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The Effects of Bank Capital Buffers on Bank Lending and Firm Activity: What Can We Learn from Five Years of Stress-Test Results?

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Discussion by

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This paper investigates:

how the capital buffers that large U.S.
banks must satisfy to “pass” the
quantitative component of the Federal
Reserve’s **CCAR** stress tests

impact

*banks’ C&I lending
and*

*firms’ C&I loan volumes, overall debt,
investment spending, and employment*



This paper finds that:

1 pp larger bank capital buffer results in:

a 2 pp lower (four-quarter) growth rate of utilized loans &
a 1½ pp lower growth rate of committed loans

for exposed firms: a 4 pp lower rate of growth in utilized loans &
a 3 pp lower rate of growth of committed credit lines,
but no impact on overall debt volumes, investment or employment

substitutability of funding, from unaffected banks and other financiers



This Paper So Nicely (!) Focuses on the Economic Magnitudes of the Impact of the Changes in Capital Buffers

For the US

Using bank-firm level data

Really well-done, careful specifications, well-written, full of robustness, ...



Your Focus on Economic Magnitudes Is Great!
(«we» should take «our» estimates even more seriously)

I would encourage you to make a table with those estimates
("qualitative" meta analysis)



You Take A Stab at Jiménez, Ongena, Peydró and Saurina (JPE 2017)

You write:

“Indeed, the estimates obtained by **Jiménez, Ongena, Peydró and Saurina (JPE 2017)** for the amount by which bank loan growth responds to an increase in capital – in this case tier 2 capital – **is very large and an outlier for the literature.**

Given the greater similarities between the CCyB and the capital buffers implied by stress tests relative to the CCyB and dynamic provisioning, we consider that the estimates that we obtain from our analysis and likely provide **a better guide as to the effects of the CCyB.**” (p.7)



JB/RE

SO

.... Jiménez, **Ongena**, Peydró and Saurina (JPE 2017) for the amount by which bank loan growth responds to an increase in capital – in this case tier 2 capital – **is very large and an outlier for the literature**

Focus on committed lending (utilized credit more demand affected?)	Berrospide, Edge (2019)	Jiménez, Ongena, Peydró, Saurina (JPE 2017)		Gropp, Mosk, Ongena, Wix (RFS 2019)
Shock	CCAR	Dynamic Provisioning		2011 EBA CE
Country	US	Spain		18 European ctry
Time Period	2012-2016	1999Q1-2012Q4		2009-2013
Average loan growth	4.75%	-2%		-
Impact of 1 pp Δ in capital requirements	<i>bf.</i> -1.5 pp <i>f.</i> -3 pp <i>f.</i> no impact on debt (or real)	Intro	<i>bf.</i> -33 pp <i>f.</i> no (real)	<i>b rwa:</i> -8.5 pp <i>bf (synd):</i> - 9pp <i>f.</i> asset – 4 pp, inv. -6 pp, sales -5 pp
Impact of having 1 pp higher capital ratio	<i>bf.</i> +5.5 pp	Crisis	<i>bf.</i> +32 pp (-13pp if maxed out) <i>f.</i> +9 pp, and real effects	-
What may explain different estimates? (your writing)	<ul style="list-style-type: none"> . CCyB/CCAR apply to CET1, while DP apply to Tier 2 and runs thru P&L: bank managers` concerns for earnings! . Loan growth is directly in DP formula 			-
Maybe also? Sample	16 large bank HCs	All banks and all firms		«bad» times



Sample Explanation: Larger Banks

- **Larger** banks respond substantially less, also in Jiménez, Ongena, Peydró, Saurina (JPE 2017)
 - E.g., Table 4, coefficient that equals 0.302^{***} on $\ln(\text{total assets}_b)$: mean bank in Spain $\exp(17)$ EUR, in US $\exp(20)$ USD, which would imply that in that Table, *ceteris paribus* (w/ other controls) no effect on lending for the bigger US banks (as the coefficient on DP equals minus 0.987^{***})
- Banks engage in «nifty» regulatory capital adjustments (e.g. intangibles, securities holdings) to meet the stricter capital requirements (so smaller effect on lending)
 - Gropp, Mosk, Ongena, Simac, Wix (2019) on EBA related moves
 - **Especially larger banks** engage in this activity (as it may require advanced accounting expertise)



Sample Explanation: Larger Firms

- Lending to **smaller firms** may respond more vigorously
 - Is the case in e.g. this Table 4 again, estimated coefficient 0.111***
 - Large banks serve both, small banks mainly serve small
 - Distributions may differ between Spain and US: but got confused by your sample stats in Table 1: $\ln(\text{total assets of firms})$ minimum = **minus 3.972?**
- Doerr (2019): «[US]banks subject to stress tests strongly cut **small** business loans secured by home equity, an important source of financing for entrepreneurs. Lower credit supply [by 27%] leads to a relative decline in entrepreneurship during the recovery in counties with higher exposure to stress tested banks.»



Additional Explanations

- Dynamic provisioning is based on **six** loan type buckets with different provisioning weights: Banks may **especially cut lending to firms**, or even «re-label» firm loans to fit into other lower-weighted buckets?
 - But these other loans are not in the corporate credit register studied
 - Auer, Ongena (2019) on the CCyB in Switzerland **targeted to residential mortgages**, which leads to expansion of corporate (mortgage / real estate) credit
- Relative importance of banking sector in each country (fear of losing clients to other financiers much higher in US?)
- Non-linear effects
 - if actual are close or further away from changed required



Controlling for Credit Demand with Fixed Effects? (Khwaja, Mian, AER 2008)

- Affecting both (and many other) papers, but could affect them in different ways; not clear how?
- Firm demand for credit **may not be homogenous**, across times, bank and/or loan types, ...
 - Berg, Streitz (2019), Altavilla, Boucinha, Holton, Ongena (2019), Kabas, Garcia, Ongena (2020). See also work by Paravisini.
- Fixed effects may lead to **selection** as it requires multiplicity
 - E.g. Degryse, De Jonghe, Jakovljevic, Mulier, Schepens (JFI 2019)

Stress even more both types of estimations? How many observations are actually used in estimated?

Maybe the estimates in Jiménez, Ongena, Peydró, Saurina (JPE 2017) are understandably larger More research seems warranted however 😊 ---



SO

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Trivia

Fraisse, Lé, and Thesmar is in 2019 Management Science

Steffen, not Steffan



To Conclude

Very nice focus on contribution in terms of magnitudes!

Few comments on the comparison and the interpretation

Success with this investigation!



so •



I am out of here!