

## **Jaime Caruana: Risk management trends and the supervisory structure**

Remarks of Mr Jaime Caruana, Governor of the Bank of Spain and Chairman of the Basel Committee on Banking Supervision, at the 31st General Assembly of the Geneva Association, Madrid, 27-29 May 2004.

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### **I. Introduction and overview**

I would like to thank Mr de Castries, Mr Liedtke, and the members of the Geneva Association for inviting me to participate in your 31st General Assembly. As the chairman of the Basel Committee on Banking Supervision, I am honoured to address another organisation that names itself after a distinguished city in Switzerland. It is a special privilege for me to do so here in Madrid, not far from the Bank of Spain.

Our organisations may hail from different Swiss cities and different sectors of the financial services industry, yet both organisations monitor trends in risk management and work to encourage advances in that discipline. This is a difficult but enormously important duty for all of us. Financial organisations - whether they are insurance companies, securities firms, or banks - compete on their knowledge of their customers. They seek to tailor products and services to each customer's ever changing needs. To succeed in an environment where products and services must evolve quickly, financial service providers must understand thoroughly the benefits, costs and risks of their current activities, while watching the horizon carefully for future changes that might alter the balance between risks and rewards.

Supervisors, for our part, must ensure that the regulatory system encourages banks, securities firms, and insurance companies to be capable of managing their risks today and ready to respond to new challenges tomorrow. Risk management and the supervisory system cannot and should not evolve independently of each other. On the contrary, supervisory agencies and financial services providers are currently working in tandem to develop a "virtuous circle" in risk management and supervision. Together, we want to ensure that supervision reflects the best practices being developed by the industry, while at the same encouraging institutions to improve those practices constantly. This morning, I would like to share a financial supervisor's perspective with you on the "virtuous circle" that is emerging to encompass risk management and supervision.

I'll begin my remarks with the results of a study that outlines the great advances achieved by leading financial institutions around the world in developing more rigorous and comprehensive risk management approaches.

At the same time that commercial organisations made improvements to their internal processes, supervisors have sought to incorporate those improvements into the supervisory structure, which is my second topic. We are moving toward a more flexible and forward-looking approach to financial supervision that seeks to motivate prudent management - and thereby complete the "virtuous circle" - by encouraging further advances in risk management. The reforms underway are especially evident in the banking world under the Basel Committee's "Basel II" framework. I should add that the International Association of Insurance Supervisors (IAIS), a fellow association of supervisors in the insurance area, is now discussing a supervisory framework that would apply to all insurance regulatory systems globally.

Evolution in risk management and the reform of financial supervision should complement and reinforce each other, and the progress in each area will be influenced by the work underway globally to revise accounting guidelines. The Geneva Association has taken a great interest in this topic, so I will conclude my remarks with some brief thoughts from my perspective on the convergence of accounting standards, advances in risk management, and supervision.

### **II. Trends across financial services sector**

Allow me to begin with an overview of recent trends in risk management. Last year, a body representing major financial supervisory agencies conducted a study of 31 banks, securities firms, and insurance companies in 12 jurisdictions. This body - called the "Joint Forum" - consists of expert supervisors from member agencies of the Basel Committee, the International Organisation of

Securities Commissioners (IOSCO), and the IAIS. The Joint Forum seeks to identify best practices and develop guidance for activities across the financial services sector.

In its report, which was published in August 2003, the Joint Forum identified two important and recent trends among large, complex firms engaged in banking, securities, or insurance, or in some mix of these activities.

#### **A. *Integration of the risk management function.***

One of the most notable advances in risk management across all three financial services sectors is the growing emphasis on developing a firm-wide assessment of risk. This constitutes the first trend in the Joint Forum's report.

Improvements in technology and telecommunications have made it easier for firms to gather, collect, and analyse large amounts of data on their exposures and business activities efficiently and increasingly in near "real time." To make the best use of firm-wide data, some organisations have established a dedicated risk management function to foster more highly integrated and systematic approaches to risk measurement and management. The risk management function typically promotes the use of common risk measures across business lines. It can then report the firm-wide risk data to senior management. Reports may range from daily updates on "value-at-risk" trading positions to regular, if less frequent, compilations of the results of stress testing.

The broader use of shared definitions to guide the comprehensive reporting of risk across the firm enables the integrated risk management function to identify concentrations of risk. Concentrations matter particularly when various business lines within the firm have different kinds of exposures to the same counterparty. Comprehensive and consistent reporting helps, moreover, to ensure that the firm is aware of the wide range of risks to which it is exposed; that it understands the relative importance of various risks and how they may interact; and that the firm is less likely to ignore material sources of risk.

The Joint Forum's study suggests that no single model for organising an integrated risk management function has become dominant. In some financial organisations, the function may exercise a considerable degree of control over individual businesses. In others - and especially in insurance companies - local business units continue to operate autonomously to a great degree.

Yet nearly all firms that establish integrated risk management units are highly dependent on the quality of their information technology to collect, analyse, and report firm-wide data efficiently and effectively. Some participants have found that the greatest challenge in developing a centralised risk management structure lies in constructing compatible and efficient management information systems across all of their businesses. As a result, they devote substantial resources in terms of personnel and expenditures to the maintenance and enhancement of their management information systems.

#### **B. *Risk aggregation into a single measure.***

Collecting risk data across many business lines has catalysed further efforts to aggregate those measures of risk by quantifying them in a rigorous fashion. This is the second major risk management trend identified in the Joint Forum report. The quantification of risk is certainly not a new concept in the insurance industry. Actuaries have long sought to estimate the likelihood of various events taking place. In recent years, however, we have seen financial risk managers and researchers apply mathematics, statistics, and modelling to many risk exposures that were previously not thought to be readily quantifiable.

In the banking industry, for example, statistical and computational analyses developed for evaluating exposures to market risk led, over the past decade or so, to the application of similar techniques to credit risk. Indeed, the introduction of increasingly reliable estimates of the drivers of credit risk, such as the probability of default, led to many of the proposals that form the basis for the Basel II bank capital framework, as I will discuss in a few minutes.

The Joint Forum found that the "ultimate expression" of risk aggregation is the summation of many types of risk into a single risk measure. This measure, often called "economic capital," estimates the amount of capital a firm requires to protect itself against all risks with a certain degree of confidence.

But the benefits of developing more aggregated measures of risk across diverse business lines are especially appealing to complex financial organisations whose activities span many kinds of activities.

As a result, it is not surprising that large, mixed financial conglomerates have tended to invest the most in the development of economic capital estimates.

### **III. The structure of financial supervision**

The two trends in the financial services sector to integrate risk management into a dedicated function and to aggregate risk measures into a single measure of economic capital form the first part of the “virtuous circle.” These trends are influencing much more than the behaviour of individual firms. They are similarly influencing the structure of financial supervision. This leads to my second topic this morning, namely how supervisors will complete the “virtuous circle” by adopting regulations that foster continued improvements in the measurement and management of risk.

In the insurance sector, this movement is visible in the European Union’s “Solvency II” project. The IAIS’s initiative to establish a new international insurance regulatory framework will likewise be significant to the industry in the new future. But certainly a lot of attention has been paid to the work that the Basel Committee and other supervisors are undertaking to reform the international bank capital adequacy framework under Basel II.

Basel II represents one of the most important reforms in banking supervision. For the past few years, central bankers, bank supervisors, and the industry have been discussing ways to revise the 1988 Basel Accord, which constitutes a cornerstone of the bank regulatory framework. The 1988 Accord was a landmark achievement in its own right. It represented the first internationally accepted “yardstick” for determining the adequacy of a bank’s capital. It was relatively simple to apply and, perhaps as a result of its simplicity, was adopted by supervisors in over 100 countries.

But its simplicity may have led in some ways to its gradual decrease in relevance for sophisticated banks and systems. Leading banks made substantial improvements in their measures of risk. As the Joint Forum reported, industry leaders introduced integrated risk management functions and raised their standards for quantifying and aggregating various risks. Extraordinary growth in practices such as securitisation and in the use of sophisticated derivative products allowed banks to transfer credit risk in ways that the 1988 Accord does not capture. In addition, some banks began to manage their exposures to operational risk separately and as a comprehensive practice comparable to the management of credit or market risk.

By the late 1990s, it became increasingly clear to leading banks and their supervisors that the original Accord no longer provided meaningful measures of risk for the most sophisticated banking organisations. As a result, the Basel Committee and others began to discuss ways to revise the existing capital rules to account for these advances.

Supervisors sought more than a simple revision of the existing framework. We wanted to align our capital requirements more closely with the best measures of economic risks that banks actually face. We sought furthermore to fortify the stability of the banking sector so that banks could continue to serve as a source of credit through good years and bad. In our view, promoting financial stability will benefit not just banks, but also other businesses and consumers as well.

To incorporate the latest advances in risk management, and to develop a more forward-looking approach to supervision, the Committee embraced a “three-pillar” approach to capital requirements. Rather than simply setting out a static minimum requirement for capital levels, the new capital framework will rely on three mutually reinforcing policy approaches. They consist of, first, risk-sensitive minimum requirements; second, a more consistent system of supervisory review; and, third, enhanced transparency and market discipline. Each of these three pillars offers unique benefits on its own, but the real strength of the three pillars stems from their ability to complement each other.

The first pillar - which specifies the minimum capital requirements - constitutes a very direct approach to supervision. By applying a uniform set of rules to banks, the first pillar adds transparency to the regulatory process. Applying a shared set of rules to all banks makes it easier to compare organisations and get a sense of their relative degrees of solvency.

On a technical level, the Committee based the measures of risk on the advanced practices that banks are adopting. The rules reflect the evolution in credit risk management by allowing qualifying banks to rely partly on their own estimates of the drivers of credit risk to determine the amount of capital required against particular exposures. One such driver of credit risk might be the bank’s own estimate of a borrower’s probability of default. Similarly, the new capital rules will reflect the advances in operational risk measurement by incorporating an explicit capital charge for such exposures to loss.

So the minimum rules will align capital charges more closely to better measures of the actual underlying economic risks that the industry is developing. This is a clear example of how we are harnessing the advances made by the leading institutions within the industry. Furthermore, to encourage those institutions which are not at the leading edge in this field to make enhancements in their internal controls and risk management processes, the New Accord will offer explicit economic incentives to adopt - over time - more accurate measures of risk and more sophisticated means for controlling their exposures to such risks.

However, the Basel Committee recognised that relying on uniform rules alone would have introduced certain drawbacks. Rules tend to be inflexible and therefore might preclude or ignore innovation. Applying uniform rules may also fail to account for a bank's unusual businesses or risk profiles.

Consequently, our second pillar, supervisory review, addresses some of those drawbacks. It introduces judgement into the policy mix. Banks and supervisors will exercise discretion in determining capital needs relevant to their particular businesses and risk profiles. That degree of discretion makes the supervisory framework more flexible and better able to adapt to change and innovation.

Finally, the third pillar, market discipline, adds greater transparency to the process. When a bank discloses information that offers meaningful insight into its risk positions and exposures, marketplace participants are better able to assess its financial health. Counterparties, investors, rating agencies, and even customers can reward banks that manage their risks properly and penalise those that hold unrealistically low amounts of capital for their risk. Their reactions provide economic incentives for banks to strengthen their management of risk and hold at least adequate levels of capital against their risks.

One might say that Basel II seeks an "efficient frontier" of policy objectives through the three pillars. Each pillar provides something that the other two cannot. Each is essential to achieving our overall objective of financial stability. I realise that this analogy of the three pillars as a portfolio of policy options is an oversimplification. But it helps us to visualise why we think that the most "efficient frontier" involves a mixture of minimum rules, tempered by supervisory discretion, and supplemented by market-based incentives.

#### **IV. Consistency of accounting standards and a three-pillar system**

Of course, our three-pillar supervisory system is highly dependent on a firm's internal measures of risk exposures. "Basel II," for example, looks at a bank's own measures of risk in Pillar 1. Supervisors then engage bank managers in a dialogue on their interpretations of those measures - and the steps managers take in response - in Pillar 2. Finally, Pillar 3 is intended to give the market greater insight into those measures of risk exposures and what the bank may do to control them. Because the three pillars are so dependent on the internal measures, neither supervisors nor bankers can ignore the mechanics that define how financial data are recorded and reported. Those mechanics, as you know, are governed by national accounting standards, which is the last topic I would like to address.

Supervisors and global market participants face significant hurdles in exercising discipline on an entity whose operations span more than one jurisdiction. Business practices differ between countries. Legal systems may be unfamiliar. Deciphering balance sheets prepared under national accounting systems can be an extremely taxing undertaking.

Considering those burdens alone, it is easy to agree that supervisory and market discipline would be more effective under more harmonious - if not completely harmonised - accounting rules. But the task is formidable.

In our duty to safeguard and reinforce financial stability, central banks and financial supervisors have a legitimate interest in the quality of accounting standards and their effective implementation. We believe that in order to help fortify the financial system, accounting standards should support - or at least be consistent with - sound risk management and control practices in use in the industry. In addition, accounting standards should facilitate market discipline by providing a more transparent "window" into an organisation's financial position and performance and likewise into its measures and management of risk exposures. Finally, accounting standards should facilitate the effective supervision of financial institutions.

In the specific case of the insurance industry, I think it's fair to say that almost all of us believe that, for international standards to be complete, we need a single, high quality standard developed to address insurance liabilities. The challenge lies in specifying a model that fits together seamlessly with other

international accounting guidelines and at the same time aligns well with sound insurance risk management and supervisory objectives. Given some of the issues we've faced in other areas of accounting, that seems unlikely to be a quick or easy job.

That same challenge to align accounting guidelines to sound risk management objectives as well as supervisory objectives exists across the financial services sectors. It explains why financial supervisors, and especially the Basel Committee, attach great importance to playing an active role in the international debates on accounting. In the Basel Committee's case, we seek to represent the supervisory perspective on key accounting issues relevant to banking, and we support the work underway in the accounting profession towards convergence in accounting standards globally.

With regard to Basel II, the Committee worked closely with our colleagues in the International Accounting Standards Board to avoid conflicts between Pillar 3 and the broader accounting standards. In fact, the Committee views Pillar 3 as a further refinement of the accounting standards that apply to banks' specific exposures. Because we recognise that we have much to do in this area, we will continue to monitor accounting and market developments in the light of Pillar 3. Our dialogue with accounting standards-setting bodies and the accounting profession will continue to grow in the years to come.

## **V. Conclusion**

This morning, I have shared some of my views on the need for risk management and supervision to evolve together and to reinforce each other. All of us recognise that both areas must keep pace with changes in accounting practices, and I think you would agree that the work we have to undertake in all three areas - risk management, supervision, and accounting - is quite demanding. To develop new ways of thinking about risk and about the techniques for measuring it, we will require hard research and significant resources. We must gather and pour over large amounts of data to sharpen our understanding of various risks and their relationships to each other. We must dedicate our talent, staff, and indeed funds to undertake this work. I would argue that is equally demanding to develop a supervisory structure that capitalises on and further encourages those advances, especially when we are trying to implement a shared framework across many jurisdictions.

But the benefits are many. On a microeconomic level, the virtuous circle I have described should help individual firms to improve the quality of their controls in the short run and strengthen their competitiveness in the long run. Yet supervisors are especially motivated by the benefits we expect at the macro level. We believe that, when all financial institutions have the right incentives to pursue profits responsibly, the financial services sector becomes better managed, more resilient, and better able to serve as a source for sustainable growth for the economy. Attaining that promise of greater financial stability is a challenge that is worthy of all of our talent, of our time, and of our hard work.

With that, I would like to thank you for welcoming me to your conference. I offer my best wishes for fruitful and thought-provoking discussions.