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## Report on Currency and Finance- 2006-08

### Theme: The Banking Sector in India: Emerging Issues and Challenges

The Reserve Bank of India today released its Report on Currency and Finance, 2006-08. The theme of this year's report is "**The Banking Sector in India: Emerging Issues and Challenges**". This is in continuation with the theme based Report on Currency and Finance introduced by the Reserve Bank in 1998-99. A special mention may be made of the Reports brought out in last three years, the themes of which were "**The Evolution of Monetary Policy**" in 2003-04 Report, "**The Evolution of Central Banking in India**" in 2004-05 Report and "**Development of Financial Markets and the Role of the Central Bank**" in 2005-06 Report. Along with these three Reports, this Report covers the most of the functions of the Reserve Bank.

The thrust of the Report is on delineating the various existing and emerging challenges faced by the banking sector and suggest measures to address them. The Report, wherever possible, has benchmarked the performance/practices of the Indian banking sector against the international best practices. The focus of the report is on scheduled commercial banks, although other components of the banking sector, such as urban co-operative banks, regional rural banks, have also been dealt with, wherever appropriate and where relevant data are available. Keeping in view the magnitude and coverage of this Report, this edition of the Report on Currency and Finance is for the period 2006-08 and is being issued in 2 volumes. The Volume I comprises five chapters, including a chapter on theme of the Report and Volume II includes 6 chapters, including the overall assessment. As a prelude to the theme based discussions, Chapter II titled as 'Recent Economic Developments' gives an analytical account of the macroeconomic developments of the Indian economy during 2007-08 and 2008-09 (up to the latest period for which data wherever possible). Chapter III to Chapter X dwell upon the theme based discussions.

### Theme of the Report

The banking system in India has undergone significant transformation following financial sector reforms since the early 1990s. The thrust of the banking sector reforms was on increasing operational efficiency, strengthening the prudential and supervisory norms, removing external constraints, creating competitive conditions and developing the technological and institutional infrastructure. The impact of the reform measures is reflected in an improvement in profitability, financial health, soundness and overall efficiency of the banking sector. Banks have been able to maintain or increase their capital adequacy ratio, despite the sharp increase in their risk-weighted assets.

With the entry of new private sector banks and increased presence of foreign banks, the Indian banking sector has become more competitive. Public sector banks have also been raising capital from the market and are subject to market discipline. Efficiency, productivity and soundness of the banking sector improved significantly in the post-reform phase. Banks have increasingly diversified into non-traditional activities, as a result of which several financial conglomerates have emerged. This has posed several regulatory and supervisory challenges. Thus, while deregulation has opened up new avenues for banks to augment incomes, it has also entailed greater risks. The banking sector has witnessed the emergence of new banks, new instruments, new windows, new opportunities and, along with all these, there have been new challenges.

The Report undertakes an in-depth analysis of the various aspects of Indian banking such as management of resource mobilisation; management of risk and capital, lending and investment operations of banks; financial inclusion; consolidation and competition; efficiency, productivity and soundness; and regulatory and supervisory challenges. The thrust of the Report is to critically examine the various issues and, going forward, what further needs to be done to ensure the growth of the banking sector in a way that supports/accelerates India's current growth momentum and enhances the stability of the financial system. Various measures suggested in this Report set out only the broad direction in which reforms in the banking sector could move in future. The pace and sequencing of measures would need to be calibrated keeping in view the degree of comfort in moving forward in a credible way.

## **Recent Economic Developments**

The Indian economy continued to record robust growth in 2007-08, although marginally lower than the last year. The overall growth momentum, which moderated particularly during the second half of the year, was on account of industry and services, offset partially by recovery in agriculture. On account of increased *kharif* foodgrain production, the overall foodgrain production during 2007-08 was placed at an all-time high of 230.7 million tonnes. Barring sugarcane and jute & mesta, all foodgrains and non-foodgrains were estimated to reach an all-time record production during 2007-08.

During 2008-09 so far (up to August 13, 2008), monsoon conditions have been favourable, barring the deficient/scanty rainfall in some regions. The index of industrial production (IIP) recorded year-on-year expansion of 5.2 per cent during April-June 2008 as compared with 10.3 per cent during April-June 2007. The overall deceleration in industry was mainly on account of the manufacturing and electricity sectors. Leading indicators of services sector activity for 2008-09 so far ( up to May/June) suggest acceleration in growth in respect of some indicators and deceleration in some others. The First Quarter Review of the Annual Statement on Monetary Policy for 2008-09 placed the real GDP growth at around 8.0 per cent for 2008-09.

Mirroring inflation trends in many advanced as well as emerging economies, various measures of inflation in India also hardened significantly since the beginning 2008, reflecting the impact of some pass-through of higher international crude oil prices to domestic prices and increase in the prices of iron and steel, among others. According to the First Quarter Review of Monetary Policy, the policy endeavour would be to bring down inflation to around 7 per cent by end-March 2009.

Indian financial markets remained largely orderly during 2008-09 so far. The Reserve Bank managed liquidity with a judicious mix of the available tools, *viz*, open market operations (OMO), including LAF and issuances of securities under MSS and increases in the CRR. Interest rates in the money market remained mostly within the informal corridor set by the reverse repo and repo rates. Interest rates in the collateralised segment of the money market remained below the call rate.

In the foreign exchange market, the Indian rupee generally depreciated against major currencies during 2008-09 so far as against the appreciation during 2007-08. During 2008-09 (April to July 2008), yields remained range bound in the first two months but hardened significantly during June–July 2008 due to hardening of inflation and soaring international oil prices. The Indian equity markets recovered somewhat during April-May 2008, but declined thereafter in tandem with the trends in major international equity markets.

The key deficit indicators of the Central and State Governments are budgeted to decline significantly during 2008-09. However, information on Central Government finances for April-June 2008 indicates some stress on Centre's fiscal position, particularly in the revenue account.

India's balance of payments position remained comfortable during 2007-08, notwithstanding a sharp increase in merchandise trade deficit. However, the current account deficit was contained at 1.5 per cent of GDP during the year. Significantly larger net capital inflows over the current account deficit resulted in an accretion of US \$ 110.5 billion to the foreign exchange reserves during 2007-08 (US \$ 47.6 billion during 2006-07). Trade deficit during April-June 2008-09 was higher by US \$ 8.9 billion over April-June 2007-08.

### **Evolution of Banking in India**

Banking in India has a long history and it has evolved over the years passing through various phases. The period leading up to Independence was a difficult period for Indian banks. A large number of small banks sprang up with low capital base. This period saw the two World Wars and the Great Depression of the 1930s. Many banks failed during the period. Apart from global factors, several other factors were also at play. Partly to address the problem of bank failure, the Reserve Bank of India was set up in 1935. At the time of independence, the entire banking was in the private sector. The banking scenario in the early independence phase raised three main concerns: (i) bank failures had raised concern regarding the soundness and stability of the banking sector; (ii) there was large concentration of resources in a few business families; and (iii) the share of agriculture in total bank credit was miniscule. Although the issue of bank failure was addressed, two of three major issues at the time of independence continued to raise concern even after 20 years of independence. Accordingly, with a view to aligning the banking system to the needs of planning and economic policy, the policy of social control over the banking sector was adopted in 1967, which marked the beginning of the next phase. Fourteen major banks were nationalised in 1969 and six in 1980. With this, the major segment of the banking sector came under the control of the Government. Some other social controls were also implemented such as priority sector lending targets. Massive expansion of branch network that followed improved the banking access considerably, especially in rural areas. This helped in mobilising the deposits and stepping up the overall savings rate of the economy. The share of credit to agriculture, which constituted a small portion for a long time, improved significantly by the end of this phase in 1991-92. However, the objective to provide credit at concessional rate led to the administered structure of interest rates and other micro controls. Large fiscal deficit by the Government necessitated pre-emption of resources by way of CRR and SLR. These factors and the increased focus on priority sector targets led to decline in profitability of the banking sector, high NPAs and weakening of the capital base. With a view to overcoming several weaknesses that had crept into the system over the years and with a view to creating a strong, competitive and vibrant banking system, financial sector reform were initiated in the early 1990s, which marked the beginning of the current phase.

Various reform measures resulted in an improvement in profitability, financial health, soundness and overall efficiency of the banking sector. With the entry of new private sector banks and increased presence of foreign banks, competition in the Indian banking sector also intensified. Another major achievement of this phase was the sharp increase in credit to agriculture from 2003-04 onwards; credit to agriculture had decelerated in the 1990s. Regional rural banks were also strengthened by way of restructuring to improve the rural credit delivery system. In this phase, financial inclusion emerged as a major policy objective and a significant progress was made in a short span of two years. The problem of dual control in respect of urban co-operative banks, which had impeded the effective regulation by the Reserve Bank for a long time, was overcome by a mechanism of Task Force on Urban Co-operative Banks (TAFUCB). So far 19 State Governments have signed MOU with the Reserve Bank constituting the TAFUCBs. The use of technology has improved significantly in the current phase.

### **Managing Resource Mobilisation**

The deposit growth of SCBs in the post-nationalisation period could be analysed broadly in four phases. In the first phase (1969-84) beginning immediately after nationalisation of banks in July 1969, deposit growth accelerated sharply as the rapid branch expansion that followed nationalisation enabled banks to tap savings from the rural areas. In the second phase (1985-95), deposit growth decelerated as banks faced increased competition from alternative savings instruments, especially capital market instruments (shares/debentures/units of mutual funds) and non-banking financial companies. This was the phase of disintermediation as savings instead of being deployed in bank deposits, were increasingly deployed in alternative financial instruments. Deposit growth decelerated further during the third phase (1995-2004) in the wake of competition from post office deposits and other small saving instruments, which carried significantly higher tax-adjusted returns than bank deposits. Despite deceleration, bank deposits, however, maintained their share in the savings of the household sector. However, there was a significant change in both the ownership pattern and maturity pattern during this phase. In the most recent phase (2004-08), deposit growth accelerated significantly in response to vigorous resource mobilisation efforts by banks to meet the increased demand for credit. As a result, the share of bank deposits in the financial savings of the household sector increased sharply.

Banks have a major role to play in meeting the resource requirements of India's fast growing economy. Although bank deposits have all along been the mainstay of the saving process in the Indian economy and banks have played an increasingly important role in stepping up the financial savings rate, physical savings, nevertheless, have tended to grow in tandem with the financial savings. A major challenge, thus, is to convert unproductive physical savings into financial savings. Also, in view of the shrinking share of household sector deposits in total deposits, banks need to explore ways of broadening the depositor base, especially in rural and semi-urban areas by offering customised products and features suitable to individual risk-return requirements. Furthermore, the changing demographics and employment patterns have also thrown opportunities for banks to reorient their role as financial intermediaries beyond the traditional confines of passive deposit mobilisation by providing new financial products demanded by the relatively younger age working population.

## Managing Capital and Risk

The importance of maintaining bank capital in line with the risks involved in the banking business has assumed greater significance in view of the need for maintaining the safety and soundness of the financial system. The Basel I framework was adopted in over 100 countries. However, over the years, several deficiencies of Basel I surfaced partly due to its inherent features and partly due to rapid financial innovations. The major limitation of Basel I was its 'one-size-fits-all' approach. The inadequacies of Basel I also became evident following the recent financial turmoil as it failed to capture off-balance sheet exposures. The Basel II framework, finalised in July 2006, attempts to align regulatory capital more closely with the inherent risks in banking by using enhanced risk measurement techniques and a more disciplined approach to risk management. In addition, Basel II has in place a variety of safeguards, which also have the benefit of reinforcing supervisors' objective of strengthening risk management and market discipline.

In keeping with the international best practices, India also decided to implement Basel II. Foreign banks operating in India and Indian banks having operational presence outside India have already adopted the standardised approach (SA) for credit risk and the basic indicator approach (BIA) for operational risk for computing their capital requirements with effect from March 31, 2008. All other commercial banks (excluding local area banks and regional rural banks) are expected to adopt Basel II not later than March 31, 2009. The parallel runs for these banks are in progress. A significant improvement in risk management practices, asset-liability management and corporate governance in Indian banks under regulatory pressure to adopt Basel II framework has been observed.

As banks would have to maintain capital for operational risk, overall capital requirements are expected to go up, even if there is an expected decline in the capital required on account of credit risk. Since most of the banks in India are at present operating at capital adequacy ratios higher than the prescribed level, meeting the Basel II requirements is not an issue in the immediate future. In the medium to long-term, however, banks would need to raise capital resources to keep pace with the expansion of their business. An assessment made in the Report suggests that the total capital requirements in the five years 2007-08 to 2011-12 are projected to go up by about Rs.5,70,000 crore assuming that banks maintain CRAR at 12 per cent, while the total capital requirements by public sector banks are projected to go up by about Rs.3,70,000 crore. As regards the various options available to banks, more than 85 per cent of capital requirements in the past were met by banks through internally generated resources. Apart from internal resources, banks also have headroom available to raise Tier 1 capital under innovation perpetual debt instruments (IPDI) and perpetual non-cumulative preference shares (PNCPS). In addition, some public sector banks have some headroom available to raise capital from the market and dilute the Government shareholding to 51 per cent.

While the Basel II framework, by making the capital requirements risk sensitive, would enhance the stability of the financial system, its implementation also raises several issues/challenges. India follows a three track approach with commercial banks, co-operative banks and regional rural banks having been placed at different levels of capital adequacy norms. The varying degree of stringency in capital regulation for different categories of banks raises the possibility of regulatory arbitrage. Non-Basel entities [RRBs and rural co-operative banks such as state co-operative banks (StCBs) and district central co-operative banks (DCCBs)], therefore, need to be subjected to Basel norms. Subsequently, based on the experience of implementing Basel II framework in respect of commercial banks, a view could be taken on the application of Basel II norms for other banks. The role of credit agencies is crucial under the standardised approach for measuring credit risk. Banks would have to continuously and constantly upgrade their skills,

technology and risk management practices in line with market developments. Apart from the adequate skills developed by the banks and by the Reserve Bank, the increased cost of adopting advanced approaches along with other incumbent risks and uncertainties require adequate safeguards to be put in place before these approaches are adopted. These, among others, could include prescribing the leverage ratio so that the capital held does not fall significantly. The problems relating to pro-cyclical lending behaviour, which is inherent in Basel II framework, could be countered by banks by managing regulatory capital position in such a way that they remain adequately capitalised during economic downturns so that they are not required to raise capital. Supervisors could also prescribe additional capital under Pillar 2 during a phase of business cycle expansion. The implementation of Basel II norms is likely to create tensions on home-host co-ordination issues and it would be a challenge to mitigate such tensions.

### **Lending and Investment Operations of Banks**

Credit extended by scheduled commercial banks from the early 1990s witnessed three distinct phases. Bank credit growth was erratic in the first phase (from 1990-91 to 1995-96). In the second phase (from 1996-97 to 2001-02), credit growth decelerated sharply and remained range bound due to the industrial slowdown, high level of NPAs and introduction of prudential norms, which made banks risk averse. The third phase (from 2002-03 to 2006-07) was generally marked by high credit growth attributable to several factors, including pick-up in economic growth, sharp improvement in asset quality, moderation in inflation and inflation expectations, decline in real interest rates, increase in the income levels of households and increased competition with the entry of new private sector banks.

Credit growth by scheduled commercial banks to agriculture accelerated sharply from 2003-04. As a result, the share of credit to the agricultural sector in total credit by scheduled commercial banks and credit intensity of the agricultural sector improved significantly. However, some disquieting features were also observed. First, the share of long-term loans in total credit to agriculture declined almost consistently between 1991 and 2006 – the share in 2006 was less than half of that in 1991. Second, the share of marginal farmers in direct finance to farmers in terms of amount disbursed and in total number of credit accounts held by them showed little improvement.

Although the share of credit to industry in total bank credit declined in the current decade, the credit intensity of industry increased sharply. A cross country survey suggests that the reliance of industry on the banking sector in India was far greater than that in many other countries. Credit growth to the SME sector, which slowed down significantly between 1996-97 and 2003-04, picked up sharply from 2004-05. However, the share of the SME sector in the total non-food bank credit declined almost consistently from 15.1 per cent in 1990-91 to 6.5 per cent in 2006-07. This suggests that it is the large corporates that have increased their dependence on the banking sector. The share of retail credit comprising housing loans, credit to individuals, credit cards receivables and lending for consumer durables, in total bank credit increased sharply from 6.4 per cent in 1990 to 25.4 per cent in 2007. On the whole, agriculture, large corporates and retail sector benefitted from credit expansion of recent years, while credit growth to the SME sector remained tepid until recently.

Banks' investment portfolio (other than that mandated by the minimum statutory requirement) was adjusted mainly in response to the requirement of the loan portfolio.

Notwithstanding some pick-up in credit growth to the agriculture and SME sectors in recent years, there is need for more concerted efforts to increase the flow of credit to these sectors given their significance to the economy. Creating enabling conditions, *i.e.*, providing irrigation facilities, rural roads and other infrastructure in rural areas, is necessary to augment the credit absorptive capacity. Devising products to suit the specific needs of the farmers is critical. There is also a need for comprehensive public policy on risk management in agriculture. Computerisation of land records can go a long way in smoothening the flow of credit to agriculture. Similarly the credit assessment capabilities of banks need improvement to ensure flow of credit to SMEs. There is need to increase the use of cluster based lending and credit scoring, which has proved quite effective in many countries as also in India. In view of the increased exposure of banks to infrastructure and retail credit segments, banks need to guard against exposures to attendant risks. The corporate sector needs to gradually reduce its dependence on the banking sector and move towards tapping the capital market so as to enable the banking sector to meet the growing requirements of agriculture, SMEs and other small and tiny enterprises, which are unable to tap funds from other sources.

## **Financial Inclusion**

Following a multi-pronged approach, several policy initiatives have been undertaken to promote financial inclusion in India from time to time. The available information suggests that financial inclusion improved considerably from the late 1960s to the early 1990s as reflected in expansion of formal financial services. This trend continued in the 1990s. According to the 59th round of All India Debt and Investment Survey of the NSSO, the share of number of households accessing credit from non-institutional sources increased sharply in 2002 in comparison with 1991 (the reference year of last survey). This increase was mainly due to increased indebtedness of households for consumption and similar other purposes for which finance could not be availed of easily from formal sources. As a result, the share of household indebtedness to non-institutional sources in their total indebtedness increased between 1991 and 2002 even as institutional credit to households expanded broadly at the same rate as during 1981-91. There has been significant improvement in various indicators of financial inclusion based on basic statistical return (BSR) data since the early 2000s. The number of credit accounts with all organised financial institutions (commercial banks, regional rural banks, urban co-operative banks, PACS, MFIs and SHGs)<sup>1</sup> per 100 adults improved from 18 in 2002 to 25 in 2007. Apart from credit penetration, significant improvement is also observed in deposit penetration. The number of saving accounts in all formal institutions increased to 54 per 100 persons (82 per 100 adults) in 2007 from 51 per 100 persons (80 for adults) in 1993. Around 22 per cent people in the country, who are below the poverty line, have little or no capacity to save. After excluding the people below poverty line, there are a little over 100 saving accounts per 100 adults. The data also suggest a significant strengthening of the micro-finance movement. Various data sets/sources suggest different extent of financial inclusion due to methodological/definitional differences. There is, therefore, need to exercise utmost caution while drawing any firm conclusion about the extent of financial inclusion/exclusion in India based on any single source.

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<sup>1</sup> Primary agricultural credit societies (PACS), micro-finance institutions (MFIs) and Self-Help Groups (SHGs)

While there has been a significant improvement in financial inclusion in recent years, moving ahead several challenges remain to be addressed. A proper assessment of the problem of financial exclusion is necessary. There is, therefore, a need to conduct specific survey for gathering information relating to financial inclusion/exclusion. There is need to reduce the transaction cost for which technology can be very helpful. RRBs and co-operative banks, are expected to play a greater role in financial inclusion in future. There would be need to design appropriate products tailor made to suit the requirements of the people with low income supported by financial literacy and credit counselling. There is also a need to improve the absorptive capacity of financial services by providing the basic infrastructure. Investment in human development such as health, water sanitation, and education, in particular, would be very helpful.

### **Competition and Consolidation**

There has been a significant increase in the number of bank amalgamations in India in the post-reform period. While amalgamations of banks in the pre-1999 period were primarily triggered by the weak financials of the bank being merged, in the post-1999 period, mergers occurred between healthy banks, driven by the business strategy and commercial considerations. Significantly, despite increase in the number of bank mergers and acquisitions, the Indian banking system has become less concentrated during the post-reform period. In fact, the degree of concentration in the Indian banking system, based on the concentration ratio and Hirschman-Herfindhal Index, was one of the lowest among the select countries studied for the year 2006. The level of competition declined somewhat in the initial years of reforms, but improved significantly thereafter. Based on the empirical evidence, the Indian banking industry could be characterised as a monopolistic competitive structure, as is the case with most other advanced countries and EMEs. The empirical analysis also suggests that mergers and amalgamation had a positive impact on efficiency both in terms of increase in return on assets and reduction in cost, when the transferees were public sector banks. A number of critical issues have emerged in the process of bank consolidation in India, viz., the nature and extent of further consolidation; continued government ownership of public sector banks; further opening of the banking sector to foreign banks; and combining of banking and commerce. The consolidation process in the banking sector could accelerate in future in view of several developments such as the planned review of the roadmap of foreign banks and implementation of Basel II. In the medium to long-term, the ownership pattern of public sector banks may also change. While some consolidation of the banking sector perhaps may be necessary, it would be appropriate to have in place a policy to ensure that the competition is not undermined any time in the future.

The ownership of public sector banks is not an issue from the efficiency viewpoint as public sector banks in India now are as efficient as new private and foreign banks, as revealed by the various measures. However, the operating environment for banks has been changing rapidly and banks in the changed operating environment need flexibility to respond to the evolving situation. Another issue that needs to be considered is the funding of capital requirements of public sector banks given the present floor of minimum 51 per cent on Government equity in public sector banks. In the medium term, this can become an issue hampering the growth of public sector banks if Government is not able to provide adequate capital for their expansion.



The roadmap of foreign banks is due for review in 2009. This would involve several issues. The increased presence of foreign banks, by intensifying competition, may accelerate the consolidation process that is underway. However, at the same time, this may also raise the risk of concentration if mergers/amalgamations involve large banks. The experience of some other countries also suggests that the emergence of large banks due to consolidation has resulted in reduced lending to small enterprises significantly. All these issues would need to be carefully weighed at the time of review. The policy relating to ownership of banks by commercial interests may have to take full account of international practices, given the issues relating to potential conflict of interests, increased potential of contagion effects and increased concentration.

### **Efficiency, Productivity and Soundness of the Banking Sector in India**

The efficiency and productivity of scheduled commercial banks (SCBs) in India was analysed empirically, using both the accounting and economic measures. The accounting measures (ratios, *etc.* based on balance sheet data) reveal that there has been an all-round improvement in the productivity/ efficiency of the SCBs in the post-reform period. The performance of banks, especially nationalised banks, worsened in the initial years of reforms as they took time to adjust to the new environment. However, a distinct improvement was discernable, especially beginning 2001-02. The efficiency/productivity parameters have now moved closer to the global levels. The most significant improvement has occurred in the performance of public sector banks and has converged with those of the foreign banks and new private sector banks. Intermediation cost as also the net interest margin declined across the bank groups. Despite this, however, profitability of the banking sector improved. Business per employee and per branch also increased significantly across the bank groups. The improvement of various accounting measures, however, varied across the bank groups. In terms of cost ratios (operating cost to income) foreign banks, and with regard to labour productivity, foreign and new private banks were ahead of their peer groups. In terms of net interest margins and intermediation cost, new private sector banks and public sector banks, respectively, were more efficient than the other bank groups. The cost of deposits of foreign banks was the lowest in the industry. However, this was not passed on to the borrowers, leading to higher net interest spread. The empirical exercise suggested that the operating cost was the main factor affecting the net interest margin. Non-interest income and the asset quality were the other determinants of net interest margin.

Efficiency and productivity measured by using non-parametric Data Envelopment Analysis (DEA) method corroborated the findings of the accounting measures or financial ratios. Efficiency improved across all bank groups and most of these efficiency gains emanated a few years after the reforms, *i.e.*, from 1997-98 onwards. The empirical analysis suggests that, there is no relationship between ownership and efficiency as most efficient banks relate to all the three segments, *i.e.*, public, private and foreign. In fact, the 28 least efficient banks belonged to the private and foreign bank segments. On the other hand, there exists a positive and significant relationship between size and efficiency as also between diversification and efficiency. This implied that large and diversified banks were more efficient. Various factors contributed to improved efficiency and productivity. These included technological advances, reduction in statutory pre-emptions, reduction in non-performing assets, shortening of maturity profile of deposits and lengthening of asset profile. The soundness of the Indian banking sector also improved both at the aggregate level and across bank groups as was reflected in the CRAR.

Notwithstanding significant improvement, there are several areas which need to be addressed. The intermediation cost in India, driven largely by the high operating costs, is still high by global standards. As the competition intensifies, net interest margins of banks are likely to come under pressure. Banks, therefore, need to focus on non-interest sources of income to sustain their profitability. Although overall efficiency and productivity of public sector banks improved, one area of concern is the low business per employee, which is almost one half of that of new private sector banks. Public sector banks, therefore, have to strive further to improve labour productivity and bring it on par with the new private sector banks. Similarly, there is a need for increased absorption of enhanced technological capability (innovation) by several banks to further augment productivity of the banking sector through changes in processes and improvement in human resource skills.

## **Regulatory and Supervisory Challenges in Banking**

As the financial landscape in the last few years has changed significantly, there has been rethinking on several aspects of regulatory and supervisory practices/ framework/structure among the regulators and supervisors all over the world. In some countries such as UK, supervision has been hived off from the central bank to avoid perceived conflict of interest with monetary policy. In response to blurring of distinctions among providers of financial services and emergence of financial conglomerates, a single regulator approach has been adopted in some countries. Australia has adopted objective-based regulation. Increased emphasis is being placed on market discipline to economise on scarce supervisory resources. Greater attention is also being paid to disclosures, to allow markets and counterparties to better control excessive risk-taking by acting as disciplinary agents. The fast evolving financial sector and the ever expanding rule books of the regulatory bodies have made some countries such as UK to adopt principles-based supervision.

The recent events in global financial markets in the aftermath of US subprime crisis have evoked rethinking on several regulatory and supervisory aspects of the banking industry, viz., how to cope with liquidity stresses under unusual circumstances; whether 'pro-cyclicality' of capital requirements is one of the factors with inherent tendency that escalate the impact of booms and busts. Regulation of complex products and monitoring of derivatives is becoming an important issue. Further, a question has been raised whether institutions should be allowed to become so big and so complex that their problems can have system-wide repercussions. As a fallout of these developments, the role of central bank as a lender of last resort has come into focus and the need for central banks to be in close touch with both financial markets, and banks and other financial institutions has received enhanced attention.

The Reserve Bank, like other bank supervisors, has been proactively responding to the various changes in the financial system by bringing about necessary changes in the regulatory and supervisory framework. There has been a shift in the regulatory focus from micro regulation to macro management based on prudential elements, with a view to strengthening the banking sector and providing them with greater operational flexibility. Mechanisms have also been put in place to meet challenges arising out of globalisation and liberalisation, financial innovations and technological advancements and a growing financial conglomeration. A major challenge in the years ahead would be to ensure that financial conglomerates are regulated adequately. The existing monitoring mechanism of financial conglomerates has some limitations, although an attempt is being made to take a group-wide perspective through inter-regulatory discussions and co-operation. The growing use of e-finance products poses certain risks for banks, which would require appropriate safeguards.

## **Overall Assessment**

The Report has attempted an in-depth analysis of various aspects of the banking sector in India against the backdrop of the evolution of the Indian banking sector beginning the 18th century with a focus on the post-independence period. The analysis suggests that the Indian banking sector has witnessed several structural changes from time to time. India now has a well-developed banking infrastructure, conducive regulatory environment and sound supervisory system. Banks have become efficient and sound and compare well with banks around the world. Banks in India have benefitted from the robust growth in the last few years, which enabled them to produce strong financial performance. Banks responded to the increased competition by diversifying and expanding through inorganic (acquisitions) and organic growth of existing businesses. While some of the changes were triggered by endogenous factors, some others were on account of exogenous or part of global developments. While banks have been able to cope with the changed environment, the fast evolving financial landscape would continue to pose several challenges in future.

The end result of the rapidly changing financial landscape would be increased competition, both within the banking industry and with non-banks putting pressure on margins which may impinge on profitability of banks. Banks, therefore, need to restructure on the cost side. High operating cost and diversification of activities would be some of the aspects, which banks need to focus on in the years ahead to remain competitive and profitable. The increase in the technological intensity is crucial in order to reduce the operating cost and achieve higher productivity. Though Indian banks have done exceedingly well in terms of containment of non-performing loans (NPLs), maintaining asset quality would continue to pose a constant challenge for banks.

The banking system's focus should continue to be on strengthening the safety and soundness of the banking sector so that benefits of increased competition and greater efficiency can be fully realised. It is the banks themselves, rather than the regulators or supervisors that are mainly responsible for the performance as well as their financial health. In view of growing complexity, risk measurement and risk management at the institutional level and governance practices in banks need to be on the top of the agenda. The major challenge would be to exploit the opportunities that would emerge, while managing the risks.

An important lesson emerging from the recent financial market developments is that the focus should not be on how the turmoil should be managed, but on what policies could be put in place to strengthen the financial system on a longer-term basis regardless of specific sources of disturbances. These issues point towards the challenges that lie ahead to preserve the safety and soundness of the financial system.

## **DISCLAIMER**

"The findings, views, and conclusions expressed in this Report are entirely those of the contributing staff of the Department of Economic Analysis and Policy (DEAP) and should not necessarily be interpreted as the official views of the Reserve Bank of India."

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