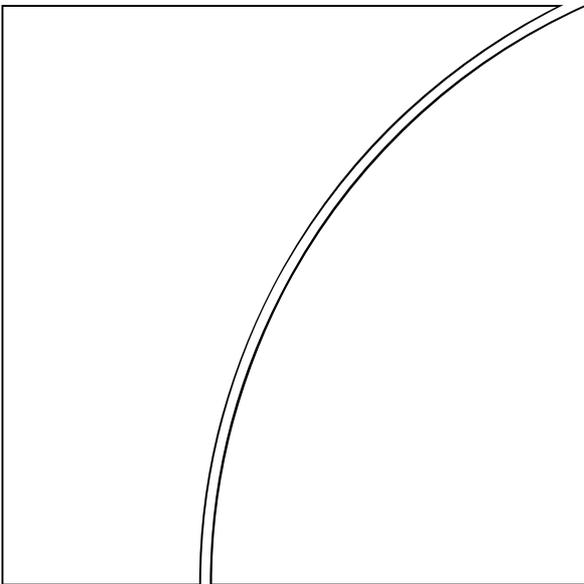


Secretariat of the
Basel Committee
on Banking Supervision



**The New Basel
Capital Accord:
an explanatory note**

January 2001



BANK FOR INTERNATIONAL SETTLEMENTS

The New Basel Capital Accord: an explanatory note

Second consultative package

- | | | |
|---|--------------|--|
| • | July 1988 | Current Accord published |
| • | End-1992 | Deadline for implementation |
| • | June 1999 | First Consultative Package on the New Accord |
| • | January 2001 | Second Consultative Package |
| • | End-May 2001 | Deadline for comments |
| • | Ca. end-2001 | Publication of the New Accord |
| • | 2004 | Implementation of the New Basel Capital Accord |

More than a decade has passed since the Basel Committee on Banking Supervision (the Committee) introduced its 1988 Capital Accord (the Accord). The business of banking, risk management practices, supervisory approaches, and financial markets each have undergone significant transformation since then. In June 1999 the Committee released a proposal to replace the 1988 Accord with a more risk-sensitive framework, on which more than 200 comments were received. Reflecting those comments and the results of ongoing dialogue with the industry and supervisors worldwide, the Committee is now presenting a more concrete proposal, seeking comments from interested parties by 31 May 2001. Comments received will be published on the BIS's website at the end of the comment period. The Committee expects the final version of the new Accord to be published around the end of 2001 and to be implemented in 2004.

Rationale for a new Accord: need for more flexibility and risk sensitivity

| The existing Accord | The proposed new Accord |
|--------------------------------|---|
| Focus on a single risk measure | More emphasis on banks' own internal methodologies, supervisory review, and market discipline |
| One size fits all | Flexibility, menu of approaches, incentives for better risk management |
| Broad brush structure | More risk sensitivity |

Safety and soundness in today's dynamic and complex financial system can be attained only by the combination of effective bank-level management, market discipline, and supervision. The 1988 Accord focussed on the total amount of bank capital, which is vital in reducing the risk of bank insolvency and the potential cost of a bank's failure for depositors. Building on this, the new framework intends to improve safety and soundness in the financial system by placing more emphasis on banks' own internal control and management, the supervisory review process, and market discipline.

Although the new framework's focus is primarily on internationally active banks, its underlying principles are intended to be suitable for application to banks of varying levels of complexity and sophistication. The Committee has consulted with supervisors worldwide in developing the new framework and expects the New Accord to be adhered to by all significant banks within a certain period of time.

The 1988 Accord provided essentially only one option for measuring the appropriate capital of internationally active banks. The best way to measure, manage and mitigate risks, however, differs from bank to bank. An Amendment was introduced in 1996 which focussed on trading risks and allowed some banks for the first time to use their own systems to measure their market risks. The new framework provides a spectrum of approaches from simple to advanced methodologies for the measurement of both credit risk and operational risk in determining capital levels. It provides a flexible structure in which banks, subject to supervisory review, will adopt approaches which best fit their level of sophistication and their risk profile. The framework also deliberately builds in rewards for stronger and more accurate risk measurement.

The new framework intends to provide approaches which are both more comprehensive and more sensitive to risks than the 1988 Accord, while maintaining the overall level of regulatory capital. Capital requirements that are more in line with underlying risks will allow banks to manage their businesses more efficiently.

The new framework is less prescriptive than the original Accord. At its simplest, the framework is somewhat more complex than the old, but it offers a range of approaches for banks capable of using more risk-sensitive analytical methodologies. These inevitably require more detail in their application and hence a thicker rule book.

The Committee believes the benefits of a regime in which capital is aligned more closely to risk significantly exceed the costs, with the result that the banking system should be safer, sounder, and more efficient.

Structure of the new Accord

Three pillars of the new Accord

- First pillar: minimum capital requirement
- Second pillar: supervisory review process
- Third pillar: market discipline

The new Accord consists of three mutually reinforcing pillars, which together should contribute to safety and soundness in the financial system. The Committee stresses the need for rigorous application of all three pillars and plans to work actively with fellow supervisors to achieve the effective implementation of all aspects of the Accord.

The first Pillar: minimum capital requirement

How capital adequacy is measured

$$\frac{\text{Total capital (unchanged)}}{\text{Credit risk + Market risk + Operational Risk}} = \text{the bank's capital ratio (minimum 8\%)}$$

Menu of approaches to measure credit risk

- Standardised Approach (a modified version of the existing approach)
- Foundation Internal Rating Based Approach
- Advanced Internal Rating Based Approach

Menu of approaches to measure market risk (unchanged)

- Standardised Approach
- Internal Models Approach

Menu of approaches to measure operational risk

- Basic Indicator Approach
- Standardised Approach
- Internal Measurement Approach

The first pillar sets out minimum capital requirements. The new framework ***maintains both the current definition of capital and the minimum requirement of 8% of capital to risk-weighted assets***. To ensure that risks within the entire banking group are considered, the revised Accord will be extended on a consolidated basis to holding companies of banking groups.

The revision focuses on improvements in the measurement of risks, i.e., the calculation of the denominator of the capital ratio. The ***credit risk*** measurement methods are more elaborate than those in the current Accord. The new framework proposes for the first time a measure for ***operational risk***, while the ***market risk*** measure remains unchanged.

For the measurement of credit risk, two principal options are being proposed. The first is the ***standardised approach***, and the second the ***internal rating based (IRB) approach***. There are two variants of the IRB approach, foundation and advanced. The use of the IRB approach will be subject to approval by the supervisor, based on the standards established by the Committee.

The standardised approach for credit risk

The standardised approach is conceptually the same as the present Accord, but is more risk sensitive. The bank allocates a risk-weight to each of its assets and off-balance-sheet positions and produces a sum of risk-weighted asset values. A risk weight of 100% means that an exposure is included in the calculation of risk weighted assets at its full value, which

translates into a capital charge equal to 8% of that value. Similarly, a risk weight of 20% results in a capital charge of 1.6% (i.e. one-fifth of 8%).

Individual risk weights currently depend on the broad category of borrower (i.e. sovereigns, banks or corporates). Under the new Accord, the risk weights are to be refined by reference to a rating provided by an external credit assessment institution (such as a rating agency) that meets strict standards. For example, for corporate lending, the existing Accord provides only one risk weight category of 100% but the new Accord will provide four categories (20%, 50%, 100% and 150%).

The internal ratings based approach (IRB)

Under the IRB approach, banks will be allowed to use their internal estimates of borrower creditworthiness to assess credit risk in their portfolios, subject to strict methodological and disclosure standards. Distinct analytical frameworks will be provided for different types of loan exposures, for example corporate and retail lending, whose loss characteristics are different.

Under the IRB approach, a bank estimates each borrower's creditworthiness, and the results are translated into estimates of a potential future loss amount, which form the basis of minimum capital requirements. The framework allows for both a foundation method and more advanced methodologies for corporate, sovereign and bank exposures. In the foundation methodology, banks estimate the probability of default associated with each borrower, and the supervisors will supply the other inputs. In the advanced methodology, a bank with a sufficiently developed internal capital allocation process will be permitted to supply other necessary inputs as well. Under both the foundation and advanced IRB approaches, the range of risk weights will be far more diverse than those in the standardised approach, resulting in greater risk sensitivity.

Credit risk mitigation and securitisation

The new framework introduces more risk sensitive approaches to the treatment of collateral, guarantees, credit derivatives, netting and securitisation, under both the standardised approach and the IRB approach.

Operational risk

The 1988 Accord set a capital requirement simply in terms of credit risk (the principal risk for banks), though the overall capital requirement (i.e., the 8% minimum ratio) was intended to cover other risks as well. In 1996, market risk exposures were removed and given separate capital charges. In its attempt to introduce greater credit risk sensitivity, the Committee has been working with the industry to develop a suitable capital charge for operational risk (for example, the risk of loss from computer failures, poor documentation or fraud). Many major banks now allocate 20% or more of their internal capital to operational risk.

The work on operational risk is in a developmental stage, but three different approaches of increasing sophistication (basic indicator, standardised, and internal measurement) have been identified. The basic indicator approach utilises one indicator of operational risk for a bank's total activity. The standardised approach specifies different indicators for different business lines. The internal measurement approach requires banks to utilise their internal loss data in the estimation of required capital. Based on work to date, the Committee expects operational risk on average to constitute approximately 20% of the overall capital

requirements under the new framework. It will be important to collect sufficient loss data in the coming months to establish accurate calibration of the operational risk charge as a basis for allowing the more advanced approaches.

Overall capital

The Committee's goal remains as in the June 1999 paper, namely to neither raise nor lower the aggregate regulatory capital, inclusive of operational risk, for internationally active banks using the standardised approach.

With regard to the IRB approach, the Committee's ultimate goal is to ensure that the regulatory capital requirement is sufficient to address underlying risks and contains incentives for banks to migrate from the standardised approach to this IRB approach. The Committee invites the industry's cooperation in conducting the extensive testing and dialogue needed to attain these goals.

The second pillar: supervisory review process

The supervisory review process requires supervisors to ensure that each bank has sound internal processes in place to assess the adequacy of its capital based on a thorough evaluation of its risks. The new framework stresses the importance of bank management developing an internal capital assessment process and setting targets for capital that are commensurate with the bank's particular risk profile and control environment. Supervisors would be responsible for evaluating how well banks are assessing their capital adequacy needs relative to their risks. This internal process would then be subject to supervisory review and intervention, where appropriate.

The implementation of these proposals will in many cases require a much more detailed dialogue between supervisors and banks. This in turn has implications for the training and expertise of bank supervisors, an area in which the Committee and the BIS's Financial Stability Institute will be providing assistance.

The third pillar: market discipline

The third pillar of the new framework aims to bolster market discipline through enhanced disclosure by banks. Effective disclosure is essential to ensure that market participants can better understand banks' risk profiles and the adequacy of their capital positions. The new framework sets out disclosure requirements and recommendations in several areas, including the way a bank calculates its capital adequacy and its risk assessment methods. The core set of disclosure recommendations applies to all banks, with more detailed requirements for supervisory recognition of internal methodologies for credit risk, credit risk mitigation techniques and asset securitisation.

Composition of the consultative package

The January 2001 package of documents consists of three components:

- An **overview** paper describing the rationale for the changes being proposed and inviting specific comments and contributions on work still in progress
- **The New Basel Capital Accord** defining in detail the content and structure of the new Accord, i.e., the draft final rules
- **Seven supporting documents** on specific topics providing technical analysis, descriptions of work in progress and guidance on implementation

The Committee looks forward to conducting an active dialogue with interested parties in the coming period and welcomes comments on aspects of the consultative package. Comments should be submitted by **31 May 2001** to relevant national supervisory authorities and central banks and may also be sent to the Basel Committee on Banking Supervision. Substantive comments received by electronic mail up to 31 May will be posted on the BIS website, unless the commenter requests anonymity. Comments should be sent to the Basel Committee on Banking Supervision, Bank for International Settlements, CH-4002 Basel, Switzerland. Comments are particularly requested via e-mail to BCBS.Capital@bis.org¹ or by fax: (41) 61 280 9100 to the attention of the Basel Committee Secretariat.

¹ This address is for comments on the second consultative package and not for correspondence.

Annex 1

Some Basic Questions

Question: What is the Basel Committee?

Answer: A committee of central banks and bank supervisors/regulators from the major industrialised countries that meets every three months at the Bank for International Settlements in Basel.²

Question: What is the significance of its papers?

Answer: They provide broad policy guidelines that each country's supervisors can use to determine the supervisory policies they apply. Some papers, such as the Capital Accord and the Core Principles, are drafted in the expectation that they will be followed more closely by supervisors world-wide.

Question: Will it be obligatory to apply the New Accord?

Answer: The present package, when finalised, will establish the basic capital frameworks for Committee member countries and the Committee expects that it will also be adopted by supervisors across the world, as the current Accord is. There has already been extended consultation with supervisors around the world and this will continue in the coming months. In addition, the International Monetary Fund and World Bank use the Basel Committee's standards as a benchmark in conducting their missions.

Question: Will the financial system be safer if this proposal goes forward?

Answer: The Committee expects that the New Accord will enhance the soundness of the financial system by aligning regulatory capital requirement to the underlying risks in the banking business and by encouraging better risk management by banks and enhanced market discipline.

Question: Will banks need to hold more or less capital under the New Accord?

Answer: Banks with a greater than average risk appetite will find their capital requirements increasing, and vice versa. The intention is to leave the total capital requirement for an average risk portfolio broadly unchanged.

² The Basel Committee consists of senior supervisory representatives from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Netherlands, Sweden, Switzerland, United Kingdom and the United States. It usually meets at the Bank for International Settlements in Basel, where its permanent Secretariat is located.

Question: What is the relationship between the Basel Committee and the BIS?

Answer: The BIS (Bank for International Settlements) is a bank owned by and serving central banks, and its premises are frequently used for international meetings of financial officials. However, apart from hosting the meetings and providing Secretariat support, the BIS itself does not participate in the process of determining Basel Committee policy.

Question: Why is the package so extensive?

Answer: There are three reasons. First, the new Accord abandons the one-size-fits-all approach and provides a menu of options from which banks can choose. Second, the new Accord adopts more risk sensitivity, and hence more complex measurement techniques. Third, the consultative package incorporates descriptions of works in progress, which will be streamlined in the final package.

Question: Will banks be able to remain on the present system if they wish?

Answer: The Committee expects supervisors to start applying the new framework to internationally active banks from 2004. Those banks that choose its simpler options, however, may continue to calculate capital requirements in a way broadly similar to the current Accord.

Question: How does the banking industry interact with the Basel Committee?

Answer: All major initiatives affecting banks are developed after active consultation with the industry, principally at the national level. Our sense is that major banks want to operate within a regulatory environment in which their international competitors are subject to similar rules, wherever they operate.

Question: If the old Accord is so outdated, why has it not been replaced earlier?

Answer: There already have been several amendments to the 1988 Accord, reflecting the changing dynamics of financial markets. About two years ago, the Committee decided that more fundamental changes were needed to respond to technological developments and new instruments in the market. The banking industry is only now acquiring the technical ability to measure credit and operational risk in the manner envisaged in the new proposal. Considerable efforts will be needed in the coming two years by banks and supervisors to acquire the necessary skills to implement the new Accord.

Question: Are banks expected to disclose all the information listed under Pillar 3?

Answer: The paper is consultative and most of the disclosures suggested are recommendations, not requirements. However, as in other aspects of the Accord, the more complex the methods used by banks, the stricter the standards supervisors will wish to enforce.

Question: How does the revised proposal differ from the June 1999 proposal?

Answer: The basic concepts and the design remain the same, but the revised package has a far more concrete character. The major changes include:

For the standardised approach to credit risk measurement, the risk buckets for corporate exposures have been more closely aligned to the underlying risk, and banks and corporates can now receive a more favourable risk weight than their sovereign.

For the IRB approach to credit risk measurement, two options (foundation and advanced) are provided so that the IRB approach is now capable of being used by many more banks.

For the measurement of other risks, Pillar One now focuses on operational risk.

Far more specific criteria have been provided for Pillars 2 and 3.

Annex 2

Clarification of Some Basic Terms

Pillar 1: The rules that define the minimum ratio of capital to risk weighted assets.

Pillar 2: The supervisory review pillar, which requires supervisors to undertake a qualitative review of their bank's capital allocation techniques and compliance with relevant standards.

Pillar 3: The disclosure requirements, which facilitate market discipline.

Internal Ratings: The result of a bank's own measure of risk in its credit portfolio.

External Credit assessments: Ratings issued by private or public sector agencies.

Consolidation: The measurement of a bank's risk on a groupwide basis.

Operational Risk: The risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems, or from external events.

Credit Risk: The risk of loss arising from default by a creditor or counterparty.

Market Risk: The risk of losses in trading positions when prices move adversely.

Credit Risk Mitigation: A range of techniques whereby a bank can partially protect itself against counterparty default (for example, by taking guarantees or collateral, or buying a hedging instrument).

Asset Securitisation: The packaging of assets or obligations into securities for sale to third parties.

Annex 3

History of the Basel capital standards

The major impetus for the 1988 Basel Capital Accord was the concern of the Governors of the G10 central banks that the capital of the world's major banks had become dangerously low after persistent erosion through competition. Capital is necessary for banks as a cushion against losses and it provides an incentive for the owners of the business to manage it in a prudent manner.

1. The existing framework

The 1988 Accord requires internationally active banks in the G10 countries to hold capital equal to at least 8% of a basket of assets measured in different ways according to their riskiness. The definition of capital is set (broadly) in two tiers, Tier 1 being shareholders' equity and retained earnings and Tier 2 being additional internal and external resources available to the bank. The bank has to hold at least half of its measured capital in Tier 1 form.

A portfolio approach is taken to the measure of risk, with assets classified into four buckets (0%, 20%, 50% and 100%) according to the debtor category. This means that some assets (essentially bank holdings of government assets such as Treasury Bills and bonds) have no capital requirement, while claims on banks have a 20% weight, which translates into a capital charge of 1.6% of the value of the claim. However, virtually all claims on the non-bank private sector receive the standard 8% capital requirement.

There is also a scale of charges for off-balance sheet exposures through guarantees, commitments, forward claims, etc. This is the only complex section of the 1988 Accord and requires a two-step approach whereby banks convert their off-balance-sheet positions into a credit equivalent amount through a scale of conversion factors, which then are weighted according to the counterparty's risk weighting.

The 1988 Accord has been supplemented a number of times, with most changes dealing with the treatment of off-balance-sheet activities. A significant amendment was enacted in 1996, when the Committee introduced a measure whereby trading positions in bonds, equities, foreign exchange and commodities were removed from the credit risk framework and given explicit capital charges related to the bank's open position in each instrument.

2. Impact of the 1988 Accord

The two principal purposes of the Accord were to ensure an adequate level of capital in the international banking system and to create a "more level playing field" in competitive terms so that banks could no longer build business volume without adequate capital backing. These two objectives have been achieved. The merits of the Accord were widely recognised and during the 1990s the Accord became an accepted world standard, with well over 100 countries applying the Basel framework to their banking system. However, there also have been some less positive features. The regulatory capital requirement has been in conflict with increasingly sophisticated internal measures of economic capital. The simple bucket

approach with a flat 8% charge for claims on the private sector has given banks an incentive to move high quality assets off the balance sheet, thus reducing the average quality of bank loan portfolios. In addition, the 1988 Accord does not sufficiently recognise credit risk mitigation techniques, such as collateral and guarantees. These are the principal reasons why the Basel Committee decided to propose a more risk-sensitive framework in June 1999.

3. The June 1999 proposal

The initial consultative proposal had a strong conceptual content and was deliberately rather vague on some details in order to solicit comment at a relatively early stage of the Basel Committee's thinking. It contained three fundamental innovations, each designed to introduce greater risk sensitivity into the Accord. One was to supplement the current quantitative standard with two additional "Pillars" dealing with supervisory review and market discipline. These were intended to reduce the stress on the quantitative Pillar 1 by providing a more balanced approach to the capital assessment process. The second innovation was that banks with advanced risk management capabilities would be permitted to use their own internal systems for evaluating credit risk, known as "internal ratings", instead of standardised risk weights for each class of asset. The third principal innovation was to allow banks to use the gradings provided by approved external credit assessment institutions (in most cases private rating agencies) to classify their sovereign claims into five risk buckets and their claims on corporates and banks into three risk buckets. In addition, there were a number of other proposals to refine the risk weightings and introduce a capital charge for other risks. The basic definition of capital stayed the same.

The comments on the June 1999 paper were numerous and can be said to reflect the important impact the 1988 Accord has had. Nearly all commenters welcomed the intention to refine the Accord and supported the three Pillar approach, but there were many comments on the details of the proposal. A widely-expressed comment from banks in particular was that the threshold for the use of the IRB approach should not be set so high as to prevent well-managed banks from using their internal ratings.

Intensive work has taken place in the eighteen months since June 1999. Much of this has leveraged off work undertaken in parallel with industry representatives, whose cooperation has been greatly appreciated by the Basel Committee and its Secretariat.

Annex 4

Special technical abbreviations used in the package

| | |
|------|--|
| ABCP | Asset-backed commercial paper |
| ABS | Asset-backed securities |
| BRW | Benchmark risk weight |
| C | Collateral value |
| CCF | Credit conversion factor |
| CLN | Credit linked notes |
| CLO | Collateralised loan obligation |
| CRE | Commercial real estate |
| CRMT | Credit risk mitigation techniques |
| D | Liability (deposit) |
| DM | Default-mode |
| E | Nominal exposure (uncollateralised) |
| EAD | Exposure at default |
| ECA | Export credit agency |
| ECAI | External credit assessment institution |
| EI | Exposure indicator |
| EL | Expected loss |
| F | Systematic risk sensitivity |
| GIC | Government insured contract |
| GSF | Granularity scaling factor |
| H | Haircut (on risk mitigants) |
| IMA | Internal models approach (market risk) |
| IRB | Internal ratings-based approach |
| LDA | Loss distribution approach |

| | |
|--------|--|
| LGD | Loss given default |
| LGE | Loss given event |
| LTV | Loan to value |
| M | Maturity |
| MLV | Mortgage lending value |
| MRC | Minimum regulatory capital |
| MTM | Mark-to-market |
| N | Normal distribution function |
| OBS | Off-balance-sheet |
| OTC | Over the counter (derivatives) |
| PD | Probability of default |
| PE | Probability of loss event |
| PFE | Potential future exposure |
| PSE | Public sector entity |
| r or R | Risk weight |
| RPI | Risk profile index |
| RRE | Residential real estate |
| RWA | Risk weighted asset |
| SME | Small and medium-sized enterprises |
| SPV | Special Purpose Vehicle |
| TNRE | Total non-retail exposure |
| UCITS | Undertakings for Collective Investments in Transferable Securities |
| UL | Unexpected loss |
| VaR | Value at risk |
| W | Floor factor (for securitised and collateralised assets) |