From the Vasa to the Basel framework: The dangers of instability

Speech by Mr Stefan Ingves, Chairman of the Basel Committee and Governor of Sveriges Riksbank, at Unique Lecture at the 2015 Annual Convention of the Asociación de Mercados Financieros, 2 November 2015, Madrid, Spain.

Introduction

Good afternoon and thank you very much for the opportunity to deliver the 2015 Unique Lecture at your Annual Financial Convention.

I am delighted to be at the magnificent Casino de Madrid, which is a building steeped in history. I will be drawing on some lessons from Swedish history as part of my speech today.

I will focus on the shape of the Basel regulatory framework and the Basel Committee's future work. But to set the stage, given the long and proud maritime histories of both Spain and my own country, Sweden, I think it would be instructive for me to first briefly discuss the story of an infamous Swedish warship, the *Vasa*.

The Vasa and the quest for perfection

In many ways, Sweden and Spain were very much alike in the 17th century. Both were fiscal-military states. This means that their economic models were centred on ensuring the strength of their military.[1]

In 1625, King Gustav II Adolf of Sweden ordered the construction of new warships. One of these royal galleons was the mighty Vasa.

It took three years and 300 men to build the Vasa. And 40 acres of timber were consumed.

The final result was impressive. The Vasa had two gun decks, a first for Sweden, 64 bronze cannons, and its tallest mast soared to 57 metres.[2] The ship was the result of a quest for perfection.

This perfection was, alas, short-lived. Tragically, the Vasa sank on its maiden voyage, after sailing only 1,300 metres, on 10 August 1628. The ship was salvaged more than 300 years later, and is now in a museum in Stockholm.

After so much planning, so many resources and so much time and effort, why did the Vasa sink? According to the King, it was the result of "foolishness and incompetence"![3] But historians generally agree that a key factor in the Vasa's fate was the lack of stability and the hull's excessive rigidity. For example, the underwater part of the hull was too small and the ship's ballast was insufficient. In short, the Vasa was well constructed but incorrectly proportioned.[4]

What is the link between this historical incident and the Basel regulatory framework? I think there are some similarities, but also important differences, with the evolution of the bank regulatory framework.

Basel and the quest for quantitative precision in risk measurement

Returning to the recent past, in 1999, the Basel Committee on Banking Supervision consulted on proposals for a new capital framework, to replace the dated Basel I framework.

Six years were spent on developing this new framework. Hundreds were involved - central bankers, regulators and supervisors, not to mention the untold bankers, academics and others who commented on the Committee's proposals. Perhaps the equivalent of 40 acres of timber were consumed in the form of internal BCBS papers, consultation papers and responses received by stakeholders!

The final result looked impressive on paper. In the Committee's quest for greater risk sensitivity, Basel II introduced the role of internally modelled approaches for credit risk and operational risk and expanded the role of models for market risk.

But things did not work out precisely according to plan. The financial crisis highlighted a number of shortcomings with the banking system and the regulatory framework, including:

- too much leverage, with insufficient high-quality capital funding banks' assets;

- excessive credit growth, fuelled in part by weak underwriting standards and an underpricing of credit and liquidity risk;

- a high degree of systemic risk, interconnectedness among financial institutions and common exposures to similar shocks;

- inadequate capital buffers to mitigate the inherent procyclicality of financial markets and maintain lending to the real economy in times of stress; and

- insufficient liquidity buffers and excessive exposure to liquidity risk. This was in terms of both direct and indirect liquidity risk (for example, through the shadow banking system).

When the first shocks of the global financial crisis were felt on 9 August 2007 - almost 379 years to the day from the Vasa's maiden voyage - Basel II was just in the very early stages of implementation. In most countries, the Basel framework had not even been implemented.

A key lesson from the Vasa incident - the critical need for a stable framework - applies equally to the regulatory framework. The Committee's post-crisis reforms were motivated by precisely this desire: a robust framework that will provide safety and stability regardless of the inevitable stormy seas. The Basel III framework seeks to address the weaknesses I mentioned and provides the foundation for a resilient banking system.

In addition, another important lesson is that the quest for perfection - or in this case, ever-more precision in measuring risk - can be illusory. Spending years on developing a "perfect" risk-sensitive framework may not deliver the results we would hope for. Instead, having in place multiple regulatory constraints provides more safeguards against the risk of a defect in any single element of the framework.

The Basel Committee's policy reforms: what is left to do?

The post-crisis regulatory framework is now well established. We are clearly within reach of finalising the Basel III reform package. This is a significant achievement that will give much needed clarity to markets, banks and supervisors as they develop their work plans. But in order to do this, we need to finalise some outstanding reforms and also calibrate the whole package. Let me now say a few words about the Committee's ongoing reforms and what is left on our agenda.

As I mentioned earlier, the Basel III reforms aim to tackle some of the major shortcomings highlighted by the financial crisis. The new framework that has emerged is one with multiple regulatory constraints. In addition to the risk-weighted ratio, it now includes a leverage ratio, large-exposure limits, the Liquidity Coverage Ratio and the Net Stable Funding Ratio. These constraints complement one another, resulting in a more robust regulatory framework.

Notwithstanding these enhancements, the framework has remained unchanged from Basel II across two broad dimensions:

- first, the way in which risk is measured - and in particular, the reliance on banks' own estimates of risk - has remained the same following the crisis; and

- second, the risk-weighted approaches are essentially the same as they were before the crisis.

The main elements of the Committee's ongoing policy reform agenda addresses fault lines that emerge from these two dimensions. These reforms build on the Committee's strategic review of the risk-weighted capital framework to assess whether it strikes the right balance in terms of simplicity, comparability and risk sensitivity. The reforms can be grouped into three broad categories:

(i) enhancing the risk sensitivity and robustness of standardised approaches;

(ii) reviewing the role of internal models in the capital framework; and

(iii) finalising the design and calibration of the leverage ratio and capital floors.

Enhancing standardised approaches

I will start by discussing the work on standardised approaches. Standardised approaches facilitate the comparability of banks' capital ratios. But the crisis highlighted a range of shortcomings with the existing approaches.

The Committee is working on revising the standardised approaches across the regulatory framework to enhance their robustness and risk sensitivity. This includes revisions to the following standardised approaches:

- *Credit risk*: The Committee consulted on proposals to revise the standardised approach for credit risk in December 2014, and will consult on revised proposals by the end of the year.
- *Market risk*: The Committee's fundamental review of the trading book, which will be finalised by the end of 2015, will include a revised standardised approach that is sufficiently risk sensitive to act as a credible fallback to the modelled approach.
- *Operational risk*: The Committee consulted last year on revising the standardised approach for operational risk. The Committee is considering changes to its proposal and will consult on a revised standardised approach by the end of the year.

Reviewing the role of internal models

Let me now say a few words about internal models. As I mentioned earlier, the use of internally modelled approaches was a defining feature of Basel II. But even at the time when Basel II was still under development, the Committee had concerns about the reliability and robustness of models. For example, let me read the following excerpt from a speech by one of my predecessors, Chairman Tom de Swaan, in 1998:

"There are still serious obstacles... Firstly, credit risk models come with substantial statistical and conceptual difficulties. To mention just a few: credit data are sparse, correlations cannot be easily observed, credit returns are skewed and... backtesting in order to assess a model's output may not be feasible. Clearly, there are model risks here."

Since then, ample evidence has accumulated to suggest that the current role of internal models in the regulatory framework does not strike the right balance between simplicity, comparability and risk sensitivity.

The Committee will publish proposals around the end of the year related to the use of models. In some cases, the proposals will remove internally modelled approaches for some risk categories. One example is operational risk, where most would agree that the benefits of the Advanced Measurement Approaches are not proportionate to the related costs and complexity. In other cases, the proposals will consist of introducing additional constraints to internally modelled approaches. More detail on the Committee's thinking in these areas will come in due course.

Finalising the leverage ratio and capital floors

Finally, in parallel with the revisions outlined above, the Committee is working on finalising the design and calibration of a Pillar 1 leverage ratio and the use of capital floors based on standardised approaches. Such measures would reinforce the "multiple constraints" framework we now have, with each measure offsetting the shortcomings of the other.

Revisions to the risk-weighted framework

In addition to the revisions related to risk-weighted asset variability that I mentioned, the Committee is working on other key revisions to the risk-weighted framework. These include:

- *Simple, transparent and comparable securitisations*: The Basel Committee and the International Organization of Securities Commissions finalised the criteria for simple, transparent and comparable (STC) securitisations earlier this year.[5] Incorporation of these criteria in the revised securitisation framework is planned to be finalised in 2016.
- *Interest rate risk in the banking book*: The Committee is reviewing the regulatory treatment of interest rate risk in the banking book. This is particularly important in the light of the current exceptionally low interest rate environment in many jurisdictions. The aim of this review is twofold. First, to ensure that banks have appropriate capital to cover potential losses from exposures to changes in interest rates. Second, to limit capital arbitrage between the trading book and banking book, as well as between banking book portfolios subject to different accounting treatments. The Committee consulted on a set of measures earlier this year, and intends to finalise its approach in 2016.
- *Sovereign risk*: I mentioned at the start of my lecture that Sweden and Spain used to be fiscal-military states. As a result of high government spending and taxation to support their military conquests, both countries defaulted on

their debt.[6] Thankfully, both countries have since scaled back their military ambitions, but we have continued to see episodes of sovereign risk. The Committee has initiated a review of the existing regulatory treatment of sovereign risk and will consider potential policy options. The review will be conducted in a careful, holistic and gradual manner.

Conclusion

Let me conclude. The Committee's post-crisis reforms seek to address the key weaknesses of the regulatory framework as highlighted by the financial crisis. Many of these reforms are now complete. Moreover, the direction of outstanding work is well defined and its finalisation is within reach. Completing the job will provide much needed clarity to the markets, to banks and to supervisors.

A key feature of the post-crisis regulatory framework is the reliance on multiple regulatory constraints. Such a framework is more robust to weaknesses stemming from specific regulatory ratios.

The Committee's ongoing policy reforms are grounded in trying to balance the simplicity, risk sensitivity and comparability of the risk-weighted framework. Around the end of the year, the Committee plans to publish the outcome of its strategic review of the capital framework.

In my speech today I have touched on history that many have already forgotten - I am referring of course to the recent financial crisis rather than the Vasa! The Committee's post-crisis reforms will be mindful of the lessons of history and they will help deliver a stable regulatory framework. This in turn will provide the foundation for a resilient banking system that supports the real economy.