



The Real Effects of Relationship Lending

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DISCUSSION

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ECB conference “Monetary Policy Pass-Through and Credit Markets” – 27/28 October 2016



Contribution

- **Very interesting and well-written paper!**
- **Careful analysis based on information at bank-firm level for Italy**
- **Main findings**
 - 1. After Lehman shock, banks provided more credit (term loans) to relationship borrowers**
 - 2. Insulation effects of relationship lending weaker after sovereign debt crisis, especially for banks with higher leverage**
 - 3. Firms used insulation to maintain stronger investment and employment growth**
 - 4. After sovereign debt crisis: firms mainly reduced investment (not employment)**

Outline of discussion

- 1. Does it matter for macroeconomic fluctuations?**
- 2. Are Lehman and sovereign debt crisis source of discrete breaks?**
- 3. Comments on the specification(s)**
- 4. Other comments**

Does it matter for macroeconomic fluctuations?

- **Impressive way to address possible endogeneity: identification of relationship lending based on firms borrowing from at least two banks**
 - **Nevertheless still endogeneity possible: rise in lending may be demand driven**

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 - Similar as analysis of satisfaction in marriage based on sample of persons that have an affair with at least one other person...
 - ... somehow I am worried that results of such an analysis are not representative
- **Do banks effectively increase total lending or is there just substitution?
What is the quality of the borrowers and investment projects?**

Does it matter for macroeconomic fluctuations?

- **Some implications that could be verified at macro level:**
 - ***“...following the Lehman default shock, firms that had longer banking relationships used the insulation to maintain stronger investment and employment growth.”***
 - ***However, the insulation effect provided by relationship banks weakened after the European sovereign debt crisis, especially for those banks with a greater leverage. As a result firms reacted mainly by reducing investment, while we do not find a similar reduction to employment growth.”***
 - ***“...our results suggest that firms substituted capital with labour as the cost of longer-term loans became relatively more expensive.”***

Does it matter for macroeconomic fluctuations?

- However, macroeconomic correlation wages and investment growth very similar in both periods...

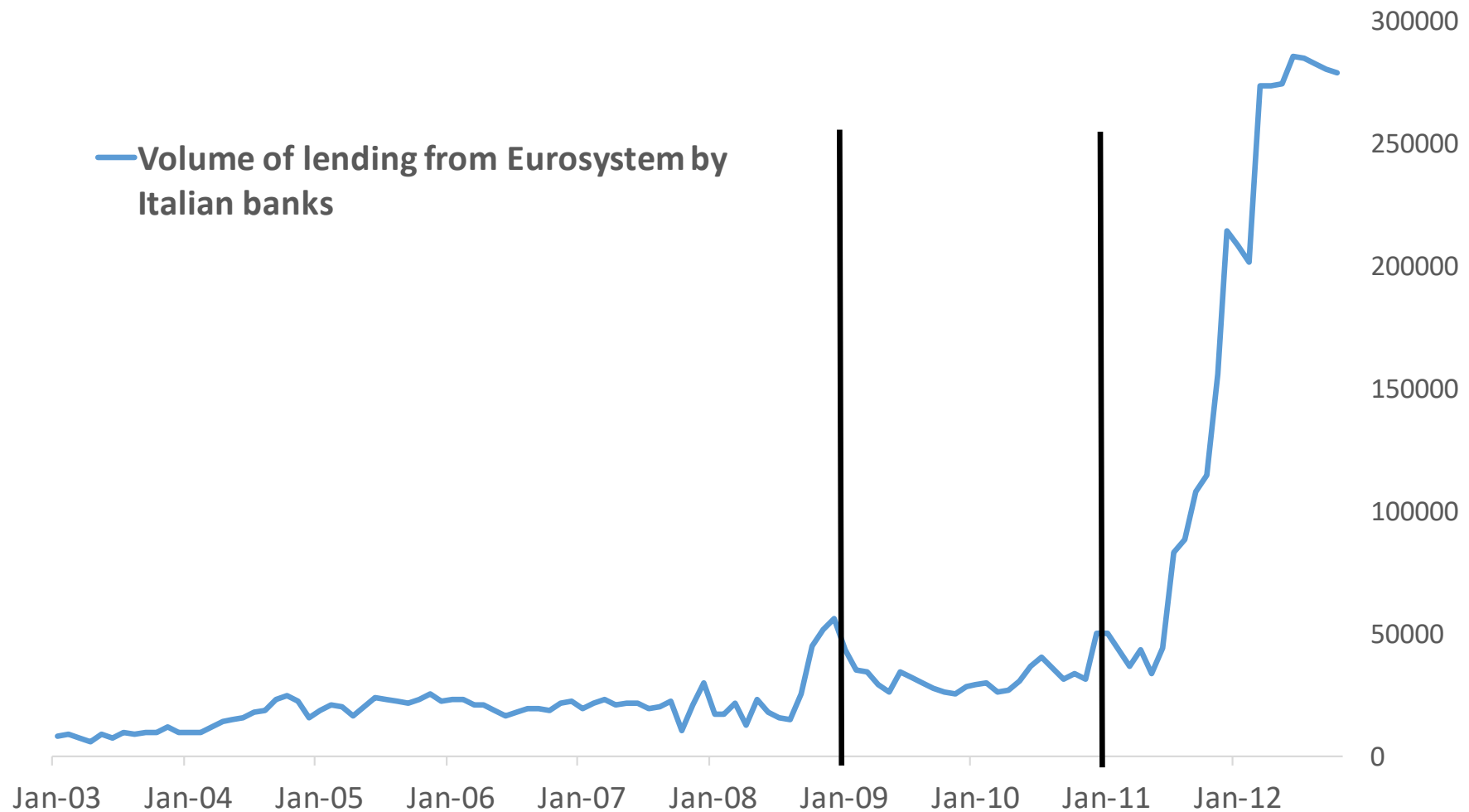


Are Lehman and sovereign debt crisis source of break?

- **Two “discrete” breaks in relationship lending are considered in paper: Lehman shock (2009) and sovereign debt crisis (2011)**
 - *“...the European sovereign debt crisis, arguably more systemic in nature compared to the external funding shock following the Lehman default.”*

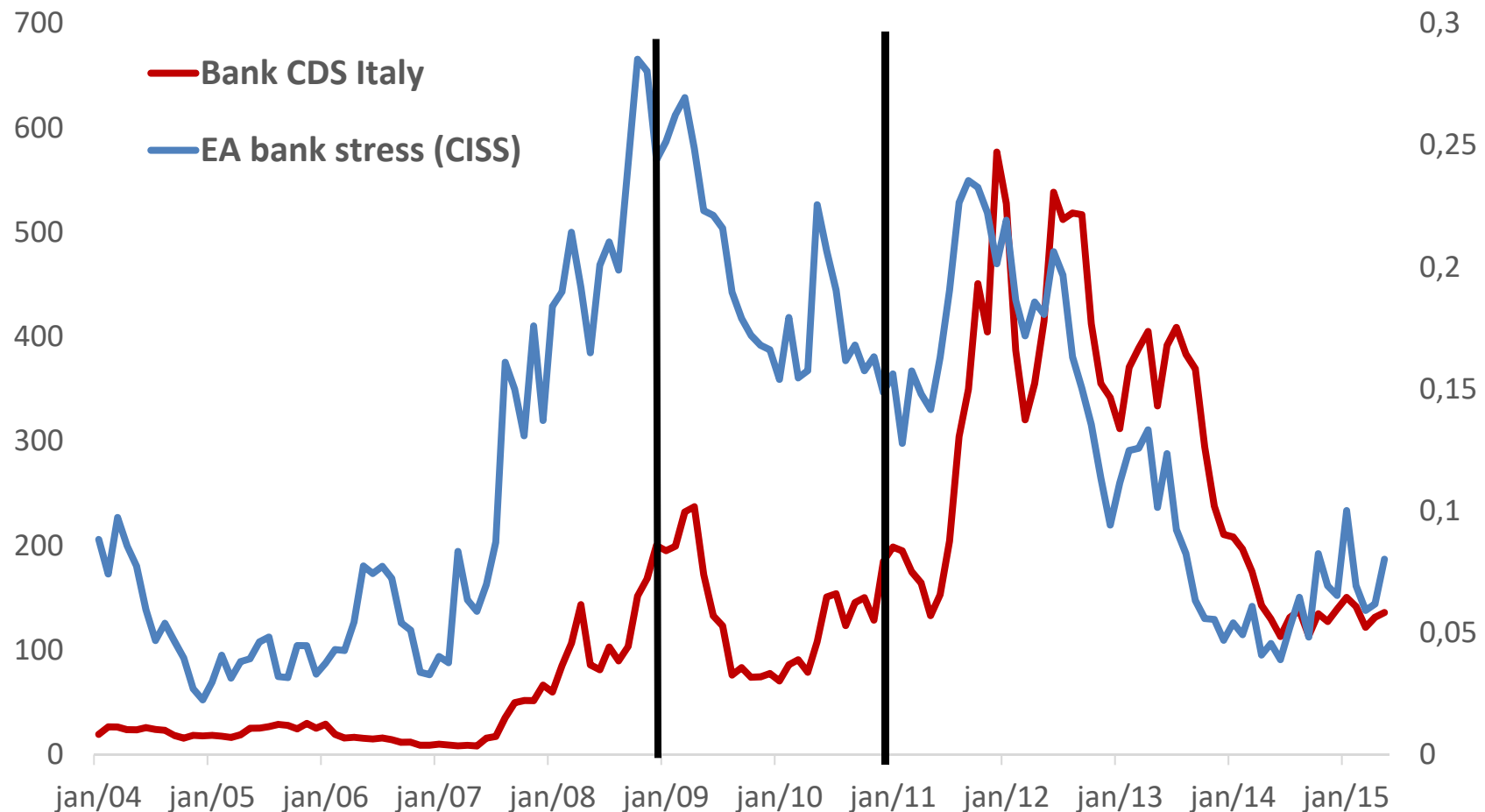
Are Lehman and sovereign debt crisis source of break?

- Could also be monetary policy, e.g. back to normal after 2011 due to access to (cheap) liquidity of 3 years LTROs



Are Lehman and sovereign debt crisis source of break?

- Are anyway not two discrete breaks: variation within periods allows for fine-tuning to define (relationship) lending regimes



Comments on the specification I

- Only relationship duration (relationship weighted share of credit) interacted with dummy, not bank-firm (firm) level control variables X_{ijt-1} (Y_{it-1})

$$\begin{aligned}
 \Delta Y_{ijt} = & \beta_1 \text{relationship duration}_{ijt-1} \\
 & + \beta_2 \text{relationship duration}_{ijt-1} * D(\text{post 2008}) \\
 & + \beta_3 \text{relationship duration}_{ijt-1} * D(\text{post 2011}) \\
 & + \gamma X_{ijt-1} + \alpha_{it} + \delta_{jt} + \varepsilon_{ijt}
 \end{aligned}$$

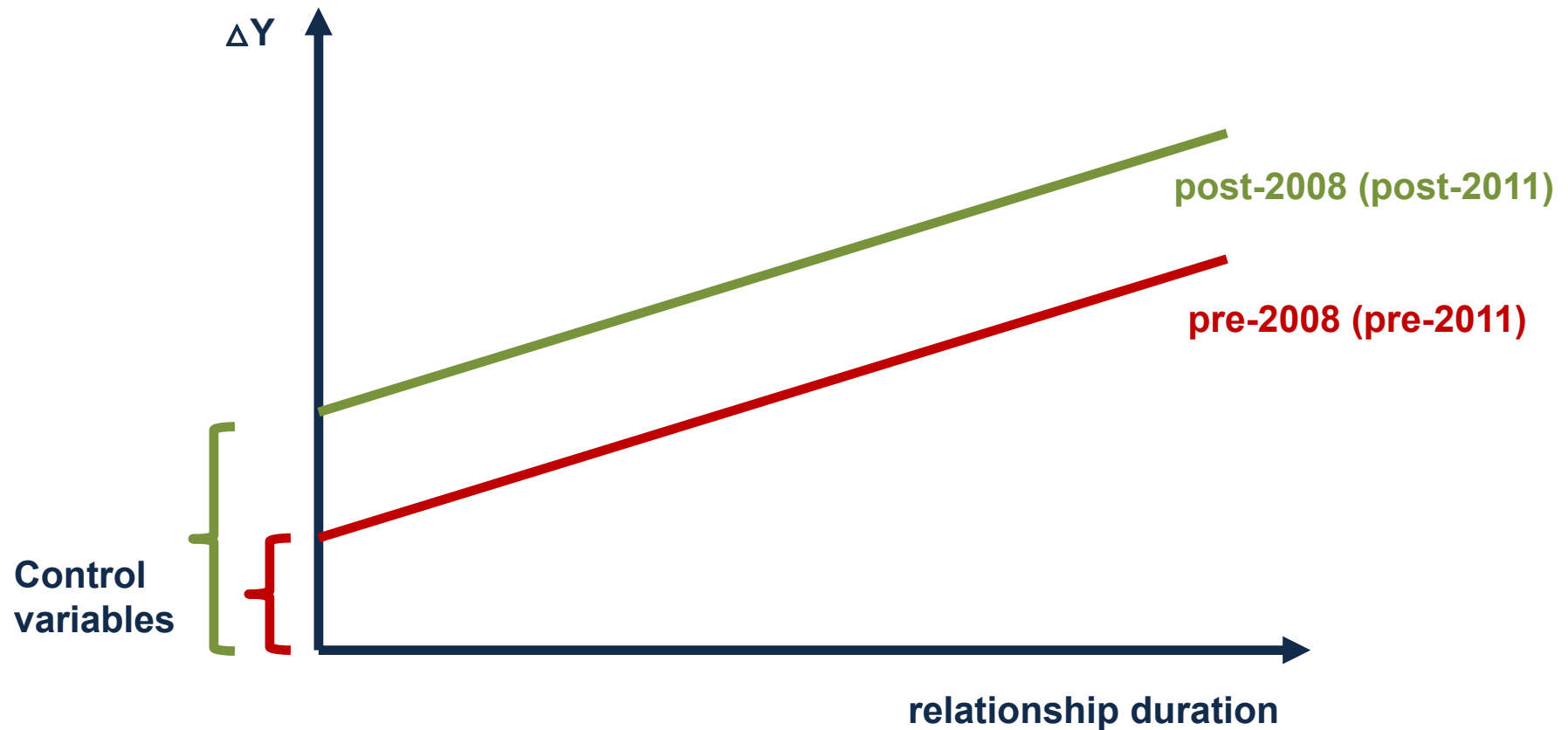
Bank-firm variables →

Firm variables {
 RoA
 Leverage
 Size
 Int. coverage

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 & + \theta_i + \mu_t + \varepsilon_{it}
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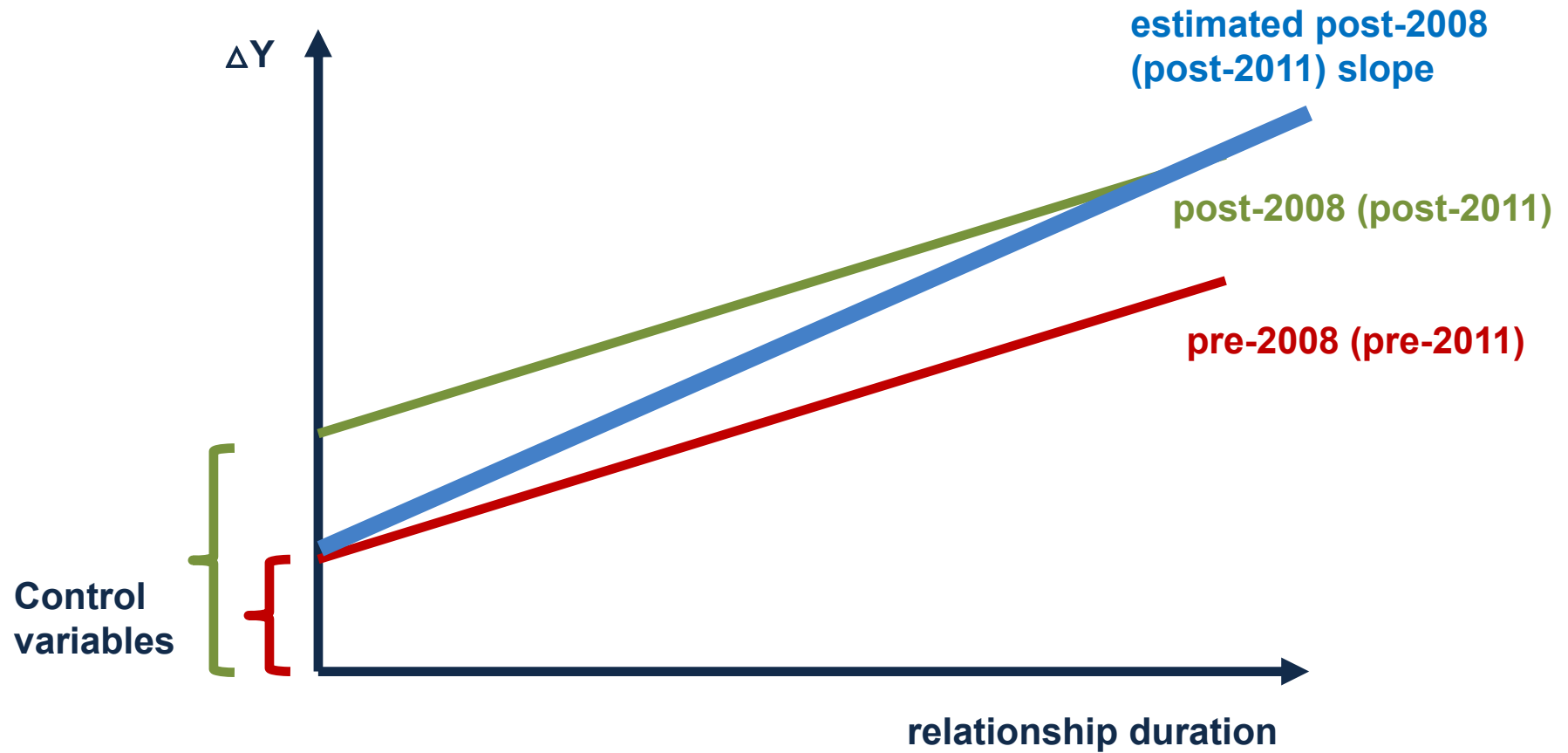
Comments on the specification I

- If role of control variables has also changed after Lehman or sovereign debt crisis, this could distort the results



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Comments on the specification II

- **Bank capital and relationship lending:**
 - *“The insulation effects of relationship lending may be heterogeneous across banks. **Table 5 examines whether weak bank capitalisation constrained the ability of banks to insulate relationship lending following the Lehman default shock and the European sovereign default crisis. This test is important because it is a first step to understand whether firms received support from their relationship lenders even when the latter are under pressure.**”*
 - *“However, the **insulation effect provided by relationship banks weakened after the European sovereign debt crisis, especially for those banks with a greater leverage.**”*
- **To know this, however, bank capital ratio has to be interacted with relationship duration**

Comments on the specification II

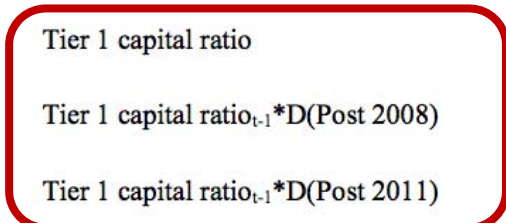
Table 5: Bank capital and relationship lending

	(1)	(2)	(3)	(4)	(5)	(6)
	ΔLog (Total credit)	ΔLog (Total credit)	$\Delta(\text{Interest}$ rate on revolving credit lines)	$\Delta(\text{Interest}$ rate on revolving credit lines)	$\Delta(\text{Interest}$ rate on term loans)	$\Delta(\text{Interest}$ rate on term loans)
Relationship duration _{t-1}	-0.199 (0.356)	-0.211 (0.339)	0.268*** (0.0525)	0.263*** (0.0468)	0.0248 (0.0166)	0.0283 (0.0183)
Relationship duration _{t-1} *D(Post 2008)	0.970* (0.530)	0.982*** (0.0834)	-0.0808 (0.0623)	-0.0720 (0.0539)	-0.0711*** (0.0245)	-0.0757*** (0.00718)
Relationship duration _{t-1} *D(Post 2011)	-0.180 (0.493)	-0.160 (0.499)	-0.00875 (0.0627)	-0.00640 (0.0603)	0.0685*** (0.0156)	0.0637*** (0.0157)
Tier 1 capital ratio	-0.417** (0.205)	-0.271 (0.188)	0.00122 (0.0535)	-0.0208 (0.0531)	0.0100 (0.0109)	-0.00809 (0.0118)
Tier 1 capital ratio _{t-1} *D(Post 2008)	0.490*** (0.181)	0.452*** (0.167)	-0.0864** (0.0333)	-0.0505* (0.0298)	0.00842 (0.0108)	0.0104 (0.0100)
Tier 1 capital ratio _{t-1} *D(Post 2011)	0.114 (0.175)	0.0796 (0.191)	-0.0673 (0.0425)	-0.0317 (0.0492)	-0.0368*** (0.0119)	-0.0394*** (0.0111)
Interbank funding ratio		0.0712 (0.0668)		-0.0418*** (0.00990)		-0.00193 (0.00232)
Liquidity ratio		0.0452 (0.0678)		0.0174 (0.0195)		-0.000258 (0.00309)
Bank size		0.389 (1.487)		0.458 (0.640)		-0.184** (0.0915)
Mutual Bank		1.144e+06 (9.582e+09)		-181707 (1.729e+09)		-283.6 (7.423e+07)
Level of interest rate on revolving credit lines _{t-1}			-0.472*** (0.0117)	-0.473*** (0.0117)		
Level of interest rate on term loans _{t-1}					-0.317*** (0.00771)	-0.317*** (0.00777)

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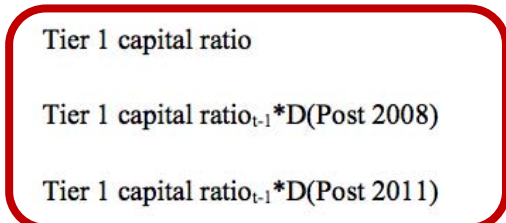
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- **Boeckx, De Sola Perea and Peersman (2016): bank capital is crucial for strength of (non-capital) transmission channels of ECB credit support policies**

Additional effect of credit support policies on volume of lending (average impact = 0.05)			
Small banks	+0.05***		
Low-liquidity banks	-0.05***		
Wholesale funded banks	+0.03		
Low-capitalized banks	-0.04***		

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Additional effect of credit support policies on volume of lending (average impact = 0.05)		Taking into account interaction effects	
		Additional effect	Interaction with low capital
Small banks	+0.05***	+0.10***	-0.05**
Low-liquidity banks	-0.05***	+0.10***	-0.05***
Wholesale funded banks	+0.03	+0.06***	-0.03**
Low-capitalized banks	-0.04***	+0.34**	

Other comments

- **There might be nonlinearities of role relationship duration**
- **Section 6.3: to check firm heterogeneity, rather than estimating for subsamples, you could also nest in one model, or allow for interaction effect of firm characteristics**
- **If you are concerned that the formation and breaking of relationships may be endogenous to firm demands or types (cf. sorting and IV estimations), why not orthogonalize relationship duration to firm characteristics?**
- **Clustering of residuals**

Conclusions

- **Nice paper and interesting topic**
- **More analysis (and different approach) required to assess whether this is important for macroeconomic fluctuations**
- **A couple of specification issues need to be addressed to get the right answers**
- **Looking forward to see next version!**