

Strengthening Indian Banking and Finance: Progress and Prospects*

The Bank Economists' Conference has become an important annual event for constructive interactions and informed debate on the state of our financial system. The theme chosen for this year, "Indian Banking: Managing Transformation", provides an excellent opportunity to reflect on the ground that has been covered in transforming Indian banking into a vibrant, sound and a well-functioning system, and to chart out a plan for the future. I am happy to be here with you again to deliver the inaugural address to the 24th Conference of Bank Economists.

As I have emphasised during our earlier interactions, there are several elements that must come together in order to make the Indian banking system stronger, efficient and low-cost. These 'fundamentals' include:

- ? strengthening of prudential norms and market discipline;
- ? adoption of international benchmarks as appropriate to our situation;
- ? management of organisational change and consolidation within the financial system;
- ? upgradation of the technological infrastructure of the financial system, and
- ? human resource development as the catalyst of the transformation.

We have made some progress in each of these areas; yet some concerns persist regarding the pace and quality of our progress. Macroeconomic and financial conditions around us are also changing swiftly, posing new challenges and lending urgency to accelerating our efforts towards our vision. In my address today, I propose to take stock of the ground covered in each of the areas that I have outlined. I hope this will help to shed some light on the road ahead.

II. Recent Macroeconomic and Financial Developments

The global financial markets have weakened significantly since end-March 2002, reflecting a downward revision in profit forecasts and concerns about the sustainability of the recovery. Corporate sector distress and auditing and accounting irregularities in June and early July 2002 severely undermined investor confidence and deepened the slump in equity markets. Negative sentiment spilled over into the corporate bond market, reflected in a sharp rise in interest rate spreads; and portfolio changes indicate a continuing flight to quality and safety. International banking activity experienced a slowdown, affected by subdued demand for credit and consolidation of off-shore lending. Adjustments are underway between the major currencies, driven by the decline in equity markets and the realignment of the US dollar. Emerging markets have also witnessed turbulence, largely due to country-specific factors, including concerns about debt dynamics and political uncertainties.

The current phase of the banking cycle appears to be driven by the downturn in economic activity rather than financial distress. Significantly, the largest financial institutions are among those affected by credit concerns. The slowdown in the demand for financing has been aggravated by a deterioration in the quality of portfolios on the assets side and the consequent tightening of lending norms. All this has rendered the short-term outlook uncertain. The silver lining in the otherwise sombre global macroeconomic and financial

situation has been Asia. Emerging Asia has been experiencing a stronger than expected recovery. Although equity markets have exhibited a decline, most countries of the region have retained access to international capital markets and international bank lending.

The Indian economy has recently been exhibiting signs of staying ahead of global activity. Some signs of cyclical recovery are currently evident, although border tensions, a relatively weak and uneven monsoon and concerns relating to the fiscal position are downside risks restraining a fuller surge of growth. Real GDP in agriculture could decline by about 1.5 per cent for the year as a whole, reflecting mainly the anticipated shortfall in foodgrains production. Industrial performance in the first half of the year appears to have shrugged off the sluggishness experienced in the preceding year. All constituent sectors of industry have recorded improvement in growth, led by manufacturing. Significantly, the production of the infrastructure industries and capital goods growth has also revived. Export growth has turned out to be robust in the first half of the year. Non-oil imports have risen over last year's level suggesting that the slackening of domestic demand seems to be flattening out. Given these lead indicators, real GDP growth of 5.0 to 5.5 per cent during 2002-03 appears feasible. Inflation, measured as year-on-year variations in the wholesale price index (WPI), has been hovering around 3.0 per cent in recent weeks. The range of inflation indicators has shifted down to 2.3-3.9 per cent from 3.0-6.3 per cent a year ago. Nevertheless, the inflation outlook is uncertain with international oil prices volatile with perceptions of war risk, and with domestic oilseeds and edible oil prices rising. For the year as a whole, inflation is expected to remain within 4.0 per cent in the current year.

The financial system is also providing clear indications of a pick up in activity. There has been improvement in the growth of non-food bank credit reflecting a better outlook for industrial growth. There has been an increase in the credit disbursed to the housing sector and industries like coal, iron and steel, textiles, fertiliser, drugs and pharmaceuticals, cement, construction, petroleum, computer software, automobiles, gems and jewellery and power. The increase in credit demand is not, however, evenly spread. The investment of scheduled commercial banks in non-SLR instruments has shown a distinct improvement from a comparatively negligible level last year. Money supply (M_3) has been tracking real output developments and inflation conditions with a continuing preference for safety reflected in the appetite for bank deposits.

Although various segments of the Indian financial markets have remained relatively unaffected by international financial developments, equity markets have moved down along with global equity markets. On the other hand, the strength of capital flows has resulted in a modest appreciation of the exchange rate of the rupee *vis-a-vis* the US dollar. First quarter balance of payments data indicate that the current account remains in surplus as in the preceding year. The foreign exchange reserves have risen to a level of US \$ 67 billion, currently the seventh largest in the world. Under these conditions, the stance of monetary policy, reiterated recently in the Statement on the mid-term review of monetary and credit policy on October 29, 2002, is provision of adequate liquidity to meet credit growth and support investment demand, consistent with price stability; to continue the soft interest rate stance and greater flexibility in the interest rate structure over the medium term. The policy stance was signalled through 25 basis points cuts each in the Bank Rate and the repo rate. Monetary policy also renewed its commitment to

monitoring conditions in the foreign exchange market with watchfulness as well as flexibility.

Financial intermediation is not just a mirror of the real economy; it is also a derivative. Around us, the prolonged global slowdown is increasingly reflected in heightened risk aversion in international financial markets. Fortunately for us in India, we seem to be breaking out early from the synchronised global downturn. Our banks, financial institutions and financial markets have responded encouragingly to the impulses for growth, reinforcing the virtuous aspects of the movement between real and financial activity. It is vital that we take advantage of this early lead and seize the opportunities for financial intermediation in the recovery phase of the business cycle.

III. Strengthening the Financial System

Strengthening of the financial sector and improving the functioning of financial markets can be described as the core principles of financial sector reforms in India. The central plank is a set of prudential norms that are aimed at imparting strength to banks and financial institutions, and inducing greater accountability and market discipline. These norms include not only capital adequacy, asset classification and provisioning but also accounting standards, exposure and disclosure norms and guidelines for investment, risk management and asset-liability management. Our approach has been to benchmark our norms against international standards.

By the end of March 2002, 25 out of 27 public sector banks had risk weighted capital adequacy ratios above the prescribed minimum of 9 per cent with 23 in excess of 10 per cent. Strategies are being worked out to turn around the two weak public sector banks including recapitalisation. Capital adequacy has improved significantly in other segments too *i.e.*, financial institutions in the regulatory domain of the Reserve Bank (except for IFCI), non-bank financial companies (NBFCs) and other segments of the banking industry except for cooperative banks. Banks have been making equity offerings and issuances of subordinated debt for inclusion under tier-II capital under transparent and non-discretionary guidelines. A cumulative amount of capital of Rs.867 crore has been returned by public sector banks to the Government.

Capital adequacy in banks and financial institutions has become a matter of considerable international attention, particularly after the Asian crisis. The draft of a new Capital Accord, proposed for implementation in 2006, envisages increased risk sensitivity of capital ratios, refinement of measures of credit risk including a greater role for external credit rating, flexibility and national discretion rather than a one-size-fits-all approach. The Reserve Bank's position has been that the new Accord should focus primarily on complex and internationally active banks while national choices of methodologies for assigning risk weights on capital ratios be accommodated within its framework. India is also engaging in collaborative studies to assess the potential impact of the new Accord.

Banks are being prepared for tightening of the norms for asset classification with convergence to international standards by March 2005. The 90-day norm for recognition of loan impairment will come into operation from 2004-05 and this is now applicable for all segments of the financial system. Phased provisioning and charging of interest on monthly rests are seen as immediate steps in the preparation.

Exposure norms in respect of single/group borrowers have been set up to limit the credit risk in banks' portfolios and are linked to capital. Additional disclosures have been prescribed in notes to accounts of balance sheets. Asset liability management systems are being constantly refined with tolerance levels prescribed on all time bands for liquidity/interest rate sensitivity mismatches. There has been considerable progress in the implementation of risk management systems although there is a need for substantial upgradation of management information systems, preparation of contingency plans and stress testing. Internal systems need to be developed further for quantifying and monitoring operational risk.

A major drag on financial sector reforms in India is the slow progress in the management of non-performing assets (NPA). Although net NPAs have undergone a steady decline since 1992-93, they are still high by the international standard of about 2 per cent. The cumulative provisions against loan losses at 43 per cent of gross NPAs is also extremely low by international standards. From the regulator's perspective, NPA management involves four steps *i.e.*, assessment, provisioning, recovery and prevention. A menu approach is adopted in India which involves intensification of recovery with ongoing tightening of norms for assessment and provisioning.

Settlement advisory committees were introduced in 1999 to provide a simplified non-discretionary and non-discriminatory mechanism to deal with the stock or 'overhang' of NPAs especially in the small sector. The effectiveness of debt recovery tribunals was enhanced through the amendment of relevant legislation in 2000. In the recent period, there has been a substantial increase in the number of cases disposed of by these tribunals. In 2001, a corporate debt restructuring mechanism as prevalent in the UK and South East Asian countries was finalised for restructuring debts of viable corporate entities. Lok Adalats have proved to be an effective institution for settlement of similar dues. The Union Budget for 2002-03 announced the setting up of a pilot Asset Reconstruction Company with the participation of banks, financial institutions and multilateral agencies. The new Credit Information Bureau will provide an institutional mechanism for sharing of information on borrowers.

A recent landmark development which should have a long term favourable impact in reducing the level of NPAs is the passage of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act. It lays out the conditions to be satisfied for the establishment of securitisation or reconstruction companies, the terms for acquisition of financial assets by these companies, enforcement of security interest, dispute settlement procedures, prudential norms, offences and penalties. The Act empowers banks and financial institutions with appropriate legal authority to speed up the recovery of the stock of impaired assets through a one-time cleaning of balance sheets. This is expected to improve their financial health and functioning considerably.

Efforts have been simultaneously undertaken to broaden and deepen the various segments of the financial market spectrum. The call money market is emerging as a pure inter-bank market and activity is rising in the repo market for non-banks. The development of money market segments has gone hand in hand with rationalisation of standing liquidity facilities at the Reserve Bank. In the gilt market, there is greater transparency, new

instruments have been introduced, and there is a progressive widening of the investor base. With the operationalisation of the Negotiated Dealing System, price and trade information is available on a near real time basis. The Clearing Corporation of India has also launched net foreign exchange clearing in India on a guaranteed settlement basis. These developments bring us closer to our goal of transforming our financial system into a resilient and competitive structure with market participants operating in different segments of the financial markets catering to varying classes of financial assets and liabilities.

IV. Transparency and Market Discipline

There is now a wider appreciation that high quality financial reporting – described as the ‘cornerstone of market discipline’ - is essential for the efficiency and stability of the financial system. Structural changes underway in the financial system have only served to raise the premium on market disclosure. Globalisation has brought with it stringent quality criteria as the emphasis is increasingly on comparability of information. Pillar III in the revised Basel Capital Accord is the most recent example. Financial innovations have made the interpretation of disclosures more difficult, testing severely existing measurement techniques. At the same time, availability of information is vital since it is the basis on which perceptions and expectations are formed, which ultimately drive markets and even business cycles.

Information conveyed by the balance sheet, income and cash flow statements is the bread and butter of traditional accounting. Risk information is supplied primarily through supplementary risk disclosures. Both are important for an efficient allocation of resources and financial discipline. We have been intensifying ongoing efforts to make the balance sheet and profit and loss accounts of banks more reflective of their true financial health. From March, 2003 banks would be required to conform to Accounting Standards issued by the Institute of Chartered Accountants of India. Banks are also required to make additional disclosures in notes to accounts on risk features such as movement in provisions held towards non-performing assets and depreciation of investments, capital market exposures and loans subject to corporate debt restructuring. These requirements are applicable to financial institutions as well. In the April, 2002 Monetary and Credit Policy Statement banks have been required to announce the maximum spread over their prime lending rates (PLR) along with their PLR announcements, the minimum and maximum rates charged to borrowers, deposit rates, the effective annualised return to the depositor and processing and service charges. These disclosures serve the interests of customers, besides fostering healthy competition among banks. The Reserve Bank, too, is expanding its disclosure to the markets, even while setting for itself exacting standards of quality and timeliness. A recent example is the release of daily cumulative balances held by banks with the Reserve Bank, over and above its daily, weekly, monthly and less frequent disclosure of information and analysis of a wide array of macroeconomic and financial variables.

In India, credit-related information in the banking sector is confidential in nature and lenders are bound by the secrecy embodied in the present legal framework. The Credit Information Bureau is intended to economise on the production costs associated with the supply of financial information for a potential clientele comprising 101 banks, 22 non-banking finance companies and 30 housing finance companies in India, as well as a large

number of co-operative banks and other regional credit grantors. The Bureau expects to provide more effectively organised information and to circumvent the constraint of limited infrastructure of some of the participants in the financial system. The Bureau is expected to launch commercial operations in the first quarter of 2003.

The content of information is important and perhaps the most difficult to address in the context of financial sector reforms. The key challenge is to close the gap between *economic* and *accounting* valuations. The prevailing mixture of historical cost and mark-to-market accounting is unsatisfactory. For traded assets and liabilities, marking to market is suitable. For non-traded instruments, imputing valuations in a verifiable manner is a major challenge. Since September 30, 2000 in line with international best practice, banks are required to classify their investment portfolios into 'held to maturity', 'available for sale' and 'held for trading' categories, the first being in the nature of permanent investments at historical valuation, not exceeding 25 per cent of total investments, but the latter two categories being marked-to-market at yearly and monthly intervals (or even more frequently), respectively.

Banks are being encouraged to set up Investment Fluctuation Reserve (IFR) accounts as part of prudent policies for utilising the gains from sale of investments in securities in the current benign interest rate regime so that they are adequately protected against any reversal of the interest rate environment. Realised gains from sale of securities can be transferred to these IFRs, which vary between 5 and 10 per cent of bank portfolios and qualify for inclusion in tier II capital. Unrealised gains should not be taken to the income account or to the IFR.

As regards the reliability of disclosure, the choice is narrowing down world wide to rule-based versus principle-based standards. Undoubtedly, principles need to be given added content before they can be applied effectively and enforced. The growing complexity of financial innovations is defeating the sustainable application of detailed rules: they can be circumvented through creative accounting. It is for this reason that a decisive preference is emerging for principle-based disclosure. There is also a distinct shift in the approach of the Reserve Bank, for instance, with circulars and instructions being replaced rapidly by guidelines, guidance notes, illustrations of conformity nuances and extensive consultations with banks on recommendations of relevant working groups before they are implemented. Indeed, similar considerations are pushing prudential authorities away from quantitative rules towards qualitative supervisory oversight in recent years.

V. Structural Changes in the Banking System

Financial systems worldwide are undergoing structural transformation. Technological innovation, deregulation of financial services at the national level, external financial liberalisation, and organisational changes in the corporate world are some of the global factors driving the transformation. Banking and finance in emerging economies is also caught up in this change. In these economies, in addition to global developments, country-specific factors are motivating the structural shifts. Consequently, two separate directions of reform are evident. There is an expansion of the financial system due to vacation of policy interventions in entry, exit and operations, the application of new advances in information technology and in general, a greater emphasis on competition and market-based outcomes. Almost contemporaneously, there is a strong drive towards

consolidation in a quest for exploiting core competitiveness and for developing “niche” strategies.

In India, the primary force for transformation was structural reforms launched in the aftermath of the balance of payments crisis of 1990-91. It was recognised that a vibrant, resilient and competitive financial sector is vital for sustaining the reform process in the real sectors of the economy. Significantly, financial sector reforms in India were pre-emptive and proactive rather than a result of banking crises, as has been the experience of several emerging economies. Secondly, the momentum of change in the financial system has been the motivation for upgrading the technological infrastructure in Indian banking and finance rather than the other way round. In that sense, the Indian financial system has been a late entrant in the expressway created by the information and communication technology revolution. Thirdly, competitive pressure – a major force of change worldwide – has been reforms-driven rather than a driver of the transformation. Finally, a large measure of the impetus for change has come from reforms in the regulatory and supervisory regime and the aspiration to apply international best practices to the country-specific situation.

The role of the public sector banks has come under close scrutiny in the recent period. It is necessary to recognise that these banks have played a critical role in the development of the Indian economy in the period 1969-90, particularly in the spread of banking and monetisation of the economy, the mobilisation of savings and their allocation by plan priorities. For all economies in the early and intermediate stages of development, credit markets face a persistent excess demand, reflecting the existing resource constraints. Moreover, market processes can well exclude the genuine credit needs of the weaker sections of society which do not have the competitive strength to bid for funds in the market for bank credit. Public ownership in Indian banking was intended to address both concerns *i.e.*, the rationing of credit in the face of excess demand not cleared by the market, and the channelling of bank credit flow to the economically disadvantaged sections of society. Over the period 1970-90, a massive expansion of bank branches occurred, and credit allocations ensured some equity in the distribution of bank credit.

At the same time, however, there was erosion in the financial health of public sector banks and deterioration in the quality of customer service. Within the ambit of financial sector reforms therefore, the focus since the early 1990s has been on the viability, efficiency and competitiveness of banks and financial institutions. Liberalisation and deregulation has to go hand in hand with a greater emphasis on consolidation, productivity, asset quality and profitability. There is also an urgent need for Government to divest substantial shareholding to the public, so that these banks can respond effectively to changing market conditions. Under the present circumstances, improvement in the cost structure of the banks and work culture are important priorities.

In order to enable the public sector banks to deal with the new capital requirements as per international guidelines, recapitalisation was initiated in 1993, aggregating Rs. 20,446 crore by the end of the 1990s. The Verma Committee’s recommendation that recapitalisation of ‘weak’ public sector banks be accompanied by conditionality relating to managerial and operational aspects of the banks’ functioning was endorsed in the Union Budget, 2000-01. Accordingly, in 2001-02, a sum of Rs.1,300 crore was provided to one of the weak nationalised banks. Two of the weak banks have already turned

around and are reporting profits and a capital adequacy ratio of 9 per cent. The last one is also going through a turnaround. Recapitalisation is associated with a monitorable reform programme and operational restructuring to ensure that flow problems in a bank's performance are dealt with.

Mergers have reflected efforts to reap economies of scale and scope through joint production of financial services and one-stop delivery wherever synergies in service supply can be exploited to lower costs of production. In general, these mergers have come about as a result of government efforts to restructure inefficient national financial systems. Market-driven consolidation is a relatively new phenomenon in these countries. A critical issue in almost all emerging economies is a reassessment of the ownership of the State in the financial system and a redefinition of the role of State-owned banks and financial institutions. The changing structure of the banking and financial systems in emerging economies has implications for systemic stability and the supervisory regime.

A major structural change in our financial system is the infusion of competition. The enabling conditions for a more competitive environment initially took the form of shifts in the policy regime. Statutory pre-emptions were progressively lowered, interest rates were deregulated and restrictions on entry and exit were eased. Financial markets were developed to enable financial intermediaries to deal in assets and liabilities of varying maturities and risk profiles. Activity restrictions were eased and banks can now undertake various types of activities reserved earlier for development financial institutions. Likewise, the term-lending financial institutions have been allowed to undertake working capital financing. Elements of this growing convergence have determined the pace and sequencing of the approach to universal banking in the recent years.

Within the banking system, there is heightened competition with the introduction of new generation private sector banks. In January 2001, revised guidelines were issued for entry of new banks in the private sector. Despite the preponderant share of domestic banks in banking activity in India, foreign banks have been a source of competition, at least potentially, given their use of sophisticated technology, risk monitoring analysis and exposure management. In recent years, the policy thrust has been to level the playing field for domestic and foreign banks. For example, foreign banks that were earlier allowed to operate only branches but not subsidiaries, are now free to choose to set up either branches or subsidiaries under common banking regulations including lending norms. Appropriate legislative changes are also under consideration of the Government. Foreign direct investment up to 49 per cent has been allowed in private sector banks and up to 20 per cent in nationalised banks. Guidelines have been issued for the entry of banks into insurance business either as joint venture participants or to take up strategic investment for providing infrastructure and services support without any contingent liability.

VI. Issues in Supervision and Regulation

Recent international financial developments have underscored the critical role of the regulatory and supervisory function in ensuring the health and stability of the financial system. There is now a worldwide debate on how to strengthen financial regulation even further, including proactively, to contend with the dangers posed by creative accounting practices, even as the depressed state of economic activity exerts conflicting pulls on the

extent of supervisory rigour. At the same time, the impact of technological advancement, financial liberalisation and the degree of integration between domestic and international financial markets has rendered the conduct of oversight of the financial system a highly complex task.

Regulatory and supervisory authorities need to be regarded as providing a range of services to the community. This includes the establishment of specific rules of behaviour for participants in the financial system, monitoring the observance of the rules, and general supervision of the behaviour of financial entities. Unlike other services, however, these are not supplied through market processes but laid down by the regulator after necessary consultations. The primary need for regulation arises from the fact that consumers of financial services are not in a position to evaluate the soundness and safety of financial entities since even the most stringent laws regarding enforceability of contracts cannot protect for post-contract-signing behaviour. Therefore, the rationale for financial regulation lies in the economic costs imposed on society by the external effects of financial market failure which can threaten systemic stability. There is also a potential for gridlocks in the financial system due to adverse selection and moral hazard problems. At the same time, substantial benefits can accrue from correction of market imperfections, reduced transaction costs, and in general, providing people with a financial system they can trust.

In India, progressive strengthening of the regulatory and supervisory framework has been a key element of financial sector reforms since their inception. There has been progress in achieving international best practices in banking supervision and this has been noted even in external audits conducted by the IMF. Within the process of convergence with the best practices, fine-tuning is undertaken keeping in view the country-specific circumstances. An example of this is the approach being evolved towards consolidated supervision and the compliance of banks with accounting standards.

In recent years, there has been a shift in emphasis from micro-regulation to macro-management, supported by a tightening of prudential norms and improvements in the functioning of financial markets. A clearer definition of the regulatory role of the Reserve Bank is also being considered within the broader debate on the conflict of interest between ownership and regulation. The supervisory strategy of the Board for Financial Supervision, which is entrusted with the supervision of banks, all-India financial institutions, non-bank financial companies and systemically important institutions, consists of combining a restructured system of on-site inspection with off-site surveillance, enhancing the role of external auditors and strengthening corporate governance, internal controls and audit procedures. Under the OSMOS system, monthly returns provide information on exposure to sensitive sectors, market risks and macro-prudential early warning indicators. Banks need to prepare for switching to risk-based supervision by 2003 by identifying information gaps in the compilation of risk profiles and training to personnel. The supervisory follow-up process will then involve a monitorable action plan including remedial actions and timely corrective steps.

Banks are being encouraged to improve the reliability and robustness of their risk management, management information and supervisory reporting systems. A scheme of prompt corrective action based on early warning triggers is being developed as a supervisory tool. Rule-based actions would be delineated not only for shortfall in capital,

but also for other indicators of incipient weakness. Trigger points would be set for three parameters – capital, non-performing assets, return on assets – and for each trigger a set of mandatory and discretionary prompt corrective actions would be laid down. In addition to macro-prudential indicators of financial vulnerability being reviewed in India, financial soundness indicators have been proposed for monitoring the health and soundness of financial institutions and markets. The Reserve Bank and the Government have initiated a wide range of legal reforms to enable the regulatory and supervisory regime to keep pace with advancements in information and communication technology. The envisaged reforms relate to electronic cheques, cheque truncation, securitisation and reconstruction of financial assets, the payment system and money laundering. With regard to the cooperative banking sector, the Reserve Bank has proposed that there is need for an apex supervisory body to deal with the existing regulatory overlap among multiple agencies. In respect of the financial institutions, the Reserve Bank has been in favour of divesting all or part of its holdings to mitigate the conflict of interest that could potentially arise in regulating the entities.

Regulation is largely perceived to be free or costless and as such, tends to be over-demanded by the public and over-supplied by the regulator. However, regulation involves a range of costs which are ultimately reflected in the price of financial intermediation. In fact, the focus in the current debate is whether regulation should be imposed externally through prescriptive and detailed rules or alternatively, by the regulator creating incentive compatible contracts that reward appropriate behaviour. The main responsibility for risk management and compliant behaviour has to be placed on the management of financial institutions. In the ultimate reckoning, it is necessary to recognise that there are distinct limits to what regulation and supervision can achieve. In particular, it does not provide a fool-proof of assured contract of safety and does not absolve either management or consumers of their responsibilities.

VII. Corporate Governance

The recent spate of interlocked occurrences of corporate distress and accounting irregularities, including financial restatements by mega corporates in the United States have severely undermined investor confidence and pulled global financial markets into the steepest declines since September 11, 2001. It is increasingly recognised that the health of corporate entities has societal implications and that high ethical standards are necessary to ensure their accountability to society. In particular, it has become vital to set up firewalls against what has come to be termed as aggressive accounting practices that ultimately compromise the stake of shareholders in the corporate entity. Today, corporate governance means much more than the conduct of business in accordance with shareholders' desires, a statement attributed to Nobel laureate Milton Friedman. It has come to encompass systems by which business corporations are directed and controlled and thus takes into account not just the interests of shareholders but others who have a stake in the well-being of the corporate enterprise. 'Doing everything better' is how corporate governance is defined today. It covers in its ambit risk assessment and providing for risk cover, early warning systems against failure as well as prompt corrective action. Good corporate governance encompasses appropriate checks and balances through external and internal audits and accounting, clear division of responsibility, both horizontal and vertical, disclosure and transparency. While there are

several models of corporate governance, the choice essentially is between the 'outsider' model of the US and the UK which entails separation of ownership and management, and the insider model of Europe and Asia, where a small group of interconnected shareholders exercise control over management. Public sector banks in India are a prototype of the outsider model while private sector banks, non-bank finance companies are more in the insider model tradition. Most Indian companies follow insider models of governance.

The public interest in corporate governance dates back to the late 1970s when, in the aftermath of the Watergate scandal, legislation specifically mandating the establishment, maintenance and review of systems of internal control, was passed in the US. Subsequently in 1985, the Savings and Loan crisis led to the formation of the Treadway Commission. Throughout the 1980s, there was a clear recognition that the existing legal infrastructure was inadequate to deal with corporate failures due to poor business practices. The Cadbury Committee's code of best practices in the UK in 1991, the Combined Code of the London Stock Exchange, The Blue Ribbon Committee of the US, the OECD's Code of 1998, the joint efforts of the World Bank and the OECD to develop benchmarks in corporate governance that qualify as best practices under the standards and codes identified by the Financial Stability Forum are all reflections of the debate that has dominated the last twenty years.

Several forces have been driving the debate *i.e.*, deregulation and financial liberalisation, systemic implications of certain failures of corporate governance and the fear of contagion, to name a few. The Sarbanes-Oxley Act, signed into law in the US in July 2002, represents a response to the series of accounting irregularities in the US. It recognises the importance of sound information for improving the allocative efficiency of markets. The Act emphasises timely and reliable public disclosure of financial statements and changes in ownership of shares due to trading activity, independence of audit committees and obligations, strengthening of criminal penalties and addressing of conflict of interest by security analysts. These elements are expected to make for far reaching changes in the management of corporate entities.

As I mentioned earlier, variants of the two dominant models of corporate governance exist in India with important differences from the US, Europe or Asia. While the outsider model may appear intuitively appealing, country-specific factors have to be taken into account. For instance, although there is separation of ownership and management in public sector banks and financial institutions, there are weak checks and balances. The Chief Executive Officer (CEO) as well as the Board is appointed by the owner *i.e.*, the Government. As such, the Board itself has no role in continuation or otherwise of the CEO irrespective of performance. Further, the fact that staff issues are outside the purview of management also limits the role of the Board substantially.

There has been considerable thinking on corporate governance issues in India too. The Kumaramangalam Birla Committee appointed by the SEBI in 1999 framed codes of disclosure for corporates. The R. H. Patil Advisory Group on Corporate Governance made important recommendations regarding the responsibilities of boards to stake/share holders, selection procedures for appointment of directors, oversight of corporate governance practices, amendment of the Companies Act for enforcing good governance, to name a few. The M. S. Verma Advisory Group on Banking Supervision advocated

uniform quality of corporate governance, irrespective of ownership. It recommended clear lines of responsibility and accountability for boards as well as for senior management throughout the organisation. The Consultative Group of Directors of Banks/ FIs under Dr A. S. Ganguly, Member of the Board for Financial Supervision has made recommendations to strengthen the supervisory role of the boards of banks. The Group has also focused on the role and responsibilities of directors.

In view of the sweeping changes taking place in the environment in which the financial system operates, corporate governance has never been more important than now. As emphasised earlier, corporate governance relates not merely to the individual firms or banks, but to the stability of the entire financial structure. The approach should be to have in place the best standards of governance as early as possible. In many areas, we have made progress in setting out what needs to be done. It is important now to put in place implementation and enforcement mechanisms, early warning systems and prompt corrective action strategies.

VIII. Technology, Payment and Settlement system

The information technology revolution has brought about a fundamental transformation ushering in, as Alvin Toffler describes it, the fourth wave. Perhaps no other sector has been affected by advances in technology as much as banking and finance. It has become the most important factor for dealing with the intensifying competition and the rapid proliferation of financial innovations. It has enabled, in general, raising the efficiency of financial intermediation in the face of ever-rising volumes of transactions, falling margins and more empowered customer expectations. In particular, there are four or five key areas in which the financial system has experienced the benefits of the technology revolution: product development, market infrastructure, risk control and market reach. The interaction of technology with globalisation has contributed to the expansion of financial markets beyond national borders, heralding the end of geography. In the process, technology has changed the contours of three major functions of financial intermediaries: access to liquidity, transformation of assets and monitoring of risks.

The Indian financial system is quickly adapting itself to these developments and is acquiring a customer-centric focus. The proliferation of Automated Teller Machines (ATMs), networking of these ATMs and Shared Payment Network based ATMs is a feature that has been welcomed by the banking public. Other innovations already within the domain of banks and financial systems in India include Internet Banking, Electronic Funds Transfer and 'Anywhere/ Anytime Banking', all of which have a high level of technology embedded in the systems offering these services. Many of the older banks are migrating towards the implementation of Core Banking or Clustered Solutions which would contribute significantly towards increasing customer satisfaction. In all this, business process re-engineering becomes an essential concomitant to ensure best results in technology upgradation.

In recent years, the Reserve Bank has assigned priority to the upgradation of technological infrastructure in the Indian financial system. Efforts have been made to modernise clearing and payment through MICR based cheque clearing, Electronic Clearing Services and Funds Transfer (ECS and EFT) and the Centralised Funds Management System. For the traditional paper-based cheque systems, introduction of

cheque truncation and imaging of cheques is envisaged to reduce the time lags in realisation of cheques. Substantial efforts have gone into developing what has been described as the 'plumbing' in the financial architecture - a modern, efficient, integrated and secure payment and settlement system for the financial services industry in India. Significant milestones in this path are the Negotiated Dealing System for transactions in government securities and the Clearing Corporation of India. In order to establish an efficient, cost-effective and dependable communication backbone, the INFINET has been set up. About 150 banks, primary dealers and mutual funds have become members. Structured Financial Messaging Solutions are being implemented for secure message transfers across members of the INFINET (Indian Financial Network). Common inter-bank application software has been designed, taking into account the security requirements. The medium-term goal is the operationalisation of Real Time Gross Settlement which would enable real time funds transfers across different banks and thereby the optimal utilisation of funds. Critical to the future of the payment and settlement system of the country is the ongoing research in the IDRBT on messaging systems, security and design specifications for RTGS.

Adequate security is a prerequisite for a modern, technology-intensive payment and settlement system, especially one functioning in a highly networked environment. Information Systems Audit is another area which needs to be adequately addressed. Some progress has been made in defining what we need but implementation would require a system-wide collaboration to obtain the best results. It is with this objective that the Reserve Bank has recently circulated the recommendations of its Working Group on Information Systems Security for the Banking and Financial Sector among all banks and financial institutions. Legal changes to deal with electronic data interchange and legal wherewithal for participants in the payment system are on the anvil. These changes are intended to enable the benchmarking of our payment and settlement system against international standards such as the Core Principles for Systemically Important Payment Systems of the Bank for International Settlements.

The future of banking and finance hinges around exploiting the opportunities thrown up by the technology explosion. This requires the combined efforts of all participants in the financial system. In December, 2001 the Reserve Bank set out its vision of the road ahead in the document Payments System in India to share this vision with all participants and the nature and direction of reforms needed to achieve it. The collective goal should be to make use of synergies between technology and finance to maximise the benefits to society.

IX. Human Resource Development

The content of human resource development (HRD) has been changing in tune with the business environment. Nonetheless, the core function of HRD is to facilitate performance improvement and/or personal growth within the institutional goal of delivering value to customers and maximisation of value-added. Capital and technology are replicable, but not human resources. Accordingly, the fundamental principle of human resource management (HRM) is to treat people as an asset rather than as a mere factor of production. The emphasis on human resource management is in the common interests of management and the workforce: by enabling employees to actualise their full potential, the collective goal is achieved. Personnel policies and practices including elements like

'institutional culture' have to be integrated with the business strategy. This involves developing the employees' skills, knowledge and attitudes on an ongoing basis, creating and maintaining a 'learning' environment, focusing on management development and career planning.

The response of Indian banks and financial institutions to the challenges imposed by the changing economic and business environment will mainly depend on the extent to which they leverage their primary strength, namely, their human resources. Certain rigidities confront the banking system in this regard. The large public ownership has sometimes operated as a drag on human resource development, particularly in skill development, management change and career planning. The recommendations of the second Narasimham Committee could provide useful guidance to banks particularly in recruiting skilled manpower from the open market, including lateral induction of experts and redeployment of existing staff in new businesses and activities after suitable training. A major challenge for many banks will be to develop the special competencies and skills for credit appraisal and risk management in an environment of deregulation and openness. Obviously, information technology is a key input in human resource development. The importance of building and reinforcing a corporate vision and culture that fosters creativity and recognises talent and merit cannot be overemphasised.

In my earlier addresses to the BECON I have emphasised the need to integrate bank economists with the mainstream of operational activity in the financial system in India. I do believe that economists can perform an extremely useful function in the progress of Indian banking and finance. Economists have traditionally been well placed to advise on strategies which depend on macroeconomic developments, and to identify developmental constraints. Economic appraisal is another traditional area of the involvement of economists and cost-benefit analysis is regarded as synonymous with the economists' work in the realm of finance. In the rapidly changing environment, the work of economists has broadened beyond the confines of macroeconomic and financial analysis and abstract research. Today, the role of the economist is increasingly being viewed as providing specialist inputs to assist administrators in formulating departmental policies and programmes on the one hand, and in placing before management an appraisal of the overall view of the institution's goals and functioning, on the other. Thus economists play a key role throughout the organisation in helping define policy, strategy and programme implementation. Economics itself is a 'cross-cutting' discipline, and economists are particularly suited to apply their expertise in a range of areas in which a financial institution interacts with its environment.

In most risk assessment and asset pricing models, for example, there is the assumption that the law of large numbers prevails. The assumption of 'normality' is convenient since it does away with specification and testing the complex relationships that rule financial markets. Yet, as Chairman Alan Greenspan of the US Federal Reserve System points out, the biggest problem in the evaluation of risk is the "fat-tail" problem and the prevalence of "non-normality". We need economists to correctly determine the underlying model for important portfolio decisions.

As the organisational structure of the financial system changes, institutional economics is likely to provide directions to manage the forces of change. Economics itself is becoming multi-disciplinary to cope with these pressures and practical research is driving

economists beyond the frontiers of their vocation. Here, a good starting point for economists is impact assessment of changes in organisational structure, management practices and employer-employee relationships on productivity, operational efficiency and institutional dynamics. This would involve designing monitoring and evaluation frameworks, in measuring and judging impact and in feeding results and practice through into new interventions by the institution into the financial system.

Economists need to assist in the development of financial engineering labs, whether virtual or real, to handle the profusion of financial innovation and product and process changes. This often requires the interaction of economists from various core specialisations, statisticians and experts in business and finance. Indeed, these compulsions are bringing about a transformation in research, data base management and information analysis – the core interests of economists.

India has produced economists of the finest calibre in every generation. Their work has been recognised internationally and honoured. There is no reason why our banks and financial system should not use this innate strength to greater advantage. It may be useful for banks and financial institutions to sponsor educational courses in our universities and technical institutes which develop a cadre of economists which is specific to their requirements. Recruitment strategies, career planning and appropriate personnel development avenues can bring forth the best in them and encourage them to make valuable contributions to the development of the industry.

X. Conclusion

To sum up, I believe that we have made progress in several areas – strengthening the balance sheets of regulated financial entities through risk-weighted capital adequacy ratios; setting out a convergence path for asset classification norms with international standards; expanding the ambit of prudential norms to include monitoring exposures to credit risk, liquidity and interest rate risk; developing internal systems for risk management; enhancing transparency and market disclosure and thereby, accountability; improving management practices and corporate governance; and managing the pressures of structural changes in our financial system. We have also made considerable headway in refining the regulatory and supervisory function, and fine-tuning it to the country specific circumstances. There is now a greater appreciation all around of the priority that is attached to financial stability, even while efforts are intensifying to improve the efficiency of financial intermediation, the performance of financial intermediaries and the evolution of financial markets.

It is also a matter of satisfaction that the overall policy environment has fostered macroeconomic stability, complementing financial stability and providing a measure of protection from the turbulent international financial events over the decade gone by. In other areas, however, our progress has been slow. These continue to remain areas of vulnerability from the point of view of systemic stability. We have not been able to bring down the levels of NPAs in our financial system to internationally acceptable levels. The management of NPAs is proving to be daunting in terms of the sheer magnitude and this is acting as a drag on operational efficiency and transaction costs. The recent legislative changes for faster recovery of NPAs are most welcome, but actual results on the ground will depend on early resolution of potential conflict between what is legally possible and

what is practical, reasonable and feasible. We also need to cover considerable ground in developing robust internal control systems, management information systems and early warning triggers. These are going to become prerequisites in the evolution of prudential norms envisaged over the medium term.

We have to redouble our efforts to adapt to the advances in technology which are changing the contours of financial intermediation worldwide. Unless we catch up, the technology lag could widen with adverse implications for efficiency and costs. We also need to imbue our financial institutions with flexibility to absorb and adapt to institutional change. Our banks must shed their inward-looking focus and develop an outward orientation. And, most important of all, we have to invest more resources into human resource development with a focus on the quality, timeliness and delivery of financial services. The human resource model of the future will require professionals to be both driving and anticipating change, understanding the complexities of the new business environment and forces shaping it.

In financial systems worldwide, today's buzzwords are competition, consolidation and stability. Proactive strengthening of prudential regulations, enhanced transparency and accountability, initiatives in setting best practices of corporate governance, and comprehensive, sound and effective regulation and supervision have together played a key role in creating a secure and conducive environment for the functioning of the financial system. There is currently a strong emphasis on upgrading the technological infrastructure for our financial institutions and markets. This is expected to provide significant gains in terms of the efficiency and cost of intermediation. The full benefits of technological transformation, especially in terms of dealing with the vulnerabilities that persist in our system, will hinge upon enabling changes in the legal architecture.

I believe that the driving force in the path ahead will be the immense skill capabilities that we possess in terms of human resources. I am glad to see the emphasis on human resource development among the themes being addressed in this year's conference. In the years to come, this 'human' bias is likely to get stronger and the quality of human resources would become the cutting edge of competitiveness. A forward-looking approach to our long-term vision must focus on building human resources in a continuous cycle of competency and development. I leave this thought with you for your consideration, and wish you success in your deliberations.

Thank you.

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