

## Perspectives

*The starting point in any discussion of the challenges confronting the global financial architecture must be an appraisal of the key constituent factors that shaped the global financial system before the crisis hit. The global financial crisis and the following recession blemish the record of finance leading to growth. The global trends are throwing a number of important perspectives. They range from questioning the very role of financial innovation to a discussion on various aspects related to financial regulation. A legion of both policymakers and scholars have come out with their perceptions analysing the causes of the crisis and findings both immediate and longer term solutions. While there is a lot to learn from the global perspectives and lot to benefit from several global initiatives, Indian banking also has many practices worth emulating by other countries. Indian banking is a success story in the midst of the financially triggered global crisis of 2008 thanks to the regulatory environment in place and the structural banking drivers. It is the untapped potentials from within that provide a favourable outlook way ahead. There is a need to explore and consolidate upon these factors.*

### 1. Introduction

1.1 The crucial role of the financial system is to allocate capital investment towards the most productive applications. The energetic growth and technological advance of the western economies suggest that our financial system has performed this task well over long periods. However, the global financial crisis and the following recession blemish this record. A time has come when questions like 'Does overmighty finance levy a tithe on growth?' are being asked. Also being discussed is the fundamental question about what our financial system is actually delivering to our economy and what it costs to do that. It is argued that the protracted debate over how to clean up after the financial crisis – and how to reform our accident-prone financial system to prevent another such episode – is stuck on the problem of how to regulate markets without undermining the benefits they bring.

1.2 It is well-recognised, particularly after the East Asian crisis of 1997, that in an environment of large cross-border capital flows,

which increased dramatically in the past two decades, the financial sector must be resilient and well-regulated. The fact that advanced financial markets, with well tested monetary policy and regulatory frameworks, are also not free from such unexpected and extraordinary developments, has become very evident in the ongoing global financial crisis. Effective regulation is needed to realise the potential of open financial markets. Financial innovation and integration have increased the speed and extent to which shocks are transmitted across asset classes and countries, blurring boundaries between systemic and non-systemic institutions. But regulation and supervision have remained geared toward individual financial institutions. The regulatory mechanisms do not adequately consider the systemic and international implications of domestic institutions' actions.

1.3 Keeping the current global and Indian banking trends in view, Section 2 discerns the perspectives from global banking developments, Section 3 deals with emerging Indian perspectives and Section 4 concludes the chapter.

## 2. Perspectives from the Global Trends

1.4 The starting point in any discussion of the challenges confronting the global financial architecture must be an appraisal of the key constituent factors that shaped the global financial system before the crisis hit. Three groups of mutually reinforcing factors that did not receive adequate attention from regulators and monetary authorities arguably contributed to increased systemic risk. First, global macroeconomic imbalances resulted in lower interest rates during the past decade, inducing more risk-taking and contributing to the creation of asset price bubbles worldwide. Second, changes in financial sector structure and the failure of risk management to keep up with financial innovation - the trend towards securitisation, including the importance of the shadow banking system - during the past two decades rendered the system more prone to instability. And, third, leveraged financial institutions have inherent incentives to take on excessive risks without internalising systemic risk, which is the main reason they need to be regulated.

1.5 A legion of both policymakers and scholars have come out with their perceptions analysing the causes of the crisis and findings both immediate and longer term solutions (For example, the de Larosiere Report (2009), the Turner Review (2009), the Geneva Report (2009), the Group of Thirty Report (2008) and the IMF Lessons paper (2009)). The financial crisis has exposed weaknesses in the current regulatory and supervisory frameworks. The recent developments have made it clear that action is needed in at least four areas to reduce the risk of crises and address them when they occur. These are (a) finding a better way to assess systemic risk and prevent its build-up in good times; (b) improving transparency and disclosure of risks being taken by various market participants; (c) expanding the cross-institutional and cross-border scope of regulation while safeguarding constructive

diversity; and (d) putting in place mechanisms for more effective, coordinated actions.

1.6 The scope of financial regulation needs to be revamped and the provision of liquidity improved. One key contributor to the global financial crisis was inadequate regulation—both in its fragmented nature and its lack of enforcement. Regulatory structures must be revamped to prevent another build-up of systemic risks, to provide a sounder footing for connecting global savers and investors through global financial intermediation, and to ensure a clear and consistent method of dealing with financial instability when it does arise. Several areas that require attention to prevent systemic crises:

- *the perimeter of regulation*, or which institutions and practices should be within the purview of regulators;
- *procyclicality*, the tendency for some regulatory and business practices to magnify the business cycle;
- *information gaps* about risk and where it is distributed in the financial system;
- harmonising national regulatory policies and legal frameworks to enhance *coordinated supervision* and resolution of firms and markets that operate across borders; and
- *providing liquidity* to markets to ensure the smooth flow of funds for investment and the effective transmission of monetary policy.

1.7 The Perimeter of Regulation: A lesson learnt from the latest crisis is that the perimeter of regulation needs to be expanded to encompass institutions and markets that were outside the scope of regulation and, in some cases, beyond the detection of regulators and supervisors. Some of these entities were able to obtain short-term debt to invest in longer-term assets and increased their leverage (the use of debt to purchase assets) to a degree that threatened the stability of the financial system

when those short-term lenders recalled their funds. Coverage of all financial intermediaries, however, is not necessary and it is important to identify carefully the specific weaknesses that wider regulation would seek to address market failures. Through a two-perimeter approach, it can be achieved - financial institutions and activities would be in the outer perimeter to be subjected to disclosure requirements, while those that pose systemic risks would be moved to the inner perimeter and be subject to prudential regulations.

1.8 Procyclical Practices: The current financial crisis is an example of excess procyclicality in banking. It is well-known that lending mistakes are more prevalent during upturns: borrowers and lenders become overconfident about investment projects and tend to lower credit standards. During recessions, banks suddenly turn conservative and tighten lending standards. Moreover, if monetary policy remains lax for too long, it may increase the risk-taking incentives of banks as they search for yield.

1.9 Dynamic loan loss provisions can help deal with procyclicality in banking. By allowing earlier detection and coverage of credit losses in loan portfolios, they enable banks to build up a buffer in good times that can be used in bad times. Their anticyclical nature enhances the resilience of both individual banks and the banking system as a whole.

1.10 Another element in the new regulatory framework for the banking sector is revised capital rules. Capital buffers need to be sufficiently large in order to strengthen financial institutions by addressing the problem of procyclicality of capital rules. The new rules should oblige banks to increase

regulatory capital in times when profits allow them more easily to do so, in order to provide a buffer to absorb losses and support continued lending to the economy during more difficult times.

1.11 The crisis has highlighted the role of leverage. In principle, risk-weighted capital requirements, which require more capital for riskier assets than for less risky ones, should control excess leverage. However, the inadequacy of risk models leading to underestimation of capital requirements results in build-up of excess leverage. It is, therefore, helpful to apply a minimum leverage ratio (capital divided by assets) including off-balance sheet items as a relatively simple tool to limit overall leverage in financial institutions during an upswing<sup>1</sup>.

1.12 Although fair value accounting methods, requiring institutions to value assets using current market prices, serve as a good benchmark in most situations, the crisis made it apparent that in periods of stress, they can accentuate downward price spirals. Accounting rules should allow financial firms with traded assets to allocate “valuation reserves,” which grow to reflect overvaluations during upswings and serve as a buffer against any reversions to lower values during downturns. Similarly, values of assets used as collateral, such as houses, also tend to move with the cycle. More room is needed in the accounting rule book to allow the reporting of more conservative valuations, based on forward-looking and measurable indicators.

1.13 Another procyclical feature of the financial system is funding liquidity—that is, the ability of financial firms to obtain funds to lend. Funds tend to be more abundant during upswings

<sup>1</sup> Leverage ratio generally refers to Tier 1 capital as a per cent of total adjusted assets, wherein adjustments to assets include items that have already been deducted from Tier 1 capital, such as goodwill. This definition is used in countries, such as the US and has been spelt out by the World Bank (2009) in its concept note on the leverage ratio “Banking and the Leverage Ratio”, available at [www.crisistalk.worldbank.org](http://www.crisistalk.worldbank.org).

and less so during downturns. Strengthened liquidity risk management techniques is the first line of defense in ensuring steady funding. It is better to rely more on less volatile forms of funding, such as retail deposits rather than short-term wholesale funding.

1.14 **Plugging Information Gaps:** One of the most troubling aspects of the crisis has been the inability to see what risks were distributed to various holders and who those holders were. Many of the new structured credit products were supposed to distribute risk to those who were supposed to be best able to manage it. But in many cases, supervisors and other market participants could not see where various risks were located as risks often were sliced and diced in ways that prevented the packagers of the risks and the purchasers from thoroughly understanding what risks they had sold or acquired. Probably most needed are data on the risk exposures of systemically important banks and nonbank financial institutions – their levels, concentrations of their exposures and the linkages among the institutions across borders and markets - for observing systemic risks and vulnerabilities.

1.15 **Better disclosure rules covering financial institutions** are required so as to make information more specific and consistent. In particular, reporting should cover both on- and off-balance-sheet items because much risk was kept off the balance sheet—hidden from investors and supervisors. Markets will function better if prices, transaction amounts, and other information (coverage, counterparty type, and overall market concentration) regarding Over-the-Counter (OTC) derivative markets are more readily available. Also better information on Credit Default Swaps (CDS) held as insurance policies by a host of interconnected parties are required. Centralised clearing facilities for CDS contracts, as are currently under construction, would help reduce counterparty risks and help in information collection.

1.16 **Improving Cross-border Coordination:** During the crisis, cross-border information flows and cooperation among regulators have been inconsistent. For the smooth handling of the systemic and global risks associated with crisis, supervision of globally and regionally significant financial firms requires that policymakers from countries where cross-border financial conglomerates operate must now act together to address inconsistencies in national legal frameworks. Secondly, ensuring that bank insolvency frameworks are compatible across home and host countries on a number of fundamental fronts is important. A consistent set of guidelines to initiate bank resolutions—including triggers, time frames, and procedures—could help preserve a firm's franchise value.

1.17 **Cooperation across jurisdictions** can be enhanced, for example, by setting up college of supervisors from countries in which a firm does business. The head of that college, the lead supervisor (typically from the country where the bank is domiciled), would be responsible for drawing a clear picture of risk concentration across the firm as well as its major strengths and weaknesses. A firm's permissible activities would be decided by the lead supervisor and other appropriate supervisors. The college would examine the firm's activities and collect information as the need arises.

1.18 **Providing Liquidity to Markets:** The crisis has triggered a variety of ways to provide liquidity to markets. Central banks have expanded the number of counterparties, broadened the types of collateral they will accept, and lengthened the maturity of liquidity support. In some cases, new facilities have been introduced. It is important that emergency liquidity and intermediation to needy borrowers should include some notion of how to discontinue those methods as conditions normalise. The timing of such an exit must be coordinated to avoid abrupt movement of liquidity and credit. exit strategies with

incentives that gradually wean market participants from central banks back to normal liquidity providers are least likely to incur such bumps.

1.19 There is a need to weighing pros and cons of financial innovations. After four decades-worth of extraordinary financial innovation, the events of the past two years have raised an argument about the risks of financial innovation. The innovations that are most obviously useful have tended to come in retail finance. Those related to payments come closest to the ideal of being user-friendly without adverse side effects, like automated teller machines. Yet plastic cards, which make day-to-day transactions so much easier, are often instrumental in creating the worst consumer debt problems. In wholesale finance, innovative products - derivatives and securitisation - can have huge benefits and huge costs. They permitted the development of risk management to handle the volatility that became endemic after the breakdown of fixed exchange rates and the deregulation of interest rates in the 1970s. The best reason for regulators to be suspicious about innovation is that so much of it in the modern world is aimed at facilitating regulatory and tax arbitrage, like in the case of the banks' off-balance sheet securitisation activity. One of the options is to use the capital adequacy regime to address the problem, because (i) the social costs and benefits cannot be easily measured, (ii) a more fundamental point is that the real systemic damage in this, as in most previous financial crises, is done not by financial instruments but by leverage - one more reason to regard capital as the first and most important line of defence.

1.20 Corporate Governance: The financial crisis has revealed severe shortcomings in corporate governance. When most needed, it often failed to provide the checks and balances that financial institutions need in order to cultivate sound business practices. Failures in corporate governance played a clear role in some of the larger financial firms at the centre

of the crisis. Governments have become major shareholders in the financial sector in the aftermath of the crisis. Hence, there is likely to be a conflict of interest as they exit from the emergency measures. International cooperation, including among private sector bodies, should be improved to ensure better coordination and implementation of agreed international corporate governance standards. Remuneration and incentive systems are supposed to align the interests of corporate officials with the long-term interest of the company and the shareholders. Distortions in these structures may lead to a short-term bias towards additional risk-taking, a tendency reinforced by tax provisions in many countries. Improvements and analysis are needed in the following areas: board oversight of risk management; board practices; governance of the remuneration process; and the exercise of shareholder rights (Box I.1).

### **Global Payment System**

1.21 A great deal has been learnt from the international financial crisis and not all the experiences have been negative. The payment systems everywhere have functioned well both for retail customers and enterprises as well as for banks and other financial institutions. They have thus helped to maintain economic activity during a period when confidence in counterparties has been at low ebb (Box I.2).

### **International Accounting Standards**

1.22 The financial crisis has highlighted the need for improvement in accounting standards. In July 2009, the Basel Committee issued a series of standards for higher capital for the trading book as it was recognised that the Basel II framework seriously underestimated the capital needs for the trading book. Therefore, the Basel Committee has introduced new trading book capital rules that substantially raise trading book capital requirements. It prescribes higher capital requirements for resecuritisations and exposures to off-balance

### Box I.1: Financial Crisis and Corporate Governance

- Depending on the characteristics of the company, remuneration and incentive systems that should be the focus of board (and sometimes regulatory) oversight need to be considered broadly and not just focused on the chief executive officer and board members.
- The governance of remuneration/incentive systems have often failed because decisions and negotiations are not carried out at arm's length. Managers and others have had too much influence over the level and conditions for performance based remuneration with the board unable or incapable of exercising objective, independent judgement.
- In many cases it is striking how the link between performance and remuneration is very weak or difficult to establish. For example, companies have often used general measures of stock price rather than the relative performance of the individual firm. Factors not within the control of the CEO have often been emphasised.
- Remuneration schemes are often overly complicated or obscure in ways that camouflage the situation. This is particularly the case with hard to value pension schemes. They are also asymmetric with limited downside risk thereby encouraging excessive risk taking. Transparency needs to be improved which goes beyond simply more disclosure that has improved in recent years. Corporations should be able to explain the main characteristics of their performance related remuneration programs in concise and non-technical terms. This should include the total cost of the program; the performance criteria used, and; how remuneration is adjusted for related risks.
- The goal needs to be remuneration/incentive systems that encourage long term performance and this will require instruments that pay-out after the longer term performance has been realised. These might include share rather than cash payments with lock-up provisions, claw backs, deferred compensation *etc.* It is important to assess the programme ex-post. Such schemes are complex and it is not likely that legal limits such as caps and some fiscal measures will be able to achieve this purpose. There is also a risk of a shift towards excessive fixed remuneration components that would weaken alignment of incentives with the long term success of the company.
- Steps must therefore be taken to ensure that remuneration is established through a sound governance process where the roles and responsibilities of those involved, including consultants and independent directors, are clearly defined and separated. Any remuneration consultants might need to be hired by the nonexecutive members of the board rather than by management. Executive board members should not participate since they have an inherent conflict of interest.
- It should be considered good practice when remuneration policies are submitted to the annual meeting and as appropriate subject to shareholder approval.
- Financial institutions may follow the Principles for Sound Compensation Practices issued by the Financial Stability Forum.

#### Reference:

Kirkpatrick, Grant (2009), 'The Corporate Governance Lessons from the Financial Crisis', OECD paper <http://www.oecd.org/dataoecd/32/1/42229620.pdf>

sheet vehicles. The Basel Committee on Banking Supervision has also released a set of guiding principles to assist the International Accounting Standards Board (IASB) on book-keeping issues underlined by the financial crisis (Box I.3). The proposals focus on provisioning, fair value measurement and related disclosures.

### Future of Regulation

1.23 Basel Committee has evolved principles for stress testing and valuation of complex products, as also for supervision and management of funding liquidity risk. It has incorporated the FSB compensation standards

into the Pillar 2 supervisory review process and has enhanced Pillar 3 disclosures focusing on trading activities, securitisations and exposures to off-balance sheet vehicles.

1.24 The Group of Central Bank Governors and Heads of Supervision, the oversight body of the Basel Committee on Banking Supervision, met on September 6, 2009 to review a comprehensive set of measures to strengthen the regulation, supervision and risk management of the banking sector. These measures will substantially reduce the probability and severity of economic and financial stress and are essential as they set the

### Box I.2: Global Trends in Large Value Payments and Their Key Drivers

Technological innovation, structural changes in banking, and the evolution of central bank policies are the three main reasons for the recent developments in large-value payments. First, technological innovation has created opportunities to make existing large-value payments systems safer and more efficient. Such innovation has also accommodated the industry's growing need for new types of systems that are not limited to a single country or a currency. Second, the financial sector has experienced immense growth over the last few decades accompanied by changes in the role of individual firms and the products they offer. In addition, financial institutions and their services have become increasingly globalised. These structural changes have affected how participants use large-value payments systems. Third, the role of central banks in large-value payments systems has changed significantly in recent years. Central banks have become more involved in payments systems and have created formal and systematic oversight functions. The main focus lies in promoting safety and efficiency in LVPSs and in maintaining overall financial stability. Central banks therefore have taken more active roles in monitoring existing and planned systems, in assessing systems according to international standards, and, if necessary, in inducing change.

Ten long-range trends in the settlement of large-value payments can be identified globally. These are: (1) Diffusion of Real-Time Gross Settlement Systems, (2) Take-off of Hybrid Systems, (3) Emergence of Cross-Border and Offshore Systems, (4) The Rise of Continuous Linked Settlement Bank, (5) Increasing Settlement Values and Volumes, (6) Shrinking Average Payment Sizes, (7) Falling Numbers of System Participants, (8) Extended Operating Hours, (9) Declining Transaction Fees, and (10) Adoption of Common Standards for Large-Value Payments Systems.

#### Future developments

The question is how these trends will evolve and what new developments can be foreseen.

- Currently, the diffusion of RTGS is well under way. RTGS and net settlement systems each have characteristics that make them desirable, thus the hybridisation of RTGS is likely to continue as long as liquidity is costly.
- Many central banks require collateral for intraday credit. With the ongoing development of financial markets, collateral is likely to find new, more profitable uses than payment settlement. This will likely drive the cost of liquidity up and, as a consequence, increase the demand for liquidity saving that netting and offsetting in conjunction with RTGS can offer. The trend toward greater hybridisation of systems is therefore likely to continue.
- The introduction of cross-border systems has been associated with unique events linked to the introduction of the euro and the establishment of CLS Bank. Cross-border systems are likely to remain rare

in the future. However, remote participation may become more prevalent. Offshore systems that settle a foreign currency are presently small and serve niche markets—mainly a local FX market or the needs of banks in the area and time zone to settle payments in a foreign currency among each other. Such demands may arise in the context of the establishment of new financial centers, for instance, in the Middle East or China, where the People's Bank of China is developing a USD clearing system.

- Most existing or planned offshore systems are limited to a single country. With improvements in information and communications technologies, the fixed cost of setting up such systems is being reduced. As a consequence, we may see more offshore systems emerge, but they are likely to remain niche players, much like the existing ones are.
- Settlement values are likely to continue growing at the pace of GDP in the long run, and be cyclical to financial market activity in the short run—as they have done over the past ten years. The rapid growth in values attributable to financial deregulation and innovation in the 1980s and early 1990s has largely been absorbed. The average real value of payments processed in LVPSs has declined. As transaction prices seem to be declining too, it can be expected that the benefits of real-time settlement will outweigh the costs for a wider variety of smaller financial transactions. Thus, the average value of large value payments is expected to continue to fall.
- Consolidation in financial services is continuing. Especially in Europe, the process of cross-border mergers has not yet taken off. In addition, the introduction of TARGET2 and the consolidation of all the EU RTGS systems into a single entity will substantially reduce the number of LVPS participants, as banks operating in several EU countries will be better positioned to manage their payments centrally.
- Evidence from systems for which price data are available suggests that the cost of payments in LVPSs has declined rapidly. The underlying reasons are associated with regulatory changes, lower costs of information and communications technology, and perhaps competition between the public and private systems that operate side by side in some countries. These reasons are not likely to change, and the cost of making payments is likely to continue to fall.
- The final trend would be the standardisation of large-value payments systems through the use of common standards. The "Core Principles for Systemically Important Payment Systems" is already widely accepted and will continue to be applied around the world.

#### Reference:

Federal Reserve Bank of New York (2008): Economic Policy Review, September, Volume 14, Number 2; <http://www.newyorkfed.org/research/epr/08v14n2/0809prei.pdf>

**Box I.3: Basel Committee on Accounting Principles  
(Chairman: Nout Wellink)**

The Basel Committee on Banking Supervision has released a set of guiding principles to assist the International Accounting Standards Board (IASB) on book-keeping issues underlined by the financial crisis. The proposals focus on provisioning, fair value measurement and related disclosures.

As the IASB develops new financial instrument accounting standards, the principles will help it produce standards that improve the decision usefulness and relevance of financial reporting for key stakeholders, including prudential regulators. Moreover, the principles would ensure that accounting reforms address broader concerns about procyclicality and systemic risk.

In developing the principles, the Basel Committee closely examined the lessons learned from the financial crisis. One of those lessons is that any new accounting rules must be consistent with sound practices in risk management and enhance transparency to help supervisors, banks, investors and other stakeholders achieve their respective objectives.

The principles respond to recommendations made by G-20 heads of state in April for “the accounting standard setters to work urgently with supervisors and regulators to improve standards on valuation and provisioning and achieve a single set of high-quality global accounting standards”.

The IASB received the principles in July.

The principles note that the new standard should:

- reflect the need for earlier recognition of loan losses to ensure robust provisions;
- recognise that fair value is not effective when markets become dislocated or are illiquid;
- permit reclassifications from the fair value to the amortised cost category; which should be allowed in rare circumstances following the occurrence of events having clearly led to a change in the business model; promote a level playing field across jurisdictions;
- address particular concerns about procyclicality by providing for valuation adjustments to avoid misstatement of both initial and subsequent profit and loss recognition when there is significant valuation uncertainty; and
- ensure loan loss provisions are robust and based on sound methodologies that reflect expected credit losses in the banks' existing loan portfolio over the life of the portfolio.

**Reference:**

Bank for International Settlements (2009), Guiding Principles for the Replacement of IAS 39, August.

new standards for banking regulation and supervision at the global level. The effort is toward the introduction of a macro-prudential overlay which includes a countercyclical capital and provisioning buffer, as well as practical steps to address the risks arising from systemic, interconnected banks (Box I.4). While reiterating the imperative of restructuring regulation, it is also important to keep in mind the need to strengthen the ability and willingness of supervisors to enforce these regulations in a timely and credible manner. Restructuring regulation will take time, but the impetus to move in the appropriate directions is strong.

**International Financial Architecture**

1.25 Through several initiatives, the current crisis has hastened the reform of the

international financial architecture which on the way forward will create a 21st century international financial architecture (Box I.5).

1.26 To sum up, while thriving markets are critical for growth and prosperity, recent events demonstrate the importance of a strong and effective regulatory framework and proper supervision. Indeed, the crisis is the result of both market failures and policy failures. The task ahead is to build a sound governance and regulatory framework that will align incentives, while maintaining a healthy balance between markets on the one hand, and policy interventions on the other. To do so, Governments may need to strengthen their relevant institutions. As the financial crisis demonstrated, there are strong interrelationships between regulations on capital, deposit insurance, tax provisions,



#### **Box I.4: Comprehensive Response to the Global Banking Crisis The Group of Central Bank Governors and Heads of Supervision, Basel**

The agreements reached were among 27 major countries of the world and are essential as they set the new standards for banking regulation and supervision at the global level. There is a need to work toward the introduction of a macro-prudential overlay which includes a countercyclical capital buffer, as well as practical steps to address the risks arising from systemic, interconnected banks.

The Central Bank Governors and Heads of Supervision reached agreement on the following key measures to strengthen the regulation of the banking sector:

- Raise the quality, consistency and transparency of the Tier 1 capital base. The predominant form of Tier 1 capital must be common shares and retained earnings. Appropriate principles will be developed for non-joint stock companies to ensure they hold comparable levels of high quality Tier 1 capital. Moreover, deductions and prudential filters will be harmonised internationally and generally applied at the level of common equity or its equivalent in the case of non-joint stock companies. Finally, all components of the capital base will be fully disclosed.
- Introduce a leverage ratio as a supplementary measure to the Basel II risk-based framework with a view to migrating to a Pillar 1 treatment based on appropriate review and calibration. To ensure comparability, the details of the leverage ratio will be harmonised internationally, fully adjusting for differences in accounting.
- Introduce a minimum global standard for funding liquidity that includes a stressed liquidity coverage ratio requirement, underpinned by a longer-term structural liquidity ratio.
- Introduce a framework for countercyclical capital buffers above the minimum requirement. The framework will include capital conservation measures such as constraints on capital distributions. The Basel Committee will review an appropriate set of indicators, such as earnings and credit-based variables, as a way to condition the build up and release of capital buffers. In addition, the Committee will promote more forward-looking provisions based on expected losses.
- Issue recommendations to reduce the systemic risk associated with the resolution of cross-border banks.

The Committee will also assess the need for a capital surcharge to mitigate the risk of systemic banks. The Basel Committee will issue concrete proposals on these measures by the end of 2009. It will carry out an impact assessment at the beginning of next year, with calibration of the new requirements to be completed by end-2010. Appropriate implementation standards will be developed to ensure a phase-in of these new measures that does not impede the recovery of the real economy. Government injections will be grandfathered.

These measures will result over time in higher capital and liquidity requirements and less leverage in the banking system, less procyclicality, greater banking sector resilience to stress and strong incentives to ensure that compensation practices are properly aligned with long-term performance and prudent risk-taking.

The Group of Governors and Heads of Supervision endorsed the following principles to guide supervisors in the transition to a higher level and quality of capital in the banking system:

- Building on the framework for countercyclical capital buffers, supervisors should require banks to strengthen their capital base through a combination of capital conservation measures, including actions to limit excessive dividend payments, share buybacks and compensation.
- Compensation should be aligned with prudent risk-taking and long-term, sustainable performance, building on the Financial Stability Board (FSB) sound compensation principles.
- Banks will be required to move expeditiously to raise the level and quality of capital to the new standards, but in a manner that promotes stability of national banking systems and the broader economy.

Supervisors will ensure that the capital plans for the banks in their jurisdiction are consistent with these principles.

#### **Reference:**

Bank for International Settlements (2009), Comprehensive Response to the Global Banking Crisis, BIS Press Release dated September 7.

corporate governance, competition policy, accounting rules and executive compensation,

which produce the overall environment in which risk-taking occurs.

### Box I.5: Reform of the International Financial Architecture

The current institutional framework for economic cooperation was designed in the 1940s, in the context of war, to promote the peaceful coexistence of nations which led to the creation of Bretton Woods institutions, namely the International Monetary Fund (IMF) and its sister institution, the World Bank. As a fallout of the ongoing global financial crisis significant international initiatives have been taken recently to strengthen the international financial architecture.

It may be recalled that the Asian crisis had sparked a broad, critical debate about the costs and benefits of globalisation and the need to reform and strengthen the international financial architecture. In 1999, to promote stability in the international financial system through enhanced information exchange and international cooperation in financial market supervision and surveillance, the Financial Stability Forum (FSF) was created with 12 member countries to assess risks and vulnerabilities affecting the international financial system and to encourage and coordinate action to address them. Consisting of national financial authorities (central banks, supervisory authorities and finance ministries) from the G-7 countries, Australia, Hong Kong, Netherlands, Singapore and Switzerland, as well as international financial institutions, international regulatory and supervisory groupings, committees of central bank experts and the European Central Bank, it brought together national authorities responsible for financial stability in significant international financial centres, international financial institutions, sector-specific international groupings of regulators and supervisors, and committees of central bank experts.

Back in mid-2007, the most salient issue in the international financial architecture was “governance,” in particular governance of the IMF, which involved, among other things, the selection of future Managing Directors, representation on the Executive Board and voting rights. The “legitimacy” of the IMF was said to be in doubt. Much has changed since mid-2007. The likelihood of worldwide recession has moved ‘governance reform’ to the back burner and made it more urgent to reform the international financial system substantively. The current crisis has hastened the reform of the international financial architecture.

The initiatives for reform of international financial architecture can be categorized under two heads: first, increase in the resources and revision of the instruments of the international financial institutions, and second, strengthening the international financial system. The following are the major actions taken or those underway:

- *The demand for IMF financial assistance.* In March 2008, following a prolonged contraction under way since the end of 2003, the stock of IMF non-

concessional loans had fallen to a historic low of about 6 billion Special Drawing Rights (SDR), equivalent to euro 7 billion. In the second half of 2008 and in the first few months of 2009, the worsening of global economic conditions was reflected in a surge of applications from member countries for financial assistance. The IMF approved 19 new credit lines amounting to nearly SDR 100 billion (euro 115 billion).

- *Increase in the IMF’s lending capacity.* In the light of the increased demand for financial assistance from the IMF, in April 2009, the G-20 endorsed a tripling, from \$250 billion to \$750 billion, of the maximum amount of non-concessional loans that the Fund can grant.
  - The lending capacity also includes additional resources made available through bilateral loan agreements and the New Arrangements to Borrow (NAB). Nearly half of the amount will initially be made available with bilateral loans, which have been already offered by Japan (\$100 billion), the EU countries (\$100 billion, contributed on the basis of their respective Fund quotas), Switzerland and Canada (\$10 billion each) and Norway (\$4.5 billion). Subsequently, these loans will be incorporated into the NAB, extended to new participants and increased with further contributions of up to \$250 billion. Recently, the United States committed to finance the increased NAB with up to \$100 billion.
  - It was decided to bring forward the next General Quota Review to January 2011, so as to ensure that the Fund’s resources remain sufficient to meet members’ financial needs also in the medium term.
- *New allocation of Special Drawing Rights.* The G-20 pledged to approve a new general allocation of SDR worth \$250 billion, of which \$100 billion in favour of emerging and developing countries.
- *Revision of the IMF’s lending toolkit.* In response to the worsening of the world economy, the IMF has begun an overhaul of its lending toolkit. The main reforms concern: (a) the conditions that countries must satisfy in order to draw on the Fund’s resources; (b) the approval of a new facility, the Flexible Credit Line (FCL), and elimination of seldom-used facilities; (c) greater flexibility in the use of the Fund’s traditional Stand-by Arrangements; (d) simplification of cost and maturity structures; and (e) the doubling of access limits. Access limits to ordinary resources have been doubled, from 100 to 200 per cent of a country’s quota on an annual basis and to 600 per cent on a three-year basis.

(Contd. ....)

(...Concl.)

- *The Flexible Credit Line facility is based on crisis-prevention criteria.* It enables the Fund to disburse, even in the absence of a crisis and for purely precautionary purposes, loans of substantial size for six months or one year to countries with sound economic fundamentals and virtuous policies in place. Once granted, the FCL permits a country to draw the entire amount, possibly all at once, without further conditions. The facility is renewable and, unlike the other ordinary credit lines, does not have access limits.
- *The cost and maturity structures for loan repayment have been simplified.* In particular, the “time-based repurchase expectations policy”, an administrative mechanism intended to induce early repayments, has been replaced by a new time-based surcharge policy, simplifying the repayment schedule.
- *Initiatives regarding the Multilateral Development Banks.* To counter the effects of the economic crisis in low-income countries, the G-20 decided to strengthen the financing capacity of the Multilateral Development Banks (MDBs) and to encourage the development of new instruments, targeted more closely to those countries’ needs and intended to accelerate resource disbursement.

As of the second category of initiatives pertaining to strengthening the international financial system, the major initiatives are as follows:

- *The Financial Stability Board.* The G-20 decided in March 2009 that the Financial Stability Forum (FSF) should be expanded and re-established with a stronger institutional basis as the Financial Stability Board (FSB). Participation in the FSB was enlarged to include all the G-20 countries (including as new members the G-20 countries that were not there in the FSF, namely, Argentina, Brazil, China, India, Indonesia, Korea, Mexico, Russia, Saudi Arabia, South Africa and Turkey). In addition, Spain and the European Commission also became FSF members. In April 2009, the expanded FSF has been re-established as the Financial Stability Board (FSB) with a broadened mandate to promote financial stability. This would provide stronger institutional ground to strengthen its effectiveness as a mechanism for national authorities, Standard Setting Bodies (SSBs) and international financial institutions to address vulnerabilities and to develop and implement strong regulatory, supervisory and other policies in the interest of financial stability. In addition to the tasks assigned to its precursor, the FSB and IMF will intensify their collaboration, each complementing the other’s role as also collaborate in conducting Early Warning Exercises and an analysis of financial risks and vulnerabilities.

- *Measures in the field of supervision and financial standards.* All systemically important financial institutions, markets and instruments will have to be subject to appropriate regulation and supervision. The system of macro-prudential supervision will be improved.
- *Reform of the structure of representation and governance of the IMF and World Bank.* The G-20 endorsed an incisive reform of the governance of the Bretton Woods institutions. The goal is to give greater voice to poor and emerging countries in decision making, to change the criteria for the selection of top management, and to clarify the division of tasks and responsibilities between the institutions’ governing bodies and technical staff.
- *The World Bank has launched a process intended to strengthen the representation of the developing countries.* The reform is divided into two phases. The first, already under way, envisages the doubling of basic votes, the assignment of some unallocated shares and the addition of a Board seat for Sub-Saharan Africa. The second phase calls for a revision of the member countries’ voting powers according to their relative weight in the world economy and their individual contributions to development financing; it will also tackle some delicate governance issues regarding the effectiveness of the Board’s activity, the diversification of World Bank staff by nationality and the procedure for selecting the President.

The future legitimacy, effectiveness and credibility of these institutions require tangible reforms to increase the voice of dynamic emerging economies and developing countries. It has been agreed for a shift of at least 5 per cent in quota share from countries currently over-represented at the IMF to countries that are currently underrepresented. This reform will give dynamic emerging market and developing economies a say in the IMF more in line with their weight in the current global economy. It has also been agreed to increase the voting power of emerging market and developing countries at the World Bank by at least 3 per cent. This will strengthen the World Bank’s ability to fulfill its mission to reduce global poverty and its capacity to tackle challenges, such as climate change and food security, that require globally coordinated actions. In the emerging international financial architecture, G-20 has emerged as the premier global economic forum to reform global economic institutions to meet the needs of an interconnected global economy.

#### Reference:

Financial Stability Forum (2009), Press Releases dated March 12 and April 2, 2009.

Banca D’Italia (2009), 115<sup>th</sup> Annual Report, May 29. <http://www.pittsburghsummit.gov>.

### 3. Indian Perspectives

1.27 The modern economic system depends on a reliable flow of financing through intermediaries. Modern life requires the smooth operation of banks, insurance companies, securities firms, mutual funds, finance companies, pension funds and Governments. These institutions channel resources from those who save to those who invest, and they are supposed to transfer risk from those who cannot afford it to those who are willing and able to bear it. India too has a well-diversified financial system which is still dominated by bank intermediation, though the size of the capital market has expanded significantly with financial liberalisation in the early 1990s. Important components of the financial sector in India broadly fall into categories namely, commercial banks, co-operative banks, non-banking financial institutions (NBFIs) and the insurance sector. Commercial banks together with cooperative banks account for nearly 70 per cent of the total assets of Indian financial institutions.

1.28 Significant financial deepening has been taking place in Indian economy over the years as seen from Credit-GDP, M3-GDP ratios as well as flow of funds indicators. In contrast to a number of countries, a noteworthy feature discernible in Indian context is that the rise in indicators of financial deepening takes place along with a noticeable rise in the domestic savings rate. The rate of domestic savings has specially picked up in the recent period during 2003-04 to 2007-08 against the backdrop of financial sectors reforms, rise in total factor productivity and investment boom, which had led to acceleration in the growth performance.

1.29 As discussed subsequently in Chapter II, important contrasts characterise the banking trends internationally *vis-à-vis* India. The rather muted effect of the crisis on Indian banking is explained by two factors: (i) The effects arising out of direct exposures of foreign branches of

Indian banks to the subprime mortgage is negligible. A few Indian banks with overseas branches, however, had invested in Collateralised Debt Obligations (CDOs)/bonds which had a few underlying entities with sub-prime exposures. Thus a few banks suffered on account of the mark-to-market losses caused by the widening of credit spreads due to adverse impact of the sub-prime episode on the term liquidity market. The additional provisioning requirements towards mark-to-market losses arising from widening of the credit spreads were, however, not significant for the banks concerned relative to the size of their balance sheets and level of profits. (ii) Indirect impact of the overseas crisis on Indian stock market and the consequent effect in the context of Indian banks' exposure to equity investments is estimated to be minimal as prudential limits on banks' exposure to capital markets is in place. With the rationalised norms on capital market exposure being applicable from April 2007, the regulatory limit on individual banks' total exposure to capital market is now capped at 40 per cent of banks' net worth as at end-March of the previous year. Further, the banks' direct investment in shares, convertible bonds/debentures, units of equity-oriented mutual funds and all exposures to venture capital funds should not exceed 20 per cent of its net worth. Several regulatory requirements prescribed by the Reserve Bank ensure that the banks' participation in the capital market is within limits.

1.30 Moreover, as regards the impact on banking system's ability to lend, it may be mentioned that there had been high credit growth with credit deployment by the Indian banking sector growing rapidly at an average rate of around 30 per cent per year during three years before the international crisis surfaced. The Reserve Bank had initiated a conscious and judicious combination of monetary and counter-cyclical prudential measures to moderate the bank credit growth and build-up of asset bubbles in certain segments.

1.31 The Indian banking system has been relatively in good health. Balance sheets of the banks appear healthy and little affected by the unsettled conditions in financial markets. The asset quality and soundness parameters of the Indian banking sector have improved significantly in the recent period.

1.32 This notwithstanding, according to CFSA (2009), financial position of commercial banks shows that the global financial meltdown has led to a crisis of confidence in the global markets and is not without its echo in the Indian financial system. In contrast to the trend observed till 2007-08, there has been a reversal in capital flows to India during 2008-09. This has led to some disturbance in the Indian financial markets, particularly in the equity and foreign exchange markets. Against this background, the CFSA assessed the financial soundness of commercial banks and found that the banking sector has withstood the shocks of the global meltdown well and none of the key financial parameters in September 2008, namely capital ratio, asset quality, earning and profitability pointed to any discernable vulnerability.

1.33 Despite not being part of the financial sector problem, India has been affected by the crisis through the feedback loops between external shocks and domestic vulnerabilities by way of the financial, real and confidence channels. In evaluating the response to the crisis, it is important to remember that although the origins of the crisis are common around the world, the crisis has impacted different economies differently. Importantly, in advanced economies where it originated, the crisis spread from the financial sector to the real sector. In emerging economies, the transmission of external shocks to domestic vulnerabilities has typically been from the real sector to the financial sector. Countries have accordingly responded to the crisis depending on their specific country circumstances. Thus, even as policy responses across countries are broadly similar, their precise design, quantum,

sequencing and timing have varied. In particular, while policy responses in advanced economies have had to contend with both the unfolding financial crisis and deepening recession, in India, the policy response has been predominantly driven by the need to arrest moderation in economic growth.

1.34 The measures put in place since mid-September 2008 have ensured that the Indian financial markets continue to function in an orderly manner. This sizeable easing has ensured a comfortable liquidity position starting mid-November 2008 as evidenced by a number of indicators including the weighted-average call money rate, and the yield on the 10-year benchmark Government securities and effective lending rates of commercial banks.

1.35 In retrospect, the key success of financial sector reforms in India since they were instituted in the early 1990s has been the maintenance of financial stability through a period marked by repeated financial crises across the world. The need of the hour is to have financial sector reforms in a recalibrated manner in light of the crisis. The fact that India has not gone through any financial crisis as a result of financial deregulation is not only remarkable, but a testimony to the appropriateness of the judgment that reforms to global standards need to be adjusted to local conditions.

1.36 India had put in place counter-cyclical prudential measures during the period of excessive growth in credit. Recognising that the sudden and significant turn of events could impair assets down the line, counter-cyclical measures such as higher risk weights and provisioning requirements for certain sectors witnessing very high credit growth, which had been put in place in 2006, were restored to their original levels. In order to preserve the economic and productive value of the assets affected by the sudden and sharp deterioration in external conditions, banks were asked to take action for the quick detection of weaknesses and

a careful assessment of viability, and put in place, in a time-bound manner, restructuring packages for viable accounts. As a precaution, it was emphasised that the basic objective of restructuring is to preserve the economic value of units, not the ever-greening of problem accounts.

1.37 In India, strengthening and developing financial sector has been in tune with the needs of the real sector. Endeavour has always been to ensure harmonised development of all the sectors of the Indian economy. A number of measures based on the principles that are now accepted internationally were already brought into practice even before the crisis. These included restrictions on leverage for banking and non-banking institutions, stringent liquidity requirements, counter cyclical prudential measures, not recognising in Tier I capital many items that are now sought to be deducted internationally, recognising profits from sale of securitised assets to Special Purpose Vehicles (SPVs) over the life of the securities issued and not reckoning unrealised gains in earnings or in Tier I capital. The challenge is to facilitate the growth of the real sector through financial products and innovations subject to adequate safeguards and adoption of sound risk management policies.

### **Operations and Performance of Commercial Banks**

1.38 The Scheduled Commercial Banks (SCBs) in India, unlike their global counterparts, showed considerable resilience against the backdrop of global financial crisis and its effects on India economy. Nonetheless, the balance sheets of SCBs shrank and their financial performance decelerated suggesting that the Indian banking system was not completely insulated from the effects of the slowdown of the India economy. While growth of both the credit and deposits of SCBs decelerated during 2008-09 *vis-à-vis* 2007-08, they remained significantly positive. Bank's

lending to industries, personal loans and services sector witnessed a deceleration, while bank's lending to agriculture and allied activities increased substantially during 2008-09. The proportion of SLR investment in NDTL increased largely reflecting a higher Government market borrowing programme.

1.39 In a reversal of past trend, the Off Balance Sheet (OBS) exposures of SCBs, which had witnessed exponential growth in recent years, declined by 26 per cent during 2008-09. The income as well as the expenditure of SCBs decelerated, leading to deceleration in net profits. This deceleration in profit was partly due to the rising average cost of deposits and borrowings coupled with a declining return on investments notwithstanding a rise in the average return on advances.

1.40 The Indian banking system has withstood the pressure of global financial turmoil as reflected in the improvement in the Capital to Risk-Weighted Assets Ratio (CRAR). The overall CRAR of all SCBs improved to 13.2 per cent at end-March 2009 from 13.0 per cent at end-March 2008, thus, remaining significantly above the stipulated minimum of 9.0 per cent. Some slippage was observed in NPAs, as reflected in the marginal increase of gross NPAs to gross advances ratio. This was however on expected lines given the slowdown of the economy. On the whole, however, the Indian banking system performed reasonably well in this extraordinarily turbulent year. The gross Non-Performing Assets (NPA) to gross advances ratio remained unchanged at 2.3 per cent as at end-March 2009 from its level as at end-March 2008. The Return on Assets (ROA) also remained unchanged at 1.0 per cent at end-March 2009 over its level at end-March 2008 indicating no deterioration in efficiency with which banks deployed their assets. The Return on Equity (ROE) increased to 13.3 per cent as at end-March 2009 from 12.5 per cent at end-March 2008, indicating increased efficiency with which capital was used by banks.

## Financial Inclusion

1.41 Financial inclusion, by enabling the financially excluded sections to access the formal financial system, facilitates economic development. It has been the endeavour of the Government and the Reserve bank to promote financial inclusion in India through various channels. The various measures undertaken till now towards financial inclusion and some of the concerns in achieving 100 per cent financial inclusion are summarised in Box I.6.

1.42 Looking forward, inclusive growth is critical for the development of the country and the banking system has an important role to play in the development process. Experience has shown that banks have contributed a lot in the development process but more needs to be done. The road to 100 per cent financial inclusion and inclusive growth is a difficult one. The situation envisages a bank account in each household which is desirous of having one. The response from the banks has been encouraging. However, many of the accounts opened have remained inoperative. Thus, there is a need for creating increased awareness among the populace through sustained financial education efforts.

1.43 Banks have to perceive financial inclusion as a commitment as well as an opportunity. Information Technology should be embraced by banks in a larger manner and with the appropriate use of the BCs, the outreach of the formal financial system should be enlarged to reach out to the unbanked and under banked areas.

## Corporate Governance

1.44 Corporate governance in financial institutions has important implications for financial stability. Alongside external supervision, there is a need to strengthen corporate governance within financial institutions to provide greater internal supervisory comfort. The recent financial crisis once again highlighted the role of corporate governance in maintaining financial stability and has underlined the need

to establish greater convergence in corporate governance practices and principles across regulatory authorities, various categories of financial institutions and countries.

1.45 Efforts have been underway to strengthen corporate governance standards in Indian banks and to bring these standards at par with the international best practices. The steps taken by the Reserve Bank of India in the recent past in this direction include *inter alia* the prescription of the 'fit and proper' criteria for elected directors of public and private sector banks, revision of calendar items for review and recommendation for strategy review for business plans by banks.

1.46 In order to further strengthen the corporate governance culture in the Indian financial system, there are certain issues that warrant attention. The Indian financial system is diverse in nature comprising various bank categories like, SCBs, Regional Rural Banks, rural and urban cooperative banks and Non-Banking Financial Companies, with each category of institution having unique governance related issues. For instance, the governance of urban and rural cooperatives is largely under the purview of State Governments, which is being presently addressed with the help of MoUs signed by the State Governments with the Reserve Bank/NABARD. Further, there is a need to harmonise the corporate governance standards across various categories of institutions, such as across public and private sector banks. The issue of standardisation of corporate governance practices across bank groups, particularly in the context of appointing professionals on bank boards was also underlined by the CFSA, 2009.

## Risk Management Systems in Banks

1.47 Innovations involving complexity and sophistication of products and services, coupled with profitability and competitive considerations, have changed the dimensions

### Box I.6: The Road Map to 100 per cent Financial Inclusion: Some Concerns

World over, recognising the importance of inclusive growth, there are efforts towards making the financial system more inclusive. In India, the Committee on Financial Inclusion (Chairman: Dr. C. Rangarajan) has suggested a National Mission on Financial inclusion and observed that financial inclusion must be taken up in a mission mode. Getting connected with the banking system would enable people to avail a range of transaction and payment services, access to affordable credit, insurance and safe savings products. It has been noticed that people without bank accounts are often the most vulnerable and impoverished. Not having a bank account excludes these people from simple credit products also, making them more likely to turn to predatory or even illegal lenders leaving them in perpetual debt.

In India, despite widespread expansion of the banking sector, particularly after nationalisation of major commercial banks in 1969 and 1980, a significant proportion of the households, especially in rural areas, are still outside the coverage of the formal banking system. These households have been dependent up on the informal money lenders for their credit needs and had few avenues for keeping their savings. A visit to the bank branch often resulted in their losing their wage for the day.

Various steps have been taken by the Reserve Bank and the Government to bring the financially excluded people to the fold of the formal banking system. The steps include efforts like nationalisation of banks, identifying priority sectors and setting up targets for the same, setting up of RRBs, LABs, credit delivery focus in rural areas through the Service Area Credit Plans, and enabling policy for microfinance by banks. Further, simplification of the KYC norms, introduction of no-frills accounts, Kisan Credit Cards, General Purpose Credit Cards, small overdrafts in no-frills accounts and permitting banks to use the business correspondent and the business facilitator models were specifically aimed to promote financial inclusion.

It has been announced in the Annual Policy Statement of Reserve Bank for the year 2005-06 that the Bank would implement policies to encourage banks, which provide extensive services while disincentivising those, which are not responsive to the banking needs of the community, including the underprivileged. Banks have been urged to review their existing practices to align them with the objective of financial inclusion.

In order to have focussed attention for the financial inclusion efforts, the State Level Bankers Committee (SLBC) has been advised to identify one or more districts for 100 per cent financial inclusion. Responsibility is given to the banks in the area for ensuring that all those who desire to have a bank account are provided with one by allocating the villages among the different banks. The 100 per cent financial inclusion drive is progressing all over the country. So far, 431 districts have been identified by SLBCs for 100 per cent financial inclusion. As on March 31, 2009, 204 districts in 18 States and 5 Union Territories have reported having achieved the target.

However, the path towards 100 per cent financial inclusion faces several issues. Some of the concerns in this endeavour are as follows:

**Coverage:** India's large size and population makes it difficult for any programme at a national level to reach out to everyone. The inclusion efforts in the urban centres and metros are difficult, especially in case of migrant labourers who do not have identity particulars at their place of work. The remittance of money by these migrant workers to their home town is often dependent on informal channels.

**Infrastructure:** Poor infrastructure in many parts of the country inhibits the development process. It is important there are adequate road, rail, digital connectivity and adequate power and infrastructure facilities which are important prerequisites for operation of a banking outlet.

**Financial products:** It is imperative that products that cater to the needs of the masses are available. Simple products rather than sophisticated instruments are required at affordable cost for the people. Flexibility is an important criterion and the products and services available should be flexible.

**Delivery models:** Efforts need to be taken to identify best delivery models/ business models for financial inclusion. The typical brick and mortar bank branches may not be feasible in all villages because of viability and other reasons. Banks have to adopt/experiment with all delivery models like satellite branches, mobile branches, business correspondents/POS, and mobile telephony services. The BC model, though a facilitating concept, is yet to scale up. The Working Group appointed by the Reserve bank to review the BC model has recommended new entities that could be appointed as BCs. The BC model, coupled with Information and Communication Technologies (ICT) solutions has the potential to reach out to the hitherto unreachable.

**Technology:** Despite significant technological advancements there are issues of standardisation, inter operability and costs that inhibit smooth technology solutions. The financial services offered with the help of ICT should ideally be standardised, interoperable and cost effective. One of the major reasons for the slow progress in providing banking services in the hinterland is the high transaction costs associated with the low value large volume transactions. Technology can to a great extent reduce the cost of transactions.

**Role of financial intermediaries:** The banks are not uniformly geared up for financial inclusion. While the commercial banks have taken significant steps to facilitate inclusion, the RRBs and the cooperative banks need to gear up their efforts in this area.

**Participative efforts:** It is important that all the participative stakeholders work together to achieve the goal of financial inclusion. Banks, State Governments, technology providers, regulators and other developmental agencies need to work together in tandem to drive the efforts towards achieving total financial inclusion.



of risks faced by banks. With the advent of very large banking groups that engage in a variety of business activities, it becomes necessary for such organisations to clearly understand the dimensions of risks and their potential systemic impact. Merely managing risks individually in respect of each exposure does not suffice and it is important that they pay enough attention to aggregation of exposures across the entire organisation, *i.e.*, risks must be recognised and managed across the entire organisation.

1.48 The CFSA which made an assessment of India's financial sector in 2008 felt that the present global financial crisis has highlighted the limitations of the present Basel Core Principles in as much as the assessment does not specifically cover areas like SIVs/NBFCs or aspects like dynamic provisioning and countercyclical norms. Hence, the CFSA feels that the Basel Committee on Banking Supervision should revisit the Basel Core Principles to cover the new areas. Secondly, the CFSA notes that though BCPs are not strictly applicable to financial institutions other than commercial banks, the efforts to extend the scope of BCP assessment to other sectors are commendable in the current context of the potential linkages of such institutions and their impact on the stability of the financial system. The Reserve Bank has already been extending such principles to non-bank entities, subject to certain thresholds and the nature of their operations.

1.49 An issue which has assumed critical significance now is 'Risk Management' and its proper understanding. Banks' risks cannot be viewed at individual level in isolation all the time. It has also been argued that the emphasis on micro-prudential regulation may have contributed to the buildup of some macro risks. Collectively, systemic risk is becoming more and more prominent with the increasing complexities and the associated risk factors in the banking activities. The banks have to have a proper

understanding of all the risk factors and at the same time they have to ensure that their customers also understand and appreciate the associated risks in their operations.

1.50 One of the most critical issues in risk management is of liquidity risk management in the banks in the wake of the crisis. A situation may arise where the liquidity may dry up and the banks and the financial institutions would face severe liquidity crunch due to adverse market conditions. In this scenario, the liquidity crunch might completely wipe out the capital of the bank as well leading to its failure. Another scenario may be where plenty of liquidity in the market may fuel inflation. Therefore, there is a need to be vigilant and monitor the market conditions more vigorously.

1.51 In recent times, increase in the banks' dependence on bulk deposits to fund credit growth has assumed significance as this could have liquidity and profitability implications. An increase in growth in housing loans, real estate exposure as also infrastructure has resulted in elongation of the maturity profile of bank assets. There is growing dependence on purchased liquidity and also an increase in the illiquid component in banks' balance sheets with greater reliance on volatile liabilities, like bulk deposits to fund asset growth. Simultaneously, there has been a shortening of residual maturities, leading to a higher asset-liability mismatch. There is a need to strengthen liquidity management in this context as also to shore up the core deposit base and to keep an adequate cushion of liquid assets to meet unforeseen contingencies. What needs to be borne in mind is that while at an individual customer level, retail deposits may be volatile, but for the bank and the banking system as a whole, it provides solid foundation for the banks to fund their longer term assets like infrastructure and similar business activities. How to cultivate this aspect in the business model and risk management process is a challenge.

1.52 A related issue is that of KYC and banks' risk management practices. Sound KYC policies and procedures not only contribute to a bank's overall safety and soundness, they also protect the integrity of the banking system by reducing the likelihood of banks becoming vehicles for money laundering, terrorist financing and other unlawful activities. There are three components here. 'Knowing their customers' is not enough for banks, they should also know the 'business' of their customers; and if the banks know the business of their customers, the banks must understand and assess the risks associated with each of their customers' businesses. This is not only an integral part of elementary risk management process but it also makes a good business sense. Regulatory intervention in this area can be expected to increase in future. The implementation of KYC norms in India will have its challenges in view of massive branch networks including mobile branches of major banks, the magnitude of customer-bases, and the complexity of proof of customer identity. In the context of greater thrust of financial inclusion and penetration, specific attention will have to be paid to align the objective of KYC and financial inclusion.

### **Customer Service**

1.53 In India, the banks face a challenge of providing services to a broad range of customers, which varies from sophisticated corporates and high net worth individuals to low-end borrowers who are catered to by microfinance initiatives. Over time, a series of initiatives have been taken to improve the quality of customer service, including *inter alia*, grievance redressal through the Banking Ombudsman Scheme, and setting up Customer Service Committees at various hierarchical levels within the bank, setting up a Customer Service Department within the Reserve Bank. In spite of these initiatives, there are gaps in the implementation of guidelines which give rise to customer grievances. Going forward, there is a

need for improving the customer service by banks through measures like financial education, credit counselling and improvement in information dissemination. The recent initiative by the Reserve Bank regarding setting up of financial literacy *cum* counselling centres is a step in this direction.

1.54 Developing a database of customers is essential in view of growing demand for tailor made services. However, the confidentiality of such data needs to be ensured. The CFSA stresses the intensive and focused use of technology to leverage the customer database, and relationship pricing to tailor products and services in line with customer demands. The CFSA has also recommended that banks which fail to achieve a threshold minimum rating on customer service may be denied privileges in terms of branch licensing.

1.55 There should be a blend of regulatory and market-based solutions to delivering fairness to customers. The key issue is the balance between these two. The issue of addressing the fair treatment of customers throughout the product life-cycle comprises:

- Product design and governance;
- Identifying target markets;
- Marketing and promoting the product;
- Sales and advice processes;
- After-sales information; and
- Complaint handling.

### **Derivative Instruments and Securitisation**

1.56 Financial derivatives have extensively been used to hedge exchange rate and interest rate risks in the Indian financial markets. The derivative transaction volume exhibited fast growth in India in comparison with other countries. The CFSA notes that the spurt in off-balance sheet exposure of the commercial banks in India during the recent years is mainly on

account of derivatives. The committee has pointed out that the current accounting standards do not clearly specify how to account for loss and profit arising out of derivatives transactions. The CFSA notes that the recent subprime turmoil has highlighted the need to have a centralised netting mechanism to mitigate the risks arising from complex derivative products.

1.57 With regard to derivatives, the Reserve Bank was indicated that banks should have a suitability and appropriateness policy. The market-makers should carry out due diligence regarding 'user appropriateness' and 'suitability' of products before offering derivative products to users. Each market-maker should adopt a board-approved 'Customer Appropriateness and Suitability Policy' for the derivatives business. In this regard, CFSA notes that strict adherence to the Reserve Bank's guidelines by banks remains a concern.

1.58 While there is no disagreement that securitisation helps the banks to cut their capital requirements, the success of securitisation lies in the pooling of high quality assets and a thorough understanding of the underlying structures and standards by all the concerned parties. It may be recalled that the inappropriate implementation of securitisation, with adverse selection and moral hazard, contributed to the financial turmoil in the US. Thus, financial turmoil underlined the need to enhance prudential and disclosure requirements for derivatives in the interest of overall stability of the system.

1.59 Recently, some leading international investment banks reported to have planned securitisation of assets for restructuring portfolios of assets to achieve risk, capital and funding efficiency in a transparent and less complex way. These banks claimed that these new securitisation schemes are different from the old securitisation schemes on account of two reasons: first, the new securitisation

schemes involve the securitisation of banks' existing assets, rather than of new lending and second, the bankers argue that the new products do not disguise the transfer of risk. Further, these products will also be rated by a credit rating agency.

1.60 This reintroduction of securitisation has to be watched cautiously given the international experience with regard to the same. Some of the caveats to the new securitisation scheme include: (i) though, the banks claim that these new schemes are not for leverage, if the advantage in terms of lower requirement of capital from the securitisation process is high, it will prompt the banks to take advantage of the leverage; (ii) the banks can make use of internal information about their borrowers to their advantage while securitising the existing asset portfolio of the bank leading to the problem of adverse selection; and (iii) since the securitised assets are removed from the banks' balance sheet, the credit originating banks will no longer have the incentive to monitor these loan assets. It, thus, would raise the issue of moral hazard. The regulators need to be watchful of the invention of the new pooled asset derivatives, if they are perceived as a way to avoid regulatory capital requirements. It should be ensured that such schemes do not develop into a widespread form of capital arbitrage.

1.61 Some of the measures that have been adopted in the recent past since the London Summit in April 2009 with regard to securitisation include the removal of the shortcomings in the Basel capital framework that had earlier generated incentives for off-balance sheet securitisation for banks. Some of the weaknesses in the accounting practices that had encouraged off-balance sheet exposure have also been addressed. Apart from the measures already taken, further reforms are being thought of by the Basel Committee, which would be implemented by supervisors and regulators across countries. These include the efforts to build stronger capital buffers into the

financial system covering capital, liquidity and provisioning. Further, measures decided by the Basel Committee to strengthen the capital treatment of securitisation would be implemented in the near future with higher risk weights on securitisation and re-securitisation, and improved disclosures of securitisation exposures.

### **Interest Rate Environment**

1.62 Monetary transmission mechanism refers to the extent and speed with which changes in the central bank's policy rate are transmitted through the term structure of interest rates across markets. The impact is first transmitted to the short-term rates *viz.*, the call money rate and rates of short-term treasury bills. This impact is then transferred onto the rates having a long-term horizon, namely, long-term Government yields. It is these yields that impact the lending rates in the credit market and thereby impact economic growth through changes in savings and investment. In the Indian context, there has been striking efficacy with which policy rates have impacted money and government securities markets.

1.63 Following the deepening of the global financial crisis since September 2008, the Reserve Bank took several measures to bring down the policy rates to step up the liquidity in the system. The liquidity situation has thus turned comfortable with the call money rate remaining within or below the lower bound of the informal LAF corridor since early November 2008. However, the Government has resorted to a large fiscal stimulus during 2008-09 to revive the economy which would continue through 2009-10. Despite the Reserve Bank actively managing the liquidity in the system, the large increase in government borrowings has resulted in hardening of yields since January 2009. The major challenge that confronts the Reserve Bank in the medium-term is to manage the government borrowing programme in a non-disruptive manner. This is because the

hardening of yields would go against the spirit of low interest rate regime that the economy requires in the current situation to revive economic growth.

1.64 Taking cue from the reduction in the Reserve Bank's policy rates and the easy liquidity conditions, all public sector banks, private sector and foreign banks have reduced their deposit and lending rates. The decline in lending rates, however, has come with a lag. Interest rates offered by public sector banks on deposits of all maturities showed moderate easing after October 2008. Further, a decline could also be seen in the deposit rates of all maturities of private sector banks and foreign banks after December 2008. Benchmark Prime Lending Rate (BPLR) of public sector and private sector banks too showed a decline since October 2008. However, BPLR of foreign banks showed considerable rigidity. Further, actual lending rates on non-export credit and terms loans above Rs.2 lakh eased for public sector banks but in the case of private sector banks and foreign banks, the rates somewhat firmed up between September 2008 and December 2008 notwithstanding the fall in policy rates and inflation, and declined between December 2008 and June 2009.

1.65 Rough estimates indicate that the effective average lending rate for SCBs has declined from 12.3 per cent in March 2008 to 11.1 per cent by March 2009. The effective lending rate is expected to have declined further in the first quarter of 2009-10.

### **NPA Management**

1.66 The increase in the level of NPAs has a number of negative consequences. From the banking system's point of view, high loan loss provisions reduce net profits and tend to put pressure on the lending rates. High real lending rates discourage new and credit worthy borrowers from seeking loans from banks, with negative consequences for real economic

activity. From a macro economic policy point of view, rigidities in lending rates that result from the large stock of NPAs dampen the effectiveness of monetary policy. In addition, to the extent that the public sector banks have to be recapitalised by the government because of the credit losses, the NPAs represent a source of quasi-fiscal liabilities.

1.67 There has been a consistent decline in NPA ratios over the years. In the context of high GDP growth high as well as credit growth in the past five years, given the well known leads and lags in the relation between credit growth and NPA trends, several analysts expect the level of NPAs to increase, particularly in the context of restructuring of loans.

1.68 While it is not unusual to expect NPAs to increase in a downturn, banks are well capitalised to cushion the impact of higher NPAs. Given the increase in banks' net worth over the past ten years and steady reduction in their NPAs, capital coverage for NPAs is at a prudent level.

### **Information Technology**

1.69 Information Technology (IT) usage remains a key lever in the journey of Indian banking towards an efficient, effective, sensitive and user friendly financial system. IT and the innovations that it enables are strategic tools for enhancing the value of customer relationship. They reduce the costs of financial transactions, improve the allocation of financial resources, and increase the competitiveness and efficiency of financial institutions.

1.70 Even as the achievements of IT in the banking sector in India are impressive, there is a big agenda on the way forward. There is a need that current financial sector leaders still need to take greater advantage of new technologies and information-based systems and expand the coverage of the Indian banking and financial system. For instance, the potential of IT in

extending banking services to under-served markets in rural and semi-urban areas is enormous. The use of Smart Card technology, mobile ATMs, coverage of post offices under electronic payments networks in out-of-reach areas – all could play significant roles in providing financial services to more people and thereby serve financial inclusion.

1.71 India is experiencing an explosion in the use of mobile communication technology. And this is a development that the financial sector can exploit. Mobile phone users belong to all strata of society, spread across metropolitan centres, towns and villages. Banks can take advantage of this expanded reach of telecom if they provide services through this medium. However, the expansion of such capabilities must be accompanied by a minimum level of essential security features and continued compliance with established covenants relating to privacy of customer transactions.

1.72 The need of the hour is leveraging technology in Indian banking for providing affordable and cost-effective banking services to the masses through multi-delivery channels. The range of services offered differs from bank to bank depending mainly on the type and size of the bank. The internet banking is changing the banking industry and is having the major effects on banking relationship. The potential of IT for near future also includes:

- Enabling differentiation in customer service;
- Facilitating Customer Relationship Management (CRM) based on available information, which can be stored and retrieved from data warehouses;
- Improving asset-liability management for banks, which has a direct bearing on the profits of banks;
- Enhancing compliance with anti-money laundering regulations; and
- Complying with Basel II norms.

1.73 Computing prowess of technology has undoubtedly made business processes highly efficient in terms of speed, cost reductions and accuracy. However, the operational risks associated with this development also solicits attention. Information Security (IS), therefore, places itself ahead in priority. The search for improved solutions for managing Information Security, building robust Business Continuity Plans (BCP) and Disaster Recovery (DR) set ups and IS Audit tools needs to continue.

### **Role of Public Sector in Banking**

1.74 There are two models of ownership of banks, namely, the Anglo-Saxon model and Asian model<sup>2</sup>. The former refers to the model adopted by most of the developed countries, while the latter can be seen in some of the developing countries, such as India. Under the former model, the key decisions are taken by the top executives almost independently dictated by short-term considerations, and regulations may not be as stringent as required. As against this, countries like India have a financial system marked by substantial public sector ownership and a different incentive structure for the top executives. In this model, there is likely to be less financial innovation in the form of complex products and less incentives for risk taking. Thus, this sector is likely to be less innovative and less efficient but would be more steady. The advantage of this sector during times of crisis is the perceived sovereign backing which has been amply clear during the current crisis. While the former model came under pressure during the recent crisis, the latter model having substantial presence of public sector stood the Indian financial system in good stead. This was evident from the fact that the NPAs ratio for foreign and new private sector banks increased significantly during 2008-09 as an after-effect of the crisis, the NPA ratio declined for public

sector banks during this period and was the lowest among all bank groups (refer to Table IV.30 in Chapter IV).

1.75 Public ownership has proved out to be a source of strength rather than a weakness for the Indian banking system. While discussing the perspectives about the role of public ownership in the banking system, there are certain issues that need to be noted. First, contrary to the belief that public ownership weakens the allocative efficiency, the analytical exercises by the Reserve Bank indicate that allocative, technical and cost efficiency of the public sector banks has been much higher than the private and foreign banks in India in the recent years. Secondly, the important aspect of public ownership of financial system in India has been the key role played by banks in the pursuit of social and redistributive objectives of developmental finance, which are vital to an emerging market economy like India.

### **Structural Growth Drivers in India in the Medium Term**

1.76 Even as global financial markets face growth and asset-quality issues, Indian banks continue to offer a healthy growth trajectory with minimal balance sheet risks. In the past five years, banking sector deposits have seen healthy growth driven by a host of factors: acceleration in nominal GDP growth, rising savings rate, increasing proportion of bank deposits in total financial savings, and inflow of non-retail deposits. With most of these factors being close to their peak levels, retail deposit growth in future would depend on increased penetration of banks in semi-urban and rural areas. The levels of penetration in India are presently low, which can provide a medium-term structural growth driver for banks in India. A facilitating factor in this connection is the favourable

<sup>2</sup> Goodhart, C.A.E. (2009), 'Banks and the Public Sector Authorities', BIS Working Paper, August.

demographics, as evident from the fact that more than 30 per cent of Indians are below 15 years of age and over the next five to 10 years will enter in the “bankable population” category. The younger generation more open to consumer loans, financial products like insurance, mutual funds and wealth management, are expected to offer a much bigger revenue base for financial-service providers.

#### 4. Conclusion and Way Forward

1.77 Globally, while policy action has rightly concentrated on dealing with immediate stability concerns, a comprehensive strategy is also needed to attenuate the impact of the current recession and put the global economy back on a sustained growth trajectory. This must include productivity enhancing reforms to support growth beyond the short term. The crisis demands tough decisions now, but it must not turn attention away from other serious structural challenges. An effective and sustainable global response will require the involvement of all major players, as well as better coordination and greater coherence among the major international organisations.

1.78 In retrospect, the key success of financial sector reforms in India since they were instituted in the early 1990s has been the maintenance of financial stability through a period marked by repeated financial crises across the world. The process of reforms is noteworthy not only for the turbulence around its path but also for the sheer dimensions of the change achieved from the position where the Indian banking system started. Way forward, the need of the hour is to have financial sector reforms in a recalibrated manner while distilling the lessons of the crisis. The policy challenge is to continue to ensure financial stability in India during this period of international financial turbulence, while achieving high growth with price stability.

1.79 The agenda that is being developed for strengthening of financial sector regulation and supervision is ambitious. The Reserve Bank has taken a number of steps and intends to take further steps. Contentious issues are expected to arise both at national and at the international levels on regulatory aspects. Whereas the principles underlying this regulatory overhaul are being increasingly accepted, many challenges will arise on their practicality and modes of implementation:

- First, there is a need to ensure that regulators and supervisors remain firm in their resolve to ensure that there is no build-up of risk in the system and that the principles and framework articulated are adhered to in letter and spirit.
- Second, the interconnectedness of the institutions and markets requires central banks, banking, securities and insurance regulators to work in close coordination with full exchange of information and frequent interaction to assess the systemic risks at any point of time.
- Third, several of the countercyclical proposals are dependent on the assessment of economic and banking conditions in national jurisdictions which will determine the capital buffer requirements – these will obviously vary from one jurisdiction to another as cycles would also vary. With banks operating across the globe, this will imply that capital requirement could vary across jurisdiction – parking the transaction in a more favourable jurisdiction cannot be ruled out. Coupled with complex structures and differential tax regimes, minimising regulatory and tax arbitrage will continue to be a challenge.
- Fourth, cross border resolution issues will continue to be daunting especially as national regulators will seek to protect domestic depositors and stake holders.

- Fifth, convergence toward international accounting standards will be a challenge in terms of not only bringing in the changes in standards that are appropriate for the country but also for putting in place systems and capabilities to facilitate convergence. Issues such as putting in place prudential filters for not distributing unrealised gains would also arise.
- Sixth, while there are discernible signs of recovery in the global financial markets, the real test of the resilience of the financial system will be its performance through the exit process. For the emerging market economies such as ours, the challenge will be to manage the impact of this process of global stabilisation.
- Seventh, an additional challenge for the EMEs is that they are exposed to the volatile international capital flows necessitating suitable regulatory policies depending on the macro economic conditions for ensuring financial stability.
- Finally, for countries like India, the advantages of coming in late is that while introducing new products and instruments they can have the benefit of the global experience so that the pitfalls can be avoided while reaping the gains of innovation.