Banking and Finance in the New Millennium.

This is the first Bank Economists' Conference in the new millennium, and the subject that you have chosen for this important conference "Indian Banking in the New Millennium" will set the tone and pace of development in the banking and financial sector for the future.

2. India's banking system has several outstanding achievements to its credit, the most striking of which is its reach. An extensive banking network has been established in the last thirty years, and India's banking system is no longer confined to metropolitan cities and large towns: in fact, Indian banks are now spread out into the remote corners of our country. In terms of the number of branches, India's banking system is one of the largest, if not the largest in the world today. An even more significant achievement is the close association of India's banking system with India's development efforts. The diversification and development of our economy, and the acceleration of the growth process, are in no small measure due to the active role that banks have played in financing economic activities in different sectors.

3. Our banking system, however, faces several difficult challenges. Some are home-grown – for example, the high cost of doing business, the high level of non-performing assets (NPAs), and the relatively low level of customer satisfaction. Some of the new challenges are external – for example, the phenomenal growth in the volume of capital flows across nations and the consequent integration of financial markets across the globe. Unlike ten or twenty years ago, Indian banks can no longer be insulated from international developments and international capital movements. These developments have brought with them both immense benefits (removal of capital constraints to development) as well as costs (introduction of possibility of greater volatility and the contagion).

4. In view of the domestic as well as international developments that have been taking place, it is extremely important for us to chart out a path for efficient development of banking in the new millennium. The subject chosen by you, therefore, could not be more timely or more relevant.

5. How should we look at the future of Indian banking in the new millennium? One way is to continue to do what we are doing now, but try and do it a little better. The other, and more exciting challenge, is to set ourselves an altogether different and ambitious goal which can translate our country's vast potential into an actual reality. In this august assembly, and at the beginning of the new millennium, I would like to take the latter course and think about the future of Indian banking against the background of the shift that is taking place in the sources of comparative advantage amongst the nations.

6. The sources of comparative advantage for nations are no longer factor endowments of capital, land and labour nor the locational advantages, nor the advantages of early start or participation in the industrial revolution. A prosperous country with one of the best records of economic performance in the 1990s, *i.e.* the United States, is actually a net importer of capital. The cost of manual labour is also rapidly becoming a smaller and smaller proportion of costs. In most manufacturing industries in the

industrial world, this cost is estimated to be no higher than one-eighth of total costs. This means that the older growth models of the Twentieth century – a model first developed by Japan in 1955, and then successfully replicated in East-Asia, no longer works. Another noteworthy aspect is the steep fall in the material component in the final value of a product.

7. The primary sources of comparative advantage of nations today are “skills” and the ability to adapt and change. These factors determine the prospects of prosperity and growth of an economy. It is important for the emerging economies like India to base their growth on leadership in new technology, knowledge-based services, and manpower skills (as did the US and Germany in the second half of the Nineteenth Century).

8. Against this background, I believe that the task that India should set for itself in the new millennium is to transform our banking system from being a largely domestic one to a truly international one. It is striking that while we have made tremendous strides in extending the reach of our banking system domestically, internationally the Indian banking system is conspicuous by its absence. We have very few branches in other parts of the world and even these are mainly confined to India related business. We cannot claim to have any significant presence in international financial markets and international banking. Banking is a service-oriented business requiring high levels of professional and personal skills and national boundaries are no longer very relevant in mobilisation and allocation of capital. Under the new circumstances, there is no reason why India should not emerge as a major international banking centre, just as it has emerged as an important location in the field of information technology and software.

9. This objective is not something that can be achieved in a short period of time. It can take 10 or even 15 years. But the time to begin and plan is now. This is a vision for the new millennium that I would like to commend for your consideration. Let me now briefly mention some of the issues that we would need to tackle, if we have to realise this vision.

A Competitive Financial Sector

10. The institution of banks continues to have a unique place within the financial system. This is due to their ‘franchise’ *i.e.*, their unique ability to issue monetary liabilities by leveraging non-collateralised deposits. Over the last three decades, however, the role of banking in the process of financial intermediation has been undergoing a profound transformation, owing to changes in the global financial system. It is now clear that a thriving and vibrant banking system requires a well developed financial structure with multiple intermediaries operating in markets with different risk profiles.

11. What are the compulsions underlying this interdependence? Firstly, the proliferation of financial innovations has led to a blurring of the boundaries between traditional banking and other types of financial intermediation. Today, banks operate with a wide variety of financial assets and liabilities, some of which are created by the non-bank constituents of the financial system. Secondly, specialised markets have come into being for each class of financial instruments and banks have to transact business in various segments of the financial market spectrum in the process of their routine day-to-day business. Thirdly, banks undertake leveraging transformations as part of their intermediation - asset-liability, debt-equity, collateralised/ non-collateralised, maturity,

size and risk. This necessarily involves other types of financial intermediaries as counterparties, in syndications and co-financing strategies, as also in the sharing of risk. Fourthly, active global capital movements and the growing volume of cross-border trade in financial services have exerted external pressures for reorientation and refocusing of activities for all players in financial markets.

12. Competitive pressures in the financial sector are thus building up, both within and from outside the banking system. Other financial intermediaries are increasingly refocusing on core competencies and niche strategies. Banks as well as other financial intermediaries are undergoing radical organisational change with an objective of synergising strength and shedding activities with comparative disadvantage. Specialisation in financial intermediation provides competitive efficiency, depth and resilience to the financial system. Together, the spectrum of financial institutions can bring about further financial deepening and encourage financial saving in the community.

13. While we have made some progress in financial sector reforms, we have a long distance to cover in order to make our financial system truly competitive, well-structured and resilient from an international perspective. In the emerging environment, the role of markets in the formation of a host of financial asset prices is expected to be significantly enhanced. The progressive easing of barriers to entry and exit will help to enhance competition and bring a greater number of participants into various segments of the financial markets. It will also enable the development of sophisticated financial products and innovations in market practices. Therefore, markets need to acquire greater depth and liquidity, especially in the money and debt segments. At the same time, rigidities in the market microstructure have to be removed so that prices of financial instruments respond flexibly to different phases of the business cycle. Moreover, financial sector reforms have to be supported by legal changes which strengthen the enforceability of contracts and allow for the resolution of problems, such as, insolvency, default and breach of contract. Continuous improvement in the technological infrastructure is also necessary to keep pace with the explosive speed of financial innovations. In order to ensure that reforms proceed apace in all segments of the financial sector, institutional development has to be intensified. Obviously, financial intermediaries as market participants have a crucial role to play in the efficient functioning of the financial system. Organisational efficiency, human skill development and technological upgradation are the key prerequisites for managing the risk-return trade-offs.

Prudential Norms

14. Orderly behaviour of financial markets depends on greater transparency, stringent conditions for disclosure of assets and liabilities, adequate capitalisation and tighter prudential norms. We must continue to strengthen our prudential norms and align them with the international best practices. Investment decisions need to be based on full information and an assessment of various types of risks. There is strong complementarity between prudential regulations and macroeconomic stability which, in turn, provides an environment for sustainable growth. Strengthening the financial system is no longer a matter of choice; it is an essential prerequisite for long run financial stability and for efficient conduct of monetary policy.

15. Since the introduction of the capital adequacy ratios under the Basle Accord,

concerns have been expressed regarding the applicability of these ratios in the rapidly changing financial environment. In particular, the “one-size-fits-all” characteristic of capital ratios has been subjected to some criticism. There is also some evidence, although by no means conclusive, to suggest that imposition of these norms may have increased the riskiness of some banks’ portfolios.

16. In the Indian context, new methods of measuring market risk, such as, the value-at-risk and pre-commitment approaches, which are rapidly gaining currency in recent years, should complement the risk weighted capital adequacy ratios until they have been validated by more significant empirical evidence.

17. All this has led the Basle Committee to propose a new consultative paper on capital adequacy framework for comments from national supervisory authorities all over the world. Based on these comments, the new norms would be finalised. While the existing Accord specifies explicit capital charges only for credit and market risks, the new proposal seeks to develop explicit risk weights for interest rate risks and other risks, particularly operational risk. Further, it seeks to ensure consistency of treatment of market risk in banking books and in trading books. The proposal also envisages a new standardised approach to risk weighting of asset in banking book which places a greater reliance on internal and external credit assessments than in the present Accord.

18. Under the supervisory review of capital adequacy, the new BIS proposal requires regulators to ensure that banks’ capital positions are consistent with their overall risk profiles and strategies. Supervisors would have the ability to prescribe capital in excess of the minimum regulatory ratios. Existing supervisory processes would be supplemented by internal capital assessment processes which would be subject to review and intervention. Under market discipline, higher disclosure standards and the role of market participants in encouraging banks to hold adequate capital are emphasised. In essence, the new market discipline would provide feedback to the setting up of minimum capital requirements.

19. The Reserve Bank, which is a member of the international working group set up by the Basle Committee on Banking Supervision (BCBS) to provide the non-G10 perspective on the new proposals, has also forwarded its comments to the Basle Committee. So far, over 200 responses from the international community have been received by the BCBS. These have been examined and a revised draft is presently under discussion in international fora.

20. The new norms, when implemented, are expected to be tighter than the existing norms. They are also expected to exert considerable strain on the resources of both banks and supervisors as skills will have to be acquired for the development, testing and validation of internal rating models used by the banks. Practices will also have to be developed for generating accurate risk profiles. Sophisticated tools will need to be employed for an appropriate evaluation of risks. Banks will have to devote greater attention to risk management systems and to the competence of risk appraisal and management personnel. This will have far reaching implications for the organisation and management of banks. Overseas operations of banks would be under even greater pressure to conform as early as possible.

21. The new BIS paper has serious implications for the public sector banks as the new

capital norms could involve injecting fresh capital into the banking system. The issue acquires significance in view of the Government's resolve to reduce its holdings in public sector banks. Moreover, injection of capital by the Government/ Reserve Bank has ramifications for the conduct of fiscal and monetary policies with consequences for growth and stability. On balance, capitalisation of banks through raising equity capital from the market appears preferable to either direct monetisation or expansion of the fiscal deficit.

Transparency and Disclosure Practices

22. Transparency has come to be regarded as the golden rule for the orderly behaviour of the financial system. There are several reasons for this development. First, transparency backed by prudent supervision enhances the accountability of the financial system. This, in turn, builds in a check against undue risk-taking and reduces the probability of failures and systemic risk. In particular, it lessens the vulnerability of markets to sudden shifts in sentiment. Secondly, it fosters healthy competition in the financial system. Transparency of business operations ensures market discipline. Thirdly, transparency facilitates efficient investment decisions. For banks, it translates into allocative efficiency and a clear perception of the risk-return trade-off embedded in investment proposals.

23. In the aftermath of the East-Asian crises of 1997-98, it was realised that information available in the markets, prior to the crisis, did not reflect the underlying realities. Dissemination practices, reliability, timeliness, and quality of data/information also varied sharply from country to country. Hence, considerable attention is being devoted to developing uniform transparency codes and standards, and substantial progress has been made. The BIS has provided the primary momentum to the quest for international standards of transparency and is in the process of expanding its coverage of reporting information on international bank lending. The IMF has also developed voluntary standards of transparency and disclosure. At the macro level, there are the Special Data Dissemination Standards (SDDS)/General Data Dissemination Standards (GDDS).

24. The IMF has also approved a Code of Good Practices on Fiscal Transparency and a Code of Good Practices on Transparency in Monetary and Financial Policies. The International Organisation of Securities Commission (IOSCO) is coordinating with other agencies, such as, the International Accounting Standards Committee, to develop proper accounting and disclosure rules for the securities market. A noteworthy feature of the exercise is that these efforts encompass the private sector also as many of the standards, *e.g.*, accounting, auditing, bankruptcy, corporate governance, and securities market regulation require to be implemented at the corporate level. The OECD, the BIS, the World Bank and the European Bank for Reconstruction and Development are working on codes for corporate governance. The BIS's Committee on Payments and Settlements is seeking best practices for payments and settlements. These international efforts indicate the critical importance assigned to transparency in the emerging international financial architecture.

25. India has been fully supportive of these efforts. It has been an active participant in the Basle process. We were among the earliest countries to join the SDDS. The Reserve

Bank appointed a Working Group on International Banking Statistics in 1999 to review the existing information available on cross-border assets and liabilities of the banking system with a view to enabling banks to prepare for data reporting under the BIS system. The Group's recommendations are being implemented as part of our efforts to get a clear idea of our banking system's international presence. The existing disclosure practices at a macro level are already comparable with international standards. Daily and weekly data on all relevant macroeconomic and financial indicators are put out by the RBI through 'hard copy' releases as well as on the RBI's website. Both the RBI and Government disseminate a wide variety of financial and economic information through weekly, monthly, quarterly and annual publications.

26. The Standing Committee on International Financial Standards and Codes, which was constituted to monitor global developments and consider the applicability of global standards and codes to Indian conditions, set up Advisory Groups in ten core areas. The Advisory Group on Transparency in Monetary and Financial Policies examined issues relating to the clarity of roles and responsibilities of policy making authorities and transparency in monetary policy formulation, conduct and implementation. The report of the Advisory Group on Banking Supervision carries recommendations relating to corporate governance in banks, transparency practices in Indian banking, supervision of cross border banking and internal rating practices adopted by banks. The report of the Advisory Group on Insurance Regulation deals with the applicability of standards set by the International Association of Insurance Supervisors (IAIS) and the twenty Insurance Guidelines issued by the OECD to India. The Advisory Group on Payment and Settlement System has also submitted its report which deals with issues relating to inter-bank payment and settlement covering Core Principles and Central Bank responsibilities. All these reports are available on the Reserve Bank's website for public information and debate.

27. Commercial banks in India are also required to maintain disclosure standards on par with those of international banks. This has been achieved by mandating disclosure of some of the essential strength indicators and performance related parameters as part of commercial banks' balance sheets. The banks in India, since April 1997, even before the onset of the South East Asian crisis, have been disclosing capital adequacy ratios (both Tier I and Tier II separately), percentage of NPAs to net advances, provision made towards NPAs, and gross and net value of investments. Secondly, since March 1998, banks in India have been asked to disclose further information regarding interest and non-interest income as a percentage of working funds, operating profit as a percentage of working funds, and information on the financial position of subsidiaries. Thirdly, with effect from April 2000, the Reserve Bank has also advised banks to disclose maturity profile of loans and advances, investments, and lending to sensitive sectors. Fourthly, public sector banks are required to attach the balance sheets of the subsidiaries to their balance sheets beginning from the year 2000-01, so as to bring more transparency in operations and move towards consolidated supervision.

28. The Reserve Bank has set up the Regulations Review Authority (RRA) in April 1999 to provide an opportunity to the public to seek relevant modification of regulations/ circulars/returns issued by the Reserve Bank. An important contribution of the RRA is the compilation of subject-wise master circulars on important subjects. The RRA has

decentralised service charges of banks. It has instituted arrangements to regularly display updated information on non-bank finance companies on the Bank's website. Other improvements effected by the RRA are granting general permission to mutual funds for issuing units to foreign institutional investors, simplifying procedures for obtaining succession certificates by banks from legal heirs, rationalisation of payment of interest for abnormal delay in collection of outstation instruments and dissemination of timely information on foreign investment in Indian companies through the RBI website to facilitate trading. Modalities for classification and dissemination of information in electronic form and through e-mail are being worked out.

29. A working group appointed by the Reserve Bank has recommended the setting up of a Credit Information Bureau for the collection of information relating to borrowers and the provision of this information to the entire financial system. The State Bank of India has entered into an MoU with the HDFC to set up a Credit Information Bureau and the modalities for setting up of the Bureau in regard to ownership and equity participation, management structure, security standards, rights and liabilities of the Bureau, *etc.*, are being worked out. The banks and financial institutions are being encouraged to make the necessary in-house arrangements for collection of such information to the Bureau. The Bureau is expected to expedite credit and investment decisions by banks and financial institutions as also curb the growth of fresh NPAs through better institutional mechanisms.

30. The goals of financial sector reforms and macroeconomic stability are best achieved in an environment fostered by improved transparency. Transparency in balance sheets, income statements, objectives and policies can help this process. In this sphere, our goal for the future should be to identify and monitor international developments with a view to aligning transparency standards and practices in the Indian financial system with the international best practices.

Asset-Liability and Risk Management

31. Mismatches between assets and liabilities of banks expose them to various types of risks. The experience of the South East Asian crises showed the dangers posed by compromising asset-liability management principles and allowing the disproportionate accumulation of mismatches both on and off the balance sheets, leading to illiquidity and even insolvency. Risk management is a continuous process of planning, organising and controlling the assets and liabilities, volumes, maturities, rates and yields. With the growing complexity of operations in financial markets, banks would have to rapidly equip themselves with a variety of knowledge-intensive skills and appropriate technology.

32. To help manage this fragile transitional phase, the Reserve Bank has provided asset-liability managers with guidelines that serve as benchmark for an integrated risk management system. Asset-Liability Management (ALM) guidelines were issued to banks in April 1999 for managing liquidity and market risks. In October 1999, the ALM guidelines were subsumed in a broad framework of guidelines for risk management systems in banks to cover the management of credit, market and operational risks. These guidelines would help to prepare the bank management to meet the challenges posed by the changing context of regulation and supervision. Banks are encouraged to evolve risk

rating systems and internal control mechanisms based on value-at-risk and duration measures. The primary responsibilities of prescribing risk parameters and establishing effective control systems are vested directly in the boards of directors of the banks.

33. Adequate internal controls are a key prerequisite for the system of risk-based supervision which is gaining currency all over the world. Internal control consists of a wide spectrum of internal inspection and audit, submission of control returns by branches/controlling offices to higher level offices, visits by controlling officials to the field level offices, risk management system, simplification of documentation procedures and efficiency in inter-office communication channels.

34. A critical precondition for the smooth functioning of the financial system is the enforceability of contracts. At present, it is extremely difficult to deal legally with defaults and breach of contracts and this is one of the major reasons why our banks' books are saddled with NPAs for a long period of time. Legal reforms must support and complement financial sector reforms by providing for internal governance as well as external discipline. The legal framework has to be flexible to enable automation, electronic fund transfers, recoveries, *etc*. In this context, efforts need to be made to streamline the working of debt recovery tribunals. Undoubtedly, legal reforms are now an important part of the agenda of financial sector reforms.

35. The face of banking is changing rapidly and banks all over the world are re-orienting their strategies, practices, products and clientele in tune with their changing environment. Increasingly they are focusing on core competencies. Internationally, bank mergers are occurring not through acquisition of weak by the strong but among equals in strength. The objective of such mergers is to synergise strength of the merging institutions in a new powerful entity. Activities and even subsidiaries not relevant for maximising profits and expansion of assets are being divested. In India, the Narasimham Committee and the Verma Committee have shed considerable light on the possible future course of action for a financial system undergoing an organisational change.

36. Public sector banks, in particular, are now in need of major capital and management restructuring. The Government has so far contributed an aggregate amount of Rs.204 billion to recapitalise public sector banks, and more is needed. This will impose a substantial fiscal burden, which the budget is unable to bear. Some banks have, therefore, been encouraged to raise capital through public issues and to raise subordinated debt for their Tier - II capital. They have also been allowed to write-off accumulated losses so as to enable them to have higher earnings per share in their public issues. Both the Government and the Reserve Bank have proposed dilution of their holdings in these banks with a view to broadbase their ownership pattern.

37. While these efforts must continue, there is a need for a major change in management styles, human resource inputs and technological upgradation to enable public sector banks to face the intensifying competition. Furthermore, it is necessary to focus on restructuring in the entire financial system and not the banking industry only.

Special Problems of NPAs in India

38. The most critical condition for bringing about an improvement in the profitability of banks is a reduction in the level of NPAs. In fact, it is a precondition for the stability

of the financial system. Although the level of NPAs has declined significantly in recent years, it is still considered relatively high by international standards. There are, of course, varying country practices for provisioning and therefore, of carrying NPAs on balance sheets of banks. Due to time lags in recovery, banks in India continue to hold NPAs on their books even after making provisions. Moreover, in India, provisioning is relatively more stringent; for instance, provisions are required to be made even on the secured portion of advances. In other countries, identified losses are written off at an early stage and banks carry very little NPAs on their books. Even so, the provision adjusted level of NPAs at 8.1 per cent of net advances for public sector banks (PSBs) in India is high. The distribution of NPAs across the public sector banks shows that there is some rigidity to move down in the category of banks with net NPAs between 10 and 20 per cent of net advances as also in the category of banks with net NPAs of up to 10 per cent of net advances. In these categories, there has not been any significant improvement since 1995-96. The Narasimham Committee has underscored the need for moving to zero net NPA levels for our banks which have an international presence. If we believe in actualising our resolve to build a banking system with an international orientation, this must be our priority target in the next two to three years.

39. Our studies on NPAs in the banking system suggest that the problems of NPAs has a sizeable overhang component arising from infirmities in the existing processes of debt recovery, inadequate legal provisions on foreclosure and bankruptcy, and difficulties in the execution of court decrees. Banks in India face external constraints such as the dominance of traditional industries in credit portfolios, industrial sickness and labour problems. The studies also reveal that there are several internal factors such as weak credit appraisal, non-compliance to lending norms, and wilful default that contribute to high NPAs. This calls for immediate corrective steps in recovery processes so that the problem is contained.

40. What are the strategies for making this possible? First, at the policy level, the problems of NPAs should be addressed by strict enforcement of prudential norms and requirements of transparency. Secondly, the most important policy contribution in this area is the need for legislation which will make recovery processes smoother and legal action quicker. Thirdly, banks are being provided with a menu of alternatives such as Debt Recovery Tribunals, Lok Adalats and Asset Reconstruction Companies. The Reserve Bank has provided indicative guidelines for compromise settlement of chronic NPAs in the small scale sector. Settlement Advisory Committees have also been formed at regional and head office levels. These alternatives will no doubt require the enabling environment to be created by appropriate legal reforms which are being addressed jointly by the Reserve Bank and the Government of India.

41. As regards internal factors leading to NPAs, the onus rests with the banks themselves. This calls for organisational restructuring, improvement in managerial efficiency, skill upgradation for proper assessment of creditworthiness and a change in the attitude of the banks towards legal action which is traditionally viewed as a measure of the last resort. These are the elements on the agenda of the second phase of reforms.

New Technology

42. In the banking and financial sectors, the introduction of electronic technology for

transactions, settlement of accounts, book-keeping and all other related functions is now an imperative. Increasingly, whether we like it or not, all banking transactions are going to be electronic. Those who do not keep pace with the trend are bound to lose out.

43. Initiatives for technological change have been an integral part of the reform process. In the recent period, the imperatives for speeding up the modernisation of technology and intensifying the use of technology have become sharper. First, in response to the compulsions imposed by the technological environment, the banking industry has accelerated the pace of computerisation of branch operations, controlling offices and head offices. The thrust is on commercially important centres which account for 65 per cent of banking business in terms of value. There are now a large number of fully computerised branches across the country.

44. A switchover from cash based transactions to paper based transactions is being accelerated. MICR clearing of cheques is now operational in ten cities, besides the four metropolitan cities. The average daily volume of cheques processed in clearing operations in four metropolitan cities has amounted to a fairly sizeable daily average value of about Rs. 20,000 crore in 1999-2000.

45. The development and use of communication networks have also helped the banking industry to improve the quality of its services. Beginning modestly with leased line terrestrial technology *i.e.* the BANKNET and its communication software, the RBI Net, a milestone was passed in February 1997 with the operationalisation of the Shared Payment Network System (SPNS) of ATMs of the Indian Banks Association in Mumbai. In June 1999, the setting up of the INFINET, a Wide Area Satellite based network using VSAT technology, was a landmark in the use of the communication technology in the Indian financial system. Currently, the INFINET connects 439 VSATs. As additional transponder space becomes available, connectivity could be extended to 5,000 branches. 10 banks are already using the VSAT network of third party service providers for various banking applications.

46. Needless to add the payments system plays a critical role in the development of the financial system. In India, the design, management and regulation of electronically based payments system are becoming the focus of policy deliberations. The imperatives of developing an effective, efficient and speedy payment and settlement systems are getting sharper with the introduction of new instruments such as credit cards, telebanking, ATMs, retail Electronic Funds Transfer (EFT) and Electronic Clearing Services (ECS). We are moving towards smart cards, debit cards and financial Electonic Data Interchange (EDI) for straight through processing.

47. Real Time Gross Settlement (RTGS) is generally regarded as the cornerstone of an integrated payments system. Setting up an RTGS environment has became the focal point of payments system reforms all over the world. Access to major financial centres and cross-border payments systems is becoming conditional to the availability of a full-fledged domestic RTGS. Apart from providing a real time funds settlement environment, RTGS is critical to an effective risk control strategy for preventing domino effects of individual defaults. In the context of internationalisation of the financial sector, RTGS provides both the technology and process controls to manage risks better.

48. The preparation of the financial system for the implementation of RTGS has been

a priority for the Reserve Bank. Considerable progress has already been made. The main processing system for RTGS is in place at the National Clearing Cells at the four metropolitan cities. The system would provide large value fund transfers with settlement on a gross basis. The Reserve Bank has taken a number of steps towards the development of the Payment System Generic Architecture Model for both domestic and cross-border payments. The Model conceives networking of computerised bank branches, with their controlling offices, central treasury cells and head offices with the proviso for introducing standardisation of operating system and networking platforms within the bank and a bank-level standardised gateway to INFINET. System Requirement Specifications would take into account the international best practices and the specific requirements of Indian banking. Extending the spread and coverage of the INFINET to cover all commercially important centres in the country, development of the Structured Financial Messaging backbone for exchange of financial messages based on international standards, integrating various segments of the payment and settlement system and consolidation of the various Deferred Net Clearing Settlements constitute the action plan for 2000-01.

49. However, there are several areas of concern that need to be addressed. Authentication of payments instructions, responsibility of the customer for secrecy of the security procedure, the legal framework for the payments system, the lack of standardisation and intra-bank connectivity are some of the areas which deserve urgent attention. A Committee on Technology Upgradation in the Banking Sector appointed by the Reserve Bank has made wide ranging recommendations relating to communication infrastructure and the use of INFINET, standardisation and security, data warehousing, data mining and management information systems, new legislation on EFT, human resource development and other related issues. These recommendations should guide the path of technological upgradation in the years to come. Banks will have to evolve a strategic vision that builds over the present technology base.

50. It needs to be emphasised that the process of technological change is only beginning in India and several countries are way ahead of us in the modernisation of technology for their financial sectors. Moreover, the intensity of use of the existing technology is at low levels. Computerisation efforts in our banks have been mostly directed towards accounting and related activities with lack of emphasis on critical areas such as management information systems and customer service. We have to redouble our efforts to equip our financial system with the state-of-the-art technological infrastructure if it is to achieve an international stature.

Human Resource Development

51. In a service industry like banking, the most important need is naturally the human resource development. During the early phase of banking development in India after independence, opportunities for employment of the educated man-power were relatively limited. The banking sector was the preferred employer for the educated persons in the country in addition to civil services. In recent years, this position has changed dramatically. Certain rigidities have also developed in human resources development within the banking system itself because of this industry being largely in the public sector. The public sector’s hierarchical structure, which gives preference to seniority over performance, is not the best environment for attracting the best talent from among the young.

52. 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 further training and redeployment of those who are already employed. Banks have to create an environment in which they will be able to expand business largely through redeployment, extensive training and better incentives. There is a pressing need to develop work practices which encourage efficiency. In these areas, a break from past practices is essential. Incentive structures need to be conceived, supported by appropriate training and motivation, which align the employee's goals and orientation with the core competencies and strategic advantages of the institution.

53. The recommendations of the second Narasimham Committee could provide useful guidance to banks in designing new recruitment practices and training facilities. The Committee recommended a system of recruiting skilled manpower from the open market, including lateral induction of experts. Supporting this should be an ongoing strategy of redeployment of existing staff in new businesses and activities, after suitable training.

54. Banks could also explore the feasibility of entering into collaborative arrangements with universities and other institutions in India and abroad, to identify and provide specialised training to the financial services industry with an ongoing flow of emerging training packages. This is particularly important for external regulatory agencies. Information technology is an area where human resource development is critical. Fortunately, Indian professionals are world leaders in this area and a spirit of co-operation and partnership between the IT and banking industries will result in a strong and modern financial system comparable to the best in the world.

The Role of Economists

55. In the last BECON Conference in Bangalore, I had referred to the role of economists in our banking system. In all the above areas that I have highlighted, this role is even more crucial. The financial system has been a natural and preferred habitat for some of the best talent in the field of economics. In fact, economists have branched out to specialise in various areas in the commercial sector and have gained considerable expertise. Recent developments have released new impulses which have brought finance and economics even closer.

56. Operational areas of banking are also increasingly drawing the interest of economists all over the world. In the recent economic literature, there is a proliferation of work on modelling of various types of risks, internal control mechanisms such as the value-at-risk and precommitment models, behaviour of financial asset prices and their impact on banks' balance sheets and contingent exposures. These are exciting areas for improving the operational efficiency of banks and economists can make a tangible contribution to strengthen their functioning. The tools of economists such as probability analysis, time series techniques, discriminant functions and capital asset pricing models can be particularly useful in developing independent views of the fundamentals of the market place. Perhaps this is the reason why one finds so many economists working in treasuries, dealing and trading rooms of banks today, besides the back office and the data warehouse. Fundamental analysis complements technical analysis in most market

research reports. The role of expectations in market processes is crucial and this is becoming increasingly important as financial liberalisation gathers momentum. Banks need to increasingly factor in the role of expectations in their forecasts and strategic plans.

57. Economists, on their part, need to break away from the strait jacket of their narrow specialisation and understand the operational realities faced by banks. Conventional economic analysis needs to be tempered by the emerging principles of financial economics to be meaningful in the context of the banking system. That is why it is important for economists in the banks to acquire field level experience as well as the knowledge of operational departments so as to enable them to make a meaningful contribution in a rapidly changing financial system.

Conclusion

58. Let me conclude by reverting back to the question that I raised at the beginning of this talk. Is it realistic for India to set itself the goal of becoming a major international banking and financial centre in the early part of this new century? I have already mentioned some of the preconditions that need to be fulfilled for this vision to be realised. We have made some progress in several of these areas, such as, the development of a competitive financial sector with multiple intermediaries; the movement towards best international practices in regard to capital adequacy, prudential norms and supervisory standards; strengthening the transparency and disclosure practices by banks and other financial institutions; and better application of asset-liability and risk management by financial intermediaries. Some progress has also been made in reducing the extent of Non-Performing Assets and introducing speedier mechanisms for settlement of bank dues (*e.g.* Debt Recovery Tribunals). So far, the progress in respect of legal and institutional reforms, including bankruptcy procedures, has been slow. Nevertheless, there is a growing consensus in favour of such reforms and the high level Committee set up to suggest appropriate measures in these areas has recently submitted its report. It is hoped that the necessary legislative action in these areas will be initiated without much delay.

59. The Indian financial system, and the banking sector in particular, is dominated by public sector institutions and banks. A sensitive and controversial question which would need to be faced, sooner or later, is whether the "public sector character" of our banks and other institutions is consistent with their being able to play a globally competitive role in the future. In order to consider this issue dispassionately, both the advantages and disadvantages associated with this particular characteristic of the financial system have to be recognised. An important advantage is the reduced "vulnerability" of the system as a whole because of sovereign ownership. Another important advantage is its wide reach and the availability of an established institutional infrastructure. Important disadvantages, however, are the relative insensitivity of the system to its cost structure, inability to respond quickly to the changing market trends, and greater rigidities in the management decision-making processes because of what may be described as "noncommercial" considerations. Development of human resources, and introduction of an appropriate incentive structure to foster a competitive culture have, in this background, proved to be particularly difficult.

60. Can some of these intrinsic disadvantages of public sector institutions be overcome? Frankly, I do not know. It is true that almost all the leading banks and financial institutions in the world today are in the private sector. At the same time, it is equally true that the private sector character of a country's banking system has been no guarantee of its global success or its economic strength. The continuing weaknesses and problems faced by the Japanese banking system, and strong international consensus in favour of public intervention, provide ample testimony for this observation. Another interesting fact is that all the leading central banks around the world are either owned by Governments or have been set up by statute, and are subject to Governmental or Parliamentary control. Yet, in recent years, many of them are functioning as truly independent institutions with no political or extraneous interference in their operations. Given the necessary will and a political consensus, in principle, it should be possible for us to grant, by legislation, complete functional and operational independence to public sector banks and institutions with the sole objective of providing best service at the least cost, and thus enable them to compete freely among themselves as well as with other private sector institutions. If, in practice, this is not a feasible option, then the only alternative is for public sector banks to be transformed into widely held private banking corporations, subject to transparency, regulations and accountability to shareholders.

61. The long-term vision for India's banking system to transform itself from being a domestic one to the global level may sound far-fetched at present. However, it is not beyond our capacity provided we have the will and the determination. Taking the banking industry to the heights of international excellence will require a combination of new technologies, better processes of credit and risk appraisal, treasury management, product diversification, internal control and external regulations and not the least, human resources. Fortunately, we have a comparative advantage in almost all these areas. Our professionals are at the forefront of technological change and financial developments all over the world. It is time to harness these resources for development of Indian banking in the new century.

62. I hope your deliberations at this conference would show us the way, and herald a new beginning for our banking system in the new millennium.

Thank you.

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