4 FUNCTIONS OF A COMMERCIAL BANK

SPECIAL NATURE OF BANKS

Banks are financial firms and depend on economies of size and gains arising from internalising certain activities rather than relying on market transactions. Banks provide packages of financial services which individuals find too costly to search out, produce and monitor by themselves. Banks are also special as they not only accept and deploy large amounts of uncollateralized public funds in a fiduciary capacity, but also leverage such funds through credit creation. Capital represents a very small fraction of total assets of banks especially when compared to non-financial institutions. A minimum percentage of capital of 8% of assets is equivalent to a leverage ratio (debt/equity ratio) of 92/8 = 11.5 which is unsustainable with non-financial institutions. Borrowers would consider it as impairing too much the repaymentability and causing an increase in the bankruptcy risk beyond acceptable levels. The high leverage of banking institutions does not interfere with their functioning because the discipline imposed by borrowers does not apply to depositors who are protected by deposit insurance. Banks require easy and immediate access to financial markets for raising funds as long as the perceived risk by potential lenders remains acceptable. The risks are however made visible and explicit by bank ratings.

The special nature of banks, creation of liquidity, carries risks unique to management of banks[1]. The basic function of bank management is risk management. One would be stretching the point, if this is equated with the

1 See Biagio Bossone, 2000, What is special about banks? Mimeo, The World Bank, Washington, D.C. and "Circuit Theory of Banking and Finance", *Journal of Banking and Finance*, 25, 2001, pp. 857-890.

conferment of special privilege which calls for the imposition of an obligation to provide banking services to all segments of population on equitable basis[2].

Characteristics of Commercial Banks

Among the financial institutions, the role of commercial banks is unique. Firstly, bank demand deposit liabilities Rs.2,56,039 crores as at end March 2004 constitute a large proportion (44.4 percent) of narrow money M1 (consisting of currency with the public, demand deposits and other deposits with the RBI) of Rs.5,76,651 crores. Of the broader measure of money supply, M3 of Rs.20,03,102 crores at the end of March, 2004, (which includes M1 + post office savings banks deposits = M2) time deposits with banks of Rs.14,26,451 crores, aggregate deposits of Rs.16,82,491 crores with banks constitute 83.9 percent.

Secondly commercial banks are the primary vehicle through which credit and monetary policies are transmitted to the economy. Credit and monetary policies are implemented through action on bank reserves (cash and statutory liquidity ratios), margin requirements and the rate at which scheduled banks can borrow from the RBI. These affect the supply, availability and cost of credit at banks.

Thirdly, the nature of lending and investing by commercial banks is multi-functional. They deal in a wide variety of assets and accommodate different types of borrowers. They facilitate the spread of the impact of monetary policy to non-bank lenders and to other sections of the economy. Further, the operations of commercial banks are highly flexible since they provide facilities for financing different types of borrowers which enables them to channel funds according to specified priorities and purposes.

Definition of Banking

The Banking Regulation Act, 1949, defines banking as accepting for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise and withdrawable by cheque, draft, order otherwise.

Functions of Commercial Bank

The functions of a commercial bank are

- to change cash for bank deposits and bank deposits for cash.
- to transfer bank deposits between individuals and/or companies.
- to exchange deposits for bills of exchange, government bonds, the secured and unsecured promises of trade and industrial units.

2 See "Annual Policy Statement 2005-06", RBI *Bulletin*, May 2005, P.354.

- to underwrite capital issues. They are also allowed to invest 5% of their incremental deposit liabilities in shares and debentures in the primary and secondary markets. The commercial banks have set up subsidiaries to provide advice on portfolio management or investment counselling. They also offer their constituents services to pay insurance, advise on tax problems and undertake executive and trustee services.

Payments Systems

Commercial banks are institutions which combine various types of transactions services with financial intermediation. Banks provide three types of transactions services. Banks, first, stand ready to convert deposits into notes and coins to enable holders of deposits to undertake transactions in cash. Secondly, bank deposits are used as a means of settling debts. Thirdly, where exchange controls do not exist, banks exchange cash and deposits from one currency into cash and deposits of another currency.

Commercial banks earlier had a monopoly on transaction services. Other financial intermediaries such as savings and loans, saving banks and credit unions in the United States have been authorised to offer transaction accounts. Money market mutual funds, another type of financial service organisation have developed financial product against which checks may be written.

Commercial banks are at the very centre of the payments systems. Bank money constitutes 38 percent of the money supply (M1) of the Indian economy. An efficient payment system is vital to a stable and growing economy and the banks' role is important.

In advanced economies commercial banks are also at the heart of the electronic payment system which is replacing paper based payment methods. In USA electronic payment between commercial banks are done through Fedwire which is a wholesale wire transfer system operated by the Federal Reserve System. About 3,00,000 transfers per day amounting to $ 1 trillion are made. Large banks in New York operate a private electronic transfer system called CHIPS (The Clearing House Interbank Payments System) which transfers $1 trillion a day involving international movement of funds.

Finally, Swift (the Society for Worldwide Interbank Financial Telecommunication) based in Brussels is operated by 2000 banks, brokerage firms and non banking financial institutions worldwide.

Intermediation

Commercial banks are the most important financial intermediaries accounting for about 66% of total assets of financial system. They have a comparative

advantage among other intermediaries in the provision of liquidity and payment services, credit supply and information services. Firstly, they undertake the important process of financial intermediation whereby the funds or savings of the surplus sectors are channeled to deficit sectors. Commercial banks along with other financial institutions channel the funds of surplus economic units to those wanting to spend on real capital investments. Funds are transferred through lending by banks or by creation of financial liabilities such as bonds and equity shares. Banks intermediate by obtaining the funds of savers in exchange for their own liabilities such as entries in a pass book and then in turn make loans to others. Financial intermediaries including banks buy and sell the right to future payments. Banks collect deposits from savers by offering interest and other features that meet customers' needs better than alternative uses of funds. In 2003-04 savings of the households in the form of bank deposits constituted 40.5 percent of gross financial savings. Deposits of commercial banks can be of any denomination which have the characteristics of low risk and high liquidity. The small deposits are put together to lend the funds.

Brokerage and Asset Transformation

Intermediary services are of two kinds: brokerage function and asset transformation activity. Brokerage function as represented by the activities of brokers and market operators, processing and supplying information is a part and parcel of all intermediation by all institutions. Brokerage function brings together lenders and borrowers and reduces market imperfections such as search, information and transaction costs. The asset transformation activity is provided by institutions issuing claims against themselves which differ from the assets they acquire. Mutual funds, insurance companies, banks and depository institutions undertake size transformation by providing many depositors with a share of a large asset or issuing debt type liabilities against equity type assets. While providing asset transformation, financial firms differ in the nature of transformation undertaken and in the nature of protection or guarantees which are offered. Banks and depository institutions offer liquidity, insurance against contingent losses to assets and mutual funds against loss in value of assets.

Through their intermediary activities banks provide a package of information and risk sharing services to their customers. While doing so they take on part of their risk. Banks have to manage the risks through appropriate structuring of their activities and hedge risks through derivative contracts to maximise their profitability.

Transformation Services

Banks combine various types of transformation services with financial intermediation. They provide three transformation services when they undertake intermediation process. Firstly, liability, asset and size transformation consisting

of mobilisation funds and their allocation (provision of large loans on the basis of numerous small deposits). Secondly, maturity transformation by offering the savers, the relatively short-term claim on liquid deposits they prefer and providing borrowers long-term loans which are better matched to the cash flows generated by their investment. Finally, risk transformation by transforming and reducing the risk involved in direct lending by acquiring more diversified portfolios than individual savers can. Commercial banks by effectively appraising credit requests can channel funds into productive uses.

Advantages of Financial Intermediaries

Benefits provided by financial intermediaries consist of reduction of information and transaction costs, grant long-term loans, provide liquid claims and pool risks. Financial intermediaries economize costs of borrowers and lenders. Banks are set up to mobilize savings of many small depositors which are insured. While lending the bank makes a single expert investigation of the credit standing of the borrower saving on several department investigations of amateur.

Financial intermediaries make it possible for borrowers to obtain long-term loans even though the ultimate lenders are making only short-term loans. Borrowers who wish to acquire fixed assets do not want to finance them with short-term loans. Although the bank has used depositors funds to make long-term loans it still promises its depositors that they can withdraw their deposits at any time on the assumption that the law of large numbers will hold. Bank deposits are highly liquid and one can withdraw the deposit any time, though on some kinds of deposits the interest previously earned on it has to be foregone. Finally, banks by pooling the funds of depositors reduce the riskiness of lending. Indirect finance in sum reduces the information and transaction costs of lenders and borrowers, renders deposits liquid and reduces the risk of lending.

Distinction between Commercial Banking and Trading Activities: Banking Book and Trading Book

Regulations make a clear distinction between commercial banking and trading activities with the common segmentation between the banking book and trading book. The banking book groups and records all commercial banking activities consisting of lending, borrowing and overlaps with investment banking operation. The trading book groups all market transactions tradable in the market. The banking book is governed by buy and hold approach while the trading book is governed by capital market practices. Accounting rules differ for the banking portfolio and trading portfolio. Accounting or portfolio rules that govern the banking book follow traditional accrual accounting of interest and costs and rely on book values for assets and liabilities. Asset-liability management applies to banking portfolio and focuses on interest rate and liquidity risks. Traditional commercial banking is local in character.

Trading book is governed by market values of transactions (mark to market) and profit and loss (which are variations of mark to market value of transactions) between two dates. The turnover of tradable positions is faster than that of banking portfolio. Earnings are P-L equal to changes of the market value of traded instruments. The market portfolio generates market risk, subject to liquidity risk. Market transactions include non-tradable instruments or derivatives traded over-the-counter. They trigger credit risk. Off balance sheet transactions which are contingencies given and received generate revenues but not exposures. They however trigger credit risk because of the possible future usage of contingencies given. Off balance sheet lines turn into a balance sheet exposure when exercised. Received contingencies create obligations for counter parties who sold them to the bank.

Payment and Settlement System

The deployment of funds mobilized through deposits involves banks in financing economic activity and providing the lifeline for the payment system. An integrated payment and settlement system is necessary for improving the conduct of monetary policy in the context of opening up of the economy. In the banking system the payment system floats, delays in processing and settlement system and legal hurdles in settlements enhance transaction costs. Operational efficiency, speed, better accuracy and timeliness of payment transactions as well as containing financial risks in the payment system are sought to be achieved by the establishment of VAST-network. The network which will encompass the entire financial sector would facilitate the movement towards **Real Time Gross Settlement (RTGS)** adopted by major countries of the world. The RTGS system would cover all the banking and financial market transactions, reduce transaction costs and improve efficiency of channels for transmission of monetary policy.

An integrated payment system will result in reduction of transaction costs and delay in settlements, minimise risk and interlink real and financial sectors. The focus of the integrated payment system is on computerisation, establishing connectivity and interface with banks' treasury/funds department, setting up controlling offices and providing connectivity among banks in an on-line and real time environment. Integration will involve interfacing of paper based as well as electronic payment services with securities and funds transactions, across the money and capital markets both national and international through a reliable, secure and speedy communication networks.

Real-Time Gross Settlement

The Committee on Payment and Settlement System (CPSS) of the Bank for International Settlements published the Report on Real Time Gross Settlement (RTGS) Systems in March 1997.

The timing of the settlement can be immediate which is described as being in real time or on the same day, either in batches at predetermined intervals (discrete) or at the end of the day (deferred). A gross settlement system is one in which both processing and final settlement of funds transfer instructions can take place continuously in real time.

The gridlock in RTGS which arises when a series of interdependent payments are stalled due to insufficient funds to settle the primary transaction, is resolved by providing for intra day liquidity to the participants. The liquidity requirement in RTGS is higher than in the netted system because each transaction has to be settled individually. However, gross settlement reduces the settlement risk, principal (credit) risk and systemic risk. In gross settlement, knock-on or domino effect on the system is avoided. RTGs is critical for an effective risk control strategy. It helps in distinguishing temporary liquidity problems from insolvency which could have helped in averting South Asian Crisis in 1997.

RTGS was implemented by the Reserve Bank on March 20, 2004. The RTGS provides for an electronic-based settlement of interbank and customer-based transactions, with intraday collateralized liquidity support from the Reserve Bank to the participants of the system. The system is enabled for straight through processing (STP) of customer transactions without manual intervention. By the end of 2004, 3000 branches in 275 centres (to go up to 500) are expected to be covered.

RTGS is a single, all India system, with the settlement being effected in Mumbai. The payments are settled transaction by transaction. The settlement of funds is final and irrevocable. The settlement is done in real time and funds settled can be used immediately. The message transmission is safe and secure.

Other Financial Services

Commercial banks provide securities related services. Commercial banks in India have set up subsidiaries to provide capital market related services, advice on portfolio management or investment counselling. In U.S., the Glass-Stegall Act of 1933 restricts the nature of services provided by commercial banks. In US they may offer discount brokerage services but not general purpose brokerage services. US banks facilitate mergers and acquisitions and in trading in currencies and US Government securities.

The Glass-Stegall Banking Act prohibits commercial banks from owning a firm dealing in securities. The Act has been challenged by banks offering money market mutual funds and other investment services. US Federal Reserve Board in January 1997 issued a proposal that would allow bank holding companies and their securities industry affiliates to offer ‘one stop shopping’ for their customers.

Commercial banks in US in 1990s have become very active in the management and distribution of mutual funds, managing more than 10 percent of the assets of all mutual funds. In India several commercial banks such as Bank of India, Canara Bank, Indian Bank and State Bank of India have set up subsidiaries under the guidelines issued by the Reserve Bank in 1987, followed by guidelines laid down by the Ministry of Finance in 1991.

Fiduciary Services

In US, banks manage employee pension and profit sharing programs that do not show up on banks' balance sheet. In US, banks operate separate trust departments which manage the funds of trust for a fee under the guidance of a trust agreement. The assets held in trust do not show up on banks balance sheet because they do not own the assets held in trust.

Off-balance sheet Activities

Banks assume contingent liabilities such as a guarantee of payment of another party, for a fee. Standby letter of credit is another example whereby a bank agrees to pay specified amount on presentation of evidence of default or non-performance of the party whose obligation is guaranteed.

The rapid expansion of off-balance sheet activities of banks, consisting of

- Commitments (unused overdraft facilities and note issuance facilities) which may require banks to advance funds and acquire a credit exposure at some future date.
- Provision of guarantees to borrow in direct financing markets and bankers acceptances of commercial bills or time drafts which substitutes banks credit rating for that of the borrowing firm (which remains an off-balance sheet exposure for the bank as long as the acceptance is not discounted and held by the accepting bank).
- Entry of banks into forward contracts in the markets in foreign exchange, interest rate and stock market.
- Banks engaging in merchant and investment banking activities like securities underwriting have blurred the distinction between business of banks and investment banks and between banking and financial markets generally and are often referred to as marketisation of banking.

In India, the off-balance sheet activities of commercial banks include fees, commissions and brokerage, profit/loss on sale/purchase of investments, forward exchange contracts, guarantees and acceptances and endorsement. The off-balance sheet exposure of scheduled commercial banks was Rs.17,63,283 crores in 2003-04. The off-balance sheet exposure as a proportion of total liabilities was 51.3 percent in 2003-04.

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ANALYSIS OF ASSETS AND LIABILITIES OF SCHEDULED COMMERCIAL BANKS

5

ASSETS AND LIABILITIES OF BANKS

At the end of March 2004 there were 90 Scheduled Commercial Banks (SCBs) comprising 27 Public Sector Banks (PSBs), 30 private sector banks and 33 foreign banks. Nine (8 in the public sector and 1 in the private sector) Indian banks operate 93 branches and 17 representative offices abroad. Indian banks' subsidiaries were 13 and joint ventures 7. The public sector banks (PSBs) dominate the banking system with more than 47% share in the total assets of the banking system.

The assets and liabilities of all scheduled commercial banks. (SCBs) as at end of March 2004 are presented in Table 5.1. Assets of Rs.19,75,206 crores consist of cash in hand and balances with RBI of Rs.1,13,246 crores (5.7% of total assets), assets with banking system of Rs.82,223 crores (4.2%), investments of Rs.8,02,066 crores (40.6%) and bank credit of Rs.8,64,143 crores (43.8%).

Liabilities of all scheduled commercial banks at Rs.19,75,206 crores consist of capital of Rs.22,348 crores (1.1% of liabilities), reserves and surplus of Rs.94,240 crores (4.8%) and deposits from public of Rs.15,75,143 crores (49.8%).

LIABILITIES

Paid-up Capital and Reserves

Paid-up capital of Rs.22,348 crores and reserves of Rs.94,240 crores in 2003-04 together constituted 5.9% of liabilities of scheduled commercial banks.

Banking Regulation Act, 1949

The Banking Regulation Act 1949 stipulates provisions to ensure adequacy of minimum paid-up capital and reserves. For a company incorporated in India a minimum paid-up capital of Rs.5 lakhs is prescribed. In the case of a banking

company incorporated outside India, Rs.15-20 lakhs depending on location is prescribed. It has to deposit further, cash or securities for Rs.15-20 lakhs with the Reserve Bank of India (RBI). Foreign banks are also required to deposit with the RBI, 20 percent of the profit from operations in India every year. They may be exempted for a specified period, if their deposits are adequate in relation to their deposit liabilities. Profits deposited with the RBI are considered an asset of the bank on which the claims of all creditors of the bank in India shall be the first charge. Guidelines for licensing of new banks were issued by RBI in 1993 as a part of reforms process. RBI revised the guidelines again in January 2001 for entry of new private sector banks. The guidelines formulated by the RBI in January 1993 in regard to entry of new banks have stepped up the requirement of capital. Now a bank has to be registered as a public limited company with a paid-up capital of Rs.200 crores, (January 2001); the initial capital should be raised to Rs.300 crores within 3 years; promoters' contribution should be 40% of capital at any point of time; NRI participation limited to 40% of paid-up capital; capital adequacy ratio 10%; NBFCs with good track record and net worth of Rs.200 crores (Rs.300 crores in 3 years) may be converted into a bank; NBFC desiring conversion should have capital adequacy ratio of 12%; and net NPAs not more than 5%.

It has been recognized that the solvency of banks depends not only on the stability of the value of their assets (read performing assets) but also on the size of the capital accounts. On top of the small capital stipulated, banks made highly risky loans. The ratio of capital funds in relation to bank assets is well recognised and is a universally accepted measure of the strength and stability of a bank. Capital means shareholders' equity which represents funds without any conditions. They have been committed to a bank with hopes for success and without any guarantee against risk. It enables a bank to attract the other borrowed funds it needs to support its business capital. Capital is closely tied with leverage and a small amount of capital placed in a bank has an influence magnified many times as noted in the special nature of banks above. Bank capital is the core of a market economy.

Table 5.1 *Assets and Liabilities of Scheduled Commercial Banks as on March 31, 2004.*

Liabilities	(Rs. crores)	%	Assets	(Rs. crores)	%
Capital	22,348	1.1	Cash and balances with RBI	1,13,246	5.7
Reserves & Surplus	4,240	4.8			
Deposits	15,75,1437	9.8	Balances with banks and money at call and short notice	82,223	4.2
Demand	2,03,142	10.3			
Savings	3,73,677	18.9			
Term	9,98,324	50.5	**Investments**	8,02,066	40.6
			Government securities	6.39,144	32.4
			In India	6,36,267	32.2
			Outside India	2,877	0.1
			Other approved	18,100	0.9
Borrowings	96,490	4.9	Non approved	1,44,822	7.3
Other liabilities and provisions (Unclassified liabilities) to banking system and participation certificates issued by SCBs)	1,86,798	9.5	**Loans and advances**	8,64,143	43.8
			Bills purchased and discounted	67,231	3.4
			Cash credit and overdrafts	3,17,836	18.8
			Term loans	4,25,076	21.5
			Fixed assets	21,403	1.1
			Other assets	91,940	4.7
Total liabilities	**19,750,020**	**100.0**	**Total Assets**	**19,75,020**	**100.0**

Source: Reserve Bank of India, *Report on Trend and Progress of Banking in India*, 2003-04.

Functions of Bank Capital

- Bank capital is the link between financial markets and bank's profitability. By relating banks' operations to financial markets, it indicates how well bank's are performing. A capital shortage of a bank indicates that it should change, among others, its operating policies.
- Bank capital is a source of funds. It helps meet startup costs of investment in land, plant and equipment. Established banks also require capital to finance growth.
- Return on bank capital indicates how well a bank's programmes can be sustained and the capital sum serves as a cushion against temporary losses and as a protection to uninsured depositors and other holders of liabilities in the event of liquidation. Financial markets continuously evaluate the relationship between earnings, assets and capital. The return on assets is measured by the return on capital divided by leverage. Profitability is the cornerstone of the capital policy of banks. Banks with low profitability are regarded as inefficient and may find it difficult to raise capital.
- Bank capital provides a cushion against temporary losses and signals that the bank has a basis of continuity and that its constituents have reason to look at banks' difficulties in a long-term perspective.
- Bank capital is generally less than 10% of assets whereas non-financial firms have capital assets ratios in the range of 40-60%.
- Relatively small unanticipated losses can significantly affect bank capital and threaten bank solvency. In 1990-91 before the advent of banking sector reforms the ratio of paid-up capital and reserves to deposits, the capital base, of public sector banks at 2.85% was quite low by international standards. Ownership of banks by government resulted in complacency about capital ratio. Lack of proper disclosure norms led many banks to keep the problems under cover. Capital is the centrepiece of regulatory policies. Bank regulators stipulate minimum requirements to promote safety and soundness of the banking system. Shareholders are not the concern of regulators. With the progressive privatisation of public sector banks' shareholders with significant stakes in the bank will act to control risk taking to protect their investment. The shareholding of the Government of India and the Reserve Bank constituted 1.8% and 59.7% in the case of State Bank of India. Other banks which are not fully owned by Government of India are Bank of Baroda (66.6%), Bank of India (76.6%), Corporation Bank (68.3%) Dena Bank (71.0%) and Oriental Bank of Commerce (66.5%). Existing norms permit dilution upto 51% through

the issue of fresh capital by public sector banks. There are 14 banks in the public sector which are fully owned by Government of India. The private sector banks can raise capital in the form of equity issues without the approval of the RBI.

Capital Adequacy

Financial risk increases the probability of banks' insolvency. Bank regulators are concerned about the downside risk of banks and they focus on lower end of the distribution of bank earnings. The variability of earnings from the regulators' view point should not lead to elimination of capital and insolvency of bank. Shareholders on the other hand are concerned with the expected return and require higher earnings per share as bank profitability becomes more variable. They have to be compensated for the bank risk.

The problem of financial risk is not solved by stipulating high capital requirement. High requirement may inhibit the efficiency and competitiveness of the banking system and may act as a constraint on the lending operations of the bank. Banks may not allocate funds in the most efficient manner. Relatively high capital requirement for banks as compared to other providers of financial services may also constrain the rate at which bank assets may be expanded impairing their competitive strength.

Capital Standards in U.S.A

Capital is regarded as a buffer against insolvency and to promote safety and soundness of the financial system. In the US the capital adequacy of any individual bank was dependent on the regulatory agency. National banks had to meet Office of the Controller of Currency (OCC) standard; Federal Reserve Board (FRB) standards applied to state member banks and banks affiliated to holding companies; and Federal Deposit Insurance Corporation (FDIC) to state chartered banks. Historically capital standards were changed many times. In the US in the early 1900s when deposit runs were a major threat to bank soundness, the office of the Comptroller of the Currency (OCC) required banks to have capital to deposit ratio of 10% or more. In the 1930s, the Federal Deposit Insurance Corporation (FDIC) began employing capital to asset ratio because risky assets were considered to be the major cause of failure. Regulators adopted a capital to risk assets ratio to let the banks utilise the large amount of default-free government securities accumulated during World War II by defining risk assets as total assets minus cash and government securities.

The Federal Reserve Board in the 1950s required the classification of assets into six different categories and banks were required to hold a different

percentage of capital against each asset category. Smaller banks were required to meet higher capital requirement since their portfolio diversification was less than a larger bank. OCC abandoned the guidelines in 1960s in favour of more subjective evaluations based on management quality, asset liquidity, ownership, operating expenses and deposit composition. Capital standards are enforced under the International Lending Supervision Act of 1983. Under the Act regulator, the requires violating banks to submit a plan to correct the capital shortfall which is enforceable in courts.

Uniform minimum primary capital-to-asset ratio was prescribed in 1981 by federal bank regulator. Primary capital was defined as equity shares, capital surplus, undivided profits, capital reserves and other non-debt instruments. Banks with less than $1 billion in assets were to satisfy 6% norm and 5% for banks with more than $1 billion in assets as laid down by FRB and OCC. The FDIC stipulated a minimum ratio of 5% for all banks. The three federal bank regulators in 1985 revised the norm at 5.5% of primary capital for all banks. Zones were established to consider ranges of ratios for primary and total capital (including all debt instruments) as well as asset quality that are relevant to capital risk. If a bank is found to be under capitalised the shortfall had to met under the supervision of the regulatory agency.

Risk Adjusted Capital Requirements

The Basle Committee on Banking Regulations and Supervisory Practices appointed by the Bank for International Settlements (BIS) has prescribed certain capital standards to be followed by commercial banks. The risk based practices and models are focused on systemic risk the entire banking industry is exposed to on account of the density of the relations among banks. Mutual lending, borrowing and trading creates strong interdependencies between banks. Failure of a large bank might trigger the contagion effect, through which other banks suffer unsustainable losses. The risk of collapse of the entire banking industry is ever present because of dense relationships among banks. The proposal for risk-based capital rules was adopted in 1988 by the Committee. The 1988 Accord requires banks to hold capital equal to at least 8% of weighted assets. This ratio called Cooke ratio addresses credit risk. The rationale for the proposal was that empirical evidence did not disclose any obvious relationship between bank capital and failure risk. The proposed norms apart from being closely related to failure risk, would also promote convergence of supervisory policies on the adequacy of capital among countries with major international banking centres. **The Basle Agreement** was signed in June 1988 by 12 industrialised nations. US banks had to comply with the norms by close of 1992.

The Cooke ratio while it is simple has several major drawbacks

- It does not differentiate between the different risks of major corporations. The Accord is not risk sensitive enough.
- The unequal treatment of short and long loans creates artificial arbitrage by banks.
- No provision for recovery is made even where collateral in the form of cash or liquid securities exist.
- Irrespective of the diversification, the same ratio is applied to all portfolios.

The RBI accepted for implementation, the standard of measuring capital as a ratio of risk weighed assets. The Committee on the Financial System (1991) suggested the adoption of capital adequacy norms, prudential norms for income recognition and provision for bad debts. The risk weighed assets ratio approach to capital adequacy is considered to be more equitable as an institution with a higher risk assets profile has to maintain a higher level of capital. Further the integration of on-balance sheet and off-balance sheet exposures into the capital ratio would provide risk sensitivity and skills to manage risk and structure balance sheet in a prudent manner.

Classification of Capital of Banks

Capital funds of scheduled commercial banks in India include Tier I or core capital and Tier II or supplemental capital. Tier I capital includes paid-up capital, statutory reserves and other disclosed free reserves and capital reserves representing the surplus arising out of the sale proceeds of assets. In computing Tier I capital, equity investment in subsidiaries, intangible assets and losses are deducted. Tier I capital consists of permanent and readily available support to a bank against expected losses. Tier I capital should not be less than 50 percent of total capital. In the US capital reserves are excluded from equity since loan loss reserves reflect anticipated actual losses.

Tier II capital comprises of less permanent and less readily available elements such as undisclosed reserves and cumulative perpetual preference shares, revaluation reserves, general provisions and loss reserve, hybrid debt, capital instruments and subordinated debt. The total of Tier II elements should be limited to a maximum of 100 percent of total Tier I elements.

Capital to Risk Assets Ratio (CRAR)

In April 1992, the RBI introduced a risk assets ratio system for banks (including foreign banks) in India as a capital adequacy measure. Under the system, the balance sheet assets, non-funded items and other off-balance sheet exposures were assigned risk weights according to the prescribed percentages.

Risk Adjusted Assets

They are the weighted aggregate of the degree of credit risk expressed as percentage of the funded and non-funded items. The aggregate is used to determine the minimum capital ratio.

Funded Risk Assets

The percentage weights allotted to the funded risk assets are:

(1) Cash, balances with RBI, balances with other banks, money at call and short notice, investment in government and other approved securities 0%

(2) Claims on commercial banks such as certificate of deposit 0%

(3) Other investments 100%

(4) Loans and advances:

a. Loans guaranteed by Government of India 0%

b. Loans guaranteed by State Governments 0%

c. Loans granted to public sector undertakings of Government of India and State Governments 100%

d. Premises, furniture and fixtures 100%

e. Bills purchased and discounted and other credit facilities 100%

Off-Balance Sheet Items

A conversion factor is used to calculate the risk exposure of the off-balance sheet items. The face value of each of the balance sheet item is multiplied by the credit conversion factor which is again multiplied by the weights attributable to the relevant counterparts specified for funded risk assets.

The credit conversion factor for different instruments in percentage are:

(1) Direct credit substitutes: General guarantee of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptance (including endorsement with the character of acceptance); 100%

(2) Transaction related contingent items: Performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions 50%

(3) Short-term self-liquidating trade related contingencies: Documentary credits collateralized by the underlying shipments; 20%

(4) Sale and repurchase agreement and asset sales with recourse where the credit remains with the bank; 100%

(5)	Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain draw-down;	100% 100%
(6)	Note issuance facilities and revolving underwriting facilities;	50%
(7)	Other commitments: formal standby facilities and credit lines with a original maturity: less than one year for each additional year or part thereof	0%
(8)	Aggregate outstanding foreign exchange contracts of	0%
	original maturity: less than one year	2%
	for each additional year or part thereof	3%

Norms for Capital Adequacy

Banks are required to maintain unimpaired minimum capital funds equivalent to the prescribed level of the aggregate of the risk-weighted assets and other exposures on an ongoing basis. All banks with international presence had to achieve the norm of 8 percent as early as possible, and in any case, by March 31, 1994. Foreign banks operating in India had to achieve this norm by March 31, 1993. Other banks will have to achieve a capital adequacy norm of 4 percent by March 31, 1993 (Tier I or core capital having been set at not less than 50 percent of total capital) and the 8 percent norm by March 31, 1996. The total of Tier II elements will be limited to a maximum 100 percent of total Tier I elements for the purpose of compliance with the norms. Banks were advised to review the existing level of capital funds vis-a-vis the prescribed level and plan to increase the capital funds in a phased manner to achieve the prescribed ratio by the end of the period stipulated.

Market Risk

In 1995-96 the Basle Committee introduced an amendment whereby the notions of banking book and trading book were made explicit, defined capital charges for market risk and allowed banks to use Tire III capital in addition to the previous two tiers. The trading positions in bonds, equities, foreign exchange and commodities were removed form the credit risk framework and given explicit capital charges related to the bank's open position in each instrument. Capital requirement extended explicitly to market risk.

Market risk is the risk of losses in on- and off-balance sheet positions arising from movements in market prices. The requirement covers interest related instruments and equities in the trading book; and foreign exchange risk and commodities risk throughout the bank. Capital charges apply to current market value of open positions in interest related instruments and equities in banks' trading books and to banks total currency and commodities positions. To assess

capital charge two approaches are envisaged: standardized and internal risk management model.

In conformity with the recommendations of the Committee on Banking Sector Reforms 1998 (CBSR), RBI announced a package of reform measures in October 1998 in areas relating to prudential norms. These measures aim at increasing the minimum capital adequacy ratio from 8% to 9% by March 31,2000; recognising the market risks and prescribing a risk weight of 2.5% in Government approved securities by March 31,1999; providing 100% risk weight for foreign exchange and gold open position limits from the year ended March 31, 1999; moving towards tighter asset classification, income recognition and provisioning norms; putting in place a formal asset-liability management system with effect from April 1,1999; and further enhancing transparency in accounting and disclosure practices.

In February 1999, banks were given autonomy to raise rupee denominated subordinated debt as Tier II capital. To restrict cross holdings, an individual bank's investment is restricted at 10 percent. CBSR, 1998 recommended issue of bonds guaranteed by Government to bolster capital adequacy. The bonds according to CBSR would also be eligible for SLR investment by banks and approved instruments for LIC, GIC and provident funds.

In USA capital of banks includes long-term debt of 7 years. In the context of regulatory capital long-term debt only serves to absorb operating losses in the event of bank failure.

Capital to Risk-weighted Assets Ratio (CRAR)

At the end of March 2004, the overall CRAR of SCBs was 12.9%. In 2003-04 only Global Trust Bank and Centurion Bank accounting for 0.5% of total assets of scheduled commercial banks could not comply with the regulatory minimum of 9%. Table 5.2 presents CRAR by Banks-Groupwise. Among the public sector banks nationalized banks had CRAR of 13.2%, old private sector banks 13.7% and foreign banks 15%.

New Capital Adequacy Framework, 1999

The Basle Committee on Banking Supervision (BCBS) has issued in June 1999 a new capital adequacy framework to replace the Capital Accord of 1988. The New Capital Adequacy Framework consists of minimum capital adequacy requirement, supervisory review of an institution's capital adequacy and internal assessment process; and effective use of market discipline as a lever to strengthen disclosure and encourage safe and sound banking.

While the Capital Accord of 1988 has helped strengthen the soundness and stability of the international banking system and enhance competitive equality

Table 5.2 *Distribution of Scheduled Commercial Banks by CRAR (2000-01 and 2003-04)*

(No. of banks)

Bank Group	Capital to Risk-weighted Assets Ratio (CRAR)								
	2000-01				2003-04				
	Below 4%	***Between 4-9%***	***Between 9-10%***	***Above 10%***	***Below 4%***	***Between 4-9%***	***Between 9-10%***	***Above 10%***	
1	2	3	4	5	6	7	8	9	
State Bank Group	–	–	–	8	–	–	1	18	
Nationalized Banks	1*	1	2	15				8	
Old Private Sector Banks	2*	1	4	16	–	–	–	20	
New Private Sector Banks	–	–	1	7	1	1	–	8	
Foreign Banks	–	–	4	38	–	–	–	33	
Total	**3**	**2**	**11**	**84**	**1**	**1**	**1**	**87**	

Source: RBI, *Report on Trend and Progress of Banking, 2001-02* and *2003-04*.

among internationally active banks it has become a less accurate indicator of a bank's financial condition in view of the developments in the financial market place. The new framework is designed to better align regulatory capital requirements with underlying risks and to recognise the improvements in risk measurement and control.

Minimum Regulatory Capital Requirement

The objective of minimum regulatory capital requirement is to provide a comprehensive and risk sensitive treatment of credit risk. The coverage of the Accord is expanded to incorporate other major categories of risk such as – market risk, interest rate risk in the banking books and operating risk and develop explicit capital charge.

Supervisory Review Process

The supervisory review of capital adequacy will seek to ensure that a bank's capital position is consistent with its overall risk profile and with its overall strategy and encourage supervisory intervention, if the capital does not provide sufficient buffer against risk. Bank managements can develop an internal capital assessment process and set targets for capital that are commensurate with the bank's specific risk profile and control environment. The internal process would then be subject to supervisory review and intervention where appropriate.

Market Discipline

Market discipline according to CBS is a lever to strengthen the safety and soundness of the banking system.

A close correspondence between the inherent riskiness of assets and the associated capital charge will lead to changes in the assessment of the risk and return characteristics of financial assets. A more precise allocation of banks risk capital could reduce the pricing differential between loans and debt securities.

The proposals are likely to reduce regulatory capital arbitrage. Banks for example have been economising on the relatively high capital cost of corporate loans by securitising their highest quality assets. Existing capital charges have encouraged them to hold a greater proportion of lower quality assets. The existing rules may have created a bias in favour of short-term lending to banks in emerging countries. Lastly the proposals might have an impact on OTC derivatives market since the 50 percent maximum risk weight that has been applied to off-balance sheet credit risk exposures is likely to be replaced by a graduated scale based on credit ratings.

Basle II : A Revised Framework

The Basle Committee on Banking Supervision's proposals for revising the capital adequacy framework in June 1999 was followed by additional proposals for consultation in January 2001 and April 2003. The Committee expects the revised

framework to be implemented at the end of 2006. The main objective for revision of 1988 Accord was to develop a framework that would further strengthen the soundness and stability of the international banking system by promoting adoption of stronger risk management practices by the banking industry.

The revised framework is based on three pillar (minimum capital requirements, supervisory review and market discipline) approach. In the revised framework some of the key elements of the 1988 capital adequacy framework have been retained including the general requirement for banks to hold to total capital equivalent to at least 8% of their risk weighted assets. Internal rating based (IRB) approach is envisaged to arrive at significantly more risk sensitive capital requirements. The New Basle Accord enumerates rules for enhancing credit risk measures, extending the scope of capital requirements to operational risk, providing various enhancements to the existing accord and detailing the supervision and market discipline pillars. The New Accord comprises three pillars:

Pillar 1 : Minimum capital requirements
Pillar 2 : Supervisory review process
Pillar 3 : Market discipline

The three pillars together contribute to a higher level of safety and soundness in the financial system. Basle II would be implemented across regions in 2007-2009. For pillar-I, IRB approach is envisaged to be used for calculating capital requirements for credit risk closely followed by standardized approach. The first pillar is compatible with the credit risk, market risk and operational risk. The regulatory capital will be focused in those three risks. The challenge regarding pillar-II implementation relates to acquiring and upgrading the human and technical resources necessary for the review of banks responsibilities; and co-ordination of home and host supervisions in the cross border implementation. The second pillar gives the bank responsibility to exercise the best ways to manage the risk specific to the bank. It also casts responsibility on the supervisors to review and validate banks' risk measurement models. With regard to pillar-III, the alignment of supervisory disclosures with the domestic and international accounting standards would be the challenge. This would improve transparency in banks and reporting.

The implementation of the advanced approaches prescribed under Basle II is under study by the steering committee constituted by RBI. The Basle II norms for capital charge for market risk are to be implemented over a 2 year period 2007-09. Meanwhile, all banks in India will adopt Standardized Approach (SA) for credit risk and basic indicator approach for operational risk. After development of adequate skills in banks and at supervisory level, some banks may be allowed to migrate to Internal Rating Based (IRB) approach.

Review of Risk Weighted Approach

The risk weighted asset approach to capital should strengthen the banking system by addition to equity. The question of strengthening capital through accessing domestic capital market is tied up with reduction of Government/RBI ownership and granting autonomy to public sector banks. If the banks are allowed to reduce the public ownership to 30 percent level as suggested by CBSR (through adoption of necessary legislation) autonomy would automatically follow and market discipline would be brought to bear on the banks. Risk can also be addressed by strengthening risk management applying judicial exposure limits and improving internal controls. Further, the capital raised by banks abroad may be allowed to be kept in foreign securities to render the banks acceptable to their counterparts abroad. The risk weighted assets approach however leaves out of the credit risk differences in the default probabilities and potential recovery rates in default. The norms also leave out other kinds of risk such as liquidity risk. Other credit risk issues such as favouring securities over loans in the weighing scheme may lead banks to curtail credit and shift to investment. The allocative efficiency is being traded off for safety and soundness of the banking system. In the risk assessment diversification which decreases risk is left out. Banks are encouraged to purchase low risk liquid securities. Further capital required in the norms does not reflect economic reality because it is based on book values, not market values of assets. The Basle norms could not adequately internalise the differences in credit ratings of dissimilar corporate borrowers. Finally, a more flexible approach has to be adopted to capital adequacy depending on the quality of assets.

Implications of Basle II Accord

- In view of its complexity, the New Accord would require shifting scarce supervisory resources away from direct supervision towards implementation of the proposal.
- Capital requirements will increase.
- Profitability will decrease because of competition for highly rated borrowings and on account of implementation cost.
- The risk management architecture is quite complex.
- Rating penetration is poor in India and rating is however a lagging indicator of credit risk.
- The likelihood of IRB approach becoming the dominant one may result in the system as a whole maintaining lower capital than warranted and become more vulnerable.
- Building historical database for computation of probability of default is time consuming.
- Rating may be avoided by counterparties which anticipate lower rating.
- Bank capital may be seen as a panacea for the prevention of bank failure.

- National accounting and auditing standards, in line with best international best practices are required.

Inter Bank Borrowing

In the assets and liabilities of SCBs presented in Table 5.1 interbank borrowing shown under item 4 'Borrowings' stand at Rs.96,490 crores at the end of March 2004 constituting 4.9% of total liabilities. The interbank liabilities consist of demand and time liabilities and borrowings from banks.

Interbank indebtedness is cleared through the clearing house. Interbank indebtedness arising out of transfer of deposits from one person to another is offset in the clearing house and any remaining balances are covered by the transfer of bankers' deposits with the central bank. The settlement of interbank indebtedness does not affect the level of aggregate deposits of the banking system or the aggregate of cash balances or bankers deposits with the central bank. The settlement has no monetary significance.

Call Money Market

The call money market, which deals in overnight funds is a key segment of the money market in India. Funds for 2-14 days are termed as notice money. Various reform measures since May 2001 have rendered the call money market into a pure interbank market closing the access of the other participants, PDs, mutual funds, corporates through primary dealers, financial institutions and non-bank finance companies. To modulate short-term liquidity, Liquidity Adjustment Facility was introduced in June 2000. It has emerged as an effective instrument to provide a corridor for the overnight call rate movement. This has resulted in stability and orderly market conditions through clear signaling.

The core of interbank borrowing is the call money market or money at call and short notice where funds are borrowed and lent by banks to each other for one day and short notice for a period up to 14 days. The interbank overnight money rate is referred to as call rate. Besides the call rate there are a number of rates such as yields on treasury bills, rates of commercial paper and certificates of deposit. Such markets operate in Mumbai, Kolkata, Delhi, Bangalore, Ahmedabad and Chennai. The transactions in these markets fluctuate widely and the daily average turnover during the fortnight ended on April 1, 2005 was Rs.18,843 crores. The participant-wise turnover indicates that SCBs account for Rs.15,800 crores (83.8% of total turnover). However, the interbank call money market is the most sensitive part of the Indian money market and is an important general indicator. The characteristic feature of lending in this market is that loans are given without security. This enables the banks to replenish their resources without disturbing their other assets. Generally the peaks and troughs in this market come during the busy and slack seasons. RBI is an important constituent of the money market since it is the residual source of

funds. Money market obtains funds from central bank either by borrowing or sale of securities. RBI changes liquidity availability through sale and purchase of government securities and repo operations, thereby influencing the cost of credit as well. The interest rate varied between 0.6% and 6.25% in 2004-05. There is an informal corridor for the call rates given by the fixed repo (injection) rate (6%) and the refinance rate (5%). The fixed repo rate acts as a floor for call rate while the refinance/reverse repo (absorption) with PDs at the Bank rate provides a ceiling. Earlier high volatility characterised call loan market on account of the mobilisation of extra short-term funds at the end of the financial year by commercial banks to window dress their balance sheets, high credit deposit ratio, maturity mismatch of assets and liabilities, periodical tax payments, large external payments on the oil import account, floatation of government loans and absence of forecasting techniques for CRAR purposes. A few banks tended to be overly exposed to the call/notice money market. They carried out banking operations and long-term asset creation with the help of call money market. The CBSR recommended that there must be clearly defined prudent limits beyond which banks should not be allowed to rely on call money market and that access to this market should essentially be for meeting unforeseen mismatches and not as regular means of financing banks' lending operation. After asset-liability management system was put in place, the mismatches in cash flows in the 1-28 days bucket were kept under check. Participants operate now within limits on both lending and borrowing operations. The call money market is now an interbank market with ALM discipline for participants and prudential limits for borrowing and lending. Non-bank participants except PDs are phased out of the call money market.

In 2003-04, volatility in the call money market declined along with turnover (Rs.9,809 crores in February 2004 and Rs.23,998 crores in October 2003). The call money rates were in the range of 4.33-4.91%. A part of the market activity migrated to the repo market (outside LAF) and Collateralised Borrowing and Lending Obligation (CBLO) segment on account of cheaper availability of funds vis-à-vis call money market.

Collateralised Borrowing and Lending Obligation

Collateralized borrowing and lending obligation (CBLO) is a money market instrument with a original maturity between one day and upto one year. The Clearing Corporation of India Limited (CCIL) (2003) operates the CCIL's, CBLO segment which has 79 members in October 2004. Banks borrowing through CBLO were exempted from CRR, if they maintain a minimum CRR of 3%. The daily turnover in 2003-04 was Rs. 4,508 crores and weighted average rate 3.96%. An automated value-free transfer of securities between market participants and CCIL was effected by RBI.

Relationship between Money and Foreign Exchange Market

The money markets for short-term deposits and loans for the home and foreign currencies are linked to the foreign exchange market. The link between these markets is the forward margin which is the difference between the spot and forward rates. Margin is a function of interest rate differentials. For the determination of forward rates through the operation of interest parity principle the prerequisites are the existence of a term inter bank money market locally and the freedom to banks to borrow or deposit funds abroad.

In India, the domestic money market is distinct from the the foreign exchange market. Foreign exchange has been kept in a separate watertight compartment from the rupee. The forward margin instead of being determined by interest rate differentials, in the Indian forex market, is a function of demand and supply.

Integration of Different Segments of Money Market

While the Discount and Finance House of India was set up on 1988 to promote secondary market activity in money market instruments, the post reform period witnessed the building of institutional infrastructure for the money market. They have helped to integrate the various segments. In 1996, the system of primary dealers was introduced to develop gilt market. Repos with RBI, (1992) Market Repos, Forward Agreements/Interest Rate Swaps (1999) and Collateralised Borrowing and Lending Operation (CBLO) (2003). The development of the payment system infrastructure was strengthened with the formation of the Clearing Corporation of India Ltd. (CCIL) in April 2002, introduction of Negotiated Dealing System (NDS) in February 2002 and the implementation of Real Time Gross Settlement (RTGS) system from April 2004.

The introduction of LAF has further improved the integration of various segments of the money market. The correlation coefficient between interest rates of CDS, CPS, 91 day Treasury Bills and repo rate with the call money rate improved steadily during the period April 1993 to May 2000 to June 2000 – June 2004. The integration of money market segments was further validated by existence of cointegrated relationships among money market rates and their further strengthening between June 2000 to June 2004.

CRR and SLR on Inter Bank Deposits

The Sodhani Group (1995)[1] identified the reserve requirement as the major impediment for the development of the term interbank money market and

1 Reserve Bank of India, The Report of the Expert Group on Foreign Exchange Markets in India, June 1995.

recommended that it should be lifted. The Group has also suggested that commercial banks should be permitted to deposit/borrow short-term dollars abroad, upto the limits specified by the RBI.

The Reserve Bank of India, through its slack season credit policy announced on April 15, 1997 has removed CRR and SLR on interbank liabilities. A term money market among banks, besides engendering a rupee yield curve, is likely to emerge. Banks will no longer be forced to square off their borrowing from other banks within the same fortnight. The interbank market which was restricted to call and 14-day deposits/borrowing can now extend to 1-6 months term money which will have beneficial impact on the availability and cost; and volatility would be reduced. Further the freedom given to banks to borrow and invest funds in overseas money market instruments up to $10 million through the credit policy announced on April 15, 1997 (raised to 15% of Tier I capital in October 1997) will not only link the money and exchange markets but will augment the supply and demand for funds and relate interest to the forward margin.

Control of Banks over Deposits

The two distinguishing characteristics of commercial banks are first that their liabilities serve as means of payment and count as money along with the coin and currency; and secondly the preferences of public do not normally determine the volume of deposits and quantity of money. Since commercial banks possess the ability to create means of payment they have to be restrained by reserve requirements. Monetary policy controls the supply of deposits by controlling the reserves of banks.

Even in a regime of reserve requirements the multiple expansion of credit and deposits on a given reserve base is misleading. "There is more to the determination of volume of bank deposits than the arithmetic of reserve supplies and reserve ratios. The use to which commercial banks put the reserves made available to the system is an economic variable depending on lending opportunities and interest rates"[2].

The demand deposits are created by banks by acquiring more assets. Bank created money is a liability which must be matched by the other side of the balancesheet.

Banks undertake multiple credit creation. When someone deposits rupees in currency it results in several rupees of deposits. A deposit is a property right evidenced by an entry in the banks' books. When a deposit or part of it is withdrawn the right to receive payment is withdrawn from the bank in future. It is exchanged for currency right now. Multiple deposit creation occurs because the funds withdrawn from one bank when it makes a loan or buys a security are received by another one which expands its loan or security holding. The required

2 Tobin, James "Commercial Banks as Creators of Money" in D. Carson (ed) *Banking and Monetary Studies*, Richard D. Irwin, Inc.

reserve, say 20% are the only leakage that absorbs reserves. However the deposits created by various banks in the chain show a decreasing series. The deposit multiplier is the change in deposits per rupee change in reserves. The deposit multiplier permits one to calculate money multiplier. The deposit multiplier relates reserves to the deposits. The sum of the series is $D = \frac{1}{rr} R$ where D stands for deposit, rr is the reserve ratio and R is the initial increase in reserves that occurred with the first deposit made out of sale of a security.

Assuming an initial deposit of Rs.10,000, 20% reserve ratio the total of deposit creation amounts to (1/.2) 10,000, that is Rs.50,000. The deposit multiplier is (1/*rr*) of 5. Multiple deposits creation is governed by the same process as deposit expansion. If bank deposits are excessive relative to public preferences they will tend to decline. Otherwise banks will lose income. Apart from the required reserves excess reserves are another leakage that absorbs the reserves. A bank frequently holds excess reserves to avoid borrowing from RBI or in the call money market. Normally they are small and constitute about 2% of total reserves. If the required ratio is 20% and the bank holds 2% excess reserves, the deposit multiplier is 2/.20 + .02 or 5.02. The excess reserve ratio depends on the interest rate that banks can earn by investing them and the benefits expected out of holding them. Other leakages are the flows into currency and time deposits. The exchange of deposits for currency constitute a loss to the deposit creation process just as the required reserve is. The proportion of currency of checkable deposits that the public withdrawal would entail has to be allowed for. The public's desired currency ratio depends on the opportunity cost of holding currency, yields on deposits and interest on securities. A term has to be added to the denominator as was done for excess reserves.

Finally, if there is a diversion of demand deposits into time deposits, the reserves if any to be held against time deposits are lost to the deposit creation process. The time deposit ratio depends on the interest rate on time deposits compared to yields on checkable deposits and securities. To adjust the checkable deposits multiplier, we have added to the denominator the *leakage* into time deposits per rupee of demand deposit times the reserve ratio against time deposits, if any.

Income, wealth and interest rates are factors which determine excess reserve ratio, currency ratio and time deposit ratio and hence the money multiplier. Deposit multiplier is partly endogenous and behaves procyclically.

The money multiplier approach is considered by New View as too mechanistic, that one must look at the profit maximising behaviour of banks and bring in demand for deposits. First , deposits radically differ from other goods and an increase in their supply, after some time raises demand for them. When banks supply more deposits after sometime the demand for deposits

increases too. The money supply theory presented here allows leakage coefficients to be determined by economic conditions. Finally since the observed changes in the money stock are due to changes in the volume of bank reserves rather than in the money multiplier then the relatively limited analysis of fluctuations in the money multiplier the money supply theory gives is adequate.

Credit Creation in Indian Banking System

Banks capacity to provide credit depends on their cash reserve (cash in hand) and balance with RBI. Credit creation is passive when deposits are created against the receipt of value. Banks create active credit through the process of lending when money lent out by banks re-enters the banking system as deposits. Under the fractional reserve system banks can create deposits by a multiple of reserves since the payments made with the proceeds of the bank loans are eventually deposited with banks leading to additional reserve funds. However, banks have to conform to the ratio of cash reserve to deposits laid down by the RBI. Bank's credit is constrained by the holding of and access to cash reserves including borrowings from the RBI and the Discount and Finance House of India. High powered money consisting of currency with the public and cash with the banks together determine the overall supply of money through the money multiplier. The proportion of deposits to currency helps determine the value of the multiplier. The average broad money multiplier is 4.58 and currency to aggregate deposits (C/AD) ratio is around 0.1890. At the end of 2004, reserve money amounted to Rs.4,36,512 crores consisting of currency with public Rs.3,15,493 crores (72.5%) and bankers' deposits Rs.96,490 crores (22.1%).

Deposits from Public

Bank liabilities consist primarily of various types of deposit accounts that are used by the bank to fund its lending and investment activities. Table 5.1 presents the total outstanding deposits from public with scheduled commercial banks at the end of March 2004 at Rs.15,75,143 crores consisting of current or demand deposits at Rs.203,142 crores (12.9% of total deposit), savings deposits, Rs.373,677 crores (23.1%) and term deposits, Rs. 998,324 crores (63.4%). Deposits constituted 79.8 percent of total liabilities of scheduled commercial banks.

Deposits and GNP

As a proportion of GNP aggregate deposits have gone up from 9.2 percent in 1950-51, 15 percent in 1970-71, 38.3 percent in 1990-91 to 60.6% in 2003-04. (Table 5.3)

Types of Deposits

The deposit accounts with the banks vary in terms of maturity, interest payments, check writing facilities and insurability. Commercial banks accept

Table 5.3 *Aggregate Deposits of Commercial Banks and GNP in Select Years*

(Rs. crores)

Year	Aggregate deposits	GNP at current prices	Col.2 as % of Col.3
1950-51	820	8,398	9.2
1960-61	1,745	15,812	11.5
1970-71	5,906	39,424	15.0
1980-81	37,988	1,22,772	30.9
1990-91	1,80,281	4,70,269	38.3
1995-96	4,33,819	9,67,763	44.8
2000-01	10,55,386	16,87,818	62.6
2003-04 (Adv.)	13,55,880	22,38,246	60.6

Source: Reserve Bank of India, *Report on Currency and Finance* 1989-90, 1995-96, Vol.II, and *Trend and Progress of Banking in India*, 1998-99 and *Handbook of Statistics on the Indian Economy*, 2003-04. Government of India, *Economic Survey*, 1999-2000 and 2003-04.

two types of deposits demand and time deposits (Table 5.4). Demand deposits are transaction accounts that are payable to the depositor on demand and carry no interest. Demand or current deposits or cash deposits are used by industry and traders to settle debts and cheques are issued by them against the accounts kept with the bank. Demand deposits formed 17.2% in 1990-91, 18.6% in 1995-96 and 15.0% in 2003-04 of aggregate deposits.

Time deposits (see Table 5.4) consist of savings accounts and term or fixed deposits with maturity varying from 14 days to 10 years.

Savings accounts are used by households to deposit their income and banks allow the accounts to be used to settle household's obligations through issue of cheques. By and large monthly salaries in the public and private sectors are paid through credit to the savings accounts of the employees. Savings deposits at Rs.3,73,677 crores in 2003-04 constituted 23.7% of aggregate deposits and 18.9% of total liabilities of the banking system. Savings accounts earn interest on the monthly outstanding balance although the account holder enjoys the cheque facility against savings accounts to make payments. The interest rate on savings account offered by banks was reduced to 3.5 p.a. with effect from March 1, 2003.

Term or fixed deposits with banks more or less represent savings or investment to earn interest. The rate of interest on term deposits depends on the length of the maturity. They accounted for 63.38% of aggregate deposits and 50.5% of the liabilities of the banking system in 2003-04.

Table 5.4 *Distribution of Deposits of Scheduled Commercial Banks*[3]
(1990-91 – 1998-99 and 2003-04)

(Rs. crores)

Year (outstanding in March)	Time deposits amount	% to aggregate deposits	Demand deposits amount	% to aggregate deposits	Deposits aggregate
1990-91	159349	82.8	33192	17.2	19241
1991-92	185670	80.5	45088	19.5	230758
1992-93	222111	82.7	46461	17.3	268572
1993-94	258560	82.1	56572	17.9	315132
1994-95	309956	80.1	76903	19.9	386859
1995-96	353205	81.4	80614	18.6	433819
1996-97	414989	82.1	90610	17.9	505599
1997-98	502897	83.1	102513	16.9	605410
1998-99	596602	83.6	117423	16.4	714025
2003-04	1279394	85.0	225022	15.0	1504416

Source: Reserve Bank of India, *Handbook of Statistics on Indian Economy*, 1999, p.259 and 2003-04.

Interest on Bank Deposits

Table 5.5 *Interest on Term Deposits*

(15-07-2005)

Resident term deposits	%
15-45 days	4.75
46-179 days	5.0
180 days to below 1 year	5.6
Above 1 year and below 2 years	5.75
2 – 5 years	5.8
Above 5 years	6.25
Senior citizens 0.75% additional on deposits above one year.	

Bank deposits are safe, liquid and earn interest in the case of time deposits. They accounted for 42.9% of financial assets (gross) of households in 2003-04. The rate of interest on savings accounts is 3.5%. The rates of interest paid on term deposits by one of the public sector

3 Includes term or fixed deposits and saving deposits.

banks is presented in Table 5.5. Effective from 21.10.1997 public sector banks were given freedom to fix their own interest rates on domestic term deposits and from 29.4.1998 the minimum period of maturity was reduced to 15 days. On short term deposits of 15-45 days, interest at 4.75% is paid, and on deposits between 180 days and 1 year 5.6%. Rate of interest of 6.25 percent is paid on deposits for above 5 years. Senior citizens are paid 0.75% additional interest on deposits above one year.

Maturity Pattern of Bank Deposits

The maturity pattern of term deposits presented in Table 5.6 reveals that term deposits above 1 year constitute the bulk. Deposits above 1 year accounted for 87.2 percent of term deposits at end March 1990-91, 74.0% of term deposits at end March 1995, 71.1% at end March 2000 and 64.9% in 2003; and term deposits of less than one year were 12.8% of term deposits in 1990-91, 26.0% in 1995, 28.9% in 2000 and 35.1% in 2003. Since 1990 short term deposits of up to one year have grown although interest rates on deposits across the broad have been cut. The consideration of liquidity has become prominent.

Table 5.6 *Maturity Pattern of Term Deposits*
(March 1990, 1995, 2000 and 2003-04)

(Rs. crores)

Period of maturity	1990	%	1995	%	2000	%	2003	%
Upto 90 days	2,969	4.2	31,375	14.1	49,069	9.5	1,04,112	12.7
6 month or less	2,945	4.2	10,026	4.5	33,157	6.4	7,41,888	9.1
6 month to 1 year	3,088	4.4	16,452	7.4	67,078	13.0	1,08,560	13.3
1 to 2 years	10,912	15.6	66,452	29.8	1,16,663	22.6	1,85,760	22.7
2 to 3 years	22,140	31.6	34,404	15.5	80,565	15.6	1,49,055	18.2
3 to 5 years	11,834	16.9	38,530	17.3	1,13,892	22.0	1,21,620	14.9
5 years and above	16,188	23.1	25,384	11.4	55,803	10.9	74,004	9.1

Source: Reserve Bank of India, *Report on Currency and Finance* 1991-92, Vol.II, p.78, 1995-96, Vol.II, p.86, 1997-98, Vol.II p.84. and *Handbook of Statistics on Indian Economy*, 1999, p. 66 and 2003-04, p.86.

Deposit Insurance

Deposit Insurance Corporation was set up in 1962 for the purpose of providing insurance cover to the depositors particularly small depositors against the risk of loss arising out of bank failures. Deposits are protected upto Rs.1 lakh per account by the Deposit Insurance and Credit Guarantee Corporation. In 2002-03, the number of fully protected accounts (with balances not exceeding Rs.1,00,000) was 1,519 million with total amount of insured deposits of Rs.8,70,940 crores. Insured deposits formed 66% of total amount of assessable deposits (entire deposits including those not covered by insurance).

The system of fixed rate deposit in insurance (set up first in US in 1930s) with a deregulated banking system in terms of price, activity and geography creates an incentive for bank managers to take excessive risk. It was identified as one of the major causes (regulatory for bearance is another) of bank failures in US in 1980s. Bank managers take excessive risks as losses are paid by insurance agency. Earnings of bank can be increased by taking more risk since asset risk can be increased without adding to deposit costs. The incompatability between the fixed rate deposit insurance system and a deregulated banking system creates a moral hazard problem in which bank managers have an incentive to engage in excessive risk. The problem can be dealt by establishing market discipline in terms of depositors withdrawing funds or by requiring higher rates of return when banks take excessive risk. If a large proportion of deposits are uninsured, market discipline can be created. Regulatory discipline can also be established by assessing risk based deposit insurance or risk based capital requirements.

In depository institutions insured depositors are indifferent to risk so that risk must be monitored by regulators. In non-financial firms, creditors monitor asset and other risks and constrain borrowing. Consequently capital is becoming a centerpiece of regulatory policy. The basic idea is that shareholders with significants takes in the institutions will act to control risk-taking to protect their investment. Thus greater capital requirements are being imposed an depository institutions. Long-term bonds which banks are being encouraged to issue would also improve market discipline from the standpoint of credit monitoring. The moral hazard problem can be diminished via equity and debt investment in the banking industry.

The Working Group on Deposit Insurance set up as a crucial component of financial sector reforms recommended in its Report in October 1999,

- Retention of the present deposit coverage at Rs.1 lakh.

- Limited coinsurance or deposits between Rs.90,000 and Rs.1 lakh.
- Introduction of two deposit insurance funds one each for commercial banks and cooperative banks at 2% of the insured deposits.
- Risk based pricing of deposit insurance premium in place of the existing flat rate system.
- Assignment of the role of liquidator and receiver to the deposit Insurance Corporation.
- Setting up of Deposit Insurance Corporation with a capital of Rs.500 crores to be fully contributed by RBI.
- Exclusion of banks which have not complied with capital adequacy requirements, entities with a CAMEL rating of C' or below for three years and DFIs.

Ownership of Bank Deposits

Data pertaining to ownership of bank deposits for March 1990, 1999 and 2003 are presented in Table 5.7. The significant feature is that individuals own the largest proportion of the deposits, 72.8 percent in 1990, 75.8% in 1999 and 68.0% in 2003. Bank deposits formed 40.9 percent of gross savings of the household sector in financial assets in 2002-03. Among individuals, non residents account for 9.2 percent and residents 63.6 percent of deposits in 1990, 10.5%, 65.3% in 1999 and 9.6% and 68% in 2003, respectively.

In 1990 among residents, farmers accounted for 12%, businessmen and traders 17.8% and wage and salary earners 16.6% of bank deposits. Among other sectors which accounted for 27.2 percent of deposits in 1990, the Government and corporate sector accounted for 6.8% and 6.1% respectively in 1990; 10.2% and 4.1% respectively in 1999 and 14.5% and 7.9% respectively in 2003-04. As compared to the corporate sector's deposits of 6.1% in 1990, 4.1% in 1999 and 7.9% in 2003 the deposits of business and traders were quite high at 17.8% in 1990, 12.0% in 1999 and 11.5% in 2003 reflecting their poor cash management. In 2003, deposits of government and corporate sector rose while share of farmers, banks and non-residents declined.

Table 5.7 *Ownership Pattern of Bank Deposits*
(March 1990, 1999 and 2003)

Sector	Percent		
	1990	1999	2003
Government	6.8	10.2	14.5
Corporate sector — non-financial	6.1	4.1	7.9
Corporate sector — financial of which:			
(a) banks	3.7	5.9	8.5
(b) other institutions	8.0	2.9	4.7
Individuals/Households	72.8	75.8	68.0
(i) non-residents	9.2	10.5	9.6
(ii) residents	63.6	65.3	58.4
(a) Business and traders	17.8	12.1	9.6
(b) Farmers	12.0	10.7	6.6
(c) Wage and Salary Earners	16.6	14.5	11.5
(d) Others	17.2	28.0	29.7
Total	**100.0**	**100.0**	**100.0**

Source: RBI *Report on Currency and Finance*, 1991-92, Vol.I, p. 166, *Bulletin*, April 2000, pp. 295-298 and September 2005, pp.776-777.

Certificates of Deposits (CDs)

Banks meet the spurt in the demand for credit by the issue of certificates of deposit of maturities of 7 days to 1 year. Since October 1993, bank-wise limits stipulated for issue of CDs were withdrawn leaving the banks free to issue CDs depending on their requirement. At the end of March 19, 2004 the total amount outstanding was Rs. 4,461 crores and the rate of discount ranged from 3.87%–5.16%. Banks also raise non-deposit resources such as floating rate notes from Euro currency market.

Borrowings from RBI

Except for export credit refinance all other specific refinance facilities were withdrawn effective October 9, 1991. While the share of export credit of Rs.84 in net bank credit was 7.6% in 2003-04. The refinance limit was Rs.5,064.08 crores and no refinance was availed.

Liquidity Adjustment Facility

The Committee for Banking Sector Reforms, 1998 recommended that the RBI's support to the market should be through a Liquidity Adjustment Facility (LAF) operated by way of repo and reverse repo providing a reasonable corridor to market players. The monthly average volume of repo transactions was Rs.79,628 in 2003-04. Apart from banks, mutual funds and financial institutions were the main participants in the repo market. The repo rates ranged between 3% and 5.05% during the year.

The LAF is the RBI's primary instrument for modulating liquidity and transmitting interest rate signals to the market. The scope of LAF was progressively enlarged to price the primary liquidity at the reverse repo rate. The ratio of normal standing facility available at the bank rate and the "back stop" standing facility linked to the reverse repo rate was modified to one-third and two-third from one-half each from December 27, 2003. The repo rate was 4.5% from August 25, 2003. The maturity period of repos was increased to 7 days. Overnight fixed rate repos at 4.5% under the LAF was introduced from August 16, 2004 while continuing with 7 day and 14 day repos and overnight fixed rate reverse repos[4].

Other Liabilities

Other liabilities and provisions consist of unclassified liabilities to banking system and participation certificates issued by SCBs. These liabilities and provisions at Rs.1,86,798 crores constitute 9.5 percent of total liabilities.

Assets of Commercial Banks

The statement of liabilities and assets of the scheduled commercial banks in 2003-04, presented in Table 5.1 shows that they have in main four types of assets: cash and balances with the RBI (Rs.1,13,246 crores or 5.7%); assets with the banking system (Rs.82,223 crores or 4.2%) investments in government and other approved securities (Rs.6,57,244 crores or 33.3%); and loans and advances (Rs.8,64,143 crores or 43.8 percent). The liquidity requirements are met by cash and investment in securities which are determined by the Banking Regulation Act and the credit policy announcements of the RBI twice a year, the Annual Policy Statement (May) and Mid-term review (October). The monetary and credit policy for 2005-06 retained the level of CRR at 5.00 percent.

Bank assets in the form of loans and advances and holding of government securities accounted for 84.4 percent of their assets in 2003-04.

Investment in Government and other Securities

Investment in government and other approved and unapproved securities at Rs.8,02,066 crores constituted 50.92 percent of total demand and time liabilities of Rs.15,75,143 crores in 2003-04. Apart from the cash reserve requirement every commercial bank has to maintain under Section 24 of the Banking Regulation Act, a minimum liquidity requirement of 25 percent in cash, gold or approved securities. This can be varied to require commercial banks to maintain higher minimum liquid assets. This was used to mobilise subscription to government securities. The pre-emption of bank funds along with interest rate regulation ensured a cheap supply of savings to the government. Statutory liquidity ratio reached a level of 38.5 percent in April 1992.

4 Repo denotes injection of liquidity by the central bank against eligible collateral, reverse repo denotes absorption of liquidity by the central bank against such collateral.

The Committee on the Financial System (1991) was of the view that the statutory liquidity ratio (SLR) instrument should be deployed in conformity with the original intention regarding it as a prudential requirement and should not be viewed as a major instrument for financing the public sector. In line with the government's decision to reduce the fiscal deficit to a level consistent with macro-economic stability, the Committee has recommended that the SLR be brought down in a phased manner to 25 percent over a period of about 5 years. Consistent with the anticipated decline in the monetised deficit of the centre, and the reduction in the centre's borrowing programme and the need for gradual promotion of a Government securities market, the SLR has been reduced to 30 percent on an incremental basis. Further reduction in SLR may be implemented in stages.

SLR was 31.5 percent of net demand and time liabilities (NDTL) as on September 31,1994; and for any increase in domestic NDTL over the level as on September 30,1994, the SLR was fixed at 25 percent. The overall effective SLR is 33.0 percent at the end of March 1999 as against the statutory requirement of 25% indicating an excess holding of about Rs. 56,000 crores which is equivalent to the net borrowing budgeted for 1999-2000. Interbank deposits have been excluded from the application of SLR since April 1, 1997. The consolidated balance sheet for 2003-04 shows investments in government securities at 32.2% of total assets and 40.39% of deposit liabilities. SLR at 25% would require an investment of Rs.3,93,785 crores as against total investment of Rs.6,36,267 crores, an excess of Rs.2,42,482 crores.

Of the total outstanding Central and State Government securities at the end of March 2003, 58.6% was held by commercial banks.

Cash Reserve Ratio

The liquidity rules governing cash reserves are laid down by the Reserve Bank of India Act at 3% minimum of net demand and time liabilities. In view of the fairly stable demand function RBI has been announcing an indicative group in broad money (M3) since the late 1980s. Bank reserves (CRR) was the principal operating instrument for the broad money (M3) growth in line with the expected growth in output and a tolerable level of inflation. However, the growing financial deepening and greater degree of openness have imparted some degree of endogeneity to income velocity of broad money and M3 multiplier the critical parameter. The Committee on the Financial System (1991) had observed that the Reserve Bank should have the flexibility to operate this instrument to serve its monetary policy objectives and that, given the Government's resolve to reduce the fiscal deficit, the occasion for its use to control the secondary expansion of credit should be less; the Committee had, therefore, recommended that the RBI should consider progressively reducing the CRR from its high level. Weighing the liquidity situation and the monetary policy considerations, and the need to reduce pre-emption of banks' resources, the RBI has discontinued the 10 percent incremental CRR. The CRR has been reduced to 10 percent in January 1997 from a level of 15 percent before reforms in 1992-93. In view of exemption of interbank liabilities from maintenance of CRR

from April 1997 effective CRR became 9.75%. Currently (2005) CRR of scheduled banks is 5.0%. Cash and balances with the RBI at the end of March 2004 at Rs. 1,13,246 crores, constituted 7.2 percent of total deposit liabilities of Rs. 15,75,143 crores. Interest at 4% per annum is paid on cash balances over the minimum of 3%.

Under RBI (Amendment) Act, 2006, no ceiling or floor rate exists. The bank cannot also pay interest on any portion of CRR balances.

Accounting Standards for Investment

The revised guidelines effective from September 30, 2000 requires banks to classify their inter investment portfolio under three categories, held to maturity (HTM), available for sale (AFS) and held for trading (HFT). Scheduled commercial banks' investments classified as available for sale (AFS) category accounted for the largest share of 62%, followed by securities in held for trading (HFT) category with a share of 23.3% while the remaining 14.7% was classified as held to maturity (HTM) category at end of March 2004. The investments under the AFS and HFT categories should e-marked to market. Banks should decide the category of investment at the time of acquisition. The investments include under HTM should not exceed 25% of the banks total investments. Banks can decide and the extent, if holdings under available for sale (AFS) and held for trading (HFT) categories.

Securities in the HFT category are to be sold within 90 days or else shifted to the AFS category. Banks may shift investments to and from HTM category once at the beginning of the accounting year. Transfer of scrips from one category to another should be done at the acquisition cost/book value/market value on the date of transfer whichever is the least.

Investment Fluctuation Reserve (IFR)

Investment fluctuation reserve of a minimum of 5% of banks' investment portfolio under held for trading (HFT) and available for sale (AFS) categories has to be built up by banks by transferring the gains realised on sale of investments within a period of 5 years. As at end-February 2005 banks have built up IFR upto 3.9%.

Maturity Classification of Investments in Government Securities

Table 5.8 presents the maturity wise classification of investments of scheduled commercial banks in government securities for the years, 1998 and 2003 under old and new loans. Of the old loans of Rs.3,93,25,866 crores in 2003, 17% fell due within one year (in 2003-04); 15.2% within 2 years; a large proportion of 34.9% falls due within 5 years; 25.9%, in 10 years; and 6.9% above 10 years. About 40% of the investments of banks in government securities are really long-term. A major portion 32.2 percent matures within 5 years. In 2003-04 of new loans of Rs. 6,70,262 to Rs. 65 lakhs matured within three years; 66.1% fall due in within 10 years; and 33.4% are of 12 years maturity and fall due in 2010 to 2015. The 7 to 12 year maturity (2006-2010) was 24.5% in 1998; and the maturities of 12 years and above increased to 33.4%.

Table 5.8 *Maturity Classification of Investments of Scheduled Commercial Banks in Government Securities @ (1998 and 2003)*

(Rs. lakhs)

Year/maturity during (April-March)	All scheduled commercial banks			
	1998		2003	
	Old loans	New loans	Old loans	New loans
1997-1998	—	—	—	—
1998-1999	(15.0)	24,52,317		
1999-2000	13,38,220 (8.2)	—	—	—
2000-2001	13,24,541 (8.1)	2,45,314 (9.3)	—	—
2001-2002	10,69,009 (6.5)	3,64,924 (13.8)	—	—
2003-2004			68,90,898 (17.0)	—
2004-2005			30,86,463 (7.8)	—
2005-2006			29,29,146 (7.4)	—
2002-2007	50,50,437 (24.5)	12,81,946 (48.5)	—	—
2006-2010			1,37,21,484 (34.0)	6,70,262 (6.5)
2007-2012	40.02718 (24.5)	7,49,814 (28.4)		
2010-2015			1,01,75,928 (25.9)	61,73,405 (60.1)
2012-2015	4,18,587 (2.5)		—	—
2015 & above	6,67,790 (4.1)	—	27,22,067 (6.9)	34,29,193 (33.4)
Total	1,63,23,619 (100.0)	26,41,998 (100.0)	3,93,25,986 (100.0)	1,02,72,860 (100.0)

Note: Figures in figures indicate percentages to total.

@ Excluding postal savings and other obligations (Treasury bills are included)

'-' Nil or Negligible

Source: "Investments of Scheduled Commercial Banks", RBI *Bulletin*, July 2000, p. 743, and March 2004, p. 279.

Investment in Shares and Debentures

Banks are allowed to subscribe to shares and debentures in the primary market inclusive of underwriting devolvement and investment in mutual funds upto 5 percent of incremental deposits of the previous year. Since October 1996, they have also been allowed to trade in shares and debentures in the secondary market upto 5 percent of their previous year's incremental deposits. The credit policy announcement in April 1997 excludes banks' investment in preference shares/ debentures/bonds of private corporate bodies from the limit (of 5 percent of their incremental deposits in the previous year). The ceiling of 5 percent is applicable only for investment in ordinary shares of corporates including PSUs in the primary and secondary markets. To encourage the flow of finance for venture capital, the overall ceiling for investment by banks in ordinary shares, convertible debentures and units of mutual funds, the Monetary and Credit Policy Statement for the year 1999-2000 enhanced it by such investment. It was also indicated that investments in venture capital will be treated as priority sector lending.

Table 5.9 presents investments of SCBs in shares and debentures (market value), certificates of deposit and commercial paper and mutual funds. In 2003-04, the investment in shares and debentures of joint stock companies was Rs. 1,03,47,037 crores units of UTI, Rs.28,307 crores, certificates of deposit and commercial paper Rs.2,94,010 crores, mutual funds Rs.5,24,522 crores and others (including bonds of quasi government bodies and venture capital funds) Rs.9,02,682 crores. Together these investments amount to Rs.1,23,74,096 crores and constitute 6.3% of total assets of SCBs and 7.8% of deposits in March 2004.

Table 5.9 *Investments of Scheduled Commercial Banks in Capital Market Instruments (1997-1999 and 2003)*

(Rs. lakhs)

Category	1997	1998	1999	2003
Shares and Debentures of Joint Stock companies (Market value)	27,36,680	38,60,416	52,46,321	1,03,47,037
Initial Contribution to share Capital of UTI	1,024	568	4,828	7,043
Unit of UTI	44,510	41,218	61,690	28,307
Certificate of Deposits and Commercial Paper	2,72,307	3,67,745	3,66,164	2,94,010
Mutual Funds	59,358	1,48,072	1,99,375	5,24,522
Others	1,20,049	3,29,620	6,03,339	9,02,682

Source: Reserve Bank of India, "Investments of Scheduled Commercial Banks 1998-1999", *Bulletin*, July, 2000, p. 731 and March 2004.

Loans and Advances

Loans and advances of SCBs presented in Table 5.1 at the end of March 2004 were Rs.8,64,143 crores of which public sector banks accounted for Rs.6,32,740 crores (73.2%).

Table 5.10: *Development of Gross Bank Credit in Select Years*

(Rs. crores)

Year	Food credit	Non-food credit									Non food gross bank credit (9+10)	Gross bank Credit (2+11)
		Priority sector				Other						
		Agriculture	Small scale industries	Other	Total (3 + 4 + 5)	Industries	Whole sale trade	Other sector	Total (7 + 8 + 9)			
1	2	3	4	5	6	7	8	9	10		11	12
1972	545 (9.9)	439 (8.0)	597 (10.9)	172 (3.1)	1,208 (22.0)	3,730 (68.1)	N.A	N.A	3,730 (68.1)		4,938 (90.1)	5,480 (100.0)
1975	564 (6.4)	785 (8.9)	1,043 (11.9)	322 (3.7)	2,150 (24.5)	6,072 (69.1)	N.A	N.A	6,072 (69.1)		8,222 (93.6)	8,786 (100.0)
1980	2,100 (9.9)	2,767 (13.0)	2,635 (12.4)	1,328 (11.9)	6,730 (31.7)	8,269 (38.9)	1,915 (9.0)	2,221 (10.5)	12,405 (58.4)		19,135 (90.1)	21,235 (100.0)
1985	5,665 (11.8)	7,660 (16.0)	6,612 (13.8)	4,137 (8.6)	18,409 (38.4)	15,939 (33.2)	2,649 (5.5)	5,264 (11.0)	23,882 (49.8)		42,291 (88.2)	47,956 (100.0)
1990	2,006 (2.0)	16,612 (16.2)	15,615 (15.2)	8,248 (8.0)	40,475 (39.4)	38,274 (37.2)	5,879 (5.7)	16,149 (15.7)	60,302 (58.7)		1,00,777 (98.0)	1,02,783 (100.0)
1995	9,791 (14.2)	27,044 (11.7)	31,884 (13.8)	14,401 (6.2)	73,329 (31.6)	93,053 (40.1)	11,980 (5.2)	43,067 (18.6)	1,48740 (64.1)		2,22,069 (95.8)	2,31,860 (100.0)
2000	39,991 (8.5)	51,922 (11.1)	56,002 (11.9)	46,490 (9.9)	1,54,414 (32.9)	1,62,837 (34.7)	17,845 (3.8)	54,075 (11.5)	2,34,757 (50.0)		4,29,162 (91.5)	4,69,153 (100.0)
2003	35,961 (4.1)	90,541 (11.8)	65,855 (8.6)	1,07,438 (14.0)	2,63,834 (34.5)	2,47,210 (32.3)	24,867 (3.2)	4,15,538 (54.3)	6,37,881 (83.3)		7,28,422 (95.3)	7,64,383 (100.0)

Source: Reserve Bank of India, *Report on Currency and Finance*, 1998-99 and *Trend and Progress of Banking in India*, 2002-03 and 2003-04.

Table 5.10 represents the deployment of gross bank credit in select years between 1972 and 2003. There has been an improvement in the sectoral spread of credit, and directed credit; and credit planning played an important role. The share of industry came down from 68.1% in 1972 to 32.3% in 2003-04 while the share of the priority sector increased from 22% in 1972 to 34.5% in 2003-04.

Although the relative share of industry in total credit declined, there is a significant increase in absolute terms from Rs.3,730 crores in 1972 to Rs.2,47,210 crores in 2003-04.

Retail Banking

Retail loans comprise consumer credit for specific purpose as well as credit for general use. They consist of housing loans, consumption loans for purchase of durables, auto loans, credit cards and educational loans. The loan values of these retail lending typically range between Rs.20,000 to Rs.100 lakhs. The loans are generally for duration of five to seven years with housing loans granted for a longer duration of 15 years. The growth of retail lending is attributable to the rapid advances in information technology, the evolving macro economic environment owing to financial market reform and several macro level demand and supply side factors. Retail portfolio accounts for 21.5% of outstanding advance as on March 31, 2004. The overall impairment of the retail loan portfolio worked out to 2.5% which is much less than the 7.4% for the entire loan portfolio (Table 5.11).

Within the retail segment, the housing loans which formed 48% of the portfolio had the least gross asset impairment of 1.9%. Banks lending to the retail sector has been influenced by falling interest rates, fiscal incentives repeal of Urban Land Ceiling Act, rationalization of stamp duty structure and low credit offtake from the commercial and corporate sectors. ICICI in the private sector and SBI in the public sector have garnered a large slice of the retail market.

RBI has put in place risk containment measures and increased the risk weight from 100% to 125% in the case of consumer credit.

Table 5.11 *Retail Portfolio of Banks (March 31, 2004)*

Items	Amount outstanding loan (Rs. crores)	Impaired credit as % of outstanding loan	Net NPAs as % of outstanding
(i) Housing	89,449	1.9	1.4
(ii) Consumer durable	6,256	6.6	4.0
(iii) Credit card receivables	6,167	6.3	2.4
(iv) Other personal loans	87,170	2.6	1.6
(v) Total retail loans (i ... + iv)	1,89,041	2.5	1.6
(vi) Total loans & advances	8,59,092	7.4	2.8

Source: RBI *Report on Trend and Progress of Banking in India* 2003-04, p.59.

Housing Finance

Fiscal incentives and supporting policy measures have influenced the growth of housing finance. Apart from deductibility of interest, advances to housing sector up to Rs.15 lakhs are considered as priority sector lending. During the period 1993-2004 outstanding housing loans by SCBS and housing finance companies grew at 23%, higher than the 14.8% growth in non-food credit. The share of housing loans in total non-food credit increased from 3% in 1992-93 to 7% in 2003-04. RBI has stipulated risk weight of 75% in the case of housing loans. Growth of housing in rural areas is constrained by non availability of clear land titles and irregular income behaviour in rural areas.

Risky Loans (Non-performing Assets)

The level of non performing loans is recognized as a critical indicator for assessing banks' credit risk, asset quality and efficiency in the allocation of resources to productive sectors. Public sector banks have made highly risky loans. The portfolios of a wide cross-section of public sector banks carry non-performing assets (NPAs) which are defined as a credit facility in respect of which interest has remained unpaid for a period of two quarters. The emergence of non-performing assets is to be traced to the grant of advances under peer pressure, political influence and connections and clout of borrowers rather than evaluation and appraisal of factors and economic considerations. Banks were saddled with implementation of various social objectives without ever considering whether credit (the amount and cost) is the appropriate instrument to set right inequalities of income and wealth especially when such loans are not for viable projects. A large collection of such loans turned into non-performing assets along with those granted on account of extra economic considerations. The growth of NPAs is also attributable to regulatory forbearance in terms of keeping insolvent institutions open and able to incur further losses. Gross NPAs of public sector banks at Rs. 54,090 crores in March 2004 constituted 7.8% of gross advances and 3.7% of total assets. Gross NPA ratio of public sector banks declined from 23% in 1992-93 to 7.8% in 2003-04.

There has been a deterioration in the financial health of the banking system over time. Apart from NPAs the viability of especially public sector banks was adversely affected by the large branch expansion undertaken to provide adequate banking facilities. All these factors led to the emergence of banks especially in the public sector which were unmanageable by any standards of management quality, structure and extant labour laws. The

recognition of banking as an industry brought in collective bargaining of wages leaving little maneuverability to control costs. Wages are related to prices only and productivity has no role. Today, the bargained wages in the banking industry are trend setters for other service industries as well as the rest of the economy. The wage bill of the public sector banks at Rs. 22,390 crores in 2003-04 constituted 16.3 percent of income whereas it absorbed only 7.7 percent of the income of private sector banks (old and new combined) and 9.2 per cent of foreign banks.

Level and Proportion of NPAs to Loan Assets

Table 5.12 presents the classification of loan assets of public sector banks in 1995, 2000 and 2004. Non-performing assets of 27 public sector banks at Rs.38,385 crores at the end of March 1995 formed 19.4 per cent of their total loan assets of Rs.1,97,402 crores; in 2000 while the total NPA rose to Rs.53,294 crores as a proportion of total loan assets NPAs declined to 14.0%; and in 2004 NPAs declined to Rs.51,541 crores and as a proportion of loan assets declined further to 7.8% the lowest yet. In 2004 of the NPAs of Rs.51,541 crores substandard assets accounted for 2.6%, doubtful assets 4.3% and loss assets 0.9%. The gross NPAs to total assets of scheduled commercial banks was 7.2% and net NPAs to net total assets were 1.2% in 2003-04.

NPAs of old private sector banks (Rs.4,392 crores) were 7.6 of total advances in 2004. As a percent of total assets NPAs of private sector banks were 1.8% in 2004.

In the case of foreign banks gross NPAs at Rs.3,013 crores in 2004 were 4.8 percent of total advances; and gross NPAs as a percentage of total assets were 2.1%.

Sector-wise analysis of NPAs of PSBs indicates that the share of priority sector in total NPAs as on 2004 was 47.5%, public sector 1.22% and nonpriority sector 51.24%.

Resolution of NPAs

SARFAESI Act, 2002

ARCS have been established for resolving NPAs. Guidelines have been prescribed by RBI for the formation and functioning of securitization companies (SC) and reconstruction companies (RC) under Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act 2002. Guidelines were also provided to banks/DFIs to facilitate sale of NPAs to SCs/RCs. An Asset Reconstruction Company of India Ltd. (ARCIL) was set up during 2003-04. Banks and FIs sold assets worth Rs.7,099 crores to ARCIL.

Recovery of Debts due to Banks and Financial Institutions Act, 1993

The process of debt restructuring gained momentum during 2003-04 after RBI issued revised guidelines in June 2004. The amendment of Recovery of Debts due to Banks and Financial Institutions Act, 1993 streamlined the functioning of Debt Recovery Tribunals (DRTs). Out of 61,301 cases (involving Rs.88,876 crores) filed with DRTs by banks as on December 31, 2003, 25,510 cases (involving Rs.23,273 crores) were adjudicated with recovery amounting to 29.5%.

Chronic NPAs up to Rs.10 crores: A scheme was introduced in January 2003 for settlement of their outstanding dues. As on March 31, 2004, 2,12,370 cases amounting to Rs.1,977 crores were decided by banks and recovery was effected in 1,80,117 cases aggregating Rs.1,095 crores.

SARFAESI Act 2002: The Act provides for enforcement of security interest for realization of dues without the intervention of courts or tribunals. Up to December 31, 2003, 27 public sector banks issued 49,169 notices involving an amount of Rs.16,318 crores. Recovery was 6.3% from 16,490 cases.

Moral Hazard and Adverse Selection

While the proportion of NPAs to total advances had declined, there has not been any corresponding reduction in the volume although banks have made vigorous efforts towards recovery and upgradation of loans. This implies that the banks are incurring NPAs from a part of their incremental lending. Banks in their anxiety to earn high returns may charge high interest rates on loans which encourages risk-taking behaviour of the borrowers. If borrowers are unable to repay, it results in an increase in nonperforming assets.

The assets and other risks banks take are not monitored in the absence of market discipline. In non-financial firms creditors monitor and constrain borrowing. The moral hazard problem in which bank managers have an incentive to engage in excessive risk can be dealt in a number of ways. The issue of long-term bonds by banks would improve market discipline from the view point of creditor monitoring. The privatisation of banks would significantly increase the stake of shareholders in the banks who will act to control risk to protect their investment. The moral hazard problem can be diminished via equity and debt investment in the banking industry. Finally the establishment of risk based capital requirement CRAR would certainly reinforce the discipline of the market by permitting debt and equity investment in banks.

Table 5.12 *Classification of Loan Assets of Public Sector Banks (1995, 2000 and 2003)*

(Rs. crores)

	1995 Amount	%	2000 Amount	%	2003 Amount	%
1. Standard assets	**1,59,017**	**80.6**	**3,26,783**	**86.0**	**6,10,435**	**92.2**
2. Non-performing assets (a+b+c+d)	**38,385**	**19.4**	**53,294**	**14.0**	**51,541**	**7.8**
a. Substandard	77,58	3.9	16,361	4.3	16,909	2.6
b. Doubtful assets	22,913	11.6	30,535	8.0	28,756	4.3
c. Loss assets	3,732	1.9	6,398	1.7	5,876	0.9
d. Advances with balances of less than Rs.25,000 classified as NPA.	3,982	2.0	—	—	—	—
Total loan assets (1+2)	**1,97,402**	**100.0**	**2,23,80,077**	**100.0**	**6,61,975**	**100.0**

Source: Reserve Bank of India, *Report on Trend and Progress of Banking in India*, 1995-96, 2002-03 and 2003-04.

The concept of moral hazard and adverse selection explains the increase in NPAs. The relationship between the interest rate charged and the expected receipts may not be monotonic because of adverse selection effects and adverse incentive effects [5]. In the case of adverse selection effect, safe borrowers drop out when bank advance rate is relatively high and borrowers with riskier projects remain, thereby lowering bank's profits. In the case of adverse incentive effects or moral hazard behaviour, borrowers tend to undertake riskier projects with increase in interest rates. Adverse selection is avoided if banks can increase their share of loans in favour of risk averse borrowers. Banks' expected return depends not only on the lending rate but also on the proportion of recovery of loans. It is likely that lower rates of interest not only improve the risk profile of banks but also raise the offtake of credit, increasing their profitability on both counts.

The Committee on Financial System (Appendix - 5.1) had recommended that a policy of income recognition should be objective and based on record of recovery rather than on any subjective considerations, that classification of assets of banks should be done on the basis of objective criteria which would ensure a uniform and consistent application of the norms, and that provisioning should be made on the basis of classification of assets into different categories. In April 1992, it was decided to implement the Committee's recommendations,

5 RBI, *Annual Report*, 1996-97, p. 57.

with certain modifications, in a phased manner over a three-year period commencing from the accounting year beginning April 1, 1992. Banks have been instructed to treat the amount in respect of term loans, overdrafts and cash credit accounts, bills purchased and discounted and other accounts, as "past due" when it has not been paid 30 days beyond the due date.

Classification of Assets

Banks have been instructed that they should not charge and take interest on non-performing assets to the income account. As compared with the existing 8 health codes (i) satisfactory (ii) irregular (iii) sick viable/under nursing (iv) sick non-viable/sticky (v) advances recalled (vi) suit filed accounts (vii) decreed debts and (viii) debt classified by the bank as bad/doubtful, banks are required to classify their advances into four broad groups:

(i) standard assets
(ii) sub-standard assets
(iii) doubtful assets, and
(iv) loss assets

Broadly, classification of assets into these categories had to be done taking into account the degree of well-defined credit weaknesses and extent of dependence on collateral security for realisation of dues. The health code system of classification of assets would, however continue as a management information tool.

Taking into account the time-lag between an account becoming doubtful of recovery, its recognition as such, the realisation of the security and the erosion over time in the value of security charged to the banks, banks are required to make provision against sub-standard assets, doubtful assets and loss assets.

Micro Prudential Norms

The main elements of prudential norms are income recognition, assets classification, provisioning for loans and advances and capital adequacy. According to international practice, commercial banks do not recognise income from non-performing assets on an accrual basis. Such incomes are booked only when they are actually received. If the balance sheet of a bank is to reflect actual financial health of that bank, there has to be proper system of recognition of income, classification of assets and provisioning for bad debts on a prudential basis.

The prudential accounting norms introduced since 1992-93 were further strengthened over time. In respect of accounts where there are potential threats of recovery on account of erosion in the value of security or absence of security and of other factors such as frauds committed by borrowers exist, such accounts

are to be classified as doubtful or loss assets, irrespective of the period to which they remained non-performing. All member banks in a consortium are required to classify their advances according to each bank's own record of recovery. Depreciation on securities transferred from the current category to the permanent category has to be immediately provided for. Banks should value the specified government securities under ready forward transactions at market rates on the balance sheet date and in the absence of market rates at yield to maturity (YTM). The resultant loss should be provided for.

Committee on Banking Sector Reforms (CBSR) 1998

Consequent to the Report of the Committee on Banking Sector Reforms (See Appendix IV:2) in April 1998 the Reserve Bank proposed to further strengthen the prudential accounting norms by advising the banks in October 1998 to make a general provision on standard assets of a minimum of 0.25 percent from the year ending March 31, 2000; besides an asset was required to be classified as doubtful, if it has remained in the Substandard Category for 18 months instead of 24 months by March 2001. Provisioning norm in respect of advances guaranteed by state governments where guarantee has been invoked and has remained in default for more than two quarters was introduced effective April 1, 2000. Banks were advised in December 1998 to treat agricultural advances as NPAs, if interest and/or installment of principal remained unpaid after it has become past due for 2 harvest seasons which should not exceed 2 half years.

As prudential measures against credit and market risks a risk weight of 2.5% in Government/approved securities was prescribed by March 31,2000; and providing 100 percent risk weight for foreign exchange and gold open position lines from March 31,1999. Disclosure norms as recommended by CBSR in regard to maturity pattern of loans and advances, investment in securities, foreign currency assets and liabilities, movements in NPAs and lending to sensitive sectors were announced in October, 1998.

Mark to Market

In order to progressively move towards the international practice of valuing all investments of banks on a mark to market basis and to facilitate the development of an active and healthy secondary market, banks are required to raise the proportion of current investments to 60 percent by the end of March 1998. New banks in the private sector were advised to mark to market their entire investments in approved securities from 1996-97.

The mark to market proportion of the approved securities was enhanced to 70% in 1998-99 and would be raised progressively to 100 percent over the next 3 years with a view to moving towards the international best practice of marking all investments to the market. It was enhanced further to 75% in 1998-2000.

Bank Credit and GNP

Gross bank (outstanding) as a proportion of GNP has gone up from 6.5 percent in 1950-51 to 11.9 percent in 1970-71, 20.7 percent in 1980-81, 25.1 percent in 1990-91 mainly credit outstanding on account of the bank nationalisation, the policy of directed bank credit and expansion in branch network (Table 5.13). It was 25.4 percent in 2000-01 and rose to 32.5 percent in 2003-04.

Table 5.13 *Bank Credit and GNP in Select Years*

(Rs. crores)

Year	Outstanding gross bank credit (GBC)	Gross national product at current prices	GBC as percent to GNP
1950-51	580	8938	6.5
1960-61	1320	15182	8.7
1970-71	4685	39424	11.9
1980-81	25370	122772	20.7
1990-91	118019	470269	25.1
1995-96	231697	967763	23.9
2000-01	429162	1687818	25.4
2003-04 (Adv.)	728422	2238246	32.5

Source: Reserve Bank of India, *Report on Currency and Finance*, Vol.II, 1989-90, 1991-92, 1995-96, *Trend and Progress of Banking in India*, 1998-99 and 2003-04, Government of India, *Economic Survey*, 2003-04.

Credit Repression

For a better appreciation of the adequacy of credit in relation to GDP an international comparison would be revealing. While bank assets (outstanding credit) as a percent of GDP is estimated at 32.5 percent in India in 2003-04, they constituted in 2002-03, 136.6% in China, 90.7% in Korea, 180.9% in Japan and 131.5% internationally. Even in US which has a vibrant equity market, bank assets were 190.6% of GDP. Credit to commercial sector in India has always been restricted resulting in credit repression. Commercial sector is the residuary recipient of credit from banks after meeting the liquidity requirements stipulated to meet borrowing requirements to finance revenue/fiscal deficit of central government. This is in stark contrast to the share of public and private sectors in GDP of 25% and 75% respectively.

Financial Exclusion[6]

RBI has found that bank practices tend to exclude rather than attract vast sections of populations in particular pensioners, self employed and those employed in unorganized sector. Banks are now urged to align their policies with the objective of financial inclusion. Reinforcement of such behaviour is contemplated. Reward banks which provide extensive services and disincentivising those banks which are not responsive. Monitoring to assess whether there is explicit or implicit denial of basic banking services is proposed.

The argument for financial inclusion is based on the privilege bestowed on banks to seek public deposits on a highly leveraged basis.

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APPENDIX 5.1

MAJOR RECOMMENDATIONS OF COMMITTEE ON THE FINANCIAL SYSTEM (CFS), NOVEMBER 1991

The Committee on the Financial System (CFS) with Shri M. Narasimhan as Chairman, has made wide ranging recommendations with a view to ensuring that the financial sector operates on the basis of operational flexibility and functional autonomy thereby enhancing efficiency, productivity and profitability.

The Committee was of the view that the Statutory Liquidity Ratio (SLR) instrument should be deployed in conformity with the original intention regarding it as a prudential requirement and should not be viewed as a major instrument for financing the public sector. In line with Government's decision to reduce the fiscal deficit to a level consistent with macro-economic stability, the Committee has recommended that the SLR be brought down in a phased manner to 25 percent over a period of about 5 years. Consistent with the anticipated decline in the monetised deficit of the Centre, and the reduction in the Centre's borrowing programmes and the need for the gradual promotion of a Government securities market, the SLR on an incremental basis has been reduced to 30 percent. Further reduction in SLR may be thought of in stages.

As regards the Cash Reserve Ratio (CRR), the Committee had observed that the Reserve Bank should have the flexibility to operate this instrument to serve its monetary policy objectives and that, given Government's resolve to reduce the fiscal deficit, the occasion for its use to control the secondary expansion of credit should be less; and the Committee had, therefore, recommended that the Reserve Bank should consider progressively reducing the cash reserve ratio from its high level. Weighing the liquidity situation and the monetary policy considerations, and the need to reduce pre-emptions of banks' resources, the Reserve Bank has discontinued the 10 percent incremental CRR. Further reduction in CRR is possible once an enduring adjustment in the monetised deficit is attained and open market operations in Government securities with market-related rates of interest become an effective instrument of monetary control.

The Committee had proposed that the interest rate paid to banks on their SLR investments and on CRR respect of impounded deposits above the basic minimum should be increased. The Government has recognised the need to move towards market-related interest rates on Government borrowing. The cash reserve ratio is essentially a monetary instrument for impounding liquidity. The payment of higher interest on CRR by reducing the amount impounded

dilutes the very purpose of imposing a CRR. From the view point of monetary control it is preferable to have a lower CRR with less or no interest paid rather than to have high CRR and pay a high rate of interest.

Identifying the causes for the deterioration in the financial health of the banking system over time, the Committee recommended various remedial measures which include inter alia capital adequacy norms, prudential norms for income recognition and provisioning for bad debts.

If the balance sheet of a bank is to reflect actual financial health of that bank, there has to be a proper system of recognition of income, classification of assets and provisioning for bad debts on a prudential basis. The Committee had recommended that a policy of income recognition should be objective and based on record of recovery rather than on any subjective considerations, that classification of assets of banks should be done on the basis of objective criteria which would ensure a uniform and consistent application of the norms, and that provisioning should be made on the basis of classification of assets into different categories.

As compared with the existing 8 health codes, banks are required to classify their advances into 4 broad groups: (i) standard assets, (ii) sub-standard assets, (iii) doubtful assets, and (iv) loss assets. Broadly, classification of assets into these categories has to be done taking into account the degree of well-defined credit weaknesses and extent of dependence on collateral security for realisation of dues. The health code system of classification of assets would, however, continue as a management information tool.

Taking into account the time-lag between an account becoming doubtful of recovery, its recognition as such, the realisation of the security and the erosion over time in the value of security charged to the banks, banks are required to make provision against sub-standard assets, doubtful assets and loss assets.

As regards accounting standards for investments, investments in approved securities have to be bifurcated into 'permanent' and 'current' investments. 'Permanent' investments are those which banks intend to hold till maturity and 'current' investments are those which banks intend to deal in, i.e., buy and sell on a day-to-day basis. To begin with, banks would have to keep not more than 70% of their investments in the permanent category from the accounting year 1992-93 but this will have to be brought down to 50% in due course. While the depreciation in respect of 'permanent' investments could be valued at cost unless it is more than face value, in which case the premium has to be amortised over the period remaining for maturity of the security. Banks are not expected to sell securities in the 'permanent' category freely, but if they do so, any loss on such transactions in securities in this category has to be written off. Besides, any gain should be taken to capital reserve account.

The Committee suggested the abolition of branch licensing policy.

APPENDIX 5.2

MAJOR RECOMMENDATIONS OF THE COMMITTEE ON BANKING SECTOR REFORMS (1998)

The Committee on Banking Sector Reforms with Mr.M.Narasimhan as Chairman was constituted on December 26,1997 to review the record of financial sector reforms of the Committee on Financial System (1991) which was also chaired by Narasimhan and to suggest remedial measures for strengthening the banking system, covering areas of banking policy, institutional structure, supervisory system, legislative and technological changes. The major recommendations of the Committee are summarised below:

Strengthening the Banking System

To strengthen the banking system, the Committee recommended an increase in the minimum capital adequacy ratio (CRAR) to 10 percent by 2002. Besides, the entire portfolio of Government securities should be marked to market in 3 years. Also, a 5 percent weightage is to be assigned for government and other approved securities to hedge against market risk. Net NPAs have to be brought down to below 5 percent by 2000 and to 3 percent by 2002. However, banks with international presence should reduce gross NPA to 5 percent by 2000 and to 3 percent by 2002, respectively. The Committee proposed Asset Reconstruction Company (ARC) to tide over the backlog of NPAs. In case of prudential norms relating to income recognition, the present norm of 180 days should be brought down to 90 days in a phased manner by 2002. As regards asset classification, an asset may be classified as 'doubtful', if it is in the substandard category for 18 months in the first instance and eventually for 12 months and 'loss', if it has been so identified but not written off. These norms which should be regarded as the minimum, may be brought into force in a phased manner.

Systems and Methods in Banks

To bring about efficiency in banks, the Committee recommended a number of measures. These include, revision of operational manual and its regular updation, simplification of documentation systems, introduction of computer audit, and evolving of a filtering mechanism to reduce concentration of exposures in lending and drawing geographical/industry/sectoral exposure norms with the Board's concurrence. Besides, the Committee has suggested induction of one more whole time director in nationalised banks in view of changing environment.

As outsourcing of services would improve productivity, it suggested the same may be introduced in the fields of building maintenance, cleaning, security, dispatch of mail, computer-related work, subject to relevant laws.

The Committee suggested a reduction in the minimum stipulated holdings of the Government/Reserve Bank in the equity of nationalised banks/State Bank of India to 33%.

In regard to tenure of a Chief Executive of a bank, the Committee indicated a minimum period of 3 years but the reasonable length of tenure to be not less than 5 years.

Structural Issues

The Committee recommended that after the convergence of activities between DFIs and banks over a period of time, they should get converted into banks, resulting in the existence of only 2 intermediaries viz. banks and non-banks. While mergers between strong financial institutions would make sense, the weak banks in the system will have to be given a revival package subject to a set of criteria.

The licensing of new private sector banks needs a review for their enhancement, while foreign banks will have to be encouraged to extend their operations on certain norms.

All appointments of chairmen, managing directors and executive directors of public sector banks and financial institutions, should be determined by an Appointments Board. The Committee felt the urgent need to raise the competency levels in public sector banks by resorting to a lateral induction of talented personnel. It also felt that the remuneration structure should be flexible and market driven.

The Committee recommended the corporatisation of IDBI. It also desired that the minimum net worth of NBFCs should at the same time be raised to Rs.2 crores progressively. For purposes of registration with the Reserve Bank, however, the minimum limit for net worth has been doubled to Rs.50 lakhs. Besides, no deposit insurance corporation for NBFCs was proposed.

The Committee proposed prudential and regulatory standards besides new capital norms for Urban Co-operative Banks (UCBs).

Integration of Financial Markets

The Committee recommended that banks and primary dealers alone should be allowed in the inter-bank call and notice money markets. Non-bank financial institutions would get access to other forms of instruments in money market like bill rediscounting, CPs, Treasury Bills. It also suggested opening the Treasury Bill market to foreign institutional investors for broadening its base.

Rural and Small Industrial Credit

The Committee proposed review and strengthening of the operation of Rural Financial Institutions (RFIs)in terms of appraisal, supervision and follow-up, loan recovery strategies and development of bank-client relationships in view of higher NPAs in public sector banks due to directed lending. In regard to capital adequacy requirements, RRBs and co-operative banks should reach a minimum of 8 percent capital to risk weighted assets ratio over a period of 5 years. It also proposed that all regulatory and supervisory functions over rural credit institutions should rest with the Board for Financial Regulation and Supervision (BFRS).

Regulation and Supervision

The Committee made a suggestion that the 'Basle Core Principles of Effective Bank Supervision' should be regarded as the minimum to be attained. It should be made obligatory for banks to take into account risk weights for market risks to facilitate soundness and stability of the system.

For effective conduct of monetary policy by the Reserve Bank, delineation of supervision/regulation from monetary policy is required implying that the Executive associated with monetary authority should not be in the Supervisory Board, to avoid weakening of monetary policy or banking regulation and supervision. The process of separating BSF from the Reserve Bank would need to be initiated and to supervise the activities of banks, financial institutions and NBFCs, a new agency in the name of BFRS would need to be initiated and to supervise the activities of banks, financial institutions and NBFCs, a new agency in the name of BFRS would have to be formed. With a view to achieving an integrated system of supervision over the financial system, the Committee recommended bringing urban co-operative banks within the ambit of the BFS.

Legal and Legislative Framework

The Committee recommended the amendment to RBI Act and Banking Regulation Act with regard to the formation of BFRS. It also gives more autonomy and powers to public sector banks (Nationalisation Act). As wide ranging changes in the legal framework affecting the working of the financial sector are sought by the Committee, an expert Committee could be constituted comprising representatives from the Ministry of Law, Banking Division, Ministry of Finance, the Reserve Bank of India and some outside experts.

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