Discussion of
"The transmission of monetary policy to credit supply in the euro area"

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Paper

The paper analyzes

- the transmission of monetary policy using high-frequency shocks

- and bank lending survey data

- together with bank and firm characteristics

- for a sample of 6,249 observations with 140 banks from 16 countries over 2004:Q1 to 2023:Q2

and finds that

- banks with lower equity ratios tighten their lending standards the most for SME firms in response to large monetary policy shocks since the GFC.

- confirmed at the extensive margin (loan rejections).

  The paper concludes that policymakers should take into account banks' capitalization levels when designing and implementing monetary policy.

Comments

- The paper is very clear on what it does.

- The paper is highly relevant.

- The paper is related to a large literature on the transmission of monetary policy, and distinguishes results by
  - sign and size of the shock
  - time period
  - conventional and unconventional monetary policy
  - bank characteristics
  - firm characteristics

Comments:

- The contribution is not entirely clear.

- Some aspects might be worthwhile to explore deeper.

- In the following, I might appear picky but I would like to urge the authors to think a bit more about the big picture.

Comments -1. Data

Bank lending survey

Survey answered by senior loan officers with five possibilities to answer:

(1) credit standards are eased

(2) credit standards are eased somewhat

(3) credit standards remain unchanged

(4) credit standards are tightened somewhat

(5) credit standards are tightened

Banks are usually in favor of expansionary monetary policy and want to appear prudent.

Why should we expect no bias in survey answers?

Comments −1. Data

<u>Bank lending survey</u>

Survey answered by senior loan officers with five possibilities to answer:

(1) credit standards are eased (0.06%)

(2) credit standards are eased somewhat (3.90%)

(3) credit standards remain unchanged (84.96%)

(4) credit standards are tightened somewhat (10.34%)

(5) credit standards are tightened (0.74%)

Banks are usually in favor of expansionary monetary policy and want to appear prudent.

Why should we expect no bias in survey answers?

→ skewed distribution

Comments –1. Data

Bank lending survey

Why should we expect no bias in survey answers?

→ Less of a problem if systematic BUT

→ Wouldn't we expect that especially the riskiest banks have an incentive to appear (more) prudent?

Table 3 in the paper:

= banks with lower equity ratio answer to have stricter lending standards

	(1)
equity ratio $t-1$	-0.034**
	(0.014)
MP shock t-1	
equity ratio $t-1 \times$ MP shockt-1	
Observations	6152
R^2	0.379
Bank controls	yes
Demand NFC	yes
Country FE	no
Country-Time FE	yes
Two-way clustered SEs (bank, time)	yes

Is non-linearity in potential response bias a problem affecting the results? (esp. given that you refrain from using bank fixed effects to observe cross sectional variation)

Comments –1. Data

Bank lending survey

Is non-linearity in potential response bias a problem affecting the results?

▸ Bank fixed effects as robustness might help to alleviate this concern.

▸ Effects might also vary over time (bias worse in economically bad periods)

▸ Several of your analyses investigate and find rather strong results for the period 2021:Q3 to 2023:Q2 - check results using actual lending data – e.g. use Anacredit!

Furthermore:

- Redefine your main dependent variable to also include the easing of credit standards + define these as minus (i.e. interval [–1; 1] and [–2; 2])

Comments -2. Data

<u>High-frequency shocks</u>

▸ based on Altavilla et al. (2019) and Jarocinski and Karadi (2020)

▸ a large and currently strongly growing literature is using these

▸ Do not get me wrong, these are great and important to have!

▸ I am however unsure about the (larger and larger) becoming differences in time in the literature.

→ A shock is derived using tick data from two 10 minutes intervals within 2.5 hours on a given ECB policy date.
→ The average size of a shock is often very small.

vs.

– Banks and firms negotiate loan terms over several weeks for projects often worth millions.

▸ Can we really aggregate the (shock) data and if so, how?

▸ Could local projections be interesting?

Comments -2. Data

High-frequency shocks

▸ Small 'lecture': An expansionary monetary policy shock does not necessarily relate to an expansionary monetary policy.

▸ The paper starts with a reference to the contractionary monetary policy period over the last two years, resulting in less credit supply.

▸ But: there might be several expansionary shocks in this period!

Example:

▸ For the next monetary policy meeting

▸ the market might expect a decrease of the policy rate of 25bps

▸ the actual rate change might only be minus 10bps.

➔ Contractionary monetary policy shock, despite expansionary monetary policy!

➔ **monetary policy shock ≠ monetary policy rate change**

Comments – 3. Data

Equity ratio

▸ Main bank characteristic: equity ratio = total equity / total assets

▸ Capital holdings ≠ Capital requirements ≠ Excess Capital

▸ Very often, the largest banks have the smallest amounts of excess capital (= efficient capital mgmt.) but, due to higher capital requirements, higher capital holdings.

▸ Are holdings a correct measure for bank risk?

▸ Can you obtain regulatory capital requirements (e.g. EBA banks as subsample?) and investigate excess capital?

▸ Furthermore:

▸ Delete the results on other variables in the graphs (such as RoA), as these are insignificant anyway.

Comments – 4. further explanations needed

- Two analyses require further explanation:

Table 8: Banks' credit standards in loans to NFCs (SMEs and large) and bank capital: analysis by subperiods

	2004Q1-2007Q4	2021Q3-2023Q2	2004Q1-2007Q4	2021Q3-2023Q2	2004Q1-2007Q4	2021Q3-2023Q2
	Tighter CS All		Tighter CS SME		Tighter CS large	
equity ratio $t-1$	0.072	-0.123*	0.099	-0.145**	-0.009	-0.118
	(0.074)	(0.068)	(0.071)	(0.068)	(0.073)	(0.084)
Observations	754	771	754	735	741	741
R^2	0.310	0.207	0.320	0.229	0.293	0.187
Bank controls	yes	yes	yes	yes	yes	yes
Demand NFC	yes	yes	yes	yes	yes	yes
Country-Time FE	yes	yes	yes	yes	yes	yes
Clustered SEs (bank)	yes	yes	yes	yes	yes	yes

What happened to 2008:Q1 to 2021:Q2?

Table 12: Average and heterogeneous effects of monetary policy on banks' rejection rates

	(1)	(2)
MP shock t−1	0.038**	
	(0.017)	
equity ratio $t-1$ × MP shock $t-1$		-0.047***
		(0.016)
Observations	3332	3308
R^2	0.031	0.209
Bank controls	yes	yes
Demand NFC	yes	yes
Country FE	yes	no
Country-Time FE	no	yes
Two-way clustered SEs (bank, time)	yes	yes

What happened to the base effect of equity $ratio_{t-1}$ (shown in all other tables)?

Comments - 5. more minor things

- When trying to compare effects between expansionary and contractionary shocks, why aggregate them separately in a quarter and not all shocks jointly and then check for differences?

- When analyzing forward guidance vs quantitative easing with a limited time period, why not also restrict the base model to the limited time period?

- Lending to SME firms might be different due to information asymmetry and not firms' risk per se.

- Why only investigate (not existing) differences for Spanish banks and not for all countries?

- In robustness: you argue with cultural differences (for term "somewhat") but include country fixed effects

Conclusion

- Carve out the contribution of the paper and its relation to the literature.

- Think deeper about the data and what the results might additionally imply.

- Very interesting and important paper which helps us to better understand the transmission of monetary policy to bank lending in Europe.