

Capital Regulation: The Road Ahead

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INTRODUCTION

It is a great pleasure for me to be here and to participate in the discussion of the future of capital adequacy regulation. I would like to compliment the organizers of this conference on the programme they have set up, covering many relevant topics, and the range of experts they have been able to bring together.

In my address, as I am sure you would expect, I will approach the issues from a supervisory perspective and in my capacity as chairman of the Basle Committee. Most of the questions that have arisen and been discussed here in the last two days are complicated, and many issues will require careful review. So do not at this stage expect me to provide clear answers on specifics. I do hope to be fairly explicit, however, on some of the more general issues at stake, in particular on the level of capital adequacy required for prudential purposes. In other words, my address today should be seen as part of the exploratory process that should precede any potentially major undertaking.

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STARTING POINT: THE BASLE ACCORD

When assessing the setup of capital regulation, I take as my starting point the Basle Capital Accord of 1988. It is commonly acknowledged that the Accord has made a major contribution to international bank regulation and supervision. The Accord has helped to reverse a prolonged downward tendency in international banks' capital adequacy into an upward trend in this decade. This development has been supported by the increased attention paid by financial markets to banks' capital adequacy. Also, the Accord has effectively contributed to enhanced market transparency, to international harmonization of capital standards, and thus, importantly, to a level playing field within the Group of Ten (G-10) countries and elsewhere. Indeed, virtually all non-G-10 countries with international banks of significance have introduced, or are in the process of introducing, arrangements similar to those laid down in the Accord. These are achievements that need to be preserved.

It is often said that the Accord was designed for a stylized (or simplified) version of the banking industry at the end of the 1980s and that it tends to be somewhat rigid in nature—elements, by the way, that have enabled it to be widely applicable and that have contributed to greater harmonization. Since 1988, on the other hand, banking and financial markets have changed considerably. A fairly

recent trend, but one that clearly stands out, is the rapid advances in credit risk measurement and credit risk management techniques, particularly in the United States and in some other industrialized countries. Credit scoring, for example, is becoming more common among banks. Some of the largest and most sophisticated banks have developed credit risk models for internal or customer use. Asset securitization, already widespread in U.S. capital markets, is growing markedly elsewhere, and the same is true for the credit derivative markets. Moreover, one of the advantages of the Capital Accord, its simplicity through a small number of risk buckets, is increasingly criticized.

Against this background, market participants claim that the Basle Accord is no longer up-to-date and needs to be modified. As a general response, let me point out that the Basle Accord is not a static framework but is being developed and improved continuously. The best example is, of course, the amendment of January 1996 to introduce capital charges for market risk, including the recognition of proprietary in-house models upon the industry's request. The Basle Committee neither ignores market participants' comments on the Accord nor denies that there may be potential for improvement. More specifically, the Committee is aware that the current treatment of credit risk needs to be revisited so as to modify and improve the Accord, where necessary, in order to maintain its effectiveness. The same may be true for other risks, but let me first go into credit risk.

OBJECTIVES

Before going on our way, we should have a clear idea of what our destination is. One of the objectives for this undertaking is, at least for supervisors, that the capital standards should preferably be resilient to changing needs over time. That is, ideally, they should require less frequent interpretation and adjustments than is the case with the present rules. Equally desirable is that capital standards should accurately reflect the credit risks they insure against, without incurring a regulatory burden that would ultimately be unproductive. Substantial differences between the risks underlying the regulatory capital requirements and the actual credit risks would entail the

wrong incentives. These would stimulate banks to take on riskier loans within a certain risk category in pursuit of a higher return on regulatory capital. To obtain better insight into these issues, we should further investigate banks' methods of determining and measuring credit risk and their internal capital allocation techniques. In doing so, however, we should not lose sight of the functions of capital requirements as discussed in the preceding session of this conference.

Moreover, the Accord should maintain its transparency as much as possible: with the justified ever-greater reliance on disclosure, market participants should be able to assess relatively easily whether a bank complies with the capital standards and to what extent. Especially in this respect, the present Accord did an outstanding job. Every self-respecting bank extensively published its Bank for International Settlements ratios.

Capital requirements foster the safety and soundness of banks by limiting leverage and by providing a buffer against unexpected losses. Sufficient capital also decreases the likelihood of a bank becoming insolvent and limits—via loss absorption and greater public confidence—the adverse effects of bank failures. And by providing an incentive to exercise discipline in risk taking, capital can mitigate moral hazard and thus protect depositors and deposit insurance. Admittedly, high capital adequacy ratios do not guarantee a bank's soundness, particularly if the risks being taken are high or the bank is being mismanaged. Therefore, supervisors consider a bank's capital adequacy in the context of a host of factors. But the bottom line is that capital is an important indicator of a bank's condition—for financial markets as well as depositors and bank regulators—and that minimum capital requirements are one of the essential supervisory instruments.

GUIDING PRINCIPLES

Therefore, it should be absolutely clear that, when it assesses the treatment of credit risk, the Basle Committee will have no predetermined intention whatsoever of reducing overall capital adequacy requirements—maybe even the contrary. Higher capital requirements could prove necessary, for example, for bank loans to higher risk

countries. In fact, this has been publicly recognized by bank representatives in view of the recent Asian crisis. More generally, we should be aware of the potential instability that can result from increased competition among banks in the United States and European countries in the longer run. And we should not be misled by the favourable financial results that banks are presently showing, but keep in mind that bad banking times can—and will—at some point return. In those circumstances, credit risk will still turn out to be inflexible, still difficult to manage, and still undoubtedly, as it has always been, the primary source of banks' losses. Absorption of such losses will require the availability of capital. A reduction of capital standards would definitely not be the right signal from supervisors to the industry, nor would it be expedient.

Of course, I am aware of the effects of capital standards on the competitiveness of banks as compared with largely unregulated nonbank financial institutions such as the mutual funds and finance companies in the United States. Admittedly, this is a difficult issue. On the one hand, too stringent capital requirements for banks that deviate too much from economic capital requirements would impair their ability to compete in specific lending activities. On the other hand, capital standards should not per se be at the level implicitly allowed for by market forces. Competition by its very nature brings prices down but, alas, not the risks. If competitive pressures were to erode the spread for specific instruments to the point where no creditor is being fully compensated for the risks involved, prudent banks should consider whether they want to be involved in that particular business in the first place. It is therefore up to supervisors to strike the optimal balance between the safety and soundness of the banking system and the need for a level playing field. In the longer run, efforts should be made to harmonize capital requirements among different institutions conducting the same activities, or at least to bring them into closer alignment. A first exchange of views on this takes place in the joint forum on the supervision of financial conglomerates.

Another principle that the Basle Committee wants to uphold is that the basic framework of the Capital Accord—that is, minimum capital requirements based on

risk-weighted exposures—has not outlived its usefulness. The rapid advances in credit risk measurement and credit risk management techniques are only applicable to sophisticated, large financial institutions. When discussing changes in the present Capital Accord, one should remember that it is not only being applied by those sophisticated institutions but by tens of thousands of banks all over the world. The Asian crisis has underlined once again that weak supervision, including overly lax capital standards, can have severe repercussions on financial stability. In the core principles for effective banking supervision published by the Basle Committee last year, it is clearly indicated that application of the Basle Capital Accord for banks is an important prerequisite for a sound banking system. Changes in the Capital Accord should take into account that the sophisticated techniques referred to above require among other things sophisticated risk management standards and a large investment in information technology—preconditions most banks in both industrialized and emerging countries cannot meet in the foreseeable future. Consequently, for these banks, the basic assumptions of the present Accord should be maintained as much as possible. Precisely because the Capital Accord is relatively simple, the framework is useful for banks and their supervisors in emerging market countries and contributes to market transparency.

Keeping that in mind, one should, however, acknowledge that the current standards are not based on precise measures of credit risk, but on proxies for it in the form of broad categories of banking assets. Indeed, banks regularly call for other (that is, lower) risk weightings of specific instruments. In order to obtain more precise weightings, the Basle Committee should be willing to consider less arbitrary ways to determine credit risks. But it is unrealistic to expect that internationally applicable risk weightings can be established that accurately reflect banks' risks at all times and under all conditions. Compromises in this respect are inevitable.

CREDIT RISK MODELS

A way out may be to refer to banks' own methods and models to measure credit risk, under strict conditions

analogous to the treatment of market risks. At present, I would describe credit risk models as still being in a development stage, although the advances that some banks have made in this area are potentially significant. Ideally, as sound credit risk models bring forward more precise estimates of credit risk, these models will be beneficial for banks. Models can be and are used in banks' commercial operations—for example, in pricing, in portfolio management or performance measurement, and naturally in risk management. The quantification that a model entails implies a greater awareness and transparency of risks within a bank. More precise and concise risk information will enhance internal communication, decision making, and subsequent control of credit risk. Also, models enable banks to allow for the effects of portfolio diversification and of trading of credit risks or hedging by means of credit derivatives. So it can be assumed that a greater number of banks will introduce credit risk models and start to implement them in their day-to-day credit operations, once the technical challenges involved in modeling have been solved.

The more difficult question is whether credit risk models could be used for regulatory capital purposes, just as banks' internal models for market risk are now being used. As should be clear from what I have just said, credit risk models can have advantages from a prudential point of view. For this reason, the Committee is conscious of the need not to impede their development and introduction in the banking industry. However, there are still serious obstacles on this road. First, 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, because of the statistical problems, back testing in order to assess a model's output may not be feasible. Clearly, there are model risks here.

Second, if models were to be used for regulatory capital purposes, competitive equality within the banking industry could be compromised. Because the statistical assumptions and techniques used differ, it is very likely that credit risk models' results are not comparable across banks. The issue of competitive equality would be compli-

cated even further by the potential differences in required capital between banks using models and banks using the current approach.

Third, and most important, a credit risk model cannot replace a banker's judgement. Models do not manage. A model can only contribute to sound risk management and should be embedded in it. This leads me to conclude that if credit risk models are to be used for regulatory capital purposes, they should not be judged in isolation. Supervisors should also carefully examine and supervise the qualitative factors in a bank's risk management and set standards for those factors. A possible strategy would be to start applying models for a number of asset categories for which the technical difficulties mentioned before are more or less overcome, while at the same time maintaining the present—albeit reassessed—Accord for other categories. This clearly has the advantage of giving an incentive to the market to develop the models approach further so that the approach can be applied to all credits. On the other hand, it might jeopardize transparency.

MARKET RISK AND THE PRECOMMITMENT APPROACH

Let me now make a short detour and discuss the supervisory treatment of risks other than credit risk. First, market risk. Although the internal models approach was introduced only recently, research work is going on and possible alternatives to this approach are being developed. The Federal Reserve, for instance, has proposed the precommitment approach. Its attractive features are that it incorporates a judgement on the effectiveness of a bank's risk management, puts greater emphasis on the incentives for a bank to avoid losses exceeding the limit it has predetermined, and reduces the regulatory burden. In my opinion, however, under this approach, too, a bank's choice of a capital commitment and the quality of its risk management system still need to be subject to supervisory review. And there are a number of other issues that are as yet unsolved—for example, comparability across firms given that the choice of the precommitment is subjective, the role of public disclosure, and the supervisory penalties, which are critical to the viability of the approach. For these

reasons, international supervisors will have to study the results of the New York Clearing House pilot study carefully.

OTHER RISKS

Now, let me turn to the other risks. If one leaves aside the recent amendment with respect to market risks, it is true that the Capital Accord deals explicitly with credit risk only. Yet the Accord provides for a capital cushion for banks, which is meant to absorb more losses than just those due to credit risks. Therefore, if the capital standards for credit risk were to be redefined, an issue that cannot be avoided is how to go about treating the other risks. Awareness of, for instance, operational, legal, and reputational risks among banks is increasing. Some banks are already putting substantial effort into data collection and quantification of these risks. This is not surprising. Some new techniques, such as credit derivatives and securitization transactions, alleviate credit risk but increase operational and legal risks, while several cases of banks' getting into problems because of fraud-related incidents have led to an increased attention to reputational risk. Not surprisingly, then, the Basle Committee will also be considering the treatment of risks that are at present implicitly covered by the Accord, such as those just mentioned and possibly interest rate risk as well.

In this process, it will be important to distinguish between quantifiable and nonquantifiable risks and their respective supervisory treatments. More specifically, the Committee will have to consider whether it should stick to a single capital standard embracing all risks, including market risks, or adopt a system of capital standards for particular

risks—that is, the quantifiable ones—in combination with a supervisory review of the remaining risk categories. From a theoretical point of view, one capital standard might be preferable, since risks are not additive. Given the present state of knowledge, however, one all-encompassing standard for banking risks that takes account of their interdependencies still seems far away. As the trend thus far has been toward the development of separate models for the major quantifiable risks, a system of capital standards together with a supervisory review of other, nonquantifiable risks seems more likely.

CONCLUSION

The overall issue of this conference, particularly of this session, is where capital regulation is heading. In my address, I have argued that, since supervisory objectives are unchanged, a reduction in banks' capital adequacy would not be desirable. Alterations in the basic framework of the Capital Accord should not only take into account the developments in risk measurement techniques as increasingly applied by sophisticated banks, but should also reflect the worldwide application of the Accord. The Basle Committee is committed to maintaining the effectiveness of capital regulation and is willing to consider improvements, where possible. In this regard, the advances made by market participants in measuring and modeling credit and other risks are potentially significant. They should be carefully studied for their applicability to prudential purposes and might at some point be incorporated into capital regulation. But before we reach that stage, there are still formidable obstacles to be overcome.

Thank you.

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