Indian Banking and Finance: Managing New Challenges

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Introduction

In my inaugural address last year, I had indicated a vision for Indian banking in the new millennium – that of a vibrant, internationally active banking system, drawing upon its innate strengths and comparative advantages to make India a major banking centre of the world. I had pointed out then that, while it may take up to 10 or even 15 years to achieve this vision, the time to begin was now. Recent developments have only served to bring forward the urgency attached to embarking upon this quest. Even as we do so, it is necessary to recognise that, in view of recent global developments and the economic slowdown, the progress towards this goal would call for even greater effort and determination. In this context, the theme chosen for this year's Conference *i.e.*, "Indian Banking: Paradigm Shift" is most timely as it provides an opportunity to deliberate on the new challenges ahead, and the action that we must take to manage them. I am happy to be a part of these deliberations and to deliver the inaugural address to the 23 rd Conference of Bank Economists here today.

As you are aware, global economic prospects turned sharply adverse since September 2001 following the terrorist attacks on the US. The possibilities of a recovery in the global economy have become highly uncertain, belying the initial expectations of a V-shaped recovery as well as the subsequent hopes of a U-shaped recovery. As of now, the consensus of forecasts settles around 2.4 per cent for world GDP growth for 2001. World trade volume growth could slow down to around 1.3 per cent and net capital outflows from developing countries may now be larger than anticipated earlier. Although the sharp spurt in international oil prices has abated, their future behaviour remains unclear. Macroeconomic weaknesses have also been associated with an erosion of business confidence. Insurance, airlines, tourism and hotel industries have been hit hard and the exposure of financial institutions to these industries can be a potential source of vulnerability.

Despite the relatively inward-looking nature of the Indian economy, it cannot remain insulated from these international developments. The direct effects of these external developments on our banking system are expected to be limited. Indirect effects, especially through exports and subdued industrial activity could, however, impact upon the asset quality of our banking system and other segments of the financial system. The need to constantly monitor international developments and take appropriate and often, preemptive action add an entirely new dimension to the progress of our banking system towards its longer-term vision.

We have made considerable progress in implementing banking and financial sector reforms. There is also some improvement in the financial performance of the banking system in terms of various indicators of operating efficiency. Nevertheless, there are several areas regarding the efficiency of our banking system – rather than its stability – that raise concerns, especially during a period of generalised uncertainty. The level of non-performing assets (NPAs) continues be high by international standards, preempting funds for provisioning and eating into the performance and profitability of financial intermediaries. The response to the debt recovery and asset restructuring initiatives undertaken as part of financial sector reforms has also been slow.

In the period ahead, our financial system will also have to prepare for a tightening of the prudential norms as the new Basel Accord becomes effective and a fuller response to the current financial environment emerges. Our financial institutions continue to be susceptible to financial market turbulence, especially in the equity market. Upgrading technical skills, technolog y, research and human capital, developing effective 'front-office'strategies and fortifying internal rules of governance and responsibility assumes a renewed priority in the fast changing scenario.

The face of banking, as we have known it, is also changing rapidly. India is approaching an era of financial conglomorisation and 'bundling' in the provision of financial services. Besides infusing heightened competition, there are implications for the regulatory and supervisory regime. Banks and financial institutions have to prepare for changes in the regulatory framework towards a more focussed, comprehensive and efficient environment that eschews regulatory forbearance. Legal reforms accordingly will have to ascend the hierarchy of priorities in the reform process.

Against this background, in this talk, I propose to focus on the main challenges facing Indian banking, such as, the role of financial intermediation in different phases of the business cycle, the emerging compulsions of the new prudential norms, and benchmarking the Indian financial system against international standards and best practices. I will also say a few words about the changing context of regulation and supervision of the financial system in India, the need for introducing new technology in the banking and financial system, and the importance of strengthening skills and intellectual capital formation in the banking industry.

Recent Macroeconomic Developments and the Banking System

For a greater part of the twentieth century, the role of the financial system was perceived as mobilising the massive resource requirements for growth. Since the 1970s and 1980s, development economics underwent a paradigm shift. The financial system is no longer viewed as a passive mobiliser of funds. Efficiency in financial intermediation *i.e.*, the ability of financial institutions to intermediate between savers and investors, to set economic prices for capital and to allocate resources among competing demands is now emphasised. Developments in endogenous growth theory since the late 1980s indicate that efficiency in financial intermediation is a source of technical progress to be exploited for generating increasing returns and sustaining high growth. These changes have provided the rationale for many developing countries to undertake wide-ranging reforms of their financial systems so as to prepare them for their true resource allocation function. As important financial intermediaries, banks have a special role to play in this new dispensation.

The sharp downturn in global macroeconomic prospects and the continuing sluggishness in domestic industrial activity have necessitated a revision in the forecast for India's real GDP growth in 2001-02 from 6.0-6.5 per cent expected at the time of the April 2001 Monetary and Credit Policy Statement to 5.0-6.0 per cent in the mid-term review of the policy. The downward revision is primarily predicated on the outlook for the industrial sector which grew by barely 2.2 per cent in April-October 2001 as against 5.9 per cent in the corresponding period of last year, mainly on account of the slowdown in manufacturing and mining and quarrying. Capital goods production declined by as much as 6.6 per cent and several sectors recorded a slow down in growth rate or an absolute decline. On the other hand, agriculture sector, supported by reasonable monsoon, recorded a rebound in growth. The *kharif* output is expected to cross a new peak of 105.6 million tonnes and prospects for the *rabi* crop are also good. On the external front, merchandise exports increased marginally by 0.5 per cent in the first eight months of 2001-02. While oil imports fell by 13.4 per cent, the non-oil imports showed an increase of 8.4 per cent. Despite a moderate widening of the trade deficit, continuing buoyancy in net invisible receipts has kept the current account deficit very low. According to available data, net capital flows are also likely to be of a higher order than in the preceding year. Foreign exchange reserves rose to US $ 48.0 billion as on December 28, 2001 recording an accretion of the order of the US $ 5.8 billion over the end-March 2001 level.

In the context of the recent deceleration in the economy the intermediation role assumes even greater relevance. Banks and financial institutions should endeavour to play a ‘supply-leading’ rather than ‘demand-following’role in initiating the upturn by energising the financial intermediation process. By virtue of a bird’s eye view of the economy and their superior credit assessment of the investment proposals and the efficiency of capital, banks should endeavour to economise on ‘search’costs in identifying and nurturing growth impulses in the commodity and service producing sectors of the economy.

In the recent period, monetary policy in India has also moved into a counter-cyclical stance signalled by cuts in key interest rates and cash reserve requirements. At the same time, market operations have ensured adequate liquidity to support the revival of aggregate demand with a clear preference for softening of interest rates within the overall institutional constraints on the interest rate regime. Inflation has been steadily falling and this has had a positive impact on inflation expectations, along with the underlying resilience of the macroeconomic fundamentals of the Indian economy. The 50 basis point reduction in the Bank Rate and the 200 basis point reduction in the CRR, announced recently, are expected to significantly enhance the lendable resources of the banking system.

The current situation of comfortable liquidity provides an opportunity for banks to transform idle liquidity into investible resources for growth. The easy interest rate environment would make it possible for banks to price in’ ‘ projects which would have earlier remained unfunded due to inherently lower returns to capital or due to lack of access to prime lending rates. This will, however, require reassessment of portfolios and internal liquidity constraints, even adjustments in risk profiles and risk management. The deceleration in the industrial growth scenario, of course, opens up the moral hazard of adverse selection and the possibilities of large-scale contamination of portfolios. In a situation of generalised slowdown, unviable projects can look potentially bankable given the scarcity of investment avenues.

Nevertheless, the possibilities for financial intermediation in the current situation are too varied and challenging to ignore. There is no systematic evidence that financial sector reforms by themselves and without supportive policies in other areas, can contribute to a revival of the economy; yet this is a time when the responsibility on the financial system to contribute to the process of economic revival is greater than before. Periods of downturn in economic activity also provide opportunities for banks to undertake consolidation and strengthening. There is a strong complementarity between financial stability and macroeconomic stability. The interests of both are served by a stable and resilient financial system.

In recent years, various measures have been taken to improve the functioning of different segments of the financial markets and thereby, to improve the operational effectiveness of monetary policy. The Liquidity Adjustment Facility (LAF), which was introduced in June 2000 has emerged as an effective and flexible instrument for managing liquidity on a day-to-day basis. In the second stage of the LAF, which commenced from May 2001, variable rate repo auctions replaced the collateralised lending facility and Level I support to primary dealers. Standing facilities were rationalised and a back-stop facility was introduced at variable market-related rates. Concurrently, LAF operating procedures were recast to improve operational flexibility and complementary measures were undertaken to improve the functioning of money and government securities market segments and to facilitate their orderly integration.

In order to enable the call money market to evolve into a pure inter-bank market, lending by non-banks was reduced to 85 per cent of their average daily call lending in 2000-01 from May 2001. The minimum maturity for wholesale term deposits of Rs.15 lakh and above has been reduced to 7 days from the earlier minimum maturity of 15 days. The maintenance of daily minimum cash reserve requirements has been lowered to 50 per cent from 65 per cent for the first seven days of the reporting fortnight. Interest paid on eligible balances under CRR has been raised to the level of the Bank Rate from November 3, 2001. The market has responded positively with an appreciable rise in turnover and a decline in volatility.

Several measures have also been taken to improve the functioning of the government securities market. 14-day and 182-day Treasury Bills were withdrawn and the notified amounts of

91-day Treasury Bills has been simultaneously increased. A Negotiated Dealing System (NDS) is being introduced to facilitate electronic bidding and to disseminate information on trades on a real-time basis. For this purpose, the Reserve Bank has begun the automation of its public debt offices. An important step is the setting up of the Clearing Corporation of India Ltd. (CCIL) to act as counterparty in all trades involving government securities, Treasury Bills, repos and foreign exchange. The entire system will operate in a networked environment and INdian FInancial NETwork (INFINET) will provide the backbone for communication.

Prudential Norms

A strong and resilient financial system and the orderly evolution of financial markets are key prerequisites for financial stability and economic progress. In keeping with the vision of an internationally competitive and sound banking system, deepening and broadening of prudential norms to the best internationally recognised standards have been the core of our approach to financial sector reforms. This has been supported concurrently by heightened market discipline, pro-active and comprehensive supervision of the financial system and the orderly development of financial market segments. The calibration of the convergence with international standards is conditioned by the specific realities of our situation; however, the New Capital Accord of the Basel Committee on Banking Supervision which was released in January 2001 adds urgency to the process of convergence. It is against the backdrop of these exigencies that prudential norms are being constantly monitored and refined. In the recent period, banks are being encouraged to build risk-weighted components of their subsidiaries into their own balance sheets and to assign additional capital. Risk weights are being constantly refined to take into recognition additional sources of risk. The concept of ‘past due’in the identification of NPAs has been dispensed with. Banks and financial institutions are being urged to prepare to move to the international practice of the ‘90 day norm’in the classification of assets as non-performing by 2003-04.

The new Basel Accord, as contained in the second Consultative Paper on Capital Adequacy of the Basel Committee on Banking Supervision released in January 2001 is in response to the perceived rigidities in the 1988 Accord’s capital requirements, the scope for capital arbitrage and the increased sophistication in the measurement and management of risk. The new Accord rests on three mutually reinforcing pillars*i.e.*, minimum capital requirements, processes of supervisory review and market discipline. Under the first pillar, the current definition of capital and the minimum requirement of 8 per cent of capital to risk weighted assets is retained. Capital requirements would be extended on a consolidated basis to holding companies of banking groups.

The primary emphasis of the new Accord is on improving the measurement of risk. The process of measurement of market risk is maintained. Three alternatives for calculating credit risk capital requirements are proposed to be made available to banks, depending on the complexity of their business and the quality of their risk management operations. The ‘standardised approach’which can be employed by less complex banks remains conceptually the same as in the 1988 norms; however, it expands the scale of risk weights and uses external credit ratings to categorise credits. Banks with more advanced risk management capabilities can employ an internal ratings based (IRB) approach – foundation’ ‘ and advanced’ ‘ variants are proposed on a progression scale – in which banks may categorise exposures into multiple credit ratings of their approved internal rating systems. The internally estimated probability of default, the maturity of exposure and the credit type *i.e.*, corporate or retail, will determine risk weights. There is a new explicit capital charge proposed on operational risk.

The processes of supervisory review contained in the second pillar emphasise the need for banks to develop sound internal procedures to assess the adequacy of capital based on a thorough evaluation of its risk profile and control environment, and to set commensurate targets for capital. The internal processes would be subject to supervisory evaluation, review and intervention, when appropriate. The third pillar aims at bolstering market discipline through enhanced disclosure by banks. Disclosure requirements are set out in several areas under the new Accord, including the way in which banks calculate their capital adequacy and their risk assessment methods.

The Basel Committee on Banking Supervision has received more than 250 comments on the January 2001 proposals. The Committee is expected to release a fully specified proposal, based on these comments, in early 2002 and to finalise the Accord during 2002. An implementation date of 2005 is envisaged. The Reserve Bank forwarded its comments to the

Basel committee in May 2001. It has supported flexibility, discretion to national supervisors and a phased approach in implementing the Accord. The Accord could initially apply to internationally active – banks with over 15 per cent of their business in cross-border transactions, as proposed by the Reserve Bank – and significant banks whose domestic market share exceeds 1 per cent – with a simplified standardised approach to be evolved for other banks. Material limits on cross-holdings of capital and eschewing of direct responsibility on external credit rating agencies in the assessment of bank assets have also been proposed by the Reserve Bank. It has also expressed its preference for external credit rating agencies that publicly disclose risk scores, rating processes and methodologies.

The new accord, when implemented, is likely to have significant implications for the banking system as a whole. Besides requiring increased capital, it attaches urgency to the development of efficient and comprehensive internal systems for assessment and management of risks, setting up and adhering to adequate internal exposure limits and improving internal control generally. The guidelines for risk management and asset-liability management provided by the Reserve Bank serve as a useful foundation for building more sophisticated control systems. The feedback received from few banks indicates the need for substantial upgradation of existing management information systems, risk management practices and technical skills. Capital allocation is also expected to be more risk sensitive and, therefore, banks and financial institutions will have to plan in advance so that there are no disruptions in the capital structure. Further sophistication in risk management and control mechanisms will have to evolve as experience with preferential risk-weighting and sensitivity to external ratings is accumulated.

A key requirement when the new Accord, after further modification, becomes operational is that of high quality human resources to cope with and adapt to the new environment. Enhancing technical skills and abilities to handle new technologies and new risks, exploiting information flows to price them in, and developing foresight in anticipating changing risk-return relationships will become essential.

Market Discipline

Processes of transparency and market disclosure of critical information describing the risk profile, capital structure and capital adequacy are assuming increasing importance in the emerging environment. Besides making banks more accountable and responsive to better-informed investors, these processes enable banks to strike the right balance between risks and rewards and to improve the access to markets. Improvements in market discipline also call for greater coordination between banks and regulators.

India has been a participant in the international initiatives to ensure improved processes of market discipline that are being worked out in several fora, such as, the multilateral organisations, the BIS, the Financial Stability Forum, and the Core Principles Liaison Group. Concurrent efforts are underway to refine and upgrade financial information monitoring and flow, data dissemination and data warehousing.

Banks are currently required to disclose in their balance sheets information on maturity profiles of assets and liabilities, lending to sensitive sectors, movements in NPAs, besides providing information on capital, provisions, shareholdings of the government, value of investments in India and abroad, and other operating and profitability indicators. Financial institutions are also required to meet these disclosure norms. Banks also have to disclose their total investments made in equity shares, units of mutual funds, bonds and debentures, and aggregate advances against shares in their notes to balance sheets.

From this year onwards, notes to banks' balance sheets will disclose the movement of provisions against NPAs as well as those held towards depreciation on investments. Guidelines relating to non-SLR investments through the private placement route mandate the disclosure of information on issuer composition and non-performing investments in a similar manner. Efforts have been made to identify and monitor early warning indicators of financial crises. The overall approach is to combine the use of micro-prudential indicators with macro-economic indicators in order to develop a set of aggregate macro-prudential indicators. This brings about a mix between bottom-up and top-down assessment. As the methodology gets refined and the indicators are stress-tested for predictive power, financial stability surveillance will be significantly improved. This process will involve greater transparency and objectivity in the disclosure practices of banks.

Efforts have also been made to set up a Credit Information Bureau to collect and share information on borrowers and improve the credit appraisal of banks and financial institutions within the ambit of the existing legislation. The Bureau has been incorporated by the State Bank of India in collaboration with Housing Development Finance Corporation (HDFC) and foreign technology partners. Collection and sharing of some items of information have already been initiated. Efforts are also going into the collection and sharing of information on private placement of debt under the Bureau so that there is greater transparency in such trades. The possibility of collecting and disseminating information on suit-filed accounts by the Bureau (in place of the Reserve Bank) is being explored by a Working Group constituted for this purpose with representation from across the financial system. The Group will also examine the prospects of on-line supply of information and the processing of queries. A draft legislation covering various aspects of information sharing, including issues relating to rights, responsibilities, and privacy has been prepared, which would considerably strengthen the functioning of the Bureau when it is enacted.

Benchmarking the Indian Banking System by International Standards

The impetus given to the strengthening of domestic financial systems and the international financial architecture by the Asian crisis has gathered momentum in recent years. An important development in this regard has been the move to set up universally acceptable standards and codes for benchmarking domestic financial systems. Moreover, multilateral assessments of country performance are increasingly focusing on observance of standards. The IMF’s Article IV consultations, its Financial Sector Stability Assessment and the Reports on Observance of Standards and Codes of the IMF and the World Bank are indicative of the fact that a country’s adherence to benchmark standards and codes is being considered integral to the preservation of international monetary and financial stability. While the process has begun with the predominant involvement of governments and regulators, the search for standards and codes is progressively encompassing the private sector with consideration of issues relating to market discipline, corporate governance, insolvency procedures and credit rights.

It is important to recognise that new standards and codes are not being regarded as final goals but as instruments or enabling conditions for enhancing efficiency in financial intermediation while ensuring financial stability. There are three levels at which action is necessary, *viz.*, legal, policy and procedures, and market practices by participants. In several areas, fundamental changes in the legal and institutional infrastructure are pre-requisites. Since these changes can impinge upon the socio-cultural as well as politico-economic ethos, appropriate adoption and some prioritisation in implementation are unavoidable.

We have made some noteworthy progress in generating a constructive debate on the applicability of international standards and codes to the Indian financial system. Participative consultation has been supported by internal self-assessments as well as external assessment. In several areas, the issues are of a technical nature. Accordingly, the Standing Committee on International Standards and Codes, set up in December 1999, constituted ten Advisory Groups comprising eminent experts, generally non-official, to bring objectivity and experience into studying the applicability of relevant international codes and standards to each area of competence.

The Advisory Groups have submitted their reports. They have set out a roadmap for implementation of appropriate standard and codes in the light of existing levels of compliance, the cross-country experience, and the existing legal and institutional infrastructure. The Advisory Group on Banking Supervision has assessed the Indian banking system *vis-à-vis* the principles of the Basel Committee on Banking Supervision. It has found the level of compliance to be generally of a high order. The Advisory Group on Bankruptcy Laws has, *inter alia*, recommended a comprehensive bankruptcy code incorporating various aspects including cross-border insolvency and the repeal of the Sick Industrial Companies Act. The Advisory Group on Corporate Governance has made recommendations relating to rules and responsibilities of boards and has advised amendments to the Companies Act.

The Advisory Group on Data Dissemination has found that India’s data dissemination compares favourably with many other countries and has proposed the compilation of forward-looking indicators. The Advisory Group on Fiscal Transparency is of the view that current fiscal practices meet the IMF's Code of Good Practices on Fiscal Transparency. It has recommended amplifying the scope of fiscal responsibility legislation in order to include the essential elements of a budget law. The Advisory Group on Insurance regulation has recommended flexible minimum capital requirements depending on the class of business. With regard to actuarial and solvency issues, the Group has found the Indian standards to be at par with international norms. The Advisory Group on International Accounting and Auditing Standards has set out an agenda for the future for convergence in auditing and accounting practices. It has recommended a single standard setting authority and the need for convergence of corporate and tax laws.

The Advisory Group on Transparency in Monetary and Financial Policies has recommended inflation as the single mandated objective for the central bank and necessary autonomy to fulfill the mandate. It has also made recommendations on the operating procedures of monetary policy. The Advisory Group on Payments and Settlement has recommended legal reforms to empower the Reserve Bank to supervise the payment and settlement system, application of the Lamfalussy standards to deferred net settlement (DNS) and introduction of Real Time Gross Settlement (RTGS). It has also recommended the setting up of the Clearing Corporation and a separate guarantee fund for foreign exchange clearing. The Advisory Group on Securities Market Regulation has compared India against the International Organisation of Securities Commissions (IOSCO) principles and emphasised the need to strengthen inter-regulator cooperation.

Thus, in India, we have made considerable progress in the identification of international standards and codes in relevant areas, expert assessment regarding their applicability, including comparator country evaluation and building up possible course of action for the future. The next step is to sensitise all concerned – policy makers, regulators and market participants – to the issues involved and to seek the widest possible debate on issues as well as expert assessments with a view to generating a broad consensus on implementation of a universally recognised set of codes and standards.

Universal Banking

Since the early 1990s, banking systems worldwide have been going through a rapid transformation. Mergers, amalgamations and acquisitions have been undertaken on a large scale in order to gain size and to focus more sharply on competitive strengths. This consolidation has produced financial conglomerates that are expected to maximise economies of scale and scope by 'bundling'the production of financial services. The general trend has been towards downstream universal banking where banks have undertaken traditionally non-banking activities such as investment banking, insurance, mortgage financing, securitisation, and particularly, insurance. Upstream linkages, where non-banks undertake banking business, are also on the increase. The global experience can be segregated into broadly three models. There is the Swedish or Hong Kong type model in which the banking corporate engages in in-house activities associated with banking. In Germany and the UK, certain types of activities are required to be carried out by separate subsidiaries. In the US type model, there is a holding company structure and separately capitalised subsidiaries.

In India, the first impulses for a more diversified financial intermediation were witnessed in the 1980s and 1990s when banks were allowed to undertake leasing, investment banking, mutual funds, factoring, hire-purchase activities through separate subsidiaries. By the mid-1990s, all restrictions on project financing were removed and banks were allowed to undertake several activities in-house. In the recent period, the focus is on Development Financial Institutions (DFIs), which have been allowed to set up banking subsidiaries and to enter the insurance business along with banks. DFIs were also allowed to undertake working capital financing and to raise short-term funds within limits. It was the Narasimha m Committee II Report (1998) which suggested that the DFIs should convert themselves into banks or non-bank financial companies, and this conversion was endorsed by the Khan Working Group (1998). The Reserve Bank’s Discussion Paper (1999) and the feedback thereon indicated the desirability of universal banking from the point of view of efficiency of resource use, but it also emphasised the need to take into account factors such as the status of reforms, the state of preparedness of the institutions, and a viable transition path while moving in the desired direction.

Accordingly, the mid-term review of monetary and credit policy, October 1999 and the annual policy statements of April 2000 and April 2001 enunciated the broad approach to universal banking and the Reserve Bank’s circular of April 2001 set out the operational and regulatory aspects of conversion of DFIs into universal banks. The need to proceed with planning and foresight is necessary for several reasons. The move towards universal banking would not provide a panacea for the endemic weaknesses of a DFI or its liquidity and solvency problems and/or operational difficulties arising from undercapitalisation, non-performing assets, and asset liability mismatches, *etc*. The overriding consideration should be the objectives and strategic interests of the financial institution concerned in the context of meeting the varied needs of customers, subject to normal prudential norms applicable to banks. From the point of view of the regulatory framework, the movement towards universal banking should entrench stability of the financial system, preserve the safety of public deposits, improve efficiency in financial intermediation, ensure healthy competition, and impart transparent and equitable regulation.

Issues in Supervision and Regulation

Progressive strengthening, deepening and refinement of the regulatory and supervisory system for the financial sector have been important elements of financial sector reforms. In the long run, it is the supervision and regulation function that is critical in safeguarding financial stability. There is also some evidence that proactive and effective supervision contributes to the efficiency of financial intermediation. Financial sector supervision is expected to become increasingly risk-based and concerned with validating systems rather than setting them. This will entail procedures for sound internal evaluation of risk for banks. As mentioned earlier, bank managements will have to develop internal capital assessment processes in accordance with their risk profile and control environment. These internal processes would then be subjected to review and supervisory intervention if necessary. The emphasis will be on evaluating the quality of risk management and the adequacy of risk containment. In such an environment, credibility assigned by markets to risk disclosures will hold only if they are validated by supervisors. Thus effective and appropriate supervision is critical for the effectiveness of capital requirements and market discipline.

In certain areas, as for instance, in the urban cooperative banking segment, the regulatory requirements leave considerable scope for regulatory arbitrage and even circumvention. The problem is rendered more complex by the existence of regulatory overlap between the Central Government, the State Governments and the Reserve Bank. Regulatory overlap has impeded the speed of regulatory response to emerging problems. The need for removing multiple regulatory jurisdiction over the cooperative banking sector has been reiterated on several occasions. In this regard, the Reserve Bank has proposed the setting up of an apex supervisory body for urban cooperative banks under the control of a high-level supervisory board consisting of representatives of the Central Governments, the State Governments, the Reserve Bank and experts. The apex body is expected to ensure compliance with prudential requirements and also supervise on-site inspections and off-site surveillance.

Recent developments in certain segments of the financial sector have also brought to the fore issues relating to corporate governance in banks. As part of on-going reforms, boards have been given greater autonomy to prescribe internal control guidelines, risk management and procedures for market discipline and accountability. It is extremely important that greater vigilance over adherence to these norms goes hand-in-hand with greater autonomy. Recent evidence of transgression of prudential guidelines by a few banks has raised the issue of the audit and supervisory functions of boards. As we move towards a more deregulated financial regime, these functions have to be transferred from either the Government or the Reserve Bank to bank boards. This imposes a greater responsibility and accountability on the bank management. It is in this context that a consultative group of directors of select banks and other experts has been set up to recommend measures to strengthen the internal supervisory role of boards. The objective is to obtain a feedback on how boards function *vis-à-vis* compliance with prudential norms, transparency and disclosure, functioning of the audit committee, *etc*., and to devise effective mechanisms for ensuring management discipline.

Several other initiatives in improving the supervisory function have been undertaken, including a prudential supervisory reporting system for financial institutions, improvements in procedures for financial inspection, sensitising the general public for better regulation of the activities of NBFCs and enactment of appropriate legislation to protect depositor interests in some States. Major legal reforms have been initiated in areas such as security laws, the Negotiable Instruments Act, bank frauds and the regulatory framework of banking. The Reserve Bank has also accepted the principle of transfer of ownership to the Government in respect of some financial institutions in view of the conflict of interest that may arise in the conduct of its supervisory function. It is expected that these initiatives will pave the way for an efficient, and risk-based supervisory environment in India.

Technology in Banking

Nobel Laureate Robert Solow had once remarked that computers are seen everywhere excepting in productivity statistics. More recent developments have shown how far this state of affairs has changed. Innovation in technology and worldwide revolution in information and communication technology (ICT) have emerged as dynamic sources of productivity growth. The relationship between IT and banking is fundamentally symbiotic. In the banking sector, IT can reduce costs, increase volumes, and facilitate customised products; similarly, IT requires banking and financial services to facilitate its growth. As far as the banking system is concerned, the payment system is perhaps the most important mechanism through which such interactive dynamics gets manifested.

Recognising the importance of payments and settlement systems in the economy, we have embarked on technology based solutions for the improvement of the payment and settlement system infrastructure, coupled with the introduction of new payment products such as the computerised settlement of clearing transactions, use of Magnetic Ink Character Recognition (MICR) technology for cheque clearing which currently accounts for 65 per cent of the value of cheques processed in the country, the computerisation of Government Accounts and Currency Chest transactions, operationalisation of Delivery *versus* Payment (D*v*P) for Government securities transactions.

Two-way inter-city cheque collection and imaging have been operationalised at the four metros. The coverage of Electronic Clearing Service (Debit and Credit) has been significantly expanded to encourage non-paper based funds movement and develop the provision of a centralised facility for effecting payments. The scheme for Electronic Funds Transfer operated by the Reserve Bank has been significantly augmented and is now available across thirteen major cities. The scheme, which was originally intended for small value transactions, is processing high value (up to Rs.2 crore) from October 1, 2001. The Centralised Funds Management System (CFMS), which would enable banks to obtain consolidated account-wise and centre-wise positions of their balances with all 17 offices of the Deposits Accounts Departments of the Reserve Bank has begun to be implemented in a phased manner from November 2001.

A holistic approach has been adopted towards designing and development of a modern, robust, efficient, secure and integrated payment and settlement system taking into account certain aspects relating to potential risks, legal framework and the impact on the operational framework of monetary policy. The approach to the modernisation of the payment and settlement system in India has been three-pronged: (a) consolidation, (b) development, and (c) integration. The consolidation of the existing payment systems revolves around strengthening Computerised Cheque clearing, expanding the reach of Electronic Clearing Services and Electronic Funds Transfer by providing for systems with the latest levels of technology. The critical elements in the developmental strategy are the opening of new clearing houses, interconnection of clearing houses through the INFINET; optimising the deployment of resources by banks through Real Time Gross Settlement System (RTGS), Centralised Funds Management System (CFMS); Negotiated Dealing System (NDS) and the Structured Financial Messaging Solution (SFMS). While integration of the various payment products with the systems of individual banks is the thrust area, it requires a high degree of standardisation within a bank and seamless interfaces across banks.

The setting up of the apex-level National Payments Council in May 1999 and the operationalisation of the INFINET by the Institute for Development and Research in

Banking Technology (IDRBT), Hyderabad have been some important developments in the direction of providing a communication network for the exclusive use of banks and financial institutions. Membership in the INFINET has been opened up to all banks in addition to those in the public sector. At the base of all inter-bank message transfers using the INFINET is the Structured Financial Messaging System (SFMS). It would serve as a secure communication carrier with templates for intra- and inter-bank messages in fixed message formats that will facilitatestraight ‘ through processing’. All inter-bank transactions would be stored and switched at the central hub at Hyderabad while intra-bank messages will be switched and stored by the bank gateway. Security features of the SFMS would match international standards.

In order to maximise the benefits of such efforts, banks have to take pro-active measures to : **?** further strengthen their infrastructure in respect of standardisation, high levels of security and communication and networking; **?** achieve inter-branch connectivity early; **?** popularise the usage of the scheme of electronic funds transfer (EFT); and **?** institute arrangements for an RTGS environment online with a view to integrating into a secure and consolidated payment system.

Information technology has immense untapped potential in banking. Strengthening of information technology in banks could improve the effectiveness of asset-liability management in banks. Building up of a related data-base on a real time basis would enhance the forecasting of liquidity greatly even at the branch level. This could contribute to enhancing the risk management capabilities of banks.

Human Resource Development in Banking

A recurring theme in the annual BECON Conference has been the need to focus on developing human resources to cope with the rapidly changing scenario. The core function of HRD in the banking industry is to facilitate performance improvement, measured not only in terms of financial indicators of operational efficiency but also in terms of the quality of financial services provided. Factors such as skills, attitudes and knowledge of personnel play a critical role in determining the competitiveness of the financial sector. The quality of human resources indicates the ability of banks to deliver value to customers. Capital and technology are replicable, but not human capital which needs to be viewed as a valuable resource for the achievement of competitive advantage. The primary emphasis needs to be on integrating human resource management (HRM) strategies with the business strategy. HRM strategies include managing change, creating commitment, achieving flexibility and improving teamwork. These processes underlie the complementary processes that represent the overt aspects of HRM, such as recruitment, placement, performance management, reward management, and employee relations. A forward looking approach would involve moving towards self-assessment of competency and developmental needs as a part of a continuous learning cycle.

The Indian banking industry has been an important driving force behind the nation’s economic development. The emerging environment poses both opportunities and threats, in particular, to the public sector banks. How well these are met will mainly depend on the extent to which the banks leverage their primary assets *i.e.*, human resources in the context of the changing economic and business environment. It is obvious that the public sector banks' hierarchical structure, which gives preference to seniority over performance, is not the best environment for attracting the best talent from among the young in a competitive environment. A radical transformation of the existing personnel structure in public sector banks is unlikely to be practical, at least in the foreseeable future. However, certain improvements can be made in the recruitment practices as well as in on-the-job training and redeployment of those who are already employed. There are several institutions in the country which cater exclusively to the needs of human resource development in the banking industry. It is worthwhile to consider broad-basing the courses conducted in these institutions among other higher-level educational institutions so that specialisation in the area of banking and financial services becomes an option in higher education curriculums. In the area of information technology, Indian professionals are world leaders and building synergies between the IT and banking industries will sharpen the competitive edge of our banks.

The changing environment, the forces of globalisation and liberalisation and the advances in information and communication technology have major HR implications for the Reserve Bank as well. Financial products are becoming increasingly complex and diverse, while the markets in which they trade get progressively deregulated. The need to adopt global best practices in financial sector regulation and supervision, and adapt them to the domestic environment, places a premium on the skills and expertise of the Bank's human resources. Again, the functioning and policies of public institutions, such as the Reserve Bank, are increasingly subject to public discussion and debate. This calls for greater transparency, more effective communication, and a high degree of professionalism in the Bank's staff. This warrants continuous upgradation of human resource management strategies with a view to enhancing the level of knowledge, sharpening skills and also to instill the necessary attitudes and work culture. The Reserve Bank is now devoting considerable attention to these areas at the entry level as well as at different levels of career development of its staff.

The Role of Economists

In my inaugural address to BECON, 2000 I had discussed the crucial role of bank economists in transforming the banking system in India. Economists have to be more 'mainstreamed'within the operational structure of commercial banks. Apart from the traditional functioning of macro-scanning, the inter-linkages between treasuries, dealing rooms and trading rooms of banks need to be viewed not only with the day-to-day needs of operational necessity, but also with analytical content and policy foresight.

Today, operational aspects of the functioning of banks are attracting intensive research by professional economists. In particular, measuring and modeling different kinds of risks faced by banks, the behaviour of risk-return relationships associated with different portfolio mixes and the impact of fluctuations in financial markets on the financial performance of banks are areas which lend themselves to analytical and empirical appraisal by economists and econometricians. The y, in turn, are discovering the degrees of freedom and room for analytical maneuver in high frequency information generated by the day-to-day functioning of banks. It is vital that we develop an environment where these synergies are nurtured so as to serve the longer-term strategic interests of banks. Even in real time trading and portfolio decisions, the fundamental analysis of economists provides an independent assessment of market behaviour, reinforcing technical analysis.

A serious limitation of the applicability of standard economic analysis to banking relates to the inadequacies of the data-base. Absence of long time series data storage in the banking industry often poses serious problems to the quest for the formal analytical relationships between variables. Even if such data exist, the presence of structural breaks may blur meaningful analysis based on traditional formulation. Economists need to think innovatively to overcome this problem. Use of panel regression, non-parametric methods and multivariate analysis could go a long way in understanding and validating behaviourial relationships in banking.

Another important challenge for the economics profession is to develop proper models for measurement of various risks in Indian conditions. This is a necessity in view of the move towards risk-based supervision. Quantification of operational risks and calibration of Value at Risk (VaR) models pose major computational challenge to bankers and policy makers alike, particularly in India. A major difficulty lies in identifying the right statistical model that determines the underlying distribution suited to the particular category of operational loss, and building the necessary database for deriving operationally meaningful conclusions.

In my inaugural address last year, I had also emphasised the need for bank economists to come out of their narrow specialisation and address operational issues relating to banking and finance. In order to make a meaningful contribution to banking, economists must have the experience of working in operational areas of banks. For this purpose, economists need to 'soil their hands'in dealing rooms, treasuries and investment units, credit authorisation and loan recovery, strategic management groups and management information systems of the banks to understand the ground realities. There are also 'economies'to be gained from field-level credit appraisal, asset recovery, debt restructuring, market and consumer behaviour in which banks are involved. Thus, the profession needs to amalgamate the objectivity and theoretical soundness of economics with the functional dimensions of banking and finance. It is this combination of specialist training with operational experience, which is going to make the economics profession relevant to the changing face of banking in India.

Conclusion

How close are we to the vision of a sound and well-functioning banking system that I outlined a year ago? It is fair to say that despite a turbulent year and many challenges, we have made some progress towards this goal. There has been progressive intensification of financial sector reforms, and the financial sector as a whole is more sensitised than before to the need for internal strength and effective management as well as to the overall concerns for financial stability. At the same time, in view of greater disclosure and tougher prudential norms, the weaknesses in our financial system are more apparent than before.

There is greater awareness now of the need to prepare the banking system for the technical and capital requirements of the emerging prudential regime and a greater focus on core strengths and niche strategies. We have also made some progress in assessing our financial system against international best practices and in benchmarking the future directions of progress. Several contemplated changes in the surrounding legal and institutional environment have been proposed for legislation.

Nevertheless, several sources of vulnerability persist. The NPA levels remain too large by international standards and concerns relating to management and supervision within the ambit of corporate governance are being tested during the period of downturn of economic activity. There is also a sense that we have a lot to acquire and adapt in terms of the technical expertise necessary to measure and manage risks better. The structure of the financial system is changing and supervisory and regulatory regimes are experiencing the strains of accommodating these changes. Certain weak links in the decentralised banking and non-bank financial sectors have also come to notice. In a fundamental sense, regulators and supervisors are under the greatest pressures of change and bear the larger responsibility for the future. For both the regulators and the regulated, eternal vigilance is the price of growth with financial stability.

We should strive to move towards realising our vision of an efficient and sound banking system of international standards with redoubled vigour. Our greatest asset in this endeavour is the fund of technical and scientific human capital formation available in the country. The themes which are being covered in this Conference under structural, operational and governance issues should help in defining the road map for the future. Once again, I commend the choice of the theme for BECON 2001, and wish you success in your deliberations.

Address delivered by Shri Bimal Jalan, Governor, Reserve Bank of India at the Twenty-third Bank Economists' Conference at Kolkata, on January 14, 2002. He is thankful to Dr. Michael Debabrata Patra and Shri Partha Ray of the Reserve Bank of India for their help in the preparation of this address.