policy with other policy areas are not well understood (Bank of England 2015).
- "More explicitly and conspicuously **distributional** than monetary policy"(Baker 2015:2)

Policy challenge: What is the most appropriate institutional setup for macropru?

Research questions

Project uses a dataset on EU countries' macroprudential policy stances and a variety of country specific factors to answer the following research questions:

–Do **contextual & structural** influence policy stances?

–Do **institutional & governance arrangements** matter?

Baseline assumption: **Inaction bias** (Tarullo2008; Verdier2013; Buiter2012; etc.)

–Time inconsistencies

–Distributional effects

Hypotheses

A	**Contextual & structural factors**
H1	High **banking sector structural power** lowers the likelihood of more intense policy stances
H2	A large **market share** of domestic banks increases the likelihood of more intense policy stances
H3	More intense policy stance are less likely in economies with large **share of OFIs** in domestic lending
H4	**Crises experiences** increases likelihood of more intense policy stances
B	**Institutional & governance arrangements**
H5	More intense policy stances are more likely when responsibility rests with **single authority**
H6	**Central banks** more likely to pursue more intense policy stances than other macroprudential authorities
H7	More intense policy stances are more likely for authorities with more **independence**
H8	Strong **accountability** measures increases likelihood of more intense policy stances
H9	More extensive **transparency** requirements increases likelihood of more intense policy stances

Main findings

- Macroprudential policy stances not affected by **political pressure & interest group resistance**.
- More intense policy stances in countries where financial systems are depending on **foreign banks, or lending from non-bank intermediaries**.
- **Single authorities** associated with more intense policy stances
- Strong **transparency & independence** arrangements influence policy stances.
- Countries based in the **Euro zone** tend to have less intense policy stances, suggesting that **policy frameworks that are multi-layered & complex pose tricky conundrums** on how to ensure sufficient institutional autonomy, policy capacity and discretion among macroprudential authorities.

Methodology & data

Dependent variable(s): Annual Change in policy stance

Independent variables:
Banking sector structural characteristics
Institutional arrangements
Governance arrangements

Control variable: Annual proxy for systemic risk (credit & assets to GDP)

–Omissions due to multicollinearity

–No added explanatory power from additional variables (capital levels, liquidity etc.)

–Euro-zone

Policy measure	Scoring
Capital requirements (CR)	$\frac{(CR-8)}{8}$
Liquidity ratio	%
Funding ratio	%
Loan to value (LTV)	$\frac{(100-LTV)}{100}$
Loan to income (LTI)	$\frac{(5-LTI)}{5}$
Risk weights residential real estate (RW RRE)	$\frac{(RW-35)}{35}$
Risk weights commercial real estate (RW CRE)	$\frac{(RW-50)}{50}$
Other measures	0.25

$$\Delta Policystance_i = f(c; \Delta systemicrisk_i; \Delta explanatoryvariables_i) + \mu_i$$

μ_i = random error term.

Results: Contextual & structural factors

H1 High **banking sector structural power** lowers the likelihood of more intense policy stances

H2 A large **market share** of domestic banks increases the likelihood of more intense policy stances

H3 More intense policy stance are less likely in economies with large **share of OFIs** in domestic lending

H4 **Crises experiences** increases likelihood of more intense policy stances

Equation no.	1	2	3	4		6	7	8	9	10	11	12
C	0.214	-0.385	1.848	0.595	-1.668	0.184	0.339	-0.424	1.801	0.523	0.136	0.134
	(0.022)**	(0.440)	(1.448)	(0.251)*	(0.737)*	(0.242)	(0.036)**	(0.447)	(1.453)	(0.250)*	(0.095)	(0.262)
Credit	-0.132	-0.150	-0.165	-0.600	-0.806	-0.083	0.020	-0.166	-0.183	-0.715	-0.061	-0.100
	(0.465)	(0.491)	(0.492)	(0.419)	(0.544)	(0.498)	(0.449)	(0.493)	(0.494)	(0.416)	(0.387)	(0.500)
Assets	0.037	0.019	0.021	0.023	0.048	0.023	0.047	0.016	0.018	-0.007	0.085	0.020
	(0.083)*	(0.080)*	(0.080)*	(0.109)	(0.151)	(0.087)*	(0.080)	(0.081)	(0.081)	(0.108)	(0.102)	(0.087)
EUROZONE							-0.196	0.076	0.081	0.238	-0.048	0.076
							(0.045)**	(0.148)	(0.147)	-0.111	(0.060)*	(0.149)
Herfindahl index (-1))		-0.238						-0.234				
		(0.185)						(0.186)				
Top 5 market share (-1)			-0.412						-0.413			
			(0.357)						(0.358)			
Domestic market share (-1)				-0.009						-0.012		
				(0.005)***						(0.005)***		
Share of OFI lending (-1)					0.555						0.020	
					-0.223						(0.025)**	
#Crises						0.022						0.022
						(0.173)						(0.174)
Observations	234	232	233	151	114	234	234	232	233	151	130	234
R-squared	0.278	0.405	0.402	0.361	0.590	0.461	0.335	0.405	0.403	0.385	0.432	0.462
Adj. r-squared	0.245	0.287	0.285	0.208	0.462	0.356	0.301	0.285	0.292	0.231	0.38	0.362
F-statistic	8.579	3.451	3.430	2.359	4.588	4.389	10.154	3.357	3.338	2.503	8.164	4.267
Prob(F-stat)	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Results: Institutional & governance arrangements (1)

H5 More intense policy stances are more likely when responsibility rests with **single authority**

H6 **Central banks** more likely to pursue more intense policy stances than other macroprudential authorities

Dep. variable Equation no.	Score 25	Score 26	Score 30	Score 31
C	0.260 (0.054)**	0.300 (0.150)*	0.472 (0.078)**	0.661 (0.181)**
Credit	-0.124 (0.869)	-0.056 (1.332)	0.159 (0.826)	0.143 (1.251)
Assets	0.354 (0.371)	0.158 (0.498)	0.282 (0.352)	0.144 (0.467)
EUROZONE			-0.282 (0.073)*	-0.376 (0.119)
Single	0.111 (0.072)*		0.072 (0.070)*	
Central bank		0.102 (0.169)		-0.053 (0.166)
Observations	132	76	132	76
R-squared	0.244	0.214	0.329	0.319
Adj. r-squared	0.181	0.09	0.268	0.202
F-statistic	3.900	1.766	5.351	2.731
Prob(F-stat)	0.000	0.085	0.000	0.006

Results: Institutional & governance arrangements (2)

H7 More intense policy stances are more likely for authorities with more **independence**

H8 Strong **accountability** measures increases likelihood of more intense policy stances

H9 More extensive **transparency** requirements increases likelihood of more intense policy stances

Dep. variable Equation no.	Score 40	Score 41	Score 42	Score 43	Score 44	Score 45	Score 46	Score 47
C	0.330 (0.086)**	0.350 (0.163)*	0.361 (0.093)**	0.247 (0.077)**	0.507 (0.093)**	0.360 (0.152)*	0.393 (0.101)**	0.601 (0.079)**
Credit	-0.529 (0.943)	-0.517 (0.949)	-0.513 (0.942)	-0.349 (0.935)	-0.102 (0.892)	-0.179 (0.888)	-0.004 (0.877)	0.035 (0.896)
Assets	0.419 (0.391)	0.423 (0.393)	0.421 (0.392)	0.327 (0.391)	0.319 (0.368)	0.357 (0.366)	0.360 (0.362)	0.373 (0.370)
EUROZONE					-0.309 (0.080)**	-0.343 (0.084)**	-0.402 (0.092)**	-0.329 (0.083)**
Independence - operational	0.033 (0.098)*				0.065 (0.092)*			
Independence - financial		0.007 (0.170)				0.235 (0.168)		
Accountability			-0.007 (0.105)				0.263 (0.129)	
Transparency				0.150 (0.090)*				-0.086 (0.084)*
Observations	116	116	116	116	116	116	116	116
R-squared	0.226	0.225	0.225	0.245	0.324	0.333	0.347	0.327
Adj. r-squared	0.152	0.151	0.151	0.173	0.252	0.263	0.278	0.256
F-statistic	3.066	3.051	3.052	3.411	4.527	4.724	5.015	4.604
Prob(F-stat)	0.002	0.002	0.002	0.001	0.000	0.000	0.000	0.000

Annex

Macroprud. policy stances	**Variable name & operationalization**	**Data sources**
National macroprudential policy intensity	Score; ExSIB - Change in policy intensity (see Annex A)	ESRB Macroprudential measures database https://www.esrb.europa.eu/national_policy/html/index.en.html
Contextual & structural factors	**Operationalization**	**Data sources**
(H1) Banking sector structural power	Herf - Herfindahl index (%) Top5 - Market share of 5 largest institutions (%)	European Central Bank Statistical Data Warehouse (ECB SDW)
(H2) Market share of domestic banks	Dom - Market share of dom. institutions (%)	ECB SDW
(H3) Share of OFIs in domestic lending	OFI - Share of OFIs in domestic lending (%)	ECB SDW
(H4) Domestic crises experiences	#Crises - No of domestic financial crisis 1970-2017	Lo Duca et al. (2017). A new database for financial crises in European countries (No. 194), ECB.
Institutional & governance arrangements	**Operationalization**	**Data sources**
(H5) Single authority	Single(dummy)	ESRB Recommendation on the macro-prudential mandate of national authorities (ESRB/2011/3) Follow-up Report – Overall assessment, June 2014. (not available online).
(H6) Role of central bank	sCB (desCB) (dummy) CBr - ESRB B3 Role of central bank (dummy variable)	
(H8) Operational independence	OpInd - ESRB E1 Oper. Indep. (dummy)	
(H10) Accountability measures	Acc - ESRB D3 Acc. to Legislator (dummy)	
(H11) Transparency requirements	Tra - ESRB D1 Public decisions (dummy)	
Control variables	**Operationalization**	**Data sources**
Credit to GDP	Credit - Credit/GDP (%)	ECB SDW (all countries but NO) BIS for NO
Domestic assets to GDP	Assets - Domestic bank assets/GDP (%)	ECB SDW
Leverage	Leverage - -(Total equity/total assets) (%)	ECB SDW