

# Risk Management: Future of Banking Sector

## Theme: Indian Banking – Emerging Future

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### ABSTRACT

*The paper enfolds the management of risk in banking industry through maintenance of adequacy of capital according to Basel 2 framework. Basel 2 is being implemented in India since 2008. The accord of Basel 2 enables bank to estimate required level of capital for the banks in proportion to their levels and areas of risks. This further improves the financial soundness of the banks and improves financial health of the economy as a whole.*

**Key Words :** Risk, Basel 2, Capital Adequacy.

**Table 1**

India - Indicators of Financial Deepening

## I INTRODUCTION

Indian banking industry includes nationalised banks, private sector banks, foreign banks and cooperative banks. Commercial banks operating in India are eighty four in number, consisting of twenty eight banks in the public sector, twenty seven banks in the private sector and twenty nine foreign banks (RBI 2006)

With the dynamic business environment and spread of business across the globe, the nature of banking business has changed over the years. It has further resulted in to emergence of diverse risks for banks. Maintaining adequate capital becomes essential for banks to remain solvent and financially strong.

In India, Basel 2 accords as followed by banks since 31st March 2008. RBI is the regulatory body for implementation of Basel 2. The framework concentrates on capital adequacy for risk bearing capacity. ICAAP, the part of pillar 2 of Basel 2 is the internal assessment process for banks which determines the additional capital which banks should maintain in addition to capital calculated according to norms set down in pillar 1 of Basel 1.

The paper deals with the concept of Basel II and the ICAAP as part of Basel 2.

## II RISK MANAGEMENT AND BASEL 2 ACCORD

The Indian Banking Industry which has witnessed significant changes since privatization, globalization and liberalization. The banking business has expanded by manifolds beyond its traditional definition of accepting for the purpose of lending. The performance of the banking industry has shown remarkable results over the years.

Item	1980-81 to 1989-90	1990-91 to 1999-00	2000-01 to 2008-09	2007-08	2008-09
1	2	3	4	5	6
Growth rate	14.7	14.8	15.3	17.9	24.4
<b>Credit</b>					
Growth rate	14.3	13.9	18.5	18.2	15.0
Credit/GDP (per cent)	19.3	20.6	36.6	50.1	52.2
<b>Deposits</b>					
Growth rate	15.3	14.6	14.2	18.3	16.6
Deposits/GDP (per cent)	29.8	37.4	57.4	67.8	72.0
<b>Bank Assets</b>					
Growth rate	-	15.4	16.0	20.0	12.8
Bank Assets/GDP (per cent)	31.4	34.0	64.4	91.8	93.3

(a) RBI (Handbook of Statistics on the Indian Economy 2007-08)

(b) Report of the High Level Committee on Estimation of Saving and Investment (Chairman Dr. C. Rangarajan)

(c) IMF, Global Financial Stability Report, April, 2009.

The banking industry is showing constantly upward growth rate. The proportion of credit to GDP, deposits to GDP and bank assets to GDP has shown upward trend in spite of uncertain economic conditions of financial year 2008-09. The gross NPAs of the scheduled commercial banks have come down from 15.7 per cent at end-March 1997 to 2.3 per cent as at end-March 2008. The profitability of banks has improved over the years. The Return on Assets (RoA) of scheduled commercial banks increased from 0.4 per cent in the year 1991-92 to 0.99 per cent in 2007-08.

Profit is the reward of risk taken by the banks. The risk-reward equation is stated as  $\text{Reward} = C \times (\text{Risk})$ , where the coefficient  $C$  reflects the efficiency of risk management. Banks undertake more diverse activities in today's complex business environment and are therefore exposed to many additional risks. Certain major risks

faced by the banks are interest rate risk, price risk, strategic risk, transaction risk, foreign currency risk, liquidity risk, reputation risk and credit risk.

Coverage of risk and management and maintaining desired level of capital is necessary for existence of banking business. There is a risk that the failure of one bank may spill over to other banks and possibly even beyond the banking system to the financial system as a whole, to the domestic macro economy, and to other countries. Banks indulge in continuous lending and borrowing, to and from each other, and need to pay other banks for third-party transfers, and therefore, tend to be very tightly financially interconnected with each other. This is recognized as systemic risk. Thus, banks are particularly susceptible to systemic risk, and shocks at any one bank are viewed as likely to be quickly transmitted to other banks, which in turn can transmit the shock to the corresponding chain of banks.

A bank fails economically when the market value of its assets declines below the market value of its liabilities, so that the market value of its capital (net worth) becomes negative. At such times, the bank cannot expect to pay all of its depositors in full and on time.' (George G. Kaufman, Bank Failures, Systemic Risk, and Bank Regulation, 1995) Therefore ensuring viability of banks is of utmost importance.

Basel 2 accord is the standard of a risk-based capital framework which is being presently implemented across the world. In India the accord is implemented for all banking companies since 31st March 2009. The Basel 2 accord has three pillars;

Pillar 1: deals with the minimum capital requirements calculated according to either The Basic Indicator Approach (BIA) or The Standardised Approach (TSA) or the Advanced Measurement Approach (AMA).

Pillar 2: deals with the internal capital requirements and supervisory review process

Pillar 3: deals with market disclosures and discipline

### III THE FIRST PILLAR

The first pillar states the contents of regulatory capital.

Tier-I or core capital (paid up capital, free reserves & unallocated surpluses, less specified deductions) Long term subordinated debt to be < 50 % of tier-I capital i.e., a minimum of 28.5 % of market risk must be covered by tier-I.

Tier-II or supplemental capital (subordinated debt > 5yrs., loan loss reserves, revaluation reserves, investment fluctuation reserves, and limited life preference shares) Tier II capital restricted to 100% of Tier-I capital.

Tier- III capital (short term subordinated debt >2yrs & < 5yrs solely for meeting a proportion of market risk.)

Tier III to be less than 250 % of Tier-I capital assigned to market risk.

The following table shows the capital structure of three different banks prepared according to Basel 2 standards.

#### Capital Funds

	Details	Axis Bank	State Bank of India	HSBC Bank
		Amount (Rs. In crores)	Amount (Rs. In crores)	Amount (Rs. In millions)
<b>A</b>	Tier 1 Capital	8826.99	67578	96,031
	Paid up Share Capital	357.71	635	44,992
	Reserves and Surplus	8409.11	63986	54,740
	Innovative Perpetual Debt Instruments	398.55	3844	-
	Other capital instruments (only total)	-	14	-
	Amount deducted from Tier 1 Capital			
	-Investments in Subsidiaries	(12.50)	-	-
	-Deferred Tax Assets	(319.05)	-	-
	-Cash Collaterals against Securitization	(6.83)	-	-
		-	901	3701
<b>B</b>	Tier 2 Capital (net of deductions) (B.1+B.2 +B.3 -B.4)	3063.90	33031	7,334
<b>B.1</b>	Debt Capital Instruments eligible for inclusion as Upper Tier 2 Capital			
	Total Amount Outstanding	1148.38	17658	-
	Amount raised during current year	239.89	1002	-
	Amount eligible as capital funds	1148.38	17658	-
<b>B.2</b>	Subordinated debt eligible for inclusion in Tier 2 capital			
	Total Amount Outstanding	1882.40	10447	2,000
	Amount raised during current year	-	134	-
	Amount eligible as capital fund	1572.90	10108	-
<b>B.3</b>	Other Tier 2 Capital- Provision for Standard Assets	361.95	5299	-
<b>B.4</b>	Deductions from Tier 2 Capital			
	-Investments in subsidiaries	(12.50)	-	-
	-Cash Collaterals against Securitization	(6.83)	-	-
<b>C</b>		11890.89	10608	103364

Source: Final Accounts of Axis Bank, HSBC, SBI, 2008-09

## **IV THE SECOND PILLAR**

The pillar is based on the objectives of Transparency and objectivity. The pillar is designed to ensure adequate capital of banks and encouraging banks to develop and implement better risk management practices (ICAAP- Internal Capital Adequacy Assessment Process).

The internal capital adequacy assessment process is the process of estimating diversified risks faced by the banks other than credit and operational risks measured under pillar 1. It is defined as, "The ICAAP is a system of sound, effective and complete strategies and processes that allow institutions to assess and maintain, on an ongoing basis, the amounts, types and distribution of internal capital that they consider adequate to cover the nature and level of risks to which they are or might be exposed." (Part XVIII of CSSF Circulars 06/273) It may be called as the process of internal governance. Reserve Bank of India (RBI) has released the ICAAP guidelines for banks operating in India and has recommended a format for submission of ICAAP.

The second pillar of Basel 2 introduces the qualitative dimensions of risk management. The pillar emphasizes on adequacy of capital for the underlying risks analysed through Internal Capital Adequacy Assessment Process. It is a mechanism to strengthen risk, capital, and performance management of the bank. Justified implementation of a strong ICAAP carefully designed according to the needs of the bank strengthens the capacity of the bank to sustain different types of risks as well as leverage to enhance profitability.

The main aspects considered under the ICAAP, may include: (1) The internal risks that are not fully captured by the minimum capital ratio prescribed under Pillar 1; (2) The internal risks that are not at all taken into account by the Pillar 1; and (3) The external risk factors for the bank.

Table: 1- The Stages of ICAAP

The ICAAP is based upon four principles. They are as follows:

**Principle 1:** Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.

**Principle 2:** Supervisors should review and evaluate the banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with the regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process.

**Principle 3:** Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require the banks to hold capital in excess of the minimum.

**Principle 4:** Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

The Principle of proportionality is also observed in drafting and implementation of ICAAP. The banks are encouraged to migrate to and adopt progressively sophisticated approaches in designing their ICAAP. The degree of sophistication adopted in the ICAAP in regard to risk measurement and management should be appropriate according to the nature, scope, scale and the degree of complexity in the bank's business operations.

## **IV THE THIRD PILLAR**

The pillar of market discipline contributes to a safe and sound banking environment. Information given under pillar-III should be consistent with that given in the audited statements. Banks are expected to give all information in one place. Disclosures should be given on a semi-annual basis. However, critical information needs to be published on a quarterly basis.

## **V THE ROAD AHEAD**

Capital adequacy, measurement for coverage of risks, asset quality, profitability and well defined internal mechanism for internal administration are on the priority list of banks as the Basel 2cord is in the process of implementation.

The Central Bank has set up a Board for Financial Supervision under the chairmanship of the Governor of the Central Bank. As the appointment of auditors is subject to approval of central bank, control can be exercised on functioning of the bank. Expansion by opening of new branches is allowed only if the financial condition is sound and history of the company is promising, its management is apt, capital structure is adequate, earning prospects are good and the public interests are protected.

A survey reported that larger banks that can afford to have sophisticated risk measurement techniques will have lower minimum capital requirements. Those banks which successfully employ the IRB approach should, in theory, be better placed to avoid over-pricing good risks and under-pricing bad risks. It follows that there may, therefore, be some migration of higher risk SME loans to those banks which do not adopt the IRB approach and which, by implication, rely on less sophisticated

and more standardised measures of risk.(RBI 4TH SEPT 2008)

RBI has suggested Standardised Approach for measurement of capital risk and Basic Indicator Approach for measurement of operating risk In India, the absence of a regulating agency for rating of the banks and the absence of desired regulatory mechanism within the banks do not give a choice of selection of method for measuring risks. This will not make the disclosures cost effective and make an adverse effect on liquidity and profitability of banks as the international players will resort to cost effective measurement of risks.

The banking sector in India may face unique problems in the absence of well-developed credit rating systems, well defined data collection mechanisms, well structured supervisory mechanism, well planned market policies and other infrastructure. Selection of capital assessment methods will affect capital levels and subsequent capital charges. This will give rise to national and international competition making such banks uncompetitive. The impact of both, the first and the second pillars will be severe on the skills of both bankers and supervisors, which will have a greater effect.

The ICAAP developed by the bank needs to be constantly revised according to the dynamics of the environment in which that particular bank is functioning.

The future roadmap of the banking industry is getting equipped for a strong and rewarding financial environment with the implementation of Basel accord.

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