## Stefan Ingves

# Aftermath of the global financial crisis

It has been almost ten years since the start of the global financial crisis. Nearly a decade has passed, and despite significant progress in a number of crucial areas, both in the global economy and in financial markets, many countries are still struggling with growth, unemployment and inflation. In Sweden, as well as in Germany and the rest of Europe, the financial crisis had a clear negative effect on GDP. Not just during the crisis but also in the years since then. And this is not surprising. Although the growth rate of the economy in most cases picks up again, crises tend to lead to a long and sustained fall in GDP, from which it takes a very long time to recover, if ever recover. So, ideally, we want to avoid the crises occurring in the first place.

I will not go deep into the details of the causes and triggers of the crisis. They are most certainly well known by this audience. I can however briefly say that before and during the crisis, the risk management of many banks was simply not adequate. Furthermore, the regulations in force at the time did not capture all the risks to which banks are exposed. Nor did they fully incorporate the systemic component of risk-taking. The extensive work of the Basel Committee is a key part of the answer to the crisis. The Committee has performed a comprehensive revision of the regulatory and supervisory framework with the goal to ensure a safer and more stable financial sector.

#### Lessons learned

The Basel Committee has been around since 1974 and has since then published many global standards and guidelines. Back in 2004, Basel II was considered a major improvement in risk management. It allowed banks to use internal models to calculate their regulatory capital requirements. The

idea was to create a stronger link between each bank's actual risk and its capital requirements. Before that, in Basel I, capital requirements were based on a set of risk weights from a standardised look-up table – without taking into account any bank-specific factors. Introducing internal models in Basel II was hence a way to achieve a more risk sensitive capital framework.

Then the financial crisis happened. It became clear that banks had too little capital in relation to their risks. And a part of the capital they did have was of too poor quality to cover losses. In addition, the liquidity risks were too high and were not adequately captured in the regulatory framework. The problems in some banks such as Bear Sterns and Lehman Brothers raised the issue of "too-big-to-fail". That is, how to deal with very large and systemically important institutions that experience problems. The case of Lehman Brothers also showed how easily problems in one bank can spread to other banks, as well as to the financial markets and the

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In den vergangenen sechs Jahren hat der Baseler Ausschuss für Bankenaufsicht mit Hochdruck daran gearbeitet, Ergänzungen und Neuerungen zu den bereits bestehenden Regulierungsstandards und Empfehlungen zu erarbeiten. Diese sollen Basel III nicht ersetzen, sondern vielmehr ergänzen und vorhandene Lücken füllen. Wichtig ist dem Autor dabei zu betonen, dass die Überarbeitungen zwar mehr Zeit in Anspruch nehmen als gedacht, man sich jedoch bemühe, die richtige Kombination aus Einfachheit, Vergleichbarkeit und Risikosensibilität zu finden, um eine globale Finanzstabilität zu gewährleisten. (Red.)

wider economy. Another key lesson from the crisis was that there are several, and often interconnected, sources of risk.

#### Key elements of Basel III

The original Basel III framework was published in December 2010. It was a result of the Basel Committee's extensive work to develop a reform package that addresses the lessons of the financial crisis. The aim was to improve risk management and governance as well as to strengthen banks' transparency and disclosures. Moreover, the reform package included the Committee's efforts to address systemically important cross-border banks.

Broadly speaking, Basel III consists of three major parts: improved standards on capital requirements, a leverage ratio, and liquidity requirements. First of all, a main objective of Basel III is to ensure that banks have higher levels of loss-absorbing capital. We therefore introduced stronger minimum standards for the quantity, quality and risk coverage of banks' capital requirements. Secondly, the Committee developed a definition of an international leverage ratio. Excessive debt is a common factor in most financial crises. A clear, straightforward leverage ratio framework is therefore an important complement to the risk-based capital framework. It helps restrict the build-up of excessive leverage in the banking sector, and helps the financial sector to steer clear of the very destructive deleveraging processes that we saw during the crisis. Thirdly, the Basel III package included ground-breaking work on liquidity requirements. Before the crisis, the liquidity across many assets appeared abundant and many banks took such liquidity for granted. It is safe to say that the financial crisis exposed a number of deficiencies in banks' liquidity risk management and risk profiles.



The Committee therefore developed two key liquidity measures: The Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The LCR is a short-term measure of a bank's liquidity. The NSFR is a structural longer-term measure that seeks to assure that the mismatch between a bank's assets and liabilities is not too large.

In addition, the Financial Stability Board together with the Basel Committee developed standards on Total Loss Absorbing Capacity (TLAC). The aim of TLAC is to avoid public money being used to save large, troubled banks or in other words, to end the too-big-to-fail problem. With TLAC, losses are to be absorbed by the bank's shareholders and creditors, instead of tax-payers. The TLAC standards have been implemented in the EU through the Banking Recovery and Resolution Directive.

#### **Revisions to Basel III**

While the Basel III agreement in 2010 was a milestone in the Basel process, further enhancements to the regulatory standards were needed to restore the credibility of the risk-weighted framework. For the past few years, the Committee has worked to make sure that the pieces all fit together, and to add additional pieces where needed. Now, let me stress that this is not a new design. It is no "Basel IV" as many from the industry call it. We have not developed new concepts and we have not made major changes to the risk management principles from Basel III. On the contrary, the Committee has worked on the parts of Basel III that needed to be added or amended to enhance the framework's purpose and assure its continued relevance.

One example is the leverage ratio, which was originally agreed in 2010. In January 2014 we published the full text defining the exposure measure and outlining the disclosure requirements. In January 2016, we agreed that the leverage ratio should be based on a Tier 1 definition of capital, that it should comprise a minimum level of three percent, and that there would be an additional requirement for global systemically important banks. In April 2016, we consulted on further refinements to the exposure measure (focusing on aspects such as derivatives and provisions). In this sense, our work in the last six years has focused on refining the original agreement reached in 2010.

A main goal of the Committee's recent work has also been to reduce excessive variability in risk weighted assets. Studies performed by the Basel Committee after 2010 showed that there was considerable variation in how banks assess their risks. And hence also in the associated risk weights and risk-weighted assets. These studies found that actual risks explained a substantial part of this variation. This is of course normal and expected. However, we also saw that a large part of the variation in risk-weighted assets arose from differences in supervisory and bank practices. And this is something we refer to as "excessive" variability. Excessive variability means that two banks with the same exposures, estimate risk-weighted assets that differ. In some cases, these differences in risk-weights and the associated capital requirements are large - in fact very large. This reduces the credibility of capital standards, as well as their comparability across banks. In addition, it undermines the level playing field.

The Committee has therefore made revisions to the internal ratings-based (IRB) approach, to reduce this excessive variability. The revisions include constraining internally-modelled approaches for some asset classes and risk categories where modelling does not give satisfactory outcomes. The revisions also include specifying some of the input parameters more clearly, in order to make the banks' calculations more consistent. This helps to make sure that the banks use their data in a fairer and more comparable way, and ultimately, that there is less unwarranted variability in the system.

### Credit risk and output floor revised

The Committee has also worked to revise the Standardised Approach for credit risk. This is perhaps the most significant risk-weighted asset standard, as it is applied by the vast majority of banks around the world. The revised approach will be more risk sensitive than the current standardised approach, and provide a solid and credible alternative using internal models. The revisions will promote comparability by reducing excessive variability in risk-weighted assets across banks and jurisdictions. The new framework also reduces the "mechanistic" reliance on external ratings. The revised Standardized Approach will be neutral in terms of its capital impact.

To provide a link between the internal models and the standardised approaches, the Committee has also been working on an output floor. One purpose of the output floor is to limit the difference between internal models and the standardised approach in the calculation of risk-weighted assets. The capital "rebate" that banks can get from using internal models should be constrained. There is a level playing field aspect to this, and a related objective of increasing comparability across banks. Another purpose is to limit the incentives banks have to underestimate their internally estimated risk weights. A third purpose is to provide transparency to market participants, which is crucial for assuring market confidence in the capital requirements. There is already an output floor in place today, which is based on Basel I and hence very outdated. The new floor will be calculated based on the revised standardised approaches. As the revised standardised approaches are more risk sensitive than Basel I, the new floor will be more risk sensitive. The design of the new floor has been largely settled, and we are now working on finalising the calibration.

On market risk, the revised standards were finalised in January 2016 and include the following key areas: (1) a revised boundary between the trading book and the banking book; (2) a more coherent and comprehensive internal models approach, and (3) an improved standardised approach, that can be used by banks with limited trading activity and serve as a credible fall-back to internal models.

In addition, the framework for Credit Valuation Adjustments, or CVA, has been revised. These revisions are intended to better capture CVA risk using a standardised approach while at the same time recognising hedging. It also provides better alignment with industry practices for accounting purposes, and with the revised market risk framework. On operational risk, the Committee's work has addressed a number of weaknesses in the current framework. Most notably, the revisions include the removal of the internally modelled approach for operational risk (the Advanced Measurement Approach), in light of the recognised difficulty to robustly model operational risk capital requirements. Instead, a single, revised and risk sensitive standardised approach has been developed. Parallel to revising Basel III, the Committee is also working on reviewing the regulatory treatment of sovereign exposures. Today, most exposures to sovereign entities effectively receive a zero percent risk weight. The Committee is reviewing both the definition of sovereign exposures and how to treat such exposures appropriately. This work is being conducted in a careful, gradual and holistic manner.

#### Global financial stability

As you have probably noticed, the finalisation of the revisions to Basel III has taken somewhat longer than initially expected. I would like to stress that the Committee recognises the importance of providing clarity and certainty to all market participants, and is working actively towards reaching an agreement as soon as possible. However, we need to spend sufficient time on assuring that the outcome strikes the right balance between simplicity, comparability and risk sensitivity, and that it adequately captures the views of all member jurisdictions. At our most recent Committee meeting two weeks ago, members reiterated their broad support for the key features of the reform package. This includes the revisions to the risk-weighted asset framework, the leverage ratio framework and the output floor. The differences, where they remain, have narrowed and work continues to reach an agreement.

Some critics have said that the Basel III revisions could lead to major increases in capital requirements for some banks, which in turn could impact the real economy negatively. I would like to emphasize that the Basel Committee's reforms aim to ensure that banks around the world are resilient to financial shocks. And that their risks are covered by capital in a uniform way across banks and across countries. Furthermore, the aim is not to significantly increase total global capital requirements. This does not mean that no bank would get higher capital requirements. It could even mean that banks in some countries get slightly higher capital requirements. But overall, on a global level, the effects of the reforms are neutral.

It is also worth noting that there will be plenty of time for banks to adjust to the revisions. Once the Committee has finalised the revised global Basel III standard, jurisdictions will transpose it into local rules or regulations. This is likely to take a few

years. There may also be transitional arrangements to phase-in some of the revisions, such as the output floor. When making reforms of any kind, there will naturally be some effects. If revising a framework does not have any real impact one can ask oneself, why bother? Designing a uniform global standard for banking regulation is not an easy task. Particularly as banking systems differ from country to country, but also because we live in a changing world. The aim of the Basel Committee's work is therefore to promote global financial stability. And find compromises that all member countries can support, and which will stand the test of time. In a global world, nobody benefits from fragmentation and nationalisation of banking regulation. This is an area where common minimum rules are beneficial for us all.

#### Regulation in itself is not enough

In summary, the Basel III framework is an important foundation for increasing the resilience of banks and fostering global financial stability. But as I mentioned before, strengthened standards for regulation alone is not enough to ensure financial stability in the longer term. Proper implementation is equally significant. We can't just make the standards – we also need to make sure that they are being implemented, applied and followed.

In order for Basel III to serve its purpose, the standards need to be implemented in a full, timely and consistent manner in all jurisdictions that have committed to do so. This is crucial to increase global financial stability, enhance comparability between banks' regulatory ratios, reduce opportunities for arbitrage and ensure a level playing field. And these aspects are all essential for fully restoring confidence in the banking system. As Chairman, I see it as essential that the Basel Committee promotes and monitors the implementation of its standards. The Committee's Regulatory Consistency Assessment Programme, or RCAP, is a peer assessment programme where a small team of experienced supervisors and experts reviews a member country's implementation of the Basel standards. To foster transparency the resulting assessments are made public, together with an overall review of compliance with the Basel standards. I am happy to say that by November last year, all Basel committee member jurisdictions had been assessed on

the capital side. The RCAPs identified over 1,000 deviations from the global standard. This resulted in as many rectifications and changes that were made to laws and regulations all over the world, to become more compliant with the Basel framework. This is a significant achievement, and the Committee will continue going forward with it.

One of the purposes of the Committee's work is to establish global minimum standards, to ensure that banks around the world are better equipped to manage losses when they arise. Financial intermediation is fundamental to economic growth. But banks are not able to perform that crucial role unless they have a foundation of strong capital and liquidity, and thereby also the confidence of their customers, counterparties and other market participants. Only strongly capitalised and highly liquid banks can safely support an economic recovery. Healthy banks lend – sick banks don't.

There are also significant synergies from developing these standards jointly. It helps assure that we all have solid rules in place. This includes the smaller countries that would have a harder time developing these rules on their own. Healthy banks worldwide stimulate global economic growth from which we all benefit. Economic growth in Sweden is good for Germany, and vice versa. Joint standards also decrease the risk of financial contagion. The cost of regulation is also much lower for all countries, if we do it jointly. Standardisation is beneficial. It will be easier for banks to comply with the prudential rules, if they are set up in a standardised way. But the benefits of standardisation are wider. To draw a parallel to the auto industry: When I rent a car anywhere in the world, I can assume that the car will most likely have the first gear on the top left of the gear stick. This facilitates driving but also road safety. Similarly, adopting minimum standards for the prudential rules will foster cross-jurisdictional business and trade, financial stability and ultimately economic growth.

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