Chapter 4

BASEL NORMS

AND

STATUS OF SUPERVISORY ENVIRONMENT IN INDIA
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BASEL Norms and Status of Supervisory Environment in India

Both developed and developing countries have been witnessing major environmental changes during the last two decades due to banking sector crises that have threatened wider systemic damage in some countries such as Latin American countries 1980s, Mexico (1982, 1994-1995, Russia (1998), Brazil (1999) and East Asia (1997 and 1998). These have provided bad experience for governments, banks’ regulators and banks’ management. Therefore, financial and operating strength of banking sector as a whole is inevitable.

Lindgren et al (1996) have observed, since 1980, over 130 countries, comprising almost three fourths of the International Monetary Fund’s member countries, have experienced significant banking sector problems, with 41 instances of crisis in 36 countries and 108 instances of significant problems.

Concerns about banking crises are hardly surprising. Bank failures generate serious negative externalities for the economy as a whole. These externalities take a wide variety of forms. The use of public money to bailout insolvent banks can endanger efforts to rein in budget deficits.

Banking crises in Less Developed Countries (LDCs) and Newly Industrialised Countries (NICs) can have huge costly repercussions for whole economies. About a quarter to a third of industrial country exports are absorbed by the developing countries. Such crises can reduce absorption by developing countries, disrupt the payments mechanism and curtail portfolio investment flows into developing countries, reducing overall growth. The recent crisis in
South-East Asia, for instance, is projected to slowdown the growth in the world economy from 4 per cent in 1997 to 3 percent in 1998 (IMF, 2004).

I. Brief Review of BASEL I and BASEL II Norms
BASEL Committee on Banking Supervision (BCBS) instituted by Bank for International Settlement has created a global financial architecture and created new dimension of challenges for banks. The BASEL Committee on Banking Supervision is a committee of banking supervisory authorities that was established by the central bank governors of the Group of Ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States of America (USA). It usually meets at the Bank for International Settlements in BASEL, where its permanent Secretariat is located.

The G 7 finance minister and central bank governors decided to establish Financial Stability Forum (FSF), in February 1997 in response to East Asian Crisis to provide a body of ‘Best Practices’. The core principle for effective banking supervision has become the most important global standard for prudential regulation and supervision in the financial sector. This is endorsed by most of the countries and many have expressed their intention to implement it. The common objectives of all supervisors is to maintain a strong an vibrant financial system and to achieve this, it is necessary that market participant become more discriminating in their approach to risk and better equipped to anticipate problems before they turn into crisis. (Fischer, 2002)

a. BASEL I Accord: Salient features
In 1988 BCBS member countries came out with its recommendations for minimum capital requirements for banks, which came to be known as the
BASEL I accord on codes and standards relating to bank supervision. It primarily comprised principles for able risk management, capital adequacy, sound supervision and regulation and transparency of operations (Ghosh and Sen, 2005). Some of the key features of BASEL I Accord are as follows:

I. Bank capital for regulatory/supervisory purposes includes Tier I and Tier II Capital. Tier I Capital comprises of equity capital and published reserves from post tax retained earnings. Tier II capital comprises includes undisclosed reserves, revaluation reserves. General provisions/general loan loss reserves, hybrid debt capital instruments and subordinate debts for computation of goodwill and investment in subsidiaries.

II. The accord focussed primarily on credit risk. Bank assets against advances were classified into five risk groups, which carried respective credit risks weights of Zero, 10, 20, 50 and 100 percent and this has been in the following Table No. 5.1

<table>
<thead>
<tr>
<th>Nature of Assets</th>
<th>Risk Attribute Profile (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Securities (Debt)</td>
<td>Zero</td>
</tr>
<tr>
<td>Bank Borrowings</td>
<td>20</td>
</tr>
<tr>
<td>Loans to others</td>
<td>Between 50-100</td>
</tr>
</tbody>
</table>

Sources: The New BASEL Capital Accord: An explanatory note’ BIS, January 2001, implications of BASEL II for emerging economics

III. In principle, banks were advised to hold capital equal to 8 per cent of the risk-weighted value of assets, such that total capital requirement equalled 0.08 times the risk weighted assets.

IV. It sets capital requirement based on broad classes of exposures and does not distinguish between relative degrees of credit worthiness among individual borrowers. For example, all corporate borrowing risk weightage assigned was 100 percent.
V. The subordinate debt instruments with an initial maturity of less than 5 years or with a remaining maturity of one year are not included as part of Tier II capital. They are limited to 50% of Tier 1 Capital.

VI. The Tier I Capital elements should not be less than 50% of CRAR.

VII. As per the Market Risk Amendments (1998), eligible capital under both Internal Model Approach and Standardised approach also included Tier III capital i.e. new short-term capital besides Tier I and Tier II capital with additional conditions.

VIII. Tier I Capital should cover a minimum of 28.5 per cent of market risk.

IX. The Tier III capital is only eligible to cover market risk including foreign exchange and commodities risk. It must have an original maturity of atleast 2 years and will be limited to 250 per cent of bank’s Tier I Capital that is allocated to support market risk.

X. The total of Tier II and Tier III capital should not exceed 50 per cent of the bank’s total capital.

XI. In so far as the overall limits in the 1996 Amendments are not breached Tier II elements may be substituted for Tier III upto the same limit of 250 per cent.

b. BASEL II Accord

The first Capital Accord of 1988 evolved by the BASEL Committee provided a framework for a fairer and reasonable degree of consistency in the application of capital standards. However, the methods used to determine the capital charge for credit risk in the accord were not sufficiently sophisticated and not perceived to be risk sensitive.

The widespread criticism in respect of the old Accord seems to have led the BASEL Committee on Banking Supervision (BCBS) to propose the new Consultative Paper on Capital Adequacy Framework in June 1999 also known
as BASEL II aimed at further strengthening the financial system. Some of the major reasons that led to BASEL II accord are as follows.

I. It was felt over time that the BASEL I was just a one-fit-all approach for capital regulation, in particular, with all corporate borrowings carrying the risk weight of 100 per cent. BASEL I gave equal risk weightage to all corporate credits irrespective of the differences in their underlying credit risks.

II. It failed to recognise that by undertaking credit portfolio diversification banks can have potential capital savings.

III. It gave rise to a significant gap between the measurement of regulatory risk (as prescribed under the BASEL norms) and the economic risk actually experienced by individual banks.

IV. It led to extensive regulatory capital arbitrage, which adds to the risk of bank asset portfolios.

V. Advances in technology and telecommunications, innovation in banking products and services, and an increase in globalisation of financial markets are major reasons for explosive growth in the markets for securitised assets and credit derivatives. This exposed banks to new types of risks viz. credit risk, operation risk and market risk. Thus need of new tools to manage and transfer credit risk was felt.

The BASEL Committee on Banking Supervision (BCBS) released the International Convergence of Capital Measurement and Capital Standards on June 26, 2004. The primary objectives of the new accord are (a) promotion of safety and soundness of the financial system, (b) the enhancement of competitive equality and (c) the constitution of a more comprehensive approach to addressing risks. These objectives are sought to be attained via three cardinal principles: (i) minimum capital requirements, (ii) supervisory review of capital adequacy and (iii) effective use of market discipline.
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BASEL II Accord was drafted by the BCBS to address the above-mentioned issues with the following goals:

I. A minimum capital requirement pillar

II. A comprehensive coverage of credit risk, market risk and operational risk.

III. A Three-Pillar approach with due emphasis on supervisory review and market discipline to ensure that bank’s capital is aligned to its actual risk profile.

IV. A menu of options, both for estimating regulatory capital and to bridge the gap between regulatory and economic capital.

Considering the various aspects of the international financial standards and codes initiative, it should be admitted that the BASEL codes (especially BASEL I) have had so far a positive impact in terms of the emerging market countries being in a position to borrow at a low risk premium and creditor institutions have benefited with a lower default probability. International financial institutions are also in a better position to effect surveillance of the system. Gains to creditor country governments include the saved fiscal costs of bailouts, which, however, are difficult to quantify. With the reinforcing of the new international financial architecture the global financial system today gives a look of apparent stability and increased resiliency to shocks, as compared to how it functioned during the financial crises of the 1990s.

II. BASEL II Accords vis-a-vis BASEL I

BASEL I was simple in approach and did not distinguish between relative degree of creditworthiness among individual borrowers. The new Accord implies a shift away from stipulation of prescriptive capital adequacy standards (rule-based capital regulation) towards specification of capital adequacy based on quality and character of bank assets, competence of its management and the
stability of the operating environment (process-oriented capital regulation). BASEL II framework is more reflective of the underlying risks in banking and provides strong incentive for improved risk management. (BIS Paper, 2004). Before discussing in detail main differences between BASEL I and BASEL II Accord are given in the following Table No. 5.2.

Table 4.11: BASEL I Versus BASEL II

<table>
<thead>
<tr>
<th>BASEL I</th>
<th>BASEL II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on single risk measure</td>
<td>More emphasis on bank’s own internal risk management methodologies,</td>
</tr>
<tr>
<td></td>
<td>supervisory review and market discipline</td>
</tr>
<tr>
<td>One size Fits all</td>
<td>Flexibility, menu of approaches, capital incentives for better risk</td>
</tr>
<tr>
<td></td>
<td>management, granularity in the valuation of assets and type of business</td>
</tr>
<tr>
<td></td>
<td>and in the risk profile s of their systems and operations.</td>
</tr>
<tr>
<td>Broad Brush Structure</td>
<td>More risk sensitivity by business class and asset class, multidimensional,</td>
</tr>
<tr>
<td></td>
<td>focus on all operational components of a bank.</td>
</tr>
</tbody>
</table>


Beside the above-mentioned comparatives of BASEL I and BASEL II other important features of BASEL II can be summarised as follows.

A. Introduction Three Pillar Approach

In the New Capital Accord, viz Basle II, while the definition of Capital Fund remained the same as that in 1988, the method of calculation of Risk Weighted Assets has been modified to factor market risk and operational risk, in addition to the credit Risk that alone was reckoned in 1988 Capital Accord.

In order to arrive at the capital requirement of a financial institution, factoring the credit, market and operational risks varieties of approaches under each of
the risk unlike BASEL I Accord where there was only one approach to measure credit risk have been proposed. Banks have been given freedom to adopt any of the approach suitable to them for arriving at the total risk weighted assets.

BASEL II has introduced Three Pillar Approach for adequate capitalisation of bank with an objective to improve a bank control. According to “Pillar I” approach bank supervisors are expected to evaluate the activities and risk profiles of individual banks in order to determine whether those banks have provided adequate capital. Pillar I requires higher levels of capital for high credit risk borrowers and vice-versa. “Pillar II” Approach represents effective supervisory review of Pillar I by the supervisors and “Pillar III” is represented by market discipline to ensure prudent management by banks by enhancing the degree of transparency in banks public reporting. (Nitsure, 2005). Unlike BASEL I, new capital charge has been introduced for risk exposure due to operations failure, in BASEL II Accord.

B. Introduction of Menu of Option
BASEL II has also made framework on menu of options, both for estimating regulatory capital and to bridge the gap between regulatory and economic capital such as (i) Credit Risk Menu, (ii) Market Risk Menu and (iii) Operational Risk Menu.

(i) Credit Risk Menu
Credit Risk can be measured through any of the three approaches, viz. Standardized Approach, Foundation Internal Rating Based Approach and Advanced Internal Rating Based Approach.

Standardized Approach: In Standardized Approach, the bank allocates a risk weight to each asset as well as off balance sheet items and produces a sum of
Risk Weighted Assets values. Thus, risk weight of 100 % may entail a capital charge of 8 % and a risk weight of 20 % may entail a capital charge of 1.6%. The risk weights are to be defined by reference to a rating provided by an approved external credit rating assessment institution that meets certain standards.

**Foundation Internal Rating Based Approach:** In Foundation Internal Rating Based approach, the bank rates the borrower and results are translated into estimates of a potential future loss amount that forms, basis for minimum capital requirement.

**Advanced Internal Rating Based Approach:** In the Advanced Internal Rating Based approach, the range of risk weights will be well diverse. The risk weights for sovereigns would range from 0 to 150 % depending on its credit rating. With regard to banks, all banks in a given country will be assigned a risk weight one category less favourable than that assigned to claims on sovereign of incorporation with a cap of 100%. In case of banks incorporated in countries rated below B, the risk weight will be capped at 150%. The risk weights for corporate would vary from 20% to 150%. However, the unrated corporate is given a 100 % weight for the reason that there may be certain good corporate that are not rated. It appears that it may provide an incentive to the corporate to remain unrated.

**ii. Market Risk Menu**

Market Risk, being dynamic in nature, is measured through either standardized or internal models approach and there is no change in this regard.
iii. Operational Risk Menu

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputation risks. Operational risk differs from other banking risks in that it is typically not directly taken in return for an expected reward but is implicit in the ordinary course of corporate activity and has the potential to affect the risk management process.

The BASEL Committee identified seven types of operational risk events that have the potential to result in substantial losses such as:

- Internal fraud;
- External fraud;
- Employment practices and workplace safety;
- Clients, products and business practices;
- Damage to physical assets;
- Business disruption and system failures;
- Execution, delivery and process management.

The potential losses, in turn, vary according to the business line within the bank in which the event occurs. Management of specific operational risks is not new. It has always been important for banks to try to prevent fraud, maintain the integrity of internal controls, reduce errors in transaction processing and so on. However, what is relatively new is the thrust on operational risk management as a comprehensive practice comparable to the management of credit risk and market risk. To manage operational risk, banks are gradually gearing to develop risk assessment techniques that are appropriate to the size and complexities of portfolios, their resources and data availability.
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There are three approaches for the purpose of operational risk popularly known as Basic Indicator (Alpha) Approach, Standardised (Beta) Approach & Advanced Measurement (Gamma) Approach.

**Basic Indicator (Alpha) Approach:** Under the Basic Indicator Approach, which banks in India would, at the minimum have to adhere, to hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted by alpha and set at 15 per cent by the BCBS) of a single indicator (currently proposed as positive annual gross income). One indicator for operational risk is identified such as interest income risk weighted assets, etc. Basic Indicator Approach utilises one indicator of operation risk for bank’s total activity. Operational risk would be computed as a percentage of average of three years positive gross annual income. Figure for any year in which annual gross income is negative or zero is to be excluded from both numerator and denominator while calculating the average.

\[ K_{BA} = \left[ \sum[G]_1^n \times \alpha \right]/n \]

**Where**

- \( K_{BA} \) = the capital charge under the Basic Indicator Approach
- \( GI \) = annual gross income, where positive, over the previous three years
- \( n \) = number of the previous three years for which gross income is positive
- \( \alpha = 15\% \), which is set by the Committee, relating the industry wide level of required capital to the industry wide level of the indicator.

**Standardised (Beta) Approach:** Under the Standardised Approach, banks’ activities are divided into eight business lines against each of which, a broad indicator is specified to reflect the size or volume of banks’ activities in that area. Within each business line, the capital charge is calculated by multiplying the indicator by a factor (beta) assigned to that business line such as Corporate Finance, Retail Banking, etc. The total capital charge under the Standardised Approach is calculated as the simple summation of the regulatory capital
charges across each of the business lines. A supervisor can choose to allow a bank to use the Alternative Standardised Approach (ASA). Under the ASA, the operational risk capital charge/methodology is the same as for the Standardised Approach except for two business lines – retail banking and commercial banking. For these business lines, loans and advances multiplied by a fixed factor ‘m’ replace gross income as the exposure indicator. The betas for retail and commercial banking are the same as in the Standardised Approach.

The total capital charge is calculated as the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year. In any given year, negative capital charges (resulting from negative gross income) in any business line may offset positive capital charges in other business lines without limit. However, where the aggregate capital charge across all business lines within a given year is negative, then the input to the numerator for that year will be zero. The total capital charge may be expressed as:

$$K_{TSA} = \left( \frac{\sum_{\text{years} 2004} \max \left[ \Sigma (G_{44} \times \beta_{44}), 0 \right]}{3} \right)$$

Where:

$K_{TSA} =$ the capital charge under the StanJune 2004 standardised Approach

$G_{44} =$ annual gross income in a given year, as defined above in the Basic Indicator Approach, for each of the eight business lines

$\beta_{44} =$ a fixed percentage, set by the Committee, relating the level of required capital to the level of the gross income for each of the eight business lines.

The values of the betas are given in the following Table No. 5.III.
Table No. 4.III: values of the betas

<table>
<thead>
<tr>
<th>Business Line</th>
<th>Beta Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Finance</td>
<td>(β₁) 18%</td>
</tr>
<tr>
<td>Trading and Sales</td>
<td>(β₂) 18%</td>
</tr>
<tr>
<td>Retail Banking</td>
<td>(β₃) 12%</td>
</tr>
<tr>
<td>Commercial Banking</td>
<td>(β₄) 15%</td>
</tr>
<tr>
<td>Payment and settlement</td>
<td>(β₅) 18%</td>
</tr>
<tr>
<td>Agency Services</td>
<td>(β₆) 15%</td>
</tr>
<tr>
<td>Asset Management</td>
<td>(β₇) 12%</td>
</tr>
<tr>
<td>Retail Brokerage</td>
<td>(β₈) 12%</td>
</tr>
</tbody>
</table>


Advanced Measurement (Gamma) Approach (AMA): Gamma approach is an internal measurement approach, now known as Advanced Measurement approach, and is based on the internal loss data estimation for each combination of business lines, bank is required to calculate an expected loss value to ascertain the required capital to be allocated / assigned. Scorecards that comprise forward linking indicators based on answered questions as diverse as fraud, business continuity, staff absence etc. are increasingly preferred in AMA.

III. Shortcoming of the BASEL Accords

Raghavan (2004) have vividly presented short coming of BASEL Accord as, “though it became a universal benchmark for assessing the adequacy of regulatory capital, the 1988 capital accord had certain shortcomings, some of which are listed herein after”:

I. As there were only four risk weights such as 0%, 20%, 50% and 100%, inadequate differentiation of credit risk had inadvertently crept in.

II. In respect of investments, general quantum equivalent to 2.5% risk weight for the entire portfolio was provided for. (In the new accord, based on a model capturing the volatility of the market, capital charge is calculated.)
III. The risk weights applied to AAA rated borrower and that of lower rated borrower are same though the risk profile of the borrowers may vary substantially. There was no relief of capital to the banks holding relatively less risky assets in their books.

IV. Capital charge was same irrespective of the maturity structure of credit exposure and the accord ignored the fact that there is greater risk of default in the longer-term exposure than the one maturing shortly.

V. The accord did not recognize the portfolio diversification effect for credit risk, though such a treatment was given in respect of market risk.

VI. The availability of certain credit risk mitigation techniques such as cash margin, collateral security, etc was not recognized.

VII. There was no capital charge for the operational risk, though it was a very important source of risk and may be, at times, more devastating than credit risk.

VIII. The BASEL Committee emphasizes that the objectives of safety and soundness cannot be achieved solely through capital adequacy requirements and hence the Capital Accord II comprise sophisticated approach consisting mainly three pillar approach. The first is Minimum Capital Requirement; the second being Supervisory Review and the third Market Discipline. The revised accord can be considered as fully implemented only if all the three pillars are put in place, as a whole package.

IX. The spread and nature of the ownership structure is important as it impinges on the propensity to induct additional capital. While getting support from a large body of shareholders is a difficult proposition when the bank's performance is adverse, a smaller shareholder base constrains the ability of the bank to garner funds. It has no maturity or
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repayment requirement and is expected to remain as a permanent component of the core capital without any repayment obligation.

Griffith Stephany et al (2004) reported Basel II would quite significantly overestimate the risk of International bank lending to developing countries, leading to a sharp rise in the cost of borrowings by these countries as well as a fall in their capital flows. Small enterprises and infrastructure projects etc. require a more liberal approach to bank credit. Thus, stringent norms of Basel II norms would damage the growth potential of emerging economies.

Banks need to undertake massive investments in upgrading risk management skills of their staff covering both quantitative and managerial skills. Basel II is said to influence all areas ranging from business process/systems to organisational structure strategies. Banks will have to establish enterprise-wise risk management methodology, data collection, IT system disclosure process etc. (Baradoili, 2003)

IV. Supervisory Structure in India
Under the powers conferred under RBI Act, 1934 and Banking Regulation Act, 1949, RBI has been taking bank-specific supervisory corrective actions where the financial position warrants such measures. These include directing banks to submit quarterly Monitorable Action Plans and progress reports on various targets set by the Reserve Bank, such as augmentation of capital, improvement in profitability, reduction of NPAs, reconciliation of entries in inter-branch, inter-bank and nostro accounts, review / renewal of borrower accounts, etc. In extreme cases, RBI can also put caps on credit-deposit ratio, restrictions on payment of dividend, call money borrowings and refinancing with high cost deposits including Certificates of Deposit, ban on recruitment and opening of branches, etc. Where the financial position so warrants, Reserve Bank effects
changes in the management of banks by removal of the Chief Executive Officer or Directors of the Board. In addition, RBI appoints additional Directors / Observers to oversee the functioning of the bank so as to prevent the affairs of the bank being conducted in a manner detrimental to the interest of present or future depositors. RBI also exercises powers in extreme cases to place banks under moratorium or initiate winding up proceedings.

The supervisory structure and methods have also undergone sea change in the era of reforms. To have an integrated supervisory system for such a vast and diverse field, an umbrella organisation in the form of Board for Financial Supervision (BFS) has been put in place since November 1994. The Board is drawn from the members of the Central Board of the RBI with Governor as Chairman. The BFS has mandate for supervision not only of banks but also the Development Financial Institutions (DFIs) and Non-Banking Financial Companies (NBFCs). Prior to the constitution of the BFS, the supervision on the commercial banks was mainly through the on-site inspections alone conducted at periodic intervals. However, to supplement that, Off-Site Monitoring and Surveillance System (OSMOS) was introduced in 1995, with focus on supervisory concerns such as Capital Adequacy, Asset Quality, Credits Concentrations, Risk Exposures, etc. The Annual Financial Inspection (AFI) system was recast in July 1997. The revised AFI system based on CAMELS model also focuses on mandated areas of solvency, liquidity and operational health of banks and shed some elements, which were in the nature of audit. The on-site examination of banks is the main instrument of the RBI’s supervisory system. This system, however, lays greater reliance on the role of external auditors as supervisory resource. The auditors are requested to verify and certify certain other aspects like adherence to statutory liquidity requirements, prudential norms and financial parameters being disclosed in the balance sheet. External auditors are also entrusted specific areas for focussed
audit. The banks have also been advised to introduce the system of concurrent audit in major and specialised branches.

V. Status of bank supervision in India
Developing a sound and healthy banking system through promotion of prudent financial practices has become essential to maintain financial stability. RBI initiated banking sector reforms in India since 1992-93 consequent upon the recommendations of committee on FSR (1991) to improve the health and enhance the efficiency, productivity and profitability of Indian Banking system over time with an objective of achieving convergence between Indian standards and the best international practices. RBI has been advising the bank to adopt the emerging best practices in banking and finance and need for having in place effective risk management and internal control systems. The Narasimham Committee Report I and II have borrowed heavily on BASEL I for their entire agenda for the banking sector reforms in India. The progress made in this regard has been summarised below.

a. Adoption of 90 days norms for recognition of loan impairment
According to the policy statement of April 2001, banks were advised to adopt 90 days norms to classify their assets with effect from 31st March 2004. Detailed guidelines were also issued that bank may move over to charging of interest on loans/advances at monthly rests for agricultural advances.

b. BASEL Capital Accord and its implication in India
The issue of capital adequacy of commercial banks was rather neglected in the pre-reforms period. The committee on Financial System (1991) however, recommended the introduction of capital adequacy regulation in respect of commercial banks in line with BCBS proposals. During the reforms period, the RBI introduced two forms of capital related regulation viz. (i) minimum net worth requirements of Rs. 200 crores and this initial capital has to be raised to
Rs.300 crores within years from the start of business. The promoters’ contribution should not be less than 40% of the paid up capital subject to lock in period of five years from the date of licensing and (ii) resource mobilisation from the capital market by making amendments in the Banking Companies (Acquisition and Transfer of Undertaking) Act 1970/1980 in July 1999 thereby allowing nationalised banks to raise capital up to 49 percent from the public.

However, India is one of the early countries that subjected itself voluntarily to the Financial Sector Assessment Programme (FSAP) of IMF and its banking system. RBI’s association with the BASEL Committee dates back to 1997 as India was among the 16 non-member countries that were consulted in the drafting of BASEL Core Principle (BCP). Indian Banking system has been assessed to be in high compliance with the relevant principles. (RBI 2000)

In April 2003, the RBI formally accepted in principle of the new Capital Accord. In its policy statement of May 2004, RBI advised banks to examine in depth the options available under the BASEL II and draw a road map by the end of December 2004 for migration to BASEL II. All banks in India have been advised to adopt the “Standardised Approach” to credit risk and the Basic Indicators Approach’ to operational risk. After adequate skills are developed both at the bank and supervisory levels, some banks may be allowed to migrate to IRB Approach. The RBI has already introduced “Risk Based Supervision” in 23 banks on a pilot basis. (Udeshi, 2004)

While BASEL standards require banks to have a capital adequacy ratio of 8% with Tier I not less than 4% (50% of 8), the RBI has mandated the banks incorporated in India to maintain the Capital Adequacy Ratio at 9% as per the recommendation of the committee on Financial Sector Reforms from the year March 2000. Banks in India are in process of implementing capital charge for
market risk prescribed in BASEL II. But since 1998, the RBI has in place several surrogates such Investment Fluctuation Reserve for 5 percent of the investment portfolio, both in the “Available for Sale” and “Held for Trading”- whereas BASEL norms take into account only the trading portfolio. (Nitsure 2005)

However, BASEL II has set forth new challenges for Indian Banking Sector. Training of banks personnel for adapting the new supervisory environment is essential. Banks have to do huge investments in upgrading risk management skill of their staff covering both quantitative and managerial skills.

Banks must focus on the ultimate goal of achieving the Advanced IRB and Advanced Measurement Approaches (AMA) for credit and operational risks respectively. AMA requires banks to develop their own methods to minimise the amount of capital that needs to be set aside.

c. Counter-party and Country Risk
The Reserve Bank is committed to the implementation of the “Core Principle for Effective Banking Supervision” drawn by BCBS. In 1999, RBI had issued risk management guidelines, which, *inter alia*, advised banks to use the country ratings by reputed credit rating agencies and classify the countries into low risk, moderate risk and high-risk categories and endeavor to develop an internal matrix that reckons the counter-party and country risks.

d. Capital for Market Risk
The government and other approved securities are assigned a risk weight of 2.5 per cent towards market risk from March 31, 2000 as against zero percent assigned earlier. Guidelines on categorisation and valuation of banks’ investments, in consonance with international practices were effective from the
half-year ended September 30, 2000. Accordingly, banks were required to provide for 2.5 per cent risk weight on SLR and non-SLR securities, with effect from March 31, 2000 and 2001, respectively, as an interim arrangement, till such time as banks move over to the framework suggested by the BASEL Committee.

The New Capital Adequacy Framework has put forward various options for calculating operational risk capital charge in a “continuum” of increasing sophistication and risk sensitivity and increasing complexity. The capital adequacy ratio is expressed as a percentage of Capital to the Risk Weighted Asset. In respect of market risk and operational risk, the capital charge calculated using anyone of the above methods is multiplied by 12.5 [For example capital the RWA is 100 and hence the multiplying factor is 12.5 (100/8)] so as to bring it at par with the risk-weighted asset for credit risk. Thus, the Capital Adequacy Ratio, under the Capital Accord II, can be expressed as follows:

\[
\text{Capital Adequacy Ratio} = \frac{\text{Tier 1 + Tier 2 + Tier 3 Capital (Capital Funds)}}{\text{RWA for Credit Risk + (12.5 X Capital Charge for Market & Operational Risk)}}
\]

Calculation of Capital Adequacy in relation to economic risk is a necessary condition for the long-term soundness of the financial institutions. As banks carry on the business on a wide area network basis, it is critical that they are able to continuously monitor the exposure across the entire organization and aggregate the risks so that an integrated approach/view is taken. It can be achieved either or in combination of the two aspects detailed below

I. Lowering of the Risk Weighted Assets can be achieved mainly through:

a. Reduction in asset size without a decline in credit quality.

b. Improvement in the asset quality at the existing volume level.

c. Ensuring better recovery management & striking compromise proposal and settlement composition of asset mix with low or nil risk weight
II. Similarly improvement in the Capital Funds can be achieved primarily through the following measures:

a. Re-capitalisation through Public / Right issue
b. Employee participation in equity.
c. Revaluation Reserve (45 % of the increased valuation)
d. Merger of banks having superior capital adequacy ratio
e. Cross holding within the permissible limits.
f. Innovative instruments - hybrid character to be classified as tier II capital.

The BASEL norms provide for assigning capital for market risk on a standardised or on internally developed Value at Risk (VaR) methods. As the valuation norms on banks’ investment portfolio have already been put in place and aligned with the best international practices, it is appropriate to adopt the BASEL norms on capital for market risk. In view of this, banks are advised to study the BASEL framework on capital for market risk as envisaged in Amendment to the Capital Accord to incorporate market risks published in January 1996 by BCBS and prepare themselves to follow the international practices in this regard at a suitable date to be announced by the RBI.

e. Reduction in Transition Period of a Sub-standard Asset to Doubtful Category and Recovery of Non-Performing Assets

With effect from March 31, 2005, an asset is classified as doubtful if it remained in the sub-standard category for 12 months. Banks are permitted to phase the consequent additional provisioning over a four-year period, with a minimum of 20 per cent each year.

The broad framework provided for compromise settlements of NPAs issued by RBI in 1995 will continue to be in place and banks are free to design and implement their own policies for recovery and write off incorporating
compromise and negotiated settlements with the approval of their Boards. Banks have been advised to formulate a policy for recovery of dues, principal amount (excluding the interest element) in all sectors irrespective of the nature of business or purpose, which have become NPAs as on March 31, 1998. A special One Time Settlement (OTS) scheme for small and marginal farmers to cover loans up to Rs.50,000 has been issued.

VI. Prompt Corrective Action
Global experience of financial turmoil led to the search for appropriate supervisory strategies to avoid bank failures as they can have an establishing effect on the economy. India represents a special case among emerging economies as its banking system has been assessed to be stable and in high compliance with the relevant core principles by FSAP of IMF. However, FSAP assessment made on India’s compliance with BASEL Committee Core Principles highlighted that lack of explicit rules for mitigation against supervisory forbearance is a major weakness.

Identifying problem banks and monitoring the behaviour of troubled banks are the most important responsibilities of bank supervisors. Prompt actions are important, as the cost of restructuring/liquidation of bank would be high with delayed precautionary actions.

The structured, predetermined capital or asset ratios that trigger actions by the regulatory authorities have two purposes: one is to reduce a bank’s moral hazard behavior. The several trigger points serve as speed breakers or trip wires to slow deterioration of weak banks and reduce incentives and opportunities for banks to increase their risky assets. Banks are encouraged to perform better by enticements (i.e. lesser restrictions on moving to higher zones). Such Structured Early Intervention and Resolution (SEIR) include carrots as well as
sticks. The second purpose is to reduce the regulators’ agency problem. The regulators first have the opportunity of using their discretion to get banks to restore depleted capital. But if the banks do not respond and their capital ratios continue to fall, appropriate sanctions including resolution at least cost to the Insurance Corporation become mandatory. (RBI, Discussion paper of PCA)

The Core Principles for Effective Banking Supervision (Principle 22) of BASEL Committee on Banking Supervision mandate that banking supervisors must have at their disposal adequate supervisory measures, backed by legal sanctions, to bring about timely corrective action when banks fail to meet prudential requirements (such as minimum capital adequacy ratios), when there are regulatory violations or where their depositors are threatened in any other way. In extreme circumstances, this should include the ability to revoke the banking license or recommend its revocation. The penal actions range from restricting the current activities of the bank, withholding approval of new activities or acquisitions, restricting or suspending payment to shareholders, restricting asset transfers, restrictions on discretionary powers of managers, directors or controlling owners, arranging a take-over by or merger with healthier institutions. (RBI, Discussion paper of PCA).

Though there are explicit provisions (Sections 35A, 36AA, 36AB, 37, 46 to 48 of Banking Regulations Act, 1949) empowering Reserve Bank to initiate appropriate corrective actions against banks, which are showing signs of distress, these are not properly structured and no time limit is set for response to such actions in the case of definite weaknesses in banks. It is, therefore, necessary that we should evolve rule-based corrective actions, which are transparent for addressing early warning signals. Framework for PCA has been discussed as follows
i Framework for PCA: Recommended Trigger Points and Mandatory and Discretionary Actions

Trigger points have been set up under the three parameters, i.e. CRAR, Net NPAs and Return on Assets (RoA). The triggers based on these ratios take care of a bank’s performance in three critical areas which are quantifiable and forming integral part of the rating framework viz. capital adequacy, asset quality, management, earnings, liquidity and systems and controls.

For every trigger point a set of mandatory and discretionary PCAs have been laid down. The PCAs are designed to pre-empt any deterioration in the soundness of banks. The trigger points for NPAs and ROA may have to be set afresh every third year depending upon the performance parameters of the banks (Muniappan, 2003).

ii: Actions based on CRAR

Capital to Risk-weighted Assets Ratio is one of the significant indicators of the financial soundness of banks. CRAR normally comes down either due to unrestricted growth in assets, especially risk-weighted assets without simultaneous increase in capital or inadequate internal generation because of low earnings or high expenditure or poor asset quality requiring in heavy provisioning. Such banks will have little cushion to absorb any shocks, triggered by credit / market risk or other external developments. The mandatory and discretionary actions for the three zones that have been designed to increase in severity as the capital shortage become more critical. Action based on CRAR has been discussed in the following Table No. 5.IV
## Table No. 4.IV: Actions based on CRAR

<table>
<thead>
<tr>
<th>CRAR less than 9%, but equal or more than 6%</th>
<th>CRAR less than 6%, but equal or more than 3%</th>
<th>CRAR less than 3%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Implications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The situation implies that the bank fails to comply with the minimum regulatory CRAR of 9%, which exhibits its inability to absorb future shocks. The poor capital base is exacerbated by low earnings, heavy provisioning requirements due to high level of NPAs, high intermediation costs, asset-liability mismatches and bank's strong appetite for risky assets. It also exhibits bank's inability to access the capital market. The bank's flexibility to operate in inter bank and overseas markets would be severely restricted, forcing the bank to adopt narrow banking.</td>
<td>It showed further deterioration in capital base due to combination of factors, such as continuous losses, heavy provisioning requirements due to precarious asset quality, failure to adjust risk-weighted assets due to illiquidity, promoters' inability to bring in additional capital, etc. indicating higher possibility of bank failure.</td>
<td>This indicates all-round deterioration in capital adequacy, which may have arisen out of very poor asset quality and earnings of the bank. It also shows the inability of the existing management to infuse fresh capital, which point to the fact that induction of new management with adequate resources is the only solution to restore the position. Given the asset quality problem and poor earnings, the possibility of a quick turnaround is ruled out. Immediate injection of capital is only alternative to avert the failure.</td>
</tr>
<tr>
<td><strong>Mandatory Actions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submission and implementation of capital restoration plan</td>
<td>Same as for CRAR less than 9%, but equal or more than 6%</td>
<td>Same as for category CRAR less than 6%, but equal or more than 3%.</td>
</tr>
<tr>
<td>Restriction on expansion of risk-weighted assets</td>
<td>Discussion with the bank’s Board on corrective plan of action</td>
<td>Wage freeze / VRS</td>
</tr>
<tr>
<td>Prior approval of RBI for new branches and lines of business</td>
<td>Order recapitalisation</td>
<td>Appointment of Observers to monitor the functioning of the bank</td>
</tr>
<tr>
<td>Paying off costly deposits and CDs</td>
<td>Reduce overseas presence / stake in subsidiaries</td>
<td>Merger / liquidation if the bank's CRAR does not improve beyond 3% within one year or within such extended period as granted by the RBI</td>
</tr>
<tr>
<td>Reduce / suspend dividend</td>
<td>Cap on deposit interest rates</td>
<td></td>
</tr>
</tbody>
</table>

**Discretionary Actions**

- Order recapitalisation
- Reduce stake in subsidiaries
- Shedding of risky business
- Cap on deposit interest rates
- Restriction on borrowings from inter bank market
- Revise credit / investment strategy and controls

- Change of promoters / change in ownership
- Wage freeze/VRS
- Merger / liquidation if the bank fails to submit / implement recapitalisation plan or fails to recapitalise pursuant to order, within such period as RBI may stipulate.
iii: Action Based on Non-Performing Assets

Poor asset quality is due to deficiencies in credit administration, i.e. substandard credit appraisal, follow-up and recovery of loan assets and weaknesses in credit risk management. Lack of adequate income inhibits the banks from making provisions as per regulatory requirements. As such, to reduce the net NPAs, the steps needed are

1. A clear-cut loans as well as recovery policy drive for recovery of NPAs, upgrading of skills, revamping of credit administration and risk management systems and entertaining only high quality proposals.

2. A sound Loan Review Mechanism needs to be in place to protect the quality of loan portfolio. Expanding avenues to generate fee-based income and measures for containment of costs would also be desirable to ensure that banks make adequate provisions.

Nearly 2/3rd of the public sector banks, old private sector banks and foreign banks had net NPAs of 10% or less whereas the new private sector banks had an average net NPAs of 4.1%. Thus, the 10% level could be the trigger level for PCA. This is an appropriate level considering the fact that 9% of NPA is the ceiling for granting autonomy to Public Sector Banks.

Two trigger points have been proposed with respect to NPAs and mandatory and discretionary actions have been given in the following Table No.5.V:
### Table no.4.V: Actions based on NPAs

<table>
<thead>
<tr>
<th>Net NPAs over 10% but less than 15%</th>
<th>Net NPAs 15% and above</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Implications</strong></td>
<td></td>
</tr>
<tr>
<td>Have serious implications not only for current earnings but also its future income. Banks charge on Net Interest Income for loan loss provisioning / write off will be substantial. Further, the situation may also lead to serious provisioning implications in future due to migration of such NPAs into higher categories. The huge stock of NPAs forces the banks place their entire credit administration machinery in dealing with problem loans with little time for follow-up of other assets. This may also prevent the bank from undertaking profitable loan business. In a few cases, banks may be tempted to take on risky loans for generating more income, leading to adverse selection. High NPAs will also restrict the banks’ flexibility in assuming interest rate and exchange rate risks, even under favourable environment. The coverage ratio of such banks will be at a very unsustainable level.</td>
<td>It shows structural weaknesses in loan policy / administration and inability of banks to adequately provide for loan impairment. Also, such banks have little or no scope or inclination to provide for more than the regulatory provisioning requirements. It could be possible that the substandard assets constitute a significant portion of the NPAs. In such an event, the bank may have to face the situation of making higher provisioning requirements in future due to migration of sub-standard advances to lower categories. Such banks will have limited flexibility in absorbing potential is severely restricted, with limited scope for internal generation of capital. In pursit for higher income, such banks could be assuming low quality assets, which may lead to adverse selection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Mandatory Action</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Special drive to reduce the stock of NPAs and contain generation of fresh NPAs.</td>
<td>Same as for category Net NPAs over 10% but less than 15% above</td>
</tr>
<tr>
<td>Review loan policy</td>
<td>Discussion with bank’s Board on corrective plan of action</td>
</tr>
<tr>
<td>Upgrade credit appraisal skills and systems</td>
<td>Prior approval of RBI required for branch expansion / undertaking new line of business</td>
</tr>
<tr>
<td>Strengthen follow-up of advances including loan review mechanism for large loans</td>
<td>Reduce overseas presence</td>
</tr>
<tr>
<td>Effective follow-up of suit filed / decreed debts</td>
<td>Reduce / suspend dividends</td>
</tr>
<tr>
<td>Put in place proper credit risk management polices / process / procedures/ prudential limits</td>
<td>Engagement of Consultants to revamp credit risk management process</td>
</tr>
<tr>
<td>Reduce loan concentration - individual, group, sector, industry, etc.</td>
<td>Reduce stake in subsidiaries</td>
</tr>
<tr>
<td>Restriction on loan portfolio growth</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Discretionary Actions</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior approval of RBI for branch expansion / undertaking new lines of business.</td>
<td></td>
</tr>
<tr>
<td>Reduce overseas presence</td>
<td></td>
</tr>
<tr>
<td>Reduce /suspend dividends</td>
<td></td>
</tr>
<tr>
<td>Engagement of consultants to revamp credit administration</td>
<td></td>
</tr>
<tr>
<td>Reduce stake in subsidiaries</td>
<td></td>
</tr>
</tbody>
</table>
iv: Action Based on Return On Assets (ROA)

Return on Assets is one of the important indicators of the overall efficiency of banks. ROA comes down due to various factors such as high non performing assets, low fee- based income, high intermediation costs due to overstaffing, etc. Proposed actions aim at improving the income and containing expenses, reduction of high cost deposits, possible reduction in high level of provisioning / write off and tapping of avenues to increase fee based income. Internationally 1% ROA is considered as a benchmark. However, the 1998-99 results of banks show a very sharp decline in ROA in all the four groups of banks as may be seen from the data given below: -

<table>
<thead>
<tr>
<th>Public Sector banks</th>
<th>1997-98</th>
<th>1998-99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Private Sector banks</td>
<td>0.77</td>
<td>0.42</td>
</tr>
<tr>
<td>New Private Sector banks</td>
<td>0.81</td>
<td>0.48</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>1.55</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>0.97</td>
<td>0.90</td>
</tr>
</tbody>
</table>

In view of such sharp variations in ROA, it is difficult to set a trigger ROA at a level close to the desirable level i.e. 1%. Keeping in mind India’s reality, a trigger point of below 0.25% has been set. The proposed mandatory and discretionary actions have been given in the following Table No 5.VI:

The published balance sheets, off-site returns and on-site inspection reports may be the primary sources for identifying the banks, which could be placed under the PCA framework. (Aggarwal and Jacques, 1998)). If a bank’s performance under any of the four broad parameters has crossed the trigger point, permission of the Board for Financial Supervision (BFS) will be taken for placing any bank under corrective action programme. Such permission will also include specific mandatory action and those of discretionary actions, which in the opinion of BFS, may be applied to all banks.
Table No.4.VI: Actions based on ROA

<table>
<thead>
<tr>
<th>A Trigger point of below 0.25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implications</td>
</tr>
<tr>
<td>ROA at less than 0.25% indicates abysmal productivity of assets. The lower ROA may also be due to unsustainable level of NPAs, high cost-income ratio due to heavy non-operating expenditure including staff expenditure and inability of the bank to tap off-balance sheet business opportunities. It could be possible that the bank suffered losses on account of interest rate and currency mismatches. Imprudent pricing of assets and liabilities without reckoning cost - yield relationship also leads to lower ROA. Raising the ROA requires restructuring of asset liability profile, scientific pricing, undertaking fee-based activities, control over non-operating expenditure and reduction of NPAs to contain provisioning level within reasonable range.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mandatory Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Mobilise low cost deposits (2) Increase fee based income (3) Contain administrative expenses (4) Special drive to reduce the stock of NPAs and contain generation of fresh NPAs (5) Prior approval of RBI required for opening new branches / starting new lines of business (6) Pay off costly deposits and CDs (7) Staff expansion / filling up of vacancies only with prior approval of RBI except recruitment of specialists (8) Capital expenditure only for technological upgradation and for day-to-day operations within Board approved limits (9) Reduce / suspend dividends (10) Restriction on borrowings in inter bank market</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discretionary Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Cap on deposit interest rates (2) Wage freeze / VRS</td>
</tr>
</tbody>
</table>

VII. Legal Protection to Supervisors

As regards legal protection to supervisors / Members of the Board for Financial Supervision, who will be authorising Prompt Corrective Action, has been provided immunity vide Sec.54 of Banking Regulation Act, 1949, viz.

a. No suit or other legal proceeding shall lie against the Central Government, the Reserve Bank or any officer for anything which is in good faith done or intended to be done in pursuance of this Act.

b. Save as otherwise expressly provided by or under this Act, no suit or other legal proceeding shall lie against the Central Government, the Reserve Bank or any officer for any damage caused or likely to be caused by anything in good faith done or intended to be done in pursuance of this act will be adequate or a specific provision to this effect should be promoted in the Banking Regulations Act.
Thus the rule-based framework focuses on the need to prevent insolvency of banks. It is, however, considered desirable to build a broader PCA regime in India so as to delineate rule-based actions not only for shortfall in capital but also for other indicators of deficiency so that corrective actions can be put in place for major deficiencies in banks' functioning. Indian banking has covered a long distance in terms of supervision and control and has been assessed to be in high compliance with the relevant principles by FSAP.
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