Rules and Discretion(s) in Prudential Regulation and Supervision: Evidence from EU Banks in the Run-Up to the Crisis

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1. The Case for a Level-Playing Field

Key Aim for Establishing the SSM

- Ensure consistent supervision across all the banks in the participating countries.

Research Questions

1. May *heterogeneities in prudential regulation* across EU countries have contributed to differences – at national level – in bank risk-taking and financial stability?
2. To reduce bank distress probability, should the prudential framework be based more on *rules or discretion*?

2. Prudential Regulation in the EU

Basel II/CRD [Dir. 48/2006 & Dir. 49/2006]

The key principles were:

1. established at the EU-level through directives;
2. but implemented through national legislation.

⇨ Large differences for banks in distinct countries

Basel III/CRD4 [Reg. 36/2013 & Dir. 575/2013]

- Single Rulebook
- Still some national options and discretions

⇨ Trend towards more uniform regulatory framework

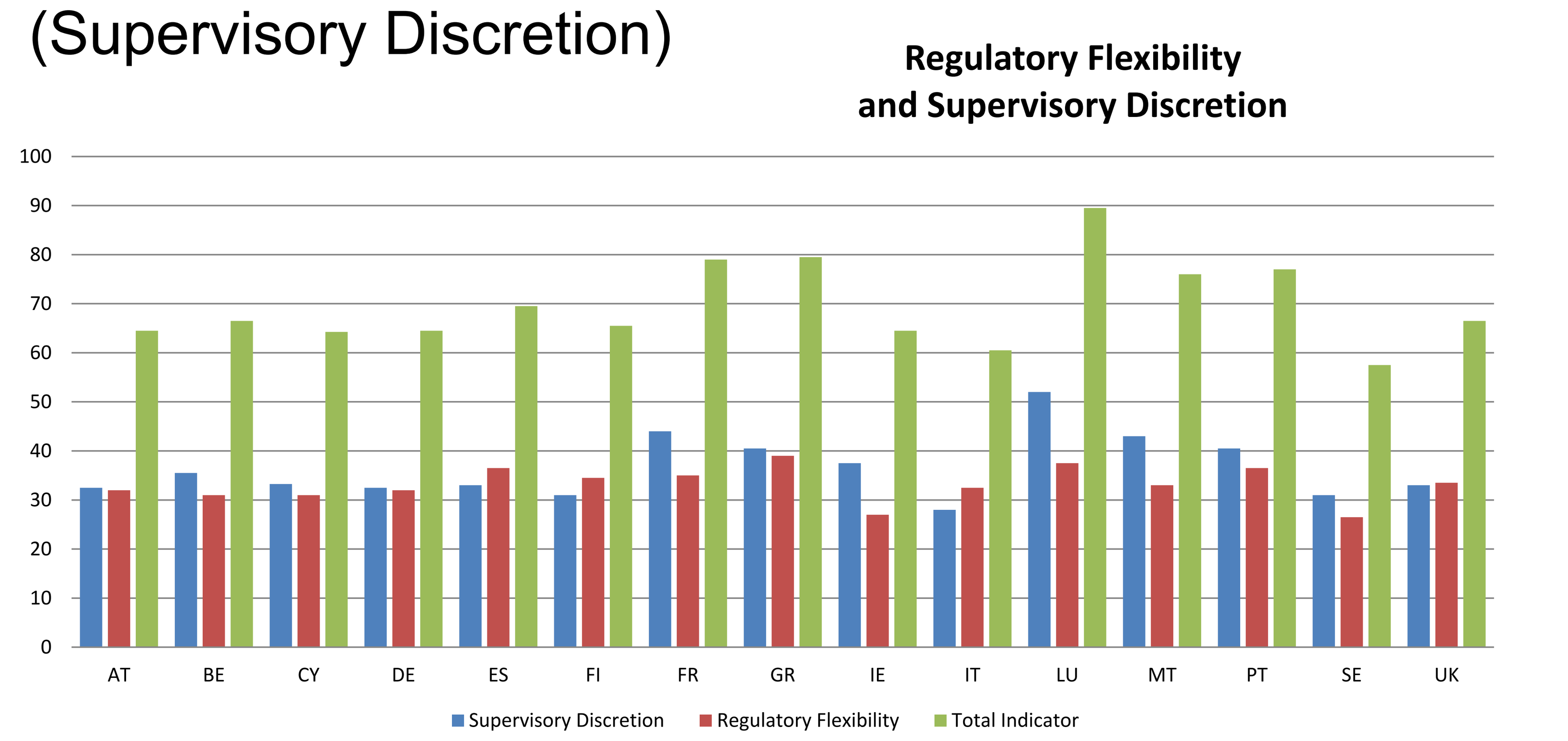
3. A New Indicator for Prudential Regulation

Focus on the CRD Implementation

Two types of **Options and Discretions** (O&Ds)

General O&Ds	**Case-by-Case O&Ds**
National Legislators determine the rules applying to ***all banks*** without additional assessment	Supervisory Authorities conduct ***bank-specific*** assessment to authorise more favourable regulatory treatment.
REGULATORY FLEXIBILITY	**SUPERVISORY DISCRETION**

- CEBS (now EBA) identified 152 O&Ds in the CRD
- We construct a **quantitative indicator** based on the CRD implementation by EU countries in all the areas.
- Higher value of the indicator = more permissive treatment for all banks (Regulatory Flexibility) or some of them (Supervisory Discretion)



4. Dataset

- Consider 696 banks in 17 EU countries (EU15, MT, CY) with at least 5bn € of total assets in the period 2000-2008

1. Bank balance sheet variables (Bankscope)
2. Bank-level measures of crisis support (Recapitalisations, Liabilities Guarantees, Asset Relief, Liquidity Facilities)
3. Country-level indicator of prudential regulation
4. Country-level macro variables

5. Empirical Analysis

- **Hypothesis:** Did banks established in countries with more flexible regulation and/or more supervisory discretion experience higher need for crisis public support?
- **Strategy:** Define a dummy for banks receiving support and estimate a logit model for the probability of receiving a government bail-out during the years 2008-2011

6. Baseline Specification: Empirical Results

MARGINAL EFFECTS OF THE LOGIT ESTIMATION

VARIABLES	(1) SUPP	(2) RECAP	(3) LIQSUPP	(4) RECAP	(5) LIQSUPP	(6) RECAP	(7) LIQSUPP
INDICATOR							
Overall Indicator	**0.00583****	**0.00435****	**0.00484*****				
	(0.00234)	**(0.00211)**	**(0.00129)**				
Supervisory Discretion				**0.00434**	**0.00469*****		
				(0.00285)	**(0.00147)**		
Regulatory Flexibility						**0.0114***	**0.0284*****
						(0.00628)	**(0.00553)**
BANK BALANCE SHEET							
Size	0.0867***	0.0833***	0.00626	0.0830***	0.00645	0.0821***	0.00263
	(0.0104)	(0.00973)	(0.00554)	(0.00966)	(0.00572)	(0.0100)	(0.00504)
Loans/Total Assets	0.00395***	0.00214***	0.00183***	0.00204**	0.00176***	0.00143*	0.000923**
	(0.000926)	(0.000807)	(0.000581)	(0.000838)	(0.000617)	(0.000733)	(0.000441)
RoE	-0.00114***	-0.000417	-0.000118	-0.000407	-0.000130	-0.000340	-0.000153
	(0.000422)	(0.000328)	(0.000164)	(0.000330)	(0.000183)	(0.000341)	(0.000113)
LiqAssets/Depos ST Funding	0.000241	-0.00101**	-0.000472	-0.00106**	-0.000495	-0.00107**	-0.000568
	(0.000291)	(0.000431)	(0.000417)	(0.000442)	(0.000419)	(0.000437)	(0.000395)
Gover Secur/Total Assets	0.00232	0.00199	0.00182**	0.00215*	0.00198**	0.00143	0.000823
	(0.00154)	(0.00131)	(0.000754)	(0.00128)	(0.000794)	(0.00130)	(0.000587)
Equity/Total Assets	-0.00635	-0.00395	-0.000131	-0.00341	0.000303	-0.00613	-0.00160
	(0.00439)	(0.00418)	(0.00159)	(0.00423)	(0.00148)	(0.00419)	(0.00102)
MACRO CONTROLS	YES	YES	YES	YES	YES	YES	YES
Observations	3,228	3,228	3,228	3,228	3,228	3,228	3,228

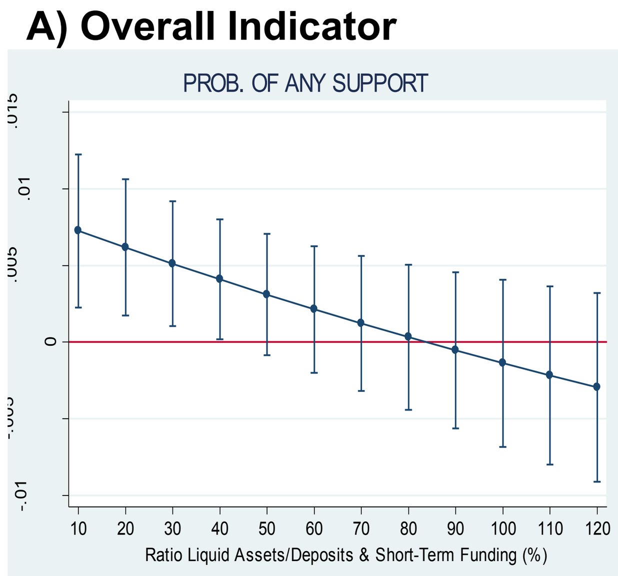
1. The Table reports the marginal effects of the logit estimation for the probability of:
- any support (SUPP)
- recapitalis. (RECAP)
- liquidity support (LIQSUPP).

2. Robust (bank-cluster) standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

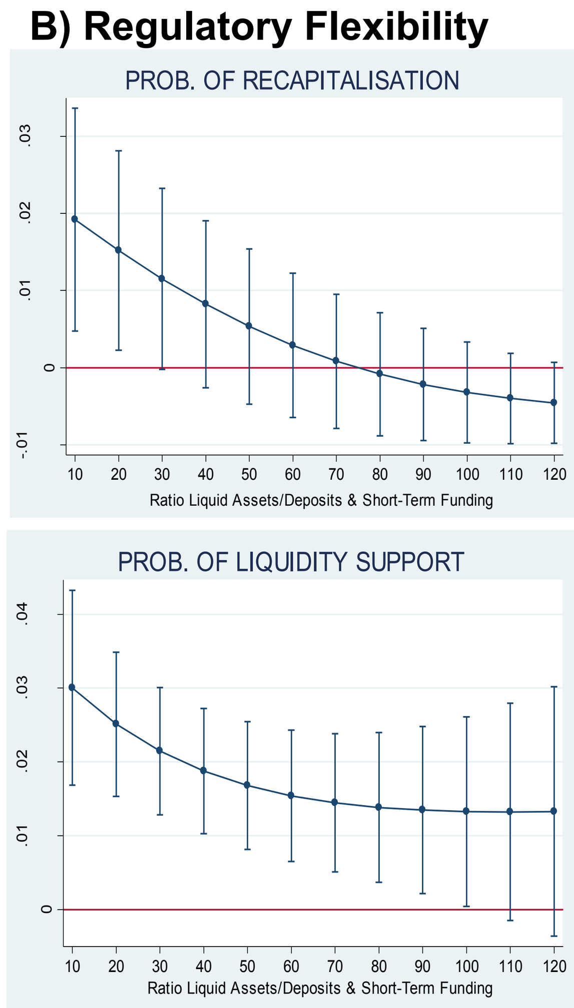
7. Bank Heterogeneity: Empirical Results

1. Interaction with Liquidity (Liquid Assets/Deposits& Short-Term Funding)

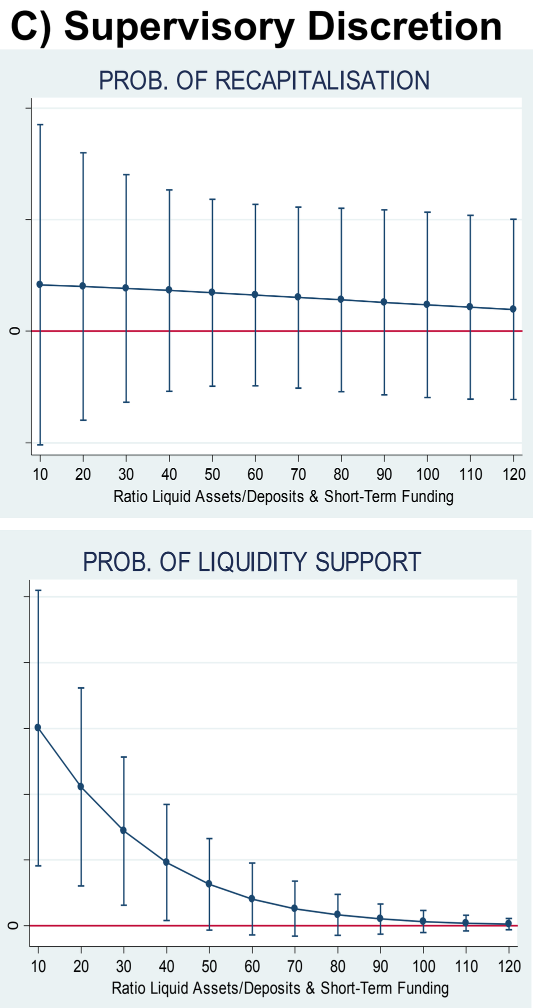
A) Overall Indicator



B) Regulatory Flexibility



C) Supervisory Discretion



1. The plots display the average marginal effect (AME) of the Indicator on the prob. of support for different values of the Liquidity Ratio (using 95% Conf. Int.).

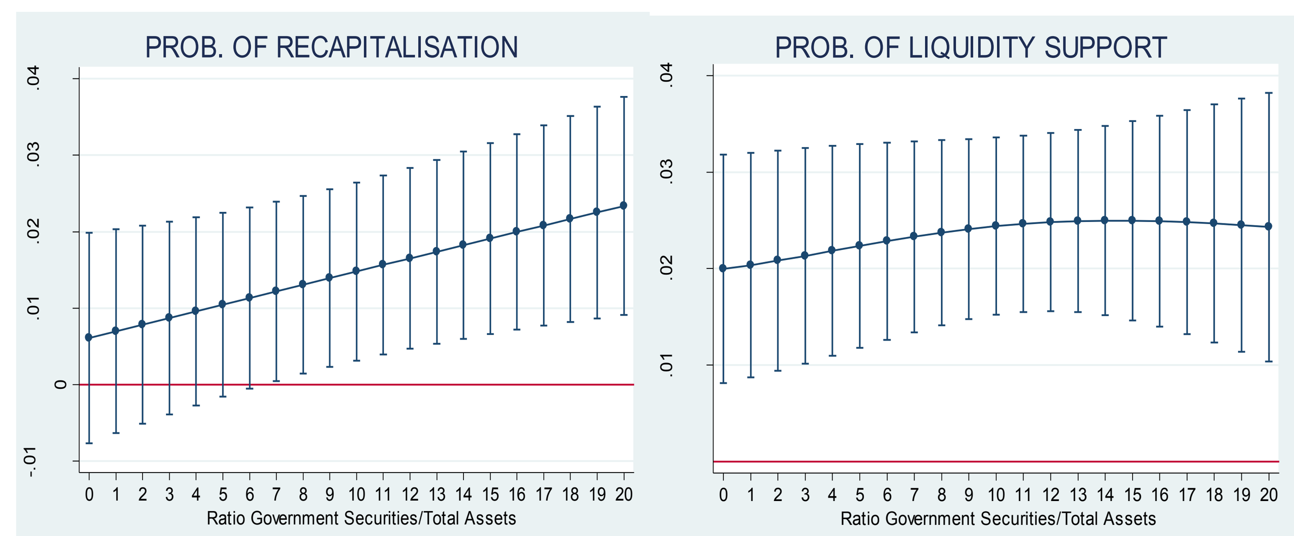
2. Estimation: Logit Regression (std. errors clustered by bank)

2. Interaction with Government Bonds (Gov. Securities/Total Assets)

Regulatory Flexibility

1. The plots display the average marginal effect (AME) of the Indicator on the prob. of support for values of the GovSec Ratio (95% Conf. Int.).

2. Estimation: Logit Reg (bank-clustered std. err.)



8. Conclusions

1. **Higher probability of crisis support** for banks in countries with ***more flexible regulation*** or ***supervisory discretion***.
2. **Rules versus Discretion**
   - *Regulatory Flexibility* may imply larger increase in the prob. of crisis support than *Supervisory Discretion*
3. **Heterogeneity across banks**
   - *Larger increase* in the support prob. *for banks* subject to laxer prudential framework if they are *more financially fragile* (subject to higher liquidity constraints).

The SSM at 1. *Frankfurt am Main, 3-4 February 2016*