

DISCUSSION:

UN-USED BANK CAPITAL BUFFERS AND CREDIT SUPPLY SHOCKS  
AT SMES DURING THE PANDEMIC

BY JOSE M. BERROSPIDE, ARUN GUPTA, AND MATTHEW P. SEAY<sup>1</sup>

Andrea Polo

Luiss University, EIEF, UPF, BSE, CEPR & ECGI

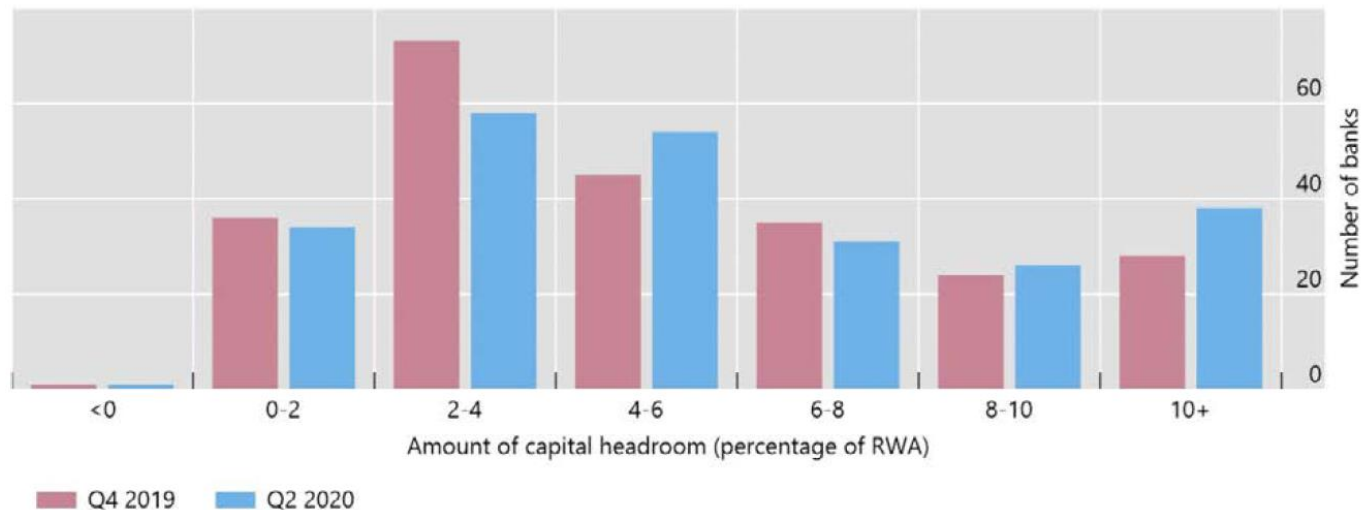
Banco de España

October 18-19, 2021

# Capital buffers

- Banks entered the crisis with much higher capital: in the US the aggregate CET1 ratio rose from 5.8% in 2009Q1 to 11.7% in 2019Q4 (Blank et al., 2020)
- Large part of the increase in CET1 ratios is due to the requirement of regulatory buffers introduced by the Basel reforms which banks can use to absorb losses (subject to payout restrictions)
- Is this approach sound? When a shock comes, will banks dip into these buffers and continue to lend or not?
- Covid-19 comes. We can test this approach!

# «Too early to say?»



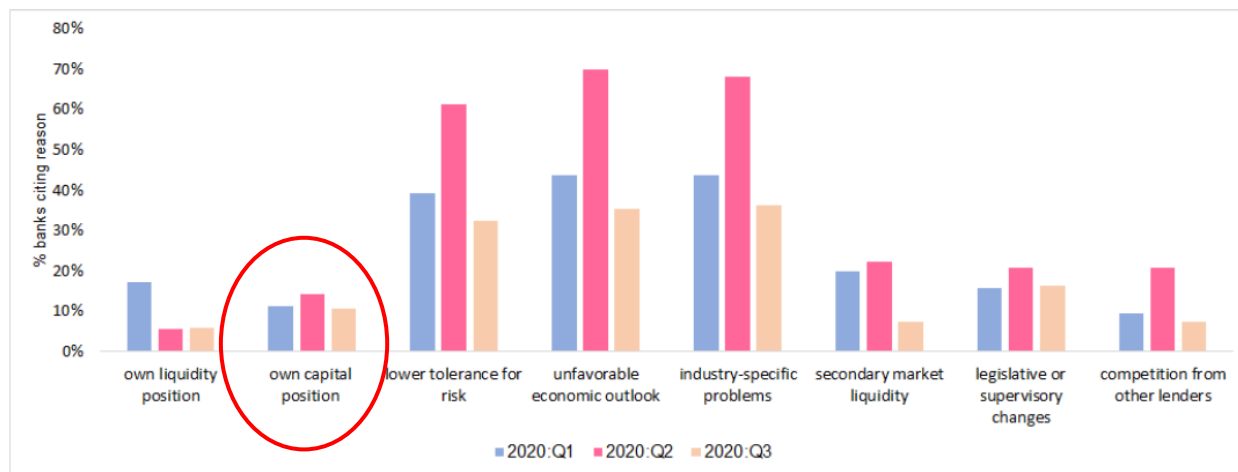
Note: Headroom above minimum and regulatory requirements in pp: Q4 2019 and Q2 2020 for a sample of 242 banks.

Source: Basel Committee on Banking Supervision.

- Most banks' capital ratios have been **well above** required minimums and buffers and this makes it difficult to assess whether banks would be willing to use their buffers
  - “Fear of imminently breaching buffers is unlikely to have been a key consideration for most banks during the pandemic.” (BCBS 2021)
  - “It would be premature, in my opinion, to see the fact that banks have not freely used the buffers as an indictment of the Basel framework [...] I believe that nothing conclusive can be said until the pandemic-induced losses start materialising.” (Enria, 2021)

# What do banks say?

Figure 3: Reasons for Tightening Lending Standards in 2020



Note: This figure depicts the percentage of domestic banks that rated each of six reasons as a “somewhat” or a “very” important reason for tightening lending standards or the terms on new C&I loans or credit lines. The survey addresses changes in the bank lending standards and terms over the quarter. Source: Federal Reserve Senior Loan Officer Opinion Survey (SLOOS).

(Kapan and Minoiu, 2021)

# This paper

However, some banks had less capital headroom than others. If banks with less capital headroom are found to reduce lending more than banks with more headroom....

...this could be interpreted as a reluctance to make use of buffers

- Data: 16 large banks in the US, Granular loan level data (FR Y-14) for loans larger than \$1M
- Methodology: Diff-in-Diff around Covid-19 shock a la KM(2008)
- Findings: banks with less capital headroom reduce lending and more likely to cut relationships, in particular to:
  - ▣ Private, bank-dependent firms
  - ▣ Younger relationships
  - ▣ Firms whose credit lines up for renegotiation during the crisis

# Similar results from different samples

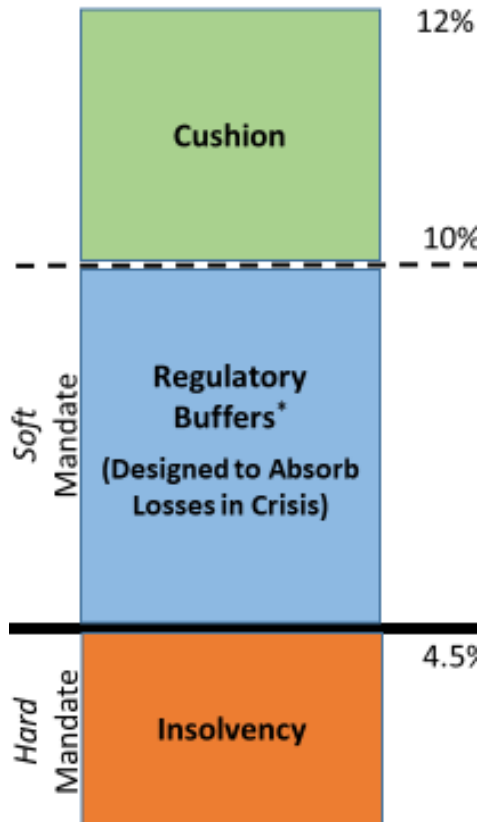
- International banks
  - ▣ Basel report on “Early lessons from the Covid-19 pandemic on the Basel reforms”, 2021
  
- Euro Area banks
  - ▣ Section 5.1 of the ECB May 2021 Financial Stability Review
  
- UK banks
  - ▣ BoE Saporta, 2021

# Is it a test about capital?

- First reaction: it is a test whether banks with more capital lend relatively more during a shock (which is not an obvious question: it was the case in the previous crisis (Jimenez et al. 2012) but not clear in this one (Li et al, 2021, Kapan & Minoiu, 2021))
- Then footnote 12: « **this relation cannot be explained by plotting the pre-pandemic level of the CET1 ratio versus the pandemic commitment growth. Counter to intuition, excess capital cushions are not positively correlated with CET1 ratios.** »
- How is it possible?

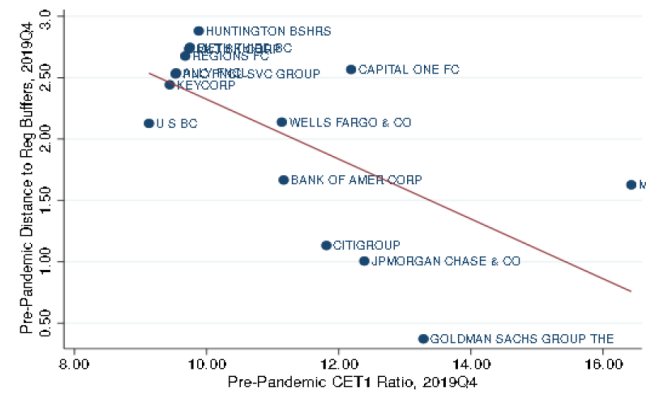
# Capital and capital headroom

## Capital Requirements



\* Regulatory Buffers comprise Stress Capital Buffer (≥2.5%) and GSIB Surcharge (1% to 3.5%), if applicable.

Figure 8: Distance to the Regulatory Buffer and CET1 capital ratios



**Negative correlation!!!**

The higher is the required capital by the regulator the lowest is the amount the banks hold in excess of it!

Results in the paper are the opposite (visual inspection) if they use capital instead of capital headroom



# Interactions with additional bank characteristics

VARIABLES	C&I Loan Commitment Growth Rate percent (Quarterly)			
	(1)	(2)	(3)	(4)
<b>POST * BufferConstrainedBank</b>	<b>-0.397**</b>	0.172	-0.0394	0.0192
<b>POST * BufferConstrainedBank * SMEFirm</b>		<b>-1.215***</b>	<b>-1.304***</b>	<b>-1.400***</b>
POST * SMEFirm		0.693	0.766*	0.530
Borrower Size	<b>-0.385***</b>			<b>-0.315***</b>
Borrower ROA	<b>1.370***</b>			<b>1.727***</b>
Borrower Leverage	<b>-2.839***</b>			<b>-2.867***</b>
Borrower Sales Ratio	0.0840			0.0734
Rating_BtoAAA	0.0712			0.0490
CET1 capital ratio	0.219**		0.248**	0.213**
Undrawn Credit Line Exposure	<b>-0.170***</b>		<b>-0.167***</b>	<b>-0.196***</b>
Bank Log Assets	<b>-1.667***</b>		<b>-1.863***</b>	<b>-1.614***</b>
Bank Deposit Ratio	<b>-0.0536*</b>		<b>-0.0577*</b>	<b>-0.0495</b>
Bank Provisions to RWA	<b>-0.437</b>		<b>-0.523</b>	<b>-0.516</b>
Bank Liquid Asset Ratio	<b>0.0603**</b>		<b>0.0524*</b>	<b>0.0620**</b>
Bank ROA	<b>-0.952*</b>		<b>-0.790</b>	<b>-0.847</b>
Constant	<b>44.98***</b>	<b>1.534***</b>	<b>41.47***</b>	<b>42.88***</b>
Observations	530,904	517,391	517,391	480,102
R-squared	0.272	0.260	0.260	0.268
Bank-Firm FE	Y	Y	Y	Y
Industry-Date FE	Y	Y	Y	Y
Zip-Date FE	Y	Y	Y	Y
Size-Date FE	Y	Y	Y	Y
No. of Banks	16	16	16	16
No. of Firms	54849	45209	45209	43023

Make sure we are not capturing negative correlation with capital.

Include **Post\*CET1** and also interactions with Post and other bank observables

# Control for demand

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Cannot include Firm\*time FE due to many single lender firms.

Following Degryse et al (2019) include Industry\*Zip\*Size\*Time FE

# Monotonicity of capital headroom

- The reluctance to make use of buffers is inferred by the cross-sectional heterogeneity between banks with more and less capital headroom
- Concern: If all the banks have very large headroom, say median is 15% larger than the minimum, and you find that banks with headroom larger than the median lend a bit more would you make inference about reluctance to make use of buffers?
- One approach could be to use dummies for different quintiles or deciles and show that the result is not monotonic. Only the bottom decile or quintile is the one which is significantly different since these banks are close to the threshold
- In your case, given the small sample maybe you can create 3 dummies for the distribution of headroom

# Differences across jurisdictions

- Similar test conducted in several jurisdictions/ Similar caveats as the ones mentioned
- However authors could stress that test is relatively more meaningful in the US
- Other jurisdictions took actions to reduce stigma associated to dipping into buffers:
  - Blanket reductions of buffers
    - Countercyclical capitalbuffer (CCyB) can be released during downturns. Many countries have reduced CCyB and this helped to maintain credit supply (BIS, 2021)
  - Blanket restrictions of payout
    - Many regulators worldwide (ECB, Bank of England, ..) had imposed payout restrictions by May 2020 (Svoronos and Vrbaski, 2020)

# Conclusions

- Given the variability in the regulatory buffers banks are required to hold, important to introduce the distinction between capital and capital headroom
- The question on usability of buffers is super important given the approach taken in the last Basel reforms
- There is a concern on whether “it is too early to say” (Enria, 2021) or whether the test on the cross-sectional heterogeneity is capturing exactly this reluctance
- This paper offers important evidence to this debate, in particular, in a country where regulators did not react quickly to reduce the stigma of dipping into the buffers
- I made a few suggestions to, hopefully, strengthen the analysis