

Comments on “The state-dependent impact of changes in bank capital requirements” by Jan Hannes Lang and Dominik Menno at Central Bank of Ireland Conference on Financial stability policies in a changing lending landscape, December 5, 2023.

I am very grateful to the organisers for asking me to be a discussant for this paper. In my comments, I would like to endorse the paper’s message that higher bank capital requirements need not be costly to the economy if implemented in a careful way. And then I’d like to go a bit further and suggest higher capital requirements may be even less costly than the paper suggests.

Bank capital is a subject close to my heart. I’ve been teaching Money and Banking for 16 years and the first thing I teach every year is what a bank’s balance sheet shows and what is meant by bank capital. I tell the students how upset I get when they write in the final exam that bank capital is “money set aside” (like it’s in a box somewhere) rather than source of funding for a bank’s assets. Despite this, about one third of my students still give me the “setting aside” answer every year!

I also explain that bankers don’t like capital requirements because they like to be as highly leveraged as possible to boost the short-run return on equity despite the potentially disastrous long-term consequences of high leverage.

I tell my students that bankers use two arguments to justify their objections to higher capital regulations to the public, one spurious and one less so. The spurious one relies on the fact that most members of the public share the misplaced beliefs of my weaker students about what bank capital actually is. For example, last year, in a submission to the US House Committee on Financial Services, JP Morgan Chase’s CEO Jamie Dimon complained that “*regulatory capital minimum requirements already have JPMorgan Chase setting aside more than \$200 billion in capital.*” But bank capital is not money set aside in place of making loans. A bank that raises capital could use all of that capital to make additional loans, if it wanted to.

The less spurious objection is the one addressed in this paper. Banking is a risky business so bank equity holders need to be compensated for this risk via a high rate of return. This cost of funding being more expensive than non-equity sources may mean that higher capital requirements raise the interest rates charged by banks and may thus reduce the supply of credit.

This is an argument worth engaging with but this paper shows that the size of this effect is likely to be very small. Using an elegant DSGE-style model, Hannes and Dominik show that a one percentage point increase in the capital ratio would raise the cost of borrowing by only 3 basis points and that this would only reduce bank lending by 0.1 percent.

The authors note that this may actually over-estimate the impact because the cost of the other source of funding in the model – deposits – does not change in response to higher bank capitalisation. In reality, however, the cost of non-equity funding is likely to fall when capital is increased.

In their 2013 book, *The Bankers’ New Clothes*, Anat Admati and Martin Hellwig spelled out how the famous Modigliani-Miller theorem from corporate finance could be applied to banks. Ultimately, the total amount of risk associated with funding a bank depends on the risk of its assets, not on how the bank was funded. Higher equity capital makes the funds provided by existing shareholders safer as there is now more money available to share in any losses. And while pricing of deposits may not be particularly sensitive to capital ratios, I am pretty sure that pricing of sub-ordinated bonds are and that (in a post-BRRD world) senior bank bonds in the Europe likely are as well.

Where the authors note that higher capital requirements can have a large effect is when banks raise their capital ratios by reducing the denominator of the ratio, risk-weighted assets. We have plenty of experience of this in Europe because much of the increase in the capital ratios of euro area banks after the global financial crisis came in the form of lower risk-weighted assets rather than higher capital. This process contributed to a multi-year credit crunch that was one of the factors that fuelled the double-dip recession in the euro area from 2010 to 2012. The model in this paper confirms that this approach to raising capital ratios has a very large impact on the supply of credit.

The paper models the process of squeezing risk-weighted assets as something that occurs when bad times trigger losses on assets and the capital ratios become binding. In the model, there is an equity issuance constraint so that when capital ratios bind, banks can only increase capital via retained earnings rather than profits. The authors are certainly correct that bankers are reluctant to raise equity during bad times—one can debate whether their concerns about being “diluted” actually make sense but it is what they think. However, one can question whether this is a genuine constraint or rather just something that reflects the preferences of bankers.

Back in 2011, when the phrase “macro-prudential” was emerging as a buzzword. Samuel Hanson, Anil Kashyap and Jeremy Stein published a paper called “A Macroprudential Approach to Financial Regulation.” Many of their proposals have been implemented since then but not their proposal to have “Corrective Action Targeted at Dollars of Capital, Not Capital Ratios.” In other words, force banks to raise capital ratios by raising capital, not by cutting risk-weighted assets. To those who say this simply wouldn’t be possible during bad times, I would reply that all finance instruments with a positive expected value can be sold if the price is right.

To give a related example, I remember first hearing about contingent-capital bonds and thinking “let me get this right, in the good times it’s just a bond and the bad times, it’s equity? Who would ever buy such a thing? Only a crazy academic could come up with such an instrument.” But, in time, it turns out there were plenty of buyers in search of yield who found they were willing to take the risk-return trade-off offered by these bonds.

The paper recommends a state-dependent capital requirements rule that allows banks to let their capital ratios fluctuate so that the equity raising constraint never binds. They show this rule reduces volatility in bank lending and comes with very little costs.

Counter-cyclical capital requirements are of course the sine qua non of macroprudential policy but my guess is that these cyclical rules will work better if practiced in an environment of higher average capital ratios than under current international rules. To make a final point that may anticipate the discussion of the next paper in the session, the regulators can tell a large euro bank that it’s ok for them to have a temporarily low capital ratio during a downturn but that doesn’t mean the bank is happy to do this. How low does your capital ratio go before bond investors and uninsured depositors start to get worried? What was Banco Popular’s capital ratio prior to its infamous Friday evening visit from the Single Resolution Board?

A higher average capital ratio over the cycle would allow banks to have temporarily lower capital ratios during bad times without triggering the same concerns about potential insolvency and all the fun and games that come with the BRRD’s box of tricks.