Basel III - tougher rules for banks

The Basel Committee recently presented a new regulatory framework for banks, the so-called Basel III. Essentially, it covers new and tougher rules for capital and liquidity in the banking sector. These more stringent rules are aimed at strengthening banks' capacity to absorb risks and reduce the risk of new banking crises arising in the future. This box presents Basel III, together with the findings of two studies regarding the macroeconomic consequences of the more stringent regulations. The new regulations entail that the banks must maintain more and considerably better capital and that rules covering banks' liquidity will be introduced. The main message of this box is that the Swedish banks are well-capitalised and are already complying with the new regulatory framework, in all essentials. Consequently, the implications of the new regulations for both the macroeconomy and monetary policy in Sweden will be minor.

The financial crisis exposed a series of shortcomings in existing regulations and in the supervision of the financial sector, as well as in financial companies' ability to bear and manage risks. Above all, this was a matter of the banks having neither sufficient high-quality capital to cover the losses in their operations nor sufficiently extensive liquidity buffers to manage their funding in a period in which confidence in the banks was being questioned and several financial markets had collapsed. In addition, supervision and regulation previously paid too little attention to systemic risks. This means that supervision and regulation were excessively focused on ensuring that individual financial companies were sufficiently capitalised and resilient. However, this was not enough to capture the overall risks that had built up in the system as a whole. In September 2009, the Basel Committee[15] therefore initiated extensive efforts to strengthen capital requirements for banks, to introduce minimum liquidity requirements for banks, and to formulate new regulatory tools to manage systemic risks.

Basel III, what is currently being implemented?

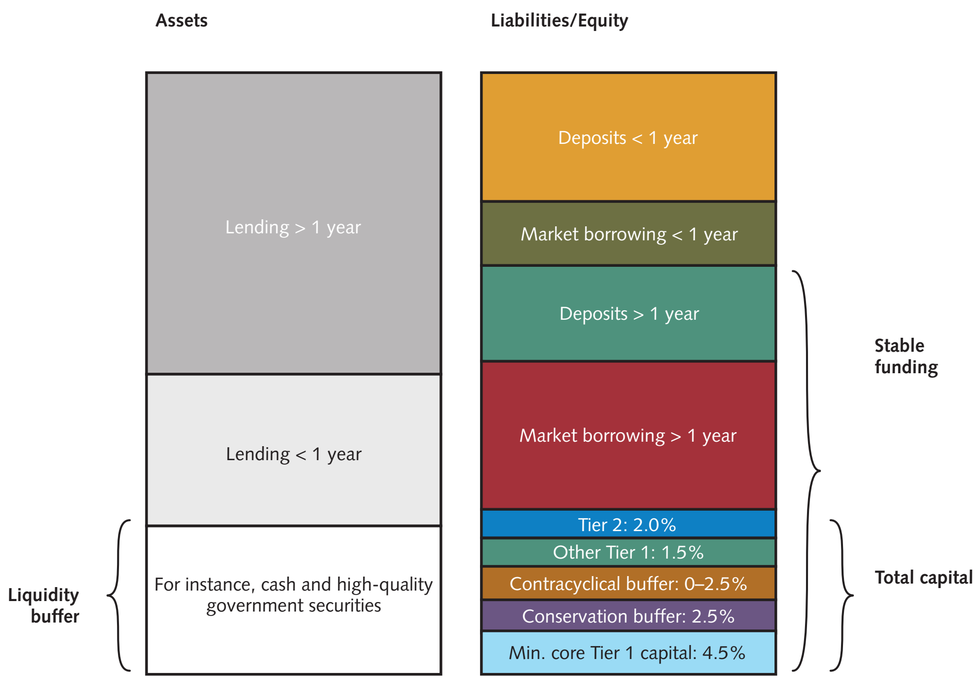
In September of this year, the Basel Committee reached agreement on the principles by which the new, more stringent minimum regulations for banks' liquidity should be formulated, as well as a timetable for the introduction of the new regulations. The new regulations will be phased in gradually. The new, more stringent capital requirements will be introduced successively, starting in January 2013, and are to have been fully introduced by January 2019. The start of the introduction of the liquidity regulations is planned for 2015, and these are to have been fully introduced by 2018.

The capital requirements in Basel III specify the minimum requirement for how much capital of various types banks must retain in order to cover risks in their assets. The banks' capital consists of the capital base, which is divided into Tier 1 capital and Tier 2 capital – see the stylised balance sheet for a bank in Figure B10. Tier 1 capital is largely to consist of core Tier

15 The Basel Committee on Banking Supervision is a committee under the Bank for International Settlements (BIS) which, among other tasks, develops international standards for the regulation and supervision of banks. The BIS has no mandate to introduce regulations, but coordinates the regulatory frameworks of the 27 participating countries, including Sweden.

1 capital, i.e. common equity and retained profits. This kind of capital has the best ability to cover losses. Tier 1 capital can also, to a lesser extent, consist of borrowed capital such as subordinated loans and hybrid capital.[16] Tier 2 capital forms a lesser portion of the capital base and is permitted to be of a lower quality.[17] The capital requirements are stated as percentage ratios of the bank's risk-weighted assets. The risk-weighted assets state how much of the nominal value of the banks' various assets are to be covered by capital. Consequently, each asset is allocated a risk-weighting. Assets with low risk, such as cash and government bonds with a high level of credit quality, are assigned low risk weightings, while assets with high risk, such as lending to companies with low creditworthiness and unsecured lending to households, are assigned high risk weightings. The amount of the capital of various kinds that the banks are to retain is then determined by multiplying the bank's risk-weighted assets by the capital cover ratios specified by Basel III.

Figure B10. Stylised balance sheet for a bank
Per cent of risk weighted assets



16 Subordinated loans have low priority in the event of bankruptcy. Hybrid capital is a cross between share capital (with subordinated priority in the event of bankruptcy) and borrowed capital (in which the annual determined return is tax deductible).
17 For example, Tier 2 capital may consist of preference shares and subordinated loans.

Regulations for capital

Agreement has now been reached on most parts of the regulatory framework for Basel III, with the only matter remaining being reaching agreement on a few minor details. One important question that remains is which further requirements should be made of the world's systematically-important banks. At present, it is possible to state that capital requirements will be strengthened by:

- Increasing the minimum requirement of the amount of capital to be retained by banks in the form of core Tier 1 capital from 2 to 4.5 per cent of the bank's risk-weighted assets.
- Increasing the minimum requirement of the total amount of capital banks are to retain in the form of Tier 1 capital from 4 to 6 per cent of the bank's risk-weighted assets – however, the minimum requirement of the total amount of Tier 1 and Tier 2 capital banks are to retain remains unchanged at 8 per cent of risk-weighted assets.
- Introducing a conservation buffer for capital of 2.5 per cent. This is to be maintained in the form of common equity and is to be added to the minimum requirement for core Tier 1 capital. In practice, this means that the requirement for the amount of capital banks are to retain in the form of core Tier 1 capital will be increased to 7 per cent after the conservation buffer has been fully phased in in 2019. The intention of this conservation buffer is to ensure that the banks maintain a buffer of high-quality capital that they will be able to use to cover losses in less prosperous times. The banks may use this conservation buffer to cover losses in less prosperous times, but the more the bank utilises this buffer, the greater the limitations will be on the bank's possibilities of distributing its profits.
- Introducing a contracyclical capital buffer that can vary between 0 and 2.5 per cent. This should consist of core Tier 1 capital or other high quality capital that can cover losses. National supervisory authorities will be provided with the possibility to expand the conservation buffer with this contracyclical buffer in times of particularly high credit growth which may lead to the build-up of overall risks in the financial system. This means that the requirement for the amount of core Tier 1 capital banks are to retain in total may amount to 9.5 per cent in periods of strong credit expansion.
- Introducing, alongside the risk-based capital adequacy requirements, a minimum requirement for gross solvency in banks. This measurement specifies the amount of capital in relation to the bank's total assets, including off-balance sheet commitments and regardless of risk. The intention of this measurement is that it should form a complement to the risk-based capital adequacy requirements and ensure that the banks do not underestimate risks. During an assessment period running from 2013 until the end of 2017, for the banks' gross solvency shall be at least 3 per cent of each bank's total assets. During the first six months of 2017, adjustments may be made to the definition of the measure, before the measure is given its final formulation from the start of 2018.

The minimum requirements for the composition of the banks' capital bases is summarised in Table B1.

Table B1. Minimum requirements for the composition of banks' capital bases under Basel III

	Core Tier 1 capital	Tier 1 capital	Total capital (Tier 1 and Tier 2)
Minimum	4.5%	6.0%	8.0%
Conservation buffer	2.5%		
Minimum conservation buffer	7.0%	8.5%	10.5%
Contracyclical buffer	0–2.5%		

Regulations for liquidity

A global minimum standard for banks' liquidity management can be justified as, among other revelations, the crisis showed that the banks were taking excessive liquidity risks. Above all, the banks had insufficient liquidity buffers, together with poor matching of the durations of assets and liabilities. The result of this was that even well-capitalised banks encountered liquidity problems when important sources of funding dried up. The Basel Committee addresses these problems by introducing two quantitative requirements for banks' liquid funds:

- The Liquidity Coverage Ratio (LCR) is directed at the banks' asset side and requires the banks to have a sufficiently strong buffer of liquid assets in the form of cash, government securities and, to a certain extent, even mortgage bonds to survive major financing problems for 30 days. This means that the reserves of highly liquid assets during such a period shall be greater than the net outflow from the bank.
- The second quantitative liquidity requirement – the Net Stable Funding Ratio (NSFR) – is aimed at attaining a better balance in the maturity structure between the banks' assets and liabilities by requiring that the assets should be funded to a greater degree by stable and long-term funding. This minimum requirement specifies that the available stable funding shall be greater than the need for stable funding in each bank. "Available stable funding" is defined as own capital and the borrowing that is deemed to be a reliable source of funding for a bank finding itself in a strained situation over a period of one year. "The need for stable funding" is derived from the bank's liquidity risk-weighted assets. Each asset is assigned a liquidity risk weighting according to a fixed classification. Liquid assets such as cash, money market instruments and securities with remaining durations of less than a year are assigned the liquidity risk weighting of zero, while other, less liquid assets are assigned higher liquidity risk weightings and, consequently, must also be covered by stable long-term funding.

The Liquidity Coverage Ratio is to be introduced with effect from 1 January 2015. The formulation of the Net Stable Funding Ratio, requires further studies. The Basel Committee will evaluate its effects before any such minimum standard can be introduced with effect from 2018.

Implications for the macroeconomy

From a monetary policy perspective, it is important to evaluate both whether the transition from the old Basel II regulations to the new Basel III regulations will have any short-term macroeconomic effects, and what long-term consequences the new Basel III regulations will have.

Short-term effects

In the evaluation of the short-term macroeconomic effects, it is natural to ask whether requirements for more and better capital in combination with more stringent liquidity requirements will lead to increased costs for the banks. If this occurs, the banks have the opportunity to manage the interest costs in a number of ways, as they do with any form of cost increase. For example, they can alter their operations and balance sheet structures, or by passing the costs along to their customers through increased interest rate margins, i.e. a greater margin between lending rates and the banks' funding costs. Will this, in turn, result in reduced lending and lower GDP growth?

A group working under the Basel Committee and the Financial Stability Board (FSB), called the Macroeconomic Assessment Group (MAG), has attempted to answer these questions.[18] They find that stricter capital adequacy requirements may lead to a marginal increase in the banks' interest rate margins and that credit volumes and GDP may decline somewhat. Stronger requirements regarding liquid assets may also lead to marginally higher interest rate margins for banks, smaller credit volumes and slightly lower GDP. The study also finds that the macroeconomic effects can be mitigated, partly by allowing monetary policy to react to the increased interest rate margins and smaller credit volumes that stem from the new regulations, and partly by phasing in the regulations over a longer period of time.

18 See the report "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements", August 2010, BIS.

Sweden did not participate in this study.[19] However, the Riksbank is currently conducting its own MAG study on the basis of Swedish data. The results indicate that the effects of the stricter Basel III regulations on the Swedish banking system and the Swedish economy are in line with, or even less than, the effects noted for other countries. Two of the reasons for this are that the Swedish banks are well capitalised in an international perspective and that they have already begun the adjustment needed to meet the tighter capital and liquidity requirements. An account of the effects of the new Basel III regulations on the Swedish banks will be given in the Riksbank's Financial Stability Report 2010:2, which will be published in early December.

Effects in the long term

When evaluating the macroeconomic effects in the long term, the economic benefits of the tighter regulations should be weighed against the economic costs. One aim of the tighter regulations is to reduce the likelihood that financial crises will occur – and to reduce the consequences of these crises on the real economy if they do nevertheless occur. International experience shows that financial crises have effects on the real economy in that they have a negative impact on GDP when they occur. As far as monetary policy is concerned, it will be important to study whether the stricter regulations reduce the likelihood of financial crises occurring and whether they affect GDP in the long term. It is not obvious in advance what effects tighter regulations for capital adequacy and liquidity will have on the real economy in the long term. It is quite conceivable that tighter financial regulation will result in fewer financial crises but that the banks' interest rate margins and the prices of other financial intermediaries will increase so much that the economy's total production will be lower. Society may nevertheless be willing to bear the costs of tighter financial regulation if this provides insurance against future financial crises. It is also conceivable that tighter financial regulation will result in both fewer financial crises and in higher total production in the long term. One explanation of this may be that the allocation of capital will be conducted more efficiently in a stable economic environment with robust banks.

A group working under the Basel Committee has studied the Long-term Economic Impact (LEI) of the new Basel III regulations.[20] This study attempts to quantify what the economic benefits and costs of the new Basel III regulations will be in the long term by comparing the state of the economy prior to the introduction of the Basel III regulations with the state of the economy following the introduction of the regulations. The group finds that the economic net effects of the stricter regulations on capital adequacy and liquidity are positive. The effects are estimated to be in the range of a 0 to 2 per cent higher level of GDP in the new state of the economy following the introduction of the Basel III

19 The countries that participated in the BIS study were Australia, Brazil, Canada, China, India, Japan, Korea, Mexico, Russia, the United Kingdom, the United States and the eurozone countries.

20 See the report "Assessing the long-term economic impact of stronger capital and liquidity requirements", August 2010, BIS. The same countries that participated in the MAG study participated in this study.

regulations compared to the GDP level that would apply in the case of an unchanged trend for GDP.

One aspect that deserves attention is that both the MAG and LEI reports perform calculations under the assumption that the return requirements of shareholders will remain unchanged even after the stricter capital and liquidity regulations are introduced. The new regulations will reduce risks in individual banks and the banking system as a whole, which would justify a downward adjustment in the shareholders' return requirements. When this is not done, the calculations will show greater macroeconomic effects than would have been the case if the shareholders acted on the basis of a risk-adjusted return requirement. A downward adjustment of the return requirement due to the lower level of risk would create scope for the banks to use profits to a greater extent to meet the costs stemming from the new regulations, rather than passing on the costs to the customers by increasing their interest rate margins. However, it is perhaps reassuring that the calculations indicate that the effects on interest rate margins will be limited, even if the return requirements are not adjusted downwards, despite the fact that the regulations have also led to lower risks.

Overall assessment – small macroeconomic effects

All in all, the studies conducted indicate that the macroeconomic consequences of Basel III will be limited. However, even though the effects are limited, the calculations are conservative and lead to greater effects than would have been the case if they took into account that the risk-adjusted return requirement for banks decreases when risks in individual banks and the banking system as a whole are reduced. Sweden has not been involved in these studies but there are many indications that the macroeconomic effects will be limited in Sweden too, and possibly even more limited than in many other countries. This has to do with the fact that the Swedish banks are relatively well capitalised and will therefore probably not be affected very much by the tighter capital and liquidity requirements.