

## **Nout Wellink: Risk management & financial stability – Basel II & beyond**

Remarks by Dr Nout Wellink, President of the Netherlands Bank and Chairman of the Basel Committee on Banking Supervision, at the GARP 2007 8th Annual Risk Management Convention & Exhibition, New York, 27 February 2007.

\* \* \*

### **Introduction**

I am very pleased to be here in New York this morning to talk about risk management in the context of a rapidly changing financial environment. Many would argue that the greatest challenges for risk managers and supervisors arise during economic downturns and periods of financial stress. However, current benign and favourable conditions can present other challenges. We are facing a period of rapid innovation in financial markets, growing competition, and fading history that is relevant to how stress could play out in the future.

In my remarks today, I would like to present a framework to think about the changing risk landscape for banks, as well as some practical steps for risk managers and supervisors that flow from this analysis. Specifically, I will first talk about the changing business model under which banks are operating. I will then discuss the new types of risk that this business model presents for banks and how traditional measures of risk and capital are becoming less relevant in this context. Finally, I will present some thoughts on what banks and supervisors can do to improve core financial institutions' resilience to stressed market conditions.

I should note that my remarks today benefit from the excellent exchanges of information that occur among banking supervisors at the Basel Committee on Banking Supervision, as well as other bodies like the Joint Forum of banking, insurance and securities supervisors. They are also informed by the insights that supervisors are deriving from the development and implementation of the Basel II capital framework. In an environment where banks and securities firms have a growing share of their activities outside of their home countries, exchanging information on emerging risks and possible supervisory responses is increasingly important.

### **Changing business model of banking**

As a result of significant financial product innovation and advances in technology, the role of banks as the ultimate holders of credit assets has become less important. At the same time, however, the global banking institutions, together with a handful of securities firms, are now at the centre of the credit intermediation process. These institutions originate and underwrite the majority of credit assets. They tend to distribute them to various classes of investors through syndication, securitisation, and credit derivative technologies. Using similar technologies, they also actively manage their residual exposures. In many cases, financial institutions may retain and manage the more complex and potentially less liquid risks, for which they are ultimately rewarded.

We are therefore witnessing a fundamental change in the business of banking from buy-and-hold strategies to so-called 'originate-to-distribute' models. While this change presents opportunities and challenges for risk managers and supervisors, it also serves as a useful framework for thinking about the changing risks at banks and other financial institutions.

This shift in business models has been propelled by the rapid innovation in financial instruments, in particular the interaction of the credit derivatives markets with the rapid growth of securitisation technology. It has also been influenced by the rapid growth of the institutional investor base. There are many new players to whom risk can be distributed, such as hedge funds, loan funds, funds-of-funds, in-house hedge funds and mutual funds. In particular, we are witnessing a rapid growth in investor appetite to take on new forms of credit risk.

These developments have created many opportunities to improve the way financial institutions manage their risk exposures and reduce their vulnerabilities to traditional types of credit stresses. Risks are now more widely distributed outside the banking system. There are more tools to manage risk concentrations. Risks, and how they are priced, have become more transparent. As a result, deteriorating credit exposures can be managed more actively at an earlier stage.

## **New risks and risk management challenges**

The transformation of banks' business models has yielded substantial benefits. However, the move to originate-to-distribute models also provides a useful framework for examining new types of risks that banks face and for highlighting some of the shortcomings of more traditional measures to manage them. By traditional measures, I mean simple balance sheet ratios of capital adequacy, historical measures of potential losses on loan portfolios, or value-at-risk-based risk measures in the trading book.

The originate-to-distribute business models depend on several key characteristics:

- First, a growing reliance on liquid markets;
- Second, a healthy risk appetite among various types of investors, in particular those taking on the more risky portions of structured credit assets;
- And third, a diverse investor base to whom risk is being distributed.

Ultimately, what we are concerned about is the ability to transfer or actively manage the various risks that core intermediaries face, not just under favourable market conditions, but also during periods when financial market, credit and liquidity conditions are less benign.

When seen through this prism, there are a number of new risks that are not captured through traditional measures. In particular, I would highlight the following:

- First, a rapid growth of trading book assets relative to traditional banking book assets and a fundamental shift in the types of risks retained in the trading book, in particular those arising from structured credit products. This is a natural consequence of the improvement in financial technology we are seeing, which enables more and more assets to be priced and traded.
- Second, the growth of the trading book is, in turn, producing a rapid growth in counterparty credit exposures relative to traditional credit exposures. As with market risk exposures, these counterparty exposures are becoming increasingly complex and difficult to measure.
- Third, the valuation of increasingly complex products presents yet another challenge. Many of these products have not been tested under periods of stressed liquidity, which could have a significant impact on valuations.
- Fourth, the use of traditional approaches by many firms to assess their vulnerability to funding liquidity risk. These approaches may not take into account the growing reliance on active markets to manage the firm's liquidity in an environment that is increasingly capital-markets driven. Both the Basel Committee and the industry are currently exploring issues relating to the management and supervision of funding liquidity.
- Finally, the degree of risk transfer that is actually achieved through credit risk mitigation and securitisation techniques requires greater scrutiny. In particular, how well do these risk transfers hold up under stress? To what extent will risk be put back to firms if counterparties were to default, if investors were to demand compensation for losses, or if investor risk appetites were to shift abruptly?

## **Practical areas of focus for risk managers and supervisors**

Trying to predict how all these risks will play out in practice can be demanding since we have little historical experience to guide us. Growth in credit markets, synthetic securitisations, new market players and new risk management techniques have largely taken place over the past five years, that is, after the last credit downturn. I expect we will only experience a true period of stress when we have the combined impact of a credit downturn, a major shift in risk appetites and a withdrawal of market liquidity.

Firms have been challenged to develop more comprehensive stress tests that cut across risk types and business lines in a true downturn environment. Stress tests that are produced on a regular basis are most evolved in the market risk area. Regular credit risk stress tests tend to be conducted primarily at the level of business lines. More comprehensive firm-wide credit stresses and scenarios often tend to be more ad-hoc. Finally, the manner in which different risk types interact under stress conditions is still at the frontier of risk management.-

I believe, however, that there are a number of additional practical steps that banks and supervisors can take to improve their understanding of financial intermediaries' resilience to stress. Here again, the changes we are seeing from the originate-to-distribute models can come to our aid in structuring our thinking.

In the case of banking institutions, this could entail an assessment of where pressure points might arise under the new business models if risk appetites were to reverse and liquidity conditions to deteriorate. This does not necessarily require a prediction of the magnitude of deterioration, but rather a relative assessment of where the greatest pressure points may emerge. Building on the earlier discussion, such areas might include:

- The inability to distribute exposures in various types of securitisation and underwriting pipelines, and the need for a deeper understanding of the risks along various points of the distribution process;
- Challenges around obtaining valuations for more structured positions and certain types of collateral;
- The growth of concentrations under stress as borrowers draw down traditional lines of credit, conduits require additional support and trading counterparties demand additional financing. In the extreme, concentrations could arise by taking back positions if counterparties default;
- And finally, the ability to collect adequate margin in relation to risk through the cycle (as discussed in the so-called "Corrigan report" produced by the Counterparty Risk Management Policy Group).

Conducting such analyses under the umbrella of the originate-to-distribute model provides a common denominator across what might otherwise be an unrelated set of risks and control points. Firms might also ask themselves where they have the capacity to improve controls on their own versus where they must rely on cooperation across the industry, either because of shared infrastructures or due to competitive issues.

Bank supervisors can reinforce these efforts through an assessment of firms' risk management approaches and how these would perform should risk appetites and market liquidity conditions reverse (whatever the cause). Given the cross-border nature of banking institutions, there is significant value in supervisors sharing information about the quality of firms' risk management systems in relation to such a scenario. There also is value in sharing across sectors where we see product lines and business lines cutting across institutional lines.

Finally, let me discuss how Basel II fits into this picture. Banks and supervisors are spending a lot of time and resources preparing for the practical implementation of the framework, including the management of a variety of home-host issues. Basel II also provides a structured framework for firms and supervisors to assess the robustness of risk management in the originate-to-distribute market environment. A more in-depth discussion of this issue is something I will take up in a future speech, but let me end with a few concrete examples about how the Basel II framework can focus dialogue in this area:

- First, Basel II requires that firms develop more robust frameworks for capturing less liquid products and rapidly growing credit risk in the trading book.
- Second, the Basel II framework permits firms to use their own models to measure counterparty credit risk exposures. This process can focus on how firms capture some of the more complex credit risks arising from structured credit and equity derivatives. Under Pillar 2, supervisors can assess how these risks are reflected in economic capital models. Moreover, the framework only allows the recognition of portfolio margining models if they are sufficiently robust from a legal and risk management standpoint.
- Third, Basel II establishes benchmarks for recognising risk transfer and mitigation in credit derivatives and securitisation structures. These provide a framework for supervisors to assess the degree of risk transfer and mitigation under both normal and more stressed market liquidity conditions.
- Fourth, Basel II seeks to advance comprehensive stress testing frameworks and provides a clear benchmark for what stress testing is intended to achieve. For banks, this means demonstrating to themselves and to supervisors that they hold an adequate cushion of capital in good times to carry them through a significant credit downturn.

- Finally, under Basel II, firms must take a close look at the robustness of their economic capital models. For example, it requires banks and supervisors to discuss assumptions regarding diversification benefits, within and across business lines and risk types.

## **Conclusions**

To conclude, there is a great deal of uncertainty around the nature of risks in the markets, the adequacy of risk premia and what might trigger the next stress scenario. At the same time, I think there is a lot that banks and supervisors can do in practice to better prepare for the inevitable next downturn. By assessing how the business of banks has changed through the prism of the originate-to-distribute models, banks and supervisors can focus their efforts on strengthening risk management in areas that present the greatest vulnerabilities to a deteriorating market liquidity scenario, as well as on those risks that are not well addressed using more traditional risk metrics. Moreover, there is significant value in the industry and supervisors sharing insights on issues and concerns around this type of a scenario. Finally, Basel II provides a structured framework for discussing some of the new risks we are seeing and creating incentives to better measure and manage those risks.

Thank you very much, and I wish you an interesting and enlightening conference.