What Will Basel III Deliver?

By Stefan Ingves, Governor of the Riksbank and Chairman of the Basel Committee on Banking Supervision

Almost seven years have passed since the start of the global financial crisis. In many parts of the world the after-effects are still being felt. As the causes of the crisis and its fall-out have been thoroughly analysed elsewhere, it suffices to say here that banks with too little equity and too great a reliance on short-term funding proved unacceptably vulnerable to financial shocks. Furthermore, the regulations in force at the time did not adequately capture all the risks to which banks are exposed. In response, the Basel Committee on Banking Supervision ("Basel Committee") has drawn up Basel III, a new and comprehensive regulatory framework.¹

The development of the Basel III rules is substantially complete, with only a few elements still outstanding. But our job as regulators and supervisors is, in many respects, only just beginning. In this article, I will focus on the intended impact of Basel III's regulatory reforms once they are fully implemented. I will also discuss what remains to be done to get the most benefit out of the new framework. Overall, Basel III aims to raise the quantity, quality, consistency and transparency of banks' capital and liquidity positions. In turn, this will deliver a stronger banking system that fosters overall financial system stability, thus providing a foundation for stronger and sustainable growth.

Banking Crises are the Same, Only Different

The lessons from the current crisis are, in many ways, similar to those learned in previous banking crises. One example is the Swedish banking crisis in the 1990s. Then, a fragile banking system characterised by low capital and weak corporate governance, in combination with weak credit extension practices, soaring asset prices and insufficient supervision caused serious problems for the Swedish banks. As a result, five of the six largest banks, comprising close to 85 percent of the banking system's total assets, failed or came close to failure. Consequently, various forms of public support were needed as well as the involvement of private investors. In total, the government spent approximately 4 percent of GDP on rescuing the banks.

More recently, some of the Swedish banks had similar experiences in the Baltic countries. Again, lax credit extension practices allowed low quality assets to build up, leading to major losses when property prices in the Baltics stopped booming. This time, however, although some capital injection was needed at some of the banks, the more evident problem was that the banks relied too heavily on short-term wholesale funding. When the business cycle then turned, investors lost their confidence in Swedish banks. This, in turn, exerted significant pressure on the banks' liquidity and funding. Close linkages between the banks spread contagion even to those which were less exposed to the region.

The Baltic case also reprised events in several East Asian countries in the late 1990s.⁴ In both these regions, a severe economic crisis, with serious consequences for the banking system, followed a long period of high economic growth, strong credit expansion, prolonged current account deficits, large foreign capital inflows and a dramatic surge in property prices.

While there are many similarities between the regions, there are also major differences. One such difference relates to banks' ownership structures. In East Asia, most of the lending was conducted by locally owned domestic banks, which funded their operations by borrowing from foreign banks. In contrast, banks in the Baltic countries were (and still are) largely foreign-owned, to a large extent by Swedish banks.

All in all, the above examples show that many elements of banking crises are common across geographies and time periods, and often have similar underlying causes. However, differences in market structures, financial shocks, and pre-existing vulnerabilities show that each banking crisis has its own peculiarities and it is not possible to predict all possible triggers or outcomes. It may be true that countries that have previously experienced crises may build up a certain degree of institutional memory that could make them less likely to repeat the experience. But "lessons learnt" will not help every time. This implies the need for an enhanced regulatory and supervisory framework that seeks to deter excessive risk-taking ex ante and to improve overall resiliency to a broader array of shocks.

Basel III Responds to the Global Financial Crisis

The Basel III framework constitutes a central component of the G20 regulatory reforms that followed the 2007/2008 financial crisis. The aim of these reforms is to develop a regulatory framework that better addresses the different risks that banks face and increases the resilience of the banking system. In turn, this will reduce the probability and mitigate the impact of future financial crises.

What can be expected from the Basel III framework when it has been finalised and adopted? More concretely, how will Basel III make the financial system safer? Most regulators and supervisors today agree that no single regulatory measure could have prevented the financial crisis. Therefore, in my view, one of the most important improvements in Basel III is its multi-dimensional approach. Basel III includes four minimum standards: two for capital and two for liquidity. However, new and strengthened rules are not enough to restore confidence in the banking system. The success of Basel III requires two additional elements. First, the regulatory framework requires sound implementation and oversight, which will enhance its credibility. Second, the framework needs to be transparent and easily understood by stakeholders, hence underpinning market discipline.

Basel III will Increase the Safety Margin of the Financial System

Basel III can be described as a multi-dimensional framework with four cornerstones. The development of the enhanced risk-based capital adequacy framework and the Liquidity Coverage Ratio (LCR) has been completed and these measures are being implemented. In January 2014, the Basel Committee and its governing body, the Group of Governors and Heads of Supervision, took an additional step by agreeing on the definition of a simple, non-risk-based leverage ratio. The fourth cornerstone is the liquidity framework's Net Stable Funding Ratio (NSFR), for which a revised proposal has been published for public consultation with a view to finalising the ratio by the end of this year. Each of these measures will increase the resilience of banks to stress. They also work together to reinforce overall resilience, creating a "virtuous feedback loop" that will help make banking systems safer and sounder.

Strengthening Capital Requirements will Improve Banks' Ability to Absorb Losses

Capital requirements are at the heart of the Basel III framework. Consequently, the main thrust of the Basel III enhancements are reflected in the capital framework. These three major changes have been summed up as "more capital and capital of better quality." Yet, they actually go much further.

First, Basel III introduces higher minimum requirements for regulatory capital by strengthening the quantity, quality and risk coverage of the capital banks hold. The minimum level of Common Equity Tier 1 (CET1) capital in relation to risk-weighted assets (RWA) is increased from 2 percent to 4.5 percent. Equally important, the requirements for the definition of regulatory capital have been tightened. The objective is to ensure that the lion's share of bank capital comprises instruments that are truly loss-absorbing. As a result, a larger part of banks' minimum capital is required to be in the form of equity. This greater loss-absorbing capacity will let a bank continue functioning even when hit by losses.

Second, Basel III introduces two new capital buffers that act as additional "air bags" against losses:

- i) A capital conservation buffer applicable to all banks at all times. This buffer will consist of CET1 capital and must be at least 2.5 percent of RWA.
- ii) A countercyclical capital buffer that requires banks to increase their capital levels in boom years when risks to financial stability tend to build up. The size of this buffer is at the supervisor's discretion but must consist of CET1 capital.

The buffer concept means that, if the banks do not fulfil the requirement, they will be restricted in making any capital distributions such as dividends and bonuses. Hence, the buffers will incentivise banks to increase capital in good times and keep a capital cushion on top of the minimum requirements. The constraints on discretionary

payments also build an automatic corrective mechanism into the regulation, as some (or all) gains have to be retained. The countercyclical buffer gives supervisors a tool to counter the systemic risks arising from very rapid credit expansion. In addition, it introduces a macroprudential measure that not only strengthens bank resilience, but also allows authorities to "lean against" imbalances in the financial system. All told, the total requirement of CET1 capital will be at least 7 percent, and, in some periods, even higher.

Third, there is a further capital surcharge that applies to systemically important banks. The size of this charge depends on a bank's relative systemic importance, both globally and domestically, and will be met with CET1 capital. The surcharge is meant to ensure that the largest banks have higher loss-absorbency capacity, reflecting the greater impact they have on the financial system. This surcharge, then, tries to address the too-big-to-fail problems observed in the crisis.

As a complement to the risk-weighted capital requirement, Basel III also introduces a leverage ratio. Like the risk-weighted capital measures, the leverage ratio aims to increase banks' resilience to losses. However, the leverage ratio does not take account of the relative riskiness of a bank's assets. It is meant to serve as a backstop to the risk-based capital ratios by setting a low floor – currently 3 percent of exposures – that must always be funded by Tier 1 capital.

This is the first time that we have a common global agreement on a leverage ratio and it is an important achievement for the Basel Committee. The leverage ratio has been devised with a view to it migrating to a Pillar 1 minimum requirement. This will be done after appropriate review and calibration, and with consideration given to interactions with the risk-based capital framework. But, as early as next year, banks will have to disclose their leverage ratios according to the definition that the Committee agreed in January.

Basel III also Boosts Banks' Resilience to Liquidity Shocks

Basel III also introduces two minimum standards to limit liquidity risks. The main motivation is the recent experience of how rapidly even deep markets can become illiquid. The sudden liquidity freezes during 2007/2008 caused severe problems, especially for banks that were heavily dependent on short-term funding. We can all agree that maturity transformation is a key role of banks. However, the overall costs to society of banks' liquidity stress are often not fully internalised by the banks. But when short-term funding is abundant in supply and relatively inexpensive, banks have private incentives to expand their balance sheets by relying on short-term wholesale funding. This comes at the price of increased vulnerability to liquidity shocks. Therefore, as with the capital requirements, there is a need to limit the risks banks can take.

One of the Basel III measures that addresses liquidity risks is the LCR. It requires banks to hold a buffer of high-quality liquid assets that is large enough to cover their net cash outflows during a stressed scenario lasting 30 days. From the start of implementation

in 2015, the LCR will progressively increase banks' capacity to resist short-term liquidity stress and disruptions in access to funding. At the same time, the LCR offers options for alternative liquidity treatments that recognise different market structures.⁶

The other Basel III measure to address liquidity risk is the NSFR, which remains to be finalised. The NSFR will encourage banks to maintain more stable and longer-term funding. It does this essentially by placing a ceiling on the maximum maturity mismatch allowed. This will help ensure that banks internalise some of the costs associated with relying on short-term and flighty funding.

A Multi-pronged Approach is Needed

As noted earlier, financial crises can take different forms, some common elements notwithstanding. Basel III therefore seeks to reflect the multi-dimensional perspective on potential risks by examining a bank's financial health along four axes: capital adequacy, leverage, short-term liquidity and the type and extent of maturity mismatch. This allows us to ensure that banks are robust to a broader spectrum and variety of risks. The four measures also complement each other to reinforce overall bank health and financial system stability. A useful way to illustrate the progress in terms of risk coverage with Basel III is in a cobweb diagram (see Figure 1).

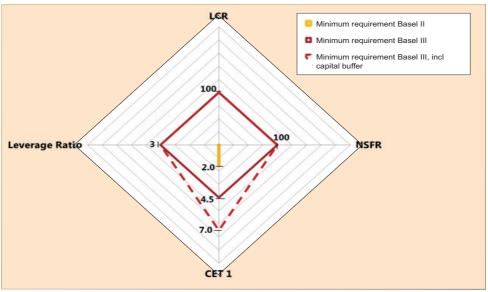


Figure 1. Cobweb Illustration of the Basel Framework

Source: The Riksbank.

Consider, for example, the capital measures. Basel III positions the leverage ratio as a complement to the risk-based framework. Some critics claim that the leverage ratio will unduly punish low-risk banks and incentivise excessive risk-taking, as it looks at banks' balance sheets without taking into account the riskiness of the business. In

fact, the leverage ratio's lack of risk sensitivity is also its strength. As the leverage ratio does not rely on banks' internal models, it provides an extra layer of protection against model risk and counters attempts to game the risk-based regime. Consequently, the leverage ratio is also a safeguard against risks we cannot envision today. However, a framework that does not adjust for risk is unlikely to be either commercially or socially efficient. Excessive risk-taking would then be constrained by the risk-based ratios. By positioning the leverage ratio as a complement to the risk-based framework, Basel III strives to balance these two aspects.

Furthermore, many regulatory frameworks did not previously include a liquidity standard or did not adequately account for liquidity risk. To some degree, stronger capital positions enhance confidence in banks' solvency, reducing the risk of runs on funding that can lead to liquidity problems. However, the recent crisis showed that meeting the capital requirements was not always sufficient. Inadequate liquidity management and, importantly, contagion effects can create liquidity strains for even strongly capitalised banks. This is particularly true for banks from smaller countries, which are largely dependent on funding from abroad. With the new liquidity standards, the framework covers another dimension of risk.

Referring back to Figure 1, the building blocks of Basel III provide authorities, investors and other stakeholders with tools for identifying imbalances and unsustainable risk-taking in several different dimensions. However, it is important that banks retain their key role as financial intermediaries. Importantly, Basel III does not seek to prevent banks from any and all risk-taking. What it does do is to put limits on the extent to which banks can take excessive risks (i.e., high risk, high leverage, high liquidity risk and high funding risk) in seeking to earn returns for their shareholders. Instead, a multi-dimensional approach to risk management, in my view, creates more effective regulation, fostering growth.

Proper Implementation of Basel III will Strengthen Trust and Confidence in the Banking Sector

The Basel III framework provides an important base for increasing the resilience of banks and fostering financial system stability. However, strengthened regulations alone are not sufficient in the long-run. For any financial system to function well, confidence in the system, in both institutions and authorities, is essential.

The financial crisis seriously hurt confidence in the financial sector, which now has to be restored. To achieve this, at least two conditions need to be met. First, Basel III needs to be consistently implemented. Second, the output of the rules, in terms of reported regulatory ratios, for instance, has to be made transparent to stakeholders.

Implementation of the Rules in a Consistent and Timely Way is Essential

Basel III is intended to transform the landscape of banks' risk management. However, no rule is effective without proper implementation and oversight. Therefore,

consistent and timely implementation of the Basel III framework is a necessary condition for the strengthening of credibility and comparability across institutions and countries. There should be "truth in advertising" for the regulatory ratios that banks present. In order to achieve this, the regulatory framework needs to deliver readily comprehensible and comparable outcomes.

Many banks today are active across international borders. As a globally harmonised framework, Basel III must be consistently implemented if a level playing field is to be achieved and potential market uncertainty to be reduced.⁷ The newly established Regulatory Consistency Assessment Programme (RCAP) started by the Basel Committee in 2012 is one important tool that will underpin consistent and timely implementation.

So far, Basel member jurisdictions are either in the process of implementing or have already implemented Basel III's risk-based capital framework into domestic regulations. Some have also started to implement the other parts of the framework. Steady progress is also being made outside the Basel member jurisdictions. For the Asia-Pacific region, the Basel III capital rules are now in force in all of the Committee member jurisdictions and a few have already adopted, or are in the process of adopting, the leverage ratio and the liquidity framework too. Parts of the capital framework are in force in some non-member jurisdictions in the region, or are in the process of adopting the rules. Table 1 below shows an overview of Basel III implementation in the Asia-Pacific region.

Table 1. Basel III Implementation in the Asia-Pacific Region

Status of Basel III Implementation, Number of Countries	Definition of Capital, Risk Coverage and Capital Buffers	Leverage Ratio	D-SIBs Regulations	G-SIBs Regulations ¹	Liquidity Coverage Ratio
Asia-Pacific, total region	18	18	18	8	18
BCBS Member jurisdictions*	8	8	8	8	8
Number of countries where:					
Final rules are in force	8	2	1	2	2
Final rules published, but are not yet in force	0	0	1	0	0
Draft regulations have been published	0	2	2	0	2

Status of Basel III Implementation, Number of Countries	Definition of Capital, Risk Coverage and Capital Buffers	Leverage Ratio	D-SIBs Regulations	G-SIBs Regulations ¹	Liquidity Coverage Ratio
Draft regulations have not been published	0	4	4	2	4
Non-member jurisdictions **	10	10	10	Not applicable (NA)	10 ²
Number of countries where:					
Final rules are in force	33	0	0	NA	0
Final rules published, but are not yet in force	1	0	0	NA	0
Draft regulations have been published	0	0	1	NA	1
Draft regulations have not been published	6	10	9	NA	9

Note:

- * Asia-Pacific BCBS member jurisdictions include: Australia, China, Hong Kong, India, Indonesia, Japan, Korea and Singapore.
- ** Non-member jurisdictions included in the FSI survey: Bangladesh, Bhutan, Fiji, Macau, Malaysia, Nepal, New Zealand, Philippines, Sri Lanka, and Thailand.
- 1. G-SIB regulations are not applicable to some of the BCBS member jurisdictions in this region at present and none of the non-member jurisdictions.
- 2. Of these, one jurisdiction was not planning to implement the Basel LCR regime as it already had a somewhat similar regulation in place.
- 3. In these jurisdictions, the regulations implementing other elements of Basel III capital standards (risk coverage, the capital conservation and countercyclical capital buffers requirements) are in the process of being adopted.

The Regulatory Framework has to Deliver Understandable and Comparable Outputs

Nonetheless, studies by the Basel Committee have shown that variations in the regulatory ratios still exist, even when the rules are implemented consistently. For example, when banks use internal models, there are unacceptably large variations in the outcomes of RWA calculations both across a global sample and within the same country. This erodes both the credibility of capital standards and their comparability across banks, hence undermining market discipline.

One line of action currently under discussion is to assess whether the framework can be simplified in some respects. Overly complex standards are hard to understand and explain, thus reducing comparability when implemented and opening the door to regulatory arbitrage. In addition to eliminating or reducing overly complex elements, the use of complementary measures – such as the leverage ratio – may increase comparability.

No less important is transparency, which can be improved through improved public disclosure. The provision of meaningful information on key risk metrics reduces information asymmetry, both in benign and stress periods, as illustrated by the classical lemons problem. Moreover, transparency facilitates market discipline, which can help reduce excessive risk-taking ex ante if banks know that market participants will penalise this type of behaviour. Increased requirements on the public disclosure of risk metrics, including the use of common templates, increased minimum reporting frequency and standardised definitions, are all part of the Basel III framework. Concrete examples include the disclosure frameworks for the LCR and the leverage ratio. In addition, the Basel Committee will issue a proposal for a revised Pillar III framework for public consultation later this year. The proposal includes welcomed improvements on earlier versions of the Basel framework with respect to both the way disclosures are presented and their content. The Basel Committee also intends to tighten the requirements on the disclosure of RWA information.

While there are concerns that public disclosure could have adverse effects, particularly during periods of stress, the Swedish experience indicates otherwise. One concrete example relates to the Baltic crisis mentioned earlier. To reduce uncertainty about the extent of the problems, the Riksbank published stress test results of individual banks. Once it was clear how large the potential losses might be and how much capital support could be needed under an adverse scenario, investors could see the degree of stress at individual banks in relation to the broader banking system. In my view, this contributed to reducing the indiscriminate rise in risk aversion towards all Swedish banks, easing systemic stress. Those banks that were truly under strain were still "punished" by the markets, but the negative market reaction was potentially less severe than it would have been had the extent of problems remained uncertain. This example and the previous illustrate an important point: banks pay an uncertainty risk premium when raising funds; the higher the transparency about exposures and risks, the lower the uncertainty premium.

Similarly, in December 2010, the Riksbank started to publish information about the liquidity ratios of Swedish banks. Evidence indicates that these disclosures have improved confidence in the Swedish banks by alleviating some of the market uncertainty. Eventually, adhering to the recommendation of the Riksbank, the banks started to disclose their liquidity ratios themselves. In retrospect, increased disclosure appears to have enhanced banks' motivations to adopt a more long-term strategy to manage liquidity risks, particularly to improve their liquidity ratios, illustrating the beneficial impact of market discipline and promoting confidence in the Basel III framework.

Conclusion

Experience shows that a similar set of features tends to recur in every financial crisis. These shared characteristics extend to both the underlying causes and the factors that shape how a typical crisis evolves. At the same time, each banking crisis has its own special features and, as a corollary, it will never be possible to predict each and every melt-down.

Basel III therefore takes a multi-dimensional approach to addressing banks' risks. Under the new framework, banks will be better capitalised and their balance sheets less leveraged. Liquidity risk management will be improved and funding profiles more stable. If the framework is consistently implemented, with appropriate transparency and disclosure, Basel III will reduce uncertainty and strengthen confidence in the banking system. This is the promise of Basel III. As the Basel Committee finalises the few remaining policy aspects of the framework and through our focus on consistent implementation, we are helping to ensure that this promise will be fulfilled.

Nonetheless, there are still things that need to be done if Basel III is to realise its full potential. Some of these tasks must be shouldered by the Basel Committee. They include, for instance, continuing to seek the right balance between simplicity, risk-sensitivity and comparability in the standards. The Committee also needs to keep studying ways of increasing the reliability of risk weights and tightening the requirements that govern internal models. This work will be complemented by the Committee's efforts to foster meaningful cooperation between authorities through supervisory dialogue and outreach. Other tasks must be taken on by the jurisdictions, in particular, the responsibility for timely and consistent implementation of the Basel III framework. It is the jurisdictions too that will oversee the outcome in banks' internal risk management practices.

This may not always be the easiest path to walk. Especially in today's economic environment, we must recognise that implementing the standards will often pose challenges in the short-term. But that does not mean that we should delay the reforms. Rather, we should push ahead and do the repair work that needs to be done, as soon as possible. Reforms are often seen as imposing costs; I prefer to think of them not as costs, but as investments in a more stable future. In any event, banks with weak capital positions and insufficient liquidity buffers cannot conceivably borrow and lend in the way we want them to. That is obvious in markets like Asia, where strongly capitalised banks were less affected by the crisis, and are now stepping into markets that are being vacated by banks that were over-leveraged. Strong banks can finance economic activity, weak banks cannot. Indeed, enhancing the strength of the banking system will better provide a foundation for sustainable competition and durable growth.

Endnotes

- The Basel framework is comprised of three Pillars. Pillar I involves the minimum quantitative requirements for regulatory capital and liquidity. Pillar II, the supervisory review process, covers risk management and supervision and Pillar III relates to market discipline and sets out minimum requirements for disclosure. See www.bis.org/bcbs/basel3/b3summarytable.pdf.
- 2. For example, one bank was put into liquidation while others were restructured and merged. Large amounts of bad loans were transferred to a public asset management corporation, a so-called "bad bank."
- 3. Corresponds to the total amount contributed to the banks by the Swedish government during the crisis in relation to the Swedish GDP in 1993.
- 4. See Bernhardtson, Ellen and Billborn, Jill, (2013), "The Role of the Banking System in Financial Crises a Comparison between the Crisis in Asia and the Crisis in the Baltic Countries," *Economic Review*, 1, Sveriges Riksbank and Bonte, Rudi, (1999), "Supervisory Lessons to be Drawn from the Asian Crisis", *BCBS Working Papers*, No. 2, June, BIS.
- 5. This article focuses on the regulatory reforms in Basel III. However, the Committee is working on a number of other reforms, of which many was initiated following the crisis that will also strengthen the financial system in different ways. Those are, for example, a fundamental review of the trading book, a review of the capital framework for securitization and a number of reforms related to the market for OTC derivatives.
- 6. These alternatives include: (i) the option to use contractual committed liquidity facilities from central banks subject to certain conditions; (ii) the use of foreign currency High Quality Liquid Assets, HQLA, to cover domestic liquidity needs and (iii) the potential use of certain high quality liquid assets with a higher haircut.
- 7. For example, differences in the definitions of core capital across jurisdictions raised concerns about the true state of some banks' health.
- 8. The latest progress report on the implementation of the Basel regulatory framework, from October 2013, can be found at http://www.bis.org/publ/bcbs263.pdf.
- 9. The lemons problem was described by Akerlof in 1970. The lemons problem illustrates the information asymmetry that exists between a seller and a buyer of a product. The buyer will weigh in the risk of buying a bad product when deciding what he is prepared to pay, meaning that he will not be prepared to pay more

than the average value of the products available in the market. Akerlof, George A., (1970), "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84 (3).