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The Impact of Bank Capital Regulation on Financing the Economy

Comments on the Public Consultation of the European Commission on the Possible Impact of the CRR and CRD IV

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Content

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Abstract

The Global Financial Crisis as well as the Eurozone Banking and Sovereign Debt Crisis revealed deficiencies in bank capital regulation which made banks vulnerable to stress in interbank markets as well as to stress in sovereign debt markets. Deteriorating banks' balance sheet quality weakened the loan supply. Especially loans to small and medium-sized enterprises within the EU became restrictive. Among reforming bank supervision, the European Commission strengthened bank regulation by applying the Basel III recommendations to European law in form of the Capital Requirements Regulation (CRR) and the Capital Requirements Directive IV (CRD IV). A public consultation on the effects of CRD IV and CRR is taking place until October 7th of this year.

We recommend the Commission to follow a balanced approach to bank regulation which ensures both financial stability and a well-functioning loan supply for firms and households. Thereby bank regulation should acknowledge that banks, which are specialized in financing small and medium-sized companies and banks specialized in long-term financing face lower risks compared to banks which are heavily exposed to their home-countries' sovereign debt or which are specialized in trading assets. Therefore, capital regulation should ensure sufficient capital buffers for trading activities and other more risky short-term activities, while it should not be too restrictive to bank activities, which are of a more long-term and low-risk nature: (1) For banks, which are specialized in low-risk activities, like lending to small and medium-sized companies or lending for infrastructure projects, raising equity capital in financial markets is more expensive. The leverage ratio might be too restrictive to these banks and leads them to reduce their long-term financing of the economy. (2) The Net Stable Funding Ratio (NSFR) is a response to the crisis experience that banks, which were less capitalised and which relied too heavily on short-term wholesale funding, had to sell-off assets at fire-sale prices as market liquidity froze. Since this requirement is calibrated to a stress scenario, it might be too restrictive in normal times for banks which are specialized in long-term financing. (3) The European Banking and Sovereign Debt crisis revealed that sovereign debt is far from riskless and far from liquid in times of stressed sovereign finances and that some banks are too heavily exposed to their home-country's sovereign debt instruments. EU sovereign debt exposures should therefore be treated like exposures to private entities according to their underlying risks. Besides increasing the safety of banks, the abatement of the preferential treatment of sovereign debt would level the playing field between lending to firms and lending to sovereigns, and thereby improve access to finance for small and medium-sized companies.

1. Scope of the European Commission's Public Consultation

The Global Financial Crisis as well as the Eurozone Banking and Sovereign Debt Crisis revealed deficiencies in bank regulation which made banks vulnerable to stress in interbank markets as well as to stress in sovereign debt markets. Deteriorating banks' balance sheet quality weakened their loan supply and especially loans to small and medium-sized enterprises became restrictive during these times of stress. Among reforming bank supervision, the European Commission strengthened bank regulation by applying the Basel III recommendations to European law in form of the Capital Requirements Regulation (CRR) and the Capital Requirements Directive IV (CRD IV). CRR and CRD IV require banks to increase the quality and the quantity of their equity capital base. Moreover, it sets new standards for banks' liquidity holdings as well as for their funding base. Reforms are based on the fact that banks, which faced the most severe problems during crisis times, were undercapitalized and relied too much on short-term wholesale market funding. However, it must be acknowledged that banks, which fared more well during stress times, had a larger capital base and a more stable funding base. Although the different bank business models fared differently well during stress times, CRR and CRD IV apply to all European banks equally. The basic question arising here is, if CRR and CRD IV made banks more stable and fostered a more stable loan supply, or if the regulatory measures lead to a lower capacity of banks to lend to the real economy.

The European Parliament and the Council introduced review clauses into the text of the CRR, which mandate the Commission to conduct an analysis of how the provisions of CRR affect banks' capacity to finance the economy. The public consultation runs until October 7th , 2015 and aims to address (European Commission, 2015) the following aspects:

- the role of CRR and CRD IV in bank recapitalisation,
- the impact of CRR and CRD IV on bank lending in general,
- the impact of CRR and CRD IV on lending to small and medium-sized enterprises,
- the impact of CRR and CRD IV on lending to infrastructure projects,
- the proportionality, i.e. how CRR and CRD IV affects different bank business models,
- the scope for simplification, and
- the single rulebook.

The Cologne Institute for Economic Research (IW Köln) participates in the consultation process by answering to the Commission's consultative document. This policy papers summarizes our recommendations to the Commission. The detailed answers to the Commission's questions can be found in Demary / Haas (2015).

2. The Effects of Capital and Liquidity Regulation on Bank Lending

2.1 Transitional Effects of Higher Capital Ratios on Bank Lending

Since the phase-in of the new capital requirements took place in a period of banks' balance sheet repair with the European economies recovering from the crisis at different speeds, the transitional effects of CRR and CRD IV on bank lending have to be differentiated from the long-term effects on banks' capacity to finance the economy. While several banks were recapitalised through capital and liquidity injections of national governments during the phase-in, most banks had three options to adopt to the new capital requirements: (i) banks could issue equity capital in financial markets, (ii) banks could retain earnings to strengthen their capital base, or (iii) banks could shrink their risk-weighted assets, i.e. banks could cut lending to non-financial companies and households. Since issuing equity capital in stressed markets can be prohibitively costly and earnings might be low or even negative in crisis periods, cutting lending was the most attractive option for banks to achieve the new regulatory capital ratios. Research conducted at the Cologne Institute for Economic Research revealed from a sample of the 80 largest Eurozone banks under direct supervision of the European Central Bank (ECB), that the last effect was especially evident in the year close to the ECB's comprehensive assessment of banks' balance sheets (Demary, 2015). Prohibiting banks to achieve higher capital ratios by shrinking risk-weighted assets would, however, been no policy option because this measure would have made it impossible for several banks to recapitalize and to deleverage without relying on governmental capital injections.

2.2 Expected Long-term Effects of Higher Capital Ratios on Lending

These transitional effects of the higher regulatory capital ratios must be distinguished from the expected long-term effects of CRR and CRD IV on bank lending. Such a permanent effect might arise through higher capital costs for banks. Regarded in isolation, however, more equity capital makes bank failures less likely and should thereby decrease the interest rates investors charge on issued bank debt thereby offsetting the additional capital costs through higher levels of equity capital. This effect can be derived the famous Modigliani-Miller-Theorem, which, however, does not directly apply to banks because of market frictions (Admati/Hellwig, 2013). Especially the implicit government guarantee on bank debt, which market participants had expected in the past, has led to low costs of issued bank debt (Schich/Lindh, 2012). The Bank Restructuring and Resolution Directive (BRRD), which entered into force on January 1st of 2015, requires a bail-in of certain debt instruments and thereby offsets expectations of governmental support for failing banks in the future. Without this support, interest rates on bank debt are expected to increase. Taking both effects together – banks' higher equity capital base as well as higher interest rates on bank debt –

banks‘ overall capital costs are expected to increase, which will have a negative impact on their lending to the real economy.

2.3 Preferential Treatment of Sovereign Debt Instruments Weakens Lending to the Private Sector

The negative impact of the higher capital requirements on credit supply can, however, be offset by abating the preferential treatment of EU sovereign debt in capital regulation. Under CRR and CRD IV banks do not need to issue equity capital for financing their exposures to EU sovereign debt – as long as these exposures are funded in national currency - while they have to finance lending to the private sector by issuing equity capital. From this follows an incentive for banks to lend preferentially to EU sovereigns. Research conducted at the Cologne Institute of Economic Research showed that in a panel regression of Eurozone countries, in which banks‘ ability to raise capital is controlled for, banks cut lending to firms and households, but increased lending to sovereigns when the mortgage rate and the interest rate on loans to non-financial corporations decline (Demary, 2015). Especially, in the current low interest rate environment the preferential treatment of sovereign debt leads to a low bank lending to the private sector. In addition to this preferential treatment of sovereign bonds in capital regulation, the absence of a large exposure limit on sovereign debt also fosters less lending to the private sector. While bank regulation restricts the amount which banks can lend to one single entity to 25 percent of their equity capital for private agents, their lending to sovereigns is unrestricted. Applying the same large exposure limit also to sovereign debt exposures will not only reduce the home bias in banks‘ balance sheets and the associated concentration risks to the solvency of their home sovereign, but would also provide banks with the right incentives to lend more to the private sector, especially to small and medium-sized enterprises. This would thereby offset the negative effects of the higher capital costs for banks on their capacity to lend.

2.4 Allowing for Different Bank Business Models in Bank Regulation

While there is a great need for sufficient capital buffers for activities like trading assets and holding derivative exposures, less strict capital buffers should be required for less risky activities like long-term financing. Especially under fixed interest rate arrangements as predominantly applied in Germany, long-term lending is less risky (Hüther et al., 2015). Infrastructure finance is by nature a long-term business and banks, which restrict their portfolio choice on safe investments, are normally engaged in long-term financing. Infrastructure investments normally yield small margins, which makes it more difficult for banks engaged in long-term finance to attract equity investors compared to banks, which are specialized in more risky investment banking activities (Hüther et al., 2015). Additionally, it is difficult for banks engaged in long-term finance to raise their capital base substantially by retaining earnings, which is a consequence of the low risk and low margin nature of long-term financing. Hence, higher capital ratios, and especially a higher leverage ratio, will force banks specialized in long-term financing to either shrink their balance sheet or to concentrate on other activities with higher margins and higher risks, which will result in less financing for infrastructure projects. The lower risk of long-term financing should be treated in bank regulation more adequately. Capital requirements should not set banks the incentives to switch from lower margin and lower risk activities too higher risk activities.

2.5 Net Stable Funding Ratio Weakens Long-term Financing

Besides the leverage ratio, also the regulation of bank funding and the liquidity regulation will negatively affect long-term financing in the long run. The Net Stable Funding Ratio (NSFR) sets banks the incentive to increase the maturity of their liabilities and to decrease the maturity of their loans. Thereby, the NSFR will negatively affect long-term financing by banks (Hüther et al., 2015). The Liquidity Coverage Ratio (LCR) might also negatively affect long-term lending as it increases the funding costs of banks, when the demand for bank bonds decreases. This is due to the fact that its definition in the CRR does not follow the definition of Basel III as the CRR definition regards less assets classes as liquid assets (Demary/Schuster, 2014). While Basel lll regards sovereign bonds, corporate bonds and mortgage-backed securities as liquid assets, CRR regards predominantly sovereign bonds as liquid assets. The CRR should instead regard all covered bonds and asset-backed securities which can be used as collateral in transactions with central banks as liquid assets.

3. Recommendation: Balanced Approach between Financial Stability and Access to Finance Needed

One crisis experience was that less capitalised banks which relied predominantly on short-term wholesale funding were more vulnerable to liquidity dry-ups compared to well-capitalized banks with a stable funding base. Moreover, the crisis revealed that banks, which are heavily exposed to sovereign debt are more vulnerable to unstable government finances compared to banks specialized in financing small and medium-sized enterprises or specialized in long-term financing. This, bank regulation should:

- Acknowledge that different bank business models carry different risks, with banks specialized in financing small and medium-sized companies and banks specialized in long-term finance facing lower risks compared to banks which are heavily exposed to their home-countries sovereign debt or which are specialized in trading assets. Hence, capital regulation should ensure sufficient capital buffers for trading activities and other more risky short-term activities, while being not too restrictive to bank activities, which are of a more long-term and low-risk nature.

- Acknowledge that issuing equity capital in financial markets is more costly for banks which are specialized in lower risk and lower margin engagements like long-term financing. For this business model the leverage ratio will be more restrictive compared to banks, which are specialized in more short-term and higher risk investment bank. Banks which are specialized in lending to SMEs, instead of trading assets, can manage their credit risks by diversification. In contrast to this, banks' exposures to their sovereign debt is characterized by concentration risks to the sovereign's debt sustainability. Because of the lower risk of lending to small and medium-sized companies, the SME support factor might be justified.

- The NSFR resulted from the crisis experience that banks, which were less well capitalised and which relied too heavily on short-term wholesale funding, had to sell-off assets at fire-sale prices as market liquidity froze (Brunnermeier et al., 2009). Banks which are specialized in trading assets are, however, different from banks which are specialized in long-term financing. The Commission should reconsider the NSFR because it may be too restrictive for banks, which are specialized in long-term financing.

- The European Banking and Sovereign Debt crisis revealed that sovereign debt is far from riskless and far from liquid in times of stressed sovereign finances. It moreover revealed that some banks are too heavily exposed to their home-country's sovereign debt instruments. The commission should reconsider the preferential treatment of EU sovereign debt, since this preferential treatment makes banks vulnerable to unstable government finances and weakens banks' lending to the private sector, especially to small and medium-sized companies.

All in all, the commission should follow a balanced approach to bank regulation that ensures financial stability as well as a well-functioning credit supply for companies and households. For achieving this, a regular revision of regulations which do not fit their purpose is necessary. Therefore, the Commission should conduct the next public consultation on the effects of CRR and CRD on bank financing of the economy in 2020.

Literature

Admati, Anat / **Hellwig**, Martin, 2013, The Bankers' New Clothes: What's Wrong with Banking and What to Do about It, Princeton University Press

Brunnermeier, Markus / **Crocket**, Andrew / **Goodhart**, Charles / **Persaud**, Avinash D. / **Shin**, Hyun, 2009, The Fundamental Principles of Financial Regulation, Geneva Reports on the World Economy 11, International Center for Monetary and Banking Studies, Geneva.

Demary, Markus, 2015, IW –Bankenmonitor: Schleppende Kreditentwicklung trotz oder wegen der Rekapitalisierungsfortschritte, forthcoming in IW-Trends

Demary, Markus / **Haas**, Heide, 2015, Comments on the Public Consultation: The Possible Impact of the CRR and CRD IV on Bank Financing of the Economy, Response to the DG FISMA Consultation Paper, forthcoming

Demary, Markus / **Schuster**, Thomas, 2014, Die Neuordnung der Finanzmärkte – Stand der Finanzmarktregulierung fünf Jahre nach der Lehman-Pleite, IW-Analysen Nr. 90, Forschungsberichte aus dem Institut der deutschen Wirtschaft Köln

European Commission, 2015, DG FISMA Consultation Paper on the Possible Impact of the CRR and CRD IV on Bank Financing of the Economy, European Commission, Brussels, http://ec.europa.eu/finance/consultations/2015/long-term-finance/docs/consultation-document_de.pdf [03-09-2015]

Hüther, Michael / **Voigtländer**, Michael / **Hass**, Heide / **Deschermeier**, Phillip, 2015, Die Bedeutung der Langfristfinanzierung durch Banken, IW-Analysen Nr. 101, Forschungsberichte aus dem Institut der deutschen Wirtschaft Köln

Schich, Sebastian / **Lindh**, Sofia, 2012, Implicit Guarantees for Bank Debt: Where Do We Stand?, OECD Journal: Financial Market Trends, Vol. 2012, Issue 1, S. 1–22