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The Basel II framework: the role and implementation of Pillar 2

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Discussions on the reform of the "Basel I" capital ratio, or "Cooke" ratio, which dates from 1988, were initiated in the late 1990s under the aegis of the Basel Committee. They culminated in June 2004 with the publication of a new Accord on international convergence of capital measurement and capital standards, commonly referred to as "Basel II". The new Accord was updated in November 2005 to incorporate several technical additions.

The Basel II framework is designed to permit a more risk-sensitive and more comprehensive coverage of banking risks. It consists of three complementary and mutually reinforcing "pillars". Pillar 1 consists of the basic minimum capital requirements. Pillar 2 introduces the principle of a structured dialogue between banking institutions and supervisors. Pillar 3 is focused on transparency and market discipline.

Each of these three pillars represents a major innovation, marking the transition from a prudential framework based on simple quantitative rules to a more complete set of standards which, in addition to using a more risk-sensitive quantitative approach, incorporates qualitative principles that institutions are expected to comply with. However, Pillar 2 has a unique characteristic that distinguishes it from the other two Pillars. It reaffirms and provides a rationale for the existing practice of many supervisors: conducting a quantitative and qualitative review of all risks using their own tools but also the processes for risk monitoring developed by banks themselves. These reviews may lead to various supervisory measures, including the imposition of additional capital requirements under Pillar 2.

The extensive consultations conducted in the past few years between supervisors and the banking industry have gradually led to the implications of Basel II being taken on board by all of the parties concerned. First of all, institutions focused on adapting their information systems to the requirements laid down in Pillar 1. For a long time, Pillar 2 was the least commented on part of the Basel reform. However, the entry into force of the new ratio will take place from the beginning of 2007 –in France as in the other countries of the European Economic Area– since the transposition of the Accord into Community law has taken the form of a new Capital requirements directive (CRD). In the run-up to this deadline, Pillar 2 has become a major topic of discussion between banks and their supervisors, and it therefore seems opportune to further clarify how the Commission bancaire will implement Pillar 2.

In particular, the cross-border implementation of the new framework raises many questions, to which European supervisors have responded by developing rules that are as harmonised as possible.

Beyond these considerations, thought needs to be given to the fundamental purpose of Pillar 2 and to its practical implementation. The increased risk-sensitivity of capital requirements under Pillar 1 undeniably represents a major advance, but it results in increased correlation of capital requirements with the business cycle, the degree of which will be specific to each institution. From the perspective of micro and macro-prudential stability, the fluctuations in the regulatory ratio that might result from this correlation must be understood and, if possible, kept in check. This article seeks to show how this objective could be achieved through a possible approach to Pillar 2 involving the putting in place of a capital cushion in addition to the regulatory minimum.

Conceived as a framework that goes beyond simple minimum capital requirements, the Basel II reform consists of three complementary and mutually reinforcing elements.

• Pillar 1 sets minimum requirements for capital. Its aim is to ensure that banking institutions hold sufficient capital to provide a minimum level of coverage for their credit risk, market risk, and operational risk. The innovation of Basel II, compared with the capital ratio of Basel I, is not only that it covers a broader range of risks (for example, the "Cooke" ratio does not implicitly capture operational risk), but also that it allows banks to choose between different levels of sophistication in the calculation of capital requirements. Thus they will be able, for credit risk and operational risk, to use either a set of standard risk weights that are a function of the quality of the counterparty,[1] or (risk weights based on) internal ratings.[2]

• Pillar 2 establishes a process of prudential supervision that complements and strengthens Pillar 1. It consists of the analysis by the bank of all of its risks, including those already covered by Pillar 1; the calculation by the bank of the amount of economic capital it needs to cover those risks; and the comparison by the banking supervisor of its own analysis of the bank's risk profile with the analysis conducted by the bank, to inform its choice of prudential measures, which may take the form of capital requirements greater than the minimum requirements or any other appropriate technique.

• Pillar 3 is concerned with market discipline. Its aim is to improve the financial transparency of banks by requiring them to disclose the information needed by outside parties to form an accurate and complete view of their capital adequacy. It is hoped that this will improve market discipline.

These three elements form an indivisible whole. However, the implementation of Pillars 1 and 3 depends primarily on the actions of the institutions – while recognising that supervisors should also be transparent in this regard, as is illustrated by the requirement that has been imposed on them to publish, by the end of 2006 at the latest, the national legislation transposing the European capital adequacy directive. By contrast, Pillar 2 can be understood only in the context of a structured and documented dialogue between banks and supervisors.

Pillar 2 has another particularity: banking supervisors have long "practised" it without knowing it. The innovation of Basel II is simply to systematise and thereby make more uniform and consistent approaches that until now have generally been implemented in isolation.

The remainder of this study provides greater detail on the definition and methods of application of Pillar 2 (1|). We endeavour to show how Pillar 2 can be used to limit the volatility of the capital ratio resulting from the greater risk-sensitivity of the Basel II framework (2|).

1| UNDERLYING PRINCIPLES OF PILLAR 2 AND THE IMPORTANCE OF HARMONISED IMPLEMENTATION AT THE INTERNATIONAL LEVEL

1|1 Three major components

A reading of the Basel and European texts makes it possible to group the major features and objectives of Pillar 2 around the following key principles:

• Banks should set in place systems for assessing the adequacy of their economic capital in relation to their risk profile, and should maintain an appropriate level of capital at all times. This is the internal capital adequacy assessment process (ICAAP).

1 *For credit risk, this is the "standardised approach", which consists in applying a risk weight to exposures that is a function of the intrinsic quality of the counterparty, based on the rating assigned by an external credit assessment institution, which may be a rating agency or another organisation. For operational risk, two approaches are based on this logic. In one, the "basic indicator approach", a single risk weight is applied to an indicator of income which is close in conceptual terms to net banking income. The other, the "standardised approach", is more elaborate: the various business lines of the institution allow a more detailed breakdown of the income indicator, and thus the risk-weight scale is broader and more representative of the level of risk.*

2 *In the internal ratings based approach (IRB approach) to credit risk, institutions will be able to calculate all of the parameters used in the calculation of capital requirements. The institution itself calculates the probability of default, the loss given default, and the credit conversion factors (the «advanced» IRB approach), or only some of them (the "foundation" IRB approach, in which the institution itself determines the probability of default, the other parameters being set by the regulations).*

The analysis should incorporate all risks, including those not covered by Pillar 1. These encompass not only risks that are quantifiable (interest rate risk in the non-trading book, concentration risk, transformation risk, and the residual risk that remains when collateral is lower than expected), but also risks that require a more qualitative approach (such as reputational and strategic risk).

• The banking supervisor compares its own analysis of the bank's risk profile with that conducted by the institution, and, based on its conclusions, may take prudential measures, which may involve setting capital requirements above minimum requirements or any other appropriate technique. This is the supervisory review and evaluation process, or SREP.

• It is important for supervisors to practise preventive supervision: they should intervene at a sufficiently early stage to prevent institutions' capital from falling below minimum requirements.

The application of these principles should be proportionate to the magnitude of the risks incurred; each risk should be considered not only in isolation but also in terms of its relative magnitude in comparison with other risks.

1|2 Close links with current practices and some aspects of current regulations

Pillar 1 of the Basel II framework means that supervisors attach greater importance to data produced by the institutions themselves, particularly data used in the internal approaches to calculating capital requirements for credit risk, market risk, and operational risk.

Similarly, Pillar 2 assigns an important role to processes developed internally by banks for monitoring and controlling all their risks, and to processes developed by the supervisors themselves. Nevertheless, this freedom is limited by the regulatory texts and by more detailed supervision of institutions, made possible by tools that are themselves more precise.

Banking supervisors did not wait for Basel II to take a close interest in this process. In France, regulation CRBF 97-02, which has been amended several times since it was issued, specifies the rules that institutions must comply with in the area of internal control. In addition to regulatory provisions such as those introduced by regulation 97-02, supervisors have a long-standing practice of complementing their review of regulatory ratios with qualitative analyses of banks' internal management, particularly in the area of the monitoring of risks and transactions.

Nevertheless, Pillar 2 does much more than synthesise or provide a legal basis for supervisory practices already in place. It not only introduces a detailed methodology for analysing risks and the internal processes used by institutions to monitor them, it also introduces the principle of a structured dialogue between institutions and supervisors, who have their own tools. This is one of the principal innovations of the new Accord, along with the possibility for banks to use internal approaches to calculate their regulatory capital requirements.

1|3 Vigilance by banks to ensure harmonised implementation of Pillar 2 and convergence in supervisory practices

Pillar 2 has an international dimension, to which the major banks have, justifiably, not failed to attach importance. Although the issue of convergence in supervisory practices is not peculiar to Pillar 2, it has particular relevance there, since the implementation of Pillar 2 leaves broad scope for qualitative assessment and thus for subjective judgement.

In the course of the various consultative processes, banking institutions have underlined their concern about the possibility that supervisors in different countries might adopt divergent approaches to the implementation of Pillar 2. If nothing were done to address this risk, we could end up with a situation in which multinational groups would be required to satisfy as many additional requirements as they have foreign establishments. Issues concerning the scope of application are another source of concern, at least in Europe, where the CRD stipulates that economic capital is to be calculated only on a consolidated basis for groups but that a SREP must be conducted for each individual entity.

In addition, banks fear that for some supervisors Pillar 2 will simply be an instrument for instituting an unjustified tightening of prudential requirements, and that arbitrary administrative authority will prevail over the relevance of the assessment.

These concerns have contributed to a more fundamental fear stemming from the methodological uncertainties relating to Pillar 2. Pillar 2 is indeed based primarily on general principles, in contrast to Pillar 1, whose provisions are prescriptive in nature and, for the most part, detailed and precise.

The expression of all of these fears has served as a catalyst for discussions within the Committee of European Banking Supervisors (CEBS) aimed at reducing as much as possible the risk of divergent application of the framework. Initiated in 2004, these discussions were followed by a long period of consultation designed to enable extensive exchanges with banks and different European supervisors on this subject, and culminating in the publication of guidelines on 25 January 2006.[3]

These guidelines define useful concepts in achieving consistent implementation of Pillar 2, both for banks (ICAAP and internal governance) and for supervisors (SREP). The guidelines help to remove any methodological uncertainty. In areas where industry has wished to obtain further clarification (for example, the treatment of interest rate risk in the non-trading book, or stress-testing), it has been decided that CEBS would conduct further analysis and refine its guidelines.

This work on the implementation of Pillar 2 was complemented by another initiative, which is not limited to Pillar 2, but essential in this area: the development of guidelines for strengthening co-operation between supervisors of multinational groups. These guidelines establish arrangements for the exchange of information between home and host supervisors, as well as a framework for co-ordinating prudential activities –particularly those relating to Pillar 2– under the authority of the home supervisor:

• the home supervisor (on a consolidated basis) co-ordinates the preparation of the risk assessment using the information provided by the host supervisors (subsidiaries);

• the two (or more) supervisors agree on the planning and co-ordination of supervisory activities;

• they divide up between them the tasks to be accomplished or perform them jointly;

• they agree on the outcomes of supervisory actions, data collection, etc.

Finally, at a practical level, operational networks have been set up for the prudential supervision of the major European banking groups. Each such network brings together, under the authority of the home supervisor, the different host supervisors of a given group. These networks allow the practical issues raised by the implementation of Pillar 2 to be addressed.

Following the example of what has been accomplished at the European level, the Basel Committee, through its Accord Implementation Group, is holding its own discussions on the methods for applying the provisions of Pillar 2.

2| A possible approach to Pillar 2: instituting a complementary capital cushion

The new regulatory capital ratio will make it possible to capture the intrinsic quality of risks much more precisely than the current framework. This results, however, in a degree of correlation between capital requirements and the economic environment, and, consequently, an increase in the variability of capital requirements over the course of the business cycle (see Box). Furthermore, the introduction of new accounting standards (IFRS) has resulted in the market valuation of a greater number of the assets and liabilities that figure in "risk-weighted assets" in the denominator of the ratio, or capital in the numerator. This may also increase the volatility of the capital ratio.

3 *CEBS "Guidelines on the application of the supervisory review process under Pillar 2".*

Box

The influence of the business cycle on internal ratings in the Basel II framework

By construction, the increased risk-sensitivity of capital requirements introduces a degree of correlation between the level of the regulatory capital ratio and the business cycle. Whereas under the Basel I framework, a business firm is assigned a fixed risk weight of 100%, whatever its financial condition, under the internal ratings based approach set out in Basel II, the capital charge is much more sensitive to the condition of a given counterparty, and, consequently, to the economic environment in which the counterparty operates.

The methods for determining the parameters of the risk-weighting function –the probability of default and the loss given default– have been designed to avoid excessive volatility in internal ratings. In particular, the estimation period used should be long enough for the parameters to be stable in the short term and easily predictable. For example, calculations for the probabilities of default are based on five-year averages,[1] unless a different factor that better captures the position in the business cycle is also incorporated (for the sectors or businesses for which this is justified).

Nevertheless, several empirical studies have shown that the behaviour of capital requirements calculated using the Internal ratings based approach follows relatively closely that of the business cycle. Calculations by the Basel Committee indicate that the fluctuations in the new regulatory ratio should on average represent 35%-40% of the fluctuations in economic growth. Indeed, the Basel Committee includes a "damping" factor, which is greater than 50%, linked to its methods of calculation.

The degree of pro-cyclicality is also affected by two sets of microeconomic parameters:

• The first concerns the risk profile of each banking institution and how it evolves over time, the amplitude and speed of this process being specific to each institution. Thus, the degree of correlation between internal ratings and the business cycle may be increased or lessened depending on the business activity of each institution and its appetite for risk.

• The second relates to the type of model used to assign internal ratings, in particular in the advance approach, which gives institutions broad latitude to opt for specifications that reinforce or reduce the pro-cyclicality of the ratio.

1 *The transition clauses of the CRD provide, however, that a shorter historical observation period can be used if needed.*

Too much volatility in the ratio is to be avoided, from the perspective both of investors and supervisors:

• For investors, the predictability of the short- to medium-term financial condition of institutions is a decisive element in their asset allocation policies. Too much variation in the ratio would be perceived as a risk factor likely to render access to markets more difficult, or to increase the cost of financing.

• From the standpoint of supervisors, the capital ratio should be relatively resilient given that the degree of exposure of banks to microeconomic or macroeconomic risks is especially pronounced by virtue of the role they play in financing various sectors. Too much instantaneous volatility would appear to indicate a lack of financial robustness.

Setting a target ratio arrived at by adding a capital cushion to the regulatory minimum, in the context of Pillar 2, might offer a methodological and systematised solution to this problem.

2|1 Setting a target capital ratio

The determination of the target capital ratio would be based on the supervisors' analysis of all the quantitative and qualitative risks of a group: those coming under Pillar 1 as well as those covered by Pillar 2. The target ratio would have a stabilising effect on the capital coverage of financial activities, since it would fluctuate much less than the regulatory ratio. Indeed, the qualitative factors that form part of the target ratio are only partially independent of the business cycle, or change more slowly than the quantitative factors.

It is this target ratio that, after discussions with the institution, supervisors would ask the institution to satisfy (and not to disclose). In practice, it would be above the regulatory ratio, insofar as prudential measures would be taken well before actual capital levels fall too close to the regulatory threshold. Furthermore, the assessment used to set the target ratio needs to have a certain constancy over time in order to be effective.

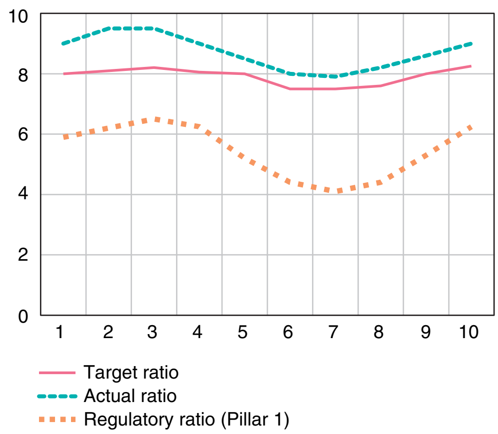
Moreover, given that the bank would itself need a safety margin of in relation to the target ratio, to be sure of satisfying it in all circumstances, the actual ratio held and published in the context of its operations would be greater than the target ratio and more stable than the regulatory ratio.

The target ratio would thus have a smoothing effect, as illustrated in Chart 1.

The combination of a minimum regulatory ratio (Pillar 1) and a target ratio (Pillar 2) would provide the benefits both of a risk-sensitive calculation mechanism and a capital level that is reasonably stable over time.

This approach based on a target ratio should, however, be distinguished from the calculation of economic capital. The latter serves primarily as an internal management tool for bank managers, who seek to provide an adequate return to shareholders and an optimal allocation of capital across different business lines. Economic capital appears to need to be lower than

Chart 1
The smoothing effect of the target ratio
(ratios as a % – X-axis ; time – Y-axis)



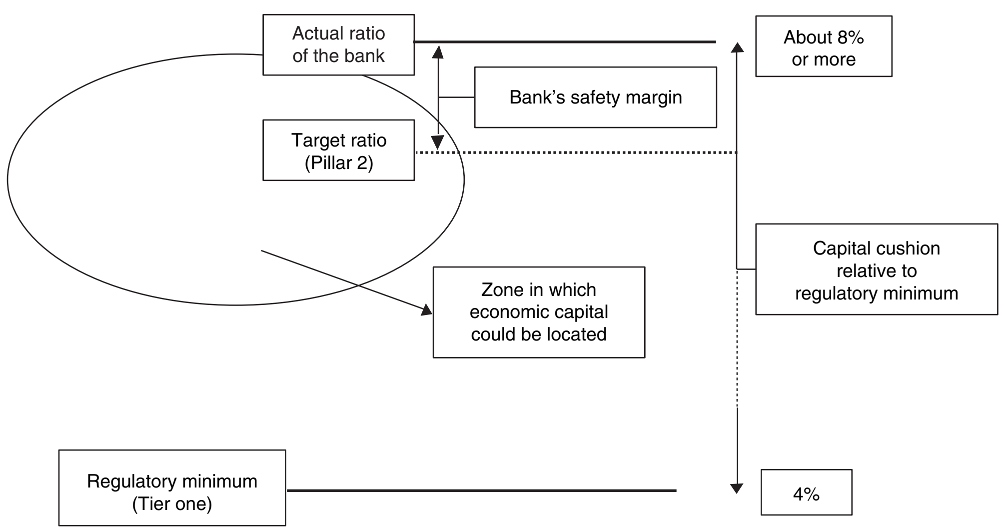
Note: The regulatory ratio moves in the opposite direction to the business cycle; the target ratio, which includes variables not correlated with the business cycle, fluctuates less; the actual ratio is managed over time in order to reduce fluctuations.

that necessary for the target ratio, which is intended to cover a longer time horizon (see Chart 2).

2|2 Implementation of the target ratio

The target ratio should be set as part of the Pillar 2 process of prudential review conducted by the supervisor in consultation with bank managers. This ratio, which should be known only to the bank and its supervisor, should be complied with, but with a temporary adjustment

Chart 2
Relationship between regulatory capital ratio, economic capital, and target and actual ratios



margin around the target when necessary, the size of which will depend upon real and approved needs.

The methods for implementing Pillar 2 will allow a dialogue between banks and supervisors, which in many cases already exists on a less formal basis. In this regard, case studies carried out at the European level (through the operational networks of the CEBS) or at the international level (in the Accord Implementation Group of the Basel Committee), should have as their objective to come up with solutions that can be applied consistently from one banking group to the next, irrespective of the country in which the parent company is established.

The target ratio would be set taking into account the various "tools" that are specific to Pillar 2, notably:

• stress tests designed to provide an assessment of the sensitivity of capital measures to changes in the economic environment or events affecting markets and liquidity;

• an examination of the factors underlying concentration risk, liquidity risk, interest rate risk, reputational and strategic risk, internal control risk, management risk and governance risk.

In France, the Commission bancaire will implement such an approach when it updates its tools for the "Organisation for the reinforcement of preventive action", in the context of a structured dialogue with banking groups. This approach meets the long-standing expectations of rating agencies. It is already commonly agreed that a Tier 1 ratio of 6% to 6.5% represents a minimum level in terms of the expectations of the market. Furthermore, under the current regulatory framework, supervisors have for the most part been led, depending on the particular circumstances of each institution, to require a ratio well in excess of the regulatory minimum. This has been the case for several years in France and in other countries, where banks already operate at capital levels above minimum requirements.

Pillar 2 of the Basel II framework is often presented simply as an enlargement of the power of supervisors. In reality, it allows them above all to be involved in the analysis of the internal processes developed by institutions to manage their risks. The richness of the dialogue that is to take place in this framework should yield a better understanding of the expectations of both supervisors and institutions.

Since, by virtue of its greater risk-sensitivity, the regulatory capital ratio in the new prudential framework is more closely correlated with the business cycle than the current ratio, corrective measures need to be sought, in particular via *the possibilities for adjustment offered by Pillar 2.*

Setting a target capital ratio is one possible solution, which is close to the current practices of markets and of many supervisors, including the Commission bancaire.

Naturally, in keeping with the desire for international harmonisation which guides the implementation of Basel II, particularly at the European level, in order to be viable and acceptable to all parties, the setting of a target ratio in the context of Pillar 2, should be part of an international framework in which there is a consensus regarding this type of instrument or the achievement of a similar result. The conclusions of the discussions currently under way, in which the French authorities intend to play a leading role, will be decisive in this regard.