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## UNIT 4 CAPITAL ADEQUACY, LOAN LOSS PROVISIONING AND OTHER REGULATORY CONTROLS

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### Objectives

After reading this unit, you should be able to:

- understand the role of capital adequacy in the regulatory framework,
- appreciate the importance of capital especially to **banks/financial** institutions
- explain the **Basel** Accord on Capital Adequacy
- a** **familiarise** with the Regulations in India
- describe the rationale of loan loss provisions in general and the norms of BIS in **particular** and other regulatory tools for **control**.

### Structure

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## 4.1 INTRODUCTION

One of the major issues in banking, both for the banker and the supervisor, is **capital**. It has several related dimensions; like the precise role of capital, the form it can take, the alternative sources of capital, the changing structure of banks' capital base and the various issues related to capital adequacy. In all of **these** issues the role of regulation has also become increasingly important as the regulators in most countries have increased the attention given to the bank capital adequacy and its structure.

Capital is a central ingredient in the regulatory and supervisory process. It is the ultimate responsibility of the bank supervision to ensure that the business of banks is conducted in a generally prudent manner and that depositors' money is not put to unacceptable risk. Capital is essentially about a bank's ability to deal with risk and the maintenance of adequate **capital** is a major part of the supervisory process.

In order to provide a cushion against unexpected (and unprovisioned) losses, **bank** regulators world-wide insist that banks maintain a specified minimum level of capital relative to their total assets as systematic under-provisioning can pose a serious threat to financial stability.

Other regulatory controls include controls on market entry and restrictions on price competition, controls on liquidity, permissible business activities, loan limits • concentration of loans and country risk exposure, foreign currency exposures.

## 4.2 CAPITAL AND RISK

Capital and risk are inseparable as risk is at the center of capital adequacy issues. The **ultimate** purpose of capital is to protect **against** various **forms** of risk **that** might affect a bank's ability to service its liabilities in the face of fluctuating earnings and changes in the value of assets. If all future outcomes were certain or all risks were insured against, there would be little, if any, need for capital. Anything that reduces risk, or shifts risks away from the bank or in any way protects against it, is a factor lessening the **need** for capital. It is in this respect that **financial** innovation has implications for capital adequacy because many new instruments (futures, swaps, options, etc.) are designed to enable users to protect themselves against interest rate and exchange rate risk in particular, but at the same time they create new risks.

The analysis of risk is a complex issue which goes well beyond the boundaries of this unit. The central problems relate to the identification of risk, its precise measurement, determining the location of risk (i.e. who is actually taking what risk **which** is not always a straightforward issue in the case of many new **instruments**) and **measures** and policies designed to cope with risk. For the purposes of this unit the following general categories of risk are particularly important.

The risks concerned with the capital adequacy encompass ultimately all the risks **run** by international banks. These include traditional international banking risks like the following:

- Credit risk
- Country risk
- Liquidity risk
- Interest rate risk
- Leverage (debt servicing) risk
- Currency risk
- Contingent (arising from commitment) risk
- Regulatory risk (the risk of excessively restrictive regulatory actions)
- Technology risks (the risk of being **in** the wrong technology or being "left behind" **and** the risk of technological failure or 'breakdowns')
- Operating efficiency risk (inadequate costs control, **sub-optimal** operating policies)

- Market strategy risks (moving into inappropriate market segments)
- Market or price risk (changes in the value of assets and positions)
- Settlement risk (arising when a bank pays out funds before it can be sure that it will receive funds on due date from the counterparty).

No such general risk taxonomy, however, can be completely exhaustive of all the individual risks faced by banks. Nevertheless, the formal identification of risks is a necessary first stage in a capital adequacy analysis,

Identifying these risks is the ultimate responsibility of individual banks and supervisory authorities shall oversee that the risk management systems in banks are operational and effective. No taxonomy can ever hope to capture the complex risk combinations (simultaneous risk possibilities), risk chains (the linking of risk realizations) and exposure transformation (shifting or mutating risk exposure) possibilities confronting international banks today. As a result of this, the sophisticated skills of treasury and financial control are now given a higher priority by banks. For individual international banks there is a managerial need to be aware of the impact of international risk exposures on all other aspects of the bank's operations.

Effective risk control in banks is a necessary part of realistic capital adequacy management. Modern supervisory schemes also relate capital to balance sheet proxies that are designed to reflect the portfolio risk assumed, this is the approach embodied in so-called "risk-assets ratios". In this respect it is important to appreciate that capital adequacy is a kind of final reserve, a "last ditch" of internal risk cushioning in a bank. Capital stands behind profits and earmarked reserves and provisions.

'Capital' finances a bank's fixed investments and other non-financial investments. High rates of investment in new technologies have enhanced the key role of bank capital. In a climate of structural deregulation and intense competition, supervisory capital adequacy ratios may also be used to restrain a bank's asset expansion beyond its capabilities. The supervisory or risk aspect of capital adequacy, however, is generally seen to be concerned with two specific roles of capital adequacy protecting uninsured depositors in the event of a bank's insolvency and absorbing unanticipated losses in order to help preserve confidence in the bank.

Capital adequacy rules are the most effective item in the regulators' toolbox. Capital is both engine and bumper to a bank, which keeps the bank not only going but also absorbing nasty shocks. The more capital a bank has the better able it is to sustain losses without skidding into insolvency. And the more Owners have control on the banks, the more closely they will watch managers to ensure they behave responsibly.

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### 4.3 BASEL CAPITAL ACCORD, 1988

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In July 1988, a committee of International Bankers under the Chairmanship of Peter Cooke from the Bank of England - Basel Committee on Bank Supervision - came to a landmark agreement. The Committee was originally set up by the Governors of Group of Ten countries in 1975 to consider common issues in the supervision of cross border banking business. From an early stage the work of the committee was motivated by the need to ensure that the banks in the international market should be subjected to common regulatory standards in order to avoid a competitive market in regulation. This led to the publication of International Convergence of Capital Measurement and Capital Standard, in 1988, which set out for the first time the 8% standard for regulatory capital for internationally active banks. This has subsequently become the benchmark of bank capitalization worldwide.

The Basel Accord was partly a response to the concern that bank capital (the cushion that protects both banks and those who lend to them when things go wrong) was inadequate and had been falling for decades. As early as in 1982 the committee was getting worried about capital standards. A report produced that year for the Group of Ten Governors effectively said, according to Peter Cooke, that capital standards in international banking have been continuously eroding and should not be eroded any further. In the next couple of years it became clear that it was not enough merely to stop the erosion of the capital

base, it had to be rebuilt, especially in the light of the Third World Debt crisis and later on because of the innovation in international banking and capital markets.

The Committee's purpose was two-fold. First, to ensure that the banking system weakened by Less Developed Countries (LDC) lending was adequately capitalized. Second, to provide a level playing field to ensure that some banks with low capital ratios would no longer be able to undercut the prices of heavily capitalized competitors.

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#### 4.4 THE FRAMEWORK OF THE BASEL ACCORD

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

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

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

A significant amendment was enacted in 1996, when the Committee introduced a measure whereby trading positions in bonds, equities, foreign exchange and commodities were removed from the credit risk framework and given explicit capital charges related to the bank's open position in each instrument.

With this brief overview we shall study the Basel Accord in detail.

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#### 4.5 BASEL ACCORD: SOME DETAILS

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The Committee emphasized on equity capital and disclosed reserves. The Committee has concluded that for supervisory purposes, capital should be defined in two tiers.

**Tier ONE** : equity capital and disclosed reserves from post tax retained earnings. This key element of capital is the only element common to banking systems of all countries. This is clearly wholly visible in the published accounts and is the basis on which most market judgements of capital adequacy are made; and it has a crucial bearing on profit margins and a bank's ability to compete. This emphasis on equity capital and disclosed reserves reflects the importance the Committee attached to securing a progressive enhancement in the quality, as well as the level, of the total capital resources maintained by major banks.

**Tier TWO** : capital, supplementary capital, upto an amount equal to core capital. Each of these elements may be included or not included by national authorities at their discretion in the light of their national accounting and supervisory regulations. Amendments to the Capital Accord to incorporate market risks was introduced in January 1996, viz., tier THREE capital,

**A. Capital elements :**

- Tier I (a) Paid up share capital/common stock  
(b) Disclosed reserves

- Tier II (a) Undisclosed reserves  
(b) Asset revaluation reserves  
(c) General provisions/general loan-loss reserves

(d) Hybrid (debt/equity) capital instruments

(e) Subordinated debt.

The sum of Tier I and Tier II elements will be eligible for inclusion in the capital base subject to the following limits:

**B. Limits and restrictions**

- The total of tier 2 (supplementary) elements will be limited to a maximum of 100% of the total of Tier I elements.
- Subordinated term debt will be limited to a maximum of 50% of tier 1 elements.
- Where general provisions/general loan-loss reserves include amounts reflecting lower valuations of assets or latent but unidentified losses present in the balance sheet, the amount of such provisions or reserves will be limited to a maximum of 1.25 percentage points, or exceptionally and temporarily upto 2.0 percentage points of risk assets;
- Asset revaluation reserves which take the form of latent gains on unrealized securities will be subject to a discount of 55%.

**C. Deductions from the capital base:**

From Tier 1 : Goodwill

From total capital (I) investments in unconsolidated banking and financial subsidiary companies. The presumption is that the framework would be applied on a consolidated basis to banking groups.

(II) Investments in the capital of other banks and financial institutions (at the discretion of national authorities)

**D. Definition of Capital Elements**

Tier I includes only permanent shareholders equity (issued and fully paid ordinary shares/common stock and perpetual non-cumulative preference shares) and disclosed reserves (created or increased by appropriations of retained earnings or other surplus, e.g., share premiums, retained profit, general reserves and legal reserves). In the case of consolidated accounts, this also includes minority interests in the equity of subsidiaries which are less than wholly owned. This basic definition of capital excludes revaluation reserves and cumulative preference shares.

Tier 2 (a) *undisclosed reserves* are eligible for inclusion within supplementary elements provided these reserves are accepted by the supervisor. Such reserves consist of that part of the accumulated after-tax surplus of retained profits which banks in some countries may be permitted to maintain as an undisclosed reserve. Apart from the fact that the reserve is not identified in the published balance sheet, it should have the same high quality and character as a disclosed capital reserve; as such, it should not be encumbered by any provision or other known liability but should be freely and immediately available to meet unforeseen future losses. This definition of undisclosed reserves excludes hidden values arising from holdings of securities in the balance sheet at below current market prices.

(b) *Revaluation reserves* arise in two ways. Firstly, in some countries, banks (and other commercial companies) are permitted to revalue fixed assets, normally their own premises, from time to time in line with the change in market values. In some of these countries the amount of such revaluations is determined by law. Revaluations of this kind are reflected on the face of the balance sheet as a revaluation reserve.

Secondly, hidden values of "latent" revaluation reserves may be present as a result of long-term holdings of equity securities valued in the balance sheet at the historic cost of acquisition. Both types of revaluation reserve may be included in tier 2 provided that the assets are prudently valued, fully reflecting the possibility of price fluctuation and forced sale. In the case of "latent" revaluation reserves a discount of 55% will be applied to the difference between historic cost book value and market value to reflect the potential volatility of this form of unrealised capital and the notional tax charge on it.

(c) *General provisions/general loan-loss reserves*: Provisions or loan-loss reserves held

against future, presently unidentified losses are freely available to meet losses which subsequently materialize and therefore qualify for inclusion within supplementary elements. Provisions ascribed to impairment of particular assets or known liabilities should be excluded. Furthermore, where general provisions/general loan-loss reserves include amounts reflecting lower valuations of assets or latent but unidentified losses already present in the balance sheet, the amount of such provisions or reserves eligible for inclusion will be limited to a maximum of 1.25 percentage points, or exceptionally and temporarily up to 2.0 percentage points.

(d) *Hybrid (debt/equity) capital instruments*: This heading includes a range of instruments which combine characteristics of equity capital and of debt. Their precise specifications differ from country to country, but they should meet the following requirements.

- they are unsecured, subordinated and fully paid-up;  
they are not redeemable at the initiative of the holder or without the prior consent of the supervisory authority;
- e they are available to participate in losses without the bank being obliged to cease trading (unlike conventional subordinated debt);  
although the capital instrument may carry an obligation to pay interest that cannot permanently be reduced or waived (unlike dividends on ordinary shareholders' equity) it should allow service obligations to be deferred (as with cumulative preference shares) where the profitability of the bank would not support payment.

Cumulative preference shares, having these characteristics, would be eligible for inclusion in this category. In addition, the following are examples of instruments that may be eligible for inclusion: long-term preferred shares in Canada, titres participatifs and titres subordonnés à durée indéterminée in France, Genussscheine in Germany, perpetual subordinated debt and preference shares in the United Kingdom and mandatory convertible debt instruments in the United States. Debt capital instruments which do not meet these criteria may be eligible for inclusion in item (e).

(e) *Subordinated term debt*: Includes conventional unsecured subordinated debt capital instruments with a minimum original fixed term to maturity of over five years and limited life redeemable preference shares. During the last five years to maturity, a cumulative discount (or amortisation) factor of 20% per year will be applied to reflect the diminishing value of these instruments as a continuing source of strength. Unlike instruments included in item (d), these instruments are not normally available to participate in the losses of a bank which continues trading. For this reason these instruments will be limited to a maximum of 50% of tier 1.

#### **Amendments Issued in January 1996 to the Capital Accord to Incorporate Market Risks**

In April 1995, the Basel Committee on Banking Supervision issued for comments by banks a package of supervisory proposals for applying capital charges to the market risks incurred by banks, defined as the risk of losses in, on and off-balance-sheet positions arising from movements in market prices.

Based on the comments received and with the endorsement of the G10 central-bank Governors the amendment was issued. The objective in introducing this significant amendment to the Capital Accord is to provide an explicit capital cushion for the price risks to which banks are exposed, particularly those arising from their trading activities.

Introducing the discipline that capital requirements impose is seen as an important further step in strengthening the soundness and stability of the international banking system and financial markets generally.

The committee confirmed the proposal to allow banks, at national discretion, to issue short-term subordinated debt subject to a lock-in clause of two years, and also limited to 250% of the bank's tier 1 capital, to meet a part of their market risks viz., changes in the interest rates, equity prices, exchange rates and commodity prices.

The Risk Weights	
On-balance-sheet items (simplified)	
0%	Cash held Claims on OECD central governments
20%	Cash in process of collection Claims on multilateral development banks Claims on OECD banks Claims on non-OECD banks, maturity $\leq$ 1 year Claims on non-domestic OECD public sector entities.
50%	Loans fully secured by mortgages on residential property
100%	Claims on private sector Claims on non-OECD banks, maturity $>$ 1 year Claims on non-OECD central governments Plants, equipment and other fixed assets Real estate Corporate bonds all other assets

The Risk Weights	
Off-balance-sheet items (simplified)	
0%	Claims on OECD central governments
20%	Cash in process of collection Claims on multilateral development banks Claims on OECD banks Claims on non-OECD banks, maturity $\leq$ 1 year Claims on non-domestic OECD public sector entities.
50%	Claims on non-OECD banks, maturity $>$ 1 year Claims on non-OECD central governments Claims on all other counterparties

#### 4.6 SELECT JOINT CENTRAL BANKS' INITIATIVES IN RECENT YEARS

- **1995 Relation between supervisors:** The supervision of financial conglomerates. Reports by the (informal) Tripartite Group of banking, securities and insurance supervisors examining the relevant issues and making a number of recommendations for the improvement of supervisory practices.
- **1996. Capital adequacy:** Amended to the Capital Accord to incorporate market risks. Establishes minimum capital standards for market risk (those arising from changes in interest rates and equity prices as well as exchange rates and commodity prices). Envisages two possibilities.
  - a) standardized method, based on a common risk measurement framework; and
  - b) an international model-based approach which allows banks to use their internal models for the measurement of risk subject to a number of qualitative and quantitative criteria as well as to successful "backtesting",

1996 *Capital adequacy*: Multilateral netting of forward value foreign exchange transactions. An amendment to the Capital Accord effective from end 1995 had extended the recognition of bilateral netting schemes (as mechanisms for reducing credit risk exposures) to all those deemed effective under the relevant laws and in compliance with the minimum standards set forth in the Lamfalussy Report.

The new document provides guidelines for the establishment of the capital requirement in the case of multilateral netting schemes.

- 1996 *Cross border banking: the supervision of cross border banking* Report prepared jointly with the Offshore Group of Banking Supervisors containing 29 recommendations aimed at reducing impediments to the effective supervision of cross-border banking.
- 1997 *Interest rate risk*: Principles for the management of interest rate risk. Consultative paper, setting out 12 principles for evaluating the adequacy of banks' management of interest rate risk.

1997 *Core principles for effective banking supervision*: Consultative document laying down 25 supervisory principles covering preconditions for effective supervision, licensing and structure of institutions, prudential regulations and requirements, methods of ongoing banking supervision, information requirements, formal powers of supervisors and cross-border banking.

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## 4.7 IMPACT OF THE 1988 ACCORD

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The two principal objectives of the Accord - namely to ensure an adequate level of capital in the international banking system and to create a "more level playing field" in competitive terms so that banks could no longer build business volume without adequate capital backing have been achieved. The merits of the Accord were widely recognized and during the 1990s the Accord became an accepted world standard, with well over 100 countries applying the Basel framework to their banking system.

Regulators in emerging markets are becoming increasingly aware that capital adequacy rules are the most effective item in their armamentarium. But gauging exactly how much capital banks need to operate safely in volatile economies can be tricky. After Basel, regulations in many emerging markets agreed to adopt the accord, viewing the 8% minimum as a magic target that, if met, would ensure the banking system's stability. In the past couple of years they have started worrying that the Basel ratio, although adequate in mature economies, may be inefficient in developing countries.

Many regulators still think of the Basel ratio as a final destination rather than a bare minimum; once they have checked that banks meet it, they sit back and relax. This "box-ticking" approach to supervision remains worryingly prevalent, especially in Africa and Eastern Europe. According to David Carse of the Hongkong Monetary Authority, the importance of using judgement and discretion was one of the main lessons from the colony's banking crisis in the 1980's. "It is as much fine art as science, he says.

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## 4.8 SHORTCOMINGS OF THE 1988 ACCORD

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At the moment there are three classes of borrowers, those for whom banks need to put aside the full 8% capital; those who need only a fifth of that; and those whom who need none at all. All non-financial companies, whatever their creditworthiness is, fall in the first category. Bankers have long complained that this puts them at a huge disadvantage to other lenders, especially when lending to big blue-chip companies. Mutual funds, for example, have no capital requirements, so in theory they can lend much more cheaply. This is one reason, say bankers, why they have been priced out of the market for better-quality borrowers. If the capital requirements of lending to Microsoft, say, were reduced to reflect the quality of its credit, the banks would be more competitive with the capital markets.

The incentives in the second and third categories are still more perverse lending to banks in OECD countries, or the countries themselves requires only a fraction of the 8% or



nothing at all, to be put aside. And that includes countries such as Mexico and South Korea. So lending to a South Korean bank requires only one fifth of the amount of capital needed for lending to General Electric, which seems a bit dotty.

Furthermore, the regulatory capital requirement has been in conflict with increasingly sophisticated internal measures of economic capital. The simple bucket approach with a flat 8% charge for claims on the private sector has given banks an incentive to move high quality assets off the balance sheet thus reducing the average quality of bank loan portfolios. Moreover, the 1988 Accord does not sufficiently recognize credit risk mitigation techniques, such as collateral and guarantees. These are the principal reasons why the Basel Committee decided to review the Accord.

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#### 4.8 PROPOSED NEW BASEL CAPITAL ACCORD

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In June 1999 the Committee released a proposal to replace the 1988 Accord with a more risk-sensitive framework, on which more than 200 comments were received. Relecting those comments the Committee presented a more concrete proposal in January 2001 seeking comments from interested parties by the end of May 2001. The Committee expects the final version of the new Accord to be published around the end of 2001 and to be implemented in 2004.

The Basel Committee of bank supervisors said in the last week of June 2001 that it would take an extra year to prepare its ambitious new plans for bank capital. The timetable for implementation thus now stretches to 2005.

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

The new framework intends to improve safety and soundness in the financial system by placing more emphasis on banks' own internal control and management, the supervisory review process and market discipline. It provides a spectrum of approaches from simple to advanced methodologies for the measurement of both credit risk and operational risk in determining capital levels. It intends to provide approaches which are more comprehensive and more sensitive to risks than the 1988 Accord, while maintaining the overall level of regulatory capital. Capital requirements that are more in line with underlying risks will allow banks to manage their businesses more efficiently.

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#### 4.10 NORMS FIXED BY THE RBI

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In April 1992 Reserve Bank of India impressed upon the banks, the need for adopting capital adequacy measures in accordance with the agreed framework on international convergence of capital measures and capital standards as laid down by the Basel Committee.

Essentially under the proposed system, the Balance Sheet assets, non-funded items and other off-balance sheet exposures would be assigned weights according to the prescribed risk weights and banks have to maintain unimpaired minimum capital funds equivalent to the prescribed ratio of the aggregate of the risk weighted assets and other exposures on an ongoing basis. It was stipulated by the Reserve Bank of India that in case of Indian banks which have branches abroad, the norm of 8% should be achieved as early as possible and, in any case, by 31st March 1994. Foreign banks operating in India were required to achieve this norm by 31st March 1993. (Tier I capital should not be less than 50% of the total capital).

While introducing the credit policy for the second half of 1998-99, on October 30, 1998,

the Governor of the Reserve Bank of India indicated the following measures regarding capital adequacy ratios.

In a bid to move towards international standards, Reserve Bank of India has stipulated that banks maintain a minimum Capital-to-Risk Assets Ratio (CRAR) or capital adequacy ratio of 9 percent by the year ending March 2000 and further increase to 10 percent (recommended by the Narasimham Committee) will be decided later. The Reserve Bank of India has gone for the second phase of structural reforms of the banking system. This will increase the financial soundness of the banks and the system as a whole. The banking system in India has a high level of weaker banks which have a very poor Capital Adequacy Ratio (CAR). This would entail either fresh capital infusion or closure of these banks or merger with strong banks. This would affect weaker banks which have a low CRAR. Like the Indian Bank which has a CAR of only 1.4 percent. For stronger banks like State Bank of India and Corporation Bank, this will not be a problem as almost all these banks have more than 8% of the CAR in the form of Tier 1 capital.

In India, various groups of banks are at present subject to different minimum capital requirements as prescribed in the Statutes under which they have been set up. Foreign banks operating in India should have foreign funds deployed in Indian business equivalent to 3.5% of their deposits as at the end of each year. The risk weighted assets ratio approach to capital adequacy measurement is more equitable as it requires those institutions with higher risk assets profile to maintain a higher level of capital funds. In the long run, such an approach, incorporating both On-Balance Sheet and Off-Balance Sheet exposures of a bank into its capital ratio according to the level of perceived risk would encourage the banks to be more risk-sensitive and to structure their Balance Sheets in a more prudent manner.

### Capital Funds:

Tier 1 Capital in the case of Indian banks would mean paid-up capital, statutory reserves and other disclosed free reserves, if any. Capital reserves representing surplus arising out of sale proceeds of assets will also be reckoned for this purpose. Equity investments in subsidiaries, intangible assets, and losses in the current period and those brought forward from previous periods, will be deducted from Tier 1 capital.

Tier 2 of the Capital consists of the following:

- 1) Undisclosed reserves and cumulative perpetual preference shares.
- 2) Revaluation reserves. It was considered prudent to consider revaluation reserves at a discount of 25% when determining their value for inclusion in Tier 2.
- 3) General provisions and loss reserves. This will be restricted upto a maximum of 1.25% of weighted risk assets.
- 4) Hybrid debt capital instruments.
- 5) Subordinate debt. The instrument should be fully paid up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses, and should not be redeemable at the initiative of the holder or without the consent of the banks' supervisory authorities. Instruments with an initial maturity of less than 5 years or with a remaining maturity of one year should not be included. Subordinated debt instruments will be limited to 50% of Tier 1 capital.

Even though no mention of Tier 3 Capital is made in India, taking into account the structure of large nationalized banks which dominate the scene the objective of the Tier 3 capital is achieved by two ways:

- 1) by the Government contribution directly to nationalized banks through recapitalisation.
- 2) by suitably increasing the risk weights even for government/approved securities.

### Risk Weights In India:

Cash, balances with RBI, balances with other banks' money at call and short notice investment in Government and other trustee securities as well as claims on other banks

such as Certificate of Deposits carry zero risk weight. So also loans guaranteed by Central/State Government.

However loans granted to Central/State Government public sector undertaking as well as other assets carry 100% risk weight.

While announcing the credit policy for the second half 1998-99, the Reserve Bank of India has announced that banks should assign a risk weight of 5 percent for government/ approved securities. The RBI proposed to implement this in two phases, in the first phase it is stipulated that the banks assign a risk weight of 2.5% of the securities for capital adequacy ratio by the year ending March 31, 2000, and the rest at a date which will be announced later.

Reserve Bank has also announced a 20 percent risk weight to be assigned to the securities of government undertakings which do not form part of the approved markets borrowing programme.

This is in addition to the 5 percent risk weight for these securities. This also is to be done in two phases, In the first phase the banks have to assign a risk weight of 10 percent plus 2.5 percent for the outstanding stock of such securities in the year 2001-2002. In the second phase the remaining 10 percent in the year 2002-2003.

In another important measure announced, the Reserve Bank of India has stipulated that the risk weight for government guaranteed advances to be the same as for other advances. Risk weights will be assigned for government guaranteed advances sanctioned from April 1, 1999 as under:

- For central government it is 0%.
- For the state government it is 0%.
- For governments who remained defaulters as on March 31, 2000, 20%.
- For governments who remained defaulters after March 31, 2000, 100%.

This means that the capital of the banks have to be increased by 9% of 2.5 of the risk weighted assets by the year 2000, if they want to achieve the minimum 9% CAR stipulation. In addition to this the 12.5% risk weight in the year 2001-2002 will further increase the risk weighted assets bringing down the CAR by 9% of that risk weighted assets.

#### **Forex Open Position to have 100% Weight:**

The Reserve Bank has hiked the risk weight assigned to banks' foreign exchange open positions to 100 percent from 62.5 percent earlier. The measure which is part of its efforts to strengthen prudential norms, will be implemented from March 31, 1999.

This step would strengthen banks' balance sheets and enable them to meet risks arising from running overnight open positions. However, the sharp hike in the risk weight attached to open positions would also deter speculative dollar purchases or sales overnight.

The recommendation was made by the second Narasimham committee in its report on banking sector reforms for integrating foreign exchange risk into the calculation of risk weighted assets.

The measure works as follows, Say, a bank runs an open position of \$ 1 million. With 100 percent risk attached to this, the bank would have to maintain the requisite full capital adequacy (currently at eight percent) on this. This opportunity cost to the bank is that it is unable to use the funds at lendable resources and earn a significantly higher interest rate compared to the relatively lower rate offered by a AAA rated bank. This would increase the cost of running an open position unless they expect the exchange rate to change significantly in their favour or were able to pass on the cost to their corporate client. This would impact liquidity in the market at least towards the closing of trade.

These measures will strengthen the financial system of the country and we may be able to avoid the pitfalls faced by the South East Asian countries.

## 4.11 CAPITAL ADEQUACY OF INDIAN BANKS: PRESENT POSITION

Out of the 27 public sector banks, 26 banks achieved the minimum capital to risk weighted assets ratio (CRAR) of at least 8 percent by March 1998. While 19 banks had CRAR exceeding 10 percent, 7 banks had CRAR between 8 and 10 percent. Following the announcement of monetary and credit policy in October 1998 banks have been advised to maintain a minimum CRAR of 9 percent by end-March 2000. During 1998-99 the Central Government contributed a sum of Rs.400 crores to the capital of three nationalized banks viz. Indian Bank (Rs.100 crores), UCO Bank (Rs.200 crores) and United Bank of India (Rs.100 crores). The overall capital contribution by the Government to nationalize banks as at end-March 1999 amounted to Rs.20,446 crores out of which Rs.642 crores was returned to the Government by four banks.

Banks were given autonomy to raise Rupee denominated subordinated debt as Tier 3 capital in February 1999. However, in view of the high level of cross holding of such instruments among the banks and financial institutions which did not necessarily add capital to the financial system, banks were advised in April 1999 that a bank's aggregate investment in Tier 2 bonds, issued by other banks and financial institutions would be permitted upto 10 percent of the investing bank's total capital.

RBI has asked both scheduled and non-scheduled banks to implement CAR in a phased manner with effect from March 31, 2002. As per the new norms, the CAR of all cooperative banks will be brought at par with that applicable to commercial banks by March 31, 2005. By March, 2002, scheduled cooperative banks will be required to meet 8 per cent and non-scheduled cooperative banks 6% CAR. The CAR will go up every year till they are at par with scheduled Commercial Banks

## 4.12 SUPERVISION BY RBI

Due to growing complexities in the financial sector, over the last few years, the inspection job has been intensified, with the apex bank having put in place a restructured supervision arm. The Board for Financial Supervision set up in November 1994 under the aegis of RBI exercises integrated supervision on banks, financial institutions and non-banking financial companies.

A new approach to on-site inspection was adopted by the Board in July 1997. This is based on the CAMELS model which evaluates:

- Capital Adequacy
- Asset quality
- Management
- e Earnings
- o Liquidity
- Systems and Control

Besides a rating model based on CACS factors, Capital adequacy, Asset quality, Compliance and Systems has been prepared for the foreign banks.

In India, thirteen of the twenty-five core principles of Banking Supervision, have already been covered on the basis of the legal provisions enshrined in the Banking Regulation Act, RBI Act and/or executive instructions issued by the RBI. In respect of remaining twelve core principles, there is a need to take certain steps, which will include amendments in legal provisions and establishing mechanism for cooperation among the regulators to comply with these principles. Broadly, these relate to prescribing prudential requirements for additional capital charge for market risk, framing guidelines for addressing country and currency risk, need for assessing the sources and quality of Start Up Capital, supervisory cooperation with regulators inside and outside the country and consolidated supervision of institutions and their subsidiaries as conglomerates. The additional capital charge for market risk has already been partially introduced by the RBI

by way of stipulation of earmarking of 5% of Tier 1 Capital for open position in foreign exchange and gold. The RBI has recently issued guidelines on "Asset - Liability Management" which will be a step towards introduction of comprehensive Risk Management Systems in the banks in India. In respect of (i) Risk Management, (ii) Consolidated Supervision, (iii) Inter-agency Cooperation and (iv) Cross-border Supervision, in house working groups have been set up by the RBI For in depth examination of each issue and recommending specific actions needed for the purposes.

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#### 4.13 CONCEPTUAL FOUNDATIONS OF LOAN LOSS PROVISIONING

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Financial statements are prepared to measure the performance of a bank and to show its financial position. The existence of loan losses affects the measures of both performance (i.e. profitability) and financial position (i.e. capital adequacy). The nature of the impact depends upon the type of accounting system which is being employed. The financial statements of banks can be prepared under two fundamentally different systems of accounting: historic cost accounting and market value accounting. Current GAAP (Generally Accepting Accounting Principles) are essentially based on historic cost accounting. This results in loans being shown in the bank's balance sheet at their original nominal value. When combined with the principle of prudence however this system of accounting requires that a liability be recognized in the balance sheet in the form of a provision for bad and doubtful debts and that an expense be recognized in the profit and loss account in the form of a charge for bad and doubtful debts. The loan loss provisioning concept which underpins GAAP is that of loan losses inherent in the loan portfolio at the balance sheet date but which are not specifically identified. The objective of the loan loss provision is therefore to quantify incurred but not precisely known losses. In contrast, Regulatory Accounting Principles (RAP) have tended to include expected future loan losses in the loan loss provision. This is an important difference in the concept. Recently, the two views have converged in the direction of GAAP concept due to the 1991 amendment to the Basel Accord which adopts the GAAP concept by excluding the word "future". US Banking Circular 201 (revised) (US Comptroller of the Currency 1992) also clarifies that banks do not need to provide, in the current period, for losses that may occur as a result of possible future events the provision need only to cover inherent losses.

Four broad approaches can be identified to the estimation of loan loss provisioning, constant percentage of loans, peer equivalent ; loan loss history ; and loan analysis. These may be used in combination. The first three are statistical while the fourth is largely judgemental. There is a trend towards the use of a more judgemental approach which involves the explicit analysis of the bank's loan portfolio. This trend has emerged partly in response to the huge loan losses experienced by international banks since the 1980s.

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#### 4.14 CAPITAL ADEQUACY AND LOAN LOSS PROVISIONING

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A bank's capital adequacy ratios are directly related to its decisions on loan loss provisions. Therefore the capital adequacy regulations for banks have an important effect on loan loss provisioning. Basel guidelines recognize two types of capital : Tier 1 (or core) capital, which is shareholders' equity (e.g. equity and published reserves from post tax retained profits less good will) and Tier 2 (or supplementary) capital which consists of lower-quality capital (e.g. subordinated debt, revaluation reserves, undisclosed reserves, hybrid securities and general loan loss provisions). Regulatory capital consists of both Tier 1 and Tier 2 capital.

The Basel Committee on Banking Supervision (1991) slightly amended the definition of general provisions eligible for inclusion in Tier 2 capital. Such provisions must "not reflect a known deterioration in the valuation of particularly assets". General provisions eligible for inclusion in regulatory capital must be "held against presently unidentifiable losses" and be "freely available to meet losses which subsequently materialize".

The Basel Committee recognizes that "much depends on the level of provisions a bank may be holding". Differences in the total level of loan-loss provisions and their division into general and specific provisions can have important effects on a bank's capital adequacy. Most countries deduct specific provisions from related assets when calculating the capital ratio. In the USA where there is no clear distinction between general and specific provisions, the allowance for loan losses is netted against outstanding loans. In the case of general provisions, the position is less clear. In some countries (e.g. Germany and Canada) they are deducted from gross assets while in others (e.g. the UK) they are not. A bank's policies on loan loss provisioning can affect both its regulatory capital and its risk weighted assets and thereby capital adequacy position.

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#### 4.15 CROSS-NATIONAL DIFFERENCES IN THE LEVEL OF LOAN LOSS PROVISIONING

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There are national differences in accounting rules and guidelines, which partially explain, observed cross-national differences in the level of loan loss provisions.

These accounting issues are :

- a whether or not operational use is made of a distinction between specific and general provisions
- whether the specific provisions on certain classes of loan are assessed on an individual or pooled basis ;
- a the approach used to estimate loan loss provisions (historical or judgemental or a combination of both);
- the accounting treatment of the general provision, the existence and disclosure of hidden reserves; the assessment of provisions arising from country risk;
- a whether or not interest is recognized on impaired loans and if so how to account for this interest;
- a the rules of collateral valuation.

Differential provisioning practices may impact the competitiveness of banks in a number of ways. First, the level of provisioning affects the quantum of capital available to support a bank's lending; second, provisioning has a direct impact on disclosed profitability and hence on retained earnings. Third, particular provisioning policies (such as income smoothing) may influence the perceived riskiness and therefore the cost of capital of a bank.

Current accounting guidelines adopt a subjective approach to loan loss provisions based on loan losses inherent in the loans portfolio at the balance sheet date but which are not yet specifically identified. Similarly the Basel Accord's distinction between specific and general provisions which focus on whether or not there is identifiable asset impairment lends itself to subjective interpretation. This implies that bank management has considerable discretion in determining the level of loan loss provisions - and more importantly, in determining how much of the overall loan loss provisions should be in the form of specific rather than general provisions. In other words bank management has significant latitude in fixing that component of loan loss provisions (specific provisions) that is ineligible to be included in regulatory capital.

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#### 4.16 SUPERVISORY IMPLICATIONS

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From a supervisory standpoint one consequence of variable provisioning practices' is their effect on the concept of Capital Adequacy. For instance if Bank A has made cumulative general provisions of 3% on its commercial loan portfolio while the provisioning level for Bank B on a loan portfolio of similar quality is only 2% then Bank B's risk-weighted Tier 1 capital ratio may appear to be about 1% points higher than Bank A's (because the higher net value of the loan portfolio is reflected in a corresponding rise in equity capital). If the difference in provisioning coverage relates to specific rather than general Provisions then the distortion would be reflected in the total risk-weighted capital asset

ratio. In either case, Basel capital adequacy regime will give an imprecise reading of the relative financial strength of individual banks.

These considerations underline the need for consistent and realistic provisioning guidelines.

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#### 4.17 PROVISIONING NORMS IN INDIA

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In response to the need for banks' balance sheets to reflect their actual financial health and its concomitant corollary, the need for a proper system of recognition of income classification of assets and provisioning for bad debts on a prudential basis the committee on the Financial System under the chairmanship of Shri Narasimham (Narasimham Committee, November 1991), recommended that in respect of banks' and financial institutions which are following the accrual system of accounting no income should be recognized in the accounts in respect of non-performing assets. An asset would be considered as non-performing if interest on such assets remains past due for a period exceeding 180 days at the balance sheet date. The Committee further recommended that banks and financial institutions be given a period of three years to move towards the above norms in a phased manner. Normally, after sometime the whole loan has to be written off. To avoid that contingency, prudence dictates recognition of the non-performing assets and provision therefore.

The Committee recommended that the policy of income recognition should be objective and based on the record of recovery rather than on any subjective considerations. Likewise the classification of assets has to be done on the basis of objective criteria which would ensure a uniform and consistent application of norms. As regards provisioning requirements, the Committee recommended that provisions should be made on the basis of classification of assets into four different categories,

The Committee underlined the need for a policy of income recognition to be objective and based on the record of recovery. It had observed that internationally income from non-performing assets (NPAs) was not recognized on accrual basis but was booked as income only when it was actually received. The Committee therefore recommended that the similar practice should be followed by banks in India.

An asset becomes non-performing when it ceases to generate income for the bank. The Committee defined NPA as advances where as on the date of the balance sheet, interest remains past due for a period of more than 180 days. This applies to term loans, overdrafts, cash credits, bills purchased/discounted but outstanding and in respect of other accounts.

Gist of recommendations of the Committee as regards provisioning norms is given below:

##### Asset Classification:

Banks should classify their advances into four broad groups viz. (i) standard assets, (ii) sub-standard assets, (iii) doubtful assets and (iv) loss-assets,

- (i) **Standard Assets** : Standard asset is one which does not disclose any problems and does not carry more than the normal risk attached to the business. Such an asset is not a Non Performing Asset (NPA).
- ii) **Sub-standard Assets** : Sub-standard asset is one which has been classified as NPA for a period not exceeding two years. In other words such an asset will have well-defined credit weaknesses that jeopardize the liquidation of the debt and are characterized by the distinct possibility that the bank will sustain some loss, if deficiencies are not corrected.
- iii) **Doubtful Assets** : A doubtful asset is one which has remained NPA for a period exceeding two years. A loan classified as doubtful has all the weaknesses inherent in that classified as sub-standard with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently known facts, conditions and values, highly questionable and improbable.
- iv) **Loss Assets** : A loss asset is one where loss has been identified by the bank by

internal or external auditors or the RBI in respect but the amount has not been written off wholly or partly. In other words, such an asset is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage or recovery value.

### Provisioning for loans and advances:

Reckoning the time lag between an account becoming doubtful of recovery, its recognition as such, the realization of the security, and the erosion over time in the value of security charged to the banks, banks should make provisions against sub-standard assets, doubtful assets and loss assets as under:

- i) **Loss Assets** : The entire assets should be written off. If the assets are permitted to remain in the books for any reason 100% of the outstandings should be provided for.
- ii) **Doubtful Assets** :
  - a) 100% of the extent to which the advance is not covered by the realizable value of the security to which the bank has a valid recourse and the realizable value is estimated on a realistic basis.
  - b) Over and above item (a) above depending upon the period for which the asset has remained doubtful 20% - 50% of the secured portion (i.e. estimated realizable value of the outstandings) on the following basis:

Period of which the advance as been considered as doubtful	Percentage of provision
Up to one year	20
One to three years	30
More than three years	50

### iii) Sub-Standard Assets :

A general provision of 10% of the total outstandings.

### Phases of Provisioning :

Banks were advised in March 1993 that they should make 100% provision in respect of loss assets and not less than 30% of the total provisioning needed in respect of sub-standard advances, doubtful advances and advances with outstanding balance of 25000 and less during the year ending 31st March 1993. The balance of provisioning needed in respect of the above categories of advances not provided for as on 31st March 1993, together with the fresh provisioning needed in respect of credit facilities identified in the year ending 31st March 1994 should be made as on that date.

### Valuation of Foreign, Exchange Transactions :

As per the Reserve Bank guidelines foreign currency assets and liabilities and unmatured spot and forward foreign exchange transactions are to be revalued on a monthly basis. Spot and forward transactions are to be revalued at the then prevailing spot and forward foreign exchange rates. Respective gains and losses arising from these valuations are to be reported on a net basis in the income statement and should not be aggregated with any other type of income or expenses.

### Accounting Norms :

The prudential accounting norms first introduced in 1992-93 have been strengthened over time. In respect of accounts where there are potential threats of recovery on account of erosion in value of the security or absence of security and/or other factors such as frauds committed by borrowers exist it was prescribed that such accounts be classified as doubtful or loss assets as appropriate.

### Mark to Market :

The mark-to-market proportion of the approved securities was enhanced from 60 percent in



1997-98 to 70 percent in 1998-99, and would be raised progressively to 100 percent over the next three years with a view to moving towards the international best practice of marking all investments in the market. Further, banks which have marked to market their securities at a higher percentage than the prescribed one were not to lower the proportion of current categories of securities later.

**Activity 1**

1. The shortcomings of the 1988 Accord

.....  
 .....  
 .....

2. Tier-2 of the capital consists of:

.....  
 .....  
 .....

**4.18 FOLLOW-UP OF NARASIMHAM COMMITTEE RECOMMENDATIONS**

The second phase of financial sector reforms was initiated after submission of the Second Narasimha Committee report to the RBI in 1998. Their recommendations and the follow-up thereof are indicated below.

**Follow-up to the second Narasimham Committee Recommendations, 1998**

Recommen	Policy Ann	ts by tl R	B: k
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**1. Capital Adequacy Ratio**

A minimum target of 9 percent CRAR to be achieved by the year 2000; the target should be raised to 10 percent for the year 2002.	Banks should achieve a minimum CRAR of 9 per cent as on March 31, 2000.
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**2. Risk Weights on Investments in**

Government securities, approved securities and other than approved securities

A risk-weight of 5 percent for market risk for Government/approved securities,	2.5percent risk weight for market risk with effect from the year ending March 31, 2000 for Government/approved securities. Risk weight of 20 percent on investments in other approved securities not guaranteed by Governments and also on investments in Government guaranteed securities of Govzrnmnt undertakings which do not form part of the approved market borrowing programme to be introduced from the financial year 2000-2001.
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**3. Risk weights on Government guaranteed advances**

Risk-weight on Government guaranteed advances to be the same as other advances	Risk weights for Government guaranteed advances from April 1, 1999 are as:
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Against the guarantee of	Risk weight (percent)
a. Central Government	0
b. State Governments	0
c. State Governments which have emained in default as on March 31, 2000 in cases where the guarantee has been invoked.	20
d. <b>State</b> Governments which continue to be in default even after March 31, 2001 in respect of such invoked guarantees.	100

#### 4. Foreign Exchange Open Position Limit

To carry 100 percent risk weight.

Implemented from the financial year ended  
March 31, 1999.

#### 5. Provisioning Norms

- i. A general provision of 1 percent on standard assets.
- ii. An asset to be classified as doubtful if it is in the sub-standard 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.
- iii. **The** Government guaranteed advances which have **turned** sticky to be classified as NPAs,
- iv. Income recognition, asset **classification and** provisioning norms should apply to Government guaranteed advances.

As a first step, banks have been directed to make a general provision of a minimum of 0.25 percent for the year ending March 31, 2000.

An asset will be treated as doubtful, if it has **remained** in sub-standard category for 18 months, instead of 24 months, by March 31, 2001. Banks **may** make provision in two phases, as under:

As on March 31, 2001: **Provisioning** of not less than 50 percent on the assets which have become **doubtful** on account of the new norms,

As on **March 31, 2002**: Balance 50 percent Of the provisions should be made in addition to provisions needed as on March 31, **2002**.

The State Government guaranteed advances in respect of which guarantee has been Invoked and the concerned Government is in default for more than two quarters are to be classified as NPAs with effect from April 1, 2000.

Provisions against **existing/old** state Government guaranteed advances where **guarantee** stands invoked **as** on March 31, 2000 are to be made during the next four years **from** the year ending March 31, 2000 to March 31, 2003 with a **minimum** of 25 percent each year.

#### 6. Other Recommendations

- i. Banks and financial institutions should avoid the practice of evergreening.

The Reserve Bank reiterated that banks and financial institutions should adhere to the prudential **norms** on asset classification, provisioning, etc, and to avoid the practice of "evergreening".

<p>ii. Any effort at financial restructuring must go hand in hand with operational restructuring. With the cleaning up of the balance sheet, simultaneously steps to be taken to prevent/limit re-emergence of new NPAs.</p>	<p>The banks were advised to take effective steps for reduction of NPAs and also put in place risk management systems and practices to prevent re-emergence of fresh NPAs.</p>
<p>iii. To enable banks in difficulties to issue bonds for Tier II capital, Government will need to guarantee these instruments which would then make them eligible for SLR investment.</p>	<p>Public sector banks were encouraged to raise their Tier II capital. Government guarantee to these instruments does not seem appropriate.</p>
<p>iv. There is a need for disclosure in a phased manner of the maturity pattern of assets and liabilities, foreign currency assets and liabilities, movements in provision account and NPAs.</p>	<p>Instructions were issued to banks to disclose these additional information from the year ending March 31, 2000.</p>
<p>v. Concentration ratios need to be indicated in respect of bank's exposure to any particular industrial sector as also to sectors sensitive to asset price fluctuations such as stock market and real estate. These exposure norms need to be carefully monitored.</p>	<p>Banks were advised to strictly comply with instructions which are already in place.</p>
<p>vi. Banks should bring out revised operational manuals and update them regularly.</p>	<p>Banks were advised to bring out revised operational manual and ensure regular Updating. Compliance to be reported to the Reserve Bank by September 30, 1999.</p>
<p>vii. There is need to institute an independent loan review mechanism especially for large borrowal accounts and to identify potential NPAs.</p>	<p>Banks should ensure a loan review mechanism for larger advances soon after their sanction and continuously monitor the weaknesses developing in the accounts for initiating corrective measures in time.</p>

#### 4.19 CONTROLS ON MARKET ENTRY

In virtually all national banking systems, regulation begins at the market entry stage. Requirements typically include a reputable management (the fit and proper criterion), and some minimum amount of subscribed capital. Branches of foreign banks must generally possess a specified amount of endowment capital although the UK imposes no such requirement, while Hong Kong has introduced a minimum assets criterion for foreign banks seeking to establish local branches. Several countries apply a perceived economic need criterion and in such cases market entry may be restricted or suspended from time to time with a view to curbing excessive and destabilizing competition. In financial centers such as Singapore, where domestic and offshore banking operations are separated entry controls may allow a greater degree of competition in the offshore markets than is permitted in the domestic sector.

Entry of foreign owned banks may be formally limited to subsidiaries (Canada) on the grounds that locally incorporated entities can be more effectively regulated by the host authority. Some other countries in contrast have preferred to confine full banking status to branches rather than subsidiaries of foreign banks because a branch is considered to enjoy the full support of the group to which it belongs. A number of countries like Singapore, Canada require Letters of Comfort from foreign banks wishing to establish local financial subsidiaries.

Foreign-based financial institutions of necessity operate in one of the more highly

regulated environment in international trade. Restrictions are often justified by the need for effective domestic prudential or monetary control. They can also reflect strong protectionist pressure emanating from indigenous financial institutions and political pressure relating to national control of the "commanding heights" of the economy. When the financial systems of countries are opened to foreign involvement it is sometimes only for a brief period in order to accept new entrants and these windows of opportunity can lead to a mad scramble among international financial institutions to establish themselves before the windows are closed again. Once in operation restrictions can also severely limit the activities of foreign-based financial institutions.

Entry as well as operating barriers, whether imposed for reasons of financial control or protection, may constrain financial efficiency and the prospects of economic growth for the host country. Yet the restricted competition itself can be highly profitable to those foreigners who have managed to find a niche in the market.

Discriminatory barriers imposed on foreign competition in national financial markets are analogous to protection in merchandise trade and include tariff-like and quota-like distortions. Reciprocity in rules governing financial services is similar to that found in conventional merchandise trade, except that the principle tends to be far more narrowly defined at the sub-sector and even at the individual enterprise level.

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## 4.20 LIQUIDITY CONTROLS

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Some countries (USA, Canada) choose not to lay down formal prudential liquidity requirements. While others (Netherlands, Germany and Switzerland) apply a number of ratios designed to limit the extent of maturity mismatching in banks' balance sheet. In a few cases (e.g. France, Italy) banks which accept short-term deposits are regulated separately from those engaged in longer-term banking business and special limits may be placed on term lending. Where regulation is formalized, distinctions may or may not be drawn on asset side between primary, secondary and other classes of liquidity and on the liabilities side between interest rate sensitive money market funds and retail deposits. Although most national schemes seek to classify liabilities by both maturity and volatility, with a view to determining the extent to which funds may be prudently used as a basis for maturity transformation, direct comparisons of permissible transformation are not possible because of the variety of assessment methods and other institutional differences. In general, liquidity regulators do not take account of undue deposit concentration. It is generally recognized that the management of a foreign currency liquidity may present special problems in so far as banks lack direct access to the lender of last resort in that currency. However, there is no common approach to the treatment of foreign currency items for liquidity purposes. Some financial centers like Singapore specifically exempt banks' foreign currency operations from the liquidity requirements that apply to local currency business. Hong Kong applies liquidity norms uniformly to local and foreign currency items. Japan pays particular attention to Japanese banks' Eurocurrency activities which are subject to a special mismatch limit. France requires separate calculations to be made for local and foreign currency liquidity and Germany applies limits to foreign currency exposures which serve the additional purpose of limiting maturity mismatching in foreign currencies. More usually however, foreign currency business is not subject to liquidity rules.

Some countries like USA assess liquidity on a worldwide consolidated basis, some (Japan) include foreign branches but not subsidiaries in the assessment process, while others (France), confine their regular assessment to banks' domestic offices. Branches of foreign banks may or may not be assessed for liquidity by the host authority.

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## 4.21 PERMISSIBLE BUSINESS ACTIVITIES

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Restrictions may in part reflect non-prudential concerns such as potential conflicts of interest or undue concentrations of economic power; there is no generally accepted view as to what is and what is not legitimate banking business. Some countries (USA, Canada, Japan) formally separate commercial from investment banking and prohibit commercial banks from underwriting equities. Restrictions are more often imposed on banks'

investments in property and also on equity holdings in non-bank companies. In the latter case limits may be expressed as a percentage of the lending bank's capital, the ceiling varying between 100% (France) and 25% (Hong Kong) and/or as a percentage of the non-bank company's equity, with the maximum holding ranging from 2% (Italy) to 20% (France).

Several countries prohibit the mixing of banking and non-banking business within the bank entity while permitting participation in at least some kinds of non-banking activity through bank holding companies, subsidiaries and/or minority interests. Other countries (Netherlands) permit the bank entity itself to engage directly in non-banking business but limit the scope for investment in non-bank companies. A third approach permits a wider range of activities to be undertaken by a special category of separately regulated "universal" banks. Finally some countries impose few formal restrictions on the kinds of business in which banks may engage whether directly or through affiliates, though these countries typically impose heavy risk weightings in certain kinds of business activity for the purpose of calculating solvency requirements.

In the case of international operations restrictions may be relaxed so as to enable foreign offices of domestic banks to compete more equally with the local banks in the country of residence.

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## 4.22 FOREIGN CURRENCY EXPOSURES

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Some countries prefer to avoid general limits or norms (US, Canada, France), others (Netherlands, Switzerland) apply incremental capital requirements to uncovered positions while a third group (UK, Germany) imposes guidelines or formal limits on aggregate and in some cases, individual foreign currency positions.

Where exposure limits are indicated they are generally stated as a percentage of capital though Japan places limits on each bank based in part on the volume of foreign exchange transactions. UK operates an exposure guidelines for all currencies together equal to 15 percent of capital. Since this is expressed as an aggregate net short positions, it is equivalent for most purposes to Germany's 30 percent of capital limit which relates to the difference between a bank's foreign currency assets and liabilities. However, because the UK guidelines embrace Sterling, whereas Germany's excludes DEM items, German banks have twice the latitude of UK banks when taking long or short positions in their local currency.

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## 4.23 LOAN CONCENTRATION

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Most supervisory authorities seek to limit risk concentrations by imposing formal or informal limits on each bank's loans to any single borrower stated as a percentage of the lending bank's capital the limits vary between countries.

In addition to limits on loans to any single borrower, most supervisory authorities also place limits on loans to a group of borrowers.

Thus in India, the Reserve Bank of India stipulates that a bank's exposure to a borrower should not exceed 25% of the bank's paid-up capital and reserves. This limit is called Single Borrower Limit (SBL). Similarly the Reserve Bank of India has prescribed that credit limits to a group should not exceed 50% of a bank's capital and reserves. This limit is called Borrower Group Limit (BGL).

Risk concentration has been a source of significant losses for banks for all categories in recent years, Immoderate or unmanageable risk concentration has been at the heart of bank problems - too much reliance on a single or common set of factors in the operation of a banking business, too much reliance on loans to one person or group, to one industry or country or predicated too much on collateral or cash flow that depends on single condition.

This is the rationale behind controls on single borrowers and group of borrower. Banks reduce risk by diversifying their activities and portfolios - this is the most basic premise - the kernel of modern portfolio theory. Banks must ensure diversification of exposures in

terms of borrower, industry, trade, country, banks etc. to avoid concentration in any one area of risk. To survive as a viable function in the bank, commercial lending must be subjected to a rigorous loan portfolio management including logical market definition and concentration limits by loan size, industry and geography.

## 4.24 COUNTRY RISK

There are varied approaches to control on country risk, Generally, supervision of country risk is influenced by the fact that regulators are often reluctant to be seen to challenge the judgement of commercial bankers in an area, which can also give rise to political difficulties.

While country risk is now among the foremost supervisory concerns, regulators have not attempted to impose an absolute limit on total country risk exposure but focus instead on the needs of diversification. A few countries impose provisioning guidelines in respect of country risk. Switzerland requires a flat 20 percent provision on loans to countries categorized as high risk.

The objective of a Country Risk Management (CRM) system is to enable the bank to balance its exposures in different countries commensurate with the evaluation of the risks. The system thus rests on two supportive exercises, viz. country risk evaluation and balanced distribution of international asset and exposures amongst various countries. The two exercises converge in setting of country limits within which the exposure needs to be controlled.

The prudential guidelines for fixing country limits for overseas branches (sector) are indicated as under:

Country limits may be fixed with reference to the total assets of the foreign branches held in the four "free" currencies (US\$, Pound Sterling, Japanese Yen and DM [now EURO]) and having regard to the risk rating of the country.

For the purpose of country risk rating, a four-fold categorization of countries may be employed as under :

- |                |                    |
|----------------|--------------------|
| a. 'Low-Risk'  | b. 'Moderate Risk' |
| c. 'High Risk' | d. 'Off Credit'    |

The country limits may be fixed by each bank having regard to two ceilings - one limiting the total credit exposure in an individual country in each risk category, and another governing the aggregate exposures in all countries in that risk category.

Both funded and non-funded credit exposures should be taken into account for the purpose of measuring/monitoring country exposures. Banks may fix sub limits for non-funded commitments. This control through sub-limits may be by way of borrower limits rather than country limits.

In 'high risk' countries, exposures of short term nature may only be preferred.

Country limits may normally be reviewed at annual intervals.

For the purpose of country limit measurement and monitoring, the following exposures may be excluded:

- a. Credit risk guaranteed by the parent organization of the borrower or a third party located in a country of lower risk category may be taken as risk shifted or transferred to the latter country.
- b. Credit exposures which are guaranteed or insured against credit and/or transfer risks by Government-owned or highly reputed private institutions issuing guarantee/insurance cover.

As the country risk has to be managed essentially by individual banks with reference to their international portfolio, the perceptions and skills of those charged with the function of managing country and other 'additional' credit risk of international business should be strengthened both at operating and control levels.

While country risk assessment remains an art in several respects, country risk monitoring

is essentially an administrative task. Monitoring country risk exposure should enable an institution not only to limit its country risk exposure but also to follow it up on a continuing basis in order to adjust it whenever the development of country risk assessment makes it necessary. It will be necessary for the prudent international banker and investor to continue to watch the international economic and political environment closely through the country risk assessment systems, monitoring their exposure carefully in order to optimize the risk composition of their cross-border lending or investments.

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#### 4.25 BANK SUPERVISION

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At one end of the spectrum is the US, where regulator on-site examinations lie at the heart of the supervisory systems and whose examiners are required to provide a composite rating of each bank on a standardized basis. At the other end of the spectrum is the UK which eschews bank inspections in favour of a surveillance system based on interviews with management backed by extensive reported data. Routine on-site bank examinations where they do occur may be conducted by the supervisory authorities' own inspectorate (USA, Canada, Italy, France and Japan), or special auditors appointed and paid by the authorities (Belgium), or auditors licensed by the authorities and subject to special statutory duties (Switzerland), or general auditors (Germany). More generally there is a tendency (Hong Kong and Singapore) to require bank auditors to report certain matters directly to the regulatory authorities.

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#### 4.26 POLICY IMPLICATIONS

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Each national financial system has distinctive institutional characteristics which have a direct bearing on the authorities' approach to bank regulation. Some countries have a highly concentrated banking industry favouring an informal regulatory regime based on direct contact with management while others have a fragmented structure calling for more formal methods of control.

Despite this, certain common trends in regulatory practices have emerged in recent years. Firstly, there has been a tendency towards a more formal regulatory framework even in those countries, which have traditionally preferred a non-statutory approach to bank supervision. Secondly, several countries have in recent years extended their regulatory coverage to non-bank deposit taking institutions. Thirdly, greater attention is being given to the measurement and control of country risk as well as to undue concentration of risk. Finally, there has been a general endorsement of the principle of consolidation supervision for which purpose most national authorities are beginning to use consolidated data when applying solvency and other prudential criteria to domestic banks with foreign branches and/or subsidiaries.

Despite these signs of gradual convergence in national regulatory arrangements, there are wide regulatory disparities in all the main areas of prudential control, which gives rise to opportunities for regulatory arbitrage.

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#### 4.27 SUMMARY

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Capital adequacy rules are the most effective items in the regulators' toolbox. In July 1988 Basel Committee on Banking Supervision came to a landmark agreement, which requires internationally active banks in the G10 countries to hold capital equal to at least 8% of a basket of assets measured in different ways according to their riskiness, Tier 1 capital being shareholders equity and retained earnings and Tier 2 capital being additional internal and external resources available to the banks. The bank has to hold at least half of its measured capital in Tier 1.

The 1988 Accord has helped strengthen the soundness and stability of the international banking system and enlarge competitive equality among internationally active Banks. However, the financial market place has developed during the past decade to a point where Accord's capital ratio has become a less accurate indicator of a bank's financial condition. The new proposal for a new capital adequacy framework issued by the

Committee in January 2001 is designed to better align regulatory capital requirements with underlying risks and to recognize the improvements made in the meantime in risk measurement and control. It consists of three pillars; minimum capital requirements, which seek to develop and expand on the standardized rules set forth in the 1488 Accord; 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 practices.

There is a very close connection between bank failures and levels of provisioning against loan losses. By avoiding the need for sudden catch-up provisions and/or loan write-offs, prudent provisioning can reduce the likelihood of shock losses that may threaten insolvency, while also allowing a troubled bank more time in which to rectify its impaired capital position. Uneven provisioning practices, on the other hand, reduce market transparency and make it much more difficult for both practitioners and regulators to monitor the financial condition of individual banks.

The purpose of loan loss provisions depends on the perceived function of financial accounting statements. The traditional approach is embodied in historic cost accounting, which results in loans being shown in the bank's balance sheet at their original, nominal value. When combined with the principle of prudence, however this system of accounting requires that a liability be recognized in the balance sheet in the form of a provision for bad and doubtful debts and that an expense be recognized in the profit and loss account in the form of a charge for bad and doubtful debts.

A bank's capital adequacy ratios are directly related to its decisions on loan loss provisions and the capital adequacy regulations have an important effect on loan loss provisioning.

Besides capital adequacy ratios, and loan loss provisioning requirements, there are other tools for control in the regulations toolbox such as controls on market entry, liquidity controls, restrictions on permissible business activities, foreign currency exposures, loan concentration, country risk and bank supervision.

Although each national financial system has distinctive institutional characteristics, common regulatory practices have emerged in recent years; Nevertheless, there are wide regulatory disparities in all the main areas of control giving rise to opportunities for "regulatory arbitrage".

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## 4.28 KEY WORDS

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**Basel Committee:** A committee of central banks and bank supervisors/regulators from the major industrialized countries that meets every three months at the Bank for International Settlement in Basel.

**General (loan loss) Reserve:** A provision for loan losses that does not refer exclusively to individual loans or a pool of loans but rather to an estimated provision for the whole loan portfolio.

**Impaired Loan:** A loan judged likely to produce a loss; it is characterized by some occurrence such as late principal or interest payments and includes any loan past due or on non-accrual status.

**Income Smoothing:** the process of ensuring that reported income is maintained at a relatively stable level.

**Loan Loss Provision:** This is a provision to account for the possibility of loan losses and may be general or specific. In US terminology, it is known as an allowance for loan losses or a loan loss reserve or a loss accrual.

**Non-Accrual Loan:** A loan carried on the bank's balance sheet that no longer accrues interest. Any payments received are deducted from the principal rather than being treated



as income. Typically a loan is placed on non-accrual status once interest payments are 90 days past due (in India 180 days past due).

**Non-Performing Loan:** In the U.S.A. a loan which is 90 days or more overdue failing to accrue interest and charged off or renegotiated to facilitate payments.

**Past Due Loan:** In the U.S.A. a loan which is more than 30 days behind in interest or principal payment.

**Beer Equivalent approach:** An approach in the estimation of loan loss provision whereby loan loss provisions are based on the levels set by peer banks.

**Percentage method:** Determining the amount of the loan loss provisions as a percentage specified by regulators or by tax policy.

**Provision:** UK terminology for the liability account in the balance sheet in respect of loan losses. US terminology for the annual expense charged to the profit and loss account in respect of loan losses.

**Recognition:** In accounting, this occurs when an accounting item is included in the financial statement.

**Regulatory Capital:** Tier 1 plus Tier 2 capital.

**Reserve Capital:** Reserves included in regulatory capital for capital adequacy purposes.

**Specific (loan loss) provision:** A provision that refers exclusively to individual loans or a pool of loans. (Loan pools are the result when banks classify their total loan portfolio into loan categories, when these loan categories comprise a large number of small loans, loan losses are estimated on a "pooled basis" as opposed to an individual basis).

**Concentration Risk:** Concentration risk is the risk that the performance across many loans is highly correlated. It stems from the lack of diversification in geography, industry, and individual borrowers.

**Country Risk:** The risk that unexpected events within a country will jeopardise a borrower's ability to repay a loan. Country risk is often divided into sovereign risk and transfer risk.

**Regulatory Arbitrage:** Opportunities arising from regulatory disparities, to exploit regulatory loopholes or concessions in different jurisdictions.

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

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

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

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

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

**Credit Risk Mitigation:** A range of techniques whereby a bank can partially protect itself against counterparty default.

**G 10 Countries:** Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, UK and USA,

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## 4.29 SELF ASSESSMENT QUESTIONS

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1. What is the rationale of capital adequacy?
2. Describe the **Basel** Capital Accord of 1988.
3. To what extent do Indian banks adhere to the capital adequacy ratio?
4. What are the steps taken by the **RBI** in recent times to strengthen the capital adequacy ratios of Indian banks?
5. Write short notes on :
  - i. Shortcomings of the 1988 Capital Accord.
  - ii. January 2001 proposal for a new Capital Adequacy **framework**.
6. What is the conceptual foundation of loan loss provisioning and what are the different approaches to their estimation?
7. "Bank's capital adequacy ratios are directly related to its decisions on loan loss provisioning". Discuss with reference to **Basel** Committee's definition of capital.
8. State the cross-national differences in the level of loan loss provision and their supervisory implications.
9. What are the provisioning norms **fixed** by RBI for banks in India?
10. What is the objective of barriers to entry to international banking system? And what are its consequences ?
11. What is the rationale behind Single Borrowing Limit and Borrower Group Limit.
12. Write Short **Notes** on :
  - a. Liquidity control
  - b. Bank supervision
  - c. Concentration risk
13. What are the policy implications of the disparate national regulations of banking?

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## 4.30 FURTHER READINGS

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1. Richard Dale, 1985, *The Regulation of International Banking*, Prentice Hall, USA.
2. Maximilian J. Hale, 1993, *Banking Regulation and Supervision*, Edward Publishing Company.
3. Claude E. Barfield, 1996, *International Financial Markets : Harmonisation versus Competition*, AEI Press, Washington, D.C.
4. Ethan B. Kapstein, 1998, *Governing the Global Economy: International Finance and the State*, Harvard University Press, USA,
5. G.A. Penn, A.M. Shea and A. Arora, 1987, *The Law and Practice of International Banking*, Sweet and Maxwell, London.
6. **Mark Lorgan**, 1997, *Corporate Banking : Practice and Law*, Chartered **Institute** of Bankers, Scotland.
7. Philip R. Wood, 1980, *The Law and Practice of International Finance Series*, Sweet and Maxwell, London.
8. Vivien A. Beattie, Peter D. Casson, Richard S. Dale, George W. McKenzie, **M.S. Sutcliffe**, and Michael J. Turner, 1995, *Banks and Bad Debts : Accounting for Loan Losses in International Banking*, John Wiley Publishers, New York.