

FROM BASEL I TO BASEL II

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Abstract

This paper examines the journey from Basel I to Basel II. It examines the historical developments and the circumstances that led to the formulation of the famous Basel-I Accord in 1988, and its further refinement over the next two decades culminating in the finalization of a comprehensive document viz., the Basel-II Accord. The objective of the paper is to provide an insight into the long drawn and painstaking consultative process conducted under the aegis of the Basel Committee on Banking Supervision to address some of the long-standing weaknesses inherent in the original Basel Capital Adequacy Accord. The paper examines the process of development of the Basel Accord from a simple and crude credit risk measurement based capital adequacy accord into a comprehensive risk control framework grounded on three pillars: one, the Capital Adequacy Pillar which aims to improve the link between Bank Capital and the risks that could lead to Bank Insolvency; two, the Supervisory Pillar which aims to improve the Supervision Capacity of the regulators / supervisors to control the risk of bank failure; and three, the Transparency Pillar which is aimed at enhancing the capacity of the market's Self Regulatory Mechanism. The paper acknowledges that by responding positively to some of the criticisms leveled at it during the various rounds of consultations the Committee has accommodated different points of views in the revised framework which has made it a more comprehensive and a more widely acceptable document for the bank supervisors around the world. The paper is expected to help facilitate a better understanding of the process of regulatory development.

INTRODUCTION

Basel-I framework for capital adequacy, introduced in 1988, was designed to establish minimum levels of capital for internationally active banks. The framework was crude and deeply problematical. It was aimed at setting standards based on 'rules of the thumb' for example, it relied on a relatively crude method of assigning risk weights to balance sheet and off balance sheet asset categories; furthermore it focussed only on credit risks while ignoring the bulk of the multiple risks facing banks today. However, its simplicity combined with the political and economic power of the OECD Central Banks encouraged over 100 countries across the world not only to adopt the Basel-I framework but also to apply it across the entire banking sector without restricting it to the internationally active banks. The voluntary adoption of Basel-I framework by several countries made it, de facto, a globally accepted standard. Although not all countries are

still fully compliant with all the aspects of Basel-I, it has served the banking industry well since its introduction in 1988. It has, however, lagged behind the financial market developments and innovation. With time it increasingly became apparent that it offered a regulatory approach to capital determination and standard setting which did not capture fully the ever increasing range of large and complex banking operations and the accompanying range of diverse set of economic risks. Along with these apparent developments, there were quite a few subtle developments. Academics like McKenzie and Khalidi (1996) questioned the very basis at the regulatory philosophy based on central engineering framework and emphasized on the need for improving the supervisory capacity of the home country supervisors (Pillar-II), and improving the transparency to enhance the markets self regulatory system (Pillar-III). They outlined the multiple tensions facing the financial markets:

- Tension between the power of regulatory authorities as embodied in mathematical formulae contained in regulations and the power of financial institutions that is exerted through the markets;
- Tension between the constructive and destructive nature of financial innovation and the inability of regulators to keep pace with change;
- Tension between universal norms contained in regulations and transient and uncertain market relations;
- Tension between competition and safety within financial markets;
- Tension between a desire for uniformity by regulators and a desire for difference by financial institutions;
- Tension between transparency and opaqueness in the flow of financial information.
- Tension between the regulators constrained by the boundaries of the nation state and the industry which now has no territorial constraints.
- Tension between the regulators who are extra-market and the industry which is free to innovate within market structures.
- Tension that inappropriate regulation may engender financial fragility.

These developments provided the thrust for the Basel Committee on Banking Supervision (henceforth, the 'Basel Committee') to work on a comprehensive review of the Basel Accord (Basel I), and its replacement with a revised and comprehensive version of the Framework of International Convergence of Capital Measurement and Capital Standards (commonly known as the Basel-II Accord). The new Framework addresses the perceived shortcomings and structural weaknesses of Basel-I. Compared to the crude risk weights of the Basel-I, the new Framework is fairly complex, making its understanding

and implementation a challenge to both the regulatory and the regulated community. This is perhaps the reason why most of the developing countries have adopted a roadmap approach for the implementation of Basel-II at their own pace and in a manner as appropriate to their economies.

In the case of Pakistan, State Bank of Pakistan (SBP) has chalked out a roadmap for implementation of Basel-II under which the banks are required to adopt standardized approach for credit risk and basic indicators/standardized approach for operational risk from 1st January, 2008 and internal ratings based (IRB) approach from January 1, 2010. SBP has embarked on a parallel run program of one and a half year for Standardized Approach and two years for IRB Approach starting from 1st July 2006 and 1st January 2008 respectively. Banks / DFI, has been asked to formulate their internal plans specifying the approach they are willing to adopt and the time table for moving to the particular approach.

The requirement is that the plans should envisage the risk management setup, various risk assessment methodologies being used for assessment of various risk categories and the policy and procedures for the capital allocation. The plans are required to highlight the gaps for moving to Basel II implementation and the steps required to overcome those gaps. In other words, SBP has directed the banks / DFIs a time bound action plan outlining the activities required to be done, and the time of completion within the overall implementation timeframe so that it could closely maintain the implementation of Basel-II in the country.

While there is much emphasis on complying with the Basel-II framework and the State Bank of Pakistan in collaboration with the local banks is making all efforts to ensure smooth transition from Basel-I to Basel-II, it would be interesting to study the historical developments and circumstances which led to the formulation of Basel-I Accord in 1988 and its further refinements over the years leading to the release of a new and more comprehensive document on the subject in the shape of Basel-II Accord. This paper provides a review of the long-drawn efforts made by the Basel Committee in seeking international convergence on the issue of capital measurement and capital adequacy standards since the introduction of Basel-I in 1988. The objective is to facilitate the readers in understanding and appreciating the importance and the rationale for an effective risk management system for banks.

BASEL-I

The origins of the Basel-I accord can be connected to the failure of Bankhaus Herstatt in Germany and Franklin National Bank of New York which led the central bank governors of G-10 countries at the Bank of International Settlement (BIS) to establish the Committee on Banking Regulations and Supervisory Practices in December, 1974. The main purpose of the Committee was to prevent or reduce the possibility of transfer of cross border contagion from the failure of Internationally active banks. At that time there

was not much of a coordination between the central banks of the developed countries the committee was therefore a set up primarily for the purpose of exchange of information on the financial condition of internationally active banks. Over the years the Committee (which was renamed as the Basel Committee on Banking Supervision-BCBS) became the core body influencing banking supervisory standards worldwide. It started with a low-key agreement allocating cross-border supervisory responsibilities among member authorities ("the Concordat") in 1975, closely followed by the principle of home country consolidated supervision.

In the early 1980s, the Committee became concerned that the capital ratios of the main international banks were deteriorating just at the time that international risks, notably those vis-à-vis heavily indebted countries, were growing. It therefore, decided to halt the erosion of capital standards in the international banking system and to work towards greater convergence in the measurement of capital adequacy. In fact, the US Congress's insistence on tighter capital standards for US banks and its concern with avoiding a loss in US banks' international competitiveness played a catalytic role in reaching this agreement. The result was the emergence of a broad consensus on a weighted approach to the measurement of risk incorporating both on and off Balance Sheet items. How this broad consensus was reached is another story. The issue of level playing field, especially in the context of higher capital adequacy requirements for US & UK banks compared to that required for the Japanese banks and its effect on the global competitiveness of US & UK banks was a major driving force behind the efforts towards the development of global standards for capital adequacy. In fact it has also been alleged that it was primarily the consensus reached between the US Federal Reserve Bank and the Bank of England that was forced upon the rest of the members of the Basel Committee as the Global Standards. Irrespective of politics behind the global harmonization of capital adequacy standards, the fact is that there were genuine concerns regarding the possibility of systemic risk and the crossborder transfer of contagion. There was also the risk of regulatory arbitrage and the possibility of competition in regulatory laxity that could lead to and a reduction in the shock absorption capacity of the global financial system an increased possibility of bank failure. The need for a multilateral accord to remove the source of competitive inequality arising from differences in national capital requirements and to strength the stability of the international banking system had become imperative.

Following comments on a Consultative Paper (published in December, 1987), a capital measurement system commonly referred to as the Basel Capital Accord (or the 1988 Accord) was approved by the G-10 members and released to banks in July, 1988. This system provided for the implementation of a framework with a minimum capital adequacy ratio of capital to risk-weighted assets of 8 per cent by end-1992. Reaching at an agreement on the minimum capital standards in the shape of Basel-I was a landmark achievement of the Committee. This framework has been progressively introduced not only in member countries but also in virtually all other countries with active international banks.

POST BASEL-I DEVELOPMENTS

CRITICISM OF BASEL-I

The original 1988 Basel Capital Accord emerged from the string of sovereign debt defaults and was a reaction to growing competitive pressure to create a more level playing field among internationally competitive banks, where small differences in pricing could have significant competitive impacts. There were quite a few problematical features in the original Basel Accord, for example, banks of non-OECD countries were assigned a higher risk weight than their OECD counterparts. The accord was therefore criticized for its adverse impact on developing countries' financial systems and distortions in the international banking industry. The critics, however, did not recognize the fact that the 1988 capital framework was not intended to be static but was to evolve over time. This was proved when in November, 1991, the Basel-I was amended to give greater precision to the definition of those general provisions or general loan-loss reserves which could be included in capital for the purpose of calculating capital adequacy. Furthermore, in April, 1995 the Committee issued another amendment to the Capital Accord to recognize the effects of bilateral netting of banks' credit exposures in derivative products and to expand the matrix of add-on factors. In April, 1996 yet another document was issued explaining how Committee members intended to recognize the effects of multilateral netting. The Committee also started work to refine the framework to address risks other than credit risk, which was the focus of the 1988 Accord.

Following two consultative processes, the Market Risk Amendment to the Capital Accord was released in January, 1996 to be made effective latest by end-1997. It was designed to incorporate within the Accord a capital requirement for the market risks arising from banks' open positions in foreign exchange, traded debt securities, equities, commodities and options. An important aspect of this amendment was that, as an alternative to a standardized measurement method, banks were permitted, subject to strict quantitative and qualitative standards, to use internal value-at-risk (VAR) models as a basis for measuring their market risk capital requirements.

Following the Mexican debt crisis of 1995 and the contagion it caused, the Committee succeeded in finalizing yet another landmark document in 1997 viz., "Core Principles for Effective Banking Supervision. The Core Principles were designed as a model for banking systems in emerging market countries and the same were later adopted by supervisors across the world. The third major achievement was the revision of minimum capital standards in 2004, known as Basel-II. This was in part motivated by the need to adapt the previous standards to advances in risk management techniques, which had encouraged regulatory arbitrage.

BASEL-II

Basel-II Accord incorporates three major elements or pillars viz., (a) minimum capital requirements, based on weights more closely aligned to economic risks than the 1988 Accord; (b) supervisory review, which sets basic standards for bank supervision to minimize regulatory arbitrage; and (c) market discipline, which envisages greater levels

of disclosure and standards of transparency for the banking system (Nachane et.al, 2006). Highlights of Basel-II are given in the Annexure.

Briefly, in Basel II regulatory capital requirements for credit risk are calculated according to two alternative approaches, the Standardized and the Internal Ratings-Based (IRB). Under the Standardized approach the measurement of credit risk is based on external credit assessments provided by external credit assessment institutions (ECAIs) such as credit rating agencies or export credit agencies. Under the simplified Standardized approach the Basel-II Framework assembles in one place the simplest options of the Standardized approach with the objective of simplifying choices for certain banks and supervisors for measures of the other determinants. Under the advanced version of the IRB approach banks provide their own measures of all the determinants such as Loss Given Default (LGD) and Exposure At Default (EAD).

For regulatory capital requirements for operational risk there are three options of progressively greater sophistication. Under the Basic Indicator approach the capital charge is a percentage of bank's gross income. Under the Standardized approach, the capital charge is the sum of percentages of bank's gross income from eight business lines (or alternatively for two of the business lines of percentages of loans and advances). Under the Advanced Measurement approach, subject to the satisfaction by the bank of more stringent supervisory criteria, the capital is estimated by its own internal system for measuring operational risk (Cornford, 2005).

PRE-BASEL-II CONSULTATIONS

The finalization of Basel-II has been the result of the Basel Committee's sustained efforts spread over a number of years. It has been working tirelessly to get agreement on a New Capital Accord to replace the original agreed on by G10 bank supervisors back in July 1988. The quest has been driven by recognition that the original has become superseded by market developments, and that it is failing to operate in the intended fashion because of 'regulatory capital arbitrage'.

The first visible fruits of its labor appeared in June 1999 in the form of a Consultative Paper (CP-1) which outlined proposals for reform of Basel I. Following consultation with interested parties, a revised set of reform proposals (CP2) was then issued in January 2001 and, once again, these were put forward for consultation. This duly resulted in a third Consultation Paper (CP3) issued in April 2003 and it is refinement of this document which resulted in the publication of Basel II in June 2004 (Hall, 2004).

CONSULTATIVE PAPER 1 OF 1999 (CPI)

Since 1st January, 1993 internationally active banks incorporated in G10 countries have been obliged to comply with a minimum risk asset ratio requirement of 8 percent or higher, if so demanded by their national supervisory authority. Since 1st January, 1998, however, in an attempt to accommodate banks' market risk exposures, this methodology has been modified to take account of both a new source (Tier 3) of regulatory capital, which is available to meet market risk capital charges subject to limits and restrictions,

and the market risks to which banks are exposed. The 8 per cent minimum ratio, however, remained as the effective regulatory floor. In an attempt to catch up with market developments since 1988, the Committee produced a set of reform proposals in June 1999. Its specific aims were to improve the way regulatory capital requirements reflect underlying risks, to better address the financial innovation that had occurred in recent years and to recognize and promote improvements in bank risk management and controls. The Committee was also keen to adopt a more comprehensive approach for addressing additional risks such as operational risk.

Under the new framework, three mutually reinforcing supervisory ‘pillars’ were proposed to be used, with a ‘supervisory review’ of an institution’s capital adequacy and internal assessment process and greater market ‘discipline’ to be effected through enhanced information disclosure. This was intended to operate alongside the traditional minimum regulatory capital requirements. The specific aims and objectives of the review were identified as :

- To continue to promote safety and soundness in the financial system.
- To continue to enhance competitive equality;
- To adopt a more comprehensive approach for addressing risks;
- To continue to focus on internationally active banks, although the new framework’s underlying principles should be suitable for application to banks of varying levels of complexity and sophistication.;
- To improve the way regulatory capital requirements reflect underlying risks ;
- To better address the financial innovation that has occurred in recent years;
- To recognize the improvements in risk measurement and control that have occurred; and
- To introduce a framework that is flexible, more accurately reflects the risks to which banks are exposed, and is responsive to financial innovation and developments in risk management practices.

The Committee proposed to continue to use a ‘standardized’ approach based upon the current Accord, but amended to allow for:

- The introduction of a new risk weighting scheme to address asset securitization.
- The application of a 20 per cent credit conversion factor for certain types of short-term commitments;
- Abolition of the 50 per cent cap on the risk weighting of certain derivative exposures;

- Wider supervisory recognition of credit risk mitigation techniques;
- Extension of the accord to cover interest rate risk in the banking book and ‘other’ risk, such as operational risk; and
- Extension of the principle of full consolidation to embrace holding company parents of banking groups; Under the proposed scheme it was resolved that early supervisory intervention would be encouraged. Supervisors will be required to set bank-specific capital charges that reflect each bank’s particular risk profile and control environment (which may exceed the minimum capital ratio standard) while supervisory review will cover, inter-alia, bank’s internal capital assessment processes and control environments. Also, it was intended to achieve greater market discipline by improving the market’s self regulatory mechanism through enhanced information disclosure covering the capital structure, including information on (i) amounts of Tier 1, Tier 2, and (if applicable) Tier 3 capital held; (ii) accounting policies, especially policies adopted in respect of the valuation of assets and liabilities, provisioning, and income recognition; (iii) components of capital and the terms and main features of capital instruments, especially in the case of innovative, complex and hybrid capital instruments; (iv) reserves set aside for credit losses and other potential losses; and (v) any conditions that may merit special attention in an analysis of the strength of a bank’s capital, including maturity, level of seniority, step-up provisions, interest or dividend deferrals, use of Special Purpose Vehicles, and terms of derivatives embedded in hybrid capital instruments. Further, with respect to risk exposures both the qualitative (e.g. management strategies) and quantitative (e.g. position data) information was required to be disclosed in a manner which facilitates objective assessment of the nature and magnitude of the risk exposures run by banks. Moreover, capital adequacy, including disclosure of risk-based capital ratios were to be calculated in accordance with the prescribed methodology, and qualitative disclosures about the internal processes used for evaluating capital adequacy.

CONSULTATIVE PAPER 2 OF 2001 (CP2)

In the light of the feedback received during the round of consultation following publication of its June 1999 paper (CP1) and to accommodate developmental work undertaken since that date, the Committee issued a revised set of proposals (CP2) in January 2001. The three-pillared approach was confirmed although proposals on each front were refined and extended. In connection with Pillar 1, a more risk-sensitive framework was proposed for the ‘standardized approach. However, the use of external credit assessments and the use of published country risk scores of export credit agencies for sovereign exposures were proposed to continue. For more complex banks, an ‘internal ratings-based (IRB) approach’ was allowed at national discretion, subject to strict compliance with rigorous supervisory standards. Qualifying banks had the option to choose between a ‘foundation’ IRB approach and an ‘advanced’ IRB approach, depending on their ability to comply with demanding sets of supervisory standards. An explicit capital charge to cover operational risk was promised, and a new treatment recognizing credit risk mitigation techniques was also proposed.

In general, the changes proposed in January 2001 reflected the Committee's change in regulatory philosophy from prescription and a 'one size fits all' policy towards a more flexible approach allowing banks and their supervisors with a range of options for the assessment of capital adequacy. Willingness to allow banks to deploy their own assessments of the risks to which they are exposed in the calculation of minimum regulatory capital charges through the use of the IRB approaches. The CP2 also intended to extend the scope of the revised accord

on a consolidated basis to parent holding companies of banking groups, as well as, on a sub-consolidated (stand alone) basis to all internationally active banks. The CP2 also confirmed that the new approach would be based on the three mutually reinforcing pillars previously outlined, namely, minimum regulatory capital adequacy requirements, supervisory review (of an institution's capital adequacy and internal assessment process), and greater market discipline to be achieved through enhanced information disclosure.

Within Pillar-1, a 'standardized approach', building upon the 1988 Accord but embracing external credit assessments, was allowed for 'less complex' banks; an 'internal ratings-based approach' was allowed at national discretion to banks with more advanced risk management capabilities which satisfy rigorous supervisory standards. The use of portfolio credit risk models was recognized as a possible future option. Further, an explicit capital charge to cover operational risk was also introduced. Moreover, it was proposed to provide capital reduction for various forms of credit risk mitigation techniques that serve to reduce risk for banks meeting minimum operational standards subject to the condition that banks would be required to hold capital against residual risks.

Under Pillar-2, a revised and extended set of procedures were proposed whereby supervisors were required to ensure that each bank had sound internal processes in place to allow it to assess the adequacy of its capital and to set targets for capital that commensurate with the bank's specific risk profile and control environment. The requirement was that these internal processes would be subject to supervisory review and intervention where appropriate. The basis of the supervisory review would include, inter alia, their knowledge of best practice across institutions and the minimum criteria attached to the various approaches available for regulatory capital assessment.

Under Pillar-3, a new and extended set of disclosure requirements and recommendations were set out to allow market participants to assess critical information describing the risk profile and capital adequacy of banks.

The Committee proposed that for banks' exposures to sovereigns (i.e. governments, central banks and public sector entities (PSEs) treated as such by national supervisors), the use of published credit scores of export credit agencies be permitted, along with the use of other external credit assessments. The definition of a 'short term inter-bank loan' was revised to include only those with an original maturity of at least three months as against six months, as previously proposed. Also, the Committee dropped its previous proposal that the availability of preferential risk weights in the standardized approach be made conditional on adherence to the International Monetary

Fund's (IMF) 'Special Data Dissemination Standards', the Basel Committee's 'Core Principles for Effective Banking Supervision', or 'International Organization of Securities Commissions' (IOSCO) 'Objectives and Principles of Securities Regulation' in view of the fact that judgments regarding compliance with such standards would in large part be qualitative.

In short, the proposals contained in CP2 meant that internal ratings-based (IRB) systems would be made available, on a much wider basis than originally intended, to qualifying banks with more advanced risk management capabilities in as much as that banks could choose between a 'foundation' approach and a more complicated 'advance' approach, depending upon their ability to comply with demanding sets of supervisory standards.

POST CP2 DEVELOPMENTS

As indicated at the time of publication of CP2, a Working Paper on Operational Risk was issued in September 2001, refining the definition of operational risk. Also, in respect of disclosure requirements, a Working Paper on Market Disclosures with the intention of reducing the overall burden placed on banks was published. Two more Working Papers were released in October 2001. The first set out a modified IRB approach for the treatment of specialized lending. The second, on asset securitization, established the eligibility conditions for the treatment of securitized assets under the IRB approach.

CONSULTATIVE PAPER 3 OF 2002 (CP3)

The first major initiative taken in 2002, following pressure from the German government and other interested parties, was to reduce the required capital charges associated with loans to small and medium-sized enterprises (SMEs). This was followed, in October 2002, by the Committee producing another revised set of proposals (CP3) and launching the third and final 'Quantitative Impact Study' (QIS3) to assess the likely effects of the revised package on the minimum capital requirements of banks worldwide. The latest revisions involved refinements to Pillar 1 capital charges for retail exposures: Under the standardized approach, the risk weights for residential mortgages and other retail exposures were reduced to 40 per cent (from 50 per cent) and 75 percent (from 100 percent) respectively. The target amount of capital required for the operational risk charge was also cut from 20 per cent of the overall requirement rising under the current accord to 12 per cent, or even less. A new 'advanced' approach (the 'Advanced Measurement Approach' – AMA) for the calculation of the operational risk capital charge was also introduced which allows banks greater flexibility in the choice of assessment methodology. Moreover, the minimum standards required of banks seeking to use the IRB approaches were redrafted with a view to ensure that they result in consistent measures of internal estimates across institutions.

The results of QIS3 were published in May 2003 which showed considerable variability in the impact of the latest set of proposals on individual banks and groups of

banks. With respect to the standardized approach, all groups of participant banks experienced average increases in overall capital requirements compared with current requirements, with small banks in the EU and G10 faring the best. The driving force behind this result was the introduction of a new capital charge for operational risk which more than offset the relief experienced with respect to retail and SME portfolios. In respect of the foundation IRB approach, the biggest ‘winners’ were again the small banks in the G10 and EU which enjoyed average reductions in overall capital charges of 19 per cent and 20 per cent respectively. Finally, the results indicated that the best option for large banks in both the EU and G10 was to adopt the advanced IRB approach, which yielded average capital reductions of 6 percent and 2 percent respectively on current levels.

POST-CP3 DEVELOPMENTS

The main post-CP3 changes agreed in the run-up to the publication of Basel II were concerned with the revised treatment of expected versus unexpected losses within the IRB approach, and of securitization and credit risk mitigation techniques. It also included further clarifications regarding the implementation of the supervisory review of capital under Pillar 2, and information disclosure under Pillar 3.

Under the IRB approach (the standardized approach is not affected) the allowance for the inclusion of general provisions within Tier 2 capital for coverage against unexpected losses was discontinued. The implication being that bank’s loan pricing and loan loss provisioning could be used only to cover the expected element of losses.

With regard to supervisory review, the allowance for flexibility for the home country regulator in the application of the rules was reaffirmed without reducing the emphasis on the need for promoting consistency in the implementation of Pillar 2 and to securing convergence in supervisory practice. In this respect the ‘Accord Implementation Group’ (AIG) was setup to work towards facilitating information exchange and to secure greater cooperation between national supervisory authorities. Moreover, in respect of the cross border implementation of Basel II, the ‘high level principle’ outlined in August 2003 was suggested for adoption without prejudice to the operation of the ‘Basel Concordat’.

With respect to Pillar 3, consultation post-CP3 focused on three main issues: proprietary versus public information; principles versus rules; and consistency with emerging accounting standards.

On 11th May, 2004, the Committee announced that ‘consensus had been reached on all outstanding issues’. The Committee also confirmed that the text of the new international capital standard would be published by end-June 2004, as previously intended. The Committee also stated that there was a need for a further review of the ‘calibration’ of the new framework prior to its implementation in order to ensure that the objective of broadly maintaining the aggregate level of required bank capital while

providing incentives to adopt the more advanced risk-sensitive approaches of the new frame-work were satisfied.

Before the release of the Basel II Framework in June 2004, the Committee gauged its impact based on QIS 3 data. In the meantime, however, bank's abilities to estimate the parameters for the more advanced approaches of Basel II have improved significantly. Furthermore, certain analyses conducted by the Committee after QIS 3 had to be based on approximations since not all necessary data were available. Several member countries therefore decided to conduct national impact studies (QIS 4) or field tests based on the Basel II Framework during 2004 or the first half of 2005. While these exercises did not represent a joint effort of the Committee, and the details varied significantly across countries, the Committee developed templates for a workbook and accompanying instructions. These could be used as a basis for the development of workbooks and instructions tailored to the particularities of the implementation on those countries that conducted a national impact study or field test.

In March 2005, the Basel Committee announced its decision to review the calibration of the Basel II Framework in spring 2006. In order to ensure that this review is based on the most recent, high quality data and to evaluate the new proposals for the recognition of double default and trading book-related issues, the Committee undertook a fifth Quantitative Impact Study (QIS 5) between October and December 2005. the results of this study were published on 16 June 2006.

IMPLEMENTATION OF THE REVISED FRAMEWORK

The revised framework for assessing the capital adequacy of internationally active banks – Basel II – was finally endorsed by the G10 bank supervisors on 26th June, 2004. It incorporated all the changes agreed upon during the long drawn consultation process. While announcing the revised framework, the Basel Committee also outlined its intention to monitor and review the application of the new framework with a view towards achieving greater consistency in application, and to revise it where necessary to accommodate market developments and further advances in risk management practices. The Basel Committee also revealed that it was in consultation with IOSCO, reviewing the regulatory treatment of bank's trading book operations. Furthermore, the Committee also mentioned that it was open for reexamining the definition of eligible capital, and that the dialogue with the banking industry would continue concerning the possible future recognition of portfolio credit risk models (Hall, 2004).

Initially, CP-3 set, the deadline for implementation of Basel-II as the end of 2006. This requirement was later replaced by allowing greater flexibility, under which banks could adopt a phased rollout of the IRB approach, for example, adopting the IRB across asset classes within the same business unit or across business units within the same banking unit or across business units within the same banking group, or moving from the foundation to the advanced version only for some inputs to risk-weighted assets. It was expected that this flexibility would facilitate adoption of the IRB approach by less sophisticated banks. Similarly, under the regulatory capital charge for operational risk, partial use of the Advanced Measurement Approach was allowed, i.e. adoption of the

approach for some parts of a bank's operations and the simpler Basic Indicator or Standardized Approach for the rest. In the Basel-II which was published after a half year's delay in June 2004 (rather than at the end of 2003 as envisaged earlier) there were further changes in the direction of allowing greater flexibility, including a relaxation of the timetable and more explicit acknowledgement of the problems confronting different national supervisors regarding the implementation of the framework. A significant change in this final version of the document was the change in title from 'The Basel Capital Accord' in CP2 and CP3 to 'International Convergence of Capital Measurement and Capital Standards' which was indicative of the fact that the Committee had realised the need to shift its emphasis away from the one-off act of signing up to a controversial international accord towards a process likely to continue in the future as well. It also reflected an acceptance of the fact that in many countries adoption procedures would require additional assessments of the impact of the revised framework and the possibility of further changes in light of comments from interested parties (banks) and National Central Banks.

As regards the time table for the implementation of Basel II, the Committee conscious of the hurdles still to be cleared, allowed the extension of the transition period for implementation of the more advanced approaches of Basel II, until the end of 2008. Furthermore since the adoption of Basel II may not be the first priority of the authorities in many non-G10 countries, the Committee therefore also accepted the fact that timetable in several countries would differ from that originally envisaged in the revised framework.

CONCLUSION

Effort of the Basel Committee on Banking Supervision aimed at addressing some of the long-standing weaknesses inherent in the original Capital Accord are quite laudable. By responding positively to some of the criticisms leveled at it during the various rounds of consultations and accommodating different points of views in the revised framework the Committee has made it a much better and a more acceptable document as compared to the proposed packages of CP1, CP2 and CP3.

Although some of the stake holders are still raising concerns about various elements of Basel-II, the process itself has proved to be a valuable experience. It has facilitated the cause of sound risk management within the banking industry, which will benefit not only the regulators but also the banks, their customers, and the community at large. Bank supervisors around the world are now already being pressurized into adopting the 'best practices' which would benefit the objective of greater financial stability. It, however, remains to be seen as how effectively they are able to implement the revised framework in their respective jurisdictions. In doing so they are well advised not to attempt imposing changes too quickly as it could have implications for certain sectors of their economies. Thus slow and cautious implementation of Basel-II owing to the required shifts in banking practice may be desirable.

ANNEXURE

The Mutually Reinforcing Pillars

The Basel II framework has substantive breadth and depth. It prescribes different approaches for different sized banks and / or domestic versus internationally active banks and recognizes properly different buckets of assets and assigns risk weights while incorporating the quality of issues / assets through rating mechanism. To allow this flexibility Basel II is elaborate and is bedecked with three mutually reinforcing pillars:

- Minimum capital requirement (MCR – Pillar I)
- Supervisory review process (Pillar II)
- Market Discipline (Pillar III)

All three pillars complement each other to form an overarching risk-management structure for the promotion of financial stability.

The Pillar 1 provides for minimum capital requirement for 3 main risks. i.e. credit risk, operational risk and market risk:

- For credit risks, the banks have a choice to adopt a Simplified Standardized Approach (SSA) with a uniform risk weight of 100 percent for corporate loans or based on Standardized Approach (SA) which allows use of ratings of the external credit assessment institutions (ECAIs). Alternatively, banks can opt for Internal Rating Based (IRB) which involves development of internal rating systems to measure capital against credit risk. Banks can adopt Foundation IRB (FIRB) using their own data to estimate probability of default (PD), Loss Given Default (LGD) and Exposure at Default (EAD). FIRB banks will depend on fixed weights approved by their supervisors whereas under Advanced IRB they may use their own estimates.
- Operational risk captures risks associated with internal processes, systems, and people. Capital for this risk is prescribed by (i) Basic Indicator Approach (BIA), (ii) Standardized Approach and (iii) Advanced Measurement Approach.
- Market risk relates to losses due to changes in prices, interest rate and equity prices. If opting for standardized approach capital is calculated against market risks by using the parameters as specified by the regulator or under internal approach banks develop their own systems and models to capture risk under this category.

The Pillar I of MCR is interconnected and reinforced with the two other pillars.

Pillar II or the Supervisory Review Process. Under this, financial institutions should have their own internal capital assessment processes to capture risks which remained uncovered under Pillar 1 and thus set aside capital in line with the bank's risk profile and control environment.

The supervisory review process validates the bank's internal assessments by ensuring that the whole array of risks has been taken care of. Three risks in particular ought to be considered under Pillar 2: risks that are not fully captured by the Pillar 1 (e.g. credit concentration risk); those factors not taken into account by the Pillar 1 (e.g. interest rate risk in the banking book, business and strategic risk); and factors external to the bank (e.g. business cycle effects). Besides using qualitative assessments, both banks and regulators, could employ forward looking stress tests to identify possible events or changes in the market conditions that could adversely impact the capital adequacy.

Pillar III seeks to enhance disclosure and transparency by strengthening banks' financial reporting system and by encouraging market discipline and allowing the key stakeholders to assess key pieces of information in the scope of application, capital risk exposures, risk assessment processes, and capital adequacy of the institution. Pillar III complements and reinforces the first two pillars and infuses market pressures to bring in better risk management and adequate levels of capital in the banks and keep key stakeholders fully informed about the risk profile of banks and enables them to take prudent decisions while transacting business with them.

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