

Contents

[Letter of Transmittal](#)
[Central Board / Local Boards](#)
[Principal Officers](#)

Part One : The Economy : Review and Prospects

- I. [Macroeconomic Policy Environment](#)
- II. [The Real Economy](#)
- III. [Money, Credit and Prices](#)
- IV. [Government Finances](#)
- V. [Financial Markets](#)
- VI. [External Sector](#)
- VII. [Assessment and Prospects](#)

Part Two : The Working and Operations of The Reserve Bank of India

- VIII. [Monetary and Credit Policy](#)
- IX. [Development and Regulation of Financial Markets](#)
- X. [Financial Regulation and Supervision](#)
- XI. [Public Debt Management](#)
- XII. [Currency Management](#)
- XIII. [Payment and Settlement Systems](#)
- XIV. [Human Resource Development and Organisational Matters](#)
- XV. [The Reserve Bank's Accounts for 2000-01](#)

[Annexure : Chronology of Major Policy Announcements : April 2000 – July 2001](#)
[Index of Appendix Tables](#)

[List of Abbreviations](#)
[Boxes](#)
[Charts](#)
[Text Tables](#)

**RESERVE BANK OF INDIA
CENTRAL OFFICE,
SHAHEED BHAGAT SINGH ROAD,
MUMBAI-400 001. INDIA.**

Letter of Transmittal

REF. NO. SYD. /02.16.01/2001-02

*August 27, 2001
Bhadra 5, 1923 (Saka)*

*The Secretary to the Government of India
Ministry of Finance
Department of Economic Affairs
NEW DELHI – 110 001.*

Dear Secretary,

In pursuance of Section 53(2) of the Reserve Bank of India Act, 1934, I transmit herewith the following documents :-

- (i) A copy of the Annual Accounts for the year ended the 30th June 2001 signed by me, the Deputy Governors and the Chief General Manager and certified by the Bank's Auditors; and*
- (ii) Two copies of the Annual Report of the Central Board on the working of the Bank during the year ended the 30th June 2001.*

Yours faithfully,

(Bimal Jalan)

Central Board / Local Boards

GOVERNOR

Bimal Jalan

DEPUTY GOVERNORS

S.P. Talwar
Y.V. Reddy
Jagdish Capoor

DIRECTORS NOMINATED UNDER SECTION 8(1)(b) OF THE RBI ACT, 1934

Yezdi Hirji Malegam
Mihir Rakshit
A. P. J. Abdul Kalam
K. Madhava Rao

DIRECTORS NOMINATED UNDER SECTION 8(1)(c) OF THE RBI ACT, 1934

Ratan N. Tata
Amrita Patel
K. P. Singh
V. S. Vyas
D. S. Brar
C. N. R. Rao
H. P. Ranina
N. R. Narayana Murthy
Suresh Krishna
Ashok S. Ganguly

DIRECTOR NOMINATED UNDER SECTION 8(1)(d) OF THE RBI ACT, 1934

Ajit Kumar

MEMBERS OF LOCAL BOARDS

WESTERN AREA

Yezdi Hirji Malegam
K. Venkatesan
Dattaraj V. Salgaocar
Jayanti Lal Bavjibhai Patel
Mahendra Singh Sodha

EASTERN AREA

Mihir Rakshit
P. D. Chitlangia
A. K. Saikia
Sovan Kanungo
Kiran Ghai

NORTHERN AREA

A.P. J. Abdul Kalam
Prem Nath Khanna
Ram Nath
Mitha Lal Mehta
Pritam Singh

SOUTHERN AREA

K. Madhava Rao
Ashok Kumar Lahiri
C. P. Nair
S. Ramachander
M. Govinda Rao

As on June 30, 2001

Principal Officers

(As on June 30, 2001)

EXECUTIVE DIRECTORS

P.B. Mathur
D.P. Sarda
R.B. Barman
S.L. Parmar
K.L. Khetarpaul
Mohd.Tahir
M.R. Umarji (on deputation)

PRINCIPAL LEGAL ADVISER

** With status equivalent to that of the Bank's ED

N.V. Deshpande **

CENTRAL OFFICE

Department of Administration and Personnel Management
Department of Banking Operations and Development
Department of Banking Supervision
Department of Currency Management
Department of Economic Analysis and Policy
Department of Expenditure and Budgetary Control
Department of External Investments and Operations
Department of Financial Companies
Department of Government and Bank Accounts
Department of Information Technology
Department of Non-Banking Supervision
Department of Statistical Analysis and Computer Services
Exchange Control Department
Financial Institutions Division
Human Resources Development Department
Industrial and Export Credit Department
Inspection Department
Internal Debt Management Cell
Legal Department
Monetary Policy Department
Premises Department
Rural Planning and Credit Department
Secretary's Department
Urban Banks Department

M.R. Dudani, Chief General Manager-in-Charge

M.R. Srinivasan, Chief General Manager-in-Charge
A.L. Narasimhan, Chief General Manager-in-Charge
M.P. Kothari, Chief General Manager
M.R. Nair, Officer-in-Charge
Radhe Shyam, Chief General Manager
T.C. Nair, Chief General Manager
—
K.B. Chakraborti, Chief General Manager-in-Charge
K.R. Ganapathy, Chief General Manager-in-Charge
R. Sadanandam, Chief General Manager-in-Charge
Smt. Rama Ananthkrishnan, Principal Adviser

Smt. K.J. Udeshi, Chief General Manager-in-Charge
K.C. Bandyopadhyay, Chief General Manager
N.P. Sinha, Chief General Manager
S.S. Gangopadhyay, Chief General Manager
Chandra Kishore, Chief General Manager
Smt. Usha Thorat, Chief General Manager-in-Charge
—
K. Kanagasabapathy, Adviser-in-Charge
B.K. Katyal, Chief General Manager
A.V. Sardesai, Chief General Manager-in-Charge
H.N. Prasad, Chief General Manager & Secretary
M.M. S. Rekhrao, Chief General Manager-in-Charge

COLLEGES

Bankers Training College, Mumbai
College of Agricultural Banking, Pune
Reserve Bank Staff College, Chennai

OFFICES

Chennai
Kolkata
Mumbai
New Delhi

BRANCHES

Ahmedabad

PRINCIPALS

C.R. Gopalasundaram
D.P. S. Rathore
M.Jesudasan

REGIONAL DIRECTORS

K. Sivaraman
V.K. Sharma
A.B. Telang
Y.S.P. Thorat

REGIONAL DIRECTORS

V.S. Das

Bangalore
Bhopal
Bhubaneswar
Chandigarh
Guwahati
Hyderabad
Jaipur
Jammu
Kanpur
Nagpur
Patna
Thiruvananthapuram

Kochi
Lucknow
Navi Mumbai, Belapur

K. Vijayaraghavan
B.Ghosh
A. Sinha
Surindra Kumar
P. K. Mishra
R. S. Bakkannavar
Ramesh Chander
Radhey Shyam
Prabal Sen
A.K. Sohani
M.D. Jha
G. Gopalakrishna

GENERAL MANAGER (O-in-C)

F.R. Joseph
N.S. Vishwanathan
R.M. Deole

PART ONE : THE ECONOMY : REVIEW AND PROSPECTS

I - Macroeconomic Policy Environment

[Real Sector Policies : Agriculture and Industry](#)

[The Union Budget, 2001-02](#)

[External Sector Policies](#)

[Monetary Policy Framework](#)

[Financial Sector Reforms](#)

[Policies for Capital Markets](#)

[Measures for Natural Calamities](#)

[The Approach to the Tenth Five Year Plan](#)

Introduction

1.1 Macroeconomic policy settings in 2000-01 were predominantly influenced by the underlying conditions in the domestic economy. Among the positive developments were an easing of the inflation rate towards the close of the year, and considerable strengthening of the balance of payments as reflected in a smaller than anticipated current account deficit and rising level of foreign exchange reserves. However, during the year, there was a deceleration in the rate of real growth, spread over agriculture, industry and even services, which dominated policy concerns. The social and economic consequences of the Gujarat earthquake engaged policy attention towards the close of the year. Moreover, the slowdown revealed several weaknesses in the growth process in terms of declining rates of capital accumulation, infrastructural and ecological constraints, gaps in social and economic opportunities available to various sections of society and continuing unemployment and poverty. Efforts to arrest the deceleration and revitalise the momentum of growth gathered importance in view of the need to prepare for launching medium-term strategies for the Indian economy hinging around a higher growth trajectory.

1.2 The framing of macroeconomic policies for revitalising growth was, to some extent, constrained by the uncertainties surrounding the international economic environment. Apprehensions of a global slowdown, the possibilities of international capital flows receding and the inflationary effects of high international oil prices emerged as external constraints on the growth prospects of developing countries, including India.

1.3 It is in the context of these developments that the macroeconomic policies in 2000-01 were framed. The Union Budget, 2000-01 accorded priority to curbing expenditure growth and bringing about structural changes in the composition of expenditure. Tax measures emphasised stability, growth, rationalisation and simplification. The Budget adopted a sevenfold strategy of strengthening the rural economy, developing knowledge-based industries and modernising traditional industries, removing infrastructural bottlenecks, human resource development, rapid export growth and higher foreign investment, prudent debt management and a credible framework for fiscal correction. Trade policies focused on liberalisation of the trade regime by removal of quantitative restrictions and streamlining of procedures. Policies for capital flows carried forward the progressive liberalisation of foreign direct investment, foreign institutional

investment, external commercial borrowing and outward investment from India. Monetary policy continued to ensure that all legitimate requirements for bank credit were met while guarding against the emergence of inflationary pressures. It also continued to pursue the active management of liquidity to ensure stability in the financial markets. The Reserve Bank intensified the process of financial sector reforms through the development and regulation of financial markets, strengthening of the financial system as well as the regulatory and supervisory framework, improvement in credit delivery mechanisms and the monitoring of international developments with a view to considering the application of international best practices to the Indian situation. In regard to the real sectors, the National Agriculture Policy emphasised efficient use of soil, water, bio-resources and inputs, a regional approach to agricultural and allied activities and stronger linkages with research. Policy initiatives in the industrial sector included extension of tax holidays for small-scale industries (SSIs) set up in industrially backward States and districts and incentives for knowledge-based, information technology (IT) and telecommunication industries.

1.4 The policy initiatives undertaken for 2001-02 continue to reflect the overall macroeconomic priorities. The Union Budget, 2001-02 has focused on extending reforms to the agricultural sector, investment in infrastructure, deepening of financial sector reforms and stronger fiscal correction through expenditure control, widening the tax base, rationalising subsidies and speeding up the process of disinvestment of public sector enterprises (PSEs). The Budget has also provided further momentum to the liberalisation of capital flows. The modified Export Import (EXIM) policy announced on March 31, 2001 has accorded primacy to agricultural exports and provided incentives for the special economic zones (SEZs). Furthermore, the phasing out of remaining quantitative restrictions was completed with safeguards to protect the domestic industry. Procedural improvements and easing of residual quantitative restrictions in respect of foreign direct investment have been undertaken under policies for external capital flows along with substantial liberalisation for Indian companies issuing American Depository Receipts (ADRs)/Global Depository Receipts (GDRs). The Monetary and Credit Policy for 2001-02 announced in April 2001 continues to emphasise the need for adequate availability of bank credit to meet all genuine requirements while ensuring that inflationary pressures are contained. Within this overall framework, the conduct of monetary policy would explore the possibility of softening of interest rates to the extent the evolving situation warrants. A flexible approach is adopted to counter the emergence of any adverse and unexpected developments either in the domestic or external sectors.

1.5 An important objective of monetary policy is to improve its operational effectiveness. Accordingly, the liquidity adjustment facility (LAF) has been further refined in terms of liquidity support facilities and operating procedures. A strategy has been put in place for the smooth transition of the call money market to a pure inter-bank market. Complementary measures have been undertaken to improve the functioning of money and government securities markets. Financial sector reforms undertaken within the ambit of monetary and credit policy for 2001-02 encompass the rationalisation of the interest rate regime, tightening of prudential measures including exposure norms, progress towards consolidated supervision, improvement in mechanisms for dealing with non-performing assets, moving towards risk based supervision, establishment of credit information bureau, the Clearing Corporation and Negotiated Dealing System, improving credit delivery mechanisms and monitoring of international standards and

codes for the financial sector.

REAL SECTOR POLICIES : AGRICULTURE AND INDUSTRY

1.6 The performance of the agricultural sector has been receiving considerable policy attention in the recent years, especially in the context of reaching the benefits of reforms to the widest sections of society. Low and variable growth of output, poor and declining yields, inadequacy of capital formation and infrastructure and degradation of natural resources due to inefficient cropping patterns have emerged as the major obstacles to rapid and sustained agricultural growth. Furthermore, in recognition of the need to coordinate a national strategy covering land use pattern consistent with the conservation and optimal use of natural resources, the Union Budget for 2000-01 proposed the setting up of a National Commission on Land Use Policy. It is against the backdrop of these concerns that the National Agriculture Policy was announced on July 28, 2000 with the objective of achieving a growth rate of over 4 per cent per annum in the sector. It emphasised sustainable growth by efficient use of soil, water, bio-resources, fertilisers and pesticides. A regional approach to the development of horticulture, floriculture, poultry, fishing and animal husbandry was mooted. Location specific and economically viable varieties of crops, use of bio-technology, strengthening of the linkage between research and extension activities, improved input management, protection to plant varieties through *sui generis* legislation and breeding of new varieties are other elements of the policy framework which would guide the direction of endogenous technological transformation in agriculture. The National Agricultural Policy also emphasised micro-credit through the promotion of farmers' Self-Help Groups with linkages with the banking system. A Micro-finance Development Fund was set up in the NABARD with a contribution of Rs. 40 crore each from the Reserve Bank and the NABARD. Over the medium-term, reforms in rural credit delivery will need to focus on a thorough restructuring of co-operatives including changes in co-operative law.

1.7 The New Agriculture Policy emphasised a conducive policy regime which would require the reforms to bring about improvements in the terms of trade for agriculture, a favourable price regime, removal of infrastructural bottlenecks and institutional reforms taking the form of land reforms, risk management and management changes emphasising the quality aspects of all stages of farm operations.

1.8 A National Policy on Handling and Storage of Foodgrains was announced on June 20, 2000 to deal with storage issues, mechanisation of harvesting and transportation, construction of chain silos and private sector participation in integrated bulk handling, storage and transportation.

1.9 In October 2000, a multi-pronged strategy for foodstock control was announced for (i) supplying foodgrains at below poverty line (BPL) rates to States, (ii) exporting surplus stock at realistic prices, and (iii) promotion of Food for Work Programmes.

1.10 Several initiatives in industrial policy were undertaken. Under the National Textile Policy 2000, the garment sector was de-reserved from the purview of SSI reservation and a venture capital fund was proposed with a view to facilitating knowledge-based entrepreneurship in the

industry. Tax holidays for SSIs and industrial units in backward states were extended by another two years. Knowledge-based industries were provided incentives in the form of reduction in customs duties on several items of the information technology (IT) and telecommunications sectors. The domestic long-distance services industry was opened up without any restrictions on the number of operators. An Expert Group was constituted with a mandate to work towards the replacement of the Industries Development and Regulation Act, 1951 by an Industry Act, which would focus on development and promotion of the industrial sector instead of regulation.

THE UNION BUDGET, 2001-02

1.11 The Union Budget, 2001-02 reviewed the gains in terms of growth and resilience of the Indian economy posted over ten years of structural reforms. Budgetary initiatives for accelerating the spread of reforms in agriculture and rural development emphasised the provision of adequate credit for agriculture through the Rural Infrastructure Development Fund (RIDF) VII, Kisan Credit Cards (KCC), the National Bank for Agriculture and Rural Development (NABARD) and the Small Industries Development Bank of India (SIDBI), particularly in the context of linking self-help groups (SHGs) and the disbursement of credit-linked subsidy for funding storage capacity building, development of rural roads and rural electrification, and setting up a technology mission for the development of horticulture in the North Eastern States. The Union Budget also envisaged an enlarged role for State Governments in the procurement and distribution of foodgrains to BPL families and a thorough review of the restrictive provisions of the Essential Commodities Act in so far as they impede the inter-State movement of foodgrains.

1.12 In the context of raising investment in infrastructure, the Union Budget, 2001-02 focused on the issue of the imposition of appropriate user charges in the power sector through reforms of State Electricity Boards (SEBs) for the restoration of financial viability, enhancement of Plan outlay for central sector power utilities, roads and telecommunications, legislative reforms in the areas of electricity distribution, telecommunication, information technology (IT) and broadcasting and rationalisation of tariffs for ports.

1.13 Financial sector reforms were provided momentum through comprehensive legislation envisaged alongside measures taken by the Reserve Bank for developing a transparent and active debt market, which are reported in Part Two of this Report. Furthermore, legislation to facilitate foreclosure and enforcement of securities in the event of default has been contemplated together with expanding the number of Debt Recovery Tribunals (DRTs). Greater autonomy is envisaged for banks in the area of recruitment.

1.14 Progressive liberalisation of the capital account was continued through greater freedom for Indian companies to invest abroad, and in the utilisation of American Depository Receipt (ADR)/Global Depository Receipt (GDR) proceeds including two-way fungibility *vis-a-vis* domestic shares. Overseas investment by partnership firms and companies providing professional services is allowed. Complementary measures undertaken by the Reserve Bank to liberalise capital account transactions are reviewed in Part Two of the Report. Foreign Institutional Investors (FIIs) are allowed to invest up to 49 per cent of the paid-up capital of Indian companies. Foreign direct investment in non-banking financial companies (NBFCs) is allowed up to 100 per cent without any domestic divestment stipulation, provided the foreign

investors bring in a minimum of US \$ 50 million under the automatic route.

1.15 Intensification of structural reforms through the Union Budget included a time-bound action programme for the dismantling of the administered pricing mechanism in the petroleum sector, rationalisation of fertiliser pricing with the objective of phasing out the retention price scheme in the medium term, decontrol of sugar and the introduction of futures/forward trading, reduction in the span of price control relating to drugs and pharmaceuticals, legislation to repeal the Sick Industrial Companies (Special Provisions) Act (SICA) and the Companies Act in order to set up a National Company Law Tribunal and amendments to the Industrial Disputes Act relating to lay-offs, retrenchment and closure. Similar legislation was proposed in the case of contract labour. A new scheme of group insurance *i.e.*, the Ashraya Bima Yojana was introduced to provide compensation for one year for workers who lose their jobs. Several measures were undertaken in respect of the small-scale sector, health and family welfare, social security, education and other aspects of human development including the welfare of women, scheduled castes and tribes and journalists.

1.16 The strategy of fiscal consolidation proposed in the Union Budget rests on the plank of prudent expenditure management. Important initiatives to economise public expenditure and also improve its quality relate to revision in user charges, scrutiny and limits to recruitment, downsizing, redeployment and retraining of staff, trimming of perquisites provided to Government employees, zero-based budgeting for all schemes at the Central and State levels, pension reform and reduction of administered interest rates. Involvement of States in the reform process is sought to be fostered through an Incentive Fund.

1.17 Tax measures in the Union Budget, 2001-02 are guided by the principles of growth in revenues, simplification and rationalisation of the tax regime and effective tax compliance. On direct taxes, no changes in existing tax rates were proposed and all surcharges, except the 2 per cent surcharge for Gujarat earthquake relief, were withdrawn. The one-by-six scheme was extended to all urban areas and the scope of deduction at source was enlarged. Tax on distributed dividend was reduced to promote growth. Tax holidays were granted for infrastructural areas and special economic zones. Under indirect taxes, the Union Budget reduced the three rates of special excise duty to a single rate of 16 per cent and abolished 8 per cent special excise duty on certain items. Special surcharge on cigarettes and tobacco products was introduced to replenish the National Calamity Contingency Fund. Several services were brought under the ambit of taxation to widen the tax base. The peak level of customs duty was reduced from 38.5 per cent to 35 per cent by discontinuing the surcharge of 10 per cent. The four-rate import duty structure (of 5 per cent, 15 per cent, 25 per cent and 35 per cent) has been left unchanged. With a view to aligning the customs tariff to the levels prevailing in the Asian countries, the number of rates would be progressively reduced to the minimum within three years with the peak rate at 20 per cent. The customs duty on certain items was reduced in accordance with the World Trade Organisation (WTO) bound rate.

1.18 The Budget proposed to strengthen disinvestment programme through the strategic sales of blocks of shares. Disinvestment proceeds would be used for restructuring PSEs, safety nets for workers, reduction of debt burden and additional budgetary support for plan, particularly in the area of social and infrastructure sectors.

EXTERNAL SECTOR POLICIES

Trade Policies

1.19 The modified EXIM policy for 1997-2002, announced on March 31, 2001 was framed in the context of the goal of accelerating export growth to achieve at least 1 per cent share of global trade (which translates to an export level of US \$ 75 billion or roughly 18 per cent in terms of growth rate) by 2004-05.

1.20 In the context of the on-going negotiations on agriculture in the World Trade Organisation (WTO) and in order to take advantage of the expected liberalisation of agricultural trade, primacy was given to agricultural exports. Measures include proposals to formulate a specific agricultural export policy and set up Agricultural Export Zones, extension of benefits of export promotion schemes such as the Duty Exemption Scheme and the Export Promotion Capital Goods (EPCG) Scheme to the agricultural sector, and the recognition as Export House/Trading House/ Star Trading House/Super Star Trading House for exporters achieving one-third of the threshold limit prescribed for exporters of goods. State Governments were assigned an important role in identifying such zones for end-to-end development for exports of specific products from specific geographical areas. The Agricultural and Processed Food Products Exports Development Authority (APEDA) would supplement the efforts of State Governments for facilitating agricultural exports.

1.21 Assistance is to be extended in research and development, market research, specific market and product studies, warehousing and retail marketing infrastructure in select countries and direct market promotion activities through media advertising and buyer-seller meets through the newly instituted Market Access Initiative scheme. In respect of Special Economic Zones (SEZs), measures include permission for foreign direct investment (FDI) under the automatic route for all manufacturing sectors, except a small negative list, doing away with licences for setting up units for items reserved under SSI, allowing units to bring back proceeds in 365 days (instead of normal period of 180 days) and retaining 100 per cent of the same in Exchange Earners' Foreign Currency (EEFC) accounts, duty free import/procurement from Domestic Tariff Area (DTA) of goods for setting up factories in SEZs, permission to sell goods in the DTA in accordance with the import policy in force, permission to sub-contract part of the production process abroad and to allow amortisation of value to be spread over 8 years instead of the present 5 years to attract capital intensive units into the SEZs and to give infrastructure status to SEZs under Income Tax Act. The Union Budget, 2001-02 had earlier announced a 10-year tax holiday for the developers of SEZs on the same lines as the developers of industrial parks.

1.22 In continuation of the process begun in the EXIM policy announcement of March 2000, the phasing out of balance of payments related quantitative restrictions (QRs) on imports on the remaining 715 items was completed in the policy announcement of March 2001. The freed items include 342 textile products, 147 agricultural products including alcoholic beverages and 226 other manufactured products (including automobiles). Along with removal of QRs, measures were simultaneously taken to safeguard against a surge in imports. These include restricting the import of agricultural products like wheat, rice, maize as also petrol, diesel, Aviation Turbine

Fuel (ATF) and urea only through designated State Trading Enterprises, instituting import permits issued by Ministry of Agriculture after an import risk analysis based on scientific principles and in accordance with the WTO Agreement on Sanitary and Phyto-sanitary Measures for the import of all primary products of plant and animal origin and the prescription of certain conditions for importing new and second hand cars for ensuring road safety as also environment concerns. In addition, an Early Warning System for monitoring of imports by streamlining and reducing the time lag for gathering data was put in place with a high-powered Standing Group functioning as a “War-room” for tracking, collating and analysing data on 300 sensitive items of importance to the public which is being published on a monthly basis.

1.23 Several measures were also taken to simplify and streamline procedures like providing automatic customs clearance to status and green card holders, reduction in percentage of physical verification and random drawing of shipping bills, expeditious verification of Duty Entitlement Passbook (DEPB) and Duty Free Replenishment Certificate (DFRC), redemption of advance/EPCG licence on the basis of No Bond issued by Directorate General of Foreign Trade (DGFT) and issuance of receipt by the Customs for ensuring accountability.

1.24 In the light of the complete removal of quantitative restrictions on imports, the Government announced several safeguard measures in order to protect the domestic industry. There was a substantial hike in the customs duties on agricultural commodities like tea, coffee and coconut (35 per cent to 70 per cent), crude edible oils (a uniform rate of 75 per cent from 35-55 per cent) and refined oils (85 per cent from 45/65 per cent), completely built units of cars and two-wheelers (60 per cent from 35 per cent) and imported liquor. In case of second-hand cars, the total duty would work out to more than 180 per cent, with the rate of basic customs duty raised to 105 per cent.

1.25 In consonance with the New Textile Policy announced to prepare the domestic industry to meet the challenges of global competition, the Union Budget, 2001-02 announced several measures including exemption from *ad valorem* excise structure for independent textile processors and abolition of the 16 per cent countervailing duty on 12 textile machinery items.

Policies for External Capital Flows

1.26 The approach to international capital flows has been conditioned by the specific institutional and legislative framework characterising the current state of development of the domestic economy with a preference for a gradualistic approach and an implicit hierarchy of various types of flows based on stability considerations. During 2000-01, policy initiatives were undertaken to further facilitate the access of industry to external capital flows so as to improve the climate for new investment.

1.27 Periodic adjustments have been made in the policy regime for foreign direct investment (FDI) to create a congenial environment for these flows. All FDI would henceforth be permitted under the automatic approval route, except for a small negative list. New foreign investment proposals in the information technology (IT) sector are entitled to automatic approval irrespective of whether the investor has an existing joint venture or technical collaboration in the country. FDI up to 100 per cent is allowed for business-to-business e-commerce subject to

certain conditions. The dividend balancing condition for FDI in the remaining 22 consumer goods industries was removed. The upper limit of Rs.1,500 crores for FDI in projects relating to electricity generation, transmission and distribution (other than atomic reactor power plants) was also removed. The limit of FDI in oil refining sector under automatic route was raised from the existing 49 per cent to 100 per cent. FDI under the automatic route is permitted up to 100 per cent for all manufacturing activities (with certain exceptions) in Special Economic Zones (SEZs). Foreign equity participation up to 26 per cent was allowed in the insurance sector subject to the issue of necessary license by the Insurance Regulatory and Development Authority (IRDA). 100 per cent FDI was allowed in the telecommunications sector for Internet Service Providers (ISPs) [not providing gateways (both for satellite and submarine cables), infrastructure providers providing dark fibre (IP category I), electronic mail and voice mail]. In principle or prior approval of the Reserve Bank is no longer required for any proposal for issue of shares as long as it is in conformity with Government guidelines.

1.28 As mentioned earlier, the Union Budget substantially liberalised the procedures for FDI in non-bank financial companies. The list of NBFC activities eligible for foreign equity investment was increased to 18 with the addition of micro-credit/rural credit. Foreign investment guidelines for NBFCs were amended to provide a minimum capitalisation norm of US \$ 0.5 million for activities which are consultative in nature or are not fund-based, irrespective of the foreign equity participation level. The provision applies to investment advisory services, credit reference and rating agencies, financial consultancy, foreign exchange broking and money changing. Permission was granted to holding companies in NBFC activities with a minimum capital of US \$ 50 million to set up 100 per cent downstream subsidiaries.

1.29 In May 2001, the Government significantly liberalised the FDI policy for crucial sectors including banks, drugs and pharmaceuticals and some areas of telecommunication. The defence equipment industry was opened to the private sector with FDI limit of 26 per cent. FDI to the extent of 100 per cent was permitted in pharmaceuticals, hotels, airports, tourism, courier services, township development and mass rapid transport system (MRTS) in all metropolitan cities.

1.30 Policies for international offerings through American Depository Receipts (ADRs)/ Global Depository Receipts (GDRs) by Indian companies were liberalised. Overseas business acquisitions through the ADR/GDR route were permitted under the automatic/simplified approval mechanism for Indian companies engaged in (i) information technology and entertainment software, (ii) pharmaceuticals, (iii) biotechnology and (iv) any other sector notified by the Government from time to time. The automatic approval is subject to conditions of previous listing, conformation to FDI policy and limiting of transactions to US \$ 100 million or ten times the export earnings during the preceding financial year. Indian companies engaged in information technology (IT) software and IT services were permitted to issue ADR/ GDR – linked stock options to permanent employees (including Indian and overseas working directors) of the subsidiary companies incorporated in India or outside and engaged in IT software and IT services (subject to eligibility criteria and other conditions). Indian companies engaged in information technology and entertainment software, pharmaceuticals, biotechnology and any other activities within the knowledge-based sector (as notified by the Government from time to time) were permitted to issue employees' stock options (ESOPs) to their permanent employees.

The liberalised norms for ESOPs were extended to multi-product diversified companies subject to specific conditions.

1.31 The Union Budget, 2001-02 proposed several measures towards further liberalising the policies towards ADRs/GDRs. Indian companies wishing to invest abroad were permitted to invest up to US \$ 50 million on an annual basis through the automatic route without being subject to the three year profitability condition. Companies with proven track record wishing to invest larger amounts were allowed to get a block allocation in advance from the Reserve Bank for investments overseas. Companies which have issued ADRs/GDRs were permitted to make foreign investments up to 100 per cent of these proceeds, up from the ceiling of 50 per cent. A scheme has been announced whereby local shares can now be re-converted to ADRs/GDRs while being subject to sectoral caps, wherever applicable. Indian companies were permitted to list in foreign stock exchanges by sponsoring ADR/GDR issues against block share holding. This facility has to be offered to all categories of shareholders. Restrictions on overseas investments by registered partnership firms and companies providing professional services were removed. Indian employees who have the benefit of ESOP schemes in foreign owned companies can now make investments abroad up to US \$ 20,000 annually instead of in a block of five years.

1.32 The access of Indian corporate entities to use of external commercial borrowings (ECBs) as a window for resource mobilisation was considerably improved and procedures streamlined. The Government delegated ECB sanctioning powers up to US \$ 100 million under all schemes to the Reserve Bank. Furthermore, prepayment approvals can now be given by the Reserve Bank, as per prevailing guidelines, even in cases where ECBs were approved earlier by the Union Ministry of Finance. The existing all-in-cost ceilings for normal projects, infrastructure projects and long term ECBs were fixed at 300, 400 and 450 basis points over 6 months London Inter-Bank Offer Rate (LIBOR) for the respective currency in which the loan was to be raised or applicable bench marks as the case may be. The average maturity for the purpose of ECB guidelines was declared to be the weighted average of all disbursements, taking each disbursement individually and its period of retention by borrowers. Corporates having underlying exposure in respect of crude and petroleum products were permitted to hedge the commodity price risk subject to detailed guidelines of the Reserve Bank. With effect from September 1, 2000, it was decided to operationalise the automatic route for fresh ECB approvals up to US \$ 50 million (with average maturity of not less than 3 years) and for refinancing of existing ECBs. Corporates are not required to obtain prior approval from the Ministry of Finance/Reserve Bank.

MONETARY POLICY FRAMEWORK

1.33 During 2000-01, the emphasis of monetary and credit policy was to provide sufficient credit for growth while ensuring that there is no emergence of inflationary pressures on this account. Towards this end, the Reserve Bank continued its policy of active management of liquidity through open market operations (OMO), including repo and reverse repo operations as part of the Liquidity Adjustment Facility (LAF), and changes in the cash reserve ratio (CRR) and the Bank Rate, as and when required. The policy stance took into account the sharp increase in oil prices in an otherwise reasonably benign international inflationary environment, a freer trade regime, the high levels of food stocks and foreign exchange reserves, the budget stance of

reining in the overall fiscal deficit and the delay in the adjustment of important administered prices, including prices of petroleum products. At the beginning of the year on April 1, 2000, the Reserve Bank announced a one percentage point reduction in the Bank Rate, the CRR (in two stages) and the repo rate, and 0.5 percentage point reduction in the saving deposit rate of scheduled commercial banks from 4.5 to 4.0 per cent. Following these measures, most public sector banks reduced their lending and deposit rates. The monetary policy stance also took note of unfavourable events such as rising inflation, droughts and emphasised the need for continuous vigilance and caution in the event of unanticipated domestic and international developments. Accordingly, a flexible approach was adopted with allowance for tightening monetary policy when necessary and unavoidable.

1.34 The year-on-year expansion of scheduled commercial banks' non-food credit was high during a greater part of the year, reflecting the increases in stocks in some industries, consumer credit demand and an augmented credit flow to the infrastructure sector. In the last quarter of 2000-01 and also in the first quarter of 2001-02, non-food credit growth decelerated as industrial activity slowed down.

1.35 The day-to-day liquidity management function of monetary policy is performed through the Liquidity Adjustment Facility (LAF) with a view to ensuring reasonable stability in financial markets and orderly market conditions. The introduction of the LAF in June 2000 facilitated the management of volatility in the foreign exchange market segment and tight liquidity conditions.

1.36 By mid-July 2000, the improvement in market liquidity enabled an easing of the reverse repo rate. Thereafter, with renewal of pressures in the foreign exchange market, the Bank Rate and the CRR were raised, standing facilities were temporarily halved and repo operations were employed to absorb liquidity and to signal the monetary stance. The cut-off repo rates gradually rose in August 2000 and were around 10 per cent for most part of September 2000. Additional repo auctions with maturity ranging from 3 to 7 days were also undertaken during this period. By mid-September 2000, market conditions began to improve. Market sentiment was rejuvenated by inflows in the form of India Millennium Deposits (IMDs) and other capital flows. Interest rate measures undertaken earlier in the context of market turbulence were withdrawn. The CRR was reduced in two stages to the April 2000 level of 8 per cent by March 2001. The Bank Rate was also reduced, in successive cuts of 50 basis points each from mid-February 2001 to the April 2000 level of 7 per cent, effective March 2, 2001. On the other hand, reverse repos were used in December 2000-January 2001 to assuage the temporary spiking of call rates and again towards the end of March 2001 in view of the usual balance sheet date adjustments. In view of easy money market conditions, repos under the LAF were used to absorb liquidity, with the rates easing to 7.0 per cent and further to 6.75 per cent on April 27, 2001 and to 6.5 per cent on May 28, 2001. The Reserve Bank conducted reverse repos during May 8-23, 2001 to tide over a spell of tight liquidity caused by Government securities auctions, reduced lending by non-bank participants under the new regulations on lending in the call money market and rationalisation of liquidity support at the Bank Rate as per the revised LAF scheme. Furthermore, the CRR was reduced by 50 basis points to 7.5 per cent effective May 19, 2001, injecting Rs.4,500 crore in terms of lendable resources to the banking system.

1.37 Against the background of macroeconomic developments in India, the budgeted levels of

the government borrowing programme, expectations of lower world GDP growth and a reasonably benign international inflationary environment, the overall stance of monetary policy for 2001-02 is to provide adequate liquidity to meet credit growth and support revival of investment demand while continuing a vigil on movements in the price level. Within the overall framework of imparting greater flexibility to the interest rate regime in the medium-term, the policy would be to maintain a stable interest rate environment with a preference for softening to the extent the evolving situation warrants. While this policy stance would characterise normal circumstances, a flexible approach would be adopted in the event of emergence of any adverse and unexpected developments in domestic or external sectors. The active management of liquidity through OMO, including the two-way sale/purchase of Treasury Bills, would also continue with reductions in CRR as and when required. Assuming a revival of the industrial sector from the second half of 2001-02, a reasonable monsoon and good performance of exports, monetary policy was formulated taking into account a growth rate of real GDP at 6.0 to 6.5 per cent, a rate of inflation within 5.0 per cent, *i.e.*, close to that in the previous year, the aggregate deposits of scheduled commercial banks of about 14.5 per cent and non-food commercial bank credit (adjusted for investments in commercial paper, shares/ debentures/bonds of PSUs and private corporate sector) growth of 16.0 to 17.0 per cent.

1.38 The Liquidity Adjustment Facility (LAF) has emerged as an effective mechanism for absorbing and/or injecting liquidity on a day-to-day basis in a flexible manner as well as transmitting short-term interest rate signals and, in the process, providing an informal corridor for the call money market. Given the satisfactory experience with the LAF, the endeavour of monetary policy has been to make it more efficient, by removing some of the existing institutional, procedural and technological constraints. The experience has also shown that the LAF can be made fully effective only when it becomes the primary instrument of liquidity adjustment, and the other forms of liquidity support to the system *viz.*, the collateralised lending facility and export credit refinance to banks and liquidity support to Primary Dealers (PDs) are gradually phased out. Yet another requirement for the LAF to become fully effective is the need to move towards a pure inter-bank call/notice money market and the need to create opportunities for activating the repo market and other alternative short-term investment options with adequate safeguards for non-bank participants which are at present allowed to lend in the call/notice money market. Considering all these issues, the Reserve Bank initiated a package of measures covering the LAF, call money market and standing liquidity facilities with a view to enhancing the smooth flow of funds across instruments and participants, resulting in further integration of the money market, thereby rendering it a more effective channel of monetary policy ([Box I.1](#)).

1.39 Changes in operating procedures were implemented to improve the efficiency of LAF and increase operational flexibility of the scheme to enable small level operators to participate. With a view to stabilising market expectations and arresting volatility in call rates, the Reserve Bank reserved the discretion to switchover to fixed rate repos on overnight basis and to introduce longer-term repos up to a 14-day period as and when required. The multiple price auction introduced on an experimental basis in May 2001 has been extended. Information on the scheduled commercial banks' aggregate cash balances maintained with the Reserve Bank and the weighted average cut-off yield in case of the multiple price auction is being released to the public.

Box I.1

Liquidity Adjustment Facility : Stage II

- Standing Liquidity Facilities split into (i) normal facility at the Bank Rate, and (ii) back-stop facility at variable daily rate at 1 percentage point above reverse repo cut-off rate in LAF auctions or 2-3 percentage point above repo cut-off rate in the absence of emergence of rate at the reverse repo auctions, or 1-3 percentage point above NSE –MIBOR when no bids for repo or reverse repo auctions have been received/accepted as the case may be as decided by the Reserve Bank.
- Normal facility constitutes about 2/3rd and back-stop facility about 1/3rd of total limits of standing liquidity support available to PDs and banks.
- Export credit refinance up to 15 per cent of outstanding export credit eligible for refinance as at the end of second preceding fortnight or existing limit as on May 4, 2001 as per the old formula whichever is higher applicable till March 31, 2002.
- Minimum bid size for LAF reduced from Rs.10 crore to Rs.5 crore.
- LAF timing advanced by 30 minutes to 10.30 a.m. for receipt of bids and 12 noon for announcement of results.
- Information on aggregate cash balances maintained by banks with the Reserve Bank to be made available to market on a cumulative basis during the reporting fortnight, with a lag of 2 days.
- Option to switchover to fixed rate repos on overnight basis.
- Option to introduce repos up to 14-day maturity.
- Multiple price auctions in place of uniform price auctions.

1.40 The export credit refinance facility was also rationalised so that the facility reflects more closely the extent of total credit support being provided by banks to exporters. The limits are now fixed on the basis of total outstanding export credit eligible instead of the incremental export credit eligible for refinance over a base date. As a matter of further comfort to all banks, the existing refinance limit as on May 4, 2001 was kept as the minimum limit available up to March 31, 2002.

1.41 The minimum maturity period for term deposits was reduced to 7 days from 15 days for wholesale deposits of Rs.15 lakh and above. With a view to enabling banks to have further flexibility in holding reserves depending upon their intra-period cash flows and to reduce volatility in the call money market, the minimum daily cash reserve requirement was reduced from 65 per cent to 50 per cent for the first seven days of the reporting fortnight from August 11, 2001. For the rest of the fortnight, the minimum requirement of 65 per cent is applicable including on the last day of the fortnight. This would enable banks to have flexibility in the management of bank reserves.

1.42 The interest rate structure on export credit was rationalised. In respect of pre-shipment credit up to 180 days, the ceiling rate applicable was set at 1.5 percentage points below the relevant PLR; banks are free to charge interest rate below the ceiling rate so prescribed. This is expected to introduce healthy competition and provide exporters a greater choice to avail of banking services in terms of interest rate, quality of service and transaction costs. The ceiling

rate on FCNR (B) deposits was set at LIBOR (instead of LIBOR plus 0.5 percentage point). The ceiling rate on foreign currency loans for exports by banks was also revised to LIBOR plus 1.0 percentage point.

FINANCIAL SECTOR REFORMS

1.43 The Reserve Bank continued to carry forward the process of financial sector reforms, focusing on the development and regulation of financial markets, strengthening the financial system in the context of fundamental changes occurring in the environment in which financial institutions and markets operate and refining the regulatory and supervisory function in the light of these changes.

Development and Regulation of Financial Markets

1.44 A crucial element of the ongoing financial sector reforms is the development of various segments of financial markets, strengthening the inter-linkages among various segments, introducing sophistication in market practices and products and building the technological infrastructure for the efficient functioning of markets. In the recent period, the focus of policy measures has been on enhancing the stability of financial markets by developing internal rules for healthy market activity, strengthening prudential and supervisory norms and redefining the regulatory role of the Reserve Bank in the context of financial markets. The amendments to the Securities Contract (Regulation) Act, 1956, which were brought into effect in March 2000, represent an important milestone in the appropriate assignment of regulatory authority over the financial markets. These amendments establish the jurisdiction of the Reserve Bank over transactions in Government securities, money market securities, gold related securities, derivatives based on these securities as also ready forward contracts in debt securities, in conjunction with the Reserve Bank's regulation of foreign exchange transactions under the Foreign Exchange Regulation Act, 1973 and later by the Foreign Exchange Management Act, 1999.

1.45 During 2000-01, the Reserve Bank adopted a flexible stance in the regulation of financial markets, involving quick responses to unanticipated market pressures and return to the normal stance as pressures eased. Liquidity management enabled the setting of informal corridors for the evolution of call rates. Consistent with measures for operational improvement of the LAF, efforts were also made to develop the call money market into a pure inter-bank market. Corporates were allowed to route their call money transactions through primary dealers up to June 2001. A phased exit of non-bank participants from the call money market through a graded reduction in their call money lending linked to the commencement of operations by the Clearing Corporation was set in motion (details are given in Section IX). At the same time, other segments of the money market are being developed to allow non-bank entities to participate. The minimum maturity of CDs was reduced to 15 days. Restriction on their transferability was also withdrawn. Guidelines for commercial paper (CPs) issuance were modified to provide flexibility to issuers and to widen the market. The repo market was expanded to cover non-bank entities holding current and SGL accounts with the Bank.

1.46 The development of the Government securities market has been an important component

of the financial sector reforms. During 2000-01, the Reserve Bank continued to manage market conditions by a combination of private placements/devolvement, open market operations and reissuance of existing securities. This strategy enabled the smooth absorption of the Government borrowing programme and imparted efficiency to monetary policy operations. A scheme for automatic invocation of undrawn refinance/ liquidity support from the Reserve Bank by an SGL account holder was introduced to resolve gridlock during settlement in the Government securities market. Sale of Government securities allotted in primary issues were allowed on the same day. An electronic Negotiated Dealing System (NDS) is expected to be introduced shortly with a view to moving towards transparent electronic bidding in auctions and secondary market transactions on a real-time basis.

1.47 In the foreign exchange market, the primary objective continued to be the maintenance of orderly conditions without any specific target for the exchange rate. The Reserve Bank met temporary mismatches in demand and supply through direct operations in the market and/or through banks. During the period May to August 2000, when the foreign exchange market experienced turbulence, market operations were combined with monetary measures. These measures included imposition of interest rate surcharge of 50 per cent on import finance, interest of 25 per cent per annum (minimum) in respect of overdue export bills from the date the bill falls due for payment, close monitoring of banks' foreign exchange transactions and upward adjustment of the Bank Rate and the CRR, along with reduction in all standing liquidity facilities. EEFC entitlements were temporarily reduced. The combination of these measures enabled orderly corrections in the exchange rate. These measures were reversed as soon as normal conditions were restored.

Banking Sector Reforms

1.48 Banking sector reforms, during 2000-01, emphasised building the health of banks and financial institutions, improving their asset quality, strengthening prudential norms and supervision and monitoring developments with a view to securing the soundness and stability of the Indian banking system comparable to international standards.

Capital Adequacy and Provisioning

1.49 In a move towards consolidated supervision, banks were required to voluntarily build in the risk-weighted components of their subsidiaries into their own balance sheets on a notional basis. They were required to assign additional capital in phases from 2000-01 onwards. A risk weight of 100 per cent was assigned for State Government guaranteed securities issued by defaulting entities and to deposits placed with the NABARD/SIDBI in lieu of shortfall in advances to priority sector. The general provision of 0.25 per cent on standard assets which was required to be made on a global portfolio basis, was allowed to be included in Tier II capital along with general provision and loss reserves up to a maximum of 1.25 per cent of the total risk weighted assets. In general, banks were encouraged to make provisions in excess of the stipulations, taking into account their own risk perceptions.

Prudential Accounting Norms

1.50 Valuation norms applicable for banks' investment portfolios were modified to reflect market movements. Commercial banks were required to classify their entire investment portfolio under three categories, viz., "held to maturity", "available for sale" and "held for trading". Investments available for sale or held for trading were required to be marked to market periodically. Guidelines were also issued regarding classification and provisioning norms for restructured accounts in the standard and substandard categories (for details, see Section X).

1.51 The concept of past due in the identification of non-performing assets was dispensed with and banks were advised to draw action plans for moving over to international practice of classifying loans as non-performing when the interest and/or principal remains overdue for a period more than 90 days as against the existing 180 days from the year ending March 31, 2004. In July 2000, guidelines were issued for recovery of dues relating to non-performing assets (NPAs) of public sector banks with outstandings up to Rs.5 crore. The guidelines provide a simple, non-discretionary and non-discriminatory mechanism for recovery of NPAs in all sectors through compromise settlements.

Exposure Norms

1.52 The Reserve Bank announced fresh norms on the concept of 'capital funds', measurement of credit exposures and level of exposure limits to individuals/group borrowers. The exposure ceiling for commercial banks in respect of individual borrowers is scheduled to be reduced from 20 per cent to 15 per cent of capital funds in March 31, 2002. With effect from April 1, 2003, the non-fund based exposure is to be reckoned at 100 per cent and banks are required to include forward contracts and other derivatives in determining individual/ group exposure. Within the overall exposure, a bank's exposure to the capital market in all forms was set at 5 per cent of its outstanding advances (including commercial paper) as on March 31 of the previous year (for details, see Section X). Banks making investments in equity shares/debentures, financing of equities and issue of guarantees were encouraged to develop expertise in equity research and to formulate a transparent policy and procedure for investment in shares, etc. Equity shares in a bank's portfolio should be marked to market preferably on a daily basis, but at least on a weekly basis. Banks are required to disclose the total investments made in equity shares, convertible bonds and debentures, units of equity oriented mutual funds, aggregate advances against shares in the 'Notes on Account' to their balance sheets. Revised guidelines in this respect were issued on May 11, 2001 (for details, see Section X).

Entry Norms for New Private Sector Banks

1.53 The entry norms for new banks in the private sector were revised in January 2001, and guidelines for conversion of non-banking financial companies (NBFCs) to scheduled banks were also issued. The minimum capital for entry was set at Rs.200 crore, to be raised to Rs.300 crore within three years from commencement of business. A minimum of 40 per cent of the paid-up capital was required to be contributed by promoters. Participation by NRIs was restricted to 40 per cent. A minimum CRAR of 10 per cent was prescribed for new private sector banks (for details, see Section X).

Norms for Banks and NBFCs Entering Insurance

1.54 Banks and registered NBFCs have been permitted to enter the insurance business under the Insurance Regulatory and Development Authority (IRDA) Act, 1999. The Reserve Bank issued guidelines in this regard for banks and NBFCs to enter into insurance business (i) on risk participation basis; (ii) for strategic investment in an insurance company without any risk participation and (iii) for agency business on behalf of insurance companies on fee basis without any risk participation. Certain eligibility criteria have been prescribed for entry of banks and NBFCs into insurance business through the above routes.

Supervision of Urban Co-operative Banks (UCBs)

1.55 Existing supervisory systems for UCBs allow for regulatory arbitrage and potential for contagion effects. Furthermore, the existence of overlapping jurisdictions between the Central Government/State Government and the Reserve Bank hinders the speed of response to unforeseen developments. In the light of the recent experience, the Reserve Bank undertook several interim measures, pending formal legislative changes, relating to lending against shares, borrowings in the call market, composition of SLR investments and term deposits placed with other UCBs.

1.56 In the April 2001 Monetary and Credit policy statement, the Reserve Bank has mooted a proposal for setting up of a new apex supervisory body, which can take over the entire inspection/supervisory functions in relation to scheduled and non-scheduled UCBs. This apex body could be under the control of a separate high-level supervisory board consisting of representatives of the Central Government, State Governments, the Reserve Bank as well as experts and may be given the responsibility of inspection and supervision of UCBs and ensuring their conformity with prudential, capital adequacy and risk-management norms as laid down by the Reserve Bank.

International Standards

1.57 The Reserve Bank has been conducting self-assessments of the Indian banking system *vis-a-vis* the Core Principles of Effective Banking Supervision. These assessments, supported by an external assessment by the IMF in November 1999, indicate that systems in India are largely compliant with the Core Principles. As a member of the Working Group on Capital of the Core Principles Liaison Group (CPLG), the Reserve Bank has provided the perspectives of the non G-10 countries in the drafting of the New Capital Accord. With regard to the New Capital Accord, it has expressed the view that where banks are of simple structure and have subsidiaries, the Accord could be adopted on stand-alone basis with the full deduction of equity contribution made to subsidiaries from the total capital. Secondly, for assigning preferential risk weights for banking book assets (excluding claims on the sovereign), preference has been expressed for assessments made by the domestic rating agencies as opposed to external rating agencies. The Reserve Bank is also of the view that risk weighting of banks should be de-linked from that of the sovereign in which they are incorporated and instead, preferential risk weights in the range of 20-50 per cent on a graded scale could be assigned on the basis of risk assessments by domestic agencies. The feedback received from a few banks indicates the need for substantial upgrading of existing Management Information Systems (MIS), risk management practices and procedures

and technical skills of the staff. The Reserve Bank has forwarded its comments on the New Capital Accord to the Basel Committee. It has also sought public opinion in India on the New Capital Accord.

1.58 The Standing Committee on International Financial Standards and Codes (Chairman: Dr.Y.V. Reddy) was constituted by the Reserve Bank and Government of India for identifying the developments in global standards and codes with a view to considering the applicability of these standards and codes to the Indian financial system. The reports of the ten advisory groups, constituted by the Standing Committee, in the areas of accounting and auditing, banking supervision, bankruptcy law, corporate governance, data dissemination, fiscal transparency, insurance regulation, transparency in monetary and financial policies, payment and settlement systems and securities market regulation assessed the appropriateness of international standards and codes in these areas to the Indian context and recommended, where necessary, measures to improve existing standards. All the Advisory Groups have submitted their Reports which have been posted at the Reserve Bank's website in order to elicit public opinion (see [Box X.4](#)).

Technological Developments in Banking

1.59 The approach to the modernisation of the payments and settlement system over the medium-term is three-pronged: (i) consolidation, (ii) development and (iii) integration. The process of finalising the Real Time Gross Settlement (RTGS) design specifications covering the entire gamut of policy, operational and implementation issues was completed during the year. A key component of the RTGS system is the subsystem of queuing of RTGS messages pending settlement. While the general principle of 'first-in-first-out' (FIFO) would be the base for the queuing mechanism for the Indian RTGS system, there would be enhancements in the form of priority assignment and potential grid lock identification by the software on the basis of pending queues. The INdian FINancial NETwork (INFINET) which initially comprised only the public sector banks was opened up for participation by other categories of members. 26 public sector banks achieved the level of 70 per cent of business captured through computerisation by June 2001.

1.60 The Information Technology Act, 2000 has given legal recognition to creation, transmission and retention of an electronic (or magnetic) data to be treated as valid proof in a court of law, except in those areas, which continue to be governed by the provisions of the Negotiable Instruments Act, 1881. Payment System Legislation in the form of amendments to various Acts as also the need for framing new legislation for the regulation of multiple electronic payments is under consideration. Several measures to ensure the authenticity of the message across the Internet have been suggested by the Working Group on Internet Banking.

Credit Delivery

1.61 During 2000-01, channels for the flow of bank credit to certain sectors such as agriculture, exports, small-scale industry, infrastructure, housing, micro-credit institutions and self-help groups were strengthened. Bank finance to agriculture through NBFCs and finance for distribution of inputs for activities allied to agriculture up to Rs.15 lakh (raised from Rs.5 lakh) were included under priority sector lending. Domestic commercial banks are required to lend a

minimum of 18 per cent of net bank credit (NBC) to agriculture of which indirect lending to agriculture should not exceed 4.5 per cent of NBC. Pursuant to the announcement in the Union Budget, 2001-02, Rural Infrastructure Development Fund-VII (RIDF-VII) has been established in National Bank for Agriculture and Rural Development (NABARD) with a corpus of Rs.5,000 crore. The interest rate charged by NABARD to State Governments under RIDF-VII will be 10.50 per cent. A sum of at least Rs.750 crore will be earmarked out of RIDF-VII for rural electrification work. The rate of interest on RIDF deposits is linked to the banks' performance in lending to agriculture. Accordingly, banks will receive interest from NABARD on contribution to RIDF-VII at rates of interest inversely proportional to the shortfall in agricultural lending, the maximum being 10 percent.

1.62 Public sector banks were set annual targets for issue of Kisan Credit Cards (KCC) during 2001-02 to achieve overall target of 33 lakh set for commercial banks. All eligible agriculture farmers are to be covered under the Scheme within the next three years. Cumulatively, 43.77 lakh KCCs involving a sum of Rs.10,626 crore have been issued by public sector banks from the inception of the Scheme up to March 2001. Banks have also been advised to provide a personal insurance package to the KCC holders to cover them against accidental death or permanent disability, up to maximum amount of Rs.50,000 and Rs.25,000, respectively. As per the model Scheme, the premium burden will be shared by banks and the KCC holders in 2:1 ratio.

1.63 Removal of procedural hurdles facing exporters has been a priority with the Reserve Bank. Exporters' suggestions were invited by the Reserve Bank, including on its website. Based on these suggestions, guidelines were issued for a flexible approach by banks to negotiating bills drawn against LCs over and above limits, delegation of discretionary powers at bank branch level for sanction of export credit, flexibility in disbursing enhanced/*ad hoc* limits pending sanction, waivers of LCs/ export orders, etc. Exporters whose suggestions could not be implemented have been informed of the reason for non-acceptance.

1.64 The limit for investment in plant and machinery for considering a unit as small scale industry (SSI), which stood at Rs.3 crore earlier, was brought down to Rs.1 crore in order to give a fillip to small units with low investment. The investment limit for tiny units continues to be Rs.25 lakh. Investment in plant and machinery in respect of industry-related Small Scale Service/Business Enterprises was increased to Rs.10 lakh from Rs.5 lakh. Commercial banks were advised to dispense with collateral requirements for the tiny sector for loans up to Rs.5 lakh. Similarly, to promote credit flow to small borrowers, the composite loan limit for providing working capital and term loan through single window was increased from Rs.10 lakh to Rs.25 lakh. Under the Credit Linked Capital Subsidy Scheme for technology upgradation of SSIs introduced in October 2000, 12 per cent back-ended capital subsidy was made admissible on the loans granted to the SSIs by scheduled commercial banks/ designated State Financial Corporations (SFCs) for technology upgradation in certain selected sectors.

1.65 A Credit Guarantee Fund Scheme for small scale industries was introduced with effect from August 2000 for the purpose of providing guarantees to a substantial extent in respect of credit facilities up to Rs.25 lakh to borrowers in the SSI sector, without any collateral security and/or third party guarantee. The scheme covers eligible credit facility extended by the lending institutions effective June 1, 2000.

1.66 Efforts to augment and rationalise micro-credit were carried forward with guidelines being issued to banks in February 2000. A Micro Finance Development Fund with a start-up contribution of Rs.100 crore from the Reserve Bank, NABARD and select public sector banks was set up in NABARD to, *inter alia*, promote research, management information systems and dissemination of best practices in micro finance. During 2001-02, linkages with SHGs would be extended across the country so as to expand the access to credit.

Non-Banking Financial Companies

1.67 The regulatory framework of NBFCs is subject to continuous review. Money received by NBFCs by issue of CPs was exempted from the purview of public deposits. The maximum rate of interest that NBFCs and Miscellaneous Non-Banking Companies (chit fund companies) and *Nidhi* companies can pay on their public deposits was reduced, effective April 1, 2001, from 16 per cent to 14 per cent per annum. In respect of Residuary Non-Banking Companies (RNBCs), effective July 1, 2000, the floor on interest rates payable was lowered by two percentage points to 6 per cent per annum (to be compounded annually) on amounts deposited in lump sum or at monthly or longer intervals and 4 per cent per annum (to be compounded annually) on the amount deposited under daily deposit schemes.

1.68 The Supreme Court upheld the constitutional validity and reasonableness of the provisions of Section 45-S of the RBI Act which prohibits unincorporated bodies engaged in the business of a financial institution from accepting public deposits, except from certain specified relatives and specified financial institutions.

Financial Institutions

1.69 Changes in the regulatory framework for select all India Financial Institutions (FIs) were put in place during 2000-01 in the context of the move towards universal banking and consolidated supervision. The risk weight of 100 per cent to be assigned by banks for State Government guaranteed securities issued by defaulting entities was extended to FIs as well. The netting of provision against standard assets from gross advances was discontinued in respect of FIs. These provisions are to be shown separately in their balance sheets and would be eligible for inclusion in Tier II capital. The provision on standard assets together with 'other general provisions and loss reserves' should not exceed 1.25 per cent of the total risk weighted assets.

1.70 FIs were required to value the investments in mutual fund units at the market rates, as per stock exchange quotations, if available, or the latest net asset value (NAV) declared by the mutual fund in respect of each particular scheme. The guidelines for classification and valuation of investments by FIs were revised with effect from March 31, 2001, so as to bring the norms at par with the international best practices. Parity in the non-performing assets (NPA) norms for banks and FIs in respect of the overdue concept was sought to be effected from the year 2001-02 (for FIs, overdue for more than 180 days with effect from the year ended March 31, 2002, as against the present norm of an overdue period of 365 days or more in respect of principal and more than 180 days in respect of interest). FIs were required to issue notices to eligible defaulting borrowers to avail of the opportunity for one time settlement of their outstanding dues

and the period for giving notice was extended up to September 30, 2000. The operation of guidelines for settlement of the outstanding dues were later extended up to June 30, 2001.

1.71 Guidelines on raising of resources by FIs were modified on June 21, 2000. FIs are not required to seek the Reserve Bank's prior approval/registration for raising of resources by way of issue of bonds (both public issue and private placement) subject to the fulfilment of certain conditions relating to the minimum maturity of the bond, call/put options, the yield-to-maturity (YTM) offered and 'exit' option on the bonds. The outstanding total resources mobilised by an individual FI, including funds mobilised under the 'umbrella limit' prescribed by the Reserve Bank, should not exceed 10 times its net owned funds (NoF) as per the latest audited balance sheet. The limit fixed for raising resources by FIs would be only an enabling provision. Resource requirements along with maturity structure and the interest rate offered thereon need to be arrived on a realistic basis and derived, *inter alia*, from a sound system of Asset Liability /risk management. In the case of floating rate bonds, FIs are required to seek prior approval from the Reserve Bank with regard to the reference rate selected and the methods of floating rate determination. In order to improve functional efficiency, rating of term deposits by all-India FIs was made mandatory. They were, however, allowed flexibility in fixing interest rates on their term deposits.

1.72 A system of monthly reporting to the Reserve Bank on raising resources by way of bonds/debentures was introduced in respect of select all-India FIs since July 2000. The format of consolidated returns on raising of resources by all-India FIs was revised to facilitate inclusion of information on short-term borrowings, which has been included under the one time 'umbrella limit'.

1.73 The existing norms relating to restructuring/rescheduling/re-negotiation of terms of the standard and sub-standard loan assets were reviewed in the light of international best practice and the BIS guidelines. For determining the exposure ceiling for FIs, the Reserve Bank proposes to adopt the concept of 'capital fund' as defined under capital adequacy standards, effective March 31, 2002. The exposure ceilings for 'single borrower' and 'group borrower' were brought down and FIs were advised to disclose certain important financial ratios/data in their published Annual Reports as part of the 'Notes to Accounts' to enable the auditors to authenticate the information. Changes in the practices and procedure of conducting financial inspection by Reserve Bank in respect of FIs were introduced.

POLICIES FOR CAPITAL MARKETS

1.74 During 2000-01, policy initiatives in respect of the capital market consisted of the tightening of prudential norms, the introduction of new products and strengthening of the existing risk management system.

Primary Market

1.75 The Securities and Exchange Board of India (SEBI) tightened entry norms relating to primary issues. Debenture Trustees Regulations were modified to ensure an arm's length relationship between the issuer and the trustee, besides laying down of responsibilities for

different intermediaries. The SEBI (Disclosure and Investor Protection) Guidelines were modified to allow initial public offerings (IPOs) of sizes up to five times the pre-issue net worth only if the company has a record of profitability and net worth as specified in the guidelines. Companies not having such a track record or IPOs (or public issues) of more than five times the size of net worth were allowed to raise resources only through the book-building route where 60 per cent of the issue size is required to be allocated to 'Qualified Institutional Buyers'. In order to strengthen the book-building process, 100 per cent one-stage book-building was permitted with Bidding Centres at all cities with stock exchanges. Stipulations were also prescribed relating to allocations, on-line information, uniformity of margin, price band, etc. The SEBI notified that companies in the IT, telecom, media and entertainment sectors are allowed to tap the market with a minimum of 10 per cent of their equity, subject to fulfillment of certain criteria.

1.76 Banks were advised on November 10, 2000 that their exposure to the capital market by way of investments in shares, convertible debentures and units of equity oriented mutual funds, within the overall exposure to sensitive sectors, should not exceed 5 per cent of the outstanding domestic credit (excluding inter-bank lendings and advances outside India) as on March 31 of the previous year. These guidelines were revised on May 11, 2001 specifying the types of capital market exposure that could be undertaken by banks. Furthermore, the 5 per cent ceiling will be computed in relation to the total advances (including commercial paper) as on March 31 of the previous year (for details see Section X).

Secondary Market

1.77 The SEBI undertook several measures to improve the functioning of the stock market. Besides granting approval for trading in futures contracts based on Bombay Stock Exchange Sensitive Index (BSE Sensex) and the Standard and Poor (S&P) CNX Nifty, the SEBI permitted introduction of new products in the form of Continuous Net Settlement (CNS), carry forward in the rolling settlement segment, Automated Lending and Borrowing Mechanism (ALBM), and Automated Lending and Borrowing Mechanism under Rolling Settlement (ALBRS). Disclosure norms relating to material information and market surveillance system covering such aspects as maintenance of records, code of ethics for elected directors, empowerment of stock exchanges, stock watch system, *etc.* were tightened.

1.78 After the presentation of the Union Budget, 2001-02, the BSE Sensex gained 4.4 per cent on February 28, 2001. This increase in the BSE Sensex was the highest on a single day in the last 11 months. During the first week of March 2001, however, the equity markets experienced some turbulence and uncertainty leading to problems in certain stock exchanges as well as liquidity/insolvency problems in some co-operative banks, which, in turn, affected some commercial banks also. The SEBI undertook several measures to stabilise conditions in the stock exchanges including banning of naked short sales, imposition of additional deposit margins on net outstanding sales of all shares and restraining broker-directors from acting as directors on the Governing Board of the BSE. Settlements on various stock exchanges were completed smoothly with shortfalls of some brokers being met by drawing down the Trade/Settlement Guarantee Funds set up by the exchanges. An important priority of the Reserve Bank during this period was to try and minimise the "contagion" spreading from the equity market to the money and the government securities markets or to the banking system as a whole. In order to achieve this

objective, it was necessary to provide assurance of sufficient collateralised liquidity to banks and to take early action to prevent the problem affecting particular co-operative banks in one region from spreading to other financial institutions. As a result, by and large, the money market as well as government securities market continued to function normally. Further, there was no reduction in market liquidity in spite of some cases of payment delays/defaults. There was also no immediate adverse impact of stock market turbulence on interest rates.

1.79 Subsequently, in May 2001, SEBI announced significant changes in the capital market in keeping with the international practices and operations in the securities markets. These measures include: (i) banning of all deferral products in the cash segment including badla; (ii) bringing in 414 scrips accounting for 95 per cent of trading volumes within the ambit of rolling settlements system from July 2, 2001; (iii) allowing index based and individual stock based options; (iv) introduction of uniform Monday-to-Friday settlement cycle across all stock exchanges for all scrips not in the rolling mode; (v) a code of conduct and a preventive framework against insider trading; (vi) removal of price bands for all stocks in the rolling mode from July 2, 2001 and for the entire market from January 2, 2002; (vii) introduction of a market wide circuit breaker system to be applicable at three stages of the index movements; (viii) shifting the margining system from net to gross basis (sales and purchases) with effect from September 3, 2001; and (ix) introduction of 99 per cent value at risk (VaR)-based margin system for all scrips in the compulsory rolling settlement with effect from July 2, 2001. These measures are expected to play an important role in the long-term growth of the capital market.

1.80 The recent experience in equity markets and its aftermath have thrown up new challenges for the regulatory system as well as for the conduct of monetary policy. It is necessary to develop firewalls against contagion stemming from non-adherence to prudential norms and regulatory guidelines in certain segments of the banking system. In the interest of financial stability, it is important to take measures to strengthen the regulatory framework for the co-operative sector by removing “dual” control, by laying down clear-cut guidelines for their management structure and by enforcing further prudential standards in respect of access to uncollateralised funds and their lending against volatile assets. In the light of recent experience, it is also necessary for commercial banks to take some corrective measures to reduce undue risks in their portfolio management.

Mutual Funds

1.81 Investment norms relating to Mutual Funds (MFs) were liberalised by allowing them to invest in mortgage backed securities of investment grade and above. Furthermore, the open-ended schemes were allowed to invest up to 5 per cent of their net asset value in unlisted equity shares. The above two measures are expected to increase the funds to the housing sector and venture capital industry. Eligibility criteria for overseas investment were changed by allowing apportionment of US \$ 500 million limit of overseas investments among Indian MFs. Norms relating to code of conduct, classification of NPAs and their disclosure, period for initial offer of a scheme and dispatch of certificates, standardisation of format, treatment of unclaimed deposits and standards for trading by the employees were tightened. Disclosure and transparency standards relating to Asset Management Companies (AMCs) were also tightened.

MEASURES FOR NATURAL CALAMITIES

1.82 The earthquake which struck Gujarat on January 26, 2001 is widely regarded as unprecedented in its intensity measuring 7.7 on the Richter scale as per the US Geological Survey. It caused loss of life, extensive damage to both private property and public property such as roads, railways, ports and telecommunications networks and disruption in economic activity. To enable the Government of Gujarat to deal with the situation, the Government of India and the Reserve Bank undertook a number of measures. These measures included: (i) an advance of Rs.500 crore to Gujarat immediately from the National Calamity Contingency Fund; (ii) augmentation of the National Calamity Contingency Fund, set up with initial corpus of Rs.500 crore as a result of the Eleventh Finance Commission recommendations, by the imposition of a 2 per cent surcharge on personal income tax and corporate tax; (iii) assistance to State Government under various Centrally Sponsored Schemes for reconstruction of roads, bridges, power installations, school buildings, public utilities and other public infrastructure; (iv) arrangements for obtaining a combined line of credit of US \$ 800 million from World Bank and Asian Development Bank; (v) setting apart of adequate funds for housing reconstruction by the Union Budget by allocating a special quota of tax-free bonds of the order of Rs.2,000 crore between the Housing and Urban Development Corporation (HUDCO) and the National Housing Bank (NHB); (vi) exemption of cement and steel used for construction in the Indira Awas Yojana, by HUDCO and by agencies identified by the State Government, from excise duty as was done after the Orissa cyclone; (vii) permission to Government of Gujarat to raise funds by floating tax-free earthquake relief bonds, which will be open to subscription in Rupees to individuals and others including Non-Resident Indians through the Reserve Bank; and (viii) exemption of all goods intended for relief from excise and customs duties and direct tax assesseees were given extension of time for filing their returns. More recent measures have been announced for rehabilitation of the earthquake-affected region in Gujarat *viz.*, (i) a five-year excise duty holiday for the goods produced in the Kutch district, (ii) an additional amount of Rs.70 crore has been earmarked for the three hundred drought-affected villages, and (iii) Rs.160 crore to be utilised for rebuilding primary schools.

1.83 The Reserve Bank announced a package of relief measures for Gujarat and also instructed the banks to make special arrangements for freezing of loan classification status and extension of new loans on liberal terms for borrowers in the affected areas. The package of special relief measures included sanction of special limits up to Rs.1 lakh for restoration/rehabilitation of businesses of small traders, self-employed and small road transporters, *etc.*; grant of loans up to Rs.2 lakh for repairs/reconstruction of houses/shops; additional limits/rescheduling of existing limits for loans for small scale industry (SSI), business, trade and industry; relaxation in interest rates; allowing loans up to Rs.10 lakh at PLR of State Bank of India and interest rates for loans exceeding Rs.10 lakh to be determined at the discretion of the financing bank; reckoning credit extended for repairs/construction of houses/shops and to small traders, small business, self-employed and small road transporters *etc.* under the relief package as a part of priority sector lending; delaying recovery of principal and interest for a period of two years in case of agricultural loans, and rescheduling of the amounts not collected during two years, for a period up to 7 years; and allowing consumption loan up to Rs.2,000 per eligible beneficiary. Banks were also advised to adhere to the time schedule of one month for sanction of new loans and reschedulement of existing loan accounts from the date of request from the

affected borrower.

1.84 With a view to assisting exporters affected by the earthquake in Gujarat, banks were advised by the Reserve Bank to: (i) extend the period of packing credit at concessional rate even beyond 360 days in deserving cases where the goods are likely to be exported (the concessional rate ranges between 10-13 per cent); (ii) convert the overdue packing credit into term loans after taking into account the availability of ECGC claim, repayable in suitable instalments; and (iii) not to classify the overdue loans as non-performing assets (NPA) in respect of i) and ii) above, but to treat as NPA if interest and instalment of principal remains unpaid for 180 days, after it has become overdue, taking into account the revised due date fixed by the banks. Instructions are already in place for rescheduling/rephasing of existing loans and for extending fresh loans to agricultural borrowers affected by natural calamities. The rescheduled loans and the fresh facilities granted to such borrowers will be treated as current dues and need not be classified as NPA as per the Reserve Bank's income recognition, asset classification and provisioning norms. A special remittance of funds was arranged for the Ahmedabad office of the Reserve Bank whose fresh note stock position is being constantly monitored.

1.85 Gujarat's limits for ways and means advances (WMA) were completely relaxed and the terms of overdraft regulations for Gujarat were eased for three months till end-April 2001. The normal WMA limit of Gujarat was revised upwards to Rs.393 crore from the earlier limit of Rs.243 crore. The Reserve Bank sanctioned soft loans of Rs.1,000 crore to the National Housing Bank (NHB) to provide financial assistance for construction of houses damaged in the Gujarat earthquake. These loans were granted at 6 per cent rate of interest per annum and are repayable over a period of 18 years, inclusive of a moratorium period of 3 years.

1.86 In July 2001, Orissa still recouping from the ravages of the super cyclone of October 1999 followed by drought in the next year, was severely hit by floods, affecting 24 out of 30 districts in the State. The Central Government disbursed Rs.100 crore from the National Calamity Contingency Fund to the State, besides other material help. Commercial banks were advised by the Reserve Bank to be in readiness to take up necessary relief measures. A Steering Committee consisting of some major banks was formed for coordination of such activities. Heavy rains throughout Kerala during the first three weeks of July 2001 caused considerable damage leading to crop losses, flooded lands, collapsed houses, torn roads and landslides in many places. On a representation from the State Government, the Central Government had announced a relief of Rs. 26 crore from the National Calamity Contingency Fund. As an immediate relief measure, the State Government provided free ration and medical assistance. The State of Bihar was also affected by recent floods causing damages to standing crops and property. The Central Government has sanctioned Rs. 30 crore from the National Calamity Contingency Fund and also released one lakh tonne of foodgrains. The frequent incidence of potential calamities has resulted in economic and social losses, eroding the recent gains in macroeconomic performance. In this context, a consensus for integrated and pre-emptive disaster management strategies is approaching critical mass ([Box I.2](#)).

THE APPROACH TO THE TENTH FIVE YEAR PLAN

1.87 The approach to the Tenth Five Year Plan (2002-07) is being formulated against the

background of a distinct step-up in the growth path during the preceding two Plan periods, and concerns arising of the recent deceleration and some evidence of erosion in the quality of growth. The Draft Approach Paper of the Planning Commission reflects the growing concern about the deterioration in the social conditions of development, despite the acceleration of GDP growth from 5.8 per cent in the 1980s to 6.4 per cent during 1992-93 to 1999-2000. It envisages an indicative target of 8.0 per cent average real GDP growth for the plan period with a view to accelerating it further in the succeeding Plan period so that per capita income doubles over the decade. Recognising that the envisaged growth target would require a 6 percentage points increase in the investment rate and up to 5 percentage points increase in the domestic saving rate, given the incremental capital output ratio (ICOR) of 4.0, the Tenth Plan would seek to maximise efficiency gains through radical departure from existing practices and institutional arrangements ([Table 1.1](#)).

Box I.2 Disaster Management : Existing Arrangements

The country experienced a series of natural disasters in the 1990s such as earthquakes in Maharashtra (1993) and Gujarat (2001), floods in Andhra Pradesh (1996), Bihar, Kerala and Orissa (2001), the super-cyclone in Orissa (1999) and severe drought in Gujarat, Rajasthan and Madhya Pradesh in the last two years. These shocks have adversely affected both agricultural and industrial production, apart from resulting in loss of life and property.

Under the current institutional arrangements, the primary relief functions of the Central Government relate to forecasting and operation of a warning system and publicising the warnings on impending calamity, provision of transport with particular reference to evacuation and movement and ensuring supply of essential commodities and medicines, maintenance and restoration of physical communication links and mobilisation of financial resources. The secondary relief measures relate to flood/ inflow forecasts from the Central Water Commission, relief rehabilitation and restoration through various agencies, contingency plans for crops, cattle preservation, nutrition and health measures, technical and technological inputs for provision of drinking water, and assistance in water management for various uses and co-ordination of the activities of the State agencies and voluntary agencies.

The Eleventh Finance Commission (EFC) recommended the continuation of the provision of Calamity Relief Fund (CRF) with contribution from the Centre and the State in the ratio of 75:25. Natural calamities such as cyclones, droughts, earthquakes, fire, floods and hailstorms are eligible for relief under the CRF. A National Calamity Contingency Fund (NCCF) with an initial coupon of Rs.500 crore has been set up to assist the States in case of calamity of severe nature where States are not in a position to provide necessary relief.

An international Programme for Enhancement of Emergency Response (PEER) was established with external aid from the Office of United States Foreign Disaster Assistance in April 1999. The programme has the objective of improving the search and rescue capability and performance of first responders from Government and non-Government agencies and will be carried out in three phases. Phase I (1999-2001) of the programme concentrates on establishing a management unit within the Asian Disaster Preparedness Centre (ADPC) and identifying international partners. Phase II (2001-2003) of the Programme will concentrate on course of development and adaptation by conducting training courses. Phase III (2004-06) aims at expanding the Programme to other Asian countries while at the same time continuing to promote and support the integration of the program in all training institutions and their on-going programs. A United Nations Development Project (UNDP) for strengthening disaster management capacity is also in operation under which the National Centre for Disaster Management would be upgraded as the Indian Institute of Disaster Management and a National Disaster Management Plan has been formulated. India is actively participating in various international fora on disaster management.

Table 1.1 : Macroeconomic Parameters for the Tenth Plan

Item	(Per cent)	
	Base-Line	Target
1	2	3
1. Average GDP growth rate	6.5	8.0
2. Gross Investment Rate	27.8	32.6
3. Implicit ICOR	4.28	4.08
4. Current Account Deficit	1.5	2.8
5. Gross Domestic Saving	26.3	29.8
5.1 Government	-0.6	1.7

Source : Draft Approach Paper to the Tenth Five Year Plan (2002-2007), Planning Commission, Government of India, May 2001.

1.88 The strategy for the Tenth Plan would include redefining the role of Government, a State-wise breakdown of growth and social development targets, extending reforms into the agricultural sector, emphasis on employment-generating sectors and poverty alleviation. Simultaneously, the Tenth Plan would have a specific focus on key indicators of human development. Accordingly, the Draft Approach Paper seeks to establish, in addition to the target rate of real growth of 8 per cent, “specific and monitorable targets” measuring human well being, in terms of: (i) reduction of the poverty ratio to 20 per cent by 2007 and to 10 per cent by 2012; (ii) providing employment to the addition to the labour force over the period 2002-07; (iii) universal access to primary education by 2007; (iv) reduction in the decadal rate of population growth to 16.2 per cent between 2001 and 2011; (v) increase in literacy rate to 72 per cent by 2007 and to 80 per cent by 2012; (vi) reduction of infant mortality rate to 45 per 1000 live births by 2007 and to 28 by 2012; (vii) reduction of maternal mortality ratio to 20 per 1000 live births by 2007 and to 10 by 2012; (viii) increase in forest and tree cover to 25 per cent by 2007 and 33 per cent by 2012; (ix) provision of drinking water to all villages by 2012; and (x) cleaning of all major polluted rivers by 2007 and other notified stretches by 2012.

1.89 The approach to the Tenth Plan takes note of the growing importance of financial intermediation in the process of growth. In this regard, it underscores the need to expand the ambit of the financial sector reforms to encompass sectors such as agriculture, unorganised manufacturing and infrastructure which have been the focus of recent policy measures. It also emphasises the need to address the shortage of long-term risk capital. Widening and deepening of financial markets combined with adequate regulatory oversight would enable a judicious mix between interest income and capital gains. This, in turn, would create the conditions for sustained increases in gross domestic saving and investment rates.

* While the Reserve Bank of India’s accounting year is July-June, data on a number of variables are available on a financial year basis, *i.e.*, April-March, and hence, the data are analysed on the basis of the financial year. Where available, the data have been updated up to June 2001, and in some areas, information beyond end-June 2001 is also discussed. For the purpose of analysis and for providing proper perspectives on policies, references to past years as also prospective periods, wherever necessary, have been made in this Report.

II - The real Economy

[Macroeconomic Scene](#)

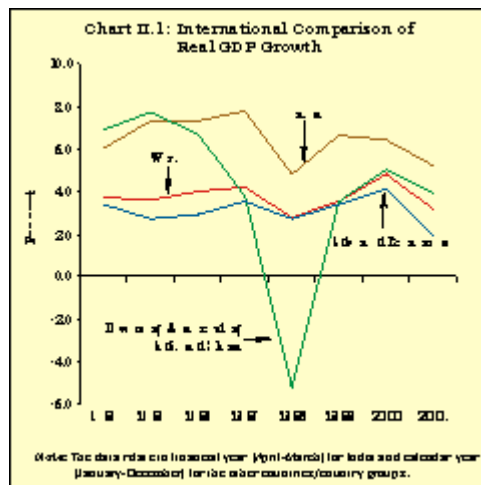
[Agriculture](#)

[Industry](#)

[Services](#)

MACROECONOMIC SCENE

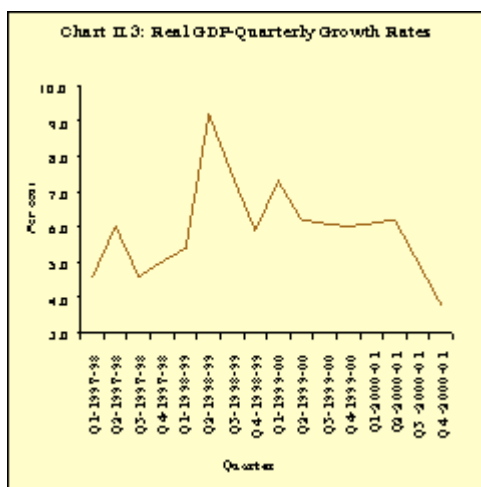
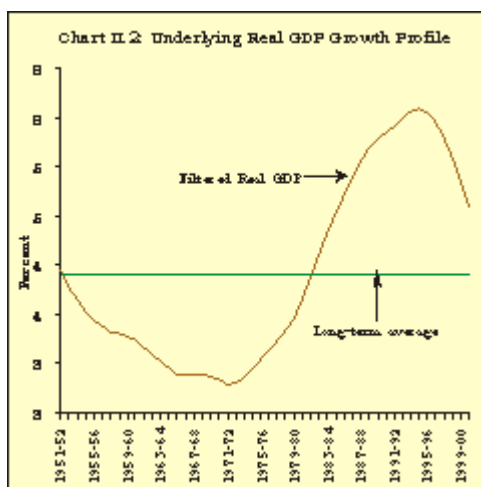
2.1 India's real GDP growth is estimated at 5.2 per cent in 2000-01 as against 6.4 per cent in 1999-2000 and 6.6 per cent in 1998-99. Compared with other developing countries, excluding China, as well as industrial countries, India's growth performance, despite the deceleration, has been quite favourable ([Chart II.1](#)). The gross domestic saving rate improved moderately to 22.3 per cent in 1999-2000 from 22.0 per cent in 1998-99. The gross domestic investment rate mirrored the improvement in the saving rate. The net inflow of resources from abroad was 1.0 per cent of GDP as in the preceding year. On the supply side, real GDP growth emanating from agriculture and allied activities recorded a deceleration to 0.2 per cent in 2000-01 from 0.7 per cent during the previous year. Agricultural production, in terms of the index of agricultural production, in fact, declined by 6.5 per cent in 2000-01. Real GDP growth originating from industry slowed down to 5.3 per cent from the preceding year's level of 6.1 per cent. Industrial production, measured in terms of the index of industrial production (IIP), also decelerated to 5.1 per cent during 2000-01 from 6.7 per cent in 1999-2000 on account of pronounced slowdown in manufacturing and electricity. Although GDP growth in the services sector slackened during the year by almost 2 percentage points to 7.5 per cent, it remained close to the average of 8.5 per cent for the period 1994-2000 ([Appendix Table II.1](#)).



2.2 The deceleration in real GDP growth during the past two years has engaged policy attention. Filtering the data on real GDP growth to eliminate irregular year-to-year fluctuations indicates the presence of a growth cycle in the Indian economy and a discernible downturn in the second half of the 1990s. Although the economy is currently poised above the long-term average growth rate of 4.4 per cent covering the full period of the growth cycle, there is clearly a need to arrest the downswing and revive the momentum of growth achieved in the high growth phase of

1994-97 ([Chart II.2](#)).

2.3 Quarterly real GDP growth moved up marginally to 6.1 per cent in the first quarter of 2000-01 from 6.0 per cent in the fourth quarter of 1999-2000. Although the second quarter GDP growth improved moderately to 6.2 per cent, this could not be sustained in the third and fourth quarters when the growth rate slowed to 5.0 per cent and 3.8 per cent, respectively ([Chart II.3](#)). The behaviour of quarterly real GDP growth during 2000-01 mainly reflected the downward movement in the growth rate of the services sector from 8.6 per cent in the first quarter to 6.3 per cent in the fourth quarter. Real GDP growth from agriculture and allied activities at 0.6 per cent in the first quarter and at 0.5 per cent in the second quarter of 2000-01 reversed the absolute declines recorded in the second half of 1999-2000. The moderate acceleration to 1.0 per cent in the third quarter could not be maintained and the real GDP from this sector registered an absolute decline of 1.4 per cent in the fourth quarter of 2000-01. Real GDP growth in industry improved to 6.1 per cent in the third quarter, after dipping to 5.4 per cent in the second quarter from 6.6 per cent in the first quarter of 2000-01. In the fourth quarter, however, it decelerated to 3.2 per cent ([Appendix Table II.2](#)).



2.4 Over the period 1997-2001, quarterly GDP growth has been considerably affected by the

fluctuations in agricultural output. In the case of industry, the growth rate has been moderate at a quarterly average of 4.9 per cent for the same period. The growth rate of services has been fairly robust at a quarterly average of 8.8 per cent over the four-year period including 2000-01.

Saving and Capital Formation

2.5 Quick estimates of the Central Statistical Organisation (CSO) indicate that the rate of gross domestic saving rose marginally to 22.3 per cent in 1999-2000 from 22.0 per cent in the preceding year ([Appendix Table II.3](#)). This was mainly on account of an improvement in the rate of household saving -- the principal component of gross domestic saving -- to 19.8 per cent in 1999-2000 from 19.1 per cent in 1998-99. Household sector saving was mainly driven by the increase in the rate of saving in physical assets in 1999-2000, which is essentially related to relatively low rates of return on financial assets in a phase of deceleration in overall economic activity; the rate of financial saving by households dipped to 10.5 per cent in 1999-2000 from 10.9 per cent in the preceding year. In the second half of the 1990s, the households' financial saving rate has generally remained below its peak of 11.9 per cent achieved in 1994-95 ([Table 2.1](#)). The rate of household financial saving (gross) in deposits decreased to 4.5 per cent of GDP during 1999-2000 from a high of 6.5 per cent of GDP during 1994-95 while the claims on Government and contractual savings (*i.e.*, provident and pension funds, and insurance funds) moved up to 1.5 per cent of GDP and 4.3 per cent of GDP, respectively, in 1999-2000 from 1.3 per cent of GDP and 3.2 per cent of GDP in 1994-95. This also reflects a lower recourse of households to the capital market (0.8 per cent of GDP from 1.7 per cent of GDP during the same period), which experienced generally depressed conditions during this period. Small savings and contractual savings continued to be the mainstay of household saving, although they were not able to offset the fall in saving rates in the other financial instruments during the second half of the 1990s. Stylised evidence suggests that there were switches by households from deposits to claims on Government and provident funds ([Table 2.2](#) and [Appendix Table II.4](#)). The private corporate sector saving rate remained at 3.7 per cent during 1999-2000. The stagnation in the saving rate of the corporate sector can be attributed to low profitability conditions associated with the slackening of industrial activity as well as the subdued capital market. The rate of public saving, which turned negative in 1998-99, deteriorated further to a dissaving of 1.2 per cent in 1999-2000 mainly on account of a widening of revenue deficits in the Centre and States primarily to accommodate the impact of the pay revisions under the Fifth Pay Commission Award ([Appendix Table II.3](#))

Table 2.1: Gross Domestic Saving and Sectoral Saving Rates

Item	(as percentage of GDP at current market prices)						
	1999-2000*	1998-99@	1997-98	1996-97	1995-96	1994-95	1993-94
1	2	3	4	5	6	7	8
1. Household saving	19.8	19.1	17.8	17.0	18.1	19.7	18.4
1.1. Financial assets	10.5	10.9	9.9	10.3	8.9	11.9	11.0
1.2. Physical assets	9.2	8.2	8.0	6.7	9.3	7.8	7.4
2. Public sector saving	-1.2	-0.8	1.5	1.7	2.0	1.7	0.6
3. Private corporate saving	3.7	3.7	4.2	4.5	4.9	3.5	3.5
4. Gross Domestic Saving	22.3	22.0	23.5	23.2	25.1	24.8	22.5

(1+2+3)

* Quick Estimates.

@ Provisional.

Source: Central Statistical Organisation.

Table 2.2: Instrument-wise Household Financial Saving Rates (Gross)

(as percentage of GDP at current market prices)

Item	1999- 2000*	1998- 99@	1997- 98@	1996-97	1995-96	1994-95	1993-94
1	2	3	4	5	6	7	8
1. Currency	1.1	1.2	0.8	1.0	1.4	1.6	1.6
2. Deposits	4.5	5.2	5.4	5.6	4.4	6.5	5.4
3. Shares and debentures	0.8	0.4	0.3	0.8	0.8	1.7	1.7
4. Claims on Government	1.5	1.6	1.5	0.9	0.8	1.3	0.8
5. Insurance funds	1.5	1.3	1.3	1.2	1.2	1.1	1.1
6. Provident and pension funds	2.8	2.6	2.1	2.2	1.9	2.1	2.1

* Quick Estimates.

@ Provisional.

Source: Central Statistical Organisation.

2.6 Tentative estimates of the Reserve Bank, based on the latest available information, place the rate of financial saving of households (net of financial liabilities) at 10.5 per cent of GDP in 2000-01 ([Table 2.3](#)). Instrument-wise, while the rates of saving in the form of currency, investment in shares and debentures including units of Unit Trust of India (UTI) and contractual savings declined, the rate of saving in the form of deposits is estimated to have moved up to 5.4 per cent in 2000-01 from 4.9 per cent in 1999-2000.

2.7 The net inflow of external saving has remained broadly stable at around 1.4 per cent of GDP in the 1990s with small year-to-year variations. Its contribution to aggregate investment has also remained stable at about 5.6 per cent. During 1999-2000, external saving stood at 1.0 per cent of GDP, as in the preceding year. Accordingly, the rate of gross domestic capital formation (GDCF), *i.e.*, gross capital formation at current prices (GCF) adjusted for errors and omissions, tracked the behaviour of the gross domestic saving rate, moving up to 23.3 per cent in 1999-2000 from 23.0 per cent in 1998-99 ([Appendix Table II.3](#)). The sectoral composition of GCF indicates an improvement in the rates of capital formation in the household sector to 9.2 per cent in 1999-2000 from 8.2 per cent in 1998-99 and in the public sector to 7.1 per cent from 6.4 per cent during the same period, mirroring the increase in investments in construction, machinery and equipment by both sectors ([Table 2.4](#) and [Appendix Table II.3](#)). On the other hand, the rate of private corporate investment declined to 6.4 per cent in 1999-2000 from 6.6 per cent a year ago. The private corporate investment rate has come down sharply from its average of 7.8 per cent during 1993-98. The slowdown in the corporate investment rate reflected pressure of excess capacity and some erosion in the financial health of corporates during the period of deceleration in overall activity.

Table 2.3: Household Saving in Financial Assets

Item	2000-01#	(Amount in Rupees crore)		
		1999-2000P	1998-99P	1997-98
1	2	3	4	5
A. Financial Assets (Gross)	2,64,699	2,44,143	2,09,664	1,71,740
a) As per cent of GDP at current market prices	12.1	12.5	11.9	11.3
1. Currency	16,901	20,822	21,846	12,780
a) As per cent of GDP at current market prices	0.8	1.1	1.2	0.8
b) As per cent of Financial Assets (Gross)	6.4	8.5	10.4	7.4
2. Deposits@	1,17,364	95,413	82,308	80,062
a) As per cent of GDP at current market prices	5.4	4.9	4.7	5.3
b) As per cent of Financial Assets (Gross)	44.3	39.1	39.3	46.6
3. Claims on Government	34,806	28,951	28,220	22,162
a) As per cent of GDP at current market prices	1.6	1.5	1.6	1.5
b) As per cent of Financial Assets (Gross)	13.1	11.9	13.5	12.9
4. Investment in Shares and Debentures+	7,234	15,516	7,513	5,059
a) As per cent of GDP at current market prices	0.3	0.8	0.4	0.3
b) As per cent of Financial Assets (Gross)	2.7	6.4	3.6	2.9
5. Contractual Saving**	88,392	83,441	69,778	51,677
a) As per cent of GDP at current market prices	4.0	4.3	4.0	3.4
b) As per cent of Financial Assets (Gross)	33.4	34.2	33.3	30.1
B. Financial Liabilities	35,829	35,762	26,687	24,919
a) As per cent of GDP at current market prices	1.6	1.8	1.5	1.6
C. Saving in Financial Assets (net) (A-B)	2,28,870	2,08,381	1,82,978	1,46,821
a) As per cent of GDP at current market prices	10.5	10.6	10.4	9.6

Preliminary. P Provisional.

@ Comprise bank deposits, non-bank deposits and trade debt (net).

+ Including units of Unit Trust of India and other Mutual Funds.

** Comprise Life Insurance, Provident and Pension Funds.

Notes: 1. Based on the latest available information, these data were revised in July 2001 and hence may not tally with the data published in the Quick Estimates of CSO released in February 2001.

2. Components may not add up to the total due to rounding off.

3. Data on GDP at current market prices for 2000-01 are not yet available from the CSO. In this Report, GDP at current market prices for 2000-01 has been estimated on the basis of the revised estimates of GDP at factor cost at current prices for 2000-01 released by the CSO in June 2001.

Table 2.4: Sector-wise Rates of Gross Capital Formation

Item	(as percentage of GDP at current market prices)						
	1999-2000*	1998-99@	1997-98@	1996-97	1995-96	1994-95	1993-94
1	2	3	4	5	6	7	8
1. Household sector	9.2	8.2	8.0	6.7	9.3	7.8	7.4

2. Public sector	7.1	6.4	6.6	7.0	7.7	8.7	8.2
3. Private corporate sector	6.4	6.6	8.4	8.4	9.6	6.9	5.6
4. Gross Capital Formation (1+2+3)	22.7	21.2	22.9	22.1	26.5	23.4	21.3

* Quick Estimates.

@ Provisional.

Source: Central Statistical Organisation.

Macroeconomic Balances

2.8 There has been a consolidation of the overall saving-investment balance during the 1990s as compared with the 1980s. The saving-investment gap, which averaged at 1.4 per cent of GDP in the 1990s, narrowed further to 1.0 per cent in 1999-2000. The narrowing of the saving-investment gap in the 1990s has lent stability to the acceleration of growth which occurred in the decade. On the other hand, accompanying compositional shifts in the public and private saving-investment balances are indicative of incipient fragilities. The saving-investment surplus of the private sector declined from 8.0 per cent of GDP in 1998-99 to 7.8 per cent in 1999-2000. At the same time, the public sector's saving-investment gap widened from 7.2 per cent of GDP to 8.2 per cent ([Table 2.5](#)).

2.9 The mainstay of the growth process continues to be capital accumulation. In recent years, attention has been drawn to the close association between the trend components of real output growth, and the rates of saving and investment in India. During the 1990s, however, the deviations of real GDP growth on the one hand, and saving and investment rates on the other, from their respective trend components, have moved in contrasting directions especially in the post-reform period ([Chart II.4](#)). This underscores the need for detailed study on the contributions of capital accumulation, human capital formation and productivity to the growth process ([Box II.1](#)).

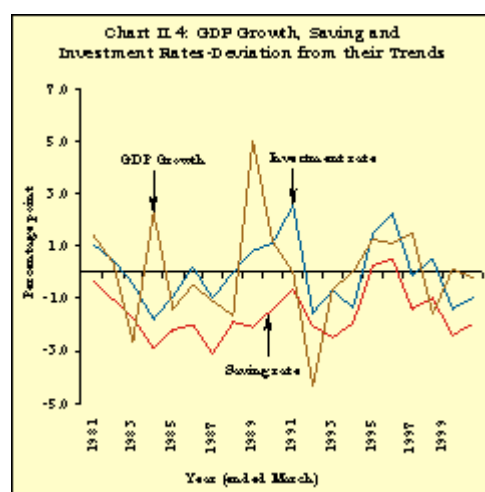


Table 2.5: Macroeconomic Balances

Item	(as percentage of GDP at current market prices)			
	1999-2000*	1998-99@	1997-98	1994-95 to 1996-97 (Average)
1	2	3	4	5
1. Private Saving-Investment Balance	7.8	8.0	5.7	6.4
2. Public Saving-Investment Balance	-8.2	-7.2	-5.1	-6.0
3. Net Inflow of resources from abroad	1.0	1.0	1.5	1.4
4. Errors and omissions	0.6	1.9	2.1	1.8
Memo Items				
Saving-Fixed Investment Balance	1.0	0.8	1.8	1.3
<i>of which:</i> Private Saving-Fixed Investment Balance	8.5	7.9	6.6	7.3

* Quick Estimates.

@ Provisional.

Source: Central Statistical Organisation.

Aggregate Demand

2.10 Compositional changes in nominal aggregate demand in the second half of the 1990s reveal a weakening of investment demand and a rise in consumption expenditure ([Table 2.6](#)). These shifts in demand have implications for the sustainability of growth in the medium-term. The rate of fixed capital formation, both government and private, declined from their levels in the high growth phase of 1994-97. During the same period, inventory accumulation moved up in relation to GDP, indicating a deficiency of planned investment demand.

Box II.1

Sources of Growth in the Indian Economy

The characteristics of the uneven growth experience of the 1990s -shifts in the pace and variability of growth between two halves of the decade, the co-movement of real GDP growth and saving and investment rates, the ability of the economy to sustain growth at over 5 per cent in spite of a decline in saving and investment rates in the second half, visual evidence of an improvement in the efficiency of capital use gathered from a downward drift in the incremental capital-output ratio (ICOR)-have drawn attention to the need for an empirical verification of the sources of growth in the Indian economy. The deceleration in economic activity during 1999-2001 is often ascribed to completion of a cyclical catch up following the phase of high expansion in the wake of the institution of structural reforms. It is important, therefore, to distinguish long-term processes from short-term developments dominated by transient conditions. The accounting of growth assumes particular relevance in the context of the emerging imperatives for moving to a higher growth path in the medium-term.

Post-World War II development economics has evolved around the central role of capital accumulation in growth. The Harrod-Domar model had a profound influence on development thinking and it was with the seminal contributions to growth theory in mid-1950s in the neoclassical framework that there was an explicit appreciation of supply side influences on the growth process. Since then, there has been wide acceptance of the view that physical inputs explain only a part of growth, the residual being attributed to gains from disembodied technical progress [total factor productivity (TFP)]. Despite providing a convenient framework for growth accounting, the restrictive and often unrealistic assumptions of constant returns to scale of production and neutral technical progress have been major deterrents to the empirical application of the neo-classical approach. In part, this provoked the evolution of endogenous growth theory towards the end of the 1980s. Attention came to be focused on continuous advances in human skills and technology upgradation through research and development along with factor accumulation to offset the dampening effect of diminishing returns and sustain economic growth. The new growth theories focus on

endogenous determination of technical change, which means endogenous determination of sources of growth.

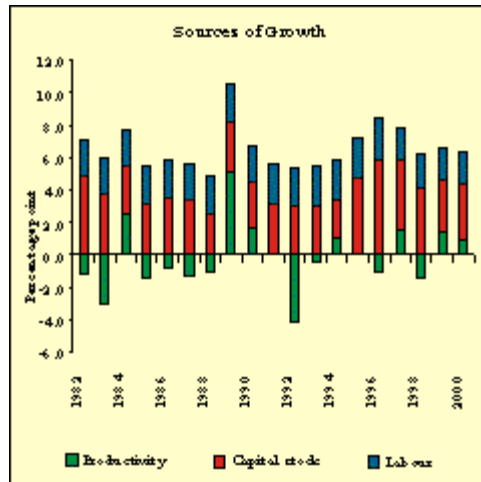
Cross-country studies relating to developing countries suggest that capital accumulation explains around 60-70 per cent of per capita growth, increases in education and human capital account for another 10-20 per cent and the remaining 30-10 per cent is due to improvements in TFP. Studies conducted on Asian countries indicate that TFP contributed a substantial share of output growth, accounting for about 50-55 per cent of growth in Hong Kong, Singapore, Korea and Taiwan. On the other hand, the assumption of constant returns in these studies has been questioned. The broad inference emerging from these diverse findings is that growth experience is country-specific. Each country's growth performance depends on a number of conditional factors including natural endowments, macroeconomic stability, institutional and social structures, outward orientation and state of financial development. This has supported the belief that while capital accumulation is critical to rapid growth, it is only a necessary condition.

In India, real GDP growth accelerated from 2.9 per cent in the 1970s to 5.8 per cent in the 1980s and further to 6.4 per cent in the 1990s (excluding 1990-91 and 1991-92). This remarkable improvement in growth performance was associated with a substantial decline in variability of output growth. The rate of growth of net fixed capital accumulation increased from 3.6 per cent in the 1970s to 4.2 per cent in the 1980s and further to 5.3 per cent in the 1990s with a distinct decline in variability in the 1990s. The growth in employment, however, declined over the period with some increase in variability in the 1990s. These stylized facts suggest an increasing substitution of capital for labour in the growth process particularly in the recent years, a reduction in the vulnerability of the growth process to short-run instability and a growing contribution of productivity to growth. Recent studies have corroborated the evidence of positive rates of growth of productivity in the manufacturing sector, comparing favourably with those of the east-Asian economies, particularly since the second half of the 1980s. Some studies have also highlighted the existence of increasing returns to scale of production, with gains in factor productivity attributed to infrastructure, human capital accumulation and expansion in external trade. The increasing adaptability of newer production technologies, expansion of market size being facilitated by the dismantling of barriers and outward orientation of the economy are factors attributed to the existence of increasing returns to scale of production in the Indian economy.

A growth accounting exercise for India was conducted by estimating an economy-wide production function for the period 1970-2000. Output was represented by GDP at factor cost at constant prices, capital accumulation by net fixed capital stock and human capital was proxied by employment in the organised sector. First stage estimations in a simple ordinary least squares procedure indicated serious biases arising from : i) non-stationarity in the variables (all the variables have unit roots; the same order of integration, however, indicates the possibility of exploring for a long-run co-integrating relationship between them), ii) presence of autocorrelation, and iii) evidence of a clear structural break in the growth process between the 1970s and the rest of the period, rendering the estimation of a single production function for the full period 1970-2000 invalid. Accordingly, the production function was re-estimated for a truncated period, *i.e.*, 1982-2000 (to avoid the structural break) by a modified OLS procedure which corrects for collinearity in a semi-parametric manner and yields unbiased estimates of a single co-integrating relationship between the variables.

The results provide robust estimates of the coefficients of capital and labour at 0.7 and 1.2 respectively. The sum of the two coefficients being greater than unity indicates the existence of increasing returns to scale which is confirmed by likelihood ratio tests and corroborated by other studies in the Indian context. The contribution of labour productivity to growth accounts for about 37 per cent. The near unit elasticity of output with respect to labour suggests that in the absence of capital accumulation, the growth of the economy would converge to the rate of growth of the labour force, an approximation of the natural rate of growth of the Indian economy.

Capital accumulation is the principal source of growth, contributing about 59 per cent to the growth process. Consequently, strategies for stepping up the growth trajectory in the medium-term would hinge around substantial increases in capital accumulation along with strategies to enhance factor productivity. This, in turn, would depend upon efforts to mobilise considerably higher saving rates than achieved so far.



The contribution of productivity to growth has been about 4 per cent, varying significantly from negative contributions in the 1980s to positive contributions in the 1990s. Importantly, declines in productivity have substantially dragged down overall growth and improvements in the contribution of productivity to growth have played a critical role in driving real growth above its long-term trend. The results, therefore, emphasise the relatively small but key role of productivity in accelerating growth.

The process of growth in India depends upon a number of underlying conditions. It is necessary, therefore, to carry growth accounting exercises further to identify the factors which enable growth by promoting investment in physical and human capital, by improving the efficiency of production and by encouraging technological progress. In addition, it is necessary to recognize the specific obstacles to growth in India - delays and inadequacies in fiscal adjustments, the tightening infrastructural constraint, continuing high levels of poverty, rigidities in the labour market, capital and technology gaps in the agricultural sector. In all these areas, an appropriate mix of macroeconomic policies could have a catalytic role to play.

References

1. Ahluwalia, I. Judge (1991), *Productivity and Growth in Indian Manufacturing*, Oxford University Press.
2. Dhal, S.C. (1999), "Potential Economic Growth in India: Viable Alternatives to Time Series Approaches", *Reserve Bank of India Occasional Papers*, 20(3).
3. International Monetary Fund (2000): *World Economic Outlook*, May.
4. Romer, P (1986), "Increasing Returns and Long Run Growth", *Journal of Political Economy*, 98, No.5.
5. Sahoo, S. and K.K. Saxena (1999), "Infrastructure and Economic Development: Some Empirical Evidence", *Indian Economic Journal*, Vol. 47(2), October-December.
6. Solow, R.M. (1956), "A Contribution to the Theory of Economic Growth," *Quarterly Journal of Economics* 70(1), 65-94.
7. Trivedi, Pushpa, Anand Prakash and David Senate (2000), "Productivity of the Indian Manufacturing Sector: 1973-74 to 1994-95", *Development Research Group Study*, No.20, Reserve Bank of India.
8. Vasudevan, A., B. K. Bhoi and S. C. Dhal (1999), "Inflation and Optimal Growth: Is there a Gateway to Nirvana?", in *Fifty Years of Development Economics*, (eds.) A. Vasudevan, D. M. Nachane and A. V. Karnik, Himalaya Publishing House, New Delhi.

Table 2.6: Demand Distribution of Nominal Gross Domestic Product

(as percentage of GDP at current market prices)

Item	1999-2000*	1998-99@	1997-98	Average 1994-95 to 1996-97
1	2	3	4	5
1. Private Final Consumption	64.5	64.6	63.7	64.9
2. Government Final Consumption	12.9	12.0	11.3	10.7
3. Private Fixed Capital Formation	14.9	15.0	15.4	15.3
4. Government Fixed Capital Formation	6.4	6.3	6.4	7.8
5. Change in Stocks	1.4	-0.1	1.2	1.0
6. Exports <i>net</i> of Imports	-1.3	-1.7	-1.2	-0.9
<i>of which:</i> Exports	11.8	11.1	10.9	10.5
Imports	13.1	12.8	12.1	11.4

* Quick Estimates.

@ Provisional.

Source: Central Statistical Organisation.

2.11 Consumption expenditure was the principal factor contributing to nominal aggregate demand. The rate of private final consumption expenditure declined marginally in 1999-2000 in relation to the period 1994-97. On the other hand, the rate of government final consumption increased by more than 2.0 percentage points over the level in the high growth phase. Thus, the improvement in the rate of final consumption was mainly due to a rise in government final consumption.

2.12 In terms of growth in real effective demand, the components exhibited contrasting behaviour. The growth rate of final consumption expenditure which averaged at 6.0 per cent during 1994-97 moved down to an average of 5.6 per cent during 1997-2000. Private final consumption decelerated from an average growth of 6.3 per cent during 1994-97 to an average growth of 4.3 per cent during 1997-2000. The growth rate of government final consumption expenditure, on the other hand, moved up sharply from an average of 4.6 per cent during 1994-97 to an average growth of 12.6 per cent during 1997-2000. Annual growth rates of real gross domestic capital formation fluctuated widely during 1995-96 and 1998-99. In 1999-2000, although there was a significant improvement, the growth in real GDCF was lower than the average rate of 11.0 per cent for 1994-97. The growth rate of public sector capital formation accelerated from 5.1 per cent in 1998-99 to 19.0 per cent in 1999-2000 and that of private sector GDCF accelerated from 1.6 per cent to 15.2 per cent resulting in the acceleration of the overall GDCF growth rate from 2.3 per cent to 9.4 per cent over the same period ([Table 2.7](#)).

Table 2.7: Growth in Select Sources in Real Effective Demand #

Item	1999-2000*	1998-99@	1997-98	(Per cent) 1994-95 to 1996-97 (Average)
1	2	3	4	5
1. Total Final Consumption Expenditure	5.8	7.9	3.0	6.0

<i>of which:</i> Private Final Consumption	4.1	7.2	1.7	6.3
Government Final Consumption	15.0	11.7	11.1	4.6
2. Total Investment+	9.4	2.3	9.5	11.0
3. Private Investment++	15.2	1.6	16.2	17.0
4. Public Investment++	19.0	5.1	-0.9	1.4
5. Total Fixed Investment	8.6	8.6	2.2	10.9
<i>of which:</i> Private Fixed	8.8	9.1	4.2	16.4
Public Fixed	8.2	7.5	-2.8	1.9

* Quick Estimates. @ Provisional.

Based on select disposition of real GDP at market prices.

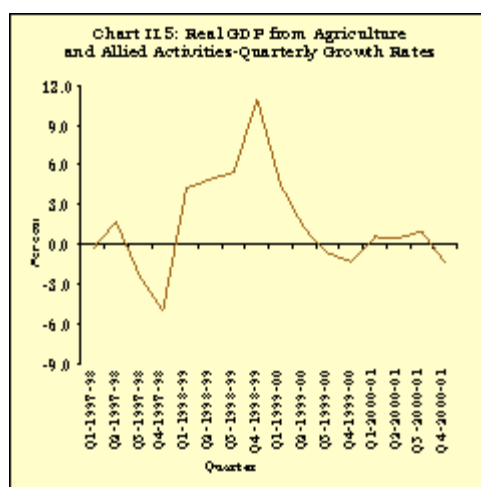
+ Adjusted for errors and omissions.

++ Unadjusted for errors and omissions.

Source: Central Statistical Organisation.

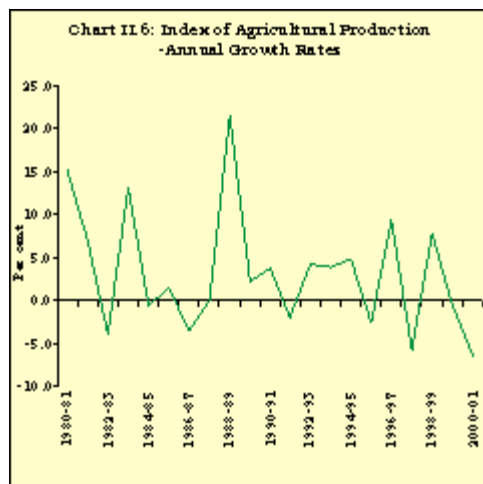
AGRICULTURE

2.13 The performance of agriculture remained subdued in 2000-01, with real GDP growth from agriculture and allied activities at 0.2 per cent during 2000-01 lower than that of 0.7 per cent during 1999-2000. This was substantially lower than the growth of 7.1 per cent achieved during 1998-99 ([Appendix Table II.1](#)). The share of agriculture and allied activities in GDP decreased to 24.0 per cent in 2000-01 and 25.2 per cent in 1999-2000 from 26.6 per cent in 1998-99. Its relative contribution to real GDP growth dipped sharply to 0.9 per cent during 2000-01 and 2.8 per cent during 1999-2000 from 28.5 per cent during 1998-99. The inter-quarter movements in these growth rates in agriculture and allied activities have been somewhat volatile with a downward drift ([Chart II.5](#) and [Appendix Table II.2](#)).



2.14 Agricultural production declined sharply during 2000-01. The index of agricultural production registered a steep fall of 6.5 per cent in 2000-01 on top of a decline of 0.7 per cent in the previous year ([Appendix Table II.5](#)). The fall in crop production in 2000-01 was the result of the sharp decline in foodgrains (6.3 per cent) as well as non-foodgrain crops - mainly oilseeds and cotton. The country received 92 per cent of the Long Period Average (LPA) rainfall during South-West monsoon 2000, with highly skewed spatio-temporal distribution of rainfall coupled

with inadequate precipitation resulting in drought conditions in the States of Chattisgarh, Gujarat, Madhya Pradesh, Rajasthan and Western Orissa. The drought conditions also had an adverse impact on the production of non-foodgrains and *rabi* agricultural production -mainly wheat - as it resulted in shrinking of productive area and consequent production losses. Indian agriculture continues to suffer from natural shocks, technology-gaps, low investment, and inadequate availability of quality inputs. During the second half of 1990s the volatility in the growth of agricultural production has increased ([Chart II.6](#)). The combination of these factors has led to a deceleration in the average growth of all crop index to 2.3 per cent during the 1990s from 5.2 per cent during the 1980s.



2.15 The production of total foodgrains declined to 196.1 million tonnes in 2000-01 from the peak of 208.9 million tonnes attained in 1999-2000. The fall was on account of rice (3.2 million tonnes), wheat (7.1 million tonnes), coarse cereals (0.3 million tonnes) and pulses (2.3 million tonnes). Production of rice and wheat declined to 86.3 million tonnes and 68.5 million tonnes in 2000-01 from their respective peak levels of 89.5 million tonnes and 75.6 million tonnes achieved in the previous year. The decline in rice production was mainly due to a decline in the area coverage in West Bengal, which had experienced severe moisture stress at the time of sowing. The decline in wheat output may be attributed to a reduction in area under the crop in Madhya Pradesh, Maharashtra and Rajasthan. Lower production of pulses was due to a decline in production in the major pulses producing States of Madhya Pradesh and Rajasthan. These States also reported substantial fall in their output of coarse cereals.

2.16 The index of non-foodgrains (base: triennium ending 1981-82=100) registered a fall of 6.6 per cent in 2000-01 as compared with a fall of 4.8 per cent in the previous year. The decline in non-foodgrains output was mainly due to fall in the production of oilseeds, cotton and jute and mesta. Oilseeds output declined in the past two years and the level of 18.2 million tonnes recorded in 2000-01 was the lowest in the past eleven years. The production of soyabean, rapeseed and mustard recorded substantial declines because of widespread drought in the oilseeds growing States of Chhattisgarh, Madhya Pradesh and Rajasthan.

The production of groundnut at 6.4 million tonnes, however, recovered to some extent from the 14-year low of 5.3 million tonnes recorded in the previous year - despite the drought conditions

experienced in Gujarat. Cotton registered a sharp decline over its output level in the previous year, while sugarcane, tea and coffee recorded increases in production. Sugarcane output, which has been increasing continuously since 1996-97, scaled yet another peak in 2000-01 at 300.3 million tonnes ([Table 2.8](#)).

2.17 During 2000-01, the fall in *rabi* output was much sharper than that in the *kharif* output. The *kharif* foodgrains production showed a fall of 1.7 per cent to 103.1 million tonnes, whereas the *rabi* foodgrains fell by 10.6 per cent to 93.0 million tonnes in 2000-01 from 104.0 million tonnes in 1999-2000. Consequent upon the decline in *rabi* foodgrains production, the share of *rabi* foodgrains to total foodgrains, which had been generally rising during the past two decades, declined in 2000-01 ([Chart II.7](#)).

Table 2.8: Agricultural Production

Crop	(Million tonnes)		
	2000-01	1999-2000	1998-99
1	2	3	4
1. All crops: Growth Rate+ (per cent)	-6.5	-0.7	+7.9
2. Foodgrains	196.1	208.9	203.6
2.1 Rice	86.3	89.5	86.1
2.2 Wheat	68.5	75.6	71.3
2.3 Coarse Cereals	30.3	30.5	31.3
2.4 Pulses	11.1	13.4	14.9
3. Non-Foodgrains			
3.1 Oilseeds++	18.2	20.9	24.8
Of which : Groundnut	6.4	5.3	9.0
: Soyabean	5.1	6.8	7.1
3.2 Sugarcane	300.3	299.2	288.7
3.3 Cotton @	9.4	11.6	12.3
3.4 Jute and Mesta#	10.4	10.5	9.8
3.5 Tea*	823.4	805.6	870.4
3.6 Coffee*	301.2	292.0	265.0

+ Based on the Index of Agricultural Production with base: triennium ending 1981-82=100.

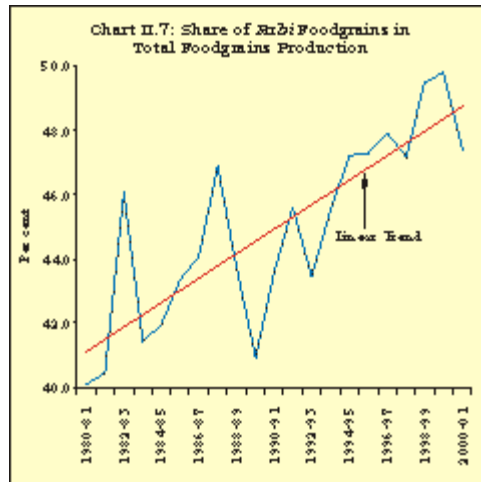
++ For nine oilseeds out of eleven in all.

@ Million bales of 170 kg. each.

Million bales of 180 kg. each.

* Million kg. and data for tea on a calendar year basis.

Note: Index of Agricultural Production is based on the latest production estimates (including the latest production figures of Tea, Coffee and other crops.)



2.18 Despite the lower output of rice and wheat during 2000-01, total procurement of foodgrains reached a new peak at 36.5 million tonnes, recording an increase of 16.0 per cent over that of 31.4 million tonnes in 1999-2000 ([Appendix Table II.6](#)). On the other hand, the total off-take of rice and wheat during 2000-01 at 18.0 million tonnes was lower by 22.1 per cent than that of 23.1 million tonnes during the corresponding period of the previous year. This decline may be attributed to lower off-take under the Targeted Public Distribution System (TPDS) coupled with Open Market Sales Scheme (OMS), even as there was increased off-take under Other Welfare Schemes (OWS). The sharp decline in the total off-take during 2000-01 was largely reflected under the TPDS category. While the off-take under OWS picked up significantly by 3.55 million tonnes, the OMS during 2000-01 was very low at 1.25 million tonnes as compared with 4.55 million tonnes in 1999-2000. Hence, even a two-and-a-half times increase in the off-take under OWS to 5.0 million tonnes in 2000-01 could not off-set the decline in total off-take under the TPDS category. The sharp rise in procurement and lower off-take resulted in a growth of 55.6 per cent in the stocks of foodgrains to 45.0 million tonnes at end-March 2001 from 28.9 million tonnes at the end-March 2000. The addition of 16.1 million tonnes of foodgrains in 2000-01 has expanded the buffer stock to almost treble its normative level. However, the per capita net availability of foodgrains per day declined from a high of 505.5 grams in 1997 to 470.4 grams in 1999 and further to 458.6 grams in 2000. Concerted efforts are necessary to bring down the quantum of foodgrains through encouraging off-take from the PDS, promoting open market sales including exports and increasing distribution through other welfare schemes.

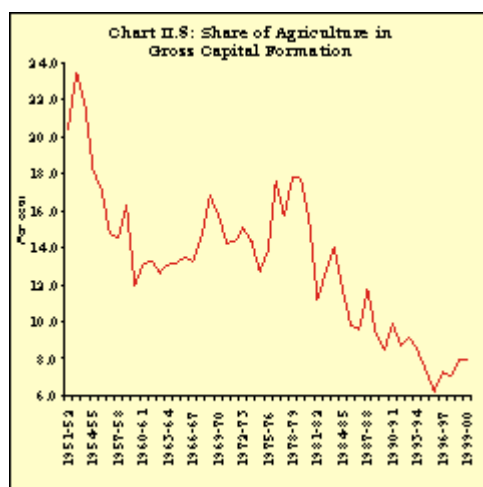
2.19 Procurement of rice and wheat during the first quarter of 2001-02 (up to June 29) at 23.2 million tonnes was higher by 28.2 per cent than 18.1 million tonnes procured during the corresponding period of the previous year. The procurement of rice during the same period at 2.7 million tonnes was higher than that of 1.9 million tonnes during the corresponding period of 2000-01. The procurement of wheat at 20.5 million tonnes was higher by 26.7 per cent than 16.2 million tonnes procured in the corresponding period of the previous year. The increased procurement of wheat during 2001-02, despite a significant fall in the production of wheat in 2000-01, can be attributed to the increase in Minimum Support Price (MSP). Total off-take of rice and wheat during the first quarter of 2001-02 aggregated 5.1 million tonnes, which was higher by 28.3 per cent as compared with 4.0 million tonnes during the corresponding period of the previous year. Total stocks of foodgrains at end-June 2001 stood at 62.0 million tonnes,

higher by 46.7 per cent, as compared with 42.3 million tonnes at the end of June 2000.

2.20 Direct institutional finance to agriculture has been slowing down in recent years. The average growth in loans outstanding decelerated to 13.6 per cent during the years 1990-99 as compared with 14.1 per cent growth recorded in the corresponding period of the 1980s. Advances, in terms of disbursements, also decelerated to 8.5 per cent per annum during the 1990s from that of 15.8 per cent per annum recorded in the corresponding period of the 1980s. Moreover, during the 1990s, there were contrasting growth profiles in various sources of finance for agriculture. Direct finance to marginal farmers (land holdings up to one hectare) grew at the slowest pace of 12.1 per cent, followed by the credit disbursed to small farmers (land holdings between one and two hectares) at 15.7 per cent per annum. Loans advanced to the large farmers (land holding of above two hectares) grew at the faster pace of 16.1 per cent between 1990-91 and 1998-99.

2.21 Various studies show that with the existing irrigation potential and the current cropping intensity co-efficient with respect to irrigation, the cropping intensity could be raised up to 149.0 as against the current level of 134.2.

2.22 Another area of concern is the declining level of capital formation in Indian agriculture. The ratio of public sector capital formation in agriculture to GDP has fallen to 0.4 per cent in 1998-99 from 1.7 per cent in 1980-81. Moreover, the rate of gross capital formation in agriculture in relation to GDP originating in agriculture has declined to 7.4 per cent in 1999-2000 from 8.9 per cent in 1980-81. The share of capital formation in agriculture and allied activities in Gross Capital Formation (GCF) in the country has also declined substantially from 20.4 per cent in 1951-52 to 6.2 per cent in 1995-96, before recovering to 8.0 per cent in 1999-2000 ([Chart II.8](#)).

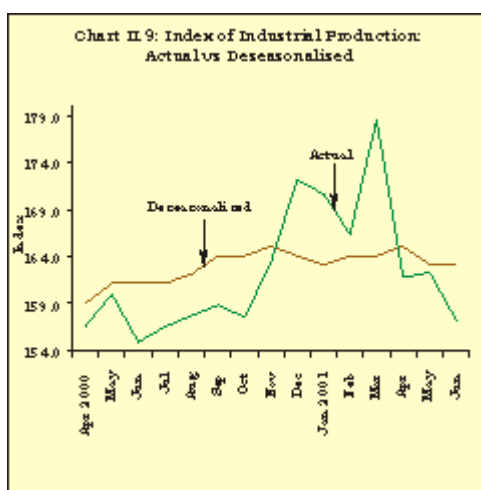


2.23 The inadequacy of new capital formation has slowed down the pace and pattern of technological change in agriculture with adverse effects on productivity. In this context, there are apprehensions that the boost in output from subsidy-stimulated use of at the expense of deterioration in the aquifers and soil - an environmentally unsustainable approach - which to some extent explains the phenomena of rising costs and slowing growth and productivity in

agriculture.

INDUSTRY

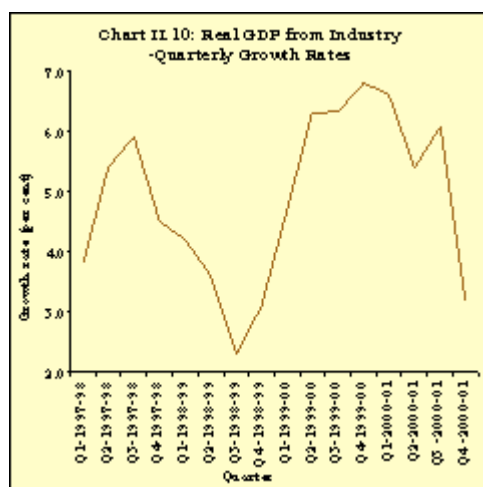
2.24 In terms of the index of industrial production (IIP), the growth of industrial output slowed down to 5.1 per cent during 2000-01 from 6.7 per cent during 1999-2000 reflecting, *inter alia*, low agricultural production, subdued performance of infrastructure (especially power), low investment activity and the presence of excess capacity in many industries ([Appendix Table II.7](#)). The slowdown in IIP growth was persistent throughout the year, with brief upturns in October and November 2000. The monthly profile of the IIP during 2000-01 and 2001-02 (up to June) exhibited the general seasonal production behaviour ([Chart II.9](#)). The sharp deceleration in production to 3.3 per cent during the last quarter of 2000-01 from 5.9 per cent during the third quarter, however, drove down the growth in IIP for the year as a whole. The sectoral profile showed a pronounced deceleration in manufacturing to 5.4 per cent during 2000-01 from 7.1 per cent during 1999-2000 as well as in electricity to 4.0 per cent from 7.3 per cent in the preceding year. The mining and quarrying sector, on the other hand, improved its growth to 3.7 per cent from 1.0 per cent during 1999-2000.



2.25 The deceleration in industrial activity continued during the first quarter of 2001-02 with the growth rate of IIP at 2.1 per cent, substantially below the growth rate of 6.1 per cent registered during April-June, 2000. During the current year, the slowdown was recorded in all the three sectors, *viz.*, mining and quarrying, manufacturing and electricity which witnessed growth rates of 0.2 per cent (from 3.6 per cent), 2.3 per cent (from 6.4 per cent) and 2.0 per cent (from 5.1 per cent), respectively, as compared with the corresponding period of the previous year.

2.26 During 2000-01, the real GDP growth originating from industry decelerated to 5.3 per cent from 6.1 per cent during 1999-2000 ([Appendix Table II.1](#)). While the share of industry remained at around 21.8 per cent during 1998-99 to 2000-01, its relative contribution to the real GDP growth moved up sharply from 9.8 per cent during 1998-99 to 20.8 per cent during 1999-2000 and 22.3 per cent during 2000-01. Quarter-wise industrial GDP growth recovered to 6.1 per cent in the third quarter of 2000-01 after dipping to 5.4 per cent in the second quarter from 6.6

per cent in the first quarter; it, however, dipped to 3.2 per cent in the fourth quarter ([Appendix Table II.2](#) and [Chart II.10](#)).

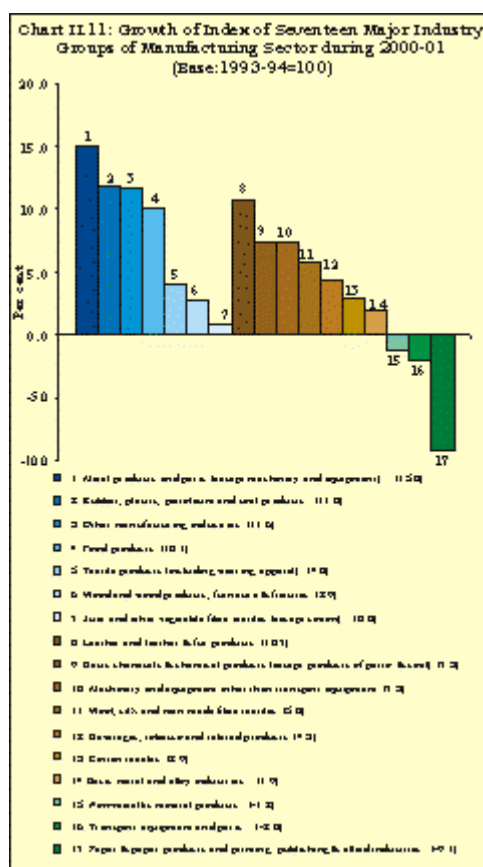


Manufacturing Sector

2.27 The manufacturing sector, with a weight of 79.36 per cent in IIP contributed to more than 86.1 per cent to IIP growth in 2000-01. At a disaggregated level, out of 17 two-digit industry groups in the manufacturing sector, positive growth was recorded in 14 groups (68.33 per cent combined weightage in the IIP) as against 12 groups with a weight of 64.97 per cent in 1999-2000. In this category, seven groups (with weightage of 26.01 per cent) registered accelerated growth rates (9 groups in 1999-2000). Seven industry groups (42.32 per cent weightage) recorded decelerated growth (3 groups in 1999-2000) while three other groups (weight being 11.03 per cent) recorded negative growth rates (5 groups in 1999-2000). The industry groups such as 'wool, silk and man-made fibre textiles', 'leather and leather and fur products', 'basic chemicals and chemical products', 'machinery and equipment other than transport equipment', 'cotton textiles', 'basic metal and alloy industries' and 'non-metallic mineral products' which had shown accelerated growth during 1999-2000 recorded either lower or negative growth rates during 2000-01 ([Appendix Table II.8](#) and [Chart II.11](#)). The industry groups, such as 'metal products and parts', 'rubber, plastic, petroleum and coal products', 'other manufacturing industries', 'wood and wood products, furniture and fixtures' and 'jute and other vegetable fibre textiles (except cotton)' improved their performance in 2000-01 from absolute declines during 1999-2000. 'Beverages, tobacco and related products', 'wool, silk and man made fibre textiles', 'paper and paper products and printing, publishing and allied industries', 'leather and leather & fur products', 'basic chemicals and chemical products (except products of petroleum and coal)' 'non-metallic mineral products' and 'metal products and parts (except machinery and equipment)' have been the high performance industries recording growth rates of above 5 per cent during four years out of the five year period, 1996-97 to 2000-01 ([Appendix Table II.9](#)).

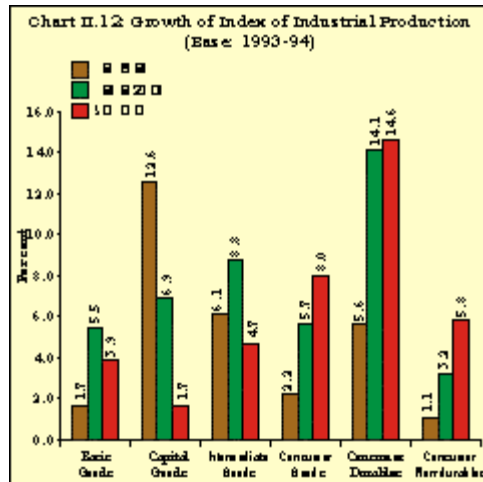
2.28 During the first quarter of 2001-02, twelve (65.20 per cent weight in IIP) out of seventeen two-digit industry groups recorded positive growth, the same number (but with 73.42 per cent weight in IIP) in the previous year. 'Other manufacturing industries' and 'rubber, plastic, petroleum and coal products' achieved high growth rates of 13.7 per cent and 9.6 per cent,

respectively. Five industry groups recorded negative growth rates during 2001-02 (up to June) with the decline sharp in respect of 'metal products and parts (except machinery and equipment)' and 'wood and wood products, furniture and fixtures'.

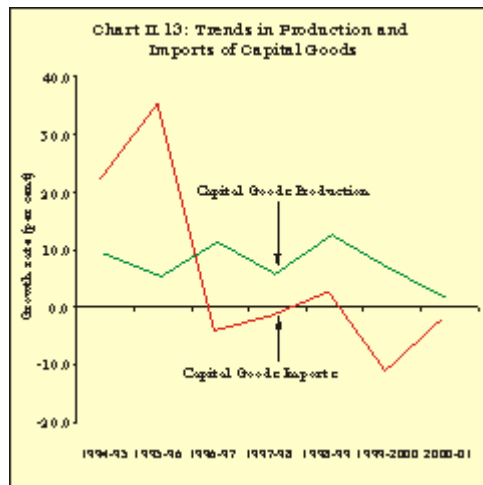


Use-based Classification

2.29 The use-based classification of the IIP indicated that the poor performance of intermediate, basic and capital goods sectors affected overall industrial growth. The consumer goods sector recorded a higher growth of 8.0 per cent during 2000-01 as against 5.7 per cent during 1999-2000, while the growth of the consumer durables sector moved up marginally. The consumer non-durables sector grew sharply by 5.8 per cent during 2000-01, higher than that of 3.2 per cent recorded during 1999-2000 ([Appendix Table II.10](#) and [Chart II.12](#)).



2.30 The slump in the capital goods sector continued to persist during 2000-01. Its relative contribution to the overall IIP growth fell sharply to 3.4 per cent from 10.1 per cent in 1999-2000. This has essentially reflected the dampening of the general investment climate. The growth in capital goods production further decelerated to 1.7 per cent during 2000-01 from 6.9 per cent during 1999-2000 while the capital goods imports continued to show an absolute decline of 2.0 per cent during 2000-01 on top of a fall of 10.9 per cent during 1999-2000 ([Chart II.13](#)). Imports of project goods and machine tools continued to register negative growth rates during 2000-01.



2.31 During the first quarter of 2001-02, the basic goods sector registered a lower growth rate of 1.4 per cent in April-June 2001-02 as compared with 5.4 per cent in the corresponding period of the previous year. The capital goods sector recorded an absolute decline of 4.2 per cent in this period as compared with a growth of 5.2 per cent during 2000-01 (April-June). Intermediate goods too posted a lower growth rate of 2.7 per cent during this period as compared with 4.6 per cent in the previous year. The consumer goods sector also witnessed a lower growth rate of 4.3 per cent in the first three months of 2001-02 as compared with 8.6 per cent in the similar period a year ago.

Infrastructure

2.32 The performance of infrastructure industries during 2000-01 deteriorated as compared with the previous year. The composite index of six infrastructure industries, with a combined weight of 26.68 per cent in IIP (base: 1993-94=100), recorded a much lower growth of 5.0 per cent in 2000-01 as against 9.1 per cent in the previous year. During this period, electricity, steel, coal, cement and petroleum refinery products witnessed decelerated/negative growth while crude petroleum registered marginal improvement ([Appendix Table II.11](#)). Electricity, a critical infrastructural input, registered a substantially lower growth of 4.0 per cent than the previous year's growth of 7.2 per cent. Steel production exhibited similar behaviour while cement recorded an absolute decline in output as compared with an increase of 14.3 per cent in 1999-2000. In all the infrastructure industries, with the exception of crude petroleum, output fell short of targets ([Table 2.9](#)).

Table 2.9: Targets and Achievements of Infrastructure Industries

Sector	Unit	2000-01 P			1999-2000		
		Target	Achievement	Gap (Per cent)	Target	Achievement	Gap (Per cent)
1	2	3	4	5	6	7	8
1. Power	Bill. Units	500.70	499.45	-0.2	469.00	480.68	2.5
2. Coal	Mill. Tonnes	308.07	307.87	-0.1	298.90	298.83	0.0
3. Finished steel	Thou. Tonnes	13,250.00	12,610.40	-4.8	12,334.00	11,483.70	-6.9
4. Railways +	Mill. Tonnes	475.00	473.25	-0.4	450.00	456.42	1.4
5. Shipping @	Mill. Tonnes	283.80	280.96	-1.0	258.00	271.92	5.4
6. Telecommunications #	Thou. Lines	7,235.00	7,146.07	-1.2	5,870.00	6,717.32	14.4
7. Fertilisers	Thou. Tonnes	15,207.60	14,711.60	-3.3	14,412.30	14,288.90	-0.9
8. Cement	Mill. Tonnes	107.00	99.94	-6.6	94.00	100.45	6.9
9. Crude petroleum	Mill. Tonnes	32.46	32.48	0.0	33.02	31.95	-3.2
10. Petroleum refinery products	Mill. Tonnes	112.82	103.48	-8.3	96.87	85.96	-11.3

P Provisional.

+ Revenue earning freight traffic.

@ Cargo handled at major ports.

Net switching capacity added.

Source: Ministry of Statistics and Programme Implementation, Government of India.

2.33 The poor performance of infrastructure industries observed since November 2000 continued in the first quarter of 2001-02 with a growth of barely 0.8 per cent as compared with that of 8.2 per cent in the same period of the previous year. Electricity, cement and petroleum refinery products decelerated to 2.0 per cent, 2.4 per cent and 6.4 per cent, respectively, as compared with 4.8 per cent, 3.6 per cent and 34.6 per cent in the corresponding period of the previous year. On the other hand, steel, coal and crude petroleum recorded negative growth rates of 0.2 per cent, 0.8 per cent and 4.5 per cent, respectively, during the same period as compared with 12.2 per cent, 11.3 per cent and -2.6 per cent recorded in the same period last year.

Mergers and Acquisitions (M&As)

2.34 M&As were reported for 1,445 companies in 2000-01, marginally lower than 1,492 companies in 1999-2000. The value of deals in these M&As at Rs. 38,054 crore during 2000-01 was lower than Rs. 50,085 crore reported in the preceding year. In 2000-01, mergers occurred in

the sectors of transport and communication, food products, finance, computer software, chemicals & plastics and drugs and pharmaceuticals. Cross-border mergers & acquisitions have been reported mainly in the information technology sector. Within the ambit of the evolving competition policy, both horizontal and vertical mergers among firms would be covered by Competition Law. Mergers involving large enterprises exceeding a prescribed threshold in assets value and turnover would come under the scrutiny of a Competition Commission of India. The Parliament has already passed the Companies (Amendment) Act 2000 thereby underlying the significance and necessity of corporate governance in the wake of M&As.

Small Scale Industries

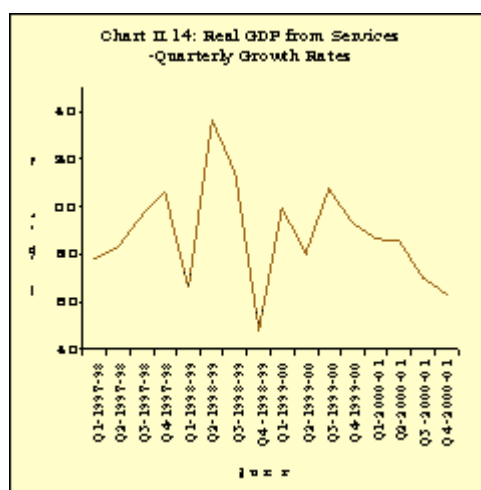
2.35 Small scale industry (SSI) is an important segment of the economy, contributing substantially in the form of production, employment and exports. The total number of units in the SSI sector increased from 4.2 lakh units as at end-March 1974 to 31.2 lakh units as at end-March 1999 and further to 32.3 lakh units as at end-March 2000, while the value of production (at current prices) of these units increased from Rs.7,200 crore to Rs.5,27,515 crore and further to Rs.5,87,000 crore during the same period. Employment in the SSI sector increased from 39.7 lakh persons to 171.6 lakh persons and further to 178.5 lakh persons during the above period. Exports from the sector increased from Rs.393 crore in 1973-74 to Rs.48,979 crore in 1998-99 and further to Rs.53,975 crore in 1999-2000. A major problem faced by SSIs is the large scale prevalence of industrial sickness.

2.36 Considering the structure of the SSI sector, the Government continued its efforts to provide further support and created an exclusive new Ministry for Small scale Industries and Agro Rural Industries (SSI and ARI) during the year 1999-2000. Furthermore, a comprehensive policy package on the SSI and tiny sector was announced on August 30, 2000 which included, *inter alia*, raising the exemption for excise duty limit from Rs.50 lakh to Rs.1 crore to improve competitiveness of the small scale sector, enhancing the limit of investment in industry related service and business enterprise from the present level of Rs.5 lakh to Rs.10 lakh and conducting the third census of small scale industries after a gap of 12 years. This census would also cover sickness and its causes. In order to address the problem of collateral faced by the SSI units and to encourage technology upgradation, two new schemes were introduced. The Credit Guarantee Fund (Scheme) for SSI was introduced to provide guarantee for loans up to Rs.25 lakh extended by commercial banks and others without any collateral including third party guarantee while the Credit Linked Capital Subsidy Scheme was introduced for technology upgradation. Credit flows to the SSI sector were also enhanced by increasing the limit for composite loan from Rs.10 lakh to Rs.25 lakh. Furthermore, the Reserve Bank constituted a committee to monitor the flow of credit to SSIs.

2.37 The guidelines issued by the Reserve Bank in May 1999 for constitution of Settlement Advisory Committees for compromise of chronic NPA accounts were modified in July 2000 to provide for one-time settlement of dues mainly to benefit the sick units in SSI sector. In order to review the existing guidelines regarding rehabilitation of sick units and making them transparent and non-discretionary, the Reserve Bank set up a Working Group in November 2000.

SERVICES

2.38 A notable feature in the structural transformation of the Indian economy has been the rapidly expanding role of services in the overall growth process. Besides emerging as a leading sector of the economy with both backward and forward linkages with the primary and secondary sectors, the rising contribution of services to GDP has imparted resilience to economic activity, particularly in the face of adverse agricultural shocks and industrial slowdown. The growth in the services sector has averaged 8.5 per cent during the period 1994-2000 ([Appendix Table II.1](#)), reaching a peak of 10.0 per cent during 1995-96. Service sector growth decelerated to 7.5 per cent during 2000-01 mainly due to lowering of the growth rates witnessed in 'community, social and personal services' on account of some evening out of the effect of wage revisions of government employees as well as in 'construction' in the preceding year. The share of services in GDP moved up to 54.2 per cent in 2000-01 from 51.5 per cent in 1998-99 and its relative contribution to overall growth increased even more sharply to 76.8 per cent in 2000-01 from 61.8 per cent in 1998-99. The growth rate of services sector recorded a steady deceleration from 8.6 per cent in the first quarter to 6.3 per cent in the fourth quarter of 2000-01 ([Appendix Table II.2](#)). The quarterly growth of services sector has remained fairly robust, averaging at 8.8 per cent in the past four years ([Chart II.14](#)).



2.39 The services sector comprises a number of narrowly defined groups classified under 'trade, hotels, restaurants, transport, storage and communication', 'financing, insurance, real estate and business services', 'community, social and personal services' and 'construction'. The post-reform growth dynamics of the real GDP originating in the various sub-sectors of services reveals several distinguishing features. First, the growth of the trade and transport group came down to 7.1 per cent during 1998-99 ([Table 2.10](#)), after reaching a high of 13.3 per cent during 1995-96 - the centre of the high growth phase of 1994-97. The industrial slowdown and poor performance in agriculture, thereafter, led to a deceleration in this segment of services to 6.9 per cent in 2000-01, although their growth had recovered moderately to 8.0 per cent during 1999-2000. Secondly, the growth in finance and real estate group exhibited an upward movement during the latter half of the 1990s to touch 11.6 per cent during 1997-98 before settling around 9.1 per cent during 2000-01. This uptrend characterising the recent years essentially reflects buoyancy in the financial services segment in response to financial sector reforms and the robust growth of new economic services such as computer software and information technology (IT).

While the new series of national accounts includes the value addition in the computer software segment in this group, attention has recently focused on an accurate assessment of the size of these service industries in GDP and adequate coverage of the 'new economy' in the national accounts ([Box II.2](#)). Thirdly, the spurt experienced in the growth in 'community, social and personal services' to 11.8 per cent during 1999-2000 from 6.3 per cent during 1996-97 was on account of revision in wages and salaries in public administration and defence. Growth in this segment came down to 7.8 per cent during 2000-01. The acceleration of growth in the construction services segment from 2.1 per cent during 1996-97 to 10.2 per cent during 1997-98 reflects the response of real activity to recent policy initiatives. The growth in this segment evened out somewhat to 8.1 per cent during 1999-2000 but is estimated to have decelerated to 5.5 per cent in 2000-01 ([Chart II.15](#) and [Table 2.10](#)).

Box II.2 **New Economy and National Accounts**

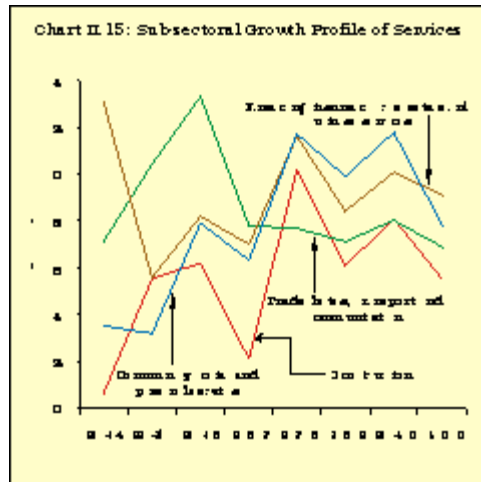
In the process of structural transformation of the economy, one of the challenges facing the compilation of national accounts statistics is the proper assessment and measurement of services which are not associated with tangible output and where the process of production and consumption often takes place at the same time. The appropriate accounting of the recent information technology revolution (IT, *i.e.*, computer hardware, software and communication equipment) has become even more challenging on account of the following issues.

First, the new economy segment is partly covered under the contribution of the industrial sector (hardware, *etc.*) and partly under services sector (software services). Secondly, as the technological advancement in computers is often reflected in the dramatic fall in their prices with a consequent substitution of computer services for other inputs of these products, the appropriate measurement of impact of computer related innovations in national accounts is rendered difficult. Construction of a base for benchmarking quality and price changes for IT products, in general, and computers, in particular, is also difficult because of the inherent problems of treatment of depreciation in these products. Thirdly, a proper assessment of the total contribution of IT to the overall real economic activity would always be difficult as the technological progress in this sector benefits the economy not only in terms of the output of this sector but also on account of spillover benefits externalised across a wide heterogeneous spectrum of the other economic activities.

The National Accounts Statistics (NAS) in India presently do not provide any clear segregation of the new (or IT) economy in terms of either hardware or software activities. The production of hardware forms part of manufacturing at the 2-digit level National Industrial Classification (NIC) because of the tangible nature of its production, but without any proper estimation of the value added from the informal sector. The Annual Survey of Industries (ASI) covers the 'manufacture of computer and computer based system' under the 3-digit NIC and these production figures are used in the NAS for the estimation of the GDP originating in hardware production. The contribution of the software sub-sector to GDP is a part of the overall business services that form a part of 'real estate, ownership of dwelling, legal and business services' sector of the national accounts. The value-added per person and number of persons employed are used for estimating the contribution of the segment of business services. The estimates are prepared at constant prices and then estimates at current prices are obtained by superimposing the price effect.

References

1. Central Statistical Organisation (2001), *Draft National Product Classification (Services Sector)*, New Delhi.
2. (2000), *National Accounts Statistics*, New Delhi.
3. Jorgenson, D.W. and K. Stiroh (1995), "Computers and Growth", in *Economics, Innovation and New Technology*, Vol.3.



2.40 The buoyancy in services has been facilitated by growth in skill-intensive finance and the computer software group as well as labour-intensive trade and transport group. The high growth in services is suggestive of productivity gains in commodity producing sectors and the concomitant shift in employment away from commodity-producing sectors. Future acceleration in economic activity is thus contingent on the productivity dynamics in the services sector. Apart from efforts needed to raise productivity across the various sub-sectors of services, there is a need to shift the structure of services in favour of the skill intensive and high value added segments so that potential productivity gains can be derived through assimilation of technical progress and innovations. This would necessitate, *inter alia*, a shift in the demand pattern more towards these service sub-sectors as well as a conducive policy environment for introducing greater competition and efficiency.

**Table 2.10: Growth and Share of Services in the Gross Domestic Product
(at 1993-94 prices)**

Sector	(Per cent)				
	2000-01R	1999-2000*	1998-99@	1997-98	1996-97
1	2	3	4	5	6
1. Construction	5.5 (5.1)	8.1 (5.1)	6.1 (5.0)	10.2 (5.0)	2.1 (4.8)
2. Trade, hotels, restaurants, transport, storage and communication	6.9 (22.3)	8.0 (21.9)	7.1 (21.6)	7.7 (21.5)	7.8 (20.9)
3. Financing, insurance, real estate and business services	9.1 (13.2)	10.1 (12.7)	8.4 (12.3)	11.6 (12.1)	7.0 (11.3)
4. Community, social and personal services	7.8 (13.5)	11.8 (13.2)	9.9 (12.6)	11.7 (12.2)	6.3 (11.4)

R Revised Estimates.

* Quick Estimates.

@ Provisional.

Note: Figures in brackets are the shares of the respective sectors in the Gross Domestic Product.
Source: Central Statistical Organisation.

III - Money, Credit and Prices

[Reserve Money](#)

[Monetary Survey](#)

[Commercial Bank Survey](#)

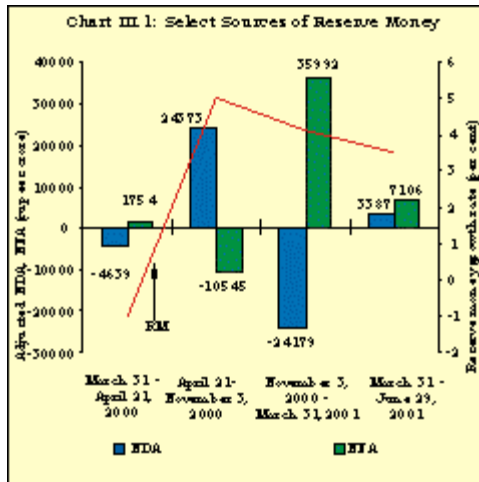
[Price Situation](#)

3.1 Reserve money expansion during 2000-01 was broadly in alignment with that recorded in the preceding year. Broad money (M3) growth, net of inflows under the India Millennium Deposits (IMDs), worked out to 14.4 per cent in 2000-01 as against 14.6 per cent in 1999-2000. The growth of aggregate deposits of scheduled commercial banks accelerated to 18.4 per cent (15.2 per cent excluding IMDs) in 2000-01 from 13.9 per cent in 1999-2000. The growth of non-food credit (adjusted for non-SLR investments) of scheduled commercial banks was significantly high at 20.9 per cent in the first three quarters of 2000-01 but decelerated towards the end of the year, reflecting the slowdown in overall economic activity. These movements were reflected in the behaviour of assets and liabilities of scheduled commercial banks. Inflation moderated to 4.9 per cent by the end of the year after the adjustments to upward revision in the administered prices of petroleum products were completed.

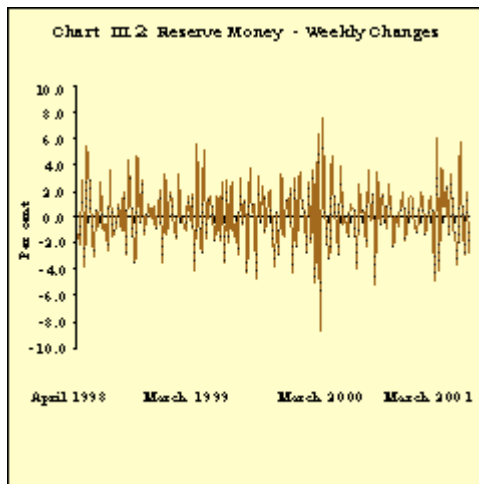
RESERVE MONEY

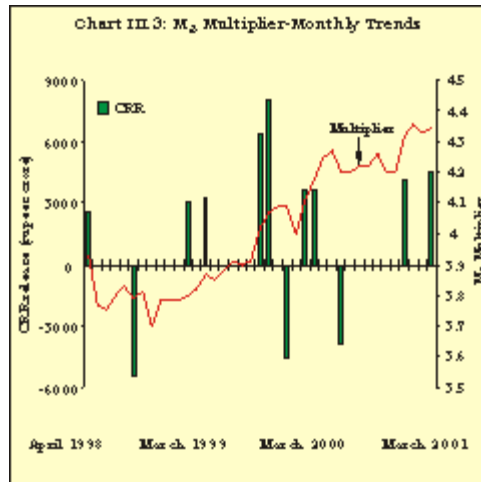
3.2 During 2000-01, reserve money grew by 8.1 per cent as compared with 8.2 per cent during 1999-2000 ([Appendix Table III.1](#)). Primary liquidity flows during the past two years need to be viewed in the context of changes in reserve requirements. The approximate cumulative net first round release of resources on account of CRR changes, at Rs.7,500 crore, during the year was much lower than that of Rs.13,000 crore during 1999-2000. Adjusted for the impact of CRR changes, reserve money growth worked out to about 11.0 per cent in 2000-01 as against about 13.0 per cent in 1999-2000.

3.3 The increase in reserve money during 2000-01 essentially emanated from an accretion to the Reserve Bank's foreign currency assets (Rs.27,463 crore, adjusted for revaluation, as against an increase of Rs.27,382 crore adjusted for revaluation during 1999-2000), which occurred mainly in the period November 2000-March 2001. The net domestic assets (NDA) of the Reserve Bank underwent a compensating decline of Rs.4,444 crore (adjusted for revaluation) in 2000-01 as compared with a decline of Rs.6,528 crore (adjusted for revaluation) in 1999-2000 ([Chart III.1](#)).

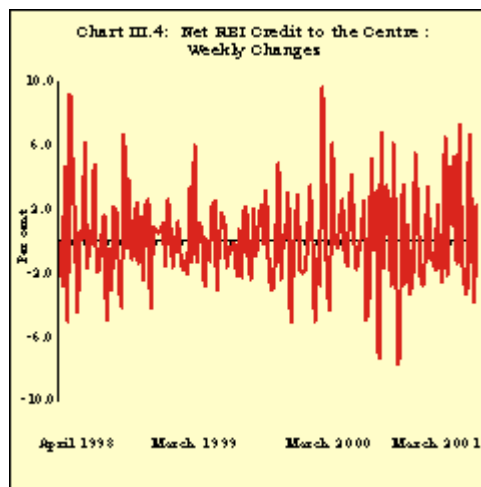


3.4 In recent years, reserve money has exhibited considerable oscillations from week to week, often of sizeable amplitudes, reflecting the growing market orientation of monetary policy and, in particular, the active management of liquidity in the money, government securities and foreign exchange segments of the financial markets (Chart III.2). Progressively market determined interest rates, financial innovations and the frequent adjustments of reserve requirements as part of the flexible deployment of monetary policy in the context of market developments, have imparted volatility to the money multiplier (Chart III.3). Accordingly, the conventional role of reserve money in the determination of money supply has become blurred under the impact of the Reserve Bank's liquidity operations. In the process, reserve money changes have emerged as the principal operating target of monetary policy, with liquidity adjustments setting up corridors for the money market rates, enabling a gradual softening of yields in the gilt markets and ensuring orderly conditions in the foreign exchange market.





3.5 The weekly movements in reserve money are being largely driven by the fluctuations of the net Reserve Bank credit to the Centre around its trend ([Chart III.4](#)). The latter is increasingly reflecting the Reserve Bank's assessment of market liquidity and absorptive capacity rather than being passively determined by the budgetary gap, as in previous years. Movements in the Reserve Bank's net credit to the Centre are, thus, a combination of the direct monetisation of the fiscal deficit embodied in primary operations -ways and means advances (WMA) netted for changes in the Centre's balances with the Reserve Bank, the Reserve Bank's flow holdings of rupee coins and private placements/ devolvments - and strategic open market (including repo) operations, introducing a new dimension to monetary-fiscal co-ordination in which adjustments between the two policy stances occur in the market.



3.6 The net Reserve Bank credit to the Centre increased by 4.8 per cent (Rs.6,705 crore) during 2000-01 in contrast to a decline of 3.8 per cent (Rs.5,587 crore) during 1999-2000. Although the Reserve Bank's subscription to the Centre's dated securities was large at Rs.31,151 crore (at face value), the monetary impact was partly offset by net open market sales (Rs.19,218 crore). Cumulative primary operations of the Reserve Bank amounted to Rs.34,943 crore during 2000-01 as compared with Rs.25,682 crore during 1999-2000 ([Table 3.1](#)).

3.7 Commercial bank draws from the Reserve Bank declined by Rs.4,471 crore in contrast to the increase of Rs.3,256 crore during 1999-2000, partly reflecting the reduction in refinance limits. The Reserve Bank's credit to the commercial sector declined by Rs.1,983 crore in contrast to the increase of Rs.3,044 crore in 1999-2000, essentially on account of the decline in availment of liquidity support by primary dealers (Rs.1,962 crore).

Table 3.1: Net Reserve Bank Credit to the Central Government

Variable	(Rupees crore)				
	2000-01	1999-2000	1998-99	First Quarter	
				2001-02	2000-01
1	2	3	4	5	6
Net Reserve Bank Credit to the Centre (1+2+3+4-5)	6,705 (4.8)	-5,587 (-3.8)	11,800 (8.8)	19,523 (13.3)	14,393 (10.3)
1. Loans and Advances	4,413	-2,060	1,042	3,619	4,316
2. Treasury Bills held by Reserve Bank	-1,388	1,107	148	-3	5
3. Reserve Bank's holdings of Dated Securities	4,301	-5,376	10,817	13,150	7,936
3.1 Central Government Securities	4,065	-5,358	10,817	13,150	7,700
4. Reserve Bank 's holdings of Rupee Coins	-25	38	42	39	13
5. Central Government Deposits	596	-704	248	-2,718	-2,123
Memo Items *					
1. Market Borrowings of Dated Securities by the Centre #	1,00,183	86,630	83,753	46,000	33,683
2. Reserve Bank's Primary Subscription to Dated Securities	31,151	27,000	38,205	21,000	6,961
3. Repos (-) / Reverse Repos (+), net	-1,355 @	1,021	-827	1,355	-1,006
4. Open Market Net Sales #	19,218	35,369	26,348	10,929	1,528
5. Primary Operations #	34,943	25,682	39,041	27,376	13,412

* At face value.

Excludes Treasury Bills.

@ Pertains to LAF.

Parenthetic figures constitute percentage variations over previous year.

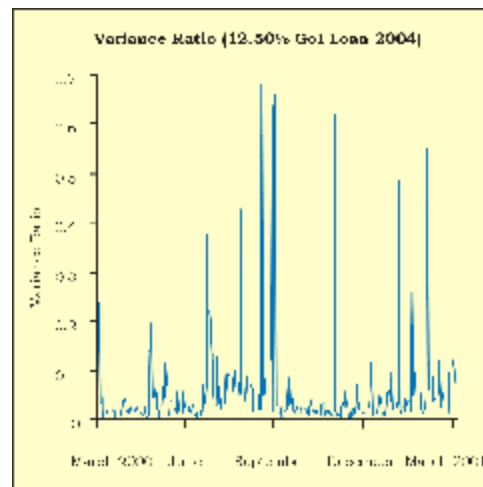
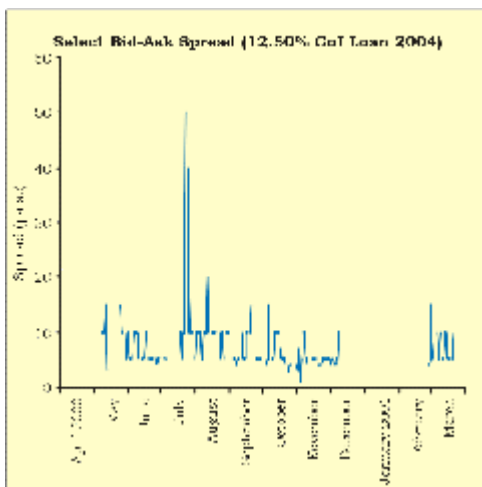
3.8 The Reserve Bank's claims on the Central Government and banks are affected by seasonal shifts in banking activity. First, banks often arbitrage between their balances with the Reserve Bank, standing refinance facilities and net repos from week to week in view of the differential reserve requirements on reporting and non-reporting Fridays. Secondly, cash demand typically picks up at the beginning of the month - on account of salary disbursements by the

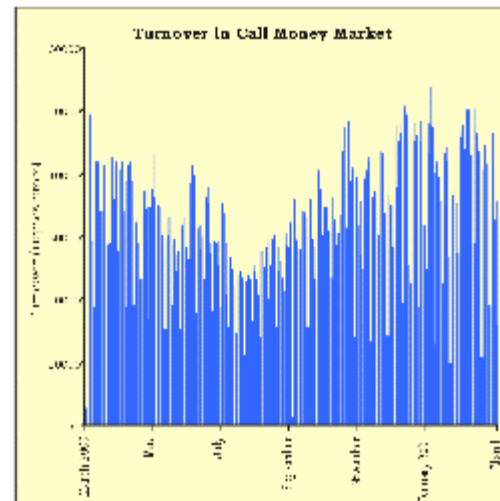
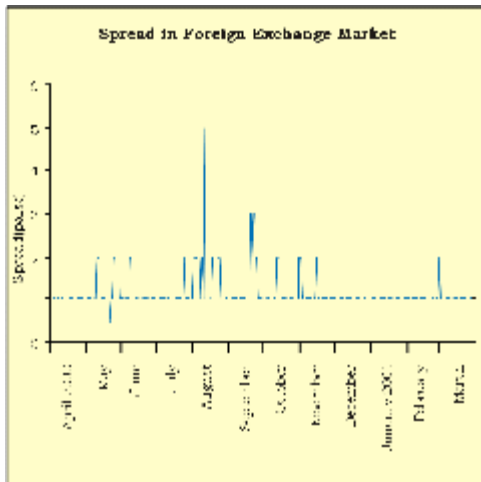
Government (often funded through the WMA) and individuals' salary encashments from the banking system (sometimes funded through recourse to net reverse repos) - and declines at the month-end when the resultant spending finds its way back into business accounts, bolstering bank liquidity. Thirdly, banks often fund advance tax payments - which is a temporary leakage from the banking system -by recourse to the Reserve Bank. Finally, cash-surplus banks park funds (otherwise lent on call) with the Reserve Bank at the year-end on balance sheet considerations so that cash-deficit banks typically have to fund their reserve requirements through refinance/ reverse repos. These changes in banks' liquidity requirements and the Reserve Bank's market operations can change the size and composition of the Reserve Bank's accommodation to the Centre without any relation to fiscal operations.

3.9 In view of the growing market orientation of base money changes, an accurate assessment of market liquidity and shifts therein assumes critical importance. Financial sector reforms have brought about a freeing of interest rates from administrative setting. Accordingly, movements in key market interest rates have emerged as the principal gauge of liquidity conditions. Fundamental changes in the financial system have necessitated the monitoring of a panel of indicators in conjunction with interest rate movements to obtain a 'fix' on market liquidity (Box III.1).

Box III.1
Measures of Market Liquidity

Liquidity in a market at any point of time essentially depends on the funds available and the associated transaction costs. The rate of interest, or the price of a financial product in more generic terms, is the first and foremost indicator of market liquidity. The nominal rate of interest, however, reflects not only the demand-supply position, *per se*, but also the liquidity premium arising out of prevailing structural illiquidity which inhibit easy transactions of large volumes and produce distortions in prices. These include factors like the trading technology, payment and settlement system, transaction cost, systemic risk, availability of risk-hedging alternatives, the monetary policy stance reflected in changes in the cost and quantum of discretionary liquidity and the supervisory and regulatory framework. The information content of the interest rate has, therefore, to be buttressed by measures of structural illiquidity and the resultant liquidity premium.





Market liquidity is accordingly being assessed in terms of several attributes like the size, transaction immediacy, depth, width, market impact and resilience of the market. A threshold size of the market and concentration on specific issues through maintaining gross issuance is often critical in order to boost the secondary market and to reduce structural illiquidity. The turnover ratio, *i.e.*, the turnover as a percentage of total outstanding stock, provides a measure of the vibrancy of the market. The larger the stock of debt outstanding in the market, generally, the higher is the turnover and the thinner is the bid-ask spread. Immediacy refers to the speed with which a trade can be executed in the market. Depth is reflected by the maximum size of a trade for any given bid-ask spread. Width or tightness is the cost of providing liquidity and is typically measured by the bid-ask spread. The bid-ask spread, *i.e.*, the differential between the lowest bid quote (the price at which an agent is willing to buy a bond) and the highest ask quote (at which the agent is willing to sell the bond), or the cost of a round trip, is a component of the transactions cost of a trader who seeks immediacy in the execution of buy or sell orders. In case there are no other transaction costs (except order processing), the spread represents an operational measure of the price of the dealers' services and provides an estimate of the security's marketability. If dealers seek to maintain an optimal inventory with a view to maximising expected average profit per unit time, the bid-ask spread would essentially be an increasing function of the price and risk of the security and a decreasing function of the volume of trading and the number of market makers. Alternately, the bid-ask spreads could reflect the adverse information costs faced by the dealer. Market impact, judged by the strength of a buy order to drive the ask rate up or by that of a sell order to push the bid rate down, increases with higher illiquidity of the market. Market resiliency is a dynamic concept depicting stability, *i.e.*, how quickly prices revert to their "normal" level after large transaction flows. The liquidity ratio, *i.e.*, the proportion of the number or value of shares traded during a brief time interval to the absolute value of the percentage price change over the same time period, should be positively related to market liquidity under normal circumstances. The variance ratio, *i.e.*, the volatility of short-term price movements to the volatility of longer-term price movements, has also been used as a proxy for market liquidity. A relatively more liquid market, *ceteris paribus*, requires less time to execute a trade, operates on a narrower bid-ask spread, supports higher volumes for a given spread and requires relatively less time for the restoration of the "normal" bid-ask spread following a big transaction.

The deregulation of the interest rates and the introduction of the money market and gilt instruments in the 1990s have resulted in the progressive evolution of the financial markets in India in terms of both depth and integration. Indicators of market activity such as bid-ask spreads, variance ratios and turnovers are providing important information, supplementary to the interest rate, to assess market liquidity conditions.

References

1. Amihud, Y. and H. Mendelson, (1986), "Asset pricing and the bid-ask spread", *Journal of Financial Economics*, 17(2).
2. Committee on the Global Financial System, (1999), 'Market Liquidity: Research Findings and Selected Policy

Implications', *BIS-CGFS Study No. 11*, Bank for International Settlements.

3. Schwartz, Robert A., (1991), "Market Liquidity", *Palgrave Dictionary of Money and Finance*.

3.10 Reserve money increased by 3.5 per cent during the first quarter (up to June 29) of 2001-02, in contrast to a decline of 2.0 per cent in the corresponding period of the previous year. The net first round release due to CRR cuts amounted to Rs.4,500 crore (Rs.7,200 crore last year). The net Reserve Bank credit to the Centre accelerated to 13.3 per cent (Rs.19,523 crore) from 10.3 per cent (Rs.14,393 crore) during the first quarter of 1999-2000. The Reserve Bank's primary subscription to the Centre's dated securities amounted to Rs.21,000 crore (at face value) while net open market sales amounted to Rs.10,929 crore. The Reserve Bank's credit to commercial banks and PDs declined by Rs.4,375 crore. The Reserve Bank's net foreign currency assets increased by Rs.6,585 crore (adjusted for revaluation) in sharp contrast to a decline of Rs.4,683 crore (adjusted for revaluation) during the corresponding period of the previous year. Reserve money increased by 0.1 per cent up to August 10, 2001 as compared with a decline of 1.2 per cent during April-August 11, 2000.

Impact of Liquidity Operations on Reserve Money

3.11 Monetary conditions eased in April 2000 with ample liquidity in the financial markets. The subsequent tightening of market conditions due to net foreign currency sales by the Reserve Bank created gaps which were filled by higher-cost liquidity generated by combining private placements/devolvments and open market (including repo) operations. The foreign currency assets declined by Rs.10,676 crore (adjusted for revaluation) reflecting the Reserve Bank's operations in the foreign exchange market during April 21-November 3, 2000. The Reserve Bank's net credit to the Centre increased sharply during this period with the expansion over the March, 2000 level reaching a historic peak of Rs.29,568 crore on November 3, 2000. Liquidity was generated by the increase in net foreign assets of the Reserve Bank through absorption of IMD proceeds and the subsequent revival of capital inflows. Furthermore, commercial bank time deposit growth outstripped non-food credit off-take by Rs.15,738 crore during the last quarter of 2000-01 in sharp contrast to the shortfalls of Rs.9,108 crore and Rs.6,803 crore during the final quarters of 1999-2000 and 1998-99, respectively. This renewed interest in government paper, reducing the net Reserve Bank credit to the Centre by Rs.22,863 crore between March 31 and November 3, 2000 ([Table 3.2](#)). Continuing capital flows resulted in an accretion of Rs.7,544 crore (adjusted for revaluation) to the Reserve Bank's foreign currency assets during 2001-02 (up to August 10, 2001). Monetary policy operations combining CRR changes and OMO (including LAF repo operations) were continued in order to modulate domestic liquidity. The net Reserve Bank credit to the Centre increased by Rs.22,423 crore up to June 15, 2001 on account of a temporary tightness in the money markets as the Centre's borrowing programme commenced; however, by August 10, 2001 this expansion moderated to Rs.14,497 crore following the revival of demand for gilts with the return of easy liquidity conditions. Adjusted for net repos, the Reserve Bank's net accommodation to the Centre worked out to about Rs.13,000 crore. This was partly neutralised by redemption of refinance by banks and PDs.

Table 3.2 : Sources of Reserve Money

Variable	(Rupees crore)				
	Out	June 29	March 31,	November 3	April 21	Out-

	standing as on June 29,2001	2001 over March 31,2001	2001 over November 3,2000	over April 21,2000	over March 31,2000	standing as on March 31,2000
1	2	3	4	5	6	7
Reserve Money	3,13,805	10,494	11,813	13,828	-2,885	2,80,555

Select Sources of Reserve Money

1. Net RBI credit to the Centre	1,66,057	19,523	-22,863	16,061	13,507	1,39,829
1.1 Ways and Means Advances	9,014	3,619	-2,545	-4,217	11,175	982
1.2 Primary Subscription to Dated Securities		21,000	1,000	30,151	0	
1.3 Net LAF Repos		1,355	-1,355	0		
1.4 Net Open Market Sales*		10,929	13,362	5,815	41	
2. RBI's claims on banks and commercial sector	20,901	-5,350	1,102	4,991	-11,896	32,055
2.1 Commercial Banks	3,616	-1,426	-846	820	-4,445	9,513
2.2 Primary Dealers	2,061	-2,949	610	4,155	-6,727	6,972
3. RBIs Net Foreign Assets	2,04,362	7,187	35,013	-4,581	863	1,65,880
3.1 RBI's Foreign Currency Assets \$		6,585	36,386	-10,676	1,754	

Memo Item

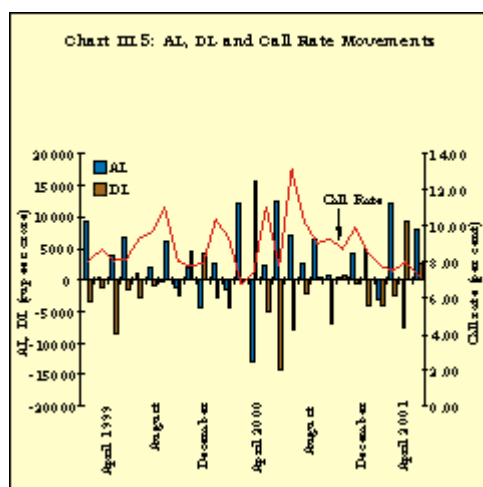
1. Release of Resources on account of changes in Cash Reserve Ratio (approximate)		4,500	4,100	-3,800	7,200	
2. Net Central Government Borrowing #		44,850	23,761	45,418	4,608	

\$ Net of revaluation.

* Dated Securities only.

Includes 364-day Treasury Bills.

3.12 The Reserve Bank continued to counterbalance autonomous liquidity (AL) flows with changes in the quantum as well as the price of discretionary liquidity (DL) with a view to balancing the market for bank reserves and ensuring orderly money market conditions ([Chart III.5](#)).



3.13 The conduct of monetary policy is being increasingly characterised by constrained

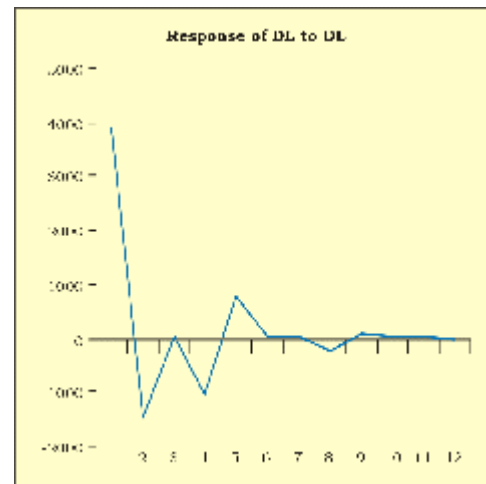
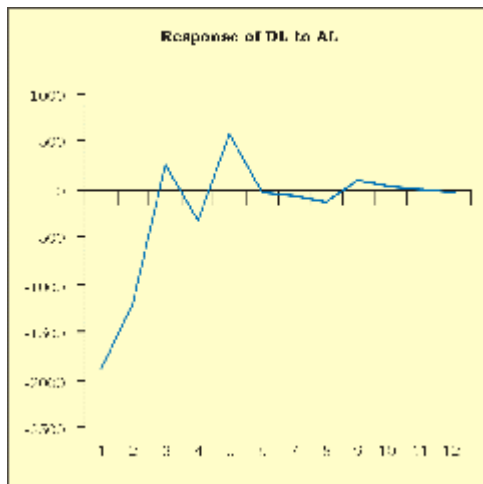
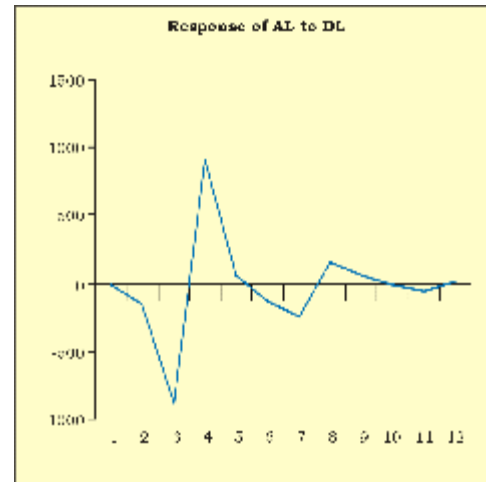
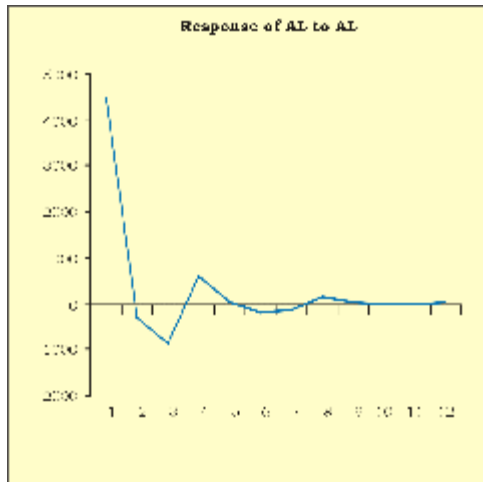
discretion. Typically monetary authorities operating in the short run are faced with the dilemma of the growth-inflation trade-off despite a conviction in the neutrality of money in the long run. Accordingly, they are confronted with the need to take a position on the growth-inflation curve which maximises welfare, thereby setting the overarching objectives of discretionary monetary policy in terms of the appropriate combination of growth and inflation. Within this assignment, central banks react to immediate concerns arising out of their responsibility for financial stability by modulating liquidity in tune with or counter to financial market developments. In India, in recent years, DL has offset AL in a fairly predictable manner (Box III.2).

Box III.2 **Identifying a Monetary Policy Reaction Function for India**

The conduct of monetary policy imposes upon the central bank the difficult choice of an optimal combination of targets - for instance, growth and inflation - determined by minimising the discounted future loss of economic welfare on account of deviations from the targets. The central bank's task is then to set its instruments such as key interest rates, base money, *etc.*, so as to best minimise these inter-temporal losses. This involves evolving some type of a rule, referred to in the literature as a monetary policy reaction function, which prescribes the path of the central bank's instruments in terms of its relationship with a particular set of variables which are observable by the central bank, typically indicators of financial market activity. The optimal reaction function is complex since it would normally be a function of all the relevant variables, which describe the state of the economy and financial conditions, and is difficult to verify. Accordingly, practitioner requirements involved in the day-to-day conduct of monetary policy warrant identifying a relatively simple reaction function with a few directly observable and verifiable variables reflecting market conditions, which respond to deviations from the targets.

In the literature, several formulations of monetary policy reaction functions have been suggested including databased indices depicting central bank operating procedures, Taylor-type instrument rules and various variants thereof as well as narrative approaches based on 'reading' monetary and financial information which is employed to effect off-model corrections to technical formulations. The operating target variables in central bank reaction functions have been monetary aggregates and short-term interest rates or both. Where a monetary aggregate in some formulation of bank reserves/base money is targeted, it is useful to partition bank reserves into autonomous (AL) and discretionary liquidity (DL) components, since central banks are seldom able to gear their entire balance sheet for the purpose of liquidity management on account of other objectives of monetary policy.

The Reserve Bank, like most central banks in developing countries, modulates liquidity conditions in the money markets by adjusting liquidity through a combination of CRR changes, open market (including repo) operations and standing refinance facilities as well as interest rate signals through changes in the Bank Rate and the repo rate. AL, the summary measure of the primary liquidity that flows to the banking system without monetary policy action, could be defined as the sum of the Reserve Bank's claims on Government (net of open market (including repo) operations), banks (net of credit to commercial banks), the commercial sector (net of credit to primary dealers) and the external sector, netted for currency (which is a leakage from the banking system), non-bank deposits with the RBI and net non-monetary liabilities. DL, which comprises CRR changes, open market (including repo) operations and credit to commercial banks and primary dealers, captures changes in the primary liquidity by monetary policy initiatives. Intuitively, if DL does not fully offset AL, then *ceteris paribus*, interest rates change to clear the market for bank reserves. In addition to the quantum of liquidity, short-term interest rates also react speedily to changes in the price of DL, such as changes in the Bank Rate and the repo/reverse repo rate.



Monthly data on AL and DL for the period 1995-2001 indicate strong negative correlation between them, suggesting that DL has consistently counter-balanced AL in a period marked by growing market orientation of monetary policy. Preliminary empirical evidence that suggests that AL 'Granger' causes DL within a vector autoregression (VAR) framework, with no evidence of significant reverse causation. In terms of forecast error variance decomposition, as much as a third of total variation in DL within a period of three months seems to be explained by AL. In terms of impulse response functions, the response of DL to AL is immediate and pronounced in the first and second months, although the tendency to react continues up to 7-8 months.

Given the stability in the response of DL to AL, it is possible to specify a monetary policy reaction function calibrating the policy response to autonomous changes in market liquidity.

Impulse Response to One Standard Deviation Shock

References

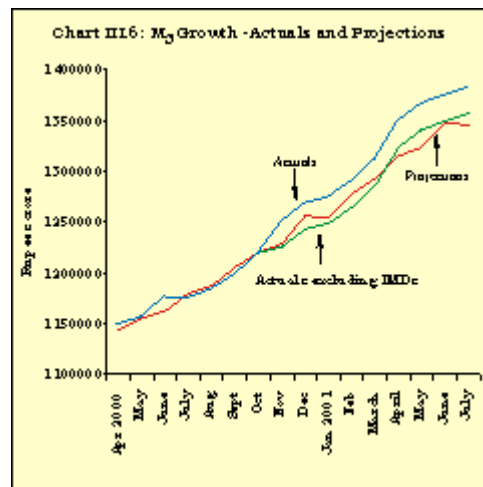
1. Bernanke Ben S. and Ilian Mihov, (1995), "Measuring Monetary Policy", *NBER Working Paper*, No.5145.
2. Borio, Claudio E.V., (1997), "The Implementation of Monetary Policy in Industrialised Countries", *BIS Economic Papers*, No.47, July.
3. Clarida, Richard, Jordi Gali and Mark Gertler, (1999), "The Science of Monetary Policy: A New Keynesian

Perspective, *NBER Working Paper*, No.7147.

4. International Monetary Fund (1999), *Seminar on Implementing Inflation Targets*, Washington DC.
5. Reserve Bank of India, (2000), *Annual Report, 1999-2000*, August.

MONETARY SURVEY

3.14 Broad money (M_3) increased by 16.7 per cent during 2000-01 as compared with an expansion of 14.6 per cent during the previous year. The M_3 growth rate, net of India Millennium Deposits (IMDs), at 14.4 per cent, however, remained broadly within the 15.0 per cent projection announced in the April 2000 monetary and credit policy statement ([Chart III.6](#)): On a monthly average basis, the M_3 growth rate (net of RIBs/IMDs) decelerated to 15.0 per cent during 2000-01 from 16.7 per cent during 1999-2000 and 18.2 per cent during 1998-99 ([Table 3.3](#) and [Appendix Table III.3](#)).



3.15 The comparison of monetary flows between 2000-01 and the preceding year needs to be qualified by few caveats, *viz.*, i) the effect of IMD flows in November 2000 and ii) the lower commercial bank deposit and credit growth during 1999-2000 as the gap between the last reporting Friday of 1999-2000 (*i.e.*, March 24) and the balance sheet date (*i.e.*, March 31) widened to a complete week, muting the impact of the year-end bulge on the end-March 2000 position.

Table 3.3 : Monetary Indicators

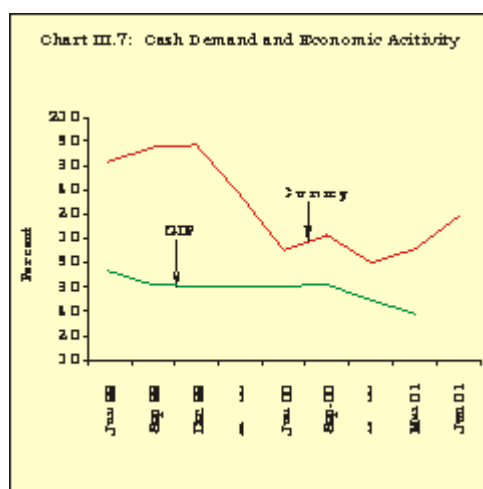
Variable	(Per cent)					
	Point-to-point basis			Monthly Average basis		
	2000-2001	1999-2000	Average During 1990s	2000-2001	1999-2000	Average During 1990s
1	2	3	4	5	6	7
I. Reserve Money	8.1	8.2	13.9	7.8	12.0	14.4
II. Narrow Money (M_1)	11.1	10.6	15.6	11.2	14.7	15.9
III. Broad Money (M_3)	16.7	14.6	17.3	15.7	17.2	17.4
III.1 M_3 , net of RIBs					16.7	
III.2 M_3 , net of IMDs	14.4			14.8		

III.3 NM ₃	14.3	15.3	16.6*	15.0	17.5	16.7*
IV. Components of Broad Money						
a) Currency with the Public	10.8	11.9	15.2	9.1	16.3	15.9
b) Aggregate Deposits	17.8	15.3	17.6	17.2	17.5	17.7
<i>Of which:</i> Scheduled Commercial Banks: (SCBs)	18.4	13.9	17.1	16.6	16.7	17.2
i) SCBs' Demand Deposits	11.9	8.5	16.5	14.5	12.8	16.0
ii) SCBs' Time Deposits	19.5	15.0	17.5	17.0	17.5	17.5
V. Sources of Broad Money						
a) Net Bank Credit to the Government	16.1	14.1	14.2	13.8	15.1	14.6
i) Net Reserve Bank Credit to the Government	3.8	-2.8	7.5	0.9	5.3	8.9
<i>Of which:</i> to the Centre	4.8	-3.8	7.1	0.3	4.3	8.8
ii) Other Banks' Credit to the Government	22.3	25.2	21.2	21.1	21.7	21.1
b) Bank Credit to Commercial Sector	14.8	18.3	14.6	19.7	16.4	14.4
<i>Of which:</i>						
Scheduled Commercial Banks' Non-food Credit	14.9	16.5	15.4	15.4	15.5	15.3
c) Net Foreign Exchange Assets of the Banking Sector	21.5	15.6	44.7	17.9	21.1	46.4

Data are provisional.

* Average for 1994-95 to 1999-2000, *i.e.*, for 6 years.

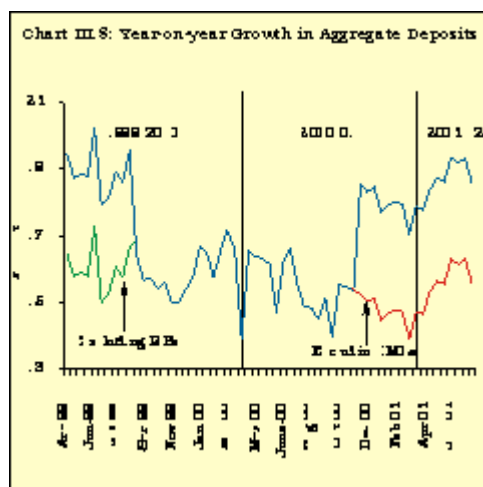
3.16 Currency with the public registered a growth of 10.8 per cent during 2000-01 as compared with 11.9 per cent during the previous year. The year-on-year monthly average cash demand dwindled to a single digit (9.1 per cent from 16.3 per cent in the previous year) - the first time since 1975-76 - largely reflecting the deceleration in economic activity ([Chart III.7](#)).



3.17 Aggregate deposits of scheduled commercial banks accelerated to 18.4 per cent in 2000-01 from 13.9 per cent in 1999-2000 ([Appendix Table III.6](#)). The total deposit mobilisation during 2000-01, at Rs.1,49,273 crore, stood much higher than the projected increase of Rs.1,25,000 crore, mainly on account of IMDs (Rs.25,662 crore). The monthly growth profile of commercial bank deposits, excluding the amounts raised through Resurgent India Bonds (RIBs) for 1999-2000 and IMDs for 2000-01, was, however, stable at around 15.5 per cent ([Chart III.8](#)).

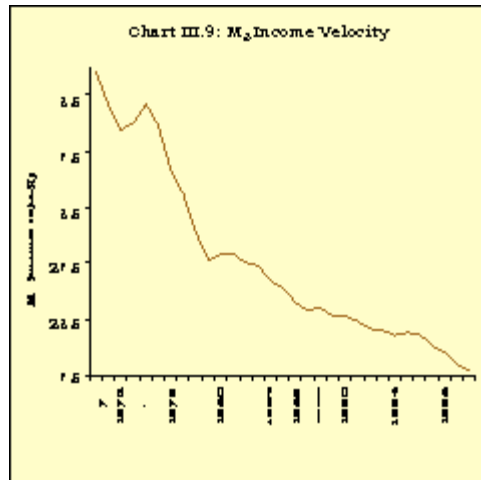
3.18 Time deposits grew by 19.5 per cent for 2000-01 as compared with 15.0 per cent during 1999-2000. The fortnightly average year-on-year increase in time deposits, however, worked out

lower at 16.9 per cent during 2000-01 than 17.8 per cent during 1999-2000. The intra-year variations in time deposits showed some deviation from the normal seasonal pattern of a peak in September and a trough in December, on account of IMD inflows in November 2000. The fortnightly year-on-year growth rates of time deposits, excluding IMDs and RIBs, were lower for most part of 2000-01 than the corresponding growth rates recorded during the preceeding year. The deceleration in domestic time deposits reflected, *inter alia*, an increasing preference by the households for contractual financial saving instruments as well as investments in physical assets on account of lowering of rates of return on deposits. Demand deposits grew by 11.9 per cent during 2000-01 as compared to 8.5 per cent during 1999-2000 with the intra-year variations following the usual pattern of quarter-end and year-end bulges reflecting the coupling of demand deposits and non-food credit followed by beginning-of-the quarter unwinding.



3.19 The income velocity of broad money declined to 1.8 during 2000-01 from an average of 2.0 during the latter half of the 1990s in line with long-term trends ([Chart III.9](#)).

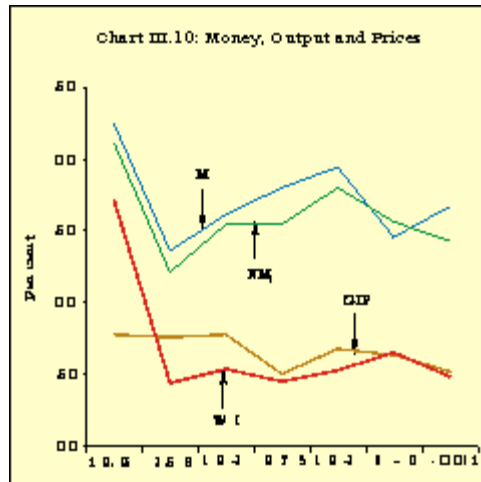
3.20 The M_3 growth rate, at 4.8 per cent, during the first quarter of 2001-02, was comparable to 4.7 per cent during the corresponding period of the previous year. The M_3 growth rate, on a year-on-year basis, worked out to 16.8 per cent as on June 29, 2001 as compared with 16.0 per cent as on June 30, 2000. The annual M_3 growth, net of IMDs, was, however, lower at 14.6 per cent. It needs to be recognised that the monetary data as on June 29, 2001 and June 30, 2000 are not strictly comparable as the latter was also the last working day of the quarter and, therefore, includes the full impact of the usual quarter-end bulge in deposits and credit. On a more comparable basis, inclusive of June-end balance sheet adjustments, the M_3 growth rate, net of IMD effects, was higher at 15.4 per cent as on July 27, 2001 than 14.6 per cent as on July 28, 2000, driven by stronger commercial bank time deposit growth (16.7 per cent, net of IMDs, than 15.4 per cent recorded a year ago). Cash demand increased by 4.3 per cent during 2001-02 (up to July 27) as compared with 3.2 per cent during the corresponding period of the previous year.



New Monetary and Liquidity Aggregates

3.21 During the year, the Reserve Bank introduced the new monetary, credit and liquidity aggregates compiled on the basis of the recommendations of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy) alongside the existing monetary aggregates. The Working Group recommended the compilation of money supply on a residency basis, in line with the international best practices, by not directly reckoning banks' nonresident repatriable foreign currency fixed deposits such as the balances under the FCNR(B) scheme, RIBs and IMDs in the monetary aggregates. The monetary impact of such capital flows would depend on their net effect on the monetary base ([Table 3.4](#), [Chart III.10](#) and [Appendix Tables III.2, 4, 5 and 7](#)).

3.22 The monthly average growth rate of the new broad money aggregate (NM_3), at 16.6 per cent over the period of 1994-95 to 1999-2000, is about a percentage point lower than that of the existing monetary aggregate (M_3) essentially on account of the treatment of capital flows. NM_3 decelerated to 14.3 per cent during 2000-01 as compared with 15.3 per cent during 1999-2000 ([Table 3.4](#)). NM_3 increased by 5.4 per cent during 2001-02 (up to June 29) as compared with 4.6 per cent during the corresponding quarter of the previous year. Preliminary empirical evidence suggests that NM_3 outperforms the conventional monetary aggregates in terms of information efficiency and explanatory power.



3.23 The domestic credit aggregate has been enlarged to include banks' money and equity market investments and net credit to primary dealers. Domestic credit decelerated to 15.2 per cent during 2000-01 from 17.6 per cent during 1999-2000. Domestic credit increased by 3.8 per cent during 2001-02 (up to June 29) as compared with 4.3 per cent during the corresponding period of the previous year. Net foreign assets (NFA) of the banking system are computed by netting banks' overseas foreign currency borrowings and non-resident repatriable foreign currency fixed liabilities from their foreign currency assets. Net foreign assets of the banking system recorded a debit of Rs.35,929 crore as at end-March 2001 reflecting swaps with the Reserve Bank out of RIB and IMD funds. Three liquidity aggregates (L₁, L₂ and L₃) encompassing select liabilities of the postal saving bank, financial institutions and NBFCs, on aggregation basis, were introduced besides the new monetary aggregates.

Table 3.4: Select New Monetary and Liquidity Aggregates

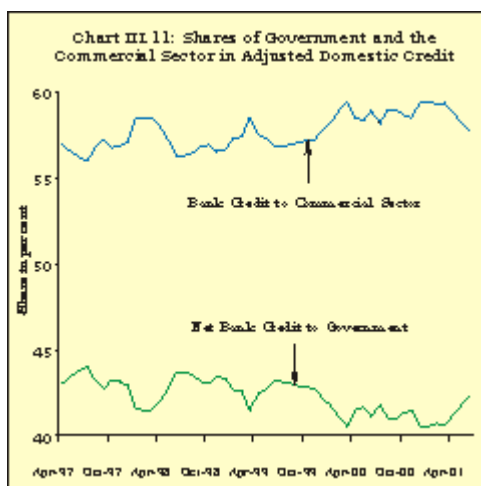
Aggregate	Definitional changes	Outstanding as at end- March,2001	Variations (per cent)	
			2000-01	1999-2000
1	2	3	4	5
NM3	M3 - Non-resident repatriable foreign currency fixed deposits + Non-bank call/term borrowings	12,26,514	14.3	15.3
L1 \$	NM3 + Post Office deposits (excluding National Savings Certificates)	12,59,679	14.4	15.3
L2 \$	L1 + Term deposits with term-lending and refinancing institutions (FIs) + Term borrowing by FIs + Certificates of deposit issued by FIs	12,72,590	14.6	15.4
L3 \$	L2 + Public deposits of NBFCs	12,92,724	14.5	14.9
Domestic Credit	Domestic credit (existing) + RBI's credit to NABARD + Banks' investments in all securities other than approved securities + Banks' net credit to primary dealers (PDs)	13,11,156	15.2	17.6
NFA of	Net foreign assets (NFA) of the banking sector (existing) -			

(Rupees crore)

the Banking Sector	Non-resident repatriable foreign currency fixed deposits - Banks' overseas foreign currency borrowing	1,61,246	13.2	14.1
Capital Account \$	Capital + Reserves	1,54,240	13.9	10.4
Data are provisional.		\$ New measure.		

Credit Aggregates

3.24 Domestic credit (adjusted for scheduled commercial banks' investments in non-SLR securities) decelerated to 15.8 per cent during 2000-01 from 17.0 per cent during 1999-2000 ([Appendix Table III.3](#)). The share of the Government in adjusted domestic credit declined to 40.6 per cent at end-March 2001 but continues to remain substantial ([Chart III.11](#)). As at end-March 2001, commercial banks held SLR securities amounting to 35.1 per cent of their net demand and time liabilities as compared with the statutory SLR requirement of 25.0 per cent. Banks' holding of SLR paper, amounting to about Rs.1,06,000 crore over and above the SLR requirement, was substantially higher than the net annual borrowings of the Central Government. The ratio of incremental non-food credit (adjusted) in incremental domestic credit (adjusted), at 43.8 per cent during 2000-01, was comparable with 45.0 per cent during 1999-2000.



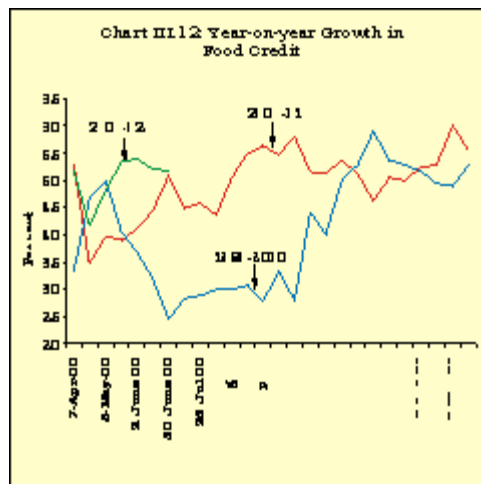
3.25 The net bank credit to the Government accelerated to 16.1 per cent in 2000-01 from 14.1 per cent recorded in the previous year. Scheduled commercial banks' investments in government securities, however, decelerated to 22.1 per cent from 24.7 per cent during 1999-2000. The share of the Reserve Bank in net bank credit to the Government, nevertheless, fell to a historic end-March low of 30.0 per cent as at end-March 2001 from the average of 40.8 per cent during the second half and 54.6 per cent during the first half of the 1990s, reflecting the increasing market orientation of internal debt management in recent years.

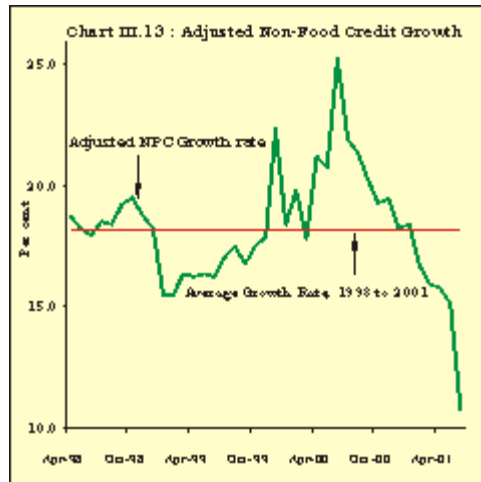
3.26 Bank credit (adjusted for scheduled commercial banks' non-SLR investments) to the commercial sector decelerated to 15.6 per cent in 2000-01 from 19.0 per cent in the previous year. The year-on-year commercial credit growth rate shot up to an average of 20.7 per cent during the first three quarters of 2000-01 (as compared with 17.5 per cent during the

corresponding period of 1999-2000) but dipped to an average of 17.2 per cent in the final quarter (as compared with 19.2 per cent during the corresponding quarter of 1999-2000). This deceleration was essentially driven by lower commercial bank non-food credit off-take during the last quarter of 2000-01, which, at Rs.11,190 crore, worked out to be almost half the off-take of Rs.20,688 crore in the corresponding quarter of 1999-2000.

3.27 Commercial bank credit decelerated to 17.3 per cent during 2000-01 from 18.2 per cent recorded during 1999-2000. The food credit extended by scheduled commercial banks showed a substantial increase of Rs.14,300 crore (55.7 per cent) during 2000-01 as compared with a rise of Rs.8,875 crore (52.8 per cent) during 1999-2000, reflecting a peaking of food procurement and a decrease in food off-take during 2000-01 ([Chart III.12](#)).

3.28 Non-food credit decelerated to 14.9 per cent during 2000-01 from 16.5 per cent registered during 1999-2000. However, the monthly dynamics of non-food credit showed that the above-average growth rates were sustained for around three quarters of 2000-01 in a *contra*-seasonal pattern. The *contra*-seasonal pick-up was, *inter alia*, on account of accumulation of stocks of fertilisers, sugar, petroleum and automobiles. The deceleration, thereafter, seemed to reflect an unwinding of oil credit off-take, repayment of working capital and subdued industrial activity ([Chart III.13](#)).





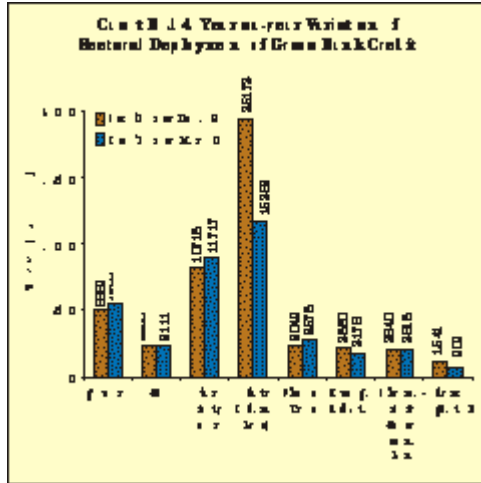
3.29 Scheduled commercial banks' investments in non-SLR instruments increased by Rs.14,138 crore as compared with Rs.13,102 crore recorded during 1999-2000. The total flow of non-food resources from scheduled commercial banks to the commercial sector (*i.e.*, non-food bank credit, together with investments in non-SLR securities) increased by 16.0 per cent as compared with 17.8 per cent in the previous year. Thus, the order of growth in adjusted non-food credit (non-food credit *plus* non-SLR investments) turned out to be similar to the projected increase of about 16.0 per cent set in the monetary and credit policy statement of April 2000.

3.30 Domestic credit (adjusted for the non-SLR investments of the scheduled commercial banks) increased by 3.6 per cent during the first quarter of 2001-02 as against 5.0 per cent during the corresponding quarter of the previous year. Net bank credit to the Government accelerated to 7.8 per cent during 2001-02 (up to June 29) from 6.6 per cent during the corresponding quarter of 2000-01, partly reflecting a sharp increase in the Centre's fiscal deficit. Scheduled commercial banks' incremental investments in government securities worked out to Rs.23,426 crore. Bank credit to the commercial sector decelerated to 0.6 per cent from 3.7 per cent during the corresponding period of the previous year, mainly on account of a decline in commercial bank non-food credit by Rs.3,126 crore in sharp contrast to the increase of Rs.16,485 crore in the previous year. The usual quarter-end bulge in non-food credit was reflected in an increase of Rs.3,952 crore during the fortnight ended July 13, 2001. On a year-on-year basis, adjusted domestic credit worked out to 15.1 per cent as on July 27, 2001 as compared with 18.2 per cent as on July 28, 2000 as non-food credit decelerated to 11.4 per cent as on July 27, 2001 from 21.5 per cent as on July 28, 2000, reflecting the lower off-take since January 2001.

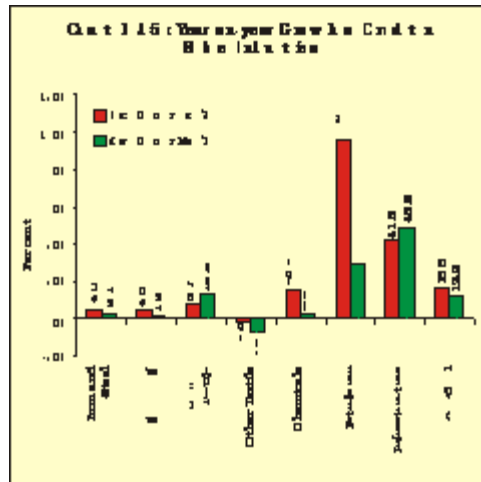
Sectoral Deployment of Gross Bank Credit

3.31 An analysis of the behaviour of non-food gross bank credit of select scheduled commercial banks during 2000-01 suggests that the priority sector credit off-take accelerated to 16.7 per cent (from 15.0 per cent last year) predominantly due to the acceleration in the credit off-take in agriculture (16.2 per cent from 12.0 per cent a year ago) and other priority sectors (33.8 per cent from 30.7 per cent last year) which was partly offset by the deceleration in credit to small-scale industries (5.9 per cent from 8.9 per cent a year ago). The credit off-take in wholesale trade (other than food procurement) accelerated to 21.3 per cent (20.4 per cent last

year) while that to the medium- and large-scale industry, other non-priority sector personal loans, advances against fixed deposits and housing decelerated to 10.4 per cent (from 12.9 per cent), 17.0 per cent (from 25.4 per cent), 4.8 per cent (from 25.0 per cent) and 14.4 per cent (from 23.6 per cent), respectively ([Appendix Table III.8](#)). An intra-year sectoral analysis shows that industry (medium and large) was the main driver of both the credit off-take pick-up in the first three quarters of 2000-01 as well as the deceleration thereafter ([Chart III.14](#)).



3.32 The industry-wise deployment of gross bank credit shows that amongst the principal industries, credit to iron and steel (3.1 per cent growth as against 2.8 per cent last year), infrastructure (48.9 per cent growth as against 21.8 per cent), cotton textiles (13.2 per cent growth as against 12.0 per cent) and residual (12.3 per cent growth as against 4.3 per cent) registered acceleration during 2000-01. Industries such as engineering (1.3 per cent as against 7.2 per cent), other textiles (-7.8 per cent as against 8.4 per cent), chemicals, dyes, paints, etc., (2.0 per cent as against 17.6 per cent) and petroleum (29.0 per cent as against 62.6 per cent), on the other hand, exhibited deceleration/decline in terms of credit off-take ([Appendix Table III.9](#)). The intra-year behaviour of credit off-take by industries shows that the credit spurt up to December 2000, as well as deceleration thereafter, was to a large extent, on account of the petroleum industry. Apart from cotton textiles and infrastructure, all other major industries exhibited a deceleration in credit off-take in the fourth quarter of 2000-01 ([Chart III.15](#)).



Trends in Utilisation of Refinance

Export Credit Refinance

3.33 During 2000-01, the aggregate outstanding export credit of scheduled commercial banks increased from Rs.40,460 crore as on March 24, 2000 to Rs.45,387 crore as on March 23, 2001 ([Appendix Table III.10](#)) before declining to Rs. 44,053 crore as on July 27, 2001. As a percentage of net bank credit, it declined from 9.3 per cent to 8.9 per cent as on March 23, 2001 and further to 7.7 per cent as at July 27, 2001. The export credit refinance limits of banks declined from Rs.10,579 crore (30.6 per cent of outstanding export credit eligible for refinance at Rs.34,576 crore) as on March 24, 2000 to Rs.7,192 crore (18.6 per cent of outstanding export credit eligible for refinance at Rs.38,765 crore) as on March 23, 2001, partly reflecting the reduction in refinance limits but increased to Rs. 9,256 crore as on July 27, 2001 (25.0 per cent of outstanding export credit eligible for refinance) at Rs. 37,080 crore. With call rates hovering over the Bank Rate of 8.0 percent during most part of 2000-01, utilisation of export credit refinance was quite substantial, except in December 2000 and January 2001. Analysis of export credit refinance availed by banks showed that a daily average utilisation of export credit refinance by banks on fortnightly basis, ranged between Rs.4,695 crore (41.6 per cent of limits) and Rs.6,144 crore (95.5 per cent of limits) during 2000-01. It ruled in the range of Rs. 2,268 crore to Rs. 5,740 crore during the period April 5-July 27, 2001.

Collateralised Lending Facility

3.34 During 2000-01, daily average utilisation of the Collateralised Lending Facility (CLF) ranged between Rs.171 crore (13.0 per cent of limit) and Rs.487 crore (74.1 per cent of limit). The daily average utilisation of CLF during the fortnight ended March 23, 2001 was Rs.304 crore (46.3 per cent of limit) which declined to Rs. 146 crore (22.2 per cent of limit) during the fortnight ended July 27, 2001.

Aggregate Resource Flow to Commercial Sector

3.35 The resource flow from bank and non-bank sources, inclusive of capital issues,

GDRs/ADRs/ FCCBs, CPs subscribed by non-banks and borrowings as well as bills rediscounted with FIs, to the commercial sector increased by Rs.1,65,056 crore during 2000-01 as compared with Rs.1,60,381 crore during the preceding year (Table 3.5). The share of the banking system in resource flows to the commercial sector, at 53.5 per cent during 2000-01, was comparable to the average during the previous three years (Chart III.16).

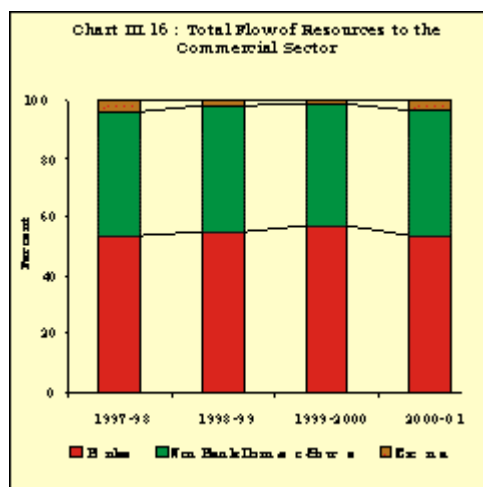


Table 3.5 : Total Flow of Resources to Commercial Sector (excluding Food Procurement Credit)

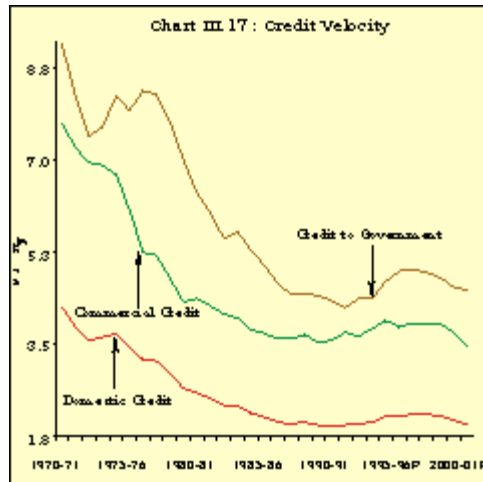
Variable	(Rupees crore)			
	2000-01	1999-2000	First Quarter 2001-02	2000-01
1	2	3	4	5
I. Scheduled Commercial Banks (I.1+I.2)	75,313	71,348	-1,606	19,957
I.1. Non-food credit	61,176	58,246	-3,126	16,485
I.2. Other Investments (2.1+2.2+2.3)	14,138	13,102	1,520	3,472
2.1. Commercial Paper (CP)	1,948	1,030	475	1,733
2.2. Bonds/Debentures/Preference Shares issued by	11,852	11,582	1,042	1,657
2.2.1 Public Sector Undertakings (PSU)	7,834	6,451	718	1,963
2.2.2 Private Corporate Sector	4,018	5,131	324	-306
2.3 Equity Shares issued by PSUs and Private Corporate Sector	338	490	3	82
II. Other Banks	13,003 @	20,395	-504 @	418
III. Other Sources (III.1+III.2+III.3+III.4+III.5)	76,739	68,638	18,373	17,656
III.1 Bills rediscounted with Financial Institutions (FIs) 575		-35	-313	6
III.2 Capital Issues \$ (2.1+2.2)	705	-536	229	813
2.1 Non-Government Public Companies	705	-536	229	813
2.1.1 Debentures and Preference Shares	-1,736	-2,730	148	427
2.1.2 Equity shares	2,441	2,194	81	386
2.2 PSU and Government Companies	0	0	0	0

III.3 Global Depository Receipts (GDRs) and Foreign Currency Convertible Bonds (FCCBs)	5,611	1,721	361 (up to May 2001)	1,029 (up to May 2000)
III.4 Issue of CPs #	-1,764	-137	2,245	231
III.5 Borrowings from FIs ##	71,613	67,626	15,852	15,577
Total Flow of Non-food Resources (I+II+III)	1,65,056	1,60,381	16,263	38,031
Memo Items				
1. Loans to corporates against shares held by them to enable them to meet the promoters' contribution to equity of new companies in anticipation of raising resources	-5	-44	0	-20
2. Private Placements	67,500	61,259	-	-
Data are provisional.	\$	Adjusted for banks' investments in shares and debentures.		
# Excluding CPs issued to banks.	##	Excludes bills rediscounted with FIs.		
@ Preliminary Estimate.				

The resource flow to the commercial sector, at Rs.16,263 crore during the first quarter of 2001-02, was much lower than that of Rs. 38,031 crore in the corresponding period of 2000-01, mainly on account of the decline in non-food credit off-take.

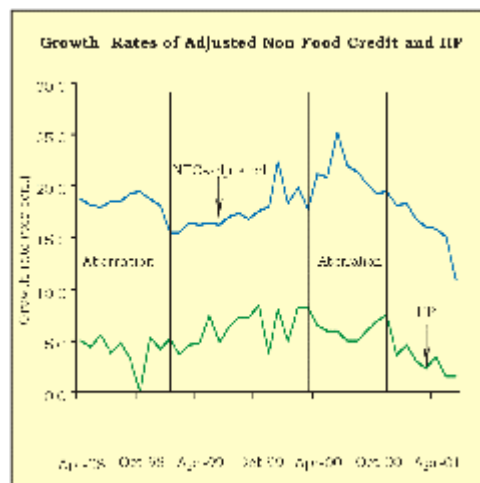
3.36 Banks continue to remain 'special' in the financial system as the primary financial intermediary, especially in view of the wide branch network. Bank finance continues to account for more than half the resources raised by the commercial sector. Small-scale industries accounted for as much as 40.0 per cent of industrial output and around 14.1 per cent of non-food gross bank credit as at end-March 2000. The correlation between the deviation from trend in respect of aggregate non-food credit and credit to small-scale industries was higher than that for large-scale industries over the period 1990-2000. This is borne out by data in respect of public limited companies for 1997-98 through 1999-2000 in which there is no systematic relationship between the size of the paid-up capital and the ratio of short-term bank borrowing to inventories. Thirdly, the velocity of credit in the Indian economy has remained reasonably stable, implying a close link between domestic (and commercial) credit and output ([Chart III.17](#)).

3.37 Non-food credit is generally regarded as providing early indications of underlying industrial activity on the assumption that production entities seek their working capital requirements to finance production. The aberrational behaviour of non-food credit during the greater part of 2000-01 even while industrial production was decelerating has raised questions about the information contained in movements of non-food credit in relation to industrial activity (Box III.3).



Box III.3 Inter Linkages Between Non-food Credit and Industrial Activity

In a developing economy with emerging financial markets, the financing of industrial activity is heavily bank-based relative to capital market-based financing found in more developed economies. Accordingly in India, movements in bank credit tend to be assessed in terms of their information content in respect of the underlying performance of the industrial sector. During the phase of liberalisation and structural reform in the 1990s especially since 1993-94, a close co-movement was observed between the acceleration in industrial growth and a surge in credit off-take. Monthly growth rates of non-food credit off-take and industrial production moved in tandem throughout the second half of the decade. During January 1997-October 1998 and again in the first three quarters of 2000-01, a distinct aberration in this co-movement was, however, evident even when non-food credit is augmented to include non-SLR investments (Chart). In the latter period, fairly high rates of growth of non-food bank credit co-existed with sluggish or declining rates of growth of industrial production. This has warranted a need for a critical re-examination of the inter-linkages between bank credit and output growth. Of particular interest, given these contrasting movements, is the 'lead indicator' characteristics ascribed to non-food credit in the context of industrial activity in India.



The inter-linkages between bank credit and output growth has been the subject of considerable debate in the literature on the credit and balance sheet (net worth) channels of transmission of monetary policy. Empirical evidence tends to favour the operation of the credit channel in emerging economies and even in economies with developed financial markets, particularly in the context of small businesses. Empirical studies of the credit-output relationships in the Indian economy are at variance with each other. Industry-level studies generally confirm the

positive impact of unanticipated credit changes on the level of output and inventories. On the other hand, it has been shown that under the assumption of rational expectations, credit shocks do not have any significant impact on firm level output in India because monetary policy is predictable and, moreover, firms tend to hold excess inventory. The demand for bank credit for inventory management tends to support the use of bank credit as a lagged indicator of real activity.

The correlation between the cyclical components of quarterly non-food credit extended by scheduled commercial banks (adjusted for their non-SLR investments) and industrial production, based on monetary data, turns out to be statistically significant over the period 1981-82 to 2000-01 in both contemporaneous and lagged terms. Causality analysis reveals bi-directional causality in the "Granger" sense between cyclical movement of non-food credit and overall industrial production as well as with the latter's components, *i.e.*, basic goods, capital goods and consumer goods production. Bi-directional causality between non-food credit and intermediate goods production is relatively weak. The statistically significant evidence of bi-directional causality considerably reduces the usefulness of non-food credit as a leading indicator of industrial activity. Viewed in the context of a generalised impulse response function, the impulse impact of a shock to overall industrial production on non-food credit is found to be smaller than the effect of a credit shock on industrial production, indicating some 'leading' properties in non-food credit in relation to industrial production. Decomposition of the forecast error variance, on the other hand, suggests that variations in overall industrial production account for a larger share of total variation in non-food credit than *vice versa*. Thus, the lead information content of non-food credit *vis-a-vis* industrial activity can get vitiated in periods of volatile credit market activity.

The generalised impulse impact of a unit standard deviation shock to non-food credit within a five-variable Vector Auto Regression (VAR) model involving used-based industries is found to be strongest on capital goods, followed by intermediate goods, consumer goods, and basic goods. The forecast error variance indicates that a shock to non-food credit accounts for a larger share of the variations in basic goods and intermediate goods reflecting the significance of credit availability, whereas shock to capital goods and consumer goods accounts for a larger share of the movements in non-food credit, reflecting the significance of demand conditions for credit off-take.

The analysis of the inter-linkages between non-food credit and industrial production needs to be qualified by some caveats. First, the strong seasonality in industrial production and bank non-food credit data with a peak observed in March is perhaps indicative of reporting biases that tend to be reflected in a significant contemporaneous correlation between bank credit and industrial production. Secondly, data on non-food bank credit include credit to the services sector while the index of industrial production does not include the services sector. This can be a source of statistical bias. This reflects the need for refinements in information availability and further investigation into the dynamic and complex relationship between bank credit and industrial output in India, before ascribing leading, coincident or lagging information content to non-food credit in relation to real activity.

References

1. Bernanke, Ben S. and Mark Gertler, (1995), "Inside the Black Box: The Credit Channel of Monetary Policy Transmission", *Journal of Economic Perspectives*, Vol. 9.
2. Darbha, G., (1999), "Financial Factors, Inventory Investment and Economic Activity - Some Empirical Evidence for India" *Journal of Quantitative Economics*, Vol.15.
3. Rao, T.V.S.R., and A. Singh, (2000), "Credit Constraints, Rational Expectations and Inventory Investment", *3rd Conference on Money and Finance*, IGIDR, Mumbai.
4. Reserve Bank of India, (1999), *Report on Currency and Finance*, 1998-99, Mumbai.

Bank Credit to Priority Sector

3.38 The scope of priority sector lending was expanded during the year to include (i) bank finance to agriculture through NBFCs and (ii) finance for distribution of inputs for activities

allied to agriculture up to Rs.15 lakh (raised from Rs.5 lakh). The aggregate outstanding priority sector advances of the public sector banks increased by Rs.18,739 crore (14.7 per cent), from Rs.1,27,807 crore as on the last reporting Friday of March 2000 to Rs.1,46,546 crore as on the last reporting Friday of March 2001. The priority sector advances formed 43.0 per cent of the net bank credit (NBC) as on March 2001 as against 43.6 per cent as on March 2000. Total agricultural advances of public sector banks as a share of net bank credit stood at 15.7 per cent, 2.3 percentage points lower than the sub-target of 18.0 per cent of the net bank credit as on March 2001. Total advances to weaker sections provided by public sector banks, at 7.3 per cent of net bank credit as at March 2001, was below the stipulated target of 10.0 per cent for this sub-group. Private sector banks' lending to the priority sector, at 38.7 per cent of net bank credit as on last reporting Friday of March 2001, fell marginally short of the stipulated target of 40.0 per cent. Their lending to agriculture, at 9.6 per cent of the net bank credit, showed a substantial shortfall from the target of 18.0 per cent. The advances of the foreign banks to the priority sector as a percentage of net bank credit came down from 35.0 per cent as on the last reporting Friday of March 2000 to 31.0 per cent as on the last reporting Friday of March 2001. Credit from the foreign banks to SSI and export sector accounted for 10.0 per cent and 19.0 per cent of the net bank credit as against sub-sectoral targets of 10.0 per cent and 12.0 per cent of net bank credit, respectively. While 60.8 per cent of the priority sector advances of the foreign banks were directed towards export credit, the bulk of the public sector banks' advances to the priority sector were accounted for by their advances to agriculture and small-scale industries.

COMMERCIAL BANK SURVEY

Table 3.6 : Quarterly Variations in Select Liabilities and Assets of Scheduled Commercial Banks*

	Out- standing as on June 29,2001	2001-02		2000-01		1999-2000				Out- standing as on March 26, 1999	
		Q ₁	Q ₄	Q ₃	Q ₂	Q ₁	Q ₄	Q ₃	Q ₂		
1	2	3	4	5	6	7	8	9	10	11	12
Liabilities											
L.1. Demand Deposits	1,46,279	3,727	2,521	13,600	-3,807	2,872	10,259	4,129	4,888	-9,333	1,17,423
L.2. Time Deposits	8,66,796	46,730	26,928	43,627	25,843	37,689	11,580	21,672	31,621	24,503	5,96,602
L.3. Other Borrowings	2,217	-349	294	-30	-153	-279	142	634	694	123	1,140
L4. Other Demand and Time Liabilities	93,635	2,427	3,328	9,936	992	-1,491	4,478	12,487	-513	1,917	60,073
L5. Net Inter-Bank Liabilities	12,906	-1,828	666	-2,798	-218	6,693	-733	1,679	635	-1,608	10,418
Assets											
A1. Food Credit	50,340	10,349	2,541	5,360	-1,092	7,491	93	5,066	-1,458	5,174	16,816
A2. Non-Food Credit	4,68,317	-3,126	11,190	24,891	8,609	16,485	20,688	29,454	11,624	-3,520	3,52,021
A3. Investments	3,94,126	23,967	14,209	21,933	6,143	18,930	7,727	11,184	13,572	21,866	2,54,595

<i>o/w</i> Govt. Securities	3,63,461	23,426	14,403	22,345	5,991	18,839	8,068	11,405	13,866	21,899	2,23,217
A4. Net Bank Reserves	77,232	15,926	-5,998	3,915	5,420	1,710	-6,508	-2,980	303	428	65,016
Memo Items											
Non-SLR Investments	77,149	1,519	5,768	5,724	-812	3,453	2,727	3,614	3,978	2,739	48,440
Authorised Dealers' Balances	-	-	5,046	454	4,627	2,751	3,346	1,483	-5,891	930	39,900
Resource Release through CRR variations	-	4,500	4,100	0	-3,800	7,200	-4,570	14,426	0	3,250	-

* Relate to last reporting Friday for each quarter except in case of Q1 of 1999-2000 in which July 2 has been considered instead of June 18 with the view to better comparability.

3.39 An inter-quarter analysis of select liabilities and assets of the scheduled commercial banks during 2000-01 in relation to 1999-2000 and during the first quarter of 2001-02 as against the corresponding quarter of 2000-01 brings to the fore certain important developments ([Table 3.6](#)). Aggregate deposits showed a much higher increase of Rs.40,561 crore during the first quarter of 2000-01 as against Rs.15,170 crore witnessed a year ago. The rise in aggregate deposits was even higher at Rs.50,456 crore during the first quarter of 2001-02. The non-food credit exhibited a substantial *contra*-seasonal increase of Rs.16,485 crore during the first quarter of 2000-01 in contrast to declines of Rs.3,520 crore and Rs.3,126 crore during the corresponding quarter of 1999-2000 and 2001-02, respectively. A comparison of the first quarters of 1999-2000 and 2000-01 must, however, account for the fact that the gap between the last reporting Friday of 1999-2000 and the balance sheet date widened to a full week, inflating the deposit and credit growth during the first fortnight of April 2000. Between March 24 and March 31, 2000, demand deposits and non-food credit increased by Rs.9,093 crore and Rs.14,372 crore, respectively as compared with Rs.5,929 crore and Rs.6,387 crore respectively during the corresponding period of the previous year. As discussed earlier, in case of the first quarter of 2001-02, the last reporting Friday happened to be one day before the last working day of the quarter. Thus, the usual quarter-end bulge in non-food credit got reflected in the fortnight ended July 13, 2001. During the first quarter of 2001-02, the non-food credit experienced a persistent decline up to June 1 even after the usual unwinding of the year-end bulge. On the other hand, despite lower first quarter-end bulge in aggregate deposits in 2001-02 in relation to preceding year, the increase in aggregate deposits in 2001-02 worked out much higher than that of the corresponding quarter of 2000-01 on account of substantial accretion in time deposits of Rs.24,634 crore during April 20- June 29, 2001 (as against Rs.17,171 crore during April 21-June 30, 2000). The usual year-beginning bulge in investments in government securities of (Rs.18,839 crore) was somewhat lower during the first quarter of 2000-01 as against an increase of Rs.21,899 crore during the first quarter of 1999-2000. The deceleration in investment in Government securities and the CRR cut at the commencement of the year, facilitated, to a large extent, the *contra*-seasonal expansion in non-food credit and the normal expansion in food credit during the first quarter of 2000-01. During the first quarter of 2001-02, on the other hand, the CRR cut and an appreciable expansion in deposits with no commensurate non-food credit off-take, led to a bulge in banks' investments in Government securities as well as a strong accretion in net bank reserves.

3.40 As the financial markets turned uncertain and monetary conditions tightened during the second quarter of 2000-01 some deceleration was observed in credit and investments. Thus, the net bank reserves moved up by Rs.5,420 crore during this quarter. As the financial markets

stabilised and liquidity conditions improved with a growth in time deposits (Rs.43,627 crore) largely driven by IMDs during the third quarter, the non-food credit off-take increased appreciably (Rs.24,891 crore) along with a jump in investments in Government securities (Rs.22,345 crore). During the fourth quarter of 2000-01, the CRR cut as well as some *contra*-seasonal dampening of non-food credit growth led to a higher investment in Government securities than witnessed in the last quarter of 1999-2000.

PRICE SITUATION

3.41 The annual rate of inflation, measured by the year-on-year variations in the wholesale price index (WPI), was predominantly influenced by revisions of administered fuel prices in February, March and September 2000. The year began with an inflation at 6.8 per cent. The impact of the February and March 2000 adjustments in administered prices persisted over the first half of the year, with inflation easing below 6.0 per cent only in the third week of August 2000. As a result of continuous hardening of international crude oil prices, the administered prices of petroleum products were revised upward again in September 2000. The consequent upward drift imparted to inflation took it to a peak of 8.8 per cent by January 13, 2001 (the highest in 2000-01). The pressures from administered price changes ebbed in March 2001 resulting in a significant drop in the inflation rate to 4.9 per cent at the end of the year (the lowest level in 2000-01) ([Chart III.18](#)). This sudden fall in inflation in the last week of March 2001 was mainly on account of the base effect correction. The inflation outcome was characterised by an absence of demand induced pressures. Excluding the price increases of the administered items, the inflation rate worked out to 2.6 per cent during 2000-01.

3.42 Average WPI inflation, an indicator of underlying inflation, persistently trended upwards to a high of 7.2 per cent in 2000-01 as against 3.3 per cent in 1999-2000 and the average of 8.1 per cent during the 1990s ([Table 3.7](#) and [Chart III.18](#)).

3.43 A disaggregated analysis of WPI indicates that, on an average basis, 'fuel, power, light and lubricants' recorded the highest price increase of 28.5 per cent (9.0 per cent in 1999-2000) reflecting the upward revision in the administered prices of diesel, petrol, kerosene, LPG and ATF prices in September 2000, and also the effect of earlier two rounds of fuel price revisions in February and March 2000. Within the fuel group, the inflation rates of mineral oils and electricity accelerated to 41.4 per cent and 18.6 per cent, respectively, in 2000-01 from those of 11.8 per cent and 7.5 per cent in 1999-2000.

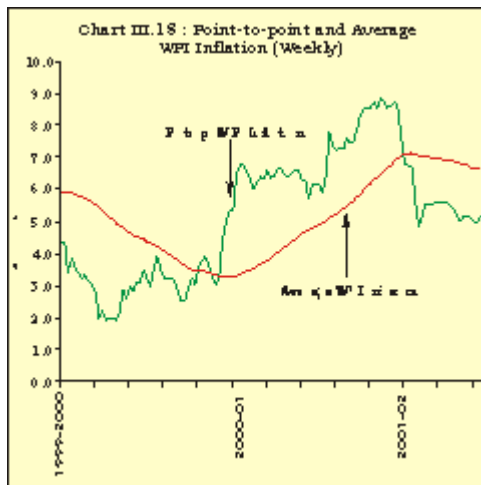
Table 3.7 : Inflation Indicators

Item	2000-01	1999-00	(Per cent)	
			1990-91 to 1999-00	1980-81 to 1989-90
1	2	3	4	5
1. WPI - All Commodities				
a) Point-to-point basis	4.9	6.5	8.7	7.5
b) Average basis	7.2	3.3	8.1	8.0

2. CPI - Industrial Workers

a) Point-to-point basis	2.5	4.8	9.4	8.9
b) Average basis	3.8	3.4	9.5	9.1

Note : WPI data is based on the new base (1993-94 = 100) from 1994-95 onwards.



3.44 Primary articles inflation inched up moderately to 2.9 per cent from 1.1 per cent in 1999-2000. Within the primary articles group, items like fruits and vegetables and fibres experienced the maximum price rise of 3.8 per cent and 8.1 per cent, respectively, from a significant price decline of 16.9 per cent and 10.4 per cent and eggs, fish and meat, pulses and milk to 6.9 per cent, 8.1 per cent, and 10.6 per cent, respectively, from 2.7 per cent, 3.7 per cent and 8.5 per cent in 1999-2000. On the other hand, cereals which had recorded a double digit rate of inflation at 17.8 per cent in 1999-2000 experienced a negative rate of inflation of 2.6 per cent in 2000-01. The other items recording price declines are 'other food articles' (15.3 per cent on top of a decline of 7.4 per cent in 1999-2000) and 'condiment and spices' (10.7 per cent as against an increase of 2.9 per cent in 1999-2000).

3.45 Manufacturing inflation was moderate during 2000-01 showing considerable co-movement with the global decline in the prices of manufactures. The sluggishness in investment demand and the presence of excess capacity in various industries dampened manufacturing inflation pressures. The manufacturing inflation was 3.3 per cent in 2000-01 as against 2.7 per cent in 1999-2000, on an average basis. The moderate acceleration in the inflation rate, on an average basis, in the case of manufactured products was contributed by the increase in the prices of cement, electrical machinery, and cotton textiles to 6.5 per cent, 7.5 per cent and 4.7 per cent, respectively, in 2000-01 as against decreases of 1.9 per cent, 1.4 per cent and 0.3 per cent in 1999-2000, and a double digit rate of increase in fertiliser prices at 10.7 per cent. Besides, 'machinery and tools', and 'transport equipments and parts' exhibited a higher inflation rate of 5.9 per cent each in 2000-01 as compared with the increases of 0.1 per cent and 3.0 per cent, respectively in 1999-2000 ([Appendix Table III.11](#)).

3.46 The major groups' weighted contributions to the WPI inflation indicate that the fuel group contributed the maximum at 63.1 per cent to the overall inflation rate in 2000-01 as compared

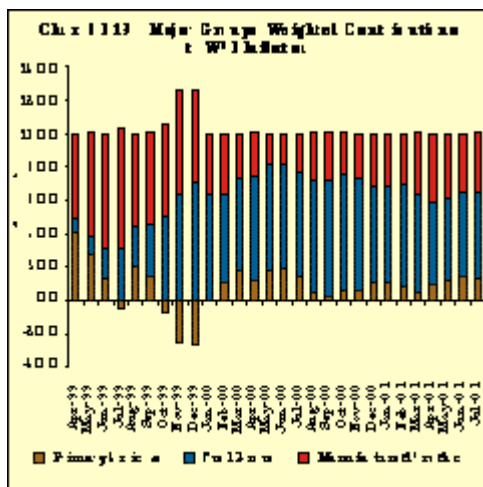
with 41.4 per cent in 1999-2000. The share of primary articles in the overall WPI inflation rose marginally to 9.7 per cent from 8.1 per cent, while that of manufactured products declined to 27.6 per cent from 49.9 per cent over the same period ([Table 3.8](#), [Chart III.19](#), and [Appendix Table III.12](#)).

**Table 3.8 : Contribution of Major Groups to Inflation (Average Basis)*
(Base: 1993-94 = 100)**

Item	2000-01	1999-00	(Per cent)	
			1990-91 to 1999-2000	1980-81 to 1989-90
1	2	3	4	5
Primary Articles (22.03)	9.7	8.1	29.8	33.2
Fuel Group (14.23)	63.1	41.4	19.9	12.6
Manufactured Products (63.75)	27.6	49.9	50.2	54.2
All Commodities (100.0)	100	100	100	100

* Data is based on the new base (1993-94=100) from 1994-95 Onwards

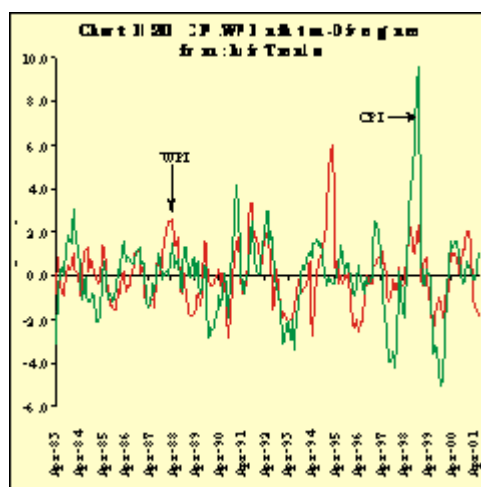
Note : Figures in parentheses indicate relative weights .



3.47 Retail price inflation, as measured by the annual variations in the Consumer Price Index for Industrial Workers (CPI-IW), on a point-to-point basis, moved within a low range of 2.5 to 5.5 per cent during 2000-01. Consumer price inflation eased during the year from 5.5 per cent at the beginning of the year to 2.5 per cent by March 2001, as compared with 4.8 per cent recorded in March 2000 ([Appendix Table III.13](#)). The generally moderate order of consumer inflation was reflected in the average (monthly) inflation rate for the year moving within a narrow range of 3.0 to 4.1 per cent in 2000-01, as compared with a higher range of 3.4 to 13.1 per cent in 1999-2000.

3.48 It may be mentioned that during the period 1995-96 to 1998-99, the CPI inflation ruled significantly higher than the WPI inflation. However, particularly since the second half of 1999-

2000 this was reversed with the CPI inflation falling below the WPI inflation. The relationship between the WPI and CPI inflation is best depicted by the behaviour of the deviations of the WPI and CPI inflation from their trend components. During the second half of the 1990s, the degree of divergence has become more pronounced ([Chart III.20](#)). This indicates persistence of inflation pressures especially in respect of food articles which have differential weights in WPI and the CPI. The divergence of the trend deviations also reflects a higher order of volatility in CPI inflation rate with respect to its trend rate.



3.49 The year-on-year rate of inflation during the first quarter of 2001-02, measured by the variations in WPI, on a point-to-point basis, eased with the pass-through of the administered price revisions into the general price level. The rate of inflation generally hovered around 5.0 per cent during the quarter. In the first week of August 2001, the inflation rate stood at 5.2 per cent as compared with 6.3 percent during the corresponding period of 1999-2000. On an average basis, the annual inflation rate consistently declined from 7.0 per cent at the beginning of April, 2001 to 6.7 per cent as on August 4, 2001. Among the major groups of WPI, on a point-to-point basis, the fuel group exhibited the maximum increase of 14.5 per cent as at end-June 2001 as compared with an increase of 26.8 per cent a year ago and the primary articles inflation decelerated to 3.1 per cent from 5.1 per cent as at end-June 2000. Manufacturing inflation increased to 3.1 per cent from 2.1 per cent a year ago. Within the primary articles group, potato, fruits and vegetables and oilseeds showed a higher order of increase. Potato prices rose by 102.1 per cent as at end-June 2001 as compared with a decline of 15.0 per cent at end-June 2000. In the case of the fuel group, the price increases of major components like mineral oils and electricity was high at 16.0 and 11.5 per cent, respectively, as at end-June 2001 as compared with increases of 41.8 and 15.1 per cent a year ago. In the case of the manufactured products group, mainly cement, edible oils, and machinery and tools showed higher order of price rises ([Appendix Table III.11](#)). The weighted contribution of the fuel group to the overall price rise as at end-June 2001 was maximum at 50.8 per cent as compared with 61.5 per cent as at end-June 2000. The shares of manufactured products and primary articles groups were 34.7 per cent and 14.2 per cent, respectively, as at end-June 2001 as compared with 19.5 per cent and 18.5 per cent a year ago ([Appendix Table III.12](#)). The CPI-IW, on a point-to-point basis, showed an increase of 3.4 per cent as at end-June 2001 as compared with 5.2 per cent as at end-June 2000.

3.50 Normally, aggregative measures of price indices such as wholesale (WPI) and consumer prices (CPI) are employed to track the inflationary process in the economy. Under flexible price setting conditions, current changes in wholesale prices are followed automatically by future changes in the consumer prices, in the presence of supply disturbances which affect wholesale prices relatively quickly and consumer prices with a lag. On the other hand, changes in aggregate demand impact first on prices at the retail level and feed through into wholesale prices over time. Current developments in the inflationary situation, particularly the divergent movement in the aggregative measures of prices like WPI and CPI, however, suggest the need for monitoring a number of indicators besides wholesale and commodity prices in order to obtain a more accurate assessment of the inflation expectations for policy purposes (Box III.4).

Box III.4 **Indicators of Inflation Expectations**

Inflation expectations play an important role in the economic decision-making processes. They are usually explicitly factored into wage contracts, product price setting, investment and inventory planning, and implicitly into financial contracts through movements in yield curves, yield spreads and generally in the formation of financial prices. Accordingly, it becomes crucial for monetary authorities to obtain a reliable gauge of inflation expectations in the economy. In part, this arises on account of the compulsion for monetary policy to be forward looking; monetary operations are usually characterised by long and variable lags between the deployment of instruments and the achievement of the final target - raising interest rates can lead to a decline in inflation only after six to eight months or more - and therefore, monetary authorities can realistically hope to target future rather than current inflation. More importantly, inflation expectations shape the stance of monetary policy. In a Fisherian world, the nominal interest rate, which typically reflects the stance of monetary policy, is the sum of the real interest rate and inflation expectations. Since the real interest rate is a variable on which monetary policy cannot have a lasting impact, it is by influencing inflation expectations that monetary authorities can change nominal interest rates in a credible and consistent manner and thereby, convey their view on the real interest rate to the financial markets. In a market-oriented environment, convergence of the real interest rate view as between authorities and markets hinges upon the central bank's ability to stabilise inflation expectations. This, in turn, can lead to changes in the real interest rates and subsequently in aggregate economic activity. In this context, central banks employ a variety of methods to assess inflation expectations including expectation surveys, yield spreads between nominal and indexed bonds, output gaps, unemployment and capacity utilisation information, besides model forecasts and conventional monetary and financial analysis.

In India, price stability around a tolerable rate of inflation is an important objective of monetary policy. The Reserve Bank's monetary and credit policy statement made in the beginning of the year typically provides a view on inflation expectations for the year, consistent with and conditional upon anticipations relating to real and financial activity, the fiscal position, the balance of payments and the monsoon. Adjustments to the forecast of inflation expectations on account of changes in these conditions and/or the impact of unforeseen developments are undertaken as part of the mid-year review of monetary and credit policy. Current and past inflation behaviour, typically expressed in terms of year-on-year changes in wholesale price indices assessed in conjunction with the behaviour of consumer price indices, are used to obtain a view on inflation expectations in the year ahead. During the second half of the 1990s and particularly in 2000-01, the wholesale price and consumer price inflation have been moving divergently, making it difficult to obtain a correct assessment of future inflationary pressures. The Policy Statement announced in April, 2001 reflected these concerns, observing that while in the medium to long run, inflation is associated with monetary expansion, in the short-run, inflation could be affected by non-monetary and supply-side factors which may not warrant a monetary policy response. Recent empirical research has also tended to confirm the existence of price cycles, further complicating the task of monetary policy. Consequently, it becomes important to assess the inflation outlook with the help of several indicators, including monetary conditions, in order to build up the appropriate policy stance.

In India, empirical work on modelling inflation has proliferated in the 1990s using univariate and multivariate time series techniques as well as macroeconomic models. In general, these efforts have focused on the proximate determinants of the inflationary process in India rather than on the formation of inflation expectations. In response to

the 'Lucas critique', the effects of inflation uncertainty have been empirically investigated by augmenting the Lucas supply function with inflation expectations and inflation variability. The results suggested that while the adverse effects of anticipated inflation on growth are minimal, unanticipated inflationary shocks create a significant loss of real output. In more recent work, attempts have been made to identify growth rate cycles in the movement of wholesale prices and advance indicators of inflation, which can be combined to construct composite indicators of inflation, using principal components analysis. Preliminary empirical exploration of the formation of inflation expectations - represented by five-monthly moving averages of the WPI inflation rate - conducted on monthly data for the period April, 1997 to March, 2001 in respect of a host of macroeconomic variables indicates the statistical presence of lead information in some of these variables. The yield spread i.e., the difference between long term and short-term government bond yields contains considerable information on the path of future inflation with a two-month lead. A 3 percentage point change in the yield spread indicates a 1 percentage point change in inflation expectations in the same direction. The impact of supply shocks can be represented by the behaviour of food prices. A 7 per cent increase in food prices signals a 1 percentage point rise in inflation expectations one month ahead. The impact of external terms-of-trade shocks is captured through fuel prices. A rise of 10 per cent in fuel prices indicates a rise of 1 percentage point in future inflation with lead information content of about six months. Exchange rate movements appear to lead inflation expectations by about one month: a 5 per cent depreciation in the exchange rate could add up to 0.3 percentage point to inflation expectations, which is consistent with the findings of other studies in India. The real money gap (defined as the deviations of the current real money aggregate from its projected path indicated in monetary and credit policy statements) is found to have one-month lead information about the future path of inflation. A 10 per cent increase in the real money gap indicates a 0.6 percentage point downward shift in inflation expectations. Empirical work on real money gap in the euro area shows that it tends to move inversely with the price gap, i.e., the deviation of actual price change from its target, somewhat before the rate of inflation. Furthermore, the real money gap is found to have greater predictive power than the output gap.

The objective of the preliminary empirical exercise is to investigate the feasibility of identifying a menu of alternative indicators of inflation expectations based on which a better guide to the formation of inflation expectations could be developed, rather than relying only on changes in WPI and CPI for projecting future inflation. The variables reported from the preliminary exercise are statistically significant and testing for unit roots indicated they are stationary. The correlation matrix points to the absence of collinearity among the various indicators and a weak ordering is feasible in terms of information content as regards future inflation. These empirical results are tentative and need to be further stress tested for robustness under varying conditions. With the inclusion of higher frequency data and refinement of the methodology, research on the subject could pave the way for developing an "inflation conditions index" for India as a composite indicator for inflation expectations.

References

1. Fama, E. F., (1990), "Term Structure Forecasts of Interest rates, Inflation and Real returns", *Journal of Monetary Economics*, 25.
2. Joshi, H. and P. Ray, (1996), "Do Inflationary Shocks Affect Growth in India?", *RBI Occasional Papers*, Vol.17(4), December.
3. Gerlach, S. and Lars E. O. Svensson, (2001), "Money and Inflation in the Euro Area: A Case for Monetary Indicators?", *BIS Working Paper*, No.98, January.
4. International Monetary Fund, (1996), *World Economic Outlook*, October.
5. _____ (2001), *World Economic Outlook*, May.
6. Reserve Bank of India, (2001), *Monetary and Credit Policy Statement*.
7. Samanta, G.P. and A. Pethe, (2001), "Construction of a Composite Leading Indicator for Tracking Inflation in India", *Economic and Political Weekly*, January 27.

IV - Government Finances

[Central Government Finances](#)

[State Government Finances](#)

[Combined Budgetary Position of the Centre and States](#)

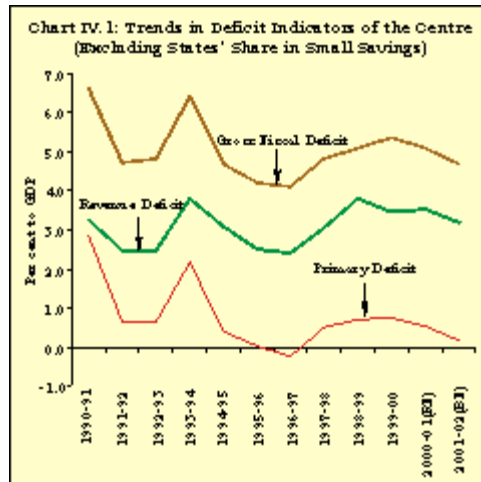
[Domestic Public Debt](#)

4.1 As per revised estimates for 2000-01, the Central Government's gross fiscal deficit (GFD) is placed at 5.1 per cent of the GDP at current market prices and the revenue deficit at 3.5 per cent. The information available in respect of State finances indicates that the consolidated gross fiscal deficit of States in 2000-01 narrowed to 4.3 per cent of GDP in the revised estimates from 4.6 per cent in 1999-2000, due to relatively high growth in receipts than in expenditure. Accordingly, as per the revised estimates, the combined revenue and fiscal deficits of the Centre and States taken together narrowed to 5.9 per cent and 9.1 per cent, respectively, from 6.2 per cent and 9.4 per cent, respectively in 1999-2000. Market borrowings continued to be the most important source of financing for the Centre, accounting for 69.6 per cent of the gross fiscal deficit. For the States, market borrowings financed 13.3 per cent of the gross fiscal deficit. Although the recourse of States to Ways and Means Advances (WMA) from the Reserve Bank was generally higher in 2000-01 than in the preceding year, the outstanding WMA and overdrafts declined to Rs.6,811 crore at end-March 2001 from Rs.7,519 crore at end-March 2000. The combined debt of the Centre and States rose to 63.7 per cent of GDP at the end of March 2001 as against 61.5 per cent at the end of March 2000. Contingent liabilities of the Centre and States rose to 10.7 per cent of GDP at end-March 2000 from 9.8 per cent at end-March 1999.

4.2 For 2001-02, the gross fiscal deficit and the revenue deficit of the Centre are placed at 4.7 per cent and 3.2 per cent of GDP lower than 5.1 per cent and 3.5 per cent, respectively, in the revised estimates for 2000-01. The improvement in the fiscal outcome would be based on maintaining higher growth in revenue and continued focus on expenditure management. The finances of States are also expected to improve during 2001-02. The combined gross fiscal deficit of States is expected to decline to 3.8 per cent of GDP from 4.3 per cent in the revised estimates for 2000-01.

CENTRAL GOVERNMENT FINANCES : 2000-01

4.3 The fiscal consolidation programme envisaged in the Union Budget 2000-01 aimed at reduction in the Centre's gross fiscal deficit and revenue deficit to 5.1 per cent and 3.5 per cent of GDP, respectively. The revenue deficit in the revised estimates at Rs.77,369 crore was marginally lower than the budgeted level of Rs.77,425 crore. The gross fiscal deficit at Rs.1,11,972 crore exceeded the budget estimates (Rs.1,11,275 crore) marginally in absolute terms; however, in terms of GDP, it remained at the level of the budget estimates (BE). The gross primary deficit at Rs.11,305 crore (0.5 per cent of GDP) was higher by 12.9 per cent than the budget estimates of Rs.10,009 crore ([Appendix Table IV.1](#)). The process of fiscal consolidation, however, has been undergoing fluctuations in consonance with the cyclical influences on economic activity ([Chart IV.1](#)).



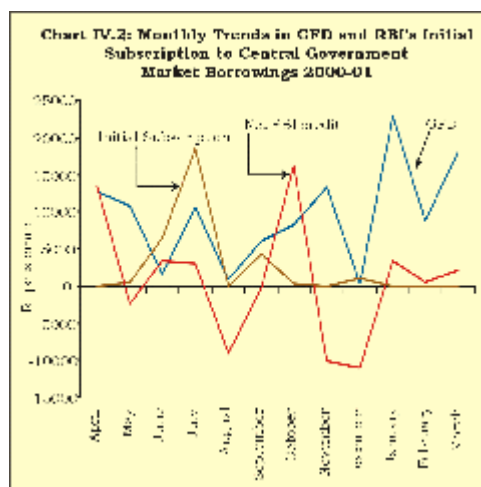
4.4 The aggregate expenditure in the revised estimates was lower by Rs.2,965 crore (0.9 per cent) than the budget estimates; in terms of GDP, the expenditure reduction was of the order of 0.2 percentage point *vis-a-vis* the budget estimates. The expenditure under both the non-Plan and Plan categories turned out to be lower than budget estimates. The expenditure compression impacted upon the annual Plan outlay, which declined to Rs.1,08,587 crore in the revised estimates, falling short by 7.5 per cent from the budget estimates of Rs.1,17,334 crore. This was mainly due to the shortfall in internal and extra budgetary resources (IEBR) of public enterprises (by Rs.5,740 crore) and reduced budgetary support to the Central Annual Plan (by Rs.3,007 crore).

4.5 Revenue receipts registered an increase of Rs.2,494 crore (1.2 per cent) or 0.1 percentage point in terms of GDP. While tax revenue suffered a decline of 1.2 per cent (Rs.1,806 crore), non-tax revenue recorded a growth of 7.5 per cent in the revised estimates, mainly on account of dividends and profits which surpassed the budget target by 26.4 per cent (Rs.2,955 crore). The shortfall in tax revenue was due to lower realisation from major taxes, *viz.*, customs and excise duties and corporation tax. Income tax collection, however, was higher by 11.7 per cent. The slackening of tax collections caused a decline in the tax-GDP ratio to 9.1 per cent in the revised estimates from 9.2 per cent projected in the budget estimates.

4.6 During 2000-01, disinvestment receipts fell short of the budget targets. The potential stress on the borrowing programme of the Centre was mitigated by efforts towards expenditure moderation. According to the Reserve Bank records, the net market borrowings during 2000-01 at Rs.73,787 crore were lower than the budget estimates of Rs.76,383 crore. The net receipts under other liabilities also declined in the revised estimates to Rs.30,845 crore (Rs.34,936 crore, BE). The Centre, however, resorted to drawing down cash balances to the extent of Rs.2,605 crore. Out of the borrowed funds, about 69.1 per cent was earmarked for meeting the revenue deficit, leaving the balance for investment outlays and net lending.

4.7 The monetary implication of the Centre's budgetary operations during 2000-01 is reflected in the level of net Reserve Bank credit to Centre, consisting of Ways and Means Advances (WMA) availed by the Centre, movements in cash balances and the Reserve Bank's participation in the Centre's market borrowings programme, which captures the extent of

monetisation of the fiscal deficit. At end-March 2001, the net RBI credit to Centre amounted to Rs.6,705 crore as against a surplus of Rs.5,588 crore recorded in the previous year. Primary subscription of the Reserve Bank to the borrowing programme in the form of private placements/devolvement amounted to Rs.32,978 crore in 2000-01 as against Rs.29,267 crore in the previous year. The agreed limit for WMA for Centre for the first and second halves of 2000-01 remained the same as in the previous two years, *i.e.*, Rs.11,000 crore (April-September) and Rs.7,000 crore (October-March). The average utilisation of WMA exhibited a progressive decline from Rs.8,588 crore in the first quarter to Rs.5,198 crore in the second, Rs.4,273 crore in the third and further to Rs.1,650 crore in the last quarter. The year-end outstanding WMA was, however, placed higher at Rs.5,395 crore as against Rs.982 crore at end-March 2000 ([Chart IV.2](#)).



Central Government Budget : 2001-02

4.8 The fiscal consolidation envisaged in the Union Budget for 2001-02 focuses on expenditure management, mainly through control of non-productive expenditure, continued thrust on tax reforms and larger mobilisation of non-debt capital receipts. The Union Budget has projected all the major deficit indicators, in terms of GDP, at levels lower than the revised estimates for 2000-01. The gross fiscal deficit for 2001-02 is placed lower at 4.7 per cent of GDP and the revenue deficit at 3.2 per cent as against 5.1 per cent and 3.5 per cent, respectively, in the revised estimates for 2000-01. The primary deficit is estimated to decline to 0.2 per cent of GDP from 0.5 per cent in 2000-01.

4.9 The Union Budget focuses on maintaining a higher growth in revenue (12.4 per cent) and containing the growth of aggregate expenditure (11.8 per cent). The expenditure management measures envisaged include downsizing the government as recommended by the Expenditure Reforms Commission, rationalisation of subsidies, pension reforms, restructuring of interest rates on contractual savings and restructuring and privatisation of public sector enterprises. All existing schemes, both at the Central and State levels, are proposed to be subjected to zero-based budgeting and all schemes that are similar in nature will be converged. Centrally Sponsored Schemes that can be transferred to States will be identified, resource flows will be linked to performance and importance will be given to decentralised planning. A new pension programme,

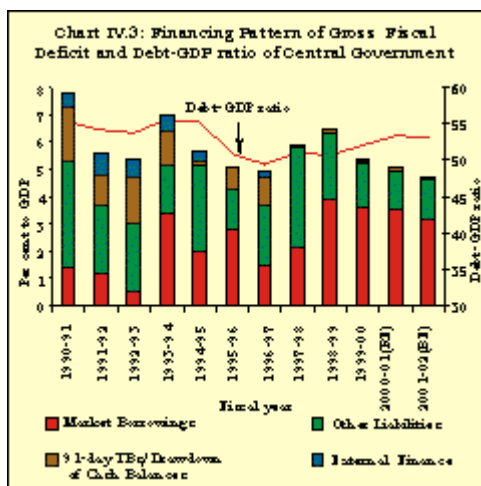
based on defined contribution, is proposed to be implemented for those who enter Central Government service after October 1, 2001. The administered interest rates on small savings were reduced by 1.5 percentage points as of March 1, 2001 and the benefit of reduction in interest rates is fully passed on to States to reduce their borrowing cost from small savings by 100 to 150 basis points. The Union Budget has targeted a higher realisation of revenue at Rs.12,000 crore through disinvestment of equity holding of PSUs. Out of the receipts realised through disinvestments, Rs.7,000 crore are earmarked for providing restructuring assistance to PSUs, safety net to workers and reduction of the debt burden and the balance Rs.5,000 crore will be used to provide additional budgetary support for the Plan mainly in social and infrastructure sectors.

4.10 The budget projects the aggregate expenditure at Rs.3,75,223 crore, a lower growth of 11.8 per cent during 2001-02 as against 12.6 per cent in the revised estimates for 2000-01 and an average growth of 12.4 per cent during the last decade. The revenue expenditure is budgeted to grow by 9.5 per cent (Rs.27,031 crore) in 2001-02 as against 13.8 per cent (Rs.34,426 crore) in 2000-01, while capital expenditure would show a relatively high growth of 24.4 per cent (Rs.12,670 crore) than 6.2 per cent in the revised estimates for 2000-01. The moderation in the growth of revenue expenditure is envisaged through non-Plan components such as non-Plan grants to States and Union Territories, defence expenditure and major subsidies. The interest payments (Rs.1,12,300 crore) would show a growth of 11.6 per cent over Rs.1,00,667 crore in the previous year and would pre-empt 48.5 per cent of revenue receipts in 2001-02. Capital outlay (investment outlay) at Rs.40,647 crore is budgeted to increase by 53.2 per cent whereas loans and advances would be lower by 5.7 per cent. The enhancement in capital outlay would raise the Annual Plan outlay for 2001-02 to Rs.1,30,181 crore, higher by 19.9 per cent than the revised estimates of Rs.1,08,587 crore for 2000-01. Budgetary support at Rs.59,456 crore (higher by 23.2 per cent) would finance 45.7 per cent of the outlay (44.5 per cent in last year) and Internal and Extra Budgetary Resources (IEBR) of public sector enterprises budgeted at Rs.70,725 crore (17.3 per cent rise) would contribute 54.3 per cent of the Plan financing (55.5 per cent in 2000-01). The energy sector would continue to receive the major share (26.0 per cent) in the Plan outlay followed by the social services (20.7 per cent) and transport sector (17.3 per cent).

4.11 The tax measures proposed in the Union Budget are guided by the principles of revenue buoyancy, further simplification and rationalisation of rate structure, and enhancement of tax compliance. Under the Central Value Added Tax (CENVAT) system which has already been put to practice and contributes about 68 per cent of the total excise revenue, the Union Budget proposes to reduce the three rates of special excise duty to a single rate of 16 per cent. A regular surcharge of 15 per cent on cigarettes and increased duty on some other tobacco products has been introduced to replenish the National Calamity Contingency Fund (NCCF) as per the recommendations of the Eleventh Finance Commission. The rate schedule for custom duties would remain the same as in the previous year and with the abolition of the 10 per cent surcharge, the peak level custom duty is reduced from 38.5 per cent to 35 per cent. In order to widen the indirect tax base, more services have been brought under the tax regime. The major proposals in direct taxes, *inter alia*, include abolition of all surcharges payable by corporates and non-corporates, except the two per cent surcharge imposed for relief to the Earthquake hit areas of Gujarat. Other changes in direct taxes include extension of the one-by-six scheme to all urban

areas to identify potential income tax assesses, reduction of tax on distribution of dividends by domestic companies and income in respect of units of mutual funds and Unit Trust of India (UTI) to 10 per cent from 20 per cent, and tax holiday for infrastructure and developers of Special Economic Zones (SEZs).

4.12 The Union Budget proposals are expected to cause a revenue loss of Rs.5,500 crore which is to be made up with tax buoyancy and increased voluntary compliance¹. The Budget estimates place gross tax revenue at Rs.2,26,649 crore, which is higher by Rs.28,328 crore (14.3 per cent) over Rs.1,98,321 crore in 2000-01. The rise in tax revenue is expected to come from higher collection from the corporation tax (Rs.5,479 crore), income tax (Rs.5,329 crore), custom duties (Rs.5,041 crore) and Union excise duties (Rs.11,039 crore). The net tax revenue (net of States' share) at Rs.1,63,031 crore would record an increase of 12.9 per cent over the previous year (12.6 per cent). Non-tax receipts are estimated to increase by 11.3 per cent (Rs.6,951 crore) to Rs.68,714 crore during 2001-02.



4.13 The Union Budget targets receipts of Rs.12,000 crore from disinvestment for 2001-02 as against Rs.2,500 crore in the revised estimates for 2000-01. The revenue receipts together with non-debt capital receipts (disinvestment and recoveries) are budgeted to finance 69.0 per cent of the total expenditure during 2001-02 as against 66.6 per cent in 2000-01. This implies that the borrowed funds (GFD) would finance 31.0 per cent of the total expenditure during 2001-02 as compared to 33.4 per cent in the previous year. The net market borrowings budgeted at Rs.77,353 crore would contribute 66.5 per cent of borrowed funds, marginally lower than 69.6 per cent in the revised estimates for 2000-01. The share of other liabilities would increase to 31.9 per cent (Rs.37,096 crore) from 27.5 per cent (Rs.30,845 crore) and that of external finance would be 1.6 per cent (Rs.1,865 crore) as against 0.5 per cent (Rs.575 crore) in the previous year ([Chart IV.3](#)).

Central Government Finances, 2001-02 (April-June)

4.14 Central Government finances came under stress during the first quarter of 2001-02 (April-June) with all the key deficit indicators increasing substantially over the corresponding period of 2000-01. The gross fiscal deficit (GFD) at Rs. 42,198 crore was higher by 68.3 per

cent over April-June 2000 and constituted 36.3 per cent of the budget estimates. The revenue deficit at Rs. 32,431 crore (41.1 per cent of budget estimates) was almost double, while the primary deficit at Rs. 24,683 crore, was more than double the level of April-June 2000. Revenue receipts during April-June 2001 at Rs. 21,623 crore, were lower by 28.8 per cent, as against a growth of 26.6 per cent in April-June 2000. Revenue realisation during the first three months represented 9.3 per cent of the budget estimates, as compared with the realisation of 14.9 per cent in the same period of previous year. Gross tax collections during April-June 2001 declined by 13.4 per cent as against a growth of 16.5 per cent during April-June 2000. The aggregate expenditure during April-June 2001 amounted to Rs. 65,089 crore (17.3 per cent of the budget estimates), showing an increase of 14 per cent over April-June 2000. While the revenue expenditure increased by 15.6 per cent, capital expenditure registered a relatively low growth of 6.8 per cent.

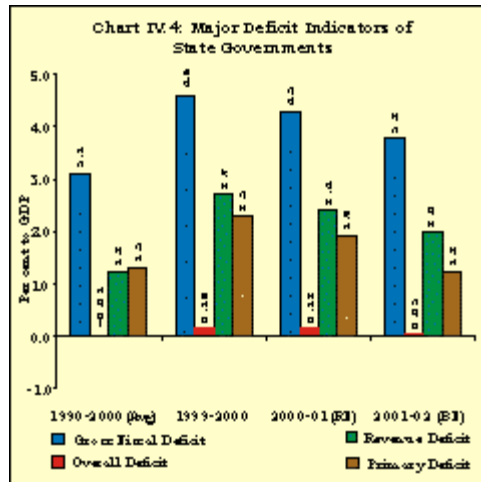
STATE GOVERNMENT FINANCES²

Budgetary Operations of the State Governments: 2000-01 and 2001-02

4.15 The fiscal outcome of States in the revised estimates for 2000-01 showed some improvement over the previous year. The consolidated gross fiscal deficit of States in the revised estimates for 2000-01 rose by 4.5 per cent from Rs.90,765 crore in 1999-2000 to Rs.94,821 crore in 2000-01. The GFD as percentage of GDP declined from 4.6 per cent in 1999-2000 to 4.3 per cent in the revised estimates for 2000-01. The improvement in the fiscal position during 2000-01 was due to relatively high growth in receipts than in expenditure, facilitated by a rise in current transfers from the Centre, particularly grants. Other fiscal indicators such as the revenue deficit and the primary deficit also showed some improvement in 2000-01. The revenue deficit declined from 2.7 per cent of GDP in 1999-2000 to 2.4 per cent of GDP in 2000-01 and the primary deficit declined from 2.3 per cent of GDP to 1.9 per cent of GDP during the same period.

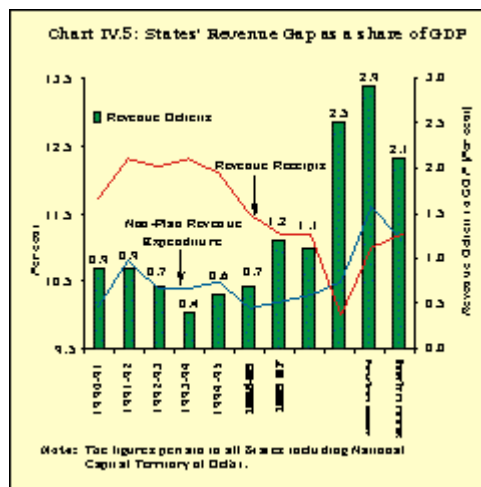
4.16 The high GFD characterising recent years has been mainly on account of the revenue deficit, which rose from Rs.8,201 crore in 1995-96 to Rs.53,709 crore in 1999-2000. This trend was reversed in 2000-01 with the revenue deficit declining even in absolute terms. As a result, the share of revenue deficit in the GFD declined from 59.2 per cent in 1999-2000 to 54.3 per cent in 2000-01.

4.17 While the revised estimates for 2000-01 showed an improvement in the GFD-GDP ratio over 1999-2000, it was 0.2 percentage point higher than the budget estimates. The rise in the gross fiscal deficit in revised estimates as compared with budget estimates was on account of a higher growth in expenditure (2.9 per cent) than growth in receipts (1.8 per cent). The revenue deficit in the revised estimates for 2000-01 overshot its projected level by 12.5 per cent to Rs.51,445 crore. In terms of GDP, the revenue deficit of the States is estimated at 2.4 per cent in 2000-01 in the revised estimates as against 2.1 per cent in the budget estimates for 2000-01. The primary deficit or the non-interest deficit as a percentage of GDP rose to 1.9 per cent as compared with the budgeted level of 1.6 per cent ([Chart IV.4](#) and [Appendix Table IV.5](#)).



4.18 In the revised estimates for 2000-01, revenue receipts have shown a rise of 1.8 per cent mainly due to significant increase of 12.7 per cent in current transfers from the Centre comprising sharable taxes and grants.

4.19 Revenue expenditure exceeded its budgeted level by 3.5 per cent. The major component of revenue expenditure which has shown a very high growth in recent years is non-plan expenditure (mainly on account of interest payments, administrative services and pension outgo), which accounted for 83 per cent of revenue expenditure in 2000-01 (BE) ([Chart IV.5](#)). However, in the revised estimates for 2000-01, the expenditure on interest payment and administrative services declined by 0.5 per cent and 10.1 per cent, respectively, over the budget estimates.



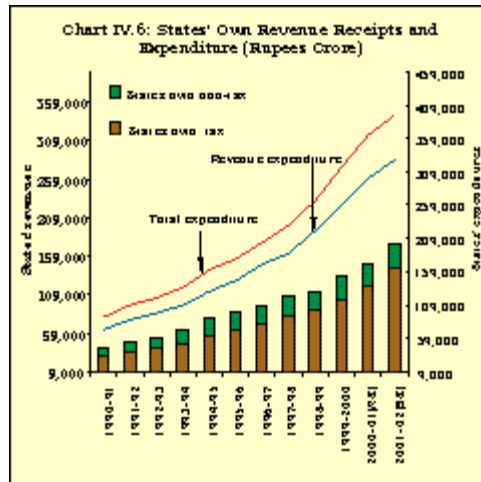
4.20 An important development during 2000-01 was the shift in the composition of expenditure in favour of developmental expenditure. While the developmental expenditure is estimated to have risen by 7.4 per cent, non-developmental expenditure is anticipated to be lower by 1.3 per cent over the budget estimates. The decline in non-developmental expenditure was mainly on account of a fall in expenditure on administrative services and miscellaneous general services.

4.21 In the budget estimates for 2001-02, several States have proposed measures aimed at strengthening the revenue base and containing expenditure. The finances of States during 2001-02 are expected to record an improvement over the position in 2000-01. The gross fiscal deficit of these States at Rs.94,028 crore is budgeted to show a decline of 0.8 per cent over the revised estimates for 2000-01. In terms of GDP, the gross fiscal deficit of States has been budgeted at 3.8 per cent in 2001-02, as compared with 4.3 per cent in the revised estimates for 2000-01 and 4.6 per cent in 1999-2000. The fiscal consolidation process in 2001-02 has focused on improvement in the revenue account. Accordingly, the revenue deficit as a percentage of GDP is budgeted lower at 2.0 per cent in 2001-02 than 2.4 per cent in the revised estimates for 2000-01 and 2.7 per cent in 1999-2000. The revenue imbalances are sought to be addressed by Additional Resource Mobilisation (ARM) and improvement in States' own tax collection as also by expenditure management.

4.22 The consolidated revenue receipts during 2001-02, inclusive of ARM of Rs.1,997 crore, are budgeted to rise by 13.0 per cent over the revised estimates for 2000-01. A significantly high proportion of this rise (77.3 per cent) would be contributed by States' own revenue receipts comprising tax and non-tax receipts, while current transfers from the Centre comprising sharable taxes and grants would account for the rest.

4.23 Total tax receipts comprising States' own taxes and the States' share in Central taxes are estimated to show a lower rise of 17.4 per cent during 2001-02 as against 17.8 per cent in the revised estimates for 2000-01. The States' own taxes are, however, budgeted to show a higher rise of 18.8 per cent in 2001-02 as compared with 17.5 per cent in 2000-01 (RE). The States' share in Central taxes, on the other hand, is budgeted to rise by 14.3 per cent in 2001-02, as against 18.7 per cent in the revised estimates of 2000-01.

4.24 On the non-tax front, States' own non-tax receipts are estimated to show a rise of 7.3 per cent in 2001-02, higher than the growth of 0.3 per cent in 2000-01 (RE). In contrast, interest receipts of States are projected to show a decline of 13.3 per cent as against a rise of 8.9 per cent in 2000-01. The revenue expenditure during 2001-02, budgeted at Rs.3,27,642 crore is expected to show an increase of 9.7 per cent as against an increase of 15.4 per cent in the previous year. Thus, States' own revenue resources are expected to finance 53.4 per cent of revenue expenditure and 44.5 per cent of the aggregate expenditure in 2001-02 as compared with 50.3 per cent of revenue expenditure and 41.4 per cent of aggregate expenditure in the revised estimates of 2000-01 ([Chart IV.6](#)).



4.25 On the expenditure front, the non-developmental expenditure is estimated to rise by 16.1 per cent in 2001-02 as compared with 12.6 per cent in the previous year. The non-developmental expenditure is estimated to account for 36.3 per cent of the budgeted aggregate disbursements. The expenditure on pensions, interest payments and administrative services taken together are estimated to absorb 42.8 per cent of the revenue receipts in 2001-02 marginally higher than that of 42.1 per cent in 2000-01.

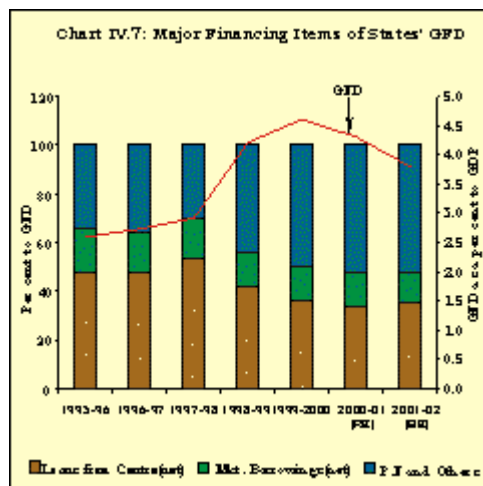
4.26 The developmental expenditure is budgeted to show a lower rise of 3.6 per cent in 2001-02 than 19.7 per cent in 2000-01. The share of developmental expenditure in total expenditure has declined from 61.1 per cent in 2000-01(RE) to 58.4 per cent in the budget estimates for 2001-02. Component-wise, the expenditure on social services is budgeted to show a lower growth of 7.9 per cent in 2001-02 than 16.4 per cent in 2000-01 (RE). The expenditure on economic services is estimated to show a decline of 1.4 per cent in 2001-02 as against the growth of 23.8 per cent in the previous year.

4.27 While some improvement is expected in the revenue deficit and fiscal deficit of States during 2001-02, the high budgeted size of the overall resource gap, at Rs.94,028 crore, is a matter of concern. The revenue deficit, though budgeted lower than that in the previous year, still accounts for 51.5 per cent of the overall resource gap in 2001-02, which is much higher than the average level of 34.8 per cent in the 1990s.

4.28 The strain on State finances experienced in recent years is largely the outcome of the lower growth in revenue as against the sharp growth in committed expenditures such as wages and salaries, pensions and interest payments. These committed expenditures account for a major portion of the non-Plan expenditure and together absorb a sizeable part of the revenue receipts. During the 1990s, the average growth in revenue receipts is estimated at 13.8 per cent, while the growth in expenditure is estimated at 15.3 per cent.

4.29 On the financing front, the States depend to a large extent on loans from the Centre. The loans from the Centre (net) are projected to finance 35.8 per cent of the GFD during 2001-02 as compared with 33.8 per cent in the previous year ([Chart IV.7](#)). Besides loans from the Centre, the States have been taking recourse to provident funds, small savings and market borrowings to

finance the growing expenditures. The net receipts from provident funds and small savings have been budgeted at Rs.13,443 crore in 2001-02, marginally lower than Rs.13,785 crore in 2000-01. The net market borrowings are estimated to decline from Rs.12,567 crore in 2000-01 to Rs.10,666 crore in 2001-02. ([Appendix Table IV.8](#))



4.30 Keeping in view the need for institutional reforms including fiscal restructuring, several States have taken initiatives to improve their finances. The proposed fiscal restructuring measures are intended to address a number of long-term issues related to revenue mobilisation, expenditure management and PSUs reforms. The measures, *inter alia*, include the setting up of Consolidated Sinking Fund (CSF) for retiring public debt, setting up of an Expenditure Review/Reforms Committee to enforce budget discipline and improve expenditure management and establishment of Guarantee Redemption Fund (GRF) to take care of contingent liabilities. To illustrate, the States like Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Goa, Haryana, Maharashtra, Mizoram, Nagaland and West Bengal have taken initiatives to set up CSFs to help retire debt. The State of Goa has proposed the setting up of a GRF, while Assam has imposed a ceiling on government guarantees against loans and other forms of debt financing sought to be availed by PSUs. The Punjab State has constituted a Public Expenditure Reforms Commission and Public Sector Disinvestment Commission in order to improve the quality of public expenditure and channelise the resources towards productive purposes. The State of Himachal Pradesh aims to introduce a comprehensive rationalisation of posts and voluntary retirement scheme (VRS) for Government servants in the coming year.

4.31 As an important budgetary measure, many States have begun to focus on expenditure management and have identified performance indicators to assess the quality of expenditure restructuring. On the resource mobilisation front, many States have focused on efficient utilisation of existing resources through simplification / rationalisation of taxes, reviewing of user charges, *etc.* Further, the States have set the stage for introducing value added tax (VAT) through an agreement to impose uniform level of sales tax.

4.32 Several States are in the process of implementing the fiscal reforms in order to improve their financial health and consequently to meet the needs of the more potentially productive sectors, namely social and economic infrastructure. The State budgets have laid emphasis on

infrastructure development by setting up Infrastructure Development Funds (IDFs) for providing necessary counterpart resources to attract private investment. Measures have also been initiated to restructure State-level public enterprises. Some States have signed Memorandum of Understanding (MoU) with the Central Government to undertake reforms in power sector and improve the financial viability of their electricity boards. Accordingly, many States have undertaken measures to set up State Electricity Regulatory Commissions (SERCs) for tariff rationalisation.

4.33 In order to enhance the transparency and uniformity of the information at State level, several States have started publishing *Budget at a Glance/Budget in Brief*, to facilitate a quick understanding of some of the critical fiscal indicators in their budgets.

Ways and Means Advances

4.34 The Reserve Bank announced a revised scheme called 'WMA Scheme 2001' effective from February 1, 2001. As per the revised scheme, the total normal WMA limits have been enhanced to Rs.5,283 crore. In the revised scheme, the Reserve Bank allows a State to run an overdraft for 12 consecutive working days instead of 10 days in the earlier scheme. Further, for facilitating cash flow management, time limit for bringing down the overdraft level, within the level of 100 per cent normal WMA limit, has been extended from 3 days to 5 days under the overdraft regulation scheme. The scheme is subject to review at the end of two years. The recourse to WMA by States has been generally higher during 2000-01 than in the previous year. However, as on March 31, 2001 State Governments' outstanding WMA and overdrafts from the Reserve Bank amounted to Rs.6,811 crore as against Rs.7,519 crore at the end of March 2000. The number of States resorting to overdrafts during 2000-01 remained at nineteen, the same as in the previous year. Three State Governments could not clear their overdrafts with the Reserve Bank within the stipulated time limit and consequently the Reserve Bank had to stop payments on their behalf.

COMBINED BUDGETARY POSITION OF THE CENTRE AND STATES³

4.35 The revised estimates for 2000-01 place combined gross fiscal deficit of the Centre and States at 9.1 per cent of GDP, marginally higher than the budget estimates of 8.8 per cent. The combined GFD during 2000-01 is, however, 0.3 percentage point lower than 9.4 per cent of GDP in 1999-2000 ([Table 4.1](#)). The revised estimates of combined revenue deficit and gross primary deficit for 2000-01 at 5.9 per cent and 3.4 per cent of GDP, respectively, are higher than the respective budget estimates of 5.6 per cent and 3.1 per cent. The rise in combined deficits was partly due to moderations in GDP growth and partly due to an increase in expenditure. The aggregate expenditure at Rs. 6,09,906 crore in the revised estimates witnessed a growth of Rs.13,675 crore. Revenue receipts at Rs.3,95,045 crore recorded relatively low growth of Rs.9,723 crore in the revised estimates. The increase in combined GFD was also contributed by non-realisation of targeted disinvestment receipts in the Centre's budget.

Table 4.1: Measures of Deficit of the Central and State Governments as proportion to GDP*

Year	Gross Fiscal Deficit	Revenue Deficit	Gross Primary Deficit
1	2	3	4
1990-91	9.4	4.2	5.0
1991-92	7.0	3.4	2.3
1992-93	7.0	3.2	2.1
1993-94	8.3	4.3	3.3
1994-95	7.1	3.7	1.9
1995-96	6.5	3.2	1.6
1996-97	6.4	3.6	1.3
1997-98	7.3	4.1	2.2
1998-99	8.9	6.3	3.7
1999-2000#	9.4	6.2	3.8
1990-2000 (Average)	7.7	4.2	2.7
2000-01(RE)#	9.1	5.9	3.4
2001-02(BE)#@	8.1	5.1	2.3

RE - Revised Estimates BE- Budget Estimates

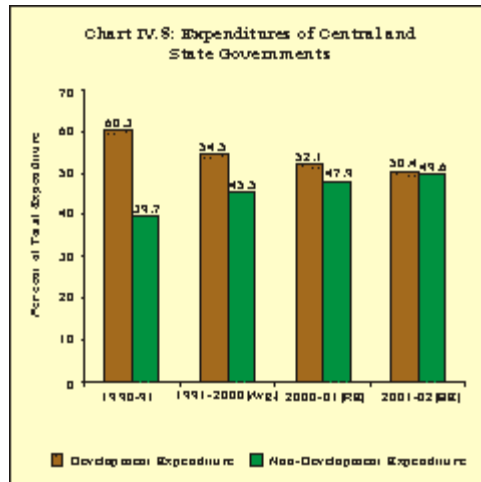
* The combined deficit indicators have been worked out after netting out the inter- Governmental transactions between the Centre and States. As such, these figures will not be equal to the total deficits as worked out separately for the Centre and for the States. Details of the adjustments in respect of each deficit indicator are given in the Notes below.

Data for State Governments are provisional (See Notes to [Appendix Table IV.5](#)).

@ Worked out on the basis of the implicit nominal GDP underlying the budget estimates of the Central Government GFD/GDP ratio of 4.7 per cent for 2001-02.

- Notes:*
1. Combined GFD is the GFD of the Central Government plus GFD of the State Governments minus net lending from the Central Government to State. Governments expenditures of the Central and
 2. Revenue deficit is the difference between revenue receipts and revenue State Governments adjusted for inter- Governmental transactions in the revenue account.
 3. Gross primary deficit is defined as combined GFD minus combined interest payments.

4.36 During the fiscal year 2001-02, the budget estimates envisage reduction in all the major deficit indicators. The combined gross fiscal deficit for 2001-02 is placed at 8.1 per cent of GDP as compared with 9.1 per cent in the revised estimates for 2000-01. Revenue deficit and primary deficit for 2001-02 are placed at 5.1 per cent and 2.3 per cent of GDP, respectively, as against 5.9 per cent and 3.4 per cent in the revised estimates for 2000-01. The reduction in the deficits are envisaged through higher revenue mobilisation as well as moderation in the growth of expenditure. The combined revenue receipts are budgeted to grow at a higher rate of 13.4 per cent than 10.8 per cent in the combined expenditure. In the revenue receipts, almost 92 per cent of the incremental revenue is expected from tax receipts. The combined tax collection for 2001-02 is projected at Rs.3,66,927 crore, an increase of 15.4 per cent over the previous year. The combined tax to GDP ratio is budgeted to rise to 14.8 per cent in 2001-02 from 14.6 per cent in 2000-01 and 14.0 per cent in 1999-2000. ([Appendix Table IV.3](#))



4.37 The budget estimates place combined expenditure growth in 2001-02 lower at 10.8 per cent than 12.4 per cent growth in 2000-01. The moderation in expenditure is envisaged through lower growth in revenue expenditure which is budgeted to rise by 9.8 per cent during 2001-02 as against 13.2 per cent in previous year. The capital expenditure would rise at a higher rate of 17.0 per cent as against 7.6 per cent in 2000-01. The pattern of expenditure indicates that developmental expenditure would increase at a lower rate of 7.3 per cent during 2001-02 as against 16.9 per cent in 2000-01. The non-developmental expenditure would increase by 13.8 per cent in 2001-02 as against 11.2 per cent during 2000-01. As a result, the share of non-developmental expenditure including others, in total expenditure is budgeted to increase from 47.9 per cent in 2000-01 to 49.6 per cent in 2001-02 with corresponding decline in the share of developmental expenditure from 52.1 per cent to 50.4 per cent ([Chart IV.8](#)). Expenditure on social sector is budgeted to increase at a lower rate of 7.4 per cent as compared with 15.1 per cent in 2000-01. Consequently, social sector expenditure as a proportion to GDP would decline to 7.3 per cent during 2001-02 from 7.8 per cent in 2000-01.

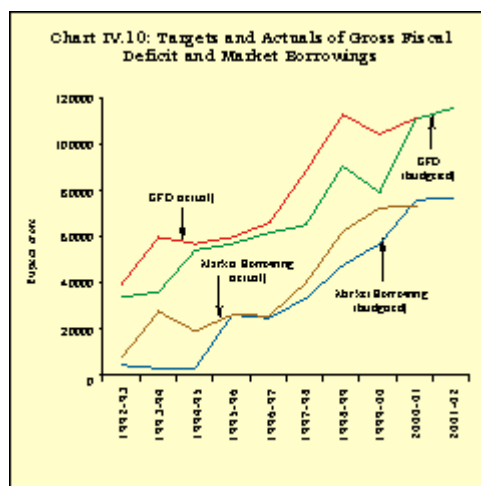
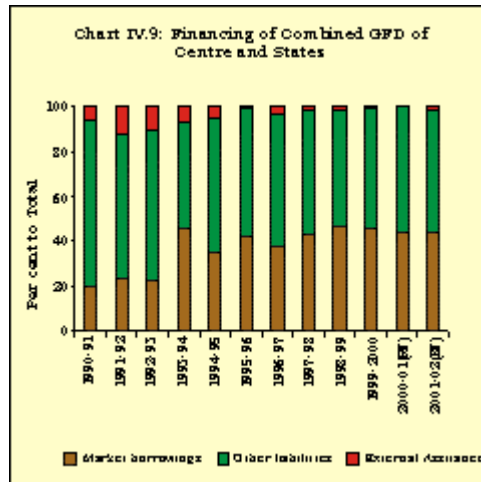
4.38 The financing pattern of the Government sector deficit indicates that almost the entire borrowing requirement is met by domestic sources. During 2001-02, domestic source is estimated to finance 99.0 per cent of the GFD and the balance through external assistance. Within the domestic sources, market borrowings would finance 43.9 per cent of the combined GFD in 2001-02 compared with 43.5 per cent in 2000-01 (RE). The other liabilities (comprising small savings, provident fund, deposits, reserve funds *etc.*) would finance 55.2 per cent in 2001-02 (BE) as against 56.2 per cent in 2000-01 ([Chart IV.9](#))

Market Borrowings

Central Government

4.39 Market borrowings have emerged as an important source of financing Centre's fiscal deficit, accounting for 69.6 per cent of fiscal deficit during 2000-01 as against 67.1 per cent in 1999-00 and 17.9 per cent in 1990-91. The sharp deviations in the fiscal deficit from the budget targets during the 1990s led to an upward pressure on resources. During the latter half of the 1990s, on an average, deviations of the fiscal deficit of the Centre were absorbed to the extent of

19 to 65 per cent by enlargement of the market borrowing programme. For the year 2000-01, however, borrowings were within budget estimates ([Chart IV.10](#)). The net borrowings of the Centre were lower than the targeted borrowing programme for the fiscal year 2000-01 ([Appendix Table IV.9](#)).



4.40 For the fiscal year 2001-02, the gross market borrowings of the Central Government are budgeted at Rs.1,18,852 crore and the net borrowings at Rs.77,353 crore. At this level, the net market borrowings would finance 66.5 per cent of GFD as against 69.6 per cent in the previous year.

State Governments

4.41 The net market borrowings originally allocated for all States for the fiscal year 2000-01 were Rs.11,230 crore (gross Rs.11,650 crore). As against this, the State Governments raised a net amount of Rs.12,880 crore (gross Rs.13,300 crore), including the additional allocation of Rs.1,650 crore. The amount mobilised through pre-announced issues aggregated Rs.11,630 crore and through auction route Rs.1,670 crore. During 2000-01, with general moderation in interest

rates in the economy, the weighted average cost of States' borrowings declined to 10.99 per cent as against 11.89 per cent in the previous year. Under the provisional allocation for the States for the year 2001-02, twenty-seven States, in the first tranche of the market borrowing programme, raised an amount of Rs.5,307 crore at the coupon rate of 10.35 per cent. Besides, the Government of Kerala had mobilised Rs.200 crore through auction method on April 17 and Gujarat Rs. 440 crore on July 20 and August 6, 2001.

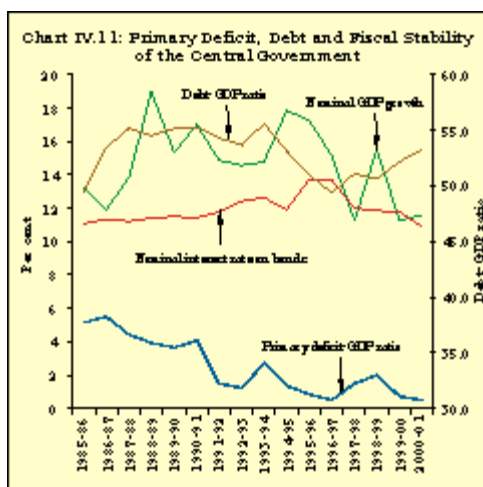
DOMESTIC PUBLIC DEBT

Debt Position of Central Government

4.42 The outstanding debt-GDP ratio of the Central Government rose to 53.3 per cent as at end-March 2001 as against 52.2 per cent in the previous year. Although at this level, the debt-GDP ratio is lower than the level of 55.3 per cent at end-March 1991, the persistence of primary deficit and convergence of nominal GDP growth and interest rates impose a downward rigidity to the debt-GDP ratio. The gap between the GDP growth rate and the interest rate on Government borrowings has narrowed down, particularly since the latter half of the 1990s ([Chart IV.11](#)). The near stickiness of medium to long-term interest rates and moderation in GDP growth has direct implications for the stability of the debt-GDP ratio.

Debt Position of State Governments

4.43 The persistence of States' fiscal deficits at high levels, reaching 4.3 per cent of GDP in 2000-01 as against 2.9 per cent in 1991-92, led to a steady rise in their public debt-GDP ratio to 23.1 per cent by end-March 2001, from 19.3 per cent as at end-March 1992. The debt growth during the latter half of the 1990s, on an average, remained at 17.9 per cent, significantly above the growth rate of State revenues at 11.0 per cent, reflecting the incipient fiscal instability at the sub-national level. The interest payments pre-empted 21.7 per cent of the revenue receipts of States in 2000-01 as against 13.0 per cent in 1990-91.



4.44 Besides loans from the Centre and market borrowings, the other sources of growth in liabilities of States in recent years have been negotiated loans from banks and financial

institutions and the public account liabilities mainly comprising provident funds, insurance and pension funds and endowments. While the share of public account liabilities in the total outstanding liabilities of States has risen from 15.4 per cent to 18.7 per cent during the 1990s, the share of loans from banks and financial institutions rose from 2.6 per cent to 6.2 per cent during the decade. These developments have implications for the fiscal stability of States, partly on account of the high interest cost element of such borrowings and partly due to the accumulation of repayment obligations of public account liabilities. The overall impact of the rising debt levels has been the reduced flexibility of States in exercising fiscal policy options to release funds for basic infrastructure and the social sector. While the demand for basic social services has risen significantly, particularly in terms of quality, the share of social service expenditure in aggregate expenditure has remained stagnant at about 32 per cent.

Combined Debt

4.45 The macroeconomic consequences of government debt and fiscal stability could be assessed in terms of the size and movement in the debt of the government sector in totality. The combined GFD of the Centre and States is placed at 9.1 per cent of GDP in 2000-01 (RE), up from 7.0 per cent in 1991-92 and the combined debt-GDP ratio at 63.7 per cent as at end-March 2001 as against 60.9 per cent as at end-March 1992. The shortening of maturity structure in the recent past with the underlying objective of minimising interest cost has given rise to the problem of bunching of repayment obligations of the Government as reflected in the repayment schedule of market debt. The high debt level also gives rise to adverse expectations and is, thus, an obstacle in the way of an easier interest rate environment. While the average nominal interest rate on Central Government market borrowings has come down to 10.95 per cent in 2000-01 from 11.77 per cent in 1999-2000 and 13.75 per cent in 1995-96, the sustained reduction and stability in long-term interest rates would be conditional upon the reduction in the size of Government borrowing. Also, given the stable domestic saving rate, sustaining higher output growth requires reduction in the public sector deficits.

4.46 The level and composition of domestic debt have assumed significance in the 1990s. The market loans, whose share in the domestic liabilities has risen from 27.0 per cent to 38.8 per cent between end-March 1991 and 2001, have been raised at considerably high cost. Similarly, another high cost component of debt, *viz.*, small savings and provident funds, constitutes a significant component of domestic liabilities, with its share in the outstanding debt increasing from 24.6 per cent to 29.5 per cent between 1991 and 2001. Since the relatively high administered interest rates on small savings provided rigidity to the interest rate structure on medium to long-term Government bonds, the overall borrowing cost of the public debt remained high, pushing up the interest burden of the Government sector to 5.7 per cent of GDP in 2000-01 from 4.4 per cent in 1990-91. The interest rate structure on small savings has since been revised, cutting back interest rates on various instruments by 0.5-2.0 percentage point in January 2000 and subsequently by 1.5 percentage point effective March 2001. Besides, the fiscal stability of the Government is also affected by existence of significant unfunded liabilities in the form of pension obligations, which are likely to grow in the future. Recognising these concerns, the Union Budget 2001-02 proposed a new pension programme based on defined contributions to those who enter Central government services after October 1, 2001.

4.47 The Central Government has introduced in Parliament the Fiscal Responsibility and Budget Management Bill, 2000, in December 2000. The Bill provides for the responsibility of the Central Government to ensure inter-generational equity in fiscal management and long-term macroeconomic stability by achieving sufficient revenue surplus, eliminating fiscal deficit and removing fiscal impediments in the effective conduct of monetary policy and prudential debt management consistent with fiscal sustainability. Under the Bill, the Government shall ensure that within a period of 10 financial years, beginning April 2001, the total liabilities (including external debt at current exchange rate) at the end of a financial year, do not exceed 50 per cent of GDP. The Bill provides for complete elimination of revenue deficit and reduction of the fiscal deficit-GDP ratio to 2 per cent by end-March 2006. The convergence conditions with regard to deficit and debt would, however, require adequate primary surplus so as to maintain debt-GDP ratio at the stipulated level.

Contingent Liabilities/Guarantees of Governments

4.48 While the outstanding public debt posed challenges for fiscal management, and its implications are clearly identified, the fiscal position of the Government may also be substantially influenced by the nature and levels of contingent liabilities, which include guarantees, counter guarantees and indemnities. Although these contingent liabilities are not treated as part of the liabilities in the existing accounting practices as their occurrence depends on certain future events, given the high debt level, these, however, are an important source of fiscal risk. Government guarantees, especially those extended to the financial institutions without risk assessment, have an in-built bias for moral hazard and adverse selection for the financial system. The outstanding guarantees extended by the Central and State Governments, which are mainly in the form of loan/credit guarantees amounted to Rs.2,08,767 crore as at end March 2000 - 21.3 per cent higher than in the previous year. In terms of GDP, the outstanding guarantees rose to 10.7 per cent as at end-March 2000 from 9.8 per cent as at end-March 1999 (Table 4.2). Besides the explicit guarantees, the implicit guarantees, viz., letters of comfort/structured payment obligations, are also the potential source of fiscal risk. Since a major part of the outstanding loan/credit guarantees of governments is extended on behalf of the public enterprises, these are, in some sense, indicative of a component of the aggregate public sector debt.

Table 4.2 : Outstanding Government Guarantees

Year(End-March)	Centre		States*		Total	
	Amount	% of GDP	Amount	% of GDP	Amount	% of GDP
1	2	3	4	5	6	7
1992	50,575	7.7	40,159	6.1	90,734	13.9
1993	58,088	7.8	42,515	5.7	1,00,603	13.4
1994	62,834	7.3	48,866	5.7	1,11,700	13.0
1995	62,468	6.2	48,479	4.8	1,10,947	11.0
1996	65,573	5.5	52,631	4.4	1,18,204	9.9
1997	69,748	5.1	63,409	4.6	1,33,157	9.7
1998	73,877	4.9	73,751	4.8	1,47,628	9.7
1999	74,606	4.2	97,454	5.5	1,72,060	9.8

2000	83,954	4.3	1,24,813	6.4	2,08,767	10.7
------	--------	-----	----------	-----	----------	------

* Data pertain to 17 major States.

Note : Ratios to GDP may not add up to the total due to rounding off.

Source: 1. Data on Centre's guarantees are sourced from finance accounts and budget documents of the Central Government.

2. Data on States' guarantees are based on the information received from State Governments.

4.49 Recognising the implications of guarantees for fiscal and financial sector stability, the Fiscal Responsibility and Budget Management Bill, 2000, prescribes that the Central Government shall not give guarantees for any amount exceeding one-half per cent of GDP during any financial year. In spite of these safeguards, it needs to be recognised that a proper reporting and disclosure of guarantees are internationally accepted as part of good practices of accounting and transparency in government operations.

4.50 It is widely recognised that the transparency with regard to the conduct of fiscal policy needs to be continuously improved (Box IV.1).

Box IV. 1 **Fiscal Transparency and Code of Good Practices**

Transparency in fiscal operations implies openness towards public about structure and functions of government, fiscal policy intentions, public sector accounts, and fiscal projections. Fiscal transparency, however, is quite distinct from the other two ingredients of sound fiscal management viz., the soundness of public finances and the efficiency of fiscal policy instruments. The soundness of fiscal management relates to the macroeconomic issue of fiscal balance, an essential pre-condition for stability. The efficiency of fiscal policy instruments relates to the microeconomic issues of expenditure programmes in achieving their objectives and tax policies in raising revenues with minimum economic distortion. Fiscal transparency, on the other hand, mainly focuses on the issue of whether sufficient information on the fiscal situation is being provided in a timely fashion to enable observers, specially financial market participants to make an accurate assessment of the underlying fiscal position. Transparency in fiscal operations strengthens accountability of the budgetary policies and highlights the risk associated with unsustainable policies. It also enhances credibility with positive outcomes in the form of lower borrowing cost and stronger public support for sound macroeconomic policies.

The IMF has stressed the importance of good governance, with fiscal transparency forming a key aspect. The IMF Manual on Fiscal Transparency provides four general principles of fiscal transparency, which form the basic structure of Code of Good Practices. These principles relate to clarity of roles and responsibilities within government, and between government and the rest of the economy; public availability of information on fiscal outcomes; open and transparent budget preparation, execution and reporting; and assurances of integrity, including those relating to the quality of fiscal data and the need for independent scrutiny of fiscal information. The Code of Good Practices on Fiscal Transparency provides policy makers with benchmarks of good practice in key areas that IMF encourages the member countries to implement.

Country experiences reveal that greater fiscal discipline is exhibited by countries with a relatively high degree of transparency, and in some cases the growth performance of such countries has been more robust as compared with the countries characterised by less transparent financial practices. The Fiscal Responsibility Act of New Zealand contains a set of principles for fiscal management and transparency, requiring the government to disclose all items involving fiscal costs and gains and to identify potential fiscal risks. In Chile, the budget process has been oriented to gain transparent control over the public finances consistent with macroeconomic stability. Chile's experience with transparency also reveals that the central bank's balance sheet contains data on quasi-fiscal activities and the state owned enterprises are operated in a transparent manner without hidden subsidies or preferential credits. In the UK, the combination of transparency and fiscal rules has supported the fiscal adjustment process.

In the Indian context, the Constitution provides a clear statement of roles and responsibilities of the Central and State governments. A reasonable standard of fiscal transparency has been achieved in the case of Central government regarding the amount of fiscal information that is made available to the public, whereas the disclosure practice in the budgetary operations of sub-national governments is not as sound as in the case of Central government. Further, the Fiscal Responsibility and Budget Management Bill (FRBMB) 2000, introduced in the Parliament in December 2000, provides for the Central government to take suitable measures to ensure greater transparency in fiscal operations in public interest and minimise as far as practicable secrecy in the preparation of the annual budget. The Bill requires laying before the Parliament the medium-term fiscal policy statement, fiscal policy strategy statement and the macroeconomic framework statement along with the annual budget. With regard to transparency at State level, the Core Group on Voluntary Disclosure Norms for the State Governments (2001) suggested benchmarking of certain disclosure standards to be followed by the State governments with regard to the budgetary exercise.

The Advisory Group on Fiscal Transparency (Chairman: Shri Montek Singh Ahluwalia), appointed by the Standing Committee on International Financial Standards and Codes, submitted its report in June 2001. The Group examined the extent to which fiscal practices in India comply with the International Monetary Fund's Code of Good Practices on Fiscal Transparency. The overall assessment of the Group is that current fiscal practices at the Central Government level satisfy the minimum requirement of the Code in many areas, although there are deficiencies in some areas. Many of these deficiencies would be substantially addressed once the FRBMB is enacted. Fiscal practices at the State level were felt to be generally behind the standards achieved at the Central Government level. The Group recommended that the Finance Secretaries Forum could review the Report of the Advisory Group on Fiscal Transparency and determine a set of minimum standards on transparency which all State Governments should achieve within a three-year period.

References

1. Government of India, (2000). *Fiscal Responsibility and Budget Management Bill*.
2. International Monetary Fund, (2001), *Revised Manual on Fiscal Transparency*.
3. International Monetary Fund, (2001), *World Economic Outlook*.
4. Kopits, G. and Jon Craig, (1998), "Transparency in Fiscal Operations", *IMF Occasional Paper 158*, IMF.
5. Reserve Bank of India, (2001), *Report of the Core Group on Voluntary Disclosure Norms for State Governments*.
6. Report of the Advisory Group on Fiscal Transparency (Chairman: Montek Singh Ahluwalia), June 2001 (<http://www.rbi.org.in>).

¹ The Finance Minister announced some post-budget modifications under both direct taxes and indirect taxes on April 25, 2001. These modifications, *inter alia*, include: (i) increase in the limits of standard deduction to Rs.30,000 for income up to Rs.1,50,000 and Rs.25,000 for persons having income from Rs.1,50,000 to Rs.3,00,000; limit for tax deduction at source on interest receipts raised to Rs.5,000 from the budget proposal of Rs.2,500 and (ii) deduction of interest income under Section 80L raised to Rs.12,000 from the Budget proposal of Rs.9,000. Under indirect taxes, all garments, except clothing accessories, raincoats and undergarments would be subjected to excise duty at 16 per cent; 5 per cent customs duty imposed on indigenous shipping companies abolished; the concessional rate of duty of 55 per cent for the import of crude palm oil by sick vanaspati units abolished and the CVD of 16 per cent on 12 critical items of textile machinery including shuttleless looms abolished.

² Based on the provisional data relating to the budgets of 26 States including NCT Delhi (out of 29 States), of which four States are Vote-on-Account.

³ Based on the budgets of twenty six State Governments.

April	5,068	3,802	79,072	43.6388	368	-36	-	-	466	33,401	6.79	2.59
May	10,341	4,781	78,198	43.9829	-897	-1,479	-	-	1,543	30,343	7.48	2.29
June	8,713	5,115	37,602	44.6893	-1,051	-510	0	1,327	4,136	27,089	11.08	3.32
July	5,847	4,253	86,571	44.7788	-408	-6,299	1,150	34	3,972	28,418	7.77	3.69
August	6,251	5,213	36,490	45.6800	-467	1,197	8,807	36	5,614	21,809	13.06	5.10
September	5,292	4,603	45,660	45.8883	-287	-1,335	10,672	2	5,141	23,334	10.32	5.19
October	6,225	4,344	50,930	46.3445	-494	-66	8,321	166	4,716	30,218	9.07	4.40
November	5,624	4,282	1,07,696	46.7789	3,686	-11,565	2,634	1,403	1,229	32,148	9.28	4.05
December	6,692	4,173	87,004	46.7496	-155	-1,671	1,206	565	5,519	30,159	8.76	3.48
2001												
January	6,099	4,670	1,51,498	46.5439	832	-87	0	1,762	5,333	38,530	9.89	4.24
February	5,130	5,087	1,41,793	46.5167	624	-2	2,802	160	3,788	33,412	8.51	4.15
March	3,896	5,362	1,15,710	46.6205	606	-40	3,952	650	5,010	36,217	7.78	4.44
April	5,843	4,914	1,14,534	46.7835	-18	-5,064	10,390	15	2,533	35,785	7.49	4.51
May	4,772	4,936	1,89,026	46.9202	469	-27	2,132	1,737	167	36,458	8.03	4.95
June	3,616	4,956	2,00,119	47.0038	36	-5,837	2,458	45	2,061	38,606	7.24	4.82
July	6,441	-	-	47.1393	-	5,092	2,349	200	622	37,793	7.19	4.50

* Outstanding as on last reporting Friday of the month.

+ Outright only.

- Not Available.

5.3 Excess demand conditions surfaced sporadically in the foreign exchange market during May-August, 2000. Monetary, regulatory and other measures were combined with repo auctions to break circuits of arbitrage running from money to foreign exchange segments. The tightening of market conditions affected the credit market as well and was reflected in the hardening of the PLRs of the PSBs, particularly in August 2000. The stock prices also went down in August 2000 with the BSE Sensex declining by 3.87 per cent as compared with April 2000.

5.4 As the foreign exchange market stabilised from November 2000 onwards, monetary measures were phased out during the last quarter of 2000-01 to return to the April 2000 position. Comfortable liquidity fuelled price rallies in the secondary market for Government paper and the PSBs also reduced PLRs during this period. The BSE Sensex also gained by 7.73 per cent in November 2000 as compared with the previous month.

5.5 Liquidity conditions eased in April 2001 in line with seasonal trends coupled with slackening in credit demand, after exhibiting the usual financial year-end hardening during March 2001. This was reflected in the large-scale participation in repo auctions and existence of unavailed refinance limits for banks and PDs. However, once the government commenced its market borrowing programme for 2001-02 there was a withdrawal from repo auctions under LAF with the outstanding amount of repos declining from a high of Rs.19,170 crore as on April 12, 2001 to Rs.110 crore as on April 27, 2001. The liquidity conditions continued to remain comfortable throughout the month with the call rates remaining within the informal corridor. Against this background the Reserve Bank rejected large repo bids on some occasions and reduced the repo and reverse repo cut-off rates by 25 basis points each to 6.75 per cent as on April 27, 2001 and 8.75 per cent as on April 30, 2001, respectively. Government completed around a quarter of its budgeted gross market borrowing programme for 2001-02 during April 2001 itself. As the ways and means advances of the Central Government crossed the limit of Rs.10,000 crore for the first half of the fiscal year, it privately placed three securities of Rs.4,000 crore each with the Reserve Bank on April 20, 2001. The Reserve Bank sold one of the securities (11.60% Government Security 2020) on the tap sale basis on April 21, 2001. The participants absorbed the entire issue. In the secondary gilt segment, the yields came down more prominently at the extreme ends of the maturity spectrum with the yields for the 10-year maturity

paper not witnessing any significant change. The foreign exchange market was broadly stable during April 2001 with the increased supply of foreign exchange on account of foreign institutional investment inflows.

5.6 During May 2001, the call money rates moved above the repo-reverse repo corridor reflecting rationalisation of standing facilities available to the commercial banks and primary dealers at the Bank Rate, and call money lendings by non-bank financial institutions. The Reserve Bank injected liquidity through the reverse repos which nudged the call money rates back to the corridor by May 19, 2001. As the liquidity conditions became comfortable, the Reserve Bank absorbed excess liquidity through repos and the repo cut-off rate was further reduced by 25 basis points to 6.5 per cent on May 28, 2001. The Central Government resumed its market borrowing through a price-based re-issue of Rs.4,000 crore on May 17, 2001 and a twin yield-based auction of Rs.3,000 crore and Rs.2,000 crore, respectively, which were all oversubscribed. There was a private placement of Rs.5,000 crore of Government security with the Reserve Bank on May 30, 2001 which was only partially off-loaded to the market during the first week of June 2001. With the cut in Federal Reserve Bank's Fund rate of 50 basis points to 4.0 per cent on May 15, 2001, preceded by the announcement of the CRR cut of 50 basis points to 7.5 per cent with effect from fortnight beginning May 19, 2001, the yields of Treasury Bills and Government securities came down. The foreign exchange market was generally stable during May 2001 with orderly movements in the exchange rate. The PLR of PSBs was reduced by 25 basis points in May 2001.

5.7 Liquidity in the financial markets was comfortable during June 2001 and call rates remained generally within 7.0-7.5 per cent, *i.e.*, well within the repo-reverse repo corridor, on account of unusually low quarter-end advance tax outflow from the banking system to the Government, resource augmentation due to CRR cut along with an appreciable mobilisation of time deposits since April 20, 2001, a moderate off-take in non-food credit and a tapering off of the tempo of gilt auctions. The reverse repo cutoff rate declined by 25 basis points to 8.5 per cent on June 7, 2001 reflecting the comfortable liquidity position. A firming up of the weighted average call money borrowing rate to 8.0 per cent on June 8, 2001 on account of outright absorption of liquidity through the open market operations was stabilised through the reverse repo operations. The privately placed Government paper of Rs.4,000 crore on June 20, 2001 could be entirely off-loaded to the market through the open market sales. The implicit yields at the cut-off prices in the month-end twin issuances of 9.39 per cent Government security, 2011 for Rs.4,000 crore and 10.45 per cent Government security, 2018 for Rs.2,000 crore turned out to be below the corresponding secondary market yields of gilts reflecting prevalence of ample liquidity in the system. The excess liquidity was absorbed through repos during the course of the month. As the non-food credit off-take was low and the direct market off-take of funds by the Government took place only at the month-end, there was a rally in the prices of secondary market of gilts where the 10-year paper touched a low of 9.48 per cent by end-June 2001. The foreign exchange market was generally stable with the increased supply of foreign exchange on account of foreign institutional investment inflows.

5.8 The liquidity situation remained comfortable during July 2001 as deposit growth continued to be buoyant with low non-food credit off-take. The call money rates (weighted average) generally ruled in the range of 6.7-8.9 per cent averaging at 7.2 per cent. The liquidity

was ample in the first week of July 2001. There was some tightness when liquidity was absorbed through the open market sales on July 12, 2001. Nevertheless, the weighted average call money rate remained within the corridor throughout the month except on the reporting Friday after the gilt auction on July 25, 2001. The Government continued its market borrowing programme through price-based auctions and completed 59.5 per cent of the gross budgeted amount of borrowings for 2001-02 by July 31, 2001. The rally in prices of gilts in the secondary market persisted till the open market sales of a short-term paper through an auction on July 12, 2001 arrested it. Thereafter, the yields hardened at the long-end and softened somewhat at the short- and medium-ends, thereby making the yield curve steeper as at end-July 2001 in relation to a month ago. The foreign exchange market continued to exhibit orderly conditions during July 2001 with the exchange rate moving in a narrow range of Rs. 47.07-47.18 per US dollar. The average forward premia eased during the month across all maturities. The comfortable liquidity conditions continued in August 2001 so far (up to August 10) and the call money rates remained around the Bank Rate. The PLR of PSBs and deposit rates were reduced by about 25 basis points each.

5.9 The stock prices tended to move generally downward between April-July 2001. The Sensex declined by 5.40 per cent between April 2001 and July 2001. The slowdown in the industrial sector and profit warnings issued by various software companies for the coming quarters had a negative impact on the market sentiment. In May 2001, the SEBI announced significant changes in the capital market in keeping with the international practices. The ban on deferral products in the cash segment by SEBI and the ban by UTI on sales and repurchases of US-64 units affected the market sentiment adversely in July 2001. The subdued market sentiment continued in August 2001. The Sensex declined by 6.6 per cent between April 21 and August 14, 2001 in sharp contrast to gains of 10.2 per cent by the Nasdaq and 6.5 per cent by the Dow Jones.

5.10 Recent empirical analyses of financial market behaviour in India have yielded evidence of growing integration between money, debt and foreign exchange markets with relatively weak convergence of capital markets. The experience of 2000-01 suggests that market integration has tended to strengthen during episodes of volatility, pointing to a swifter transmission of market pressures from one segment to another than in earlier years. An indication of this integration during periods of market pressures is the existence of excess returns contemporaneously in various segments. This imposes additional constraints on the management of market conditions requiring simultaneous action across the spectrum (Box V.1).

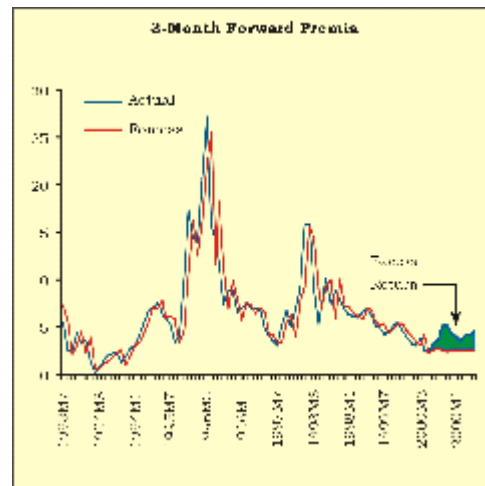
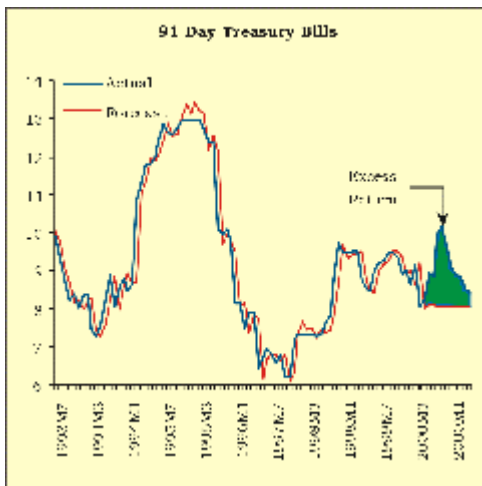
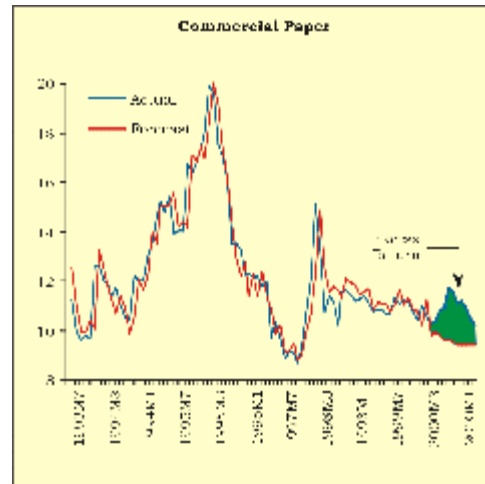
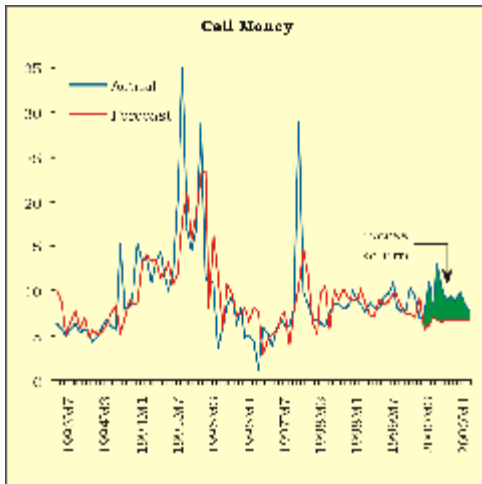
Box V.1
Integration of Financial Markets in India: Some New Evidence

The progress of financial sector reforms in India has been marked by a growing integration within the financial market spectrum. Evidence of market inter-linkages is reflected in the close co-movement of turnovers and rates of return. The structure of financial returns across markets continues to be differentiated by maturity, liquidity and risk, indicative of seams in the integration. In periods of orderly market conditions, the strengthening linkages between market segments suggests enhancement in the operational efficiency of markets as well as the conduct of monetary policy, the latter through the improvement in the transmission channels that integrated markets provide. On the other hand, the emerging market integration has entailed a swifter diffusion of turbulence originating in one market segment across the spectrum. Episodes of volatility have tended to unleash almost contemporaneous perturbations in several market segments, particularly the money, debt and foreign exchange markets. This has severely constrained monetary policy. On several occasions in the late 1990s and again during May-August, 2000 monetary operations

have had to be undertaken simultaneously in various market segments in order to localize contagion in the presence of the asymmetric integration of markets. This has necessitated a flexible approach, allowing for temporary departures from the announced stance to contend with disorderly conditions across the market spectrum. The monetary policy reaction has been in terms of a combination of instruments, including regulatory action, to ensure the rapid restoration of stability. In general, markets have responded positively to the policy signals, returning to normalcy fairly quickly and this, in turn, has enabled a smooth vacation of market interventions to revert to the monetary stance. Under these conditions, the evolving channels of financial market integration in India warrant close and continuous scrutiny so as to distinguish between market reactions to fundamentals and transitory forces and thereby shape the policy response to the growing frequency of episodes of heightened but asymmetric inter-linkages.

In the economics and finance literature, a necessary condition for financial market integration is the convergence of risk-adjusted returns across the market continuum. The existence of a reference rate around which this convergence occurs is regarded as a sufficient condition of integration. As noted in the literature co-movement need not, however, indicate integration. Studies have found that market co-movements can also be the result of market contagion. In a world of asymmetric information about market prices, price changes in one market segment may depend on price changes in other segments through 'structural contagion coefficients'. As a consequence, markets do not absorb all information simultaneously and price movements exhibit lead/lag correlation structures. Empirical studies conducted in the Indian context have provided reasonably robust evidence of integration between the money market segments *i.e.*, call money, commercial paper (CPs) and certificates of deposit (CDs), the gilt market represented by the Treasury Bill segments and the forward foreign exchange market segment. The equity market is found to have remained segregated from this integration. The 91-day Treasury Bill rate was observed to have the potential of emerging as a reference rate. Cross-border integration of the forex market is weak: while there is some evidence that covered interest parity may hold in India, the occurrence of uncovered interest parity is unambiguously rejected. This points to forward market inefficiency as the forward exchange rate does not provide unbiased predictions of the future spot exchange rate. Moreover, modeling market efficiency in the forward market segment indicates the persistence of excess returns, *i.e.*, deviations from uncovered interest parity.

Preliminary evidence of financial market integration is provided by the strength of association in the movements of rates of returns, *i.e.*, the cross correlation structure. The balance of opinion in the literature, however, does not favour the use of correlations for empirical verification of market integration. This is because financial rates of return predominantly exhibit 'random walk' properties, *i.e.*, that today's prices cannot be used to predict future prices or that they are non-stationary with no tendency to revert to an underlying trend value. Variance is infinite under these conditions and this yields inconsistent estimates of the parameter. In India, most financial rate movements are found to be non-stationary. Accordingly, the series were differenced to make them stationary and correlation coefficients were computed on the differenced data. A comparison with the results of earlier studies (conducted on non-stationary data) shows a significant improvement in the correlation coefficient for call money rates and 91-day Treasury Bill rates from 0.62 in the period 1993-98 to 0.73 in 2000-01, the latter period containing the most recent episode of market volatility spread across segments. The correlation between 91-day Treasury Bill rate and the three-month forward premia improved from 0.49 to 0.87 and the correlation between call money rates and the forward premia remained high at 0.70.



Differencing the data runs the disadvantage of losing information about underlying long run relationships between the rates of return. Accordingly, the co-movement between rates was examined in a co-integration framework in which linear combinations of non-stationary variables can be identified which are stationary. It may be mentioned that co-integration could not be established between equity and other market segments. The rationale for seeking a cointegrated relationship between the rates of return in the money, foreign exchange and gilt market segments emerges from the fact that all the rate variables were integrated of the same order *i.e.*, $I(1)$. Conducting the estimation under the Johansen-Juselius (JJ) procedure yields a unique cointegrating vector between the call money rate, the 91-day Treasury Bill rate and the three-month forward premia by subjecting the call money rate to the normalization restriction. The coefficient of the 91-day Treasury Bill (risk-free gilt) rate being close to unity suggests operational efficiency, but the significance of the coefficient of the forward premia at 0.3 indicates that the foreign exchange market has a small but decisive influence on the call money rate. The short run dynamics of the cointegrated relationship were examined in a vector error correction model (VECM) framework. It was found that the call money rate adjusts rapidly to the long run path with a correction of about 80 per cent of disequilibrium error in a one month period. In the case of Treasury Bills and forward rates, the adjustment in disequilibrium error is comparatively slow. An analysis in terms of orthogonalised variance accounting shows that the variation in 91-day Treasury Bill rate is explained almost fully (90 per cent) by its own variance. The call money rate movements, besides being influenced by their own behaviour, are explained primarily (30 per cent) by the 91-day Treasury Bill rate followed by three-month forward premia (12 per cent) over a time horizon of 12 months. In case of the forward rate, more than 50 per cent of its variation is explained by the call money rate.

The out of sample forecasts from the VECM for the different rate variables indicated contemporaneous episodes of

excess returns across market segments in the first half of 2000-01. Excess returns were most pronounced in the call money market ranging between 0.7-6.3 percentage points over the underlying forecast during April to September 2000. In the case of Treasury Bills and forward markets, the excess returns ranged between 0.2-2 percentage points and 0.1-2.7 percentage points and for CP, between 0.4-2.1 percentage points. These excess returns tend to disappear in all markets with the restoration of stability from October-November, 2000 (please see charts in this box).

The simultaneous appearance of co-movement and volatility in financial markets in India indicates asymmetric integration. Even as efforts are intensified for deepening and broadening financial market segments and developing a seamless and vibrant market continuum, the policy response in the transition would rely on multiple interventions and a combination of instruments to ensure financial stability.

References

1. Aburachis, A.T. (1993), "International Financial Markets Integration: an Overview" in Stanley R. Stansell (eds.), *International Financial Market Integration*, Basil Blackwell Publication.
2. Ballie, R. T. and Bollerslev, T. (1989), "Common Stochastic trends in a system of exchange rates", *Journal of Finance*, 44, 167-82.
3. Bhoi, B. K. and S. C. Dhal (1998), "Integration of Financial Markets in India: An Empirical Evaluation", *RBI Occasional papers*, Vol.19.,No.4, December.
4. Christopher, K. M. (1993), "Financial Market Integration and co-integration tests" in Stanley R. Stansell (eds.), *International Financial Market Integration*, Basil Blackwell Publication.
5. Frankel, J. (1990) "International Financial Integration, relations among Interest Rates and Exchange Rates and Monetary Indicators", in C.Pigott(ed.) *International Financial Integration and US monetary Policy*, Federal Reserve Bank of New York.
6. Joshi, Himanshu (1998), "Liquidity and Term Structure of Interest rates", *RBI Occasional Papers*, Vol.19, No.4, December.
7. Stein, J. L. (1991), "International Financial Markets: Integration, Efficiency, and Expectations", Oxford, Basil Blackwell.

MONEY MARKETS

Call/Notice Money Market

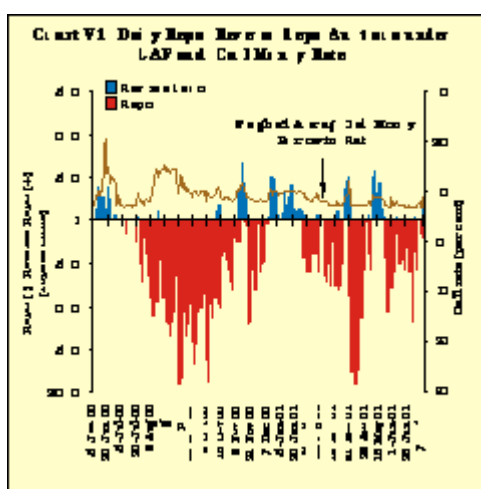
5.11 The call money market remained orderly during 2000-01 with short-lived episodes of volatility in June and August 2000. Call rates were range-bound within the informal corridor created by the Reserve Bank's liquidity operations. The daily call money borrowing rates, on an average basis, moved between a peak of 10.35 per cent and a low of 7.55 per cent. The Liquidity Adjustment Facility (LAF) introduced from June 5, 2000 onwards modulated short-term liquidity under varied financial market conditions and thereby imparted stability to market conditions during the year. The average of daily weighted average call money borrowing rate was higher at 9.15 per cent during 2000-01 than 8.87 per cent during 1999-2000 ([Table 5.2](#)).

5.12 Market liquidity was ample up to mid-May 2000, and the call money rates (weighted average borrowing rate) generally ruled steady in the range of 7.0-8.0 per cent. Market conditions tightened in June 2000 as foreign currency sales by the Reserve Bank in the face of uncertainty in the foreign exchange market sucked out domestic liquidity. This coincided with

the seasonal tightening on account of advance tax outflows. The Reserve Bank injected liquidity through a series of reverse repo auctions under the LAF progressively increasing the reverse repo cut-off rate from 9.05 per cent on June 5, 2000 to 10.85 per cent on June 14, 2000 ([Appendix Table V.1](#)). However, the weighted average call money borrowing rate spurted to touch a high of 20.34 per cent on June 17, 2000. The reverse repo cut-off rate was further raised to 14.0 per cent on June 20, 2000 in order to prevent spillovers between the call money and foreign exchange market segments. As the call money rates moved down from June 21, 2000 onwards and pressures eased, the reverse repo cut-off rate was reduced to 12.25 per cent by June 28, 2000. The call money rates tracked the reverse repo rate movements, declining to 7.14 per cent by the end of June 2000. Thus, liquidity management ensured that a further run away spike, after a temporary spurt in the call money rates in response to the transient impact of market volatility, was contained ([Chart V.1](#)).

**Table 5.2: Daily Call Money Borrowing Rates
(Summary Statistics)**

1	2000-01			1999-2000		
	Low	High	Weighted Average	Low	High	Weighted Average
	2	3	4	5	6	7
Minimum (%)	0.20	7.00	3.15	0.10	7.00	3.99
Maximum (%)	13.80	35.00	20.34	10.50	35.00	18.79
Average (%)	7.55	10.35	9.15	7.48	10.07	8.87
SD (%)	1.56	3.26	2.23	1.02	3.49	1.73
CV	0.21	0.32	0.24	0.14	0.35	0.19



5.13 Market conditions eased during the first half of July 2000 with the coupon payments and redemption of zero coupon bonds. The reverse repo cut-off rate declined to 9 per cent and the call rates also moved down to around 7.0 per cent. A temporary renewal of pressures in the

foreign exchange market was countered by monetary tightening on July 21, 2000. Call rates edged up, ruling in the range of 8.4 per cent to 9.7 per cent between July 22-24, 2000. In August 2000, following persistent pressures from the foreign exchange market, a significant amount of liquidity was absorbed by the Reserve Bank through daily, three-day and seven-day repos. Progressively higher cut-off rate, from 8.0 per cent as on August 2, 2000 to a peak of 15.0 per cent as on August 18, 2000, were set in repo auctions and call rates moved in tandem, hovering around 14.0 per cent level during a greater part of the month.

5.14 Foreign exchange market conditions stabilised in September 2000. Accordingly, repo cut-off rate was progressively reduced to 10.0 per cent on September 11, 2000 and further to 8.0 per cent on October 25, 2000. The call rates also decreased from an average of 10.32 per cent during September 2000 to 9.07 per cent during October 2000 ([Table 5.3](#)). In the second week of November 2000, liquidity conditions tightened. Reverse repos were employed to inject liquidity and assuage market pressure at a cut-off rate of 10.0 per cent. Thereafter, liquidity improved substantially on account of India Millennium Deposits (IMD) inflows. Outright open market sales along with repo auctions under LAF effectively absorbed excess liquidity. The repo cut-off rate at 8.0 per cent served as a floor for the call money rates.

5.15 Seasonal tightening of the call money rates during the last week of December 2000 owing to advance tax payments and a price rally in the Government securities market was eased through reverse repo operations during December 22, 2000-February 2, 2001. Monetary easing in the form of Bank Rate and CRR cuts between mid-February and early March 2001 enabled a further decline in call rates to an average of 8.5 per cent in February 2001 and 7.8 per cent during March 2001. The usual year-end tightening at the end of March 2001 on account of balance sheet considerations was accommodated through the reverse repo auctions including a special LAF auction on March 31, 2001 in order to adjust market mismatches of funds.

Table 5.3: Monthly Call Money Borrowing Rates

Month	Mean (%)	SD (%)	CV
1	2	3	4
1999-2000	8.87	1.73	0.19
2000-01	9.15	2.23	0.24
2000			
April	6.79	1.21	0.18
May	7.48	0.67	0.09
June	11.08	3.68	0.33
July	7.77	0.86	0.11
August	13.06	2.12	0.16
September	10.32	1.28	0.12
October	9.07	0.77	0.08
November	9.28	1.27	0.14
December	8.76	0.84	0.10
2001			
January	9.89	0.21	0.02

February	8.51	0.59	0.07
March	7.78	0.72	0.09
2001-02 (so far)			
2001			
April	7.49	1.21	0.16
May	8.03	0.81	0.10
June	7.24	0.30	0.04
July	7.19	0.48	0.07
SD Standard Deviation.	CV Co-efficient of Variation.		

5.16 During the first quarter of 2001-02, the call money rates remained easy and well within the repo-reverse repo corridor except for a brief period during May 9-21, 2001, reflecting adjustment of the market with revised guidelines under the second stage of LAF. The call money market eased in April 2001 after the usual hardening in end-March 2001 with the weighted average call money borrowing rates hovering slightly above the repo rate of 7.0 per cent for most part of the month. The excess liquidity was absorbed by a series of repo auctions and the repo outstanding amount averaged Rs.11,544 crore during April 3-29, 2001. However, as the market borrowing programme of the Government built up tempo during the latter half of the month the outstanding amount of repos declined from Rs.19,170 crore on April 12 to Rs.110 crore on April 27, 2001. Reflecting the prevalence of comfortable liquidity conditions the repo and reverse repo rates declined by 25 basis points each to 6.75 per cent and 8.75 per cent, respectively. However, in response to the rationalisation of standing facilities available to the commercial banks and PDs under the second stage of LAF, the weighted average call money borrowing rate moved up to 9.13 per cent on May 9, 2001 and remained generally above the ceiling of the corridor till May 18, 2001. A series of liquidity injections in the form of reverse repos (averaging an outstanding amount of around Rs.3,340 crore during May 8-23, 2001) as well as a cut in the CRR by 50 basis points to 7.5 per cent of net demand and time liabilities effective May 19, 2001 could nudge the call rates back to the corridor by May 21, 2001. With appreciable mobilisation in time deposits during May-June 2001, a decline in non-food credit up to fortnight ended June 1, 2001 followed by a low increase thereafter and a low advance tax outflow to Government in June 2001, the liquidity conditions remained easy. Mirroring this, the call money rates remained well within the corridor hovering between 7-7.5 per cent for the rest of the first quarter of 2001-02. The excess liquidity was absorbed through a series of repo auctions.

5.17 During July 2001, liquidity conditions were comfortable and call money rates (weighted average) generally ruled in the range of 6.70-8.88 per cent averaging 7.19 per cent. This comfortable liquidity was underscored by the substantial over-subscription to the issue of Government dated securities during the month. However, following the sale of dated securities, there was some firmness in the call money rates during the concluding part of second and fourth weeks of the month. Reverse repos were employed to inject liquidity in the market. The liquidity conditions remained comfortable during August 2001 (up to August 10) with daily call rates hovering mostly below the Bank Rate.

Other Money Market Segments

Term Money Market

5.18 There has been a steady rise in outstanding transactions in this segment of the market, though the volumes continue to be small. During March 2001, the daily volume of transactions (outstanding) ranged between Rs.1,242-2,687 crore as compared with that of Rs.941-1,489 crore in March 2000. During April-July 2001 the daily volume of transactions (outstanding) ranged between Rs.2-2,556 crore as compared with that of Rs.258-1,977 crore during the corresponding period of the previous year.

Certificates of Deposit (CDs) Issued by Banks

5.19 Developments in the CD market closely reflected the alternating phases of money market behaviour. The outstanding amount of CDs issued by scheduled commercial banks (SCBs) declined from Rs.1,273 crore as on April 21, 2000 to Rs.872 crore as on May 5, 2000 on account of improvement in liquidity ([Appendix Table V.2](#)). Thereafter, following tight liquidity condition as also reduction in maturity period of CDs to 15 days effective May 3, 2000, issuances started rising and outstandings touched a peak level of Rs.1,695 crore as on October 20, 2000. However, with a return of comfortable liquidity conditions, the outstanding amount of CDs declined to Rs.771 crore as on March 23, 2001. The typical discount rates (for 3 months maturity) on CDs, which declined from 11.00 per cent as on April 7, 2000 to 8.50 per cent as on June 16, 2000, ranged between 10.0 - 10.50 per cent during August-November 2000, reflecting market conditions. In the following months, discount rates started declining and ranged between 8.00 - 10.0 per cent during the period December 2000 to March 23, 2001.

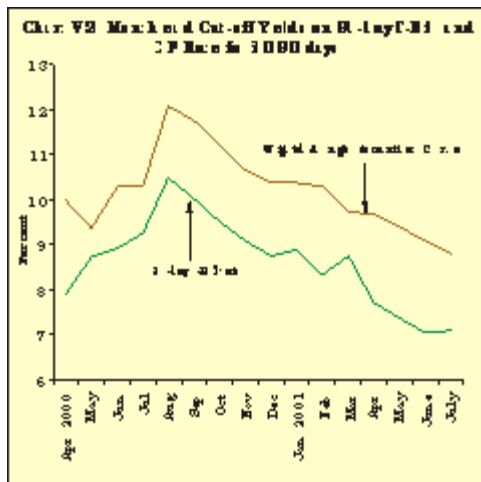
5.20 During 2001-02 the outstanding amount of CDs issued by scheduled commercial banks decreased from Rs.1,042 crore as on April 6 to Rs.905 crore on April 20, 2001, reflecting easy conditions. However, it rose to Rs.935 crore on May 18, 2001 on account of the tight liquidity conditions prevailing during the second and third weeks of the month. It moved down to Rs.921 crore as on June 29, 2001. The typical discount rate (for three-month maturity) on CDs, which increased from 9.75 per cent as on April 6, 2001 to 10.00 per cent as on April 20, 2001, declined to 8.00 per cent as on May 18, 2001 and remained at that level as on June 29, 2001. The typical discount rate ranged between 8.00-10.00 per cent during April-June 29, 2001, reflecting the market conditions.

Commercial Paper

5.21 The weighted average discount rates on commercial paper (CP) which were ruling in a narrow range of 9.55 - 9.95 per cent during April 30- June 15, 2000, firmed up to 12.03 per cent in the fortnight ended September 15, 2000 in consonance with other financial prices. As a result, the outstanding amount of CP which increased from Rs.5,634 crore as on April 15, 2000 to Rs.7,627 crore as on June 30, 2000, declined subsequently to Rs.5,577 crore as on September 15, 2000 ([Appendix Table V.3](#)). With easing of liquidity conditions, discount rates declined from 11.44 per cent in the fortnight ended October 15, 2000 to 9.87 per cent in the fortnight ended March 31, 2001. During the second half of the year, the CP market recorded heightened activity. By end-December 2000, the outstanding amount of CP reached the peak level of Rs.8,343 crore before declining to Rs.6,991 crore as on March 15, 2001 and further to Rs.5,847 crore as on

March 31, 2001. During 2000-01, manufacturing and related companies issued 86.2 per cent of the total CPs issued while 12.7 per cent of the total were issued by leasing and finance companies and the balance 1.1 per cent by financial institutions.

5.22 The liquidity premium on CPs, measured by the differential between the 91-day Treasury Bill rate and the weighted average effective rate of discount on CPs (60-90 days), remained stable at an average of 1.5 percentage points in 2000-01(Chart V.2). The average differential between the average discount rate on CPs (60-90 days) and 91-day Treasury Bill rate worked out to 1.7 percentage points during 1999-2000.



5.23 Reflecting the trends in other segments of money market, the weighted average discount rate on CP ruled in a narrow range of 9.4-9.98 and the outstanding amount of CP issued by corporates rose steadily from Rs.6,295 crore as on April 15, 2001 to Rs.8,566 crore as on June 30, 2001 on account of improvement in liquidity. The share of manufacturing and other companies in the amount of CP issued increased from 78.31 per cent as on April 15, 2001 to 90.96 per cent on May 15, 2001 but decreased to 81.54 per cent on June 30, 2001 with concomitant variations in the share of finance/leasing companies/FIs. Guidelines of CP issuance in terms of dematerialised form came into effect from July 1, 2001. The outstanding amount of CPs declined to Rs.7,275 crore as on July 31, 2001.

Commercial Bill Market

5.24 The outstanding amount of commercial bills rediscounted by commercial banks and various financial institutions stood at Rs.1,033 crore at end-December 2000, higher than that of Rs.785 crore during the corresponding period of the previous year. The stock of rediscounted commercial bills rose further to Rs.1,063 crore at end-January 2001. The activity in the bill market slowed down with the outstanding amount of bills rediscounted by banks and FIs declining to Rs.668 crore as at end-February 2001 but rose to Rs.1,013 crore as at end-March 2001. The outstanding amount of bills rediscounted by banks with financial institutions as at the end of April 2001 declined sharply to Rs.691 crore before recovering a little to Rs.700 crore as at end-June 2001.

Repurchase Agreements: Inter-bank Repo

5.25 During the year, the weekly turnover in the inter-bank repo market ranged between Rs.196 crore and Rs.4,216 crore except during the last weeks of June and November 2000 when the turnover spurted to Rs.5,799 crore and Rs.6,907 crore, respectively. Reflecting the trends in other segments of the money market, repo rates which ranged between 5.0-10.0 per cent up to mid-June 2000, started rising and ranged between 6.5-22.0 per cent in the latter half of June 2000. Subsequently, rates started rising and ranged between 7.50 - 16.50 per cent up to September 8, 2000. During October 2000 - April 2001, the inter-bank repo rate moved between 8.00 - 12.30 per cent.

5.26 During the period April-July 2001, the weekly turnover in the inter-bank repo market ranged between Rs.3,035 crore and Rs.8,176 crore. Reflecting the trends in other segments of the money market, repo rates ranged between 6.40 - 10.25 per cent up to July 2001, except during the first week of April 2001, when repo rate had increased to 14.0 per cent. The volume of turnover in the inter-bank repo market is expected to go up in future following the gradual phasing out of non-bank entities from the call/ notice money market coupled with the setting up of the Clearing Corporation.

Forward Rate Agreements (FRAs / Interest Rate Swaps (IRS)

5.27 There were increases in volumes of FRAs/ IRS during 2000-01. FRAs/IRS transactions, both in terms of number of contracts and outstanding notional principal amount, rose from 216 contracts amounting to Rs.4,249 crore as on March 24, 2000 to 399 contracts for Rs.6,617 crore as on August 11, 2000 and further to 1,521 contracts amounting to Rs.21,504 crore as on March 23, 2001. The participation in the market continued to be restricted mainly to a few foreign and private sector banks, PDs and all-India financial institutions.

5.28 During 2001-02 up to July, the number of contracts in FRAs/IRS transactions rose from 1,615 contracts as on April 6, 2001 to 2,383 contracts as on July 27, 2001 and the outstanding notional principal amount increased from Rs.22,865 crore to Rs.38,101 crore. Though there was a significant increase in the number and amount of contracts, participation in the market continued to be restricted mainly to foreign and private sector banks, PDs and all-India financial institutions.

FOREIGN EXCHANGE MARKET

5.29 Comfortable supply conditions characterising the foreign exchange market in the early part of 2000-01 were dissipated by the hardening of international oil prices, successive interest rate increases in industrial countries and the withdrawal of portfolio flows during the period mid-May to mid-August 2000. Inflows under the IMDs during October-November 2000 eased market tightness and brought stability to various segments of the foreign exchange market.

5.30 During April 2000, excess supply conditions were reflected in net market purchases of US \$ 368 million by the Reserve Bank. With pressures mounting in May 2000 due to the adverse international environment, the exchange rate moved from Rs.43.66 per US dollar at end-April

2000 to Rs.44.28 per US dollar as on May 25, 2000. Excess demand conditions were reflected in the spot market gap in the merchant segment increasing from US \$ 202 million in April 2000 to US \$ 855 million in May 2000 (Table 5.4). In the inter-bank segment, banks took positions in response to merchant activity (Table 5.5). Monetary measures in the form of interest rate surcharge of 50 per cent of the lending rate on import finance, penal interest at 25 per cent per annum (minimum) in respect of overdue export bills and net foreign exchange sales of US \$ 1,948 million during May-June 2000 were undertaken by the Reserve Bank to meet genuine demand-supply mismatches and to prevent building up of speculative positions (Table 5.6). In response to these measures, the rupee regained stability, trading within a narrow range of Rs.44.57-Rs.44.79 per US dollar during June 2000.

5.31 The exchange rate, which was trading in the range of Rs.44.67-Rs.44.73 per US dollar during the first half of July 2000, moved to Rs.45.02 per US dollar on July 21, 2000 as the market gap in the spot merchant segment more than doubled from US \$ 233 million in June 2000 to US \$ 586 million in July 2000 and compensating activity built up in the inter-bank segment. Market pressures were met with orthodox monetary tightening in the form of increases in the Bank Rate and the CRR and reduction in the limits available to banks for all refinance facilities. The rupee remained range-bound around Rs.45.00 per US dollar in the last week of July 2000.

5.32 Demand pressures resurfaced during the first few days of August 2000 with the exchange rate moving from Rs.45.00 per US dollar at end-July 2000 to Rs.45.83 per US dollar on August 11, 2000. Balances in Exchange Earners Foreign Currency (EEFC) accounts were scaled down and restrictions were imposed on future accretions and credit facilities available against EEFC accounts. Market supply improved as a result, and the rupee traded in a narrow band of Rs.45.67-Rs. 45.91 per US dollar during the last fortnight of August 2000. The monetary and other measures were further supported by the Reserve Bank through net sales of US \$ 1,656 million during July-October 2000 on top of net sales of US \$ 1,948 million during May-June 2000 or a total of US \$ 3,604 million during May-October 2000 to meet temporary demand-supply mismatches.

Table 5.4: Merchant Transactions in the Foreign Exchange Market

Month	(US \$ million)						
	Spot			Forward			Merchant
	Purchases	Sales	Net	Purchases	Sales	Net	Turnover*
1	2	3	4	5	6	7	8
2000							
April	5,865	6,067	-202	1,608	2,453	-845	20,000
May	5,768	6,623	-855	1,838	3,747	-1,909	21,930
June	6,553	6,786	-233	1,348	2,679	-1,331	21,038
July	5,984	6,570	-586	2,005	3,607	-1,602	21,880
August	6,306	6,574	-268	2,326	4,009	-1,683	23,991
September	7,161	6,334	827	1,864	3,778	-1,914	23,214
October	6,429	6,624	-195	1,478	3,244	-1,766	20,547

November	6,354	6,991	-637	1,817	3,760	-1,943	23,475
December	6,749	6,609	140	1,515	3,466	-1,951	21,553
2001							
January	7,788	6,724	1,064	1,596	3,410	-1,814	23,116
February	7,391	6,988	403	1,628	3,452	-1,824	22,796
March	8,410	7,696	714	1,940	4,047	-2,107	25,902
April	5,588	6,065	-477	1,733	3,589	-1,856	20,074
May	5,946	5,622	324	1,456	3,325	-1,869	19,813
June P	6,428	6,555	-127	1,467	3,305	-1,838	21,336

* Include cross-currency (*i.e.*, foreign currency to foreign currency, both spot and forward) transactions and cancellation/re-booking of forward contracts.

P Provisional.

Table 5.5: Inter-bank Transactions in the Foreign Exchange Market

Month	(US \$ million)						
	Spot			Forward/Swap		Inter-bank	
	Purchases	Sales	Net	Purchases	Sales	Net Turnover*	
1	2	3	4	5	6	7	8
2000							
April	8,017	6,627	1,390	14,893	13,601	1,292	60,829
May	15,472	13,474	1,998	22,209	21,742	467	105,192
June	12,721	12,072	649	22,677	21,895	782	107,406
July	12,508	11,103	1,405	20,063	18,605	1,458	89,304
August	15,611	14,857	754	28,499	25,871	2,628	109,473
September	12,781	12,343	438	23,491	22,110	1,381	92,063
October	12,290	11,597	693	23,607	22,456	1,151	86,879
November	11,286	10,085	1,201	25,984	23,845	2,139	89,920
December	8,660	7,963	697	20,477	20,106	371	75,106
2001							
January	14,370	14,588	-218	26,707	23,866	2,841	102,743
February	12,915	12,414	501	24,012	21,061	2,951	91,558
March	13,751	13,915	-164	29,635	26,304	3,331	107,243
April	10,293	9,035	1,258	24,612	23,025	1,587	83,532
May	10,330	10,271	59	32,031	29,984	2,047	103,646
June P	10,605	10,440	165	26,209	25,316	893	99,126

* These data are on gross basis and include cross-currency (*i.e.*, foreign currency to foreign currency, both spot and forward) transactions.

P Provisional.

Table 5.6: Purchases and Sales of US Dollars By the Reserve Bank

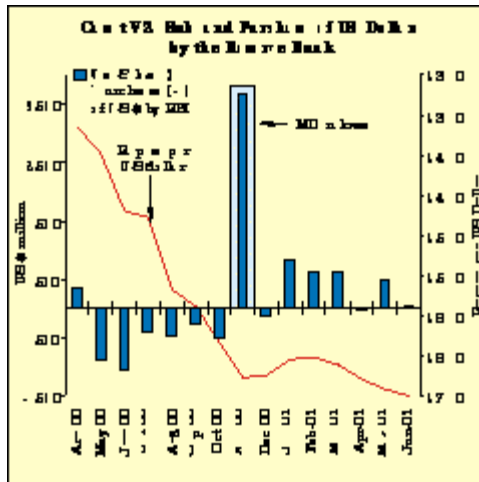
Month	Net Sales(-)/ Purchases *	Cumulative since April 2000	(US \$ million)
			Outstanding Forward Sales (-) / Purchases #
1	2	3	4
2000			
April	368	368	-670
May	-897	-529	-1,380
June	-1,051	-1,580	-1,693
July	-408	-1,988	-1,903
August	-467	-2,455	-2,225
September	-287	-2,742	-2,225
October	-494	-3,236	-2,225
November	3,686	450	-2,025
December	-155	295	-1,643
2001			
January	832	1,126	-1,638
February	624	1,750	-1,438
March	606	2,356	-1,259
April	-18	2,338	-1,160
May	469	2,807	-980
June	36	2,843	-800

* Include spot, swap and forward transactions besides transactions under Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs).

Outstanding as at the end of the month.

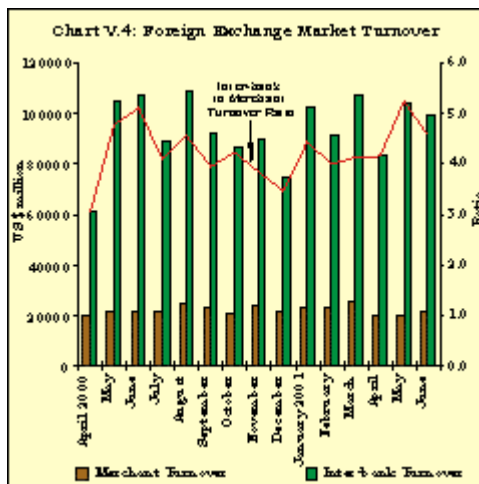
5.33 In the remaining period of the year, orderly conditions returned to all segments of the market. Buoyant supply conditions were reflected in net market purchases of US \$ 5,593 million by the Reserve Bank between November 2000-March 2001 which more than offset the net sales of US \$ 3,604 million during the earlier part of the year (May-October 2000). For the year as a whole, the Reserve Bank's net market operations, therefore, resulted in net market purchases of US \$ 2,356 million ([Chart V.3](#) and [Table 5.6](#)). The interest rate surcharge on import finance and the penal interest rate on overdue export bills were withdrawn with effect from January 6, 2001.

5.34 The average monthly turnover in the merchant segment of the foreign exchange market increased from US \$ 20 billion during 1999-2000 to US \$ 23 billion during 2000-01. The average monthly turnover in the inter-bank foreign exchange market increased to US \$ 93 billion during 2000-2001, reversing its declining trend of the previous two years. The average monthly total turnover (inter-bank plus merchant) increased from US \$ 95 billion in 1999-2000 to US \$ 116 billion in 2000-01. The ratio of inter-bank to merchant turnover hovered around 4 reflecting orderly market activity. Between May and August 2000, however, the ratio exceeded 4 indicating hectic inter-bank activity ([Chart V.4](#)).



5.35 The recent experience with exchange rate regimes in the world over indicates that central banks are getting more actively involved in the dynamics of market processes with a view to signaling their stance on exchange market developments. Monetary authorities' reactions to exchange market pressures are typically swift with a preference for withdrawal from market activity as soon as orderly conditions prevail. In general, they tend to adopt a combination strategy within which monetary policy and regulatory measures are employed to support direct and indirect interventions.

5.36 To investigate the practice of foreign exchange intervention, a recent survey based on response of 22 institutions out of 43 institutions that participated in the Bank for International Settlements (BIS) and the European Central Bank, presents interesting results on issues like instruments, timing, amounts, motivation, secrecy and perception of efficacy of foreign exchange interventions (Box V.2).



Box V.2
Mechanics of Foreign Exchange Market Interventions by the Central Banks

Surveying the mechanics of monetary authorities' foreign exchange intervention reveal the following :

- Official intervention, both sterilised and unsterilised, was reasonably common in foreign exchange markets; the Reserve Bank of New Zealand was the only authority to report that it had not intervened in the last 10 years. The central banks indicated a preference for dealing with major domestic banks but they also transact with major foreign banks. About 50 per cent of central banks sometimes conducted business with other entities like other central banks (23.5 per cent) or investment banks (25 per cent).
- About 95.2 per cent of authorities reported that the official intervention activities always include spot market transactions and other 4.8 per cent sometimes include spot transactions. Around 52.9 per cent sometimes used the forward market, perhaps in conjunction with spot market to create a swap transaction; no authority reported always using the forward market.
- Direct dealing over telephone is the most popular method of intervention with 43.8 per cent of authorities using direct dealing over an electronic network. Live foreign exchange brokers are used sometimes or always by 63.2 per cent of the respondents.
- About 95 per cent of central banks reported that the size of intervention sometimes or always depended on market reaction to initial trades.
- Most interventions took place during the business day but almost half of central banks surveyed reported that they sometimes intervene prior to business hours and more than half intervenes after business hours (e.g., Reserve Bank of Australia).
- About 23.8 per cent of authorities reported sometimes intervening with indirect methods like changing banking regulations on foreign exchange exposure and moral suasion.
- 89.5 per cent of authorities sometimes or always intervened to resist short-run trends and 66.7 per cent of the authorities intervened to make the exchange rates return to "fundamental values". Some countries specified "other" reasons that might be interpreted as variations on the leaning-against-the-wind or misalignment hypothesis. Still other countries indicated macroeconomic goals such as limiting exchange rate pass-through to prices, defence of an exchange rate target or accumulating reserves as motivating factor behind intervention. The profitability consideration in intervention decisions was uniformly rejected by all respondents.
- As regards secrecy in intervention, about 76.5 per cent of authorities reported sometimes or always intervening secretly to maximise market impact, whereas 57.1 per cent of authorities reported sometimes or always intervening secretly to minimise market impact. No central bank cited portfolio adjustment as a reason for secret intervention.
- As regards effect of intervention on exchange rates as well as the time horizon of the effect, all the central banks felt that intervention had some effect on exchange rates. Most of the respondents believed in a relatively rapid response, over a few minutes (38.9 per cent) or a few hours (22.2 per cent). A substantial minority expressed that intervention's full effect is seen over a few days (27.8 per cent) or more (11.1 per cent).

References

1. Neely, Christopher J., (2000), "The Practice of Central Bank Intervention: Looking Under the Hood", *Federal Reserve Bank of St. Louis, Working Paper* No 2000-028, October.
2. Bank for International Settlements, (1999), "Central Bank Survey of Foreign Exchange and Derivatives Market Activity," May, Basel.

5.37 The excess demand for merchant transactions in the forward segment increased from US \$ 845 million in April 2000 to US \$ 1,909 million in May 2000 and remained large, moving in a range of US \$ 1,602-1,914 million during July-September 2000. In reflection, the six-month

forward premia increased from 2.5 per cent in May 2000 to 4.9 per cent in September 2000. The one-month premia increased from 2.2 per cent in May 2000 to 6.1 per cent in August 2000. Volatility in the forward segment was reflected in an inversion of the forward premia curve ([Chart V.5](#)). Net forward sales by the Reserve Bank increased from US \$ 670 million as at end-April 2000 to US \$ 2,225 million as at end-August 2000. With the return of normalcy, forward premia generally remained stable from October 2000 onwards. The one-month premia declined from its peak of 6.1 per cent during August 2000 to 4.3 per cent during March 2001 while the six-month premia declined from 4.9 per cent during September 2000 to 4.6 per cent during March 2001. Net forward sales of the Reserve Bank declined, in tandem, from US \$ 2,225 million as at end-August 2000 to US \$ 1,259 million as at end-March 2001. The average six-month forward premia for the fiscal year 2000-01 at 3.9 per cent was lower than that of 4.7 per cent during the preceding year ([Table 5.7](#)).

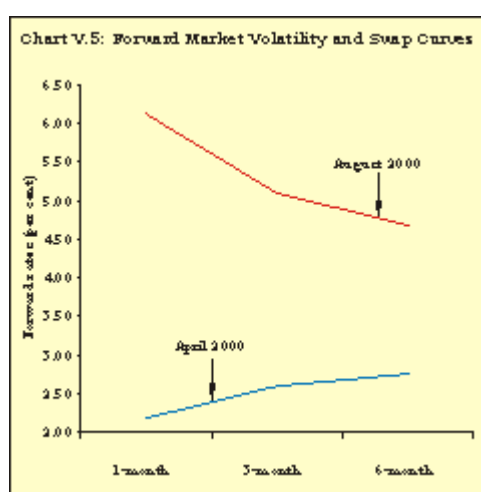


Table 5.7: Forward Premia (Monthly Average)

Month	(Per cent per annum)		
	1-month	3-month	6-month
1	2	3	4
2000			
April	2.18	2.59	2.76
May	2.16	2.29	2.51
June	3.70	3.32	3.17
July	3.70	3.69	3.69
August	6.13	5.10	4.67
September	5.16	5.19	4.92
October	4.20	4.40	4.32
November	3.78	4.05	4.12
December	3.07	3.48	3.88
2001			
January	4.24	4.24	4.32

February	3.60	4.15	4.33
March	4.34	4.44	4.55
April	3.95	4.51	4.84
May	5.02	4.95	5.06
June	4.43	4.82	4.95
July	4.22	4.50	4.73

5.38 During 2001-02 so far (up to August 10), the foreign exchange market exhibited orderly conditions with the rupee moving in a range of Rs. 46.56 - 47.18 per US dollar. The excess supply conditions resulted in net purchases by the Reserve Bank from the market amounting to US \$ 487 million during the first quarter of 2001- 02. The spot exchange rate moved to an average of Rs.47.14 per US dollar in July 2001 from an average of Rs.46.62 per US dollar during March 2001. The 6-month forward premia which increased marginally to 5.0 per cent during June 2001 from 4.6 per cent during March 2001 fell to 4.7 per cent during July 2001. The orderly market conditions also enabled a reduction in outstanding forward liabilities of the Reserve Bank to US \$ 800 million as at end-June 2001 from US \$ 1,259 million as at end-March 2001.

GOVERNMENT SECURITIES MARKET

5.39 The Government securities market during 2000-01 was driven by expectations of declining yields in the wake of reductions in the administered interest rates on small savings, provident funds, and the Bank Rate. The easing of yields over the year was interrupted by the impact of the Government borrowing programme and monetary measures to counter foreign exchange market conditions. Comfortable liquidity at the beginning of 2000-01 built up a positive market sentiment leading to a mild rally in the Government securities during April-mid-May 2000. Pressures in the foreign exchange market in mid-May and July 2000, the tightening of liquidity during June 2000 on account of advance tax outflows, monetary tightening in July 2000 and a steady increase in the repo cut-off rates in August 2000 caused a mid-year hardening of gilt yields. The Reserve Bank undertook substantial devolvments and private placements to absorb market pressures. In the wake of the IMD inflows, interest in government paper revived and a smart rally in prices enabled a decline in yields from November 2000. The rally in the gilt segment gathered momentum as monetary conditions were eased during February-March 2001. During 2001-02 (up to August 10) the gilt yields generally declined due to expectations of fall in the interest rates.

Primary Market Developments

Dated Securities

5.40 Dated securities aggregating Rs.1,00,183 crore were issued during 2000-01 as against Rs.86,630 crore during 1999-2000 ([Appendix Table V.4](#)). The Central Government's market borrowing commenced in April 2000 with the entire notified amount of Rs.5,000 crore in the first auction being absorbed by the market at a YTM cut off of 10.26 per cent ([Appendix Table V.5](#)). The ratio of bid amount received to notified amount (BR/NA) was 2.10 during April 2000, indicative of the favourable market response ([Table 5.8](#)). The devolvement on primary dealers (PDs) of Rs.3,055 crore and of Rs.5,401 crore on the Reserve Bank during April-May 2000

reflected the policy preference for easier interest rates. With the tightening of liquidity conditions during mid-May-August 2000, market sentiment turned unfavourable resulting in a fall in the BR/NA ratio below unity in June and August 2000. The Reserve Bank had to undertake private placements besides accepting devolvments of 39 per cent and 42 per cent of the gross amounts raised through auctions during June and August 2000, respectively. The weighted average cut-off yields of primary gilt issuances moved up from 10.28 per cent in April 2000 to 10.71 per cent in June 2000 and further to 11.47 per cent in August 2000.

5.41 As the liquidity conditions stabilised and IMD inflows poured into the system, the BR/NA ratio moved up from 1.34 during September 2000 and remained above 2 up to January 2001 rising even further to 3.43 in February 2001 as the mid-year monetary measures were unwound. There was complete market absorption of the primary gilt issuances between October 2000-March 2001 except for a devolvement upon the Reserve Bank of Rs.1,000 crore in the auction on December 26, 2000 and a devolvement of Rs.1,911 crore on the PDs in the auction on March 29, 2001. The primary market cut-off gilt yield of a ten year paper declined from 11.69 per cent in October 2000 to 11.10 per cent in December 2000 ([Chart V.6](#)).

5.42 The issuances of securities to accommodate the market's preference for shorter-term paper during phases of market uncertainties reduced the weighted average maturity of debt issued to 10.6 years during 2000-01 from 12.6 years during 1999-2000. Furthermore, the range of maturities of loans issued also widened to 2.9 years-20 years during 2000-01 from 5.3 years-19.6 years during 1999-2000. The weighted average cost of primary issuance during the year, however, was lower at 10.95 per cent against 11.77 per cent during the previous year.

Table 5.8: Major Indicators of Primary Auctions of Central Government Dated Securities*

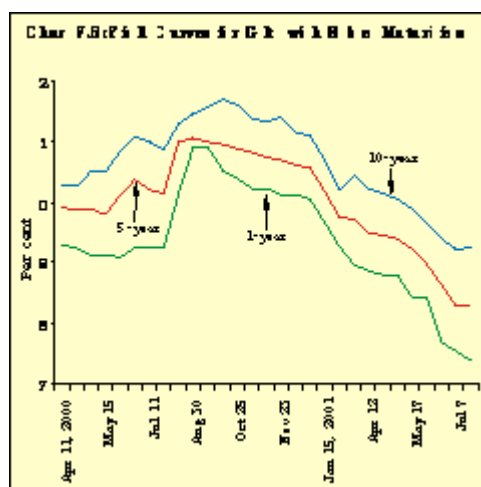
Month	Notified amount (Rs. crore)	Number of bids received	Amount of bids received (Rs. crore)	BR/NA**	Devolvement on PDs(%)	Devolvement on RBI (%)
1	2	3	4	5	6	7
2000						
April	11,000	737	23,059	2.10	23	0
May	16,000	754	20,989	1.31	3	34
June	4,000	104	2,904	0.73	23	39
July	9,500	505	15,672	1.65	0	37
August	3,000	51	2,264	0.75	49	42
September	3,000	135	4,030	1.34	0	13
October	6,000	414	15,248	2.54	0	0
November	10,000	565	20,445	2.04	0	0
December	7,000	543	14,686	2.10	0	14
2001						
January	4,000	409	11,505	2.88	0	0
February	3,000	231	10,290	3.43	0	0
March	3,000	161	4,397	1.47	64	0

April	16,000	1,184	47,733	2.98	0	0
May	9,000	759	25,763	2.86	0	0
June	0	0	0	-	0	0
July	18,000	1,187	37,625	2.09	0	0

* Excluding private placement and tap issuance

** Ratio of amount of bids received (BR) to notified amount (NA).

5.43 During 2001-02 (upto August 13), the Central Government raised a gross amount of Rs.70,000 crore through issue of dated securities with about 30 per cent privately placed with/devolved on the Reserve Bank.



Secondary Market Transactions

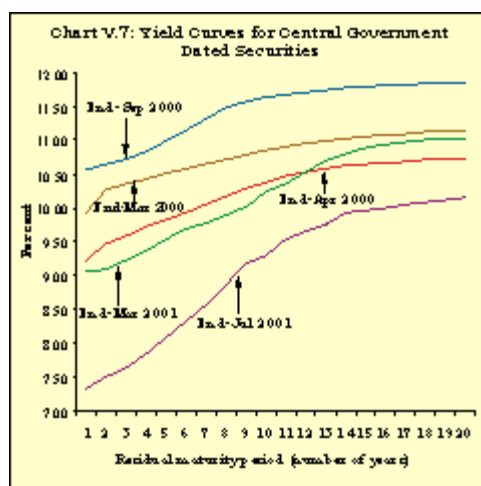
5.44 The year 2000-01 was characterised by volatility in secondary market both in terms of yield movements and turnover. Under the easy liquidity conditions during April-mid-May, the yield curve shifted downwards, particularly at the short-end as long tenor securities were issued by the Reserve Bank. Thereafter, the yield curve shifted up particularly in the short-end, as the liquidity conditions tightened. The turnover declined sharply during June 2000 over the level in the previous month. There was some easing of yields during the first half of July 2000 on account of inflows of coupon payments and redemption of Government securities as well as aggressive open market operations by the Reserve Bank. The turnover rose sharply in July 2000.

5.45 Yields began to rise again during the second half of July and August 2000 eroding the earlier gains in gilt prices. The upward movement in yields reflected the impact of monetary measures and the absorption of liquidity through repos. The illiquidity of longer maturity papers prompted the Reserve Bank to offer the PDs switches from medium- to long-term Government securities to 364-day Treasury Bills. The turnover fell during August 2000 as banks and other participants turned to money and foreign exchange market segments in search of better returns.

5.46 Activity in the secondary market revived during September-October 2000 and yields at the short- and medium-segments declined. As the proceeds of IMDs entered the system, activity

picked up for the first time in 2000-01 at the longer-end of the maturity spectrum. The yields of longer dated maturities fell in the face of a strong rally in the prices of Government securities. The aggressive auctioning of Government securities could arrest this rally temporarily. In December 2000, the rally resumed at the long-end with improved sentiment and stable financial market conditions.

5.47 The two-stage cut in the Federal Reserve Bank's interest rate by a total of 100 basis points in January 2001 fuelled market expectations of an imminent adjustment in key interest rates in India to the pre-July 2000 level. As the liquidity conditions eased and there was a slowdown in the non-food credit of the scheduled commercial banks the Reserve Bank reduced the Bank Rate and the Cash Reserve Ratio by 50 basis points each. With a conducive environment created by the 150 basis point reduction in the administered interest rates on small savings announced in the Union Budget for 2001-02 on February 28, 2001, the Bank Rate was reduced by a further 50 basis points effective close of business on March 1, 2001. This reduction did not bring down yields any further as the market had already discounted it prior to the presentation of the Union Budget. In March 2001, the market remained volatile on year-end considerations, viz., profit booking and reluctance to take fresh positions as also the developments in the capital markets. The profile of the yield curves captures the three liquidity phases during the year ([Chart V.7](#)).



5.48 The secondary market for Central Government dated securities and Treasury Bills (outright as well as repos) deepened during 2000-01 to register an aggregate volume of transactions of Rs.6,95,135 crore ([Appendix Table V.6](#)), as compared with Rs.5,35,602 crore in 1999-2000. As much as 82 per cent (Rs.5,69,174 crore) of the transactions were on outright basis with the balance by way of repos. Transactions in State Government securities, however, were lower at Rs.2,986 crore as against Rs.3,632 crore during 1999-2000. The turnover in Central Government securities (calculated by counting twice the volume of transactions in the case of outright transactions and counting four times the volume of transactions in the case of repos) during 2000-01 amounted to Rs.16,42,190 crore as against Rs.12,36,678 crore in 1999-2000. The outright turnover aggregated Rs.11,38,348 crore as compared with Rs.9,05,722 crore in 1999-2000. Thus, the average monthly turnover in Central Government securities aggregated Rs.1,36,849 crore in 2000-01 as compared with Rs.1,03,056 crore in 1999-2000. The average

monthly turnover of outright transactions amounted to Rs.94,862 crore during 2000-01 as against Rs.75,477 crore in 1999-2000. The average daily turnover was also higher at about Rs.4,512 crore as against Rs.3,388 crore in 1999-2000. The turnover in State Government securities during 2000-01 amounted to Rs.6,005 crore as against Rs.7,265 crore during 1999-2000. The turnover in Central Government securities during 2001-02 (up to June) amounted to Rs. 7,96,558 crore. The outright turnover aggregated to Rs. 5,40,485 crore. The turnover in the State Government securities was Rs. 2,175 crore during the period.

5.49 An analysis of the most heavily traded securities in the secondary market during 2000-01 indicates that during April and May the tenor of these securities ranged mostly between 4-10 years showing the market preference for medium to long term securities. During June-September, 2000 it mostly ranged between 1-8 years exhibiting the shift to shorter to medium tenor bonds while from October 2000 onwards, it was mostly 6-12 years exhibiting the shift towards medium to long-term securities.

5.50 During 2001-02 upto mid-August, easy liquidity conditions in the financial markets and interest rate cuts in the developed economies turned the domestic gilt market buoyant. The reduction in the LAF repo rate by 25 basis points to 6.75 per cent on April 27, 2001 was positively received. The reduction in the CRR by 50 basis points to 7.5 per cent of net demand and time liabilities effective May 19, 2001 was followed with another reduction in the LAF repo rates by 25 basis points to 6.5 per cent on May 28, 2001. Gilt prices surged across the spectrum as these measures seemed to have the desired effect upon the cost and availability of liquidity in the banking system.

Open Market Operations

5.51 Liquidity management in the short-term consisted of absorption of excess liquidity through repos and injection of liquidity through the reverse repos during tight liquidity conditions. Long-term management of liquidity was conducted through outright open market sales to absorb excess liquidity in conjunction with private placement/devolvement operations and outright open market purchases in tight liquidity conditions.

5.52 The Reserve Bank's initial subscriptions during the first quarter of 2000-01 amounted to Rs.7,961 crore with net open market sales of Rs.2,025 crore ([Table 5.9](#)). The open market activity picked up in July 2000. The liquidity conditions turned easy during the first half of July 2001. With foreign exchange market conditions turning uncertain and market appetite for gilts remaining weak, the Reserve Bank resorted to private placement of an 11-year paper on July 3, 2000 and subsequently conducted open market sales of shorter maturity gilts and Treasury Bills. As the monetary conditions were tightened, the Reserve Bank's open market purchase of 11.9 per cent Government Stock 2007 enabled stability of yields in the 4-8 year tenor. Subsequently, the Reserve Bank again undertook private placements, offloading them to the market on tap basis. The net OMO sales amounted to Rs.5,966 crore during July 2000 (up to the last reporting Friday of the month). PDs were offered a switch from long dated papers to Treasury Bills between August 24 and September 7, 2000.

Table 5.9: Net RBI Credit to the Centre, RBI's Initial Support to

Market Borrowing and Open Market Operations

Up to	(Rupees crore)								
	Net RBI Credit to Centre			RBI's initial subscription (cumulative)			Net OMO Sales (cumulative)		
	2001-02	2000-01	1999- 2000	2001-02	2000-01	1999- 2000	2001-02	2000-01	1999- 2000
1	2	3	4	5	6	7	8	9	10
April	5,067	13,507	9,615	12,000	0	12,000	60	36	7,021
May	20,774	11,077	7,847	12,000	515	16,000	5,083	36	12,003
June	19,523	14,393	8,205	21,000	7,961	21,275	10,929	2,025	18,598
July	11,849	17,479	8,913	21,000	20,801	24,547	16,020	7,991	18,817
August		8,481	3,146		26,916	24,547		7,126	24,590
September		8,168	3,510		31,603	25,192		8,460	25,750
October		24,359	9,887		31,978	29,267		8,527	23,686
November		14,154	7,935		31,978	29,267		20,063	27,206
December		3,041	7,572		32,978	29,267		21,764	27,206
January		6,360	3,217		32,978	29,267		21,851	27,276
February		6,932	-1,086		32,978	29,267		21,853	31,774
March		6,705	-5,587		32,978	29,267		21,892	30,861

Note : Data on fiscal year variation basis pertaining to March 31 for March and last reporting Friday for all other months.

5.53 The return to easy liquidity conditions on account of inflow of IMD proceeds prompted a step up of open market sales during November 2000. The net open market sales during this month amounted to Rs.11,536 crore (up to the last reporting Friday of the month) as against an average monthly sale of Rs.1,218 crore during April-October 2000 in order to mop up the excess liquidity. Furthermore, the Reserve Bank conducted an OMO auction of 11.19 per cent Government security 2005 from its own portfolio for a notified amount of Rs.3,500 crore for the first time since 1995 on November 16, 2000 to facilitate price discovery. The market response was, however, lukewarm with an off-take of Rs.1,200 crore at a cut-off yield of 10.66 per cent. There were no major OMO conducted during the rest of 2000-01. The net sales of Central Government dated securities and Treasury Bills under OMO amounted to Rs.21,892 crore during 2000-01 as against Rs.30,861 crore during 1999-2000.

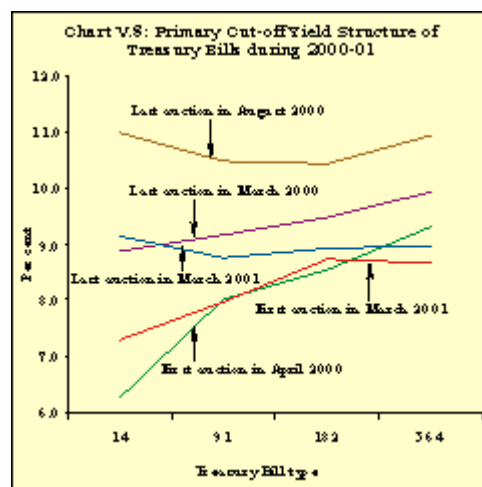
5.54 During the first quarter of 2001-02, low levels of advance tax collections as well as tax shortfall in the previous fiscal year necessitated not only direct borrowing by Government from the market but also private placement of its securities with the Reserve Bank. The Reserve Bank undertook private placement of three gilts aggregating to Rs.12,000 crore on April 20, 2001 whose monetary impact was neutralized partially through the subsequent open market sales to the tune of Rs.5,000 crore. Securities of Rs.5,000 crore privately placed on May 30, 2001 could only be partially off-loaded subsequently during the first week of June 2001. Securities of Rs.4,000 crore privately placed on June 20, 2001, could be completely sold off in the open

market sales conducted on the next day. During this quarter the Reserve Bank's initial subscriptions amounted to Rs.21,000 crore with the net open market sales aggregating to Rs.10,929 crore. With a view to provide short-term investment avenues the Reserve Bank conducted open market sales (on an auction basis) during July 2001. During 2001-02 (up to August 10), the Reserve Bank's initial subscriptions amounted to Rs 21, 679 crore, with net open market sales aggregating to Rs. 16,050 crore.

Treasury Bills

5.55 The easing of interest rate environment during 2000-01 was reflected in the yield movements of Treasury Bills. The structure of the implicit primary yield for minimum cut-off price of Treasury Bills flattened with the average cut-off yield of the 14-day Treasury Bills remaining unchanged at 8.23 per cent while those of 91-day, 182-day and 364-day Treasury Bills declining by 5 basis points, 25 basis points and 33 basis points, respectively, to 8.98 per cent, 9.43 per cent and 9.76 per cent during 2000-01 in relation to their respective average yields during 1999-2000. In contrast, the average yield levels for all the Treasury Bills had increased during 1999-2000 compared to the previous year.

5.56 The intra-year dynamics between events and yield movements of the Treasury Bills in the auctions were clearly in evidence during the 2000-01 ([Chart V.8](#)). The setting of easy liquidity and monetary conditions at the start of 2000-01 provided a conducive environment for successful auctions at lower implicit yields especially at the shorter ends and, therefore, the yield structure shifted down and became steeper between end-March 2000 and early-April 2000.



5.57 As the liquidity conditions started to tighten and the implicit cut-off yields began to firm up in June 2000, the Reserve Bank took substantial devolvement to contain the further firming up of yields. The liquidity conditions eased somewhat in early half of July 2000. From July 21, 2000 onwards, the cut-off yields rose in the primary Treasury Bill market. Despite increasing yields there was devolvement on the Reserve Bank in Treasury Bill auctions during August 2000. The yield levels of the Treasury Bills touched the peak for 2000-01 and the yield structure inverted as on end-August 2000 with the yield of 14-day Treasury Bills highest at 10.97 per cent, followed by that of 10.91 per cent for the 364-day, 10.47 per cent for 91-day and 10.42 per cent for 182-day Treasury Bills. The yields for 14-day, 91-day, 182-day and 364-day Treasury Bills

were higher by 471 basis points, 247 basis points, 189 basis points and 162 basis points, respectively, over their levels at the beginning of April 2000.

5.58 Market sentiment improved from September 2000 accompanied by a decline in the repo cut-off rates during October 2000. Price expectations turned positive with the external inflows of the IMDs. The cut-off yields came down reflecting the movement in the call money rates and the yields of 14-day Treasury Bills realigned at lower levels than the yields of the other Treasury Bills. After the easing of monetary conditions by February 2001 and early March 2001, the yields declined. The year ended with the hardening of interest rates. This was reflected in the upward shift of the yield structure by end-March 2001.

5.59 During 2001-02 so far (August 13) barring spurts in the second and third weeks of May as well as in the first week of June in respect of the yield of 91-day Treasury Bill, the cut off yields of both 91-day and 364-day Treasury Bills witnessed a gradual easing with softening of the call/notice money market after the cut in CRR on May 19, 2001. In July 2001, the yields of both these Treasury Bills showed fluctuation and thereafter declined during August 2001 (up to August 13).

14-day Treasury Bills

5.60 The total issues of 14-day auction Treasury Bills during 2000-01 amounted to Rs.10,480 crore ([Appendix Table V.7](#)), of which non-competitive bids aggregated Rs.5,280 crore and competitive bids Rs.4,436 crore representing 50 per cent and 42 per cent, respectively, of the total issues, with the balance being subscribed by the Reserve Bank. The notified amount was Rs.100 crore per auction. The outstanding at the year-end amounted to Rs.100 crore. During 2001-02 (up to May 14), the total issues aggregated to Rs.1,100 crore with 64 per cent being allocated to competitive bids and no devolvement on the Reserve Bank. The issues of 14-day Treasury Bills have been discontinued after May 14, 2001.

91-day Treasury Bills

5.61 A gross amount of Rs.7,255 crore was raised during 2000-01 through 91-day Treasury Bills as against Rs.8,155 crore in the previous year. Out of the gross amount, non-competitive bids aggregated Rs.2,055 crore accounting for about 28 per cent of the value of the total issues. The notified amount of each auction was kept unchanged at Rs.100 crore and the year-end outstanding amount was Rs.1,830 crore. The Reserve Bank's subscription to these Bills fell to 11.8 per cent (Rs.855 crore) of the total issues during 2000-01 from 18.7 per cent (Rs.1,523 crore) during the previous year. Reflecting market absorption of these Treasury Bills, the year-end outstanding Bills were held totally outside the Reserve Bank. As against this, in 1999-2000, the year-end holdings of the Reserve Bank at Rs.288 crore accounted for about 19 per cent of the outstanding bills (Rs.1,520 crore). During 2001-02 (up to August 13, 2001), the total issues of 91-day Treasury Bills amounted to Rs.6,665 crore. The notified amount in each auction has been increased from Rs.100 crore to Rs.250 crore since the issue dated May 18, 2001.

182-day Treasury Bills

5.62 A total notified amount of Rs.2,600 crore was raised through 182-day Treasury Bills during 2000-01 which was absorbed by competitive bids with devolvement on the Reserve Bank on only four occasions, in June 2000 and in August 2000, amounting to Rs.251 crore. The notified amount was kept at Rs.100 crore on each of the auctions. There were no non-competitive bids. The outstanding amount of Rs.1,300 crore as at end-March 2001 was held entirely outside the Reserve Bank. As against this, the Government had raised Rs.2,900 crore through these Treasury Bills during 1999-2000 with non-competitive bids that were accepted outside the notified amount on two occasions aggregating to Rs.600 crore. The total devolvement on the Reserve Bank on eight occasions was Rs.645 crore during 1999-2000. During 2001-02 (up to May 10, 2001) a notified amount of Rs.300 crore was fully absorbed by competitive bids with no devolvement on the Reserve Bank. Since May 14, 2001 the issues of 182-day Treasury Bills have been discontinued.

364-day Treasury Bills

5.63 With a view to offering increased amount of short-term paper to the market, the notified amount of these Treasury Bills for each auction was raised from Rs.500 crore to Rs.750 crore effective the auction on December 13, 2000 and the gross mobilisation through issuance of these Treasury Bills aggregated to Rs.15,000 crore as against Rs.13,000 crore in 1999-2000. The subscription by the Reserve Bank was Rs.1,827 crore or 12.2 per cent of the value of the total issues. During 2001-02 (up to August 10), gross amount of Rs.7,500 crore was raised by issue of these Treasury Bills without any devolvement on the Reserve Bank. The notified amount in each of the auctions continued to remain at Rs.750 crore.

Credit Markets

5.64 The movements in interest rates in term deposits and prime lending rates of scheduled commercial banks generally followed the three-phase pattern in alignment with the other segments of the financial market spectrum, *albeit* with some lags. On balance, term deposit rates across all maturities as well as the PLRs were lower as at end-March 2001 than the corresponding levels as at end-March 2000 for the three groups of scheduled commercial banks, *viz.*, PSBs, foreign banks and private banks.

5.65 The reduction of interest rate on saving deposits by 50 basis points to 4.0 per cent, effective April 1, 2000, lowered the cost of mobilisation of funds for the banking system. The interest rates on term deposits offered by the public sector banks (PSBs) eased from their levels in March 2000 with some time lag in June 2000. On the other hand, the response of lending rates was faster as the PLRs of the PSBs eased from their March 2000 levels in April 2000.

5.66 As the monetary conditions tightened during mid-May to August 2000, the rates for deposits of PSBs with maturities up to 1 year, between 1-3 years and beyond 3 years rose during August, October and September 2000, respectively. The PLRs of the PSBs also hardened in August 2000.

Table 5.10: Intra-Year Movements in Interest Rates

(Per cent)

Item	Interest Rates						
	1	2	3	4	5	6	7
1. Prime Lending Rate*	10.0-12.5 (July 2001)	10.0-13.0 (March 2001)	11.50-13.00 (February 2001)	11.75-13.00 (August 2000)	11.25-12.50 (April 2000)	12.00-13.50 (March 2000)	
2. Deposit Rates *							
i) Up to one year	4.25-8.0 (August 2001)	4.0-8.0 (December 2000)	4.0-8.25 (November 2000)	4.0-8.5 (August 2000)	4.0-8.0 (June 2000)	5.0-9.0 (March 2000)	
ii) 1-3 years		7.75-9.25 (August 2001)	8.0-9.5 (March 2001)	8.5-9.5 (October 2000)	8.0-10.0 (June 2000)	8.5-10.5 (March 2000)	
iii) Above 3 years	8.75-10.0 (June 2001)	9.0-10.0 (April 2001)	9.5-10.25 (December 2000)	9.5-10.5 (September 2000)	9.5-10.0 (June 2000)	9.75-11.0 (March 2000)	
3. Treasury Bills#							
i) 14-day	7.56 (May 11, 2001)	8.35 (end-March 2001)	8.35 (end-Dec. 2000)	7.56 (end-Sept. 2000)	8.09 (end-June 2000)	8.87 (end-March 2000)	
ii) 91-day	7.08 (end-July 2001)	8.75 (end-March 2001)	8.75 (end-Dec. 2000)	10.0 (end-Sept. 2000)	8.91 (end-June 2000)	9.17 (end-March 2000)	
iii) 182-day	8.33 (May 9, 2001)	8.92 (end-March 2001)	9.49 (end-Dec. 2000)	10.42 (end-Sept. 2000)	9.23 (end-June 2000)	9.47 (end-March 2000)	
iv) 364-day	7.38 (end-July 2001)	8.96 (end-March 2001)	9.99 (end-Dec. 2000)	10.91 (end-Sept. 2000)	9.24 (end-June 2000)	9.93 (end-March 2000)	
4. 10-year residual maturity Government of India Security YTM (Secondary Market)	9.30 (end-July 2001)	10.23 (end-March 2001)	10.16 (end-Feb. 2001)	11.64 (end-Sept. 2000)	10.37 (end-April 2000)	10.85 (end-March 2000)	

* Public Sector Banks

Treasury Bill yields as per auction dates

5.67 Surplus liquidity conditions and the easing of monetary conditions during the third phase enabled a softening of interest rates for deposits of PSBs with maturities up to 1 year, between 1-3 years and beyond 3 years in November 2000, March 2001 and December 2000, respectively. The PLR declined with a lag during the third phase *i.e.*, in February-March 2001 Deposit and lending rates declined further during the second quarter of 2001-02 ([Table 5.10](#)).

Mobilisation of Resources by Non-Bank Financial Sector

Financial Institutions

5.68 The aggregate amount of resources raised by the financial institutions¹ by way of term money, CDs, CPs², term deposits and inter-corporate deposits (ICDs) increased from Rs.7,789 crore as on March 24, 2000 to Rs.10,371 crore as on March 23, 2001. Among these instruments, the outstanding amount of ICDs increased from Rs.5,031 crore as on March 24, 2000 to Rs.5,768 crore as on March 23, 2001 and further increased to Rs. 5,937 crore as on July 13, 2001. Similarly, the outstanding amount of term deposits increased from Rs.677 crore as on March 24, 2000 to Rs.999 crore as on March 23, 2001 before declining a little to Rs. 987 crore. The outstanding amount of CDs also increased from Rs.1,689 crore as on March 24, 2000 to Rs.2,289 crore as on March 23, 2001. It, however, declined to Rs. 1,124 crore as on July 13, 2001 on improved liquidity conditions. The outstanding amount of term money borrowings by financial institutions increased substantially from Rs.392 crore as on March 24, 2000 to Rs.1,135 crore as on March 23, 2001 and further to Rs. 1,372 crore as on July 13, 2001. The outstanding amount of CPs, stood at Rs.99 crore as on March 23, 2001. It increased to Rs. 159.25 crore as on April 6, 2001 before declining to a range of Rs. 78-89 crore up to June 15, 2001. Thereafter, it increased to Rs. 217.25 crore as on July 13, 2001.

5.69 Interest rates offered on term money borrowings by financial institutions increased from 10.9 per cent in March 2000 to 11.0 per cent in March 2001 but declined to 10.25 per cent as on July 13, 2001. The interest rates on CDs issued by financial institutions hardened from a range of 9.50-9.65 per cent in March 2000 to 10.00-10.50 per cent in March 2001 but declined to 9.25-10.50 per cent as on July 13, 2001. Interest rates on term deposits moved in the range of 8.00-11.50 per cent during the period. The interest rates on CPs issued by FIs during the period prevailed in the range of 10.13-11.05 per cent during 2000-01 but declined to 8.45-9.20 per cent during the first quarter of 2001-02.

Non-Bank Financial Companies

5.70 Aggregate public deposits of non-banking financial companies (NBFCs), in terms of the survey data as reported by 979 NBFCs holding public deposits, stood at Rs. 19,426 crore as on March 31, 2000. Deposits with NBFCs as a proportion to that of commercial banks worked out to 2.4 per cent as at end-March 2000. The interest rate ranged between 12 per cent to 14 per cent for 43 per cent of the deposits, and 14 to 16 per cent for 36 per cent of the deposits mobilised by NBFCs (excluding RNBCs) for the reporting period as at end March 2000. According to the quarterly information pertaining to large NBFCs with a deposit base of Rs. 20 crore and above, the public deposits for 49 companies was Rs. 18,121 crore as at end-December 2000 as against Rs. 17,974 crore far as at end-September 2000. In response to an environment of easing interest rates, the ceiling rate of interest for public deposits held with NBFCs was reduced from 16 per cent to 14 per cent effective from April 1, 2001.

Housing Finance Market

5.71 Housing finance for the purpose of achievement of the stipulated allocation from incremental bank deposits includes direct housing finance to individuals or group of individuals including co-operative societies, indirect housing finance by way of term loans to housing finance intermediaries, State Housing Boards, etc. and investment in bonds and debentures of

NHB and HUDCO. For 2001-02, the scheduled commercial banks were advised to compute their respective share of housing finance allocation at 3 per cent of their incremental deposits as on the last reporting Friday of March 2001 over the corresponding figure of the last reporting Friday of March 2000. This would, however, be the minimum housing finance allocation for each bank.

EQUITY, DEBT AND TERM LENDING MARKETS

5.72 The capital market, in general, experienced depressed conditions during 2000-01. The primary market remained subdued. While the resource mobilisation from the public issues market declined, that from the private placement market witnessed a lower growth. Resource mobilisation by mutual funds also declined sharply, after a record mobilisation in 1999-2000. Activity in the secondary market remained generally bearish with share prices declining by more than 25 per cent during the year. During the first week of March 2001 the market was affected by considerable uncertainty arising from turbulence in stock exchanges and apprehensions of liquidity/payments problems. Timely measures were undertaken by the SEBI and the Reserve Bank to restore stability in the equity market and to prevent volatility spreading to other market segments. The market sentiment remained subdued in the following months reflecting, *inter alia*, ban on deferral products in the cash segment by SEBI and ban on sales/ repurchases of US-64 units by UTI and downgrading of India's rating by some international agencies.

Primary Market Developments

New Issues Market-Prospectus and Rights Issues

5.73 The primary market witnessed a sharp decline in resource mobilisation in the public issues market, despite a significant increase in the number of floatations. Aggregate resource mobilisation through prospectus and rights issues at Rs.6,421 crore was lower by 16.7 per cent as compared with Rs.7,704 crore mobilised during the previous year. Although resources raised by both public and private sectors declined, the decline was much sharper in the case of the former with PSUs and Government companies remaining absent from the public issues market for the third consecutive year. Resource mobilisation by banks and financial institutions in the public sector declined sharply by 42.3 per cent to Rs.1,472 crore (through 5 issues) from Rs.2,551 crore (through 4 issues) during 1999-2000 ([Table 5.11](#)).

5.74 During April-July 2001, resource mobilisation from the public issues market by the private sector at Rs.810 crore declined by 22.4 per cent from Rs.1,044 crore mobilised during April-July 2000. There was no issue from the public sector as was the case during the corresponding period of the previous year. The number of issues declined sharply to three during April-July 2001 from 64 during April-July 2000.

Table 5.11: Mobilisation of Resources from the Primary Market*

Item	(Amount in Rupees crore)	
	2000-01 P	1999-2000

	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5
A. Prospectus and Rights				
1. Non-Government Public Limited Companies (Private Sector) (a+b)	145	4,948.9 (-4.0)	79	5,153.3 (2.8)
a) Financial	18	2,504.0	13	2,803.6
b) Non-financial	127	2,444.9	66	2,349.7
2. Public Sector Undertakings (PSU Bonds)	-	-	-	-
3. Government Companies	-	-	-	-
4. Banks/Financial Institutions (in the Public Sector)	5	1,472.2 (-42.3)	4	2,551.0 (-41.4)
5. Sub Total (1+2+3+4)	150	6,421.1 (-16.7)	83	7,704.3 (-17.7)
B. Private Placement+				
6. Private Sector	387	24,398.8 (25.7)	367	19,403.5 (14.2)
a) Financial	214	13,862.9	176	10,875.2
b) Non-financial	173	10,535.9	191	8,528.3
7. Public Sector	200	43,101.2 (3.0)	211	41,855.5 (28.1)
a) Financial	109	25,440.3	119	17,981.3
b) Non-financial	91	17,661.1	92	23,874.2
8. Sub-Total (6+7)	587	67,500.2 (10.2)	578	61,259.0 (23.3)
C. Total (A+B)	737	73,921.3 (7.2)	661	68,963.3 (16.8)

* Including both debt and equity.

P Provisional.

- Nil/Negligible.

+ Estimates based on information gathered from arrangers, FIs and newspaper reports.

Note: Parenthetic figures represent percentage variations over the previous year.

5.75 During 2000-01, resources mobilised by non-Government public limited companies (private sector) at Rs.4,949 crore through 145 issues declined by 4.0 per cent as compared with Rs.5,153 crore mobilised through 79 issues during 1999-2000 ([Appendix Table V.8](#)). Although the share of mega issues (Rs.100 crore or above) in total resource mobilisation increased marginally to 69.1 per cent (Rs.3,419 crore from 13 mega-issues) from 66.8 per cent (Rs.3,443 crore from 12 issues) in the previous year, most of the issues during 2000-01 were of Rs.10 crore and less (mostly equity issues from the IT sector) in sharp contrast to the previous year when most of the issues were of Rs.10 crore and above. As a result, the average size of issues by the private sector companies registered a sharp decline to Rs.34 crore from Rs.65 crore in 1999-2000. During 2000-01, there were 80 equity issues by the IT sector accounting for Rs.664 crore or 13.4 per cent of total resource mobilisation as compared with 32 issues aggregating Rs.495 crore (9.6 per cent) during 1999-2000. The public issues market continued to be dominated by equity issues numbering 136 issues out of a total of 145 issues, the remaining being debt issues. However, in terms of resource mobilisation, the share of equity instruments was only 53.9 per

cent. The share of premium in the total amount mobilised by equity issues declined sharply to 47.5 per cent from 78.8 per cent.

Private Placement Market

5.76 The private placement market witnessed a relatively moderate growth during 2000-01 in comparison with the previous four years. Resources mobilised through private placements increased by 10.2 per cent to Rs.67,500 crore as compared with an increase of 23.3 per cent during 1999-2000. The shares of the public and private sectors stood at 63.9 per cent (Rs.43,101 crore) and 36.1 per cent (Rs.24,399 crore), respectively. The major all-India development financial institutions (IDBI, IFCI, ICICI, IIBI) were the largest mobilisers of funds as a group (Rs.14,124 crore) from the private placement market followed by the State level undertakings (Rs.11,972 crore).

Euro Issues

5.77 During 2000-01, resource mobilisation by Indian corporates through Euro issues by way of Foreign Currency Convertible Bonds (FCCBs), Global Depository Receipts (GDRs) and American Depository Receipts (ADRs) registered a significant increase. There were, in all, thirteen issues floated for an aggregate amount of Rs.4,197 crore during 2000-01 as compared with six issues aggregating Rs.3,487 crore in the previous year.

5.78 There were three Euro issues during April-July 2001 aggregating Rs.1,437 crore (US \$ 305 million) as compared with six issues aggregating Rs.2,625 crore (US \$ 593 million) during April-July 2000.

Mutual Funds

5.79 Net resource mobilisation by mutual funds during 2000-01 declined by 33.1 per cent to Rs.13,339 crore from Rs.19,953 crore during the previous year. Resource mobilisation by the private sector mutual funds declined by 43.1 per cent to Rs.8,481 crore and by 56.0 per cent to Rs.1,999 crore by the Unit Trust of India (UTI). However, resource mobilisation by the public sector mutual funds increased to Rs.2,860 crore as compared with Rs.513 crore during the previous year ([Table 5.12](#)).

5.80 According to the estimate made by SEBI, resource mobilisation by mutual funds during April-June 2001 at Rs.6,936 crore increased by 71.7 per cent from Rs.4,041 crore mobilised during the corresponding period of the previous financial year.

Disinvestment in Public Sector Enterprises

5.81 The disinvestment programme of the Government was muted with the actual proceeds from disinvestments falling far below the targeted amount. As against a target of Rs.10,000 crore during 2000-01, proceeds from disinvestments aggregated Rs.1,869 crore. In the Union Budget for 2001-02, the target for disinvestment has been increased to Rs.12,000 crore. The Government has set up a new Department of Disinvestment (*Vinivesh Vibhag*) after the tenure of the

Disinvestment Commission ended in November 1999, to establish a systemic policy approach to disinvestment and to give fresh impetus to this programme which will increasingly emphasise strategic sales of identified PSUs. The Government reconstituted the Disinvestment Commission in July 2001 with Dr. R.H. Patil as its new Chairman.

Table 5.12: Net Mobilisation of Resources by Mutual Funds#

Item	2000-01 P		(Amount in Rupees crore) 1999-2000 P	
	No. of Schemes	Amount	No. of Schemes	Amount
1	2	3	4	5
1 . Unit Trust of India @	..	1,999.0	..	4,548.0
2 . Public Sector Mutual Funds*	65	2,859.5	44	513.0
3 . Private Sector Mutual Funds	158	8,480.6	121	14,892.2
Total (1 to 3)	223	13,339.1	165	19,953.2

Net of repurchases/redemptions. P Provisional. .. Not available.

@ Net sales value with premium under all domestic schemes, includes re-investment sales.

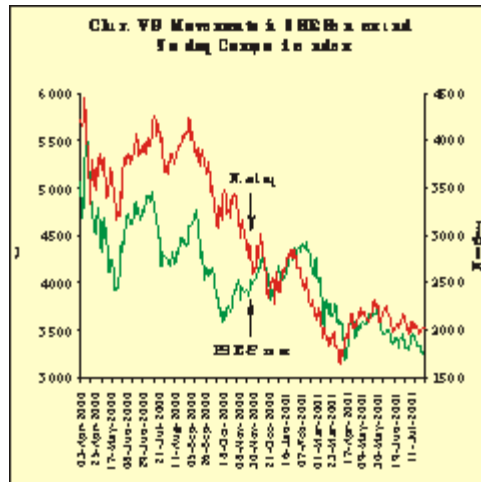
* Sponsored by banks and FIs in the public sector.

Source: UTI and respective Mutual Funds.

Secondary Market Developments

5.82 The stock market remained generally subdued during 2000-01 reflecting large sell-offs in global equity markets, particularly, in new economy stocks on the Nasdaq, a slowdown in FII inflows, deceleration in industrial production and increase in international oil prices.

5.83 The market began the year on a subdued note in April 2000 and tended to move downwards, in general, as the year progressed. It declined sharply between April-May 2000. However, the equity prices recovered somewhat in June 2000 despite a sharp decline in net FII investment. Market sentiment was considerably influenced by the downturn in international equity markets ([Chart V.9](#)). As a consequence, the recovery could not be sustained and equity prices declined sharply in July 2000. The downtrend continued till October 2000 with pressures in other segments of the financial markets dampening the market sentiment. A fragile recovery in November 2000 could not be sustained as the stock prices declined again in the following month. The decline was mainly on account of substantial net sales by the FIIs during the month. The substantial decline in Nasdaq index during the second half of the month and weakness in Asian markets also affected the market sentiment adversely. Share prices registered modest gains in January 2001 mainly due to large FII inflows and expectations of strong earnings growth of the new economy companies in the third quarter.



5.84 The market responded positively to the Union Budget for 2001-02 with the BSE Sensex recording an 11-month peak for a single day. In the first week of March 2001, however, the market was adversely affected by considerable uncertainty leading to problems in certain stock exchanges as well as liquidity/solvency difficulties in some co-operative banks, which in turn, also affected some commercial banks. Timely policy actions were undertaken including banning of naked short sales, raising margin requirements, facilitating orderly settlement in stock exchanges, ensuring adequate liquidity in other market segments and specific measures to minimise the spread of contagion.

5.85 In May 2001, SEBI announced significant changes in the capital market in keeping with the international practices and operations in the securities markets. These measures included: (a) banning of all deferral products in the cash segment including badla, (b) bringing in 414 scrips accounting for 95 per cent of trading volumes within the ambit of rolling settlements system from July 2, 2001, (c) allowing index based and individual stock based options, (d) introduction of uniform Monday-to-Friday settlement cycle across all stock exchanges for all scrips not in the rolling mode, (e) a code of conduct and a preventive framework against insider trading, (f) removal of price bands for all stocks in the rolling mode from July 2, 2001 and for the entire market from January 2, 2002, (g) introduction of a market wide circuit breaker system to be applicable at three stages of the index movements, (h) shifting the margining system from net to gross basis (sales and purchases) with effect from September 3, 2001, (i) introduction of 99 per cent value at risk (VaR)-based margin system for all scrips in the compulsory rolling settlement with effect from July 2, 2001.

5.86 The BSE Sensitive Index (Base: 1978-79=100), which stood at 5001.28 as at end-March 2000 declined to touch a low of 3540.65 as on March 13, 2001. Although the Index recovered to close at 3604.38 as at end-March 2001, it still registered a decline of 1396.90 points (27.93 per cent) over the end-March 2000 level ([Table 5.13](#)). The monthly average of BSE Sensitive Index, which stood at 5261.77 in March 2000, declined to touch 3807.64 by March 2001 ([Appendix Table V.9](#)), registering a decline of 1454.13 points (27.64 per cent).

5.87 The continued weak trend witnessed in April 2001 was reinforced with the profit-warning for the next year issued by various IT companies. The BSE Sensex touched a low of 3183.77

points on April 12, 2001 in the current financial year. However, the share prices increased in May 2001 particularly on the back of net FII investment, which remained strong despite the reduction in India's weightage in the MSCI Emerging Market Free Index. The BSE Sensex closed the first quarter of 2001-02 at 3456.78 as on June 29, 2001 and declined further to close at 3329.28 on July 31, 2001. The trend in stock market remained subdued in August 2001 so far.

5.88 The volatility in the BSE Sensex, as measured by the co-efficient of variation, declined to 8.8 per cent in 2000-01 from 13.2 per cent in 1999-2000. The dispersion (the range between closing high and closing low) at 2001 points in 2000-01 was also lower than that of 2,689 points recorded during 1999-2000 ([Appendix Table V.9](#)).

5.89 The total turnover of BSE at Rs.10,00,031 crore during 2000-01 registered an increase of 46.0 per cent as compared with an increase of 119.6 per cent in the previous year. The market capitalisation of listed scrips at BSE declined sharply by 37.4 per cent to Rs.5,71,553 crore as at end-March 2001 in contrast to an increase of 68.1 per cent during 1999-2000. The average price-earning ratio based on 30 scrips included in the Sensex increased to 23.9 during 2000-01 from 19.8 in the previous year ([Table 5.13](#)). The average price-book value ratio based on the 30 Sensex scrips increased to 3.6 from 3.4 in 2000-01. The annualised yield based on the 30 scrips included in the Sensex, increased marginally from 1.2 per cent to 1.3 per cent in 2000-01.

5.90 The total turnover in the capital market segment of the National Stock Exchange (NSE) at Rs.13,39,511 crore registered an increase of 59.6 per cent during 2000-01 as against an increase of 102.4 per cent in the previous year. As at end-March 2001, the number of companies listed at the NSE stood at 785 with market capitalisation of Rs.5,43,575 crore as against 673 listed companies with market capitalisation of Rs.8,50,880 crore as at end-March 2000 ([Table 5.14](#)). The National Securities Clearing Corporation Limited (NSCCL), which handles the clearing and settlement operations of NSE, guarantees settlement on behalf of its clearing members through its Settlement Guarantee Fund (SGF).

5.91 The NSE and NSCCL have launched the Mutual Fund Services System (MFSS) to effectively cater to the individual investors buying and redeeming of mutual fund scheme units, which is presently being undertaken manually. NSE commenced trading in Nifty Index Futures from June 12, 2000. The futures contract has a maximum of 3-month expiration cycle.

Table 5.13: Important Indicators of the Stock Exchange, Mumbai

Indicators	2000-01	1999-2000	Percentage Variations	
			2000-01	1999-2000
1	2	3	4	5
1. BSE Sensex				
i) Average	4269.69	4658.63	-8.3	41.4
ii) End of the year	3604.38	5001.28	-27.9	33.7

2. Price Earning Ratio@	23.9	19.8	21.0	53.7
3. Price-Book Value Ratio@	3.6	3.4	5.9	50.4
4. Yield @ (per cent per annum)	1.3	1.2	5.7	-32.4
5. Listed Companies	5,955	5,889	1.1	0.7
6. Turnover (Rs.crore)	10,00,031	6,85,028	46.0	119.6
7. Market Capitalisation as at end-March (Rs. crore)	5,71,553	9,12,842	-37.4	68.1

@ Based on 30 scrips included in the Sensex and are averages for the year.

Source : The Stock Exchange, Mumbai.

**Table 5.14: Important Indicators of the National Stock Exchange
(Capital Market Segment)**

Indicators	2000-01	1999-2000	Percentage Variations	
			2000-01	1999-2000
1	2	3	4	5
1. S&P CNX Nifty				
i) Average	1334.76	1368.62	-2.5	43.3
ii) End of the year	1148.20	1528.45	-24.9	41.8
2. Turnover (Rupees crore)	13,39,511	8,39,051	59.6	102.4
3. Listed Companies*				
i) Number	785	673	16.6	4.3
ii) Market Capitalisation (Rupees crore)	5,43,575	8,50,880	-36.1	153.8
4. Permitted Equities*				
i) Number	320	479	-32.2	-21.4
ii) Market Capitalisation* (Rupees crore)	59,165	1,09,457	-45.9	-29.8

* As at end of the year.

Source: National Stock Exchange of India Ltd.

Foreign Institutional Investors (FIIs)

5.92 Net investment³ by FIIs continued to remain buoyant during 2000-01 at Rs.9,669 crore even as it was marginally lower than that of Rs.9,816 crore during 1999-2000. The monthly net FII investment was positive during January-April, May, August, October and November 2000 and negative during June, July September and December 2000. FII investment was also positive in January, February and March 2001. The monthly net FII investment touched a high of Rs.2,438 crore during April 2000. Cumulative investments by FIIs which stood at Rs.39,133

crore as at end-March 2000 increased to Rs.48,802 crore as at end-March 2001. The number of FIIs registered with SEBI which stood at 527 as at end-March 2001, came down to 505 as at end-July 2001.

Banks' Investments in Capital Market

5.93 During 2000-01, banks' direct investment in the capital market instruments declined sharply. Accommodation provided by scheduled commercial banks to the commercial sector through investments in bonds/ debentures/preference shares and equity shares (including loans to corporates against shares to meet promoters' contribution) declined to Rs.10,166 crore during 2000-01 from Rs.11,738 crore during the previous year. Banks' investments in bonds/debentures and preference shares at Rs.9,818 crore, formed the major portion of their investment in capital market instruments.

5.94 The guidelines relating to banks' financing of equities and investment in shares issued in November 2000 were revised based on the feedback received from banks and market participants on the recommendations made by the Technical Committee of the Reserve Bank and SEBI. In terms of the revised guidelines issued in May 2001, banks' overall exposure to the capital market in all forms (fund and non-fund based) was stipulated at 5.0 per cent of outstanding advances (including CPs) as on March 31 of the previous year as against the earlier stipulation whereby the ceiling of 5.0 per cent of outstanding credit was applicable only for their investment in shares, convertible debentures and units of MFs (other than debt funds), while there was no quantitative restriction on other forms of exposure.

Progress of Dematerialisation

5.95 In order to expedite the process of dematerialisation, the SEBI introduced an element of compulsion whereby settlement of trade in certain select scrips was required to be effected compulsorily in demat form. SEBI has been expanding the compulsory demat list from time to time and as on June 30, 2001 there were 2,335 scrips which needed to be settled only in the dematerialised form. In order to avoid creation of securities in physical form, it has recently directed that securities issued through initial public offering (IPO) can only be settled in dematerialised form.

Debt Market

Wholesale Debt Market - NSE

5.96 During 2000-01, the number of securities listed on the wholesale debt market (WDM) segment of NSE increased to 937 from 843 in 1999-2000 while the number of active securities listed and available for trading in the segment increased to 1,534 from 1,412 during the same period. The volume of trading increased by 40.9 per cent to Rs.4,28,582 crore in 2000-01 from Rs.3,04,216 crore in 1999-2000, with the highest volume recorded in January 2001 at Rs.66,400 crore. The trend in the trading pattern during 2000-01 remained almost the same as in the previous year with Government Securities and Treasury Bills accounting for the bulk of the trading volume at over 96 per cent of the total trade. However, in the current financial year so

far, as a fall-out of the subdued stock market conditions, increased activity by banks, mutual funds and insurance companies was witnessed in the debt segment. The volume of corporate debt traded on the WDM Segment of NSE which was merely Rs. 10.73 crore in April 2001 , increased to 101.46 crore in May and Rs.118.33 crore in June 2001. The growth rate slowed down somewhat in July 2001 as the volume declined to Rs.111.33 crore. The volume of corporate debentures traded increased from Rs.498 crore in 1999-2000 to Rs.689 crore in 2000-01. Banks, brokers and PDs accounted for 96 per cent of the total volume, of which Indian banks accounted for 33 per cent of the trade in 2000-01.

Term Lending Institutions

5.97 During 2000-01, financial assistance sanctioned and disbursed by all-India financial institutions (AIFIs) at Rs.1,17,667 crore and Rs.72,528 crore, respectively, registered lower growth of 16.2 per cent and 7.3 per cent, respectively, as compared with 23.6 per cent and 20.1 per cent during 1999-2000 ([Appendix Table V.10](#)). During April-June 2001, sanctions and disbursements declined by 23.2 per cent and 0.3 per cent, respectively, as compared with sharp increases of 33.3 per cent and 47.3 per cent, respectively, during April-June 2000.

¹ The data pertain to ten all-India financial institutions, viz., IDBI, ICICI, IFCI, NABARD, Exim Bank, NHB, SIDBI, TFCI, IIBI and IDFC.

² The all-India financial institutions, with effect from October 10, 2000, have been permitted to issue CPs within the ceiling of their overall umbrella limit.

³ Data on net investments by FIIs differ from data presented in Section VI which relate to net inflows.

VI - External Sector

[Balance of Payments](#)

[Foreign Exchange Reserves](#)

[External Debt](#)

[Exchange Rate Developments](#)

[International Developments](#)

6.1 The external sector recorded a distinct improvement in 2000-01. There was an accretion to the foreign exchange reserves of the order of US \$ 4.2 billion with the level of the reserves crossing US \$ 42 billion by end-March 2001, equivalent of around 9 months of imports. The current account deficit (CAD) narrowed over the year, reflecting robust merchandise export performance and subdued import demand. Another noteworthy aspect was the decline in the external debt in terms of its ratio to GDP and also in terms of the ratio of short-term debt to the level of foreign exchange reserves. The pressures on the balance of payments (BoP) in the first half of 2000-01 on account of the hardening of international oil prices, the massive downturn in international equity prices and successive increases in interest rates in the US economy and Europe eased with the mobilisation of funds under the India Millennium Deposits (IMDs) which brought about a turnaround in the BoP in the second half of the year. The exchange rate of the rupee remained broadly stable, except for a brief period during May-August 2000. During 2000-01, it depreciated by about 5.1 per cent against the US dollar but strengthened against other major currencies.

BALANCE OF PAYMENTS

6.2 The overall balance recorded a surplus for the fifth year in succession taking the level of foreign exchange reserves to US \$ 42.3 billion by end-March 2001. The merchandise trade deficit, on BoP basis, declined to US \$ 14.4 billion during 2000-01 from US \$ 17.8 billion in the previous year. Export growth was higher at 19.6 per cent as against 9.5 per cent in 1999-2000 with buoyancy in all major categories of exports. Import growth, however, decelerated to 7.0 per cent from 16.5 per cent in 1999-2000, despite the increase in imports of petroleum, oil and lubricants (POL) by 24.1 per cent. The invisible account continued to provide support to the balance of payments with a net surplus of US \$ 11.8 billion in 2000-01. Reflecting the improvement in the performance of exports, the CAD declined to 0.5 per cent of GDP in 2000-01 from 1.0 per cent in 1999-2000. Net capital flows were lower at US \$ 9.0 billion as against US \$ 10.4 billion recorded in 1999-2000.

6.3 Key monitoring indicators of the BoP point to a combination of improvement in fundamentals and the impact of cyclical factors. Notwithstanding a difficult international environment characterised by a sharp slowdown of the US economy, the growth in current receipts was robust, spread across both merchandise and invisibles. This was reflected in upward movements in the export/GDP ratio, the invisible receipts/GDP ratio and the current receipts/GDP ratio. The ratio of invisible payments to GDP increased moderately while that of imports to GDP remained almost unchanged. As a result, current receipts financed around 96 per cent of current payments in 2000-01, recording an improvement over the previous year. The decline in the CAD/ GDP ratio was thus primarily achieved on the strength of current receipts

which grew by 17.1 per cent during 2000-01. Information on exports in terms of physical performance is not yet available; however, the decline in international prices of commodities and manufactures, excluding POL, as well as erosion in the terms of trade (ToT) facing developing countries in Asia reported in the World Economic Outlook (May 2001) of the International Monetary Fund (IMF) imply that the merchandise export growth recorded during 2000-01 might have been mainly driven by higher volume.

6.4 Net capital flows were lower with inflows under IMDs making up for the decline in external assistance and normal external commercial borrowings. The share of equity flows in net capital flows increased to 56.6 per cent in 2000-01 as compared with 49.7 in 1999-2000. The debt/GDP ratio declined to 21.4 per cent which is well below the conventional threshold of moderate indebtedness. The adequacy of reserves in terms of current and contractual obligations improved to around 9 months of imports/38 months of debt service payments/12 times the level of short-term debt ([Table 6.1](#) and [Appendix Table VI.1](#)).

Table 6.1 : India's Balance of Payments : Key Indicators

Variable	(US \$ million)				
	2000-01	1999-2000	1998-99	1997-98	1990-91
1	2	3	4	5	6
i) Trade Balance	-14,370	-17,841	-13,246	-15,507	-9,438
ii) Invisibles, net	11,791	13,143	9,208	10,007	-242
iii) Current Account Balance	-2,579	-4,698	-4,038	-5,500	-9,680
iv) Capital Account	9,023	10,444	8,435	9,844	7,056
v) Overall Balance # (iii+iv)	5,856	6,402	4,222	4,511	-2,492
vi) Reserves and Monetary Gold (Increase - , Decrease +)	-5,830	-6,142	-3,829	-3,893	1,278
Indicator	(Per cent)				
1. Trade					
i) Exports / GDP	9.4	8.3	8.2	8.7	5.8
ii) Imports / GDP	12.4	12.3	11.4	12.5	8.8
iii) Income Terms of Trade (Base: 1978-79=100)	..	..	598.5	562.8	212.2
Annual Growth Rate	..	..	6.3	8.3	0.2
iv) Exports Volume Growth	..	..	3.4	-6.3	11.0
2. Invisibles Account					
i) Invisible Receipts / GDP	7.2	6.7	6.2	5.7	2.4
ii) Invisible Payments / GDP	4.8	3.8	4.0	3.2	2.4
iii) Invisibles (net) / GDP	2.5	2.9	2.2	2.5	-0.1
3. Current Account					
i) Current Receipts @ / GDP	16.6	14.9	14.3	14.3	8.0
ii) Current Receipts Growth @	17.1	12.9	2.1	6.2	6.6
iii) Current Receipts @ / Current Payments	96.4	93.0	93.2	90.9	71.5
iv) CAD / GDP	-0.5	-1.0	-1.0	-1.4	-3.1
4. Capital Account					
i) Foreign Investment / GDP	1.1	1.1	0.6	1.3	0.03
ii) Foreign Investment / Exports	11.4	13.8	7.0	15.1	0.6
5. Others					
i) Debt-GDP Ratio	21.4	21.9	23.4	24.3	28.7
ii) Debt Service Ratio	17.1	16.2	17.8	18.9	35.3
iii) Liability Service Ratio	18.3	17.0	18.9	19.9	35.6
iv) Import Cover of Reserves (in months)	8.6	8.2	8.2	6.9	2.5

@ Excluding official transfers.

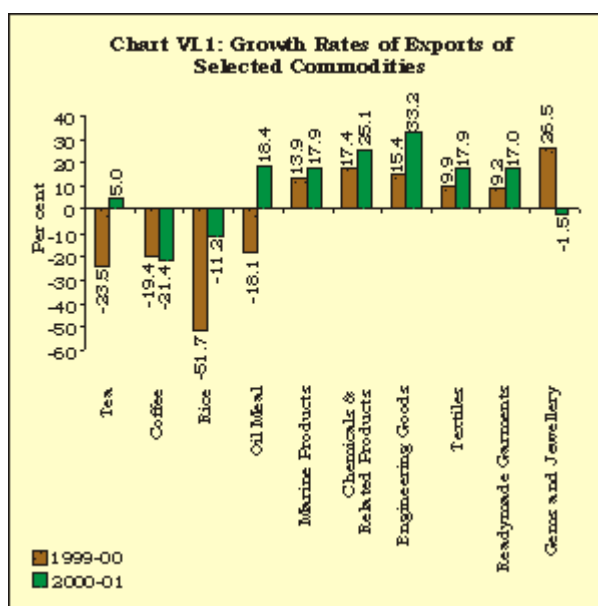
.. Not available.

Includes errors and omissions.

Merchandise Trade (as per DGCI&S Data)

6.5 According to the provisional data released by the Directorate General of Commercial Intelligence and Statistics (DGCI&S), exports at US \$ 44.3 billion during 2000-01 recorded a growth of 20.4 per cent, surpassing the target of 18 per cent set by the Union Ministry of Commerce for the year and substantially exceeding the growth of 10.8 per cent attained during 1999-2000. On the other hand, imports at US \$ 49.6 billion during 2000-01 remained broadly unchanged from those in the preceding year. Accordingly, the trade deficit declined substantially to US \$ 5.3 billion during 2000-01 from US \$ 12.9 billion during 1999-2000 ([Appendix Table VI.2](#)).

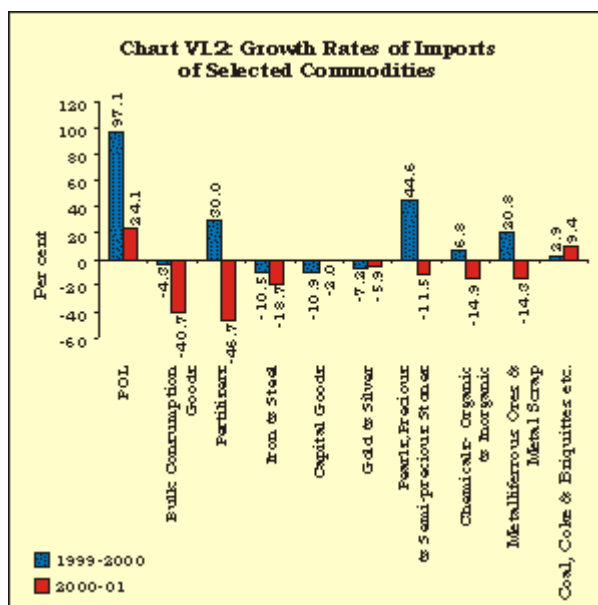
6.6 Commodity-wise data on India's foreign trade for 2000-01 showed a general buoyancy in exports in respect of all the major categories of exports, with the exception of gems and jewellery, handicrafts and carpets. The overall growth in manufactured exports at 16.1 per cent during 2000-01 was of a higher order than that in the previous year. The major categories of manufactured exports which recorded noteworthy improvement in performance during 2000-01 included engineering goods (33.2 per cent), chemical and related products (25.1 per cent), leather and leather manufactures (22.7 per cent) and textiles (17.9 per cent). Exports of gems and jewellery declined by 1.5 per cent during 2000-01 as against a growth of 26.5 per cent during 1999-2000, mainly on account of depressed demand conditions in major markets *viz.*, USA, Hong Kong, Japan and Israel. The exports of agriculture and allied products recorded a growth rate of 7.0 per cent during 2000-01 as compared with a decline of 7.1 per cent during 1999-2000. Within this group, the export performance of tea, oil meal and marine products improved while that of coffee and rice continued to decline ([Appendix Table VI.3](#) and [Chart VI.1](#)).



6.7 The destination profile of exports shows improvement in the growth of India's exports to most of the major countries/groups. Exports to the developing countries in Asia posted an impressive growth of 21.8 per cent during 2000-01, up from 19.9 per cent during 1999-2000. Exports to the countries in the OPEC group also recorded a robust growth of 23.8 per cent during 2000-01 as compared with 9.6 per cent during the previous year. Among the advanced countries, exports to France, Germany, Italy, Japan and the UK showed improved growth during 2000-01 *vis-a-vis* the previous year. The growth in exports to North America, however, decelerated to 10.7 per cent during 2000-01 from 17.0 per cent during 1999-2000. Exports to the countries in Eastern Europe decelerated sharply to 1.1 per cent during 2000-01 as against the increase of 22.8 per cent during 1999-2000.

6.8 The decline in overall imports (0.2 per cent during 2000-01 as against an increase of 17.3 per cent during 1999-2000), despite an increase in POL imports (24.1 per cent), was essentially on account of the decline in non-oil imports reflecting weak domestic demand. The increase in POL imports was primarily due to the hardening of international crude oil prices. Non-POL imports declined by 8.5 per cent during 2000-01 as compared with the increase of 3.2 per cent during 1999-2000, notwithstanding the removal of quantitative restrictions on the imports of a large number of items. Commodity-wise data for 2000-01 show sharp declines in the imports of industrial raw materials/intermediate goods such as metalliferous ores and metal scrap (14.3 per cent), iron and steel (18.7 per cent), organic and inorganic chemicals (14.9 per cent) and artificial resins and plastic material (23.0 per cent), clearly bearing out the slackening in domestic demand. Imports of capital goods declined by 2.0 per cent during 2000-01 as against a large decline of 10.9 per cent in 1999-2000. Within this group, the import of machine tools, transport equipment and project goods declined by 16.5 per cent, 43.4 per cent and 35.6 per cent, respectively, during 2000-01. The imports of pearls, precious and semi-precious stones declined by 11.5 per cent during 2000-01 in contrast with the increase of 44.6 per cent in 1999-2000, broadly in line with the decline in exports of gems and jewellery. With improved domestic production, the import of fertilizers dropped by 46.7 per cent during 2000-01 as against the increase of 30.0 per cent during 1999-2000. The imports of gold and silver (excluding gold imports through passenger baggage) declined by 5.9 per cent during 2000-01 in continuation of the trend observed during 1999-2000 ([Appendix Table VI.4](#) and [Chart VI.2](#)).

6.9 As per the provisional data of the DGCI&S, there was a deceleration in exports and decline in imports during the first quarter of 2001-02. Exports at US \$10.5 billion recorded a low growth of 1.7 per cent as compared with 26.6 per cent during the corresponding period of the previous year. Imports during the first quarter at US \$12.5 billion showed a decline of 2.4 per cent as against the growth of 19.6 per cent during the corresponding period of the previous year. Both POL and non-POL imports declined by 1.0 per cent and 3.0 per cent, respectively, during April-June 2001. The trade deficit during April-June 2001 at US \$1.9 billion was lower than that of US \$2.4 billion during the corresponding period of the previous year.



Invisibles

6.10 The net surplus on the invisibles account was lower at US \$ 11.8 billion in 2000-01 than that of US \$ 13.1 billion in the previous year mainly on account of a decline of US \$ 1.6 billion in net non-factor service earnings ([Appendix Table VI.5](#)). The decline in net non-factor services was spread over travel, transportation and miscellaneous accounts. Travel (net), in particular, suffered a sharp decline of US \$ 0.6 billion in 2000-01 reflecting a higher outgo coupled with subdued tourist arrivals in India. On the other hand, net transfers continued to be buoyant, underpinned by the continuing resilience in private transfers which reached a level of US \$ 12.8 billion in 2000-01.

6.11 Software exports recorded a significant growth of 57 per cent on the top of an increase of 53 per cent in the preceding year to reach US \$ 6.3 billion in 2000-01. The slowdown in the US economy and the decline in technology-laden international stock exchanges entailed a period of consolidation for the Indian software exporting companies and a restructuring of export strategies.

6.12 Non-factor service payments recorded a sharp rise of US \$ 4.7 billion in 2000-01 under miscellaneous (US \$ 3.2 billion), travel (US \$ 0.7 billion) and transportation (US \$ 0.8 billion) accounts. The impact of current account liberalisation is being reflected in rising outgoes in the form of technology related payments, imports of financial services, management fees payments for office expenses, advertising and other business and commercial services.

Current Account

6.13 Notwithstanding a sharp rise of US \$ 3 billion in the POL import bill, the robust growth in merchandise exports, supported by the continuing buoyancy in private transfers and software exports, contained the current account deficit at US \$ 2,579 million (0.5 per cent of GDP) during 2000-01 as compared with US \$ 4,698 million (1.0 per cent of GDP) in 1999-2000.

6.14 The current account deficit has averaged 1.3 per cent of GDP over the 1990s in response to concerted efforts to bring strength and stability to the external sector in the wake of the crisis of 1990-91 when the current account deficit turned unsustainable at 3.1 per cent of GDP. The consolidation of the current account deficit in the ensuing period was accompanied by structural shifts in the financing of the current account gap with the growing dominance of private capital flows, mainly equity.

Capital Account

6.15 The uncertainty characterising international financial markets had a significant bearing on the developments in the capital account as reflected in the quantum and composition of the capital flows during 2000-01. The net capital flows were lower at US \$ 9.0 billion than the previous year's level of US \$ 10.4 billion. Inflows under external assistance and normal commercial borrowings remained subdued. External commercial borrowing in the form of trade credits, bonds, syndicated loans and other instruments showed a sharp decline which was more than compensated by the mobilisation of funds through the launching of IMDs. The proportion of relatively stable flows (i.e., all capital flows excluding portfolio flows and short-term trade credit) to total capital flows increased marginally to 68.2 per cent in 2000-01 from 67.4 per cent in 1999-2000 ([Appendix Table VI.6](#)). The recent developments in the capital account have necessitated a more active management of capital flows and the pace and sequencing of capital account liberalisation has to be constantly assessed.

Foreign Investment

6.16 Foreign investment flows showed a marginal decline from US \$ 5,181 million in 1999-2000 to US \$ 5,099 million in 2000-01 reflecting subdued industrial activity and a weak stock market performance. This decline was mainly due to a reduction in portfolio investment from US \$ 3,026 million during 1999-2000 to US \$ 2,760 million during 2000-01. Foreign institutional investment (FII) inflows declined to US \$ 1,847 million during 2000-01 from US \$ 2,135 million during 1999-2000. The amount raised through the GDR/ADR route at US \$ 831 million was, however, higher than that in the previous year (US \$ 768 million). There was also a marginal increase in foreign direct investment (FDI) from US \$ 2,155 million during 1999-2000 to US \$ 2,339 million during 2000-01 ([Table 6.2](#)). During the first quarter of 2001-02, foreign investment flows were higher at US \$ 1,551 million than in the corresponding period of 2000-01 (US \$ 1,451 million) as portfolio investment flows increased from US \$ 789 million during April-June 2000 to US \$ 943 million during April-June 2001. Foreign direct investment inflows at US \$ 608 million were, however, lower than those of US \$ 662 million in the corresponding period of the previous year.

6.17 The source and direction of foreign direct investment flows remained, by and large, unchanged during the 1990s. Companies registered in Mauritius and the US were the principal source of foreign direct investment in India during 2000-01 followed by Japan and Germany ([Table 6.3](#)). The bulk of direct foreign investment was channeled into 'computers (hardware and software)' 'engineering industries', 'services', 'electronics and electrical equipment', 'chemicals and allied products' and 'food and dairy products' ([Table 6.4](#)).

Table 6.2 : Foreign Investment Flows by Category

Item	(US \$ million)		
	2000-01P	1999-00	1998-99
1	2	3	4
A. Direct Investment	2,339	2,155	2,462
a) Government (SIA/FIPB)	1,456	1,410	1,821
b) RBI	454	171	179
c) NRI	67	84	62
d) Acquisition of shares *	362	490	400
B. Portfolio Investment	2,760	3,026	-61
a) GDRs/ADRs #	831	768	270
b) FIIs @	1,847@@	2,135	-390
c) Off-shore funds and others	82	123	59
Total (A+B)	5,099	5,181	2,401

P Provisional.

* Relates to acquisition of shares of Indian companies by non-residents under Section 5 of FEMA, 1999.

Represents the amount raised by Indian corporates through Global Depository Receipts (GDRs)/ American Depository Receipts (ADRs).

@ Represents net inflow of funds by Foreign Institutional Investors (FIIs).

@@ The revisions were brought about as a result of reporting of revised data by some designated banks due to re-classification.

Note : Data on foreign investment presented here represent gross inflows into the country and may not tally with the data presented in other tables which include direct imports against foreign investment, Indian investment abroad as well as disinvestments. They also differ from data relating to net investment in stock exchanges by

FII in Section V.

Non-Resident Deposits

6.18 The outstanding balances under nonresident deposit schemes continued their increasing trend, reflecting the overall confidence of non-resident Indians in the economy. Net inflows were higher at US \$ 2,317 million in 2000-01 as against US \$ 1,540 million in the previous year ([Table 6.5](#)).

Table 6.3 : Foreign Investment - Country-wise Inflows*

Source	(Rupees crore)			(US \$ million)		
	2000-01P	1999-2000	1998-99	2000-01P	1999-2000	1998-99
1	2	3	4	5	6	7
Germany	516	135	478	113	31	114
Italy	131	548	486	29	125	116
Japan	711	622	989	156	142	235
Mauritius	3,853	2,187	2,482	843	501	590
Netherlands	348	358	224	76	82	53
South Korea	109	35	359	24	8	85
USA	1,464	1,551	1,905	320	355	453
Others	1,595	1,468	1,491	349	337	354
Total	8,727	6,904	8,414	1,910	1,581	2,000

P Provisional.

* Exclude inflows under the NRI direct investment route through the Reserve Bank and inflows due to acquisition of shares under Section 5 of FEMA, 1999.

Table 6.4 : Foreign Investment - Industry-wise Inflows*

Sectors	(Rupees crore)			(US \$ million)		
	2000-01P	1999-2000	1998-99	2000-01P	1999-2000	1998-99
1	2	3	4	5	6	7
Chemical and allied products	626	523	1,580	137	120	376
Computers	1,397	433	447	306	99	106
Engineering	1,246	1,423	1,800	273	326	428
Electronics and electrical equipment	974	750	960	213	172	228
Finance	184	86	778	40	20	185
Food and dairy products	341	529	78	75	121	19
Pharmaceuticals	284	236	120	62	54	28
Services	1,031	506	1,550	226	116	368

Others	2,644	2,418	1,103	578	553	262
Total	8,727	6,904	8,414	1,910	1,581	2,000

P Provisional.

* Exclude inflows under the NRI direct investment route through the Reserve Bank and inflows due to acquisition of shares under Section 5 of FEMA, 1999.

External Assistance

6.19 Net inflow of external assistance (gross utilisation *less* repayments of principal) at US \$ 546 million during 2000-01 was lower than that of US \$ 1,000 million in the previous year, partly reflecting pre-payment of about US \$ 290 million against eight fixed interest rate International Bank for Reconstruction and Development (IBRD) currency pool loans (at interest rates ranging between 9.25-11.6 per cent) during May 2000. In line with the trend holding over the past few years, there was a negative transfer of resources (sum of loans and grants *less* repayments of principal and interest) from the country to the tune of US \$ 619 million during 2000-01 ([Appendix Table VI.7](#)).

Table 6.5 : Balances under NRI Deposit Schemes

Scheme	(US \$ million)				
	Balance		Variation @		
	End-March		2000-01P	1999-2000	
	2001P	2000			
1	2	3	4	5	
1. FCNR(B)	9,076	8,172	904	337	
2. NR(E)RA	7,147	6,758	860	885	
3. NR(NR)RD	6,849	6,754	553	318	
Total	23,072	21,684	2,317	1,540	

P Provisional

@ All figures are inclusive of accrued interest and valuation changes arising on account of fluctuations in non-dollar currencies against the US dollar.

Note: Variations do not match with the differences between the outstanding stocks for rupee deposits on account of exchange rate fluctuations during the year.

External Commercial Borrowings

6.20 The disbursements under external commercial borrowings increased to US \$ 3,811 million (excluding IMDs) in 2000-01 from US \$ 3,187 million in 1999-2000. The increase in disbursements was mainly on account of refinancing of loans which was also reflected in increase in amortisation payments to US \$5,313 million from US \$ 2,874 million. Net flows under ECBs (excluding IMDs) turned negative at US \$ 1,502 million during 2000-01 as against US \$ 313 million during 1999-2000. The normal flows under ECBs were supplemented by IMDs during the year. Funds mobilised under IMDs amounted to US \$ 5.5 billion. Gross disbursements (including IMDs), therefore, increased from US \$ 3,187 million during 1999-2000 to US \$ 9,324 million during 2000-01 with net flows increasing from US \$ 313 million to US \$ 4,011 million.

Table 6.6 : Foreign Exchange Reserves and Use of IMF Credit

(US \$ million)

As at the end of	Gold	SDRs	Foreign Currency Assets	Total	Reserve Position in Fund	Outstanding use of IMF Credit (net)*
1	2	3	4	5 = (2+3+4)	6	7
March 1993	3,380	18	6,434	9,832	296	4,799 (3,433)
March 1994	4,078	108	15,068	19,254	299	5,040 (3,568)
March 1995	4,370	7	20,809	25,186	331	4,300 (2,755)
March 1996	4,561	82	17,044	21,687	310	2,374 (1,625)
March 1997	4,054	2	22,367	26,423	291	1,313 (947)
March 1998	3,391	1	25,975	29,367	283	664(497)
March 1999	2,960	8	29,522	32,490	663	287 (212)
March 2000	2,974	4	35,058	38,036	658	26 (19)
March 2001	2,725	2	39,554	42,281	616	0
June 2001	2,798	4	40,652	43,454	609	0

* Figures in bracket are in SDR million.

Overall Balance

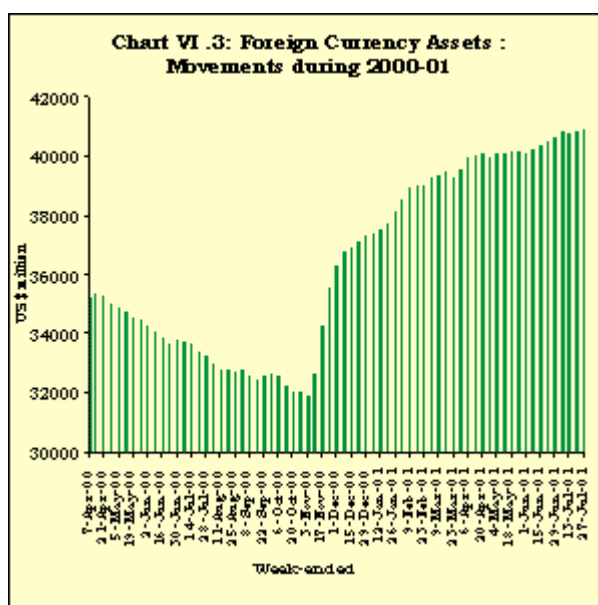
6.21 The overall balance recorded a surplus for the fifth year in succession at US \$ 5.9 billion (1.3 per cent of GDP) during 2000-01 as against that of US \$ 6.4 billion (1.4 per cent of GDP) in 1999-2000. The overall surplus during the year, net of repurchases of US \$ 0.03 billion from the IMF, resulted in an accretion of US \$ 5.8 billion (excluding valuation) to the foreign exchange reserves.

FOREIGN EXCHANGE RESERVES

6.22 India's foreign exchange reserves comprising foreign currency assets, gold held by the Reserve Bank and Special Drawing Rights (SDRs) held by the Government increased by US \$ 4,245 million (including valuation changes) during 2000-01 to US \$ 42,281 million by end-

March 2001 as against an increase of US \$ 5,546 million during 1999-2000 ([Table 6.6](#) and [Appendix Table VI.8](#)). The Reserve Bank's forward liabilities remained low, declining from US \$ 2,225 million in August 2000 to US \$ 1,259 million at end-March 2001. Net of outstanding forward liabilities and use of IMF credit, foreign exchange reserves increased by US \$ 3,687 million to US \$ 41,022 million as at end-March 2001.

6.23 The increase in the foreign exchange reserves during 2000-01 was entirely on account of expansion of foreign currency assets by US \$ 4,496 million as the value of gold - the other major component of reserves - declined by US \$ 249 million during the year. The first seven months of the year witnessed a loss of foreign currency assets of US \$ 2,967 million. From November 2000 onwards there was a turnaround with the inflows under the IMDs and a revival of FII inflows leading to the restoration of investor confidence. The foreign currency assets increased by US \$ 7,463 million between end-October 2000 and end-March 2001, of which almost US \$ 2 billion was made up of inflows other than the IMDs ([Chart VI.3](#)).



6.24 During 2001-02 up to August 10, the foreign exchange reserves increased by US \$1,854 million to US \$ 44,135 million as foreign currency assets increased by US \$1,801 million to US \$ 41,355 million.

6.25 Balances under the SDRs held by the Government amounted to SDR 2 million (US \$ 2 million) as at end-March 2001 as compared with SDR 3 million (US \$ 4 million) as at end-March 2000. A total amount of SDR 38 million (US \$ 50 million) was purchased from the IMF while SDR 12 million (US \$ 15 million) were credited on account of various other receipts from the IMF.

6.26 The value of gold held by the Reserve Bank declined by US \$ 249 million during the year to US \$ 2,725 million at end-March 2001. During the year, the value of gold holdings fluctuated between US \$ 2,948 million (end-June 2000) and US \$ 2,711 million (end-February 2001). The decline in the value reflected essentially the movements in international gold prices as the

quantity of gold held was almost unchanged during the year (357.761 tonnes at end-March 2001 as against 357.763 tonnes as at end-March 2000). The gold holdings amounted to US \$ 2,771 million as on August 10, 2001 reflecting an increase of US \$ 46 million over the end-March 2001 level.

6.27 The overall approach to the management of India's foreign exchange reserves in recent years has reflected the changing composition of the capital account of the balance of payments and the "liquidity risks" associated with different types of flows within the parameters of reserve adequacy. The policy for reserve management is built upon factors and contingencies such as the size of the current account deficit, the size of short-term liabilities (including current repayment obligations on long-term loans), the potential variability in portfolio investment and other types of capital flows and unanticipated external shocks. The policy objective is to ensure that, excluding short-term variations in response to market movements, the quantum of reserves in the long-run is in line with the growth of the economy and the size of risk-adjusted capital flows.

6.28 With the changing profile of capital flows, the traditional approach of assessing reserve adequacy in terms of import cover has been broadened to include a number of parameters which take into account the size, composition and risk profiles of various types of capital flows as well as the types of external shocks to which the economy is vulnerable ([Box VI.1](#)).

Box VI.1 **Adequacy of Reserves**

In India, various measures have been employed to judge reserve adequacy. The High-Level Committee on Balance of Payments (Chairman: Dr. C. Rangarajan, 1993) recommended that the target level of reserves should be determined in terms of payment obligations in addition to the traditional measure of import cover of 3 to 4 months. The Reserve Bank operationalised this concept and stressed in its Annual Report for 1996-97 that the level of reserves should be assessed in relation to stock of short-term debt and portfolio flows. The Committee on Capital Account Convertibility (Chairman: Shri S.S. Tarapore, 1997) suggested four alternative measures of adequacy of reserves : (i) import cover of not less than 6 months, (ii) reserves should not be less than 3 months of imports plus 50 per cent of annual debt service payments plus one month's imports and exports to take into account the possibilities of leads and lags, (iii) a ceiling of 60 per cent in the ratio of short-term debt and portfolio stock to reserves and (iv) a net foreign exchange assets to currency ratio (NFA/Currency ratio) of not less than 40 per cent but the objective should be to maintain it at around 70 per cent.

In the recent period, the empirical assessment of reserve adequacy has been influenced by the measure proposed by Pablo Guidotti, the Deputy Finance Minister of Argentina at the G-33 Seminar in Bonn, which lays down a simple guideline for the policy makers in emerging market economies. Countries should manage their external assets and liabilities in such a way that they are always able to live without new foreign borrowing for up to one year. This implies that the usable foreign exchange reserves should exceed scheduled amortisation of foreign currency debts (assuming no rollovers) during the following year. The Guidotti rule received the support of Alan Greenspan, Chairman of the Board of Governors of the US Federal Reserve System. He suggested a "Liquidity at Risk" rule that would also take into account the foreseeable risks that a country could face. Accordingly, a country's liquidity position could be calculated under a range of possible outcomes for relevant financial variables (exchange rates, commodity prices, credit spreads, *etc.*). While the concept of liquidity at risk has been broadly discussed at different fora, no specific methodology has been outlined. It has been left to the institutions and countries to develop their own approaches.

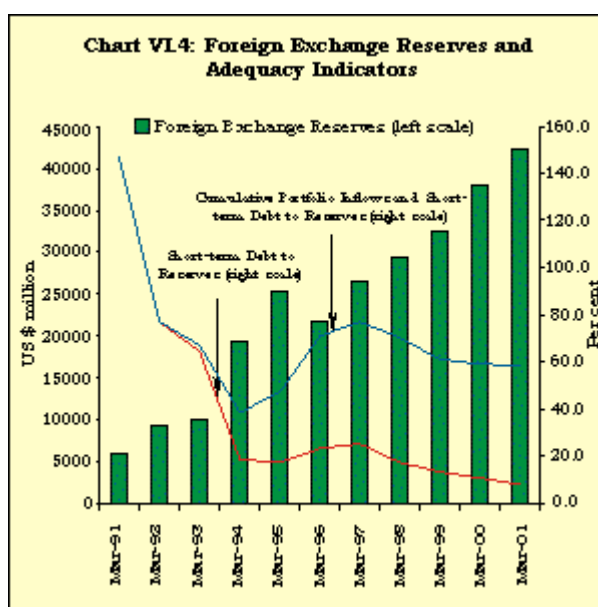
References

1. Greenspan, Alan, (1999), "Recent Trends in the Management of Foreign Exchange Reserves", Speech at the *World Bank Conference on Recent Trends in Reserve Management*, Washington D.C., April 19.
2. Reserve Bank of India, (1997), *Report of the Committee on Capital Account Convertibility*, (Chairman: Shri S.S. Tarapore), Mumbai.
3. Reserve Bank of India, *Annual Report, 1996-97*.

6.29 The increase in India's foreign exchange reserves by US \$ 4,245 million during 2000-01 was on the top of an increase of US \$ 16,349 million during the period 1996-2000. The import cover of reserves increased from 6.0 months at end-March 1996 to 8.6 months as at end-March 2001. The ratio of short-term debt to foreign exchange reserves declined from 23.2 per cent at end-March 1996 to 8.2 per cent at end-March 2001. Similarly, the ratio of volatile capital flows (defined to include cumulative portfolio inflows and short-term debt) to reserves declined from 71.1 per cent as at end-March 1996 to 58.5 per cent as at end-March 2001 ([Chart VI.4](#)).

EXTERNAL DEBT

6.30 During the 1990s, there has been a consolidation of external debt. The sustainability of external debt improved with robust growth in current receipts, containment of the CAD, capping of short-term debt flows and predominance of equity flows in the capital account. Moreover, capital flows were used to build up the foreign exchange reserves instead of financing current import requirements.



6.31 India's external debt increased by 2.1 per cent from US \$ 98,158 million as at end-March 2000 to US \$ 100,255 million as at end-March 2001 ([Table 6.7](#) and [Appendix Table VI.9](#)). The increase in external debt during the year was mainly on account of the accretion of US \$ 5.5 billion under IMDs. However, the overall increase in external debt during the year could be contained at US \$ 2.1 billion in view of sluggishness in normal commercial borrowings and valuation factors. While the proportion of multilateral (excepting IMF) and bilateral debt in the

total debt declined to 47.6 per cent as at end-March 2001 from 50.5 per cent as at end-March 2000, that of rupee debt fell to 3.7 per cent from 4.5 per cent over the same period. The share of commercial borrowings (including long-term trade credits) in total external debt at 29.9 per cent as at end-March 2001 was higher than that of 27.1 per cent at end-March 2000 reflecting accretions on account of IMDs. The proportion of long-term non-resident deposits also increased to 15.4 per cent from 13.8 per cent over the same period.

Table 6.7 : India's External Debt

Item	(US \$ million)	
	At the end of March	
	2001	2000
1	2	3
1. Multilateral	31,103	31,438
2. Bilateral	16,624	18,176
3. IMF	0	26
4. Commercial Borrowings (including trade credits) #	29,941	26,634
5. NRI Deposits	15,432	13,562
6. Rupee Debt	3,693	4,389
7. Long Term-Debt (1to 6)	96,793	94,225
8. Short-Term Debt *	3,462	3,933
9. Total Debt (7+8)	100,255	98,158

Includes net investment by 100 per cent FII debt funds.

* Excludes suppliers' credits of up to 180 days.

6.32 The key indicators of external debt sustainability point towards further consolidation. Notwithstanding the increase in the absolute level of external debt, the external debt-GDP ratio declined from 21.9 per cent as at end-March 2000 to 21.4 per cent as at end-March 2001. The ratio of debt to current receipts fell from 145.5 per cent at end-March 2000 to 126.9 per cent at end-March 2001 ([Table 6.8](#)). The proportion of short-term debt to total external debt declined from 4.0 per cent at end-March 2000 to 3.5 per cent at end-March 2001. As a result, the ratio of short-term debt to foreign exchange reserves declined from 10.3 per cent as at end-March 2000 to 8.2 per cent at end-March 2001. The interest service ratio continued its downward trajectory, declining from 7.3 per cent during 1999-2000 to 6.4 per cent during 2000-01. The debt service and liability service ratios at 17.1 per cent and 18.3 per cent, respectively, during 2000-01 were marginally higher than that of 16.2 per cent and 17.0 per cent during 1999-2000. The increase in

the debt service and liability service ratios during the year was essentially on account of prepayments of external assistance and refinancing of commercial debt.

Table 6.8 : External Debt Service Payments

		(US \$ million)		
Item	2000-01	1999-00	1998-99	
1	2	3	4	
1. External Assistance @	3,729	3,442	3,144	
2. External Commercial Borrowing *	7,383	4,704	4,530	
3. IMF #	26	267	419	
4. NRI Deposits (Interest Payments)	1,737	1,791	1,719	
5. Rupee Debt Service	617	711	802	
6. Total Debt Servicing	13,492	10,915	10,614	
7. Total Current Receipts**	79,003	67,472	59,760	
8. Debt Service Ratio (6/7%)	17.1	16.2	17.8	
9. Interest Payments to Current Receipts Ratio (%)	6.4	7.3	7.8	
10. Debt to Current Receipts Ratio (%)	126.9	145.5	162.1	
11. Liability Service Ratio (%)	18.3	17.0	18.9	

@ Inclusive of non-Government loans.

* Inclusive of interest on medium, long term and Short term credits.

Excluding charges on net cumulative allocation.

** Excluding Official Transfers.

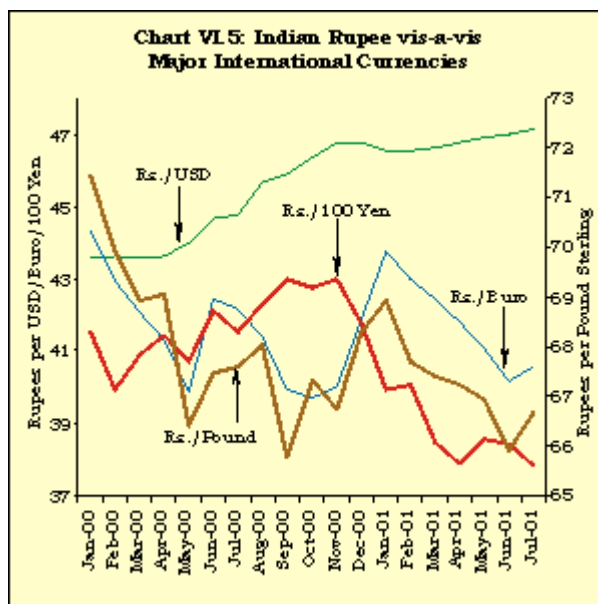
- Note:**
1. Debt service payments in this table follow accrual method of accounting consistent with balance of payments compilation and may, therefore, vary from those recorded on cash basis.
 2. Liability-service ratio represents debt service payments and remittances of profits and dividends taken together as a ratio of total current receipts.

EXCHANGE RATE DEVELOPMENTS

6.33 The exchange rate of the Indian rupee *vis-a-vis* the US dollar traded within a range of Rs.43.61-Rs.46.89 during 2000-01. While the rupee traded within a wide range of Rs.43.65-Rs.46.85 during May-October 2000, the movements were confined to a narrow range of Rs.46.35-Rs.46.89 during the period November 2000-March 2001.

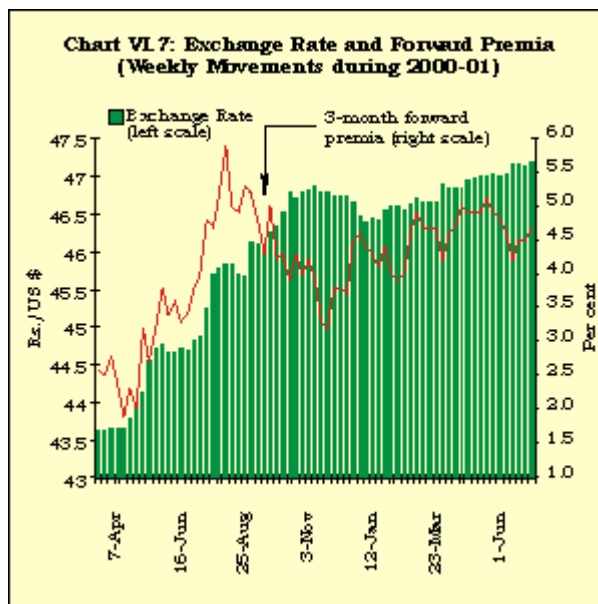
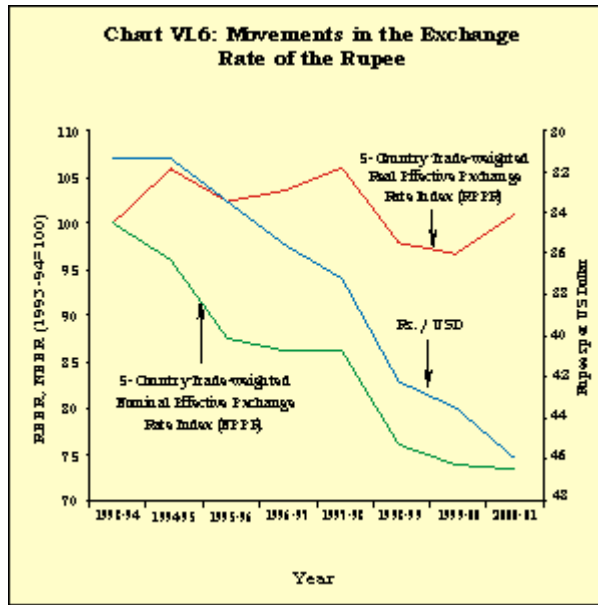
6.34 For the financial year 2000-01 as a whole, the exchange rate averaged Rs.45.68 per US dollar recording a depreciation of about 5.1 per cent over the average of Rs.43.33 per US dollar during the previous year. The rupee strengthened against other major currencies reflecting the movements of the US dollar *visa-vis* other major international currencies. The rupee appreciated

by 3.4 per cent and 8.0 per cent during 2000-01 against the Pound Sterling and the Euro, respectively ([Chart VI.5](#)).



6.35 As a result of the divergent movements in the exchange rate of rupee vis-a-vis other major currencies, the effective exchange rate was broadly stable during the year with the 5-country nominal effective exchange rate (NEER) depreciating by 0.6 per cent during 2000-2001 ([Appendix Table VI.10](#), [Chart VI.6](#)).

6.36 The developments in the forward premia during the period May-September 2000 mirrored developments in the spot exchange rate. The six-month forward premia increased from 2.5 per cent in May 2000 to 4.9 per cent in September 2000. With the return of normalcy, forward premia generally remained stable from October 2000 under all maturities in the remaining part of the year ([Chart VI.7](#)).



6.37 The developments in the foreign exchange market during 2000-01 reflected the policy stance of focusing on managing volatility while allowing the underlying demand and supply conditions to determine the exchange rate movements.

6.38 The orderly conditions witnessed in the foreign exchange market since November 2000 have continued in 2001-02 so far. The spot exchange rate of the rupee *vis-a-vis* the US dollar moved in a range of Rs. 46.56-47.18 per US dollar during the period April 2001 to August 10, 2001. The exchange rate was Rs. 47.12 per US dollar as on August 10, 2001. Excess supply conditions resulted in net purchases from the market amounting to US \$ 487 million during April-June 2001. The 6-month forward premia were broadly stable during the period and

averaged 4.7 per cent during July 2001 as against 4.6 per cent during March 2001. The 6-month forward premia was 4.8 per cent as on August 10, 2001.

INTERNATIONAL DEVELOPMENTS

6.39 Global economic activity decelerated significantly in the second half of 2000. According to the World Economic Outlook (May 2001) of the IMF, although some slowdown from the rapid growth in late 1999 and early 2000 was desirable and expected, the actual outturn was much steeper than anticipated earlier. World output growth is projected to decelerate to 3.2 per cent in 2001. Unlike the previous downturn which largely reflected the effects of the financial crises in several emerging markets, the current slowdown is due to weakening growth prospects of the advanced economies, led by a marked deceleration in the US economy amidst faltering recovery in Japan and signs of moderation in the Euro area. While the advanced economies are projected to grow at half the rate of 4.1 per cent recorded in 2000, the US economy is projected to decelerate to 1.5 per cent in 2001 as against 5.0 per cent in 2000. According to the World Bank estimates (Global Development Finance, April 2001), the deceleration in the US may be much steeper -from 5.0 per cent in 2000 to 1.2 per cent in 2001. Given the present favourable inflation environment and the projected decline in inflation in 2001 in both advanced and developing economies, there appears to be considerable room for more flexible use of counter-cyclical monetary policy in most of the countries. In fact, several central banks of advanced economies have already reduced their policy interest rates in the first few months of 2001 ([Table 6.9](#)). The improved fiscal positions of many advanced economies in the recent years may also facilitate some fiscal easing as a second line of defense. Under these conditions, expectations gain ground that the slowdown may be short-lived.

6.40 The current phase of economic slowdown in global activity has encountered significant volatility in the exchange rates of major international currencies, a large fall in equity prices and a major terms-of-trade shock in the form of high oil prices. The impact of these developments on different countries has been varied, depending on their cross-border linkages, domestic economic structures and policies. In emerging Asia, GDP growth is expected to decline to 5.9 per cent in 2001 from 6.9 per cent in 2000. This decline reflects a series of domestic and external shocks including higher oil prices, slowing growth in the US, fall in equity prices largely in response to the correction in TMT (Telecommunication, Media and Information Technology and Software) stocks in the US, downturn in the global electronics cycle, and concerns about the sagging pace of corporate and financial restructuring. Net private capital flows to the emerging markets are projected to recover in 2001 from the steep fall of 2000, although they are way below the peak levels recorded in the pre-Asian crisis period. More strikingly, emerging markets recorded large current account surpluses in 2000. As a result, surpluses in the current account and net capital inflows were entirely absorbed in the form of reserve build-ups. The impact of the large correction of technology stocks on the financial markets across the globe, particularly in terms of volatility spillovers and negative wealth effects, may compress domestic demand.

6.41 The unwinding of large current account imbalances among major advanced countries may occur in a disorderly fashion, affecting the prospects for capital flows and the direction of movement in the exchange rate of the US dollar. Large misalignments in the exchange rates

among major currencies may at times contribute to volatility in the currencies of developing countries.

Table 6.9 : Interest Rate Stance of Some Major Central Banks in 2001

Country	Policy Rate	Change in rate	From	-	To	General Government fiscal balance position in 2000 (as proportion of GDP)
1	2	3	4			5
US	Federal Funds Rate					1.7
January 3, 2001		-0.5	6.50	-	6.00	
January 31, 2001		-0.5	6.00	-	5.50	
March 20, 2001		-0.5	5.50	-	5.00	
April 18, 2001		-0.5	5.00	-	4.50	
May 15, 2001		-0.5	4.50	-	4.00	
June 27, 2001		-0.25	4.00	-	3.75	
UK	Repo Rate					5.9
February 8, 2001		-0.25	6.00	-	5.75	
April 5, 2001		-0.25	5.75	-	5.00	
May 10, 2001		-0.25	5.50	-	5.25	
August 2, 2001		-0.25	5.25	-	5.00	
Canada	Bank Rate					3.4
January 23, 2001		-0.25	6.00	-	5.75	
March 6, 2001		-0.50	5.75	-	5.25	
April 17, 2001		-0.25	5.25	-	5.00	
May 29, 2001		-0.25	5.00	-	4.75	
July 17, 2001		-0.25	4.75	-	4.50	
Euro-area (ECB)	Main Refinancing Rate					0.3
May 11, 2001		-0.25	4.75	-	4.50	
Japan	Official Discount Rate					-8.2
February 9, 2001		-0.15	0.50	-	0.35	
February 28, 2001		-0.10	0.35	-	0.25	
Australia	Cash Rate Target					1.1
February 7, 2001		-0.50	6.25	-	5.75	
March 7, 2001		-0.25	5.75	-	5.50	
April 4, 2001		-0.50	5.50	-	5.00	
New Zealand	Official Cash Rate					0.3

March 14, 2001	-0.25	6.50	-	6.25
April 19, 2001	-0.25	6.25	-	6.00
May 16, 2001	-0.25	6.00	-	5.75

6.42 The impact of the significant terms-of-trade shock emanating from a more than tripling of fuel prices in just about one year has generally been interpreted to be moderate in terms of output loss and increase in inflation. In many emerging market economies, however, external sector vulnerability has increased, highlighting the need for introduction of specific standing international measures and internal supply management strategies. South Asia continues to be the most energy-intensive region among all developing regions in the world and, therefore, the vulnerability of these economies to a major oil shock could be substantial. It is estimated that South Asia recorded a CAD/GDP of 2.2 per cent in 2000, which is the highest for the region in the last decade.

6.43 The growth in world trade volumes is projected to decelerate from 12.4 per cent in 2000 to 6.7 per cent in 2001 (according to the World Bank estimates, the deceleration could be steeper at 5.5 per cent in 2001). As regards non-fuel exporters among developing countries, the decline in growth in export volume could be more pronounced (from 19.0 per cent in 2000 to 6.9 per cent in 2001). The terms of trade for this group of countries, however, may show a modest improvement of about 1 per cent in 2001 as against the continuous deterioration experienced in the second half of the 1990s. Estimates prepared by the Institute of International Finance in May 2001 indicate that emerging market export growth may fall to below 4.4 per cent in 2001 from 22 per cent in 2000.

6.44 Net private capital flows to these economies (excluding Argentina and Turkey), in turn, are expected to record a modest increase. Net private flows may be of the order of US \$ 153.0 billion in 2001 as against US \$ 147.0 billion in 2000. The benign international interest rate environment, however, may not help in reducing the cost of foreign capital for the emerging markets if the risk premia demanded by international investors start increasing. In the aftermath of the developments in Turkey and Argentina, external financing conditions for emerging markets tightened somewhat reflecting a rise in investor risk aversion.

6.45 Major international currencies exhibited volatility during 2000-01. The Euro fell consistently from US \$ 1.17 when it was introduced on January 1, 1999 to US \$ 0.83 by October 2000, representing a fall of almost 30 per cent. The Euro recovered somewhat in the subsequent months (trading in a range of US \$ 0.90-0.95), but fell below 0.85 again in May 2001 before rising again to about 0.89 in the first half of August 2001. The Japanese Yen appreciated from about 120 Yen per US dollar in June 1999 to 105 Yen per US dollar by June 2000. Since then it has depreciated gradually and in the first half of August 2001 it traded around 123 Yen per US dollar. According to the World Economic Outlook (WEO) of the IMF, in the face of the significant increase in the US current account deficit, net equity flows primarily explain the recent movements in the euro-dollar exchange rate. Net portfolio flows to the US in the form of investments in US Government bonds and notes, corporate bonds and equities rose from less than US \$ 25 billion in the early 1990s to US \$ 500 billion in 2000. Long-term interest rate differentials - as opposed to short-term differentials - continue to explain the behaviour of the three major international currencies.

VII - Assessment and Prospects

7.1 During the year 2000-01, the GDP growth at 5.2 per cent reflected the impact of two consecutive years of below-average monsoons, a downturn in industrial growth after promising signs of revival in 1999-2000, the strains imposed by droughts and floods in various parts of the country and the unprecedented severity of the Gujarat earthquake. Despite the fall in foodgrains production, foodstocks reached an all-time high, improving food security and insulating the economy from transient agricultural shocks. The lower growth performance of 2000-01 was associated with signs of stability as inflation turned relatively benign towards the close of the year, the combined fiscal deficit of the Centre and States was manageable, the external current account deficit moved to near-balance, the external debt/GDP ratio declined and the foreign exchange reserves touched a level equivalent to around nine months of imports.

7.2 Apart from a brief period of volatility during the year, financial market segments generally remained stable and liquid. Reforms in the broad areas of money and finance were carried forward as originally contemplated. There was, however, substantial turbulence in equity markets in March 2001. This was followed by considerable stress in certain segments of the financial markets affecting a few banks, some co-operative institutions and the largest mutual fund. This has posed some challenges for the management and development of financial markets as a whole.

7.3 The outlook for the global economy suffered a downturn with the release of first quarter growth figures for 2001 for most of the developed countries. In the second quarter, the growth of the US economy slowed down to 0.7 per cent from 1.2 per cent in the first quarter. In the domestic economy, the onset of the monsoon has been, on the whole, fairly satisfactory in spite of initial spatial aberrations reflected in drought conditions in the southern States and Maharashtra and floods in Orissa, Bihar and Kerala. Although full information on agricultural production is not yet available, procurement of foodgrains at 23.2 million tonnes up to June 2001 was higher by 28.2 per cent over April-June. As a result, despite some increase in off-take, stocks of foodgrains soared to 62.0 million tonnes at the end-June 2001. The growth of industrial production fell sharply to 2.1 per cent in the first three months of 2001-02 from 6.1 per cent in April-June, 2001. This mirrored the slowdown in manufacturing and electricity generation. Capital goods production index recorded an absolute decline while basic and intermediate goods production indices decelerated. The slowdown spread to the consumer goods segment in which the growth rate of 4.3 per cent almost halved from that of 8.6 per cent in April-June, 2000.

7.4 Reserve money increased by 0.1 per cent during the current financial year up to August 10 as against a decline of 1.2 per cent during the corresponding period of the previous year. Net Reserve Bank credit to the Centre decelerated to 9.9 per cent (Rs.14,497 crore) from 15.7 per cent (Rs.21,934 crore) during the corresponding period of 2000-01. Private placements/devolvments in Government securities of Rs.21,679 crore were partly offset by open market operations of Rs.16,050 crore. The Reserve Bank's net foreign currency assets (adjusted for revaluation) recorded an increase of Rs.7,544 crore in contrast to a decline of Rs.7,047 crore in the corresponding period of the previous year. The year-on-year M₃ expansion at 15.4 per cent (net of IMDs) as on July 27, 2001 was a little above the indicative target of about

14.5 per cent set for the year as a whole. Aggregate deposit growth of 16.2 per cent (net of IMDs) was buoyant in relation to the growth of 15.6 per cent recorded a year ago. Growth in currency with the public at 12.0 per cent remained strong as compared with 10.3 per cent in the previous year. Net bank credit to the Government accelerated to 8.9 per cent during 2001-02 (up to July 27) from 8.6 per cent in the comparable period of the previous year, reflecting the absorption of the market borrowing programme of the Centre. Bank credit to the commercial sector decelerated to 1.9 per cent from 2.6 per cent during the same period on account of significantly lower off-take of non-food credit of scheduled commercial banks at Rs.1,714 crore from Rs.14,482 crore during April-July, 2000. Scheduled commercial banks' investments in non-SLR securities increased by only Rs.495 crore during April to mid-July, 2001 as against an increase of Rs.4,307 crore in the corresponding period of the preceding year. Accordingly, scheduled commercial banks' non-food credit adjusted for their non-SLR investments increased by Rs.2,209 crore up to end-July, 2001; in April-July of the preceding year, the increase in the adjusted non-food credit extended by scheduled commercial banks had been of the order of Rs.18,967 crore. Food credit extended by scheduled commercial banks for procurement operations rose to Rs.11,036 crore from Rs.7,117 crore in April-July, 2000. Inflation, measured by the year-on-year change in wholesale prices, declined to 5.2 per cent by August 4, 2001 from 6.3 per cent a year ago. The easing of inflationary pressures was also reflected in the movement of the average wholesale prices as well as consumer prices during the current financial year.

7.5 The Centre's gross fiscal deficit at Rs.42,198 crore during April-June, 2001 was higher by 68.3 per cent over the level in April-June, 2000. The revenue deficit was almost double the level in the first quarter of 2000-01, reflecting the continuing slowdown in revenue collections, both tax and non-tax. On the other hand, growth in expenditure was higher in the revenue account as well as in the capital account during April-June 2001 over the level in April-June 2000.

7.6 Stock prices tended to decline from April to mid-August, 2001. The Sensex which stood at 3566.26 on April 2, 2001, declined by 234.37 points or 6.6 per cent to close at 3331.89 on August 14, 2001. The decline was in contrast to the trends in the international capital markets with the Nasdaq gaining by 10.2 per cent and the Dow Jones by 6.5 per cent in the same period. Domestic factors such as the general sluggishness in industrial activity, profit warnings issued by various software companies for the coming quarters and the uncertainty characterising stock markets had a bearing on the market behaviour. Mutual funds remained net sellers in equities during this period. The decision by the Unit Trust of India (UTI) to suspend temporarily sales and repurchases of US-64 units also dampened the market sentiment.

7.7 Financial markets were otherwise generally characterised by conditions of stability and ample liquidity, supported by the relatively higher deposit mobilisation, lower non-food credit demand and releases of resources through CRR cuts. The call money rates remained broadly within the corridors set by the repo and reverse repo rates except in mid-May, 2001 reflecting adjustment of the market with revised guidelines under the second stage of LAF. The Government securities market was driven by strong rallies in the secondary market. The yield curve shifted downwards with yields on 10-year paper reaching 9.3 per cent, the lowest in the recent past. Prime lending rates of the public sector banks declined by 25 basis points each at the higher end of the range in May and July, 2001 and remained stable in the first part of August,

2001. The foreign exchange market was active, with occasional bunching of demand setting off movements in the spot exchange rate. Forward premia eased across all maturities in June, 2001 after a temporary hardening in May, 2001 tracking the rise in the call rates.

7.8 Export growth decelerated sharply to 1.7 per cent in April-June, 2001 from 26.6 per cent in the first three months of 2000-01 reflecting the slowdown in global economic activity. Imports declined as the sluggishness in the domestic economy held down import demand and the sharp rise in PoL imports witnessed during the preceding year lost momentum. Capital flows remained stable. Foreign direct investment inflows at US \$ 608 million in April-June, 2001 were marginally lower than those in the corresponding period of the preceding year. On the other hand, net inflows on account of FIIs at US \$ 632 million in the first three months of 2001-02 were higher than in the corresponding period of 2000-01. The level of the foreign exchange reserves increased by US \$ 1,854 million to US \$ 44,135 million as on August 10, 2001 reflecting the improvement in the merchandise trade account and the stability in net capital flows.

Prospects for Growth

7.9 The deceleration of economic activity for the second year in succession has raised some concerns about the feasibility of rapidly moving the economy to a higher growth path in the medium term. The recent growth experience has undoubtedly revealed some areas of concern which could impede the path to sustained high growth. The rate of capital formation has been declining over the second half of the 1990s, mainly reflecting the inadequate response of private investment to the current state of structural reforms and deceleration in public investment. Given the unsatisfactory capital accumulation, infrastructural requirements are emerging as binding constraints on growth. The size and quality of fiscal adjustment have also remained insufficient, resulting not only in shifts in the pattern of aggregate demand from investment to consumption in the Government sector but also undermining the output and the quality of delivery of public services. The large and growing financing requirements of the Centre and the States have occasionally strained the financial markets, rendering the conduct of both monetary policy and debt management more complex.

7.10 Over the period of planned development, the Indian economy has undergone contrasting phases in the pace and variability of the growth process. Up to the 1970s, low rates of real growth were associated with considerable fluctuations, mainly emanating from the behaviour of the monsoon. Since the late 1980s and particularly in the 1990s, the reform process has increased the susceptibility of the economy to the reality of the cycle in economic activity and the swings of alternating phases of the cycle. The experience of the late 1990s suggests that India is not immune to the slowdown phase of the global business cycle. Cyclical turns of economic activity have imposed some constraints on the operation of macroeconomic policies for achieving developmental goals. Against this background, the conduct of monetary policy, in particular, has been complicated by the uncertainties characterising an environment of slowing output and low inflation.

7.11 The recent slowdown in economic activity seems to reflect a combination of cyclical and structural factors with different weights assignable to either, depending on the changing

conditions in the growth process. The general deficiency in aggregate demand, and in particular, the faltering pace of investment demand, relatively low requirements of bank credit, the slowdown in currency expansion, decline in import demand and some evidence of high carrying costs of inventories being incurred by some industries are indicators of cyclical influences on the growth process. On the other hand, growing evidence on the gaps in agricultural development and the absolute deficiencies in physical and social infrastructure, which are already operating as a drag on the speed and quality of growth, are being identified as structural impediments. In the recent period, the structural constraints have necessitated a revision in the assessment of the potential output growth path of the economy generated from the robust optimism in the wake of the high growth phase in the mid-1990s. In respect of agriculture, the increase in the variability of production, falling capital formation and the loss of pace in technological upgradation seem to be indicative of long-term deceleration in agricultural development. As regards infrastructure, the demand for infrastructure services continues to outpace supply, warranting urgent new capacities in power, telecommunications, transport and the social infrastructure. Apart from expansion in supply, upgradation of quality is also crucial.

7.12 A major concern arising out of the performance of the economy during 2000-01 is the relative role of global and domestic factors in determining the duration of the current phase of activity. Given the relatively low degree of openness of the economy, the recent slowdown is predominantly ascribed to domestic conditions –demand slowdown, sluggishness in supply responses and supply side constraints. There is also the view that the economy is part of the global developments and irrespective of the degree of openness, India cannot be immune to the global economy. While there is still considerable uncertainty, it is widely expected that the world GDP growth would be substantially lower in 2001 as compared with a high growth of 4.8 per cent in the previous year, due to the slowdown of the US economy. A favourable factor this year is that the international inflationary environment is reasonably benign. Low inflationary expectations have facilitated substantial reduction in international interest rates in order to revive economic activity in major industrial countries. India cannot but reckon the impact of these global developments though for several reasons, including its relatively small share of trade, GDP growth in India is unlikely to be as seriously affected by these developments, as in many other countries. While merchandise exports growth may moderate, software exports with more diversified destinations and private remittances may still be maintained.

7.13 It is also necessary to recognise the limits up to which strategic combinations of policies can overcome the operation of the institutional constraints on growth. So far, a degree of deftness in the design of macroeconomic policy framework has been successful in stemming contagion from global financial crises, the impact of the global slowdown as well as temporary influences that have tended to slow down domestic activity. These interventions in terms of policy mixes are getting increasingly circumscribed by the inadequate legal and institutional structure which, in several ways, is inhibiting the response of policies to rapidly changing circumstances in a transitional phase. In the development and regulation of the financial markets and in improving the financial soundness of financial institutions, the legal and institutional constraints are being acutely felt. The current monetary policy has signalled important reforms which require changes in existing legislation or introduction of new laws to provide, *inter alia*, flexibility to undertake transactions in Government securities and facilitate retailing, to bring about greater flexibility in monetary policy operations, to enable separation of debt management functions, to bring

reasonable control over fiscal management, to redesign the ownership function of the Reserve Bank, to restructure deposit insurance consistent with financial sector liberalisation, to provide enhanced protection to depositors of NBFCs, to encompass areas of security laws within the regulatory framework of banking and to create an enabling environment for markets for asset securitisation.

7.14 In the present stage of the development process, policy formulation is also faced with the dilemma posed by the need to address simultaneously the macroeconomic concerns (the slowdown of growth and capital formation, the stagnation in saving, the vitiation of the macro-balances, distributional issues, the consolidation of the fiscal accounts, the viability of the BoP and the reining in of inflationary pressures) and the microeconomic considerations (regulation of financial markets, soundness of financial institutions, extending reforms into particular sectors and availability of bank credit). In certain periods and the exigencies attached to micro-developments have required a temporary abandonment of the macro stance or even a temporary sacrifice of macro objectives. The functions of financial supervision and the conduct of monetary policy, for instance, involve significant trade-offs. Rapid movement toward strong supervision could lead inadvertently to a dampening in economic activity. Excessive monetary easing to relieve financial stress could, on the other hand, lead to higher inflationary expectations, exchange rate volatility and asset bubbles.

7.15 The balancing of the relative emphasis on financial versus non-financial sectors in the process of reform is also engaging policy attention in the context of the medium term. For example, considerable anxiety is being expressed that the poor performance of agriculture indicates that the process of reforms has by-passed the agricultural sector while there has been considerable progress in the financial sector. It is argued that in countries where agricultural reforms were started in the early stage of the overall reform process, the potential output of the economy as a whole has moved upwards. Thus, there is a need to clearly spell out the reform objectives and destinations while carefully accelerating the pace of reforms in several of the non-financial sectors. The legal and institutional changes to enable policy reform would no doubt command attention.

7.16 Growth prospects for 2001-02 are associated with some favourable objective conditions. The Meteorological Department has forecast a normal South-West monsoon during 2001. The target fixed for foodgrains production in 2001-02 is 212 million tonnes, an increase of 8.1 per cent over the preceding year. More recent estimates of the performance of the monsoon and the area coverage under major crops indicate that foodgrains output could be around 209 million tonnes in 2001-02. Leading indicators of industrial activity and business confidence suggest the prospects of a modest revival of the industrial sector only in the second half of the year, in alignment with the usual seasonal upturn in industrial activity. A critical consideration would be the performance of the services sector and a return to the average growth rate of 8.4 per cent achieved in the 1990s. As regards the likely growth rate of real GDP, in April 2001, the Statement on Monetary and Credit Policy had projected a growth rate of 6.0 to 6.5 per cent for 2001-02 on certain favourable assumptions regarding the state of the monsoon and possibility of industrial recovery in the second half of the year. On the whole, the monsoon conditions so far have turned out to be not unfavourable. However, the industrial outlook continues to be uncertain and a cause for considerable concern. The realisation of the growth rate projected in April 2001

is dependent on a sharp reversal in current industrial trends during the post-monsoon period. Inflationary conditions are expected to remain supportive with headline inflation around 5 per cent. Money supply expansion is expected to be about 14.5 per cent, amply supporting an expansion of non-food credit of the order of 16-17 per cent, assuming that there would be a pick-up in industrial activity. A major objective guiding the conduct of monetary policy is the close monitoring of financial market conditions with a view to flexibly shifting policy operations towards managing excess liquidity, should circumstances warrant. The current account deficit is expected to be well below 2 per cent of GDP even if non-oil imports show considerable increase in the event of a pick-up in economic activity. The fiscal deficit of the Centre is budgeted at 4.7 per cent of GDP and over three-fourth of the Centre's net borrowing requirement has already been completed. The Centre is also closely monitoring the fiscal developments in various States. The growth prospects for 2001-02 will also depend to a certain extent on the global developments and the bottoming out of the current slowdown in world output, trade and international capital flows. The availability of more recent information on the performance of the real economy will no doubt entail a conditional adjustment to these initial expectations.

Issues in Agriculture

7.17 In the second half of the 1990s, real GDP growth originating in agriculture and allied activities slowed down significantly to 3.2 per cent from 4.5 per cent in the 1980s, exhibiting considerable variability and recording absolute declines in the third and fourth quarters of 1999-2000 and again in the last quarter of 2000-01. The annual trend growth rate of agricultural production decelerated to 2.2 per cent in the 1990s from 3.1 per cent in the 1980s. The share of capital formation in agriculture as a proportion to gross capital formation has declined from 9.9 per cent in 1990-91 to 8.0 per cent in 1999-2000. The decline in capital formation has been more pronounced in the public sector, reflecting the persistent and large revenue deficits. The share of agriculture and allied activities in total Plan outlay declined from 6.1 per cent in the Sixth Plan Period to an estimated 4.9 per cent in the Ninth Plan Period. The share of irrigation and flood control in total outlay also shrunk from 10.0 per cent to an estimated 6.5 per cent over the Plan periods.

7.18 Agricultural development represents the convergence of the main objectives of economic policy in India: growth, stability and poverty alleviation. Agriculture continues to provide productive employment opportunities for over two-thirds of the population. The agricultural sector also makes a significant contribution to India's exports, accounting for a little less than a fifth of total merchandise exports. Despite some degree of resilience acquired by the economy in recent years, agriculture continues to play a critical role in determining the macroeconomic balances, especially in generating private consumption demand.

7.19 While public investment in agriculture is declining, subsidies for agriculture are increasing. The increase is concentrated on input subsidies, though food subsidies are also being incurred to maintain high levels of food stocks. In this context, a conscious choice needs to be made, given the overall resource constraint, between subsidies and investment. The question that has to be raised in the context of the overall balance is whether it would be worthwhile shifting spending on subsidies to investment, especially in terms of contribution to agricultural employment and poverty alleviation as well as to spread the benefits to backward and dry land

tracts. This leads to the issue of the ideal instruments for agricultural credit delivery and the appropriate institutional changes that are required to ensure necessary credit flow to agriculture. The supply chain arrangements in agriculture encompassing storage, processing and trading, also need to be reviewed taking into account the role of the middlemen and the appropriate legal as well as regulatory structures. Genuine self-regulatory organisations including co-operatives need to be founded and nurtured, tailoring international experience to the country-specific requirements and cultural milieu. A major challenge is to devise nationwide networks that can cater to nationally integrated markets while allowing for local variations and initiatives particularly at the State level. It is necessary to move to a situation where an efficient system of market intermediaries is created in the agriculture sector. In fact, the pace of progress in liberalisation of external trade in agriculture warrants a sense of urgency and priority to institutional reform in agriculture.

7.20 The issue of terms of trade facing Indian agriculture also assumes importance. India is a large producer of several agricultural products. If the focus is on global agriculture, it is important to consider both quality and quantity of production. Certification of quality requires institutional arrangements within the country that carry credibility in both domestic and foreign markets. In this context, the institutional mechanisms such as commodity exchanges and futures trading for hedging risks as well as insurance mechanisms to alleviate the effects of weather uncertainties assume importance. The concept of a nationwide multi-commodity exchange has been mooted in this regard. Commercialisation of agriculture can progress only when institutional arrangements such as insurance penetrate deep within the agricultural sector.

Industrial Revival: Problems and Prospects

7.21 Industrial production slowed to an annual average growth rate of 6.6 per cent in the post-reform period from 7.8 per cent in 1980s. In the first four years of the Ninth Plan period, *i.e.*, up to 2000-01, industrial production grew at 5.6 per cent per annum. Given the continuing slowdown in the first quarter of the current financial year, it is likely to clearly remain well below the target growth of 8.2 per cent per annum set for the Plan period 1997-2002. Subdued investment demand reflected in the low growth of capital goods output, decline in power generation, the deceleration in the production of basic and intermediate goods and inventory accumulation in some industries are factors which reflect the phase of the cycle through which the industrial sector is transiting.

7.22 Despite some stress, the industrial sector has successfully stood up to the pressures of competition from imports and the entry of multinational companies into the domestic market. The growth and spread of structural transformation exemplified in corporate restructuring, mergers and acquisitions is also noteworthy. This suggests that Indian industry has the inherent capability, resilience and skills to cope with the exacting pressures of a transforming, globally competitive environment. Thus, a central task in the revival of the industrial sector is the rebuilding of confidence in the growth impulses by a conducive policy environment.

7.23 In the context of reinvigorating industrial growth, public sector enterprises (PSEs) also have an important role to play. On the one hand, the PSEs face a tightening of the budget constraint as budgetary support has dried up. On the other hand, considerable uncertainty

characterises the future especially in an outcome dominated by uncertain prospects for disinvestment, restructuring and privatisation. Setting out a clear path would help to dispel uncertain expectations and provide the PSEs with the confidence to design strategies to raise resources, plan growth trajectories and cope with the pressures for change. Appropriate changes in legislation as well as in the institutional infrastructure enabling flexibility in policies will facilitate the critical public sector component of Indian industry to compete effectively, domestically and globally.

7.24 The course of future industrial development in India would need to reinforce the strong complementarities between the public and private sectors. In the investment mixes for the medium term, the guiding consideration should be to focus energies of PSEs in areas that 'crowd in' the private sector and those with the minimal 'crowding out' effects. A conscious policy of flexibility and promoting greater competition is needed so that public investment takes place where needed and vacates where it is superfluous or inefficient.

7.25 Preparing for the Tenth Plan would pose testing challenges for Indian industry. As per the projections of the approach to the Tenth Plan, in order to attain the target of 8 per cent growth of GDP per annum envisaged for the Plan period, industry is required to grow at over 10 per cent, especially in an environment of heightened competition from imports following the removal of quantitative restrictions. A conducive environment for the industrial revival would hinge upon reforms in the labour market to bring about the necessary flexibility and supply response, changes in exit procedures through appropriate legislation relating to industrial sickness, the Companies Act and industrial disputes and bankruptcy laws. The impetus for accelerated industrial growth could be released by substantially raising investment in infrastructure, hastening of the disinvestment process and restructuring of public sector enterprises.

7.26 The new economy sectors continue to enjoy a competitive edge, despite the underlying domestic industrial conditions and the global slowdown. The fast growing sectors, *i.e.*, software, knowledge-based industries, information technology (IT) enabled services, pharmacology, biotechnology and entertainment services carry the potential of generating increasing returns to scale and sustaining the step-up in the growth path of the economy. These industries have the inherent confidence and the capabilities to expand rapidly and command global leadership. A critical enabling requirement for accelerated growth of these sectors is the expeditious removal of procedural and institutional constraints on production, marketing and international trade.

External Sector

7.27 The prospects for an early recovery in the global economy turned uncertain with the US economy slowing down in the second quarter, with real growth falling below 2 per cent for three consecutive quarters. Business investments in equipment and software also recorded consecutive declines over the same period. In the Euro area, the moderation in growth since the third quarter of 2000 continued with domestic demand remaining weak and investment demand registering a negative growth in the first quarter of 2001. The recovery in the Japanese economy continues to be hesitant. For the global economy, downside risks, particularly, the impact of falling asset prices on demand and business confidence, weaker corporate earnings and corporate restructuring, growing external imbalances and the potential misalignment of key currencies

have made the prospects for the global economy less promising in 2001 than assessments based on currently available information. The growth in world trade volume is projected to decelerate steeply with projections by multilateral institutions placed between 5.5-6.7 per cent in 2001 as against 12.4 per cent in 2000. The decline in export growth is expected to be more pronounced for non-fuel exporting developing countries.

7.28 An assessment of the leading information on industrial production, employment, inventories, new investments and exports suggests that the speed and the period over which the global recovery could occur remains uncertain. It is now expected that the recovery of the US economy may be visible only towards the beginning of 2002 with the turnaround starting possibly towards the close of 2001. With all the major regions of the global economy experiencing downturn, prospects for the emerging market economies remain uncertain, depending on the level of global inter-dependence. Net private capital flows to the emerging markets are projected to decline from US \$ 168 billion in 2000 to US \$ 140 billion in 2001.

7.29 Risks to emerging market economies emanating from both external and domestic developments have intensified in 2001. The slowdown in the US economy and sharp fall in the global electronics demand have weakened the prospects of most of the export-dependent East Asian economies. Amidst financial crisis in two of the leading emerging market economies – Argentina and Turkey- average emerging market credit quality deteriorated in the first quarter of 2001 with Argentina, Turkey, Ecuador and Malaysia facing rating downgrades in a sequence. Spillover to other emerging markets from Argentina and Turkey was, however, limited in terms of elongation of spreads on the Emerging Market Bond Index (EMBI), reflecting the limited impact of devaluation in Turkey and the large sell offs of Argentinean bonds in March 2001. Syndicated lending to emerging markets fell sharply in the first quarter of 2001 and the rally in the equity markets following the Federal Reserve's January 2001 cut in interest rates was reversed by the end of the quarter. In June 2001, both Argentinean and Turkish government completed major debt swap arrangements to lengthen debt maturities. Yield spreads on sovereign bonds of emerging markets generally declined in the second quarter of 2001, with the maximum improvement for countries with superior ratings. Equity markets in general also recovered to end-2000 levels.

7.30 Unlike many emerging markets, the impact of the US slowdown on India's exports of merchandise and software is expected to be moderate with export diversification providing a degree of insulation. While foreign direct investment flows are expected to be relatively unaffected, the outlook for portfolio flows remains mixed. On one hand, they could recede, affected by a degree of home bias. On the other hand, readjustment of portfolios among fund managers could result in additional flows into India. The prospects for raising external commercial borrowings may, however, require constant monitoring.

7.31 Recent developments in India's external current account indicate that exports hold the key to a sustainable balance of payments. Ensuring adequate credit flows to the export sector and removal of procedural bottlenecks in the access to the trade and payments regime will continue to dominate the formulation of monetary and exchange management policies. Sustained efforts to create a conducive export performance by effecting enduring improvements in productivity at the specific export industry level, efforts to diversify export markets through appropriate

marketing plans, and state level export efforts would need to be pursued. Maintaining and building upon the recent export performance is critical for ensuring viability to the envisaged expansion in the CAD in the Tenth Plan period.

7.32 While the CAD is expected to remain low in 2001-02, preliminary projections for the Approach to the Tenth Five Year Plan incorporate an average CAD of 2.8 per cent per annum during the Plan period. This would imply that net capital flows would have to increase from US \$ 10 billion in the initial year of the Tenth Plan to about US \$ 40 billion in the terminal year or an average of US \$ 20 billion per annum during the Tenth Plan period. This would depend on a four-fold increase in FDI, FII and ECB flows from current levels. Policies for capital flows would need to be suitably adjusted to ensure a preferred hierarchy in flows so that the capital account is stable and not subject to sudden reversals. In India, the pace of liberalisation of the capital account would critically depend on both domestic factors, especially progress in the financial sector reform as well as fiscal adjustment, and the evolving international financial architecture. It is considered prudent for many developing countries to have the legal framework for taking appropriate action to manage unwarranted swings and volatility in external markets. Such options for domestic actions are warranted as long as the international financial system imposes an unequal burden of adjustment between the domestic economy and market participants in the event of volatility.

7.33 The overall approach to the management of India's foreign exchange reserves in recent years has reflected the changing composition of balance of payments, and has endeavoured to reflect the "liquidity risks" associated with different types of flows. The policy for reserve management is thus judiciously built upon a host of identifiable factors and other contingencies. Such factors, *inter alia*, include the size of the current account deficit, the size of short-term liabilities (including current repayment obligations on long-term loans), the possible variability in portfolio investments and other types of capital flows, the unanticipated pressures on the balance of payments arising out of external shocks, and movements in the repatriable foreign currency deposits of non-resident Indians. Taking these factors into account, India's foreign exchange reserves are at present comfortable. It is, however, necessary to ensure that, leaving aside short-term variations in reserve levels, the quantum of reserves in the long run is in line with the growth of the economy and the size of risk-adjusted capital flows. This will provide greater security against unfavourable or unanticipated developments.

Fiscal Policy Issues

7.34 Fiscal policies announced by the Central and State Governments for 2001-02 have renewed a commitment to stronger fiscal consolidation through expenditure management, revenue augmentation, and restructuring of PSEs. Fiscal stability is crucial for achieving the targets being envisaged for the Tenth Five Year Plan (2002-07). Public sector saving of 4.6 per cent of GDP and reduction of the combined fiscal deficit to 3.3 per cent of GDP during the Plan period are key fiscal indicators consistent with Plan targets. Gross budgetary support for the Plan would need to be raised to 5 per cent of GDP by the terminal year of the Plan. The Plan's fiscal strategy would envisage reduction in the number of Government employees with all additional requirements met through redeployment and rationalisation. It is obvious that fiscal corrections at the Centre and States are critical to reach the targets for growth indicated in the Approach

Paper to the Tenth Plan.

7.35 The Fiscal Responsibility and Budget Management Bill 2000 proposes the legal and institutional framework for initiating the consolidation. In this context, it is important for fiscal reforms to percolate to the States where the quality rather than the quantity of adjustment is under evaluation.

7.36 The path to durable fiscal consolidation is through fiscal empowerment *i.e.*, by expanding the scope and size of revenue flows into the budget. A fiscal strategy based on revenue maximisation would also provide the necessary flexibility to shift the pattern of expenditures and redirect them productively; on the other hand, fiscal adjustments based predominantly on expenditure reduction involve welfare losses and risk the danger of triggering a downturn of overall economic activity. There has been some progress in restructuring the tax system; however, the leakages in the tax base through exemptions continue to pose problems. A major medium-term challenge would be to arrest the declining trend in the tax-GDP ratio – from 16 per cent in the late 1980s to 14 per cent in 1999-2000 – and raise to the level of about 18 per cent by the terminal year of the Tenth Plan Period, as suggested by the Planning Commission. Higher tax revenue should be achieved mainly through buoyancy and expansion of the tax base. A central issue remains the co-ordination of central excises (CENVAT) with a State-level VAT, with the objective of structuring a national VAT. In this context, the issue of a State-level VAT that includes inter-State trade assumes critical significance. It is also imperative to introduce comprehensive taxation of services at the central level with appropriate assignment to States and local bodies.

7.37 Revenue maximisation covers not only taxes but also non-tax revenues, especially cost recovery in respect of all commercial services directly (*i.e.*, water) or indirectly (*i.e.*, power) in which investments have been made. The non-tax revenue/GDP ratio has stagnated at around 2.5 per cent in the 1990s. Improvement in setting and collection of user charges, extension of user charges to non-merit goods and improvement in cost recoveries are essential to raise the contribution of non-tax revenues and the elimination of the revenue deficit which emerges as the medium term objective. The issue in regard to PSEs is not merely their profit or loss, but also return on investments made by Government to cover the cost of capital after meeting the maintenance cost. Adequacy of returns on investments already made by the Government is the key to fiscal empowerment. This is also needed to overcome overhang issues relating to accumulated burden of expenditure commitments in the power sector, public enterprises, the financial sector and the carrying costs of food stocks. Therefore, the problems associated with ‘flow’ of return would need policy changes and that with ‘overhang’ would need structured solutions spread over a period.

7.38 In the area of expenditure management, the Union Budget, 2001-02 has effected some of the recommendations of the Expenditure Reforms Commission relating to financial assistance to States to procure foodgrains for Below Poverty Line (BPL) families, phased programme of complete decontrol of urea by April 1, 2006 and downsizing of staff. In any approach to containment of expenditures, it is necessary to recognise the constraints as well as the consequences. Since a predominant part of the budgets, especially at the State level, is committed in the form of interest, pensions and salaries, there is often a reduction in non-

committed expenditure which may actually be essential in nature. It is, therefore, necessary to assess the impact of expenditure containment on the level and quality of delivery of public services. The primary responsibility of Government in terms of providing public goods and essential public services can be discharged effectively when tax as well as non-tax revenues are enhanced, non-merit subsidies are eliminated and tax expenditures are eschewed.

7.39 Debt management strategies of the public sector need to consider sustainability of budgetary operations at various levels. In this context, the size of Government borrowings is only one element in public debt management. It is necessary to monitor the behaviour of the components of public debt. In particular, it is important to track the growth in other liabilities. One of the structural weaknesses of the fiscal system is the ballooning of the pension liabilities of the public sector. The Union Budget for 2001-02 noted with concern that pension liabilities have reached unsustainable proportions and constituted a High-Level Expert Group to provide a roadmap for pension reforms. The Eleventh Finance Commission underscored the need for some viable scheme of pension funding. In this context, a new pension scheme based on defined contributions for central Government employees entering service after October 2001 has been announced. Contingent liabilities arising on account of formal guarantees extended by Central and State Governments need to be considered within strategies to ensure the sustainability of public debt. The quality of financial assets in terms of ownership in PSEs and Government-owned financial entities need to be assessed keeping in view the health of their balance sheets as a whole, since the Government is the owner. In addition, a holistic view of the assets and liabilities as well as incomes and expenditures of the public sector as a whole would add to the quality of fiscal adjustment and the health of public finances.

7.40 The growing interest burden in the budget has been a matter of considerable concern. Several options to address the problem are available. Some of these actions are aligning interest rates on small saving instruments with those on similar instruments offered by banks and financial institutions, gradual elimination of tax exemptions on small savings and harmonisation of tax exemptions for all saving instruments, repayment of interest and principal on the Special Deposit Scheme, and issue of callable loans, floating rate bonds and inflation-indexed bonds. An expert committee set up by the Government of India is currently reviewing the system of administered interest rates. The tax exemptions on small saving instruments have been under review. On the repayment of interest and principal on the Special Deposit Scheme, a gradual phasing is the preferred approach. Initiatives have recently been taken to establish an efficient and reliable benchmark rate for the issuance of floating rate bonds through the recent rationalisation of the treasury bill issuance structure.

7.41 The prohibition of direct borrowings by the Central Government from the Reserve Bank under the Fiscal Responsibility and Budget Management Bill, except by way of advances to meet temporary cash needs in certain circumstances, is of particular relevance to the flexibility in the conduct of monetary policy consistent with its objectives. The exit of the Reserve Bank from the primary market does not prohibit participation of the Reserve Bank in the secondary market and does not eliminate monetisation; however, the scope for private placement of debt or devolvement of auctions of public debt on the Reserve Bank is eliminated. Thus, the extent of monetisation and terms of such monetisation would depend on the judgement of the Reserve Bank in regard to overall stability. Such operational freedom is essential to assure the system that

conduct of monetary policy balances the three relevant elements, *viz.*, the fiscal needs of government, the compulsion of a deregulated interest rate regime and requirements of a more open external sector. In fact, separation of functions of a public debt manager from that of monetary authority needs to be viewed in this context.

7.42 The proposals in the Fiscal Responsibility and Budget Management Bill and the policy announcement made in regard to separation of public debt functions from the Reserve Bank should be viewed in this context as medium-term goals. Such separation is no doubt predicated on a manageable level of fiscal deficit and Government borrowings. In view of the complex nature of linkages, co-ordination between fiscal and monetary policies should be consistent with the overall macroeconomic objectives. Operating procedures of monetary and fiscal authorities, especially debt and cash management, have to be consistent and mutually reinforcing. Harmonious implementation of policies may require that one policy is not unduly burdening the other for too long and for this purpose, credibility of both monetary and fiscal policies is critical.

7.43 The strategy of fiscal empowerment is of special significance for States since the bedrocks of socio-economic welfare, *i.e.*, law and order and social services are in the State sector. There is considerable merit in emphasizing the quality aspects of fiscal adjustment in the process of reduction in the fiscal deficit and this means fiscal empowerment rather than fiscal enfeeblement as an appropriate strategy.

7.44 As regards the growing interest burden of States, the Group of State Finance Secretaries on Interest Burden of States is discussing draft recommendations which merit consideration. States would need to undertake reduction of fiscal deficits and the elimination of the revenue deficit. Another recommendation is renegotiation of existing loans from the Centre either by restructuring terms of existing loans on the basis of prevailing market rates or by repaying earlier loans through fresh borrowings from the market. With regard to future loans from the Centre, interest rates are sought to be related to weighted average costs of borrowings of the Centre with the minimum spread. The Group also envisaged flexibility in the selection of projects as well as deployment of existing staff in respect of Centrally Sponsored Schemes, issue of securities of different maturities and the development of a liquid and vibrant retail debt market.

7.45 The major focus of economic reform in India has to be at the level of States with the interState issues emerging as the major concern of Government. Extending fiscal reforms to States will require a focus on institutional infrastructure especially relating to law and order, provision and delivery of essential services such as drinking water, sanitation, primary education and dispensaries, not only to serve the needs of the poor and the underprivileged but also to attract resources from the financial sector for investments in physical infrastructure. Improving the delivery of services should be the priority warranting total cost recovery for commercial activities with self-balancing cross-subsidisation. State budgets may have to differentiate between bankable and non-bankable segments, enable, expand and hive off the former while focusing on efficient use of resources for non-bankable components such as anti-poverty programmes, and social services. The major thrust of reform is to expand what may be called social infrastructure which requires large public funding and where scope for private funding is extremely limited in the short run, especially among poorer regions. The objectives of reform can be attained by fiscal reorientation towards larger responsibilities for States to provide public

goods and social services, including anti-poverty programmes, with concomitant rollback of fiscal activism in commercial activities.

The Conduct of Monetary Policy

7.46 For 2001-02, the Reserve Bank proposes to continue to ensure that all legitimate requirements for credit are met consistent with price stability. Towards this objective, the Reserve Bank will continue its policy of active management of liquidity through OMO, including two-way sale/purchase of treasury Bills, and further reduction in CRR as and when required. Unless circumstances change unexpectedly, or current problems in some segments of the market are not resolved soon, on the present reckoning, it should also be possible to maintain the current interest rate environment, and explore the possibility of some further softening in medium and long-term rates over time, following the stance of interest rate flexibility announced in the Union Budget for 2001-02. The policy stance is flexible in case the underlying inflationary situation turns adverse or there are unfavourable and unexpected external developments.

7.47 There has been some easing of constraints on the flexibility of interest rates in the financial system as a whole. Assuming a continued positive outlook for inflationary expectations, further flexibility would be facilitated if consistent progress is made in the direction of credible fiscal adjustment combined with flexibility in administered interest rates, improvements in the operational efficiency of the financial system and reduction of the burden of non performing assets in the banking system. The Reserve Bank will continue with its effort to bring about orderly development and smooth functioning of financial markets and would take further steps in financial sector reforms.

7.48 In India, while inflation is not targeted, policy statements have been identifying a tolerable level of inflation taking into account the global trends and domestic compulsions. There has also been some sensitivity to issues relating to measurement of prices including in the growing services sector as also asset prices. An area of concern is the continuing hardness in international oil prices and the impact on inflation in India. In the coming years, the element of 'buying time' embodied in the pricing mechanism may not be available in view of emerging budgetary priorities relating to quasi-fiscal activities embodied in the oil pool account. The impact of movements in international oil prices on domestic inflation and the balance of payments may, therefore, be more direct and rapidly transmitted.

7.49 In a deregulated environment, the availability of adequate resources at appropriate costs, *i.e.*, interest rates assumes importance. Stable and preferably low interest rates are conditional upon enabling stable inflationary expectations which, in turn, depends on price stability. The monetary policy review of October 1999 had identified several structural and other constraints impeding the downward flexibility of interest rates in India, *i.e.*, high non-interest operating expenses of public sector banks, the relatively large overhang of NPAs, the practice of offering fixed interest rates on term deposits by banks, the large and persistent increase in the size of the market borrowing requirements of the Government, the floor set by administered interest rates on contractual savings and the high level of the CRR. The need to impart flexibility to interest constraints. The recent reductions in administered interest rates on some saving instruments enabled a general easing of the interest rate structure through monetary policy action in the

beginning of the current financial year.

7.50 There is merit in devising a transparent system of determining administered interest rates, such as small savings rates, which would ensure a reasonable and assured real return to the small savers and at the same time make the small savings rates more flexible. As interest rates in the economy cover credit, money and securities markets, such a system has to reckon with linkages among these rates as well. Similarly, in considering returns to sources from a variety of instruments, the interest rate regime cannot ignore tax incidence and their contractual nature or otherwise. The Expert Committee appointed by the Government of India to review the system of administered interest rates and other related issues is currently examining various aspects of small savings rates.

7.51 The objective of monetary policy operations is to make the interest rate regime more flexible and responsive to the economic fundamentals. The interest rate policy is evolving and at the present stage of development, it may not be as effective as it could be in a more deregulated environment mainly because the financial markets lack depth and are far from being fully integrated. Moreover, the public sector dominates the financial sector; this has a tendency to impede responses based on either market considerations or regulatory incentives. In the context of the deceleration in industrial activity, the role of monetary policy in enabling the revival by marking down interest rates has been widely discussed. In this context, it is worth noting that the Reserve Bank has created a number of instruments, as a package, to ensure adequate liquidity and appropriate interest rates. Allowing for lending at below Prime Lending Rates (PLR), for instance, has resulted in a significant amount of lending at sub-PLR rates.

7.52 In recent years, the operating procedures of monetary policy have undergone significant changes. A major transformation has also taken place in the form of an expansion in the array of monetary instruments. The gradual switchover to indirect market-based instruments in the conduct of monetary policy was made possible because of simultaneous efforts at developing various segments of the financial market, particularly money, foreign exchange and government securities market. Reform in the call money market when fully implemented in the next two to three years would mean completion of the transition towards indirect instruments of monetary policy. The increasing responsibility of the Reserve Bank in undertaking reform in the financial markets has to be seen essentially in the context of improving the effectiveness of the transmission channels of monetary policy. Development of financial markets has, therefore, encompassed regulatory and legal changes, building up of institutional infrastructure, constant fine-tuning in market microstructure and massive upgradation of technological infrastructure. An important development in the evolution of monetary policy in India is the activation of the Bank Rate as instrument of monetary policy in 1997. This was followed up with a more active recourse to repo operations, leading to an orderly progress to a full-fledged LAF. With the emergence of financial markets with depth and sophistication, the Bank Rate would perform the critical function of the principal signaling variable and the LAF rates, setting a corridor for short-term money market, would be the operating instruments of monetary policy.

Financial Sector Reforms

7.53 The major thrust of financial sector reforms would continue to be on the development of

financial markets, strengthening of the financial system and prudential and supervisory norms, improvement in credit delivery and modernisation of the technological environment of the financial sector.

7.54 In India, the regulation of financial sector traditionally evolved as an instrument of planned development. In such a situation, the objectives are mobilisation of savings and allocation of investible resources mainly through public sector and/or administered prices of financial products. There has been an implicit sovereign guarantee of maintaining systemic stability giving in the process an impression of protecting interests of all financial intermediaries and market participants. The management of the financial sector, therefore, contained a variety of objectives and to this end, many financial institutions were nationalised or created to subserve ends of planned development, thus relegating the role of competition as an instrument of efficiency to a secondary position. Furthermore, co-ordination among the financial institutions took precedence over arm's length relationships or checks and balances, which underplays both the degree of transparency and the extent of accountability. In a deregulated environment, savers have a wide range of financial instruments and intermediaries to choose from with a spectrum of risks, rewards and liquidity. The expectations of savers, the options for investors to raise resources, the accountability of intermediaries and the focus of regulation need to be fully attuned to the reforms in the financial sector which emphasise competition and attendant risks as a package, leading to greater efficiency along with systemic stability.

7.55 Some progress has been made in the context of the recommendation of the Narasimham Committee (1991) that non-bank financial companies should be brought under the ambit of regulation and supervision of the Reserve Bank. In recent years, the Reserve Bank has taken a number of steps towards regulating the undertaking of financial business by NBFCs and the acceptance and safety of public deposits. Separate legislation has been proposed for enhanced protection to depositors of NBFCs. The Narasimham Committee II (1998) also recommended the conversion of Development Financial Institutions (DFIs) into either commercial banks or NBFCs so as to improve their regulation, especially in the context of the move towards universal banking. In the recent period, developments relating to the activities of DFIs have been drawing concern. The ratio of net NPAs to net advances has increased sharply for some of the major DFIs, with an accompanying deterioration in their capital adequacy ratios and the ratio of total outstanding borrowings to net owned funds. It is in the context of these developments that early implementation of recommendations of the Narasimham Committee and an unambiguous signal of strengthening of the regulatory framework for the DFIs assume critical importance.

7.56 In recent years, a view that has gained ground is that the Reserve Bank should be delinked from the ownership of financial institutions through transfer of ownership to the Government. In order to enhance competitive impulses as also in view of the regulatory and prudential considerations, the issues relating to the separation of ownership and regulation have been receiving increasing attention. Retaining the ownership structure of the regulated/supervised institutions engenders moral hazard with systemic implications. The Reserve Bank has accepted the recommendation of transfer of ownership in respect of the State Bank of India, the National Housing Bank, the National Bank for Agricultural and Rural Development, and plans to initiate the process of transfer of ownership of other financial institutions. The Reserve Bank's holdings in the Discount and Finance House of India and the

Securities Trading Corporation would be completely divested during 2001-02.

7.57 Transparency and disclosure standards in regard to banks have been enhanced to meet international practices, with the range and extent of disclosures gradually increasing over the last couple of years. Recent policy announcements have expressed the intent of moving towards international best practice of 90-day norm for loan classification by end-March 2004. The NPA portion of banks due for reclassification needs to be closely monitored. The issue of transparency also leads to questions of corporate governance in banks. It needs to be recognised that the reform process is only an enabling mechanism; leveraging it fully is possible only if the institutional players in the system are receptive to good governance. The corporate governance practices in banks needs to be transparent and consistent, striking a balance between promoting safe and sound banking, on the one hand, and imparting to banks the necessary flexibility for effective competition, on the other. It is in this context that the need for good governance practices in banks, especially with regard to the constitution of bank boards and their accountability, is reiterated.

7.58 An important aspect of the future course of financial sector reforms relates to the supervisory framework. The regulatory regimes and supervisory systems in the changing environment face new challenges in safeguarding the integrity, efficiency, soundness and stability of the financial system. In India, the regulatory and supervisory arrangements have been rendered complex in view of the existence of various types of financial intermediaries with differing charters owing their origins to pre-reform strategies.

7.59 In the light of the recent experience, the Reserve Bank has proposed the setting up of a new apex supervisory body, which can take over the entire inspection/supervisory functions in relation to scheduled and non-scheduled urban cooperative banks (UCBs). This apex body could be under the control of a separate high-level supervisory board consisting of representatives of the Central Government, State Governments, the Reserve Bank as well as experts and may be given the responsibility of inspection and supervision of UCBs and ensuring their conformity with prudential, capital adequacy and risk-management norms as laid down by the Reserve Bank.

7.60 Notwithstanding a perceptible decline in the NPAs of the banking system in India, the levels of NPAs still remain high. Several initiatives have been undertaken for containing/minimising the stock of NPA overhang as well as its increment. The resolution of the NPA problem requires greater accountability, improved disclosures and an efficient credit information system. Concomitantly, there is a need to initiate legislative framework that will make the recovery process smoother and legal action more prompt and efficient. It is necessary to recognise that insolvency laws in India and their operating mechanisms are out of alignment with the pace of reforms in the financial sector and are emerging as the most critical impediment to debt recovery with mounting defaults perpetuated under relevant legal provisions.

7.61 Considering the complexities of banking business and emerging product innovations with complex risk profiles, there is a growing acceptance that a risk-based supervision (RBS) approach would be more efficient than the traditional transactions-based approach. Accordingly, the focus has shifted towards evaluating and monitoring risk management systems, internal

controls, corporate governance, and information systems, as opposed to merely examining the balance sheets of individual banks. To meet with the requirements of RBS, banks would have to take immediate measures to improve the reliability and robustness of their risk management strategies, management information and supervisory reporting systems.

7.62 The credit needs of small and medium enterprises which typically come under pressure during a period of structural change require special attention warranting changes in internal procedures and incentive mechanisms among financial intermediaries, especially banks. An important task of the banking system in the coming years will be the management of the rural credit delivery systems and processes as also channels of credit flow to small and medium scale industries. Harnessing the widely dispersed skills of artisans in rural areas through micro-credit schemes would, to some extent, augment both the income and employment generation potential. It needs to be recognised that for the rural borrower also, it is not costs *per se* but an appropriate credit delivery mechanism characterised by adequacy, timeliness and certainty of credit availability based on simple norms that is of most relevance. Improving the credit delivery system of co-operatives is vital for reaping productivity and employment gains and to this end, strengthening of genuine co-operative credit structures is essential.

PART TWO : THE WORKING AND OPERATIONS OF THE RESERVE BANK OF INDIA

VIII - Monetary and Credit Policy

[Developments During 2000-01](#) [Institutional Measures](#)

Introduction

8.1 The macroeconomic environment since the second half of the 1990s has rendered the conduct of monetary policy complex and subject to conflicting pulls. While output considerations may warrant monetary easing, it has been necessary to guard against monetary expansion turning excessive in a situation of slowing down of output growth which could cause the emergence of inflationary pressures and expectations. Moreover, the policy setting has been complicated by the impact of brief, yet significant, supply shocks to the price level within the general ebbing of demand-pull factors, structural rigidities resulting in the downward inflexibility of interest rates, the continuous pressure of the Government's market borrowing programme and sporadic episodes of volatility in the financial markets. The on-going integration of financial markets across the world, the phenomenal increase in financial turnover, the liberalisation of the economy and the rapidity with which unanticipated domestic and international tremors get transmitted to financial markets across the world because of the new technology have added additional dimensions to the conduct of monetary policy.

8.2 A factor which further complicates the conduct of monetary policy during certain periods is the difficulty of an appropriate assessment of the potential inflationary pressures. While there is little disagreement that in the medium- to long-run, inflation is largely caused by monetary expansion, in the short-run, price fluctuations could be affected by non-monetary and supply side factors. Under these conditions, monetary and credit policies have been deployed in support of the overall macroeconomic policy objectives, *albeit*, with a flexible approach under which tightening or easing of monetary conditions can be swiftly undertaken.

8.3 The conduct of monetary management has undergone significant changes in the 1990s in terms of objectives, framework and instruments, reflecting broadly the progressive liberalisation of the Indian economy. The Reserve Bank announced a multiple indicator approach in 1998-99, which accords the necessary flexibility to respond to changes in domestic and international economic and financial market conditions more effectively. While the growth in broad money (M_3) continues to be used as an important indicator of monetary policy, interest rates along with information on currency, credit extended by banks and financial institutions, the fiscal position, trade, capital flows, the inflation rate, the exchange rate and transactions in foreign exchange available on high frequency basis are juxtaposed with output data for drawing policy perspectives. This shift has been gradual and a logical outcome of measures taken over the period of structural reforms.

8.4 A major transformation has also taken place in the operating procedures of monetary policy. The reform of monetary and financial sectors has enabled the Reserve Bank to expand the

array of instruments of indirect monetary control and at the same time reduce reliance on reserve requirements. The liquidity management in the system is carried out through open market (including repo) operations (OMO), supplemented by access to the Reserve Bank's standing facilities. The Liquidity Adjustment Facility (LAF) operations combined with strategic OMO have evolved as the principal operating procedure of monetary policy.

8.5 During 2000-01, the stance of monetary policy, as in the recent past, was to ensure that all legitimate credit requirements were met consistent with price stability. Assuming a real GDP growth of 6.5-7.0 per cent (revised to 6.0-6.5 per cent in the October 2000 mid-term review), a normal agricultural crop, improvement in industrial activity and an inflation rate of around 4.5 per cent, indicative projections were given for the key information variables: M_3 growth at about 15.0 per cent, commercial bank deposit growth at 15.5 per cent (or Rs.1,25,000 crore) and adjusted non-food credit growth (inclusive of non-SLR investments) at around 16.0 per cent for the year. Alongside the day-to-day operations for monetary and liquidity management, policy initiatives were undertaken to bring about institutional changes so as to strengthen the transmission of monetary policy impulses and to improve and focus the delivery of credit.

8.6 Developments during 2000-01, which are covered in the following sub-sections, encompass issues in the day-to-day management of liquidity in the money and gilt segments, including LAF operations. Institutional measures designed to improve the operational effectiveness of monetary policy are the focus of the subsequent sub-section, which also covers changes in the operating procedure under the LAF, maintenance of cash reserve requirements, rationalisation of interest rates, strengthening of the credit delivery mechanism in respect of rural credit, export credit and small-scale industries (SSI) and the institution of credit delivery mechanisms after the Gujarat earthquake and the monetary policy stance for 2001-02.

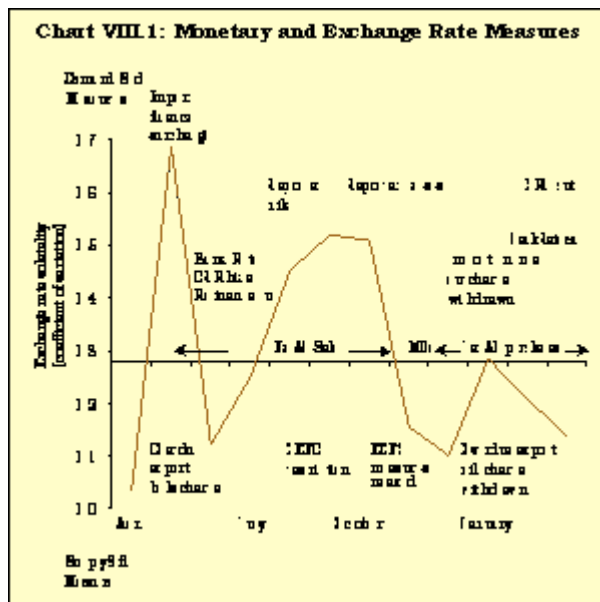
DEVELOPMENTS DURING 2000-01

Liquidity Management

8.7 In April 2000, the Reserve Bank reduced, by one percentage point each, (i) the CRR on eligible demand and time liabilities of commercial banks to 8.0 per cent, in two equal stages, effective April 8 and April 22, 2000 augmenting lendable resources by Rs.7,200 crore; (ii) the Bank Rate to 7.0 per cent, effective the close of business on April 1, 2000; and (iii) the fixed rate repo rate to 5.0 per cent, effective April 3, 2000. The Reserve Bank also cut the savings deposit rate of scheduled commercial banks by 0.5 percentage point to 4.0 per cent, effective April 1, 2000.

8.8 The foreign exchange market conditions began to tighten from mid-May 2000, mainly on account of a sharp increase in the oil import bill and the drying up of capital flows. The Reserve Bank undertook a series of monetary measures to bridge the demand-supply gap in the foreign exchange market. First, an interest rate surcharge of 50 per cent of the actual lending rate on bank credit for imports was introduced with effect from May 26, 2000 as a temporary measure. Essential categories, such as export-related imports, bulk imports in respect of crude oil, petroleum products, fertilisers, edible oil and other essential commodities imported through Government agencies were, however, exempted from the interest surcharge. Secondly, the

Reserve Bank indicated that it would meet genuine market requirements including Government debt service payments as considered necessary. Arrangements to meet fully or partially the foreign exchange requirements for import of crude oil by the Indian Oil Corporation were also announced. Thirdly, exporters were advised not to delay repatriation of export proceeds beyond the due date. In order to discourage any delay in the realisation of export proceeds, banks were required to charge interest at 25 per cent per annum (minimum) in respect of overdue export bills from the date the bill falls due for payment. Finally, banks were advised to enter into transactions in the foreign exchange market only on the basis of genuine requirements and not for the purpose of building up speculative positions ([Chart VIII.1](#)).



8.9 The Reserve Bank undertook active operations in the foreign exchange market (net sales of US \$ 1,948 million) in May-June 2000. This put pressure on money market conditions, driving up banks' and primary dealers' (PDs) recourse to the Reserve Bank and nudging up call rates above the Bank Rate especially during the latter half of May and June. The decline in foreign currency assets of the Reserve Bank was largely off-set by private placements and reverse repo operations. This resulted in an increase in the Reserve Bank's net domestic assets, particularly the net credit to the Centre.

8.10 The introduction of the LAF in June 2000 provided the Reserve Bank with an effective instrument to adjust liquidity and transmit interest rate signals to the markets. The LAF operations contained the movement of money market rates within a stable corridor and created the enabling conditions for the emergence of a short-term rupee yield curve.

8.11 Reverse repo auctions were conducted at progressively higher interest rates to push up short-term interest rates with a view to ensuring orderly conditions in the foreign exchange market. The renewal of foreign exchange market pressures in July 2000 prompted a further tightening of monetary conditions on July 21, 2000. The Bank Rate was increased by a percentage point to 8.0 per cent as at the close of business on July 21, 2000. The CRR was increased by 0.5 percentage point to 8.5 per cent in two equal stages, effective July 29 and

August 12, 2000, respectively. Limits available to banks on account of standing liquidity facilities were temporarily halved in two equal stages, effective July 29, 2000 and August 12, 2000, respectively.

8.12 The permissible balances in banks' Exchange Earners' Foreign Currency (EEFC) accounts were scaled down to 50 per cent of the amount outstanding as on August 11, 2000 and the excess over 50 per cent was required to be converted into rupees by August 23, 2000. Future accretions to such EEFC accounts were restricted to 50 per cent of what was then eligible and such accretion was required to be maintained in liquid form in current/savings accounts. Credit facilities available against EEFC accounts were held in abeyance

8.13 The Reserve Bank continued to modulate liquidity conditions directly through net foreign currency sales and net primary subscription to government securities, partly offset by net OMO sales. The monetary stance was reinforced through aggressive repo operations under the LAF, with the daily repo rate rising from 8.0 per cent as on August 1, 2000 to 14.5 per cent as on August 14, 2000. The daily repo rates eased to 10.0 per cent by September 11, 2000 as stability returned to the foreign exchange market. Subsequently, as part of the mid-year review of macroeconomic and monetary conditions and the consequent monetary stance in October 2000, the EEFC scheme was reviewed in the light of previous experience and EEFC entitlements were restored to their earlier levels. It was also decided that the EEFC accounts would henceforth be held in the form of current account and credit facilities would not be provided by banks against the EEFC balances.

8.14 In early November 2000, a turnaround in market sentiment following the successful launch of the India Millennium Deposits (IMDs) and subsequent capital inflows allowed the easing of monetary conditions. The improved liquidity conditions facilitated government securities auctions and net OMO sales by the Reserve Bank. The interest rate surcharge of 50.0 per cent on import finance and the interest rate of 25.0 per cent on overdue export credit were withdrawn, effective January 6, 2001. The CRR was reduced by 0.5 percentage point to 8.0 per cent, in two equal stages, effective February 24, 2001 and March 10, 2001, respectively. The Bank Rate was cut by 0.5 percentage point each to 7.5 per cent, effective the close of business on February 16, 2001 and further to 7.0 per cent, effective the close of business on March 1, 2001. The Reserve Bank conducted reverse repo operations to tide over temporary spells of tight liquidity - during January 2001 driven by a rally in the government securities markets and at end-March, on account of the usual balance sheet date considerations.

8.15 The Reserve Bank continued to modulate liquidity conditions through a combination of CRR changes, private placements and open market (including repo) operations in the first quarter of 2001-02. Repos under the LAF were used to absorb liquidity, with the rates easing to 7.0 per cent and further to 6.75 per cent on April 27, 2001 and 6.5 per cent on May 28, 2001 in consonance with easy money market conditions resulting from continued capital flows, poor credit off-take as well as accommodation of the Centre's fiscal deficit *via* ways and means advances and private placements with the Reserve Bank. Reverse repos were conducted during May 8-23, 2001 to tide over a spell of tight liquidity caused by government securities auctions, lending by non-bank participants under the new regulations on lending in the call market and curtailment of liquidity support at the Bank Rate as per the revised LAF scheme. The CRR was

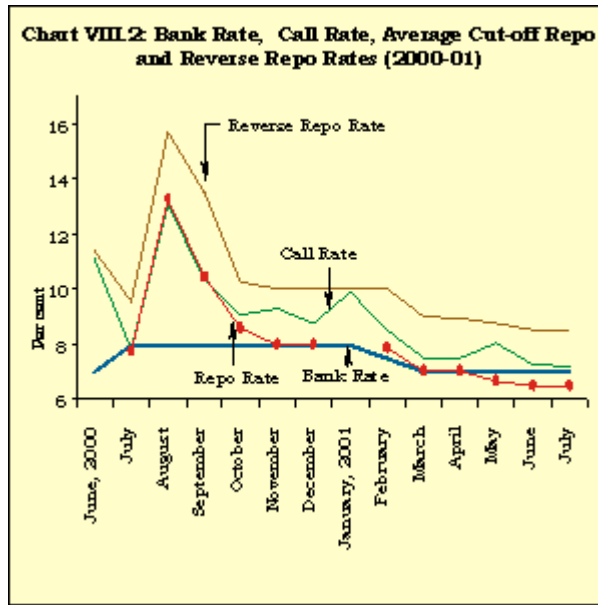
reduced by 50 basis points to 7.5 per cent, effective May 19, 2001, injecting Rs.4,500 crore in terms of lendable resources to the banking system.

INSTITUTIONAL MEASURES

8.16 The sweeping changes occurring in the financial system in recent years have necessitated restructuring and refocusing of the operational framework of monetary policy the world over and India is not an exception in this regard. Financial sector reforms have themselves brought forward these imperatives. The progressive liberalisation of financial markets and key financial prices have entailed a growing market orientation of monetary policy, alongside a gradual shift from direct to indirect instruments and improvement in the channels of credit flow. The Reserve Bank's responsibility for financial stability has provided the rationale for on-going efforts to develop a vibrant and resilient financial system to play the critical allocational role in the financial resource requirements of growth. It is in this context that the bi-annual statements of monetary and credit policy in recent years have focused upon 'structural measures' in order to strengthen the financial system and to improve the functioning of the various segments of the financial markets. The major objectives are to : (i) increase the operational effectiveness of monetary policy; (ii) redefine the regulatory role of the Reserve Bank in the determination of interest rates, margins and credit allocations, while simultaneously strengthening its role in the development of financial markets and the management of overall liquidity in the system; (iii) strengthen prudential and supervisory norms, while at the same time providing banks and financial institutions maximum autonomy in operational matters; (iv) improve the credit delivery system, particularly for agriculture, exports, services, SSI, self-help groups (SHGs) and micro-credit institutions; and (v) develop the technological and institutional infrastructure necessary for an efficient financial sector. The April 2000 monetary and credit policy statement reviewed the progress, highlighting the need for speeding up the development of an active secondary securities market and putting in place of banks' risk management and internal control mechanisms with timely and efficient procedures of loan recovery.

Changes in the Operating Framework of Monetary Policy: Liquidity Adjustment Facility

8.17 Policy initiatives and contemporaneous market development have led to the evolution of a full-fledged LAF in which liquidity is injected (absorbed) through reverse repo (repo) auctions with a view to imparting stability to short-term money market rates and enable orderly market play ([Chart VIII.2](#)). The Interim Liquidity Adjustment Facility (ILAF) introduced in April 1999, as a transitional mechanism for providing banks an access to liquidity at fixed interest rates, was replaced by the LAF, effective June 5, 2000. The fixed rate repo gave way to variable rate repo auctions. The Additional Collateralised Lending Facility (ACLF) for banks and Level II liquidity support to PDs were replaced by variable rate reverse repo auctions with same day settlement. Export credit refinance facility remained unchanged.



8.18 Given the satisfactory implementation of the first stage of the LAF during 2000-01, the second stage of the LAF was instituted in the Policy Statement of April 2001. The standing liquidity facilities in the form of the Collateralised Lending Facility (CLF), export credit refinance to banks and collateralised liquidity support to PDs were divided into two parts in approximately 2:1 ratio, *viz.*, a normal facility provided at the Bank Rate and a backstop facility at a variable daily rate linked to the cut-off rates in regular LAF auctions at 1 per cent above the reverse repo rate. If reverse repo auctions do not take place on a particular day under the LAF, the back-stop facility would be provided at 2-3 percentage points above the repo rate. In the absence of both repo and reverse repo auctions or in case no bids were received/accepted under either repos or reverse repos, the rate for the back-stop facility would be 1-3 percentage points above the National Stock Exchange's Mumbai Inter-bank Offer Rate (NSE-MIBOR). While the major part of the standing facilities continue to be available at the Bank Rate, a part of such facilities is now priced at market-related rates.

8.19 The limits on export credit refinance were fixed at 15 per cent of the total outstanding export credit eligible for refinance as at the end of the second preceding fortnight, effective May 5, 2001, instead of the earlier system of linking refinance to the incremental export credit over a base date, *viz.*, February 16, 1996. The existing refinance limit as on May 4, 2001, as per the earlier formula, is retained as the minimum entitlement up to March 31, 2002. With the announcement of the second phase of LAF, the Reserve Bank has been in the process of moving gradually from a system of segmented refinance to a more fungible system of liquidity adjustment at market-related rates.

8.20 Several measures were also undertaken in the April 2001 monetary and credit policy statement with a view to improving the operating procedures of the LAF. The minimum bid size was reduced from Rs.10 crore to Rs.5 crore to facilitate greater participation by small operators. The timing for receipt of bids was advanced by 30 minutes to 10.30 am so that the announcement of results could be made by 12.00 noon. The back-stop facility was made available till the close of banking hours. Further, the following options are now available to the Reserve Bank with a

view to providing quick interest rate signals in the face of unforeseen exigencies: (i) a switchover to fixed rate repos on overnight basis at interest rates announced as part of auction announcement on the previous evening or before 10.00 am on the day of auction; (ii) introduction of longer-term repos up to a 14-day period as and when required, in addition to overnight repos; and (iii) introduction of multiple price auctions from May 2001. Apart from releasing to the public the weighted average cut-off yield in case of multiple price auctions, the Reserve Bank publishes data on the scheduled commercial banks' aggregate cash balances maintained with it on a cumulative basis during the reporting fortnight with a lag of two days with a view to stabilising market expectations and arresting volatility in call rates.

Maintenance of Cash Reserve Requirements

8.21 In the recent period, several measures have been undertaken with a view to enabling banks to choose an optimum strategy for holding intra-reporting period bank reserves. In November 1999, a lagged reserve maintenance system was introduced under which banks were allowed to maintain reserve requirements on the basis of the last Friday of the second (instead of the first) preceding fortnight. From May 6, 2000, banks were required to maintain a minimum of 65.0 per cent (instead of the earlier 85.0 per cent) of the CRR balances on a daily basis from the first working day to the thirteenth day of the fortnight and adjust the balances accordingly on the reporting Friday (*i.e.*, the fourteenth day). From August 11, 2001, the daily minimum requirement of 65.0 per cent was reduced to 50.0 per cent for the first seven days of the reporting fortnight and 65.0 per cent for the rest of the days inclusive of the reporting Friday (which earlier did not have a minimum prescription). The interest rate on eligible balances was hiked by 2 percentage points to 6.0 per cent, effective April 21, 2001 with a view to eventually aligning it with the Bank Rate. Further, in order to facilitate the emergence of an inter-bank term money market, inter-bank term liabilities with a maturity of 15 days and above were exempted from the maintenance of minimum CRR of 3 per cent.

Interest Rates

8.22 The October 1999 mid-term review of the monetary and credit policy had underscored the need to address the structural constraints hindering the downward flexibility of interest rates in India, *viz.*, high operating expenses of public sector banks, overhang of NPAs, the practice of offering fixed interest rates on deposits and its consequences for the average cost of funds, the large government borrowing programme, the rigidities in interest rates on contractual saving and the high level of CRR.

8.23 In April 2000, as part of the efforts to ease the rigidities in the interest rate structure, the restriction on fixed rate loans extended only for project loans was withdrawn. Banks were given the freedom to offer all loans on fixed or floating rates while complying with PLR stipulations. The norms relating to the PLR have been progressively liberalised in the recent period. In April 2001, banks were allowed to offer loans at sub-PLR rates, thereby removing the practice of treating the PLR as a floor for loans above Rs.2 lakh.

8.24 On domestic term deposits, the minimum maturity period of 15 days was reduced to seven days in respect of wholesale deposits (Rs.15 lakh and above). Bank boards were accorded

the freedom to formulate their own rules regarding penal interest rates on premature withdrawal. Considerable freedom was also allowed in respect of interest rates for renewal of overdue term deposits. Banks have also worked out schemes to offer higher and fixed rates of interest on term deposits of senior citizens. As regards Foreign Currency Non-Resident (Banks) [FCNR(B)] deposits, banks were allowed to use current swap rates for fixing interest rate ceilings for the following week. Since April 2001, the earlier mark-up of 50 basis points over the LIBOR/swap rates in determining the ceiling rate was done away with. Banks were also allowed, as in the case of domestic term deposits, to offer differential rates of interest on NRE/FCNR(B) deposits, depending on size; however, for FCNR(B) deposits, the freedom to offer such rates was subject to the overall ceiling prescribed.

Credit Delivery

8.25 An integral element of the conduct of monetary and credit policy has been the direction of bank credit to certain sectors such as agriculture, exports, SSIs, infrastructure, housing, micro-credit institutions and SHGs. Policy stipulations have been reinforced through incentives to ensure the adequate allocation of credit by banks in favour of these sectors. Besides improving the volume and terms of credit, policy efforts have been directed towards enhancing and simplifying the access to credit by simplifying documentation procedures and decentralising the sanctioning to the branch level.

Rural Credit

8.26 In terms of the statutory responsibility under Section 54 of the Reserve Bank of India Act, 1934, the Reserve Bank has endeavoured to (i) institutionalise rural credit; (ii) enlarge its coverage; and (iii) ensure provision of timely and adequate credit to as large a segment of the rural population as possible so as to achieve anticipated growth rates in agricultural production and employment. Banks are required to meet targets and sub-targets set under priority sector lending. During 2000-01, the scope of priority sector lending was rationalised to include bank finance to agriculture through non-banking financial companies (NBFCs) and finance for distribution of inputs for activities allied to agriculture up to Rs.15 lakh (raised from Rs.5 lakh). Keeping in view the importance of agriculture in the economy, the domestic commercial banks have been advised to lend a minimum of 18 per cent of net bank credit to agriculture, of which indirect lending to agriculture should not exceed 4.5 per cent of net bank credit (NBC). A time frame of two years has been set within which both public and private sector banks should achieve the target of 18 per cent of net bank credit for lending to agriculture as also the target stipulated for lending to the priority sector and weaker sections. This would, however, be without prejudice to the allocation under the RIDF for not meeting the targets for lending under priority sector/agriculture during the intervening period. Banks have also been advised to step up direct lending to agriculture.

8.27 Banks are allocated amounts on the basis of the shortfall from stipulated levels in priority sector lending for deposit in the Rural Infrastructure Development Fund (RIDF). Pursuant to the announcement in the Union Budget for 2001-02, RIDF-VII was established in the NABARD with a corpus of Rs. 5,000 crore ([Table 8.1](#)). A sum of at least Rs.750 crore would be earmarked out of RIDF-VII for rural electrification work. In the case of RIDF-I to VI, the rate of interest on

deposits placed in the Fund was uniform for all banks irrespective of the extent of their shortfall. It has now been decided to link the interest on RIDF deposits to banks' performance in lending to agriculture. Accordingly, banks will receive interest from the NABARD on their contribution to RIDF-VII at rates inversely proportional to the shortfall in agricultural lending. Banks would be paid an interest rate of 10.0 per cent on the entire deposit to be made in RIDF-VII if the shortfall in lending to agriculture in terms of percentage to net bank credit works out to less than 2 percentage points, 9.0 per cent for a 2-4.99 percentage point shortfall, 8.0 per cent for a 5-8.99 percentage point shortfall and 7.0 per cent for shortfalls of 9 percentage points and above.

8.28 Public sector banks were set annual targets for the issue of Kisan Credit Cards (KCC) during 2001-02 to achieve the overall target of 33 lakh set for commercial banks. All eligible farmers are to be covered under the scheme within the next three years. Cumulatively, 43.77 lakh KCCs, involving a sum of Rs.10,626 crore, have been issued by public sector banks from the inception of the scheme up to March 2001. Banks have also been advised to provide a personal insurance package to the KCC holders to cover them against accidental death or permanent disability up to a maximum amount of Rs. 50,000 and Rs. 25,000, respectively. As per the model scheme, the premium burden will be shared by banks and the KCC holders in 2:1 ratio.

8.29 Banks were also advised to make efforts for the speedy implementation of the *Swarnajayanti Gram Swarajgar Yojana* launched in the preceding year. The flow of credit to agriculture under the Special Agricultural Credit Plan (SACP), introduced in 1994-95, has been improving significantly year after year. For 2000-01, public sector banks had set a disbursement target of Rs.25,893 crore, against which the actual disbursement amounted to Rs.24,654 crore.

Export Credit

8.30 Several measures have been taken to ensure timely and adequate flow of credit to the export sector. Besides improving the access to credit through on-line facilities, longer maturity lines of credit and term loans, fast track clearance of export documents was instituted at specialised bank branches. A Monitoring Group of Bankers, set up in 1999, met with bank officials, exporters and industry associations including field-level visits at 21 major export centres. Exporters' responses were directly invited by the Reserve Bank, including on its website. Guidelines issued for the implementation of these suggestions, include, *inter alia*, institution of a flexible approach by banks in negotiating bills drawn against letters of credit (LCs) over and above limits, increasing discretionary powers at the bank branch level for sanction of export credit, according further flexibility in disbursing enhanced/*ad hoc* limits pending sanction, waivers of LCs/export orders, *etc.* Exporters whose suggestions could not be implemented have been informed of the reason for non-acceptance.

Table 8.1: Rural Infrastructure Development Fund

RIDF	Corpus	Year established	Amount Sanctioned	(Amount in Rupees crore)	
				Amount Disbursed	Disbursement as percentage to Sanction
1	2	3	4	5	6
I	2,000	1995-96	1,898.64	1,742.45	91.8

II	2,500	1996-97	2,588.78	2,093.68	80.9
III	2,500	1997-98	2,665.34	1,907.72	71.6
IV	3,000	1998-99	3,119.86	1,423.13	45.6
V	3,500	1999-2000	3,639.34	1,255.15	34.5
VI	4,500	2000-01	4,632.67	1,062.12	22.9
VII	5,000	2001-02	717.16	Nil	

Note :. Data up to June 2001

8.31 In the April 2001 policy announcement, a significant rationalisation of prescribed interest rates on export credit was undertaken. A ceiling rate on rupee export credit is now indicated, linked to the relevant-tenor PLR, and banks are free to charge interest rates below the prescribed rate, effective May 5, 2001. The ceiling rate on foreign currency loans for exports was set at LIBOR *plus* 1.0 percentage point, effective April 19, 2001. The revisions in the interest rates are applicable not only to fresh advances but also to the existing advances for the remaining period.

Small-Scale Industry

8.32 The total credit provided by public sector banks to SSIs, at Rs.48,445 crore as on the last Friday of March 2001, worked out to 14.2 per cent of the net bank credit and 33.1 per cent of the total priority sector advances of these banks. Out of the advances of the SSI sector, the advances to cottage industries, *khadi* and village industries, artisans, tiny industries, *etc.*, at Rs.26,019 crore, constitute 53.7 per cent of the advances to the SSI sector.

8.33 The limit for investment in plant and machinery for considering a unit as SSI was brought down to Rs.1 crore from the earlier Rs.3 crore in order to give a fillip to small units with low investment. The investment limit for tiny units continues to be Rs.25 lakh. Investment in plant and machinery in respect of industry-related Small-Scale Service/Business Enterprises (SSSBE) was increased to Rs.10 lakh from Rs.5 lakh. Commercial banks were advised to dispense with collateral requirements for the tiny sector for loans up to Rs.5 lakh. Similarly, to promote the credit flow to small borrowers, the composite loan limit for providing working capital and term loans through a single window was increased from Rs.10 lakh to Rs.25 lakh. Under the Credit-Linked Capital Subsidy Scheme for Technology Upgradation of SSI, introduced in October 2000, a 12 per cent back-ended capital subsidy was made admissible on loans granted to the SSIs by scheduled commercial banks/designated State Financial Corporations (SFCs) for technology upgradation in certain selected sectors.

8.34 The momentum provided for improving credit delivery systems for small-scale borrowers in the Union Budget, 2000-01 was carried forward. Public sector banks are to make concerted efforts to operationalise at least one specialised SSI branch in every district and centres having cluster of SSI units. The lead banks of the districts were advised to take steps for operationalising specialised SSI branches in their respective districts and centres in the districts having a cluster of SSI units. The convenor of the State-Level Bankers Committee (SLBC) in each state monitors the progress in the operationalisation of specialised SSI branches. Banks were also required to fix separate sub-limits in respect of purchases from SSIs while sanctioning/ renewing credit limits of large corporate borrowers (Rs.10 crore and above). Banks were advised to complete the process of operationalising SSI branches by December 31, 2000. As at end-March

2001, there were 390 specialised SSI bank branches operating in the country.

8.35 A Credit Guarantee Fund Scheme for Small Scale Industries was introduced by the Central Government with effect from August 2000 for the purpose of providing guarantees to a substantial extent in respect of credit facilities up to Rs.25 lakh to borrowers in the SSI sector, without any collateral security and/ or third party guarantees. The scheme covers eligible credit facility extended by the lending institutions, effective June 1, 2000.

Micro-credit

8.36 Guidelines were issued to banks in February 2000 to streamline micro-credit and enhance the outreach of micro-credit providers. Recognising micro-credit interventions as an effective tool for poverty alleviation, a Micro Finance Development Fund, with a start-up contribution of Rs.100 crore from the Reserve Bank, NABARD and select public sector banks, was set up in the NABARD to, *inter alia*, promote research, action research, management information systems and dissemination of best practices in micro-finance. By March 31, 2001, 2,63,825 SHGs were credit linked, with the cumulative bank loans extended to the groups amounting to Rs. 480.88 crore. The coverage of an additional one lakh SHGs by the NABARD and SIDBI set during 2000-01 was achieved. The target for the year 2001-02 is to extend linkages with SHGs across the country so as to link 1 lakh additional SHGs to provide access to credit to an additional 20 lakh families.

8.37 As mentioned in the last year's Annual Report, a Rs.1,000 crore consortium scheme is in place under which the banking system provides finance to Khadi and Village Industries Boards (KVIBs). The credit provided by banks to the Khadi and Village Industries Commission (KVIC) under this scheme will be reckoned as their indirect lending to the SSIs under the priority sector. These loans are provided at 1.5 per cent below the average prime lending rates of five major banks in the Consortium. As at end-July 2001, an amount of Rs.458 crore was outstanding out of an amount of Rs.738 crore disbursed by the Consortium under the scheme.

8.38 To help overcome the hurdles being faced by women in accessing bank credit and credit plus services, the Central Government has drawn up a 14-point Action Plan for public sector banks to strengthen credit delivery to women, particularly in the tiny and SSI sectors. Public sector banks are required to apprise the progress made in implementing every action point to the Government and the Reserve Bank on a quarterly basis commencing from the quarter ended March 2001.

Measures for Gujarat Earthquake

8.39 In view of the devastating effect of earthquake in Gujarat in January 2001, the Reserve Bank announced a package of relief measures for the State. The WMA limit and the terms of overdraft regulations to the Government of Gujarat were relaxed. The loan classification status in case of borrowers affected by the earthquake was frozen on an 'as-is-where-is' basis up to March 31, 2003. With regard to standard assets, no demand for recovery would be made for two years while in regard to loans not classified as standard assets, no penalties would be levied in the event of non-receipt of repayments due during the next two years. During this period, banks

would charge simple interest at 10 per cent per annum till end-March 2003. The affected small traders, small business, self-employed and small road transporters, *etc.*, would be sanctioned fresh loans up to Rs.1 lakh for the purpose of restoration/rehabilitation of their business at interest rates not exceeding PLR. Banks were advised to grant loans up to Rs.2 lakh at interest rates not exceeding PLR for repairs/reconstruction of houses/shops damaged by the earthquake. Provisions were made for sanction of additional limits/ rescheduling of existing limits for affected SSI, business, trade and industry, under a need-based approach, with interest on additional limits at PLR up to Rs.10 lakh and at banks' discretion beyond Rs.10 lakh. The PLR would be that of the State Bank of India. Interest on rescheduled loans would be charged at 10 per cent per annum at a simple rate up to March 2003. Loans for repair/construction of houses and shops and to small traders, small business, self-employed and small road transport operators, *etc.*, would be reckoned as priority sector lending. Waiver of processing fees for the affected beneficiaries and relaxations in the recovery of principal and interest in respect of agricultural loans, provisions for reschedulement up to 7 years, long-term loan of Rs.1,000 crore at 6.0 per cent rate of interest per annum repayable over 18 years to enable NHB to provide refinance assistance and relief/concessions for affected exporters are other measures taken to mitigate the losses due to the Gujarat earthquake.

The Monetary Policy Stance for 2001-02

8.40 Against the background of easy liquidity conditions in the early part of the year, notwithstanding the turbulence in equity markets in March 2001, the monetary stance for 2001-02 is to ensure that all legitimate requirements for credit are adequately met consistent with price stability. Towards this objective, the Reserve Bank continues its policy of active management of liquidity through OMO, including two-way sale/purchase of treasury bills, and further reduction in CRR as and when required. Unless circumstances change unexpectedly, or current problems in some segments of the market are not resolved soon, on the present reckoning, it would also be possible to maintain the current interest rate environment and explore the possibility of some further softening in medium- and long-term rates over time, following the stance of interest rate flexibility announced in the Union Budget for 2001-02. The monetary policy stance takes note of the fiscal deficit of the Centre budgeted at 4.7 per cent of GDP and the consequent size of the borrowing programme and envisages a real GDP growth of 6.0-6.5 per cent and an inflation rate projected within 5 per cent. Consistent with this macroeconomic outlook, the growth rates projected for the key information variables are: about 14.5 per cent and commercial bank aggregate each for M₃ deposits and 16-17 per cent for adjusted non-food credit of commercial banks.

8.41 The exchange rate management, within this monetary stance, will continue to focus on managing volatility and ensuring orderly market conditions with no fixed "target" for the exchange rate. The approach would be one of watchfulness, caution and flexibility. The policy for building adequate levels of international reserves will continue with due consideration to the liquidity risks associated with various types of capital flows. The progressive liberalisation of the capital account would be carried forward while the pace and sequencing will be determined by evolving macroeconomic and external conditions.

8.42 The major thrust of financial sector reforms would continue to be on the development of

financial markets, strengthening of the financial system and prudential and supervisory norms, improvement in credit delivery and modernisation of the technological environment of the financial sector.

IX - Development and Regulation of Financial Markets

[Developments During 2000-01](#)

[Money Markets](#)

[Government Securities Market](#)

[Foreign Exchange Market](#)

[Institutional Measures](#)

Introduction

9.1 The development and regulation of money, foreign exchange and Government securities markets is a function of the Reserve Bank that emerges out of its role as monetary authority as well as debt manager to the Government and its responsibility for the stability of the financial system. In this context, the Reserve Bank has been emphasising a redefinition of its regulatory role *vis-à-vis* financial markets, particularly in an environment characterised by multiple regulation. The amendments to the Securities Contract (Regulations) Act (SCRA), 1956 which were brought into effect on March 1, 2000 assume critical significance. They establish the regulatory jurisdiction of the Reserve Bank over transactions in Government securities, money market securities, gold related securities, derivatives based on these securities and ready forward contracts in all debt securities, in conjunction with the Reserve Bank's regulation of foreign exchange transactions under the Foreign Exchange Regulation Act, 1973 and later by the Foreign Exchange Management Act, 1999.

9.2 The development of financial markets is regarded as a critical prerequisite for improving the operational effectiveness of the transmission of monetary policy. Accordingly, the first phase of financial sector reforms consisted of the easing of various structural rigidities – both price- and quantity-based, so as to increase participation in financial markets as well as to develop and strengthen inter-linkages between market segments, fostering competition, introduction of more sophisticated financial instruments and innovations in market practices, ensuring adequate liquidity in various segments of the market spectrum, and developing the regulatory, legal, institutional and technological infrastructure for orderly market activity.

9.3 In the second phase of reforms, issues relating to the stability of financial markets have received priority in the policy agenda. The liberalisation of financial markets has raised the vulnerability of financial institutions to volatility in financial asset prices and thereby increased the potential risks of impairment of their balance sheets, with implications for systemic stability. The international experience with market failures in 1997-98 and contagion effects have prioritised the regulatory function in the context of the development of financial markets in India. The need for regulation arises in the context of maintaining systemic stability given the strong complementarity between financial stability and price stability. In the country-specific situation, the challenge is to make the micro regulations consistent with macro objectives. In the recent period, policy initiatives have encompassed measures for market discipline, fine-tuning of the market microstructure in order to reflect the evolving sophistication and technological advancement in the functioning of markets, and specific changes in the legal and regulatory framework which would institute healthy market practices and also enable more effective supervision and oversight.

9.4 In regard to the money markets, a basic objective in the recent years has been to develop a proper short-term rupee yield curve with deep liquidity therein. A four-fold strategy is being adopted in this regard. First, LAF operations are being conducted with a view to keeping the short-term interest rates within a corridor. Secondly, the call money market is being developed into a pure inter-bank market with a phased withdrawal of non-bank participants who only lend in the market. Thirdly, the traditional sector-specific refinance support is being rationalised and the additional recourse to the standing liquidity facilities of the Reserve Bank is being made increasingly market-based. Finally, the other money market segments, especially the repo market, are being developed with lending as well as borrowing access to the non-banks in these markets.

9.5 In respect of Government securities market, the initiatives in the recent years have been to develop the market in terms of depth, liquidity, turnover and participants. Given the constraints imposed by conditions in the money and foreign exchange markets and the persistently large Government borrowing programme, the Reserve Bank has at times taken private placements in the primary issues or devolvement at the auctions and has subsequently undertaken open market operations at opportune points of time to assuage market pressures to contain the monetary impact of the fiscal operations and to allow for the emergence of a smooth yield curve. The Reserve Bank has also been adopting a policy of passive consolidation in the number of outstanding loan issuances and facilitating creation of volumes in benchmark securities. Open market operations are undertaken to contain volatility and to provide liquidity to the Government securities market.

9.6 The foreign exchange market in India continues to be relatively thin, localised and expectation-driven with a tendency towards ‘herding’ and asymmetrical behaviour. The medium-term policy endeavour is to develop the foreign exchange market in terms of depth and liquidity, enable the introduction of new instruments and pricing strategies and greater integration with other segments of the financial market. In the day-to-day regulation of the foreign exchange market, the policy objective is to manage volatility with no fixed rate target and allow demand and supply conditions to determine exchange rate movements in an orderly manner. The Reserve Bank also enters periodically into foreign exchange transactions with the market to prevent undue fluctuations in the exchange rate.

9.7 The operational aspects of the regulation of money, Government securities and foreign exchange markets are discussed under developments during 2000-01 in the following section. Under money markets, the issues covered include efforts to develop a pure inter-bank money market and to widen other money market segments. In the Government securities market, the discussion covers the increasing depth in the market in terms of various indicators of turnover in the primary as well as secondary segments, periods of heightened activity recorded during the year and the turning points in market activity and efforts undertaken by the Reserve Bank to improve the operational efficiency of the primary dealers (PDs). Under the foreign exchange market, the discussion covers the progressive liberalisation of current and capital transactions including Indian investment abroad, policy measures to deal with the mid-year uncertainty in market behaviour and the efforts to inform the public about various facilities available for the use of foreign exchange. The discussion on these developments is followed by institutional measures

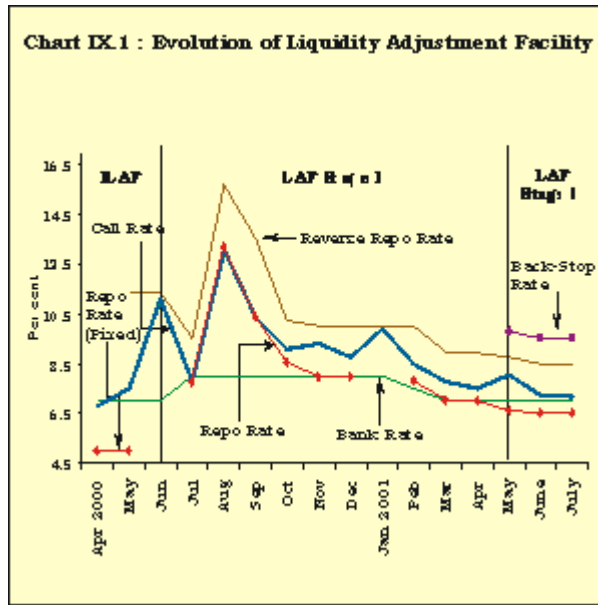
to improve the functioning of the financial markets. These measures have a relatively long-term perspective and include setting up of a Clearing Corporation for facilitating clearing and settlement in money, Government securities and foreign exchange markets, broadening and deepening of various market segments, issues relating to the separation of debt management from monetary management and its implications for the functioning of markets, the proposal for introduction of electronic Negotiated Dealing System (NDS) and the likely medium-term agenda for the development and regulation of financial markets.

DEVELOPMENTS DURING 2000-01

9.8 During 2000-01, the Reserve Bank continued to adopt a strategy of maintaining orderly conditions in the money, Government securities and foreign exchange markets with a flexible stance of responding quickly to unforeseen developments in the external environment and reverting to normal conditions as pressures eased. Liquidity management operations were employed to maintain orderly conditions in the money market. In the Government securities market, outright sales of securities through OMO was undertaken to minimise the monetary impact of the increase in foreign currency assets on account of IMDs and switches/purchases of securities to provide liquidity to the longer end of the market (see Section V). Long-term securities had devolved heavily on the PDs in the primary auctions in the wake of volatility in the foreign exchange market and monetary tightening in May-August 2000. The strategy in regard to management of the exchange rate continued to be maintenance of orderly conditions in the foreign exchange market, meeting temporary supply-demand gaps arising due to uncertainties or other reasons, and curbing destabilising and self-fulfilling speculative activities.

Money Markets

9.9 A policy priority in the development of the money market has been the positioning of liquidity adjustment facility (LAF) as an instrument for modulating liquidity and signaling the monetary stance, and for creating conditions for orderly market activity. The first stage of the LAF, introduced with effect from June 5, 2000, progressed satisfactorily ([Chart IX.1](#)). The second stage, introduced with effect from May 8, 2001, brought about further refinements in LAF (a detailed description is given in Section VIII).



9.10 Efforts to develop the call money market into a pure inter-bank market (including PDs) while providing access to other short-term instruments for non-bank participants gathered momentum with the measures announced in the Statement on Monetary and Credit policy of April 2001. Corporates were allowed to route their call money transactions through PDs up to June 2001. A four-phased exit of non-bank institutions from the call money market commenced effective May 5, 2001, in which as part of stage I, non-bank institutions were permitted to lend, on an average, up to 85.0 per cent of their average daily call money lendings during 2000-01 during a reporting fortnight. This would be followed by reductions in their access to 70.0 per cent in the stage II when the Clearing Corporation (para 9.37 and [Box IX.1](#)) is operationalised. Subsequently, such limits would be reduced to 40.0 per cent and 10.0 per cent in stage III and stage IV, respectively, before effecting a complete withdrawal of non-bank participants from the call money market.

9.11 In consonance with the phasing out of non-banks from the call money market, other avenues for their short-term investments were made attractive. In 2000-01, the minimum maturity of certificates of deposit (CD) was reduced to 15 days to bring them on par with other short-term instruments. With a view to providing flexibility and depth to the secondary market, restriction on the transferability period for CDs issued by banks and financial institutions was withdrawn. Similarly, the minimum maturity period for wholesale deposits of Rs.15 lakh and above was reduced to 7 days. The repo market was expanded to cover non-bank entities holding both current and SGL accounts with the Reserve Bank. The minimum repo tenor was reduced to 1-day and State Government securities were made eligible for repos.

9.12 Guidelines for commercial paper (CPs) were modified to provide greater flexibility to issuers, to broaden the investor base and to simplify issuance procedures, including in dematerialised form. The most important measure in this regard was that CP no longer had to be carved out of working capital limit. Banks, FIs, PDs and satellite dealers (SDs) were directed to make fresh investments and hold CP in only dematerialised form with effect from June 30, 2001 and convert the outstanding investments in scrip form by October 31, 2001. In this regard, the

Fixed Income Money Market and Derivatives Association of India (FIMMDA) has issued detailed set of standardised market practices and documentations regarding dematerialisation of CP on July 29, 2001.

9.13 The main intention of these measures has been to transform call money market into a pure inter-bank market and evolve call money and repo markets to an integrated set for equilibrating short-term positions of banks as well as non-banks. Furthermore, these measures would enable development of a proper short-term rupee yield curve which, in turn, would influence the other financial market segments.

Government Securities Market

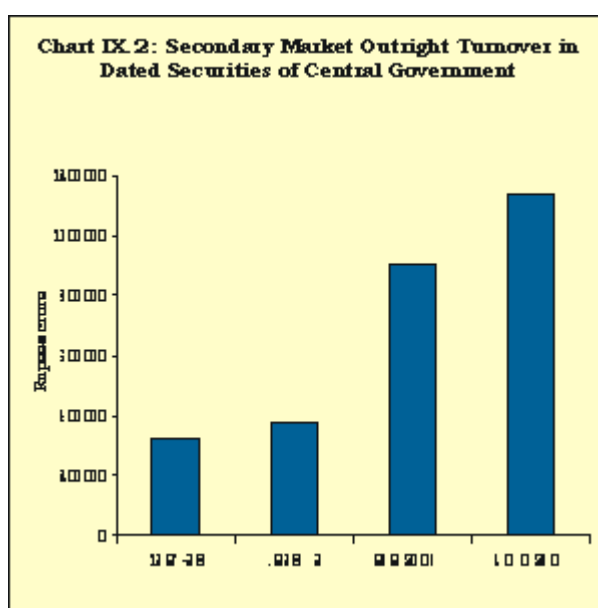
9.14 The aggregate volume of transactions in Central Government dated securities and Treasury Bills (outright as well as repos) during 2000-01 was higher by 30 per cent at Rs.6,95,135 crore as compared with Rs.5,35,602 crore in 1999-2000, reflecting increasing depth in the Government securities market. The deepening of the market was attributable to several factors such as generally stable call rates, favourable market expectations especially during the second half of the year, more active trading by the new PDs, mutual funds and some traditional participants like banks and LIC and active OMO by Reserve Bank. During 2000-01, the total outright transactions amounted to Rs.5,69,174 crore or 82 per cent of the aggregate transactions and the balance of Rs.1,25,961 crore or 18 per cent was by way of repos. During 1999-2000 the total outright transactions amounted to Rs.4,52,861 crore or 85 per cent of the aggregate transactions and the balance Rs.82,741 crore or 15 per cent was by way of repos. During 2000-01 the transactions in State Government securities were lower at Rs.2,986 crore as against Rs.3,632 crore during 1999-2000.

9.15 The turnover in Central Government securities (calculated as twice the volume of outright transactions *plus* four times the volume of repo transactions) amounted to Rs.16,42,190 crore in 2000-01 as against Rs.12,36,678 crore in 1999-2000. The outright turnover aggregated to Rs.11,38,348 crore as compared with Rs.9,05,722 crore in 1999-2000 ([Chart IX.2](#)). Thus, the average monthly turnover in Central Government securities aggregated to Rs.1,36,849 crore in 2000-01 as compared with Rs.1,03,056 crore in 1999-2000. The average monthly turnover of outright transactions amounted to Rs.94,862 crore during 2000-01 as against Rs.75,477 crore in 1999-2000. The average daily turnover was also higher at about Rs.4,512 crore as against Rs.3,388 crore in 1999-2000. The turnover ratio in Central Government securities (defined as the ratio of total turnover during the period to total outstanding securities at the beginning of the period) increased to 4.13 in 2000-01 from 3.82 during 1999-2000. The turnover in State Government securities amounted to Rs.6,005 crore during 2000-01 as against Rs.7,265 crore during 1999-2000.

9.16 The turnover in Central Government Securities during 2001-02 (up to June) amounted to Rs. 7,96,558 crore. The outright turnover aggregated to Rs. 5,40,485 crore (*i.e.* 68 per cent of the total turnover). The turnover in State Government securities was Rs. 2,175 crore during this period.

9.17 An analysis of the month-wise secondary market turnover in Government Securities Market (GSM) during 2000-01 shows intra-year fluctuations. The volume of transactions, which was stable at the beginning of the fiscal year, registered a sharp decline in June 2000 due to tight liquidity conditions in the market and the consequent high short-term rates. The transaction volumes fluctuated widely in the following months before moving up in September and October 2000 as a result of easy liquidity conditions, boosted by inflows of funds on account of IMDs in November 2000. The turnover showed a decline towards the end of the fiscal year with yields rising in Government securities.

9.18 Consistent with the market conditions, the investor preference, in terms of choosing the investment horizon, also showed a mixed trend during the year. Thus, during tight market conditions the preference shifted towards short and medium-term bonds and with the improvement in liquidity conditions, investor interest in long-term bonds revived.



9.19 In the secondary market, in tandem with the easing of call rates during April to mid-May 2000, the Government securities market witnessed a small rally and the yield curve shifted downwards, tilting more at the short-end, as the issuance of long tenor securities by the Reserve Bank moderated the price increase at the long-end. As the liquidity conditions tightened, inflation crept up and uncertainties surfaced in the foreign exchange market, the yield curve shifted up with short-term maturity paper displaying a relatively high proportionate increase. There was some easing of yields during the first half of July 2000 on account of inflows of coupon payments and redemption of Government securities as well as private placement of Government securities with the Reserve Bank.

9.20 The gains in gilt prices, however, dissipated during the second half of July and August 2000. Yields went up again in the face of uncertainties in the foreign exchange market warranting monetary tightening and absorbing of excess liquidity through repos in the second half of July and August 2000. The illiquidity of longer maturity papers prompted the Reserve Bank to offer to the PDs switches from three medium- to long-term Government securities to

364-day Treasury Bills during August 2000. The higher returns in the repo, call money and foreign exchange markets encouraged participants to divert their funds away from dated Government securities.

9.21 As the foreign currency market stabilised, the repo cut-off rate progressively declined during September-October 2000 and interest in the Government securities market was rekindled. Yield at the short-and medium-ends declined. As the proceeds of IMDs entered the system and currency and oil markets stabilised, activity picked up in 2000-01 at the longer-end of the maturity spectrum. The yields of longer dated maturities fell in the face of a rally in the prices of Government securities. The aggressive auctioning of Government securities in November 2000 arrested this rally temporarily. In December 2000, the rally resumed at the long-end with improved sentiment on account of a stable rupee, declining oil prices and expectations of cut in international interest rates.

9.22 The two-stage cut in the Federal Funds rate by 100 basis points not only provided the external backdrop for the sharp rally in January 2001 but also raised hopes for an imminent rate cut to restore the pre-July 2000 position. While partly meeting market expectations through reduction in the Bank Rate and the cash reserve ratio by 50 basis points each, the Government's resolve to tackle the fiscal deficit as also address some of the structural issues, *viz.*, reduction in interest rates on small savings in the Union Budget announced on February 28, 2001, allowed the Reserve Bank to further cut the Bank Rate by 50 basis points from March 2, 2001. The fact that the yields did not fall further after the second Bank Rate cut was indicative of the fact that this reduction had already been factored in. In March 2001, the market remained volatile on year-end considerations, *viz.*, profit booking and reluctance to take fresh positions as also the developments in the capital markets. During 2001-02 (up to August 11), barring a few spikes, the gilt yields mostly declined due to downward interest rate expectations.

9.23 With effect from October 6, 2000 the Reserve Bank allowed the same day sale of Government securities for entities which are successful in getting allotments in auctions. The Bank also encourages investors to hold securities in scrip-less form, and issued a set of guidelines governing the maintenance of the Constituents' SGL Accounts in October 2000. From September, 2000, the banks are required to value the unquoted Central Government securities on the basis of the prices/YTM rates put out by the Primary Dealers' Association of India (PDAI)/(FIMMDA) at periodic intervals. To take care of gridlocks in the DvP system due to shortfall of funds, a scheme of Special Fund Facility was introduced on October 3, 2000. Under this facility funds are made available on a collateralised basis against undrawn CLF and Primary Dealers' Liquidity Support (PDLs).

9.24 During 2001-02, the turnover in Government securities saw a steep rise of about 80 per cent in May over its level in April reflecting increased participation by non-bank entities in the repo market as a result of reduced lending by them in call money market as per the new regulations adopted by the Reserve Bank. The turnover was similar in June 2001 as in May 2001.

9.25 Several steps were taken during 2000-01 for developing and strengthening the PD system. Capital adequacy guidelines for PDs, consistent with international standards, were issued in December 2000. In order to provide liquidity, PDs were allowed a "switch facility" to swap

their medium- to long-dated Government securities with 364-day Treasury Bills during August 2000. Liquidity support to PDs was made contingent upon not only the bidding commitment but also the performance of PDs in both primary and secondary markets from April 2000. Since PDs were no more required to take devolvments at Treasury Bills auctions, the payment of commissions for Treasury Bills was withdrawn with effect from June 5, 2000. During 2001-02, a revised scheme for bidding and underwriting was announced in April 2001. The standing liquidity facilities were split into normal and back-stop components and the limits for PDs were announced separately. In order to promote retailing, it was proposed that a maximum of 5 per cent of the notified amount in each auction of dated securities would be allocated for allotment to retail investors, and that individuals and provident funds would be allowed to participate in these auctions on a non-competitive basis.

9.26 The Reserve Bank issued a notification permitting all the entities maintaining current and SGL account with the Bank to undertake repo operations in Treasury Bills and dated securities of all maturities issued by the Government of India and State Governments. Such ready forward contracts would be settled through the Subsidiary General Ledger Accounts of the participants with Reserve Bank at Mumbai only and no sale transaction should be put through without actually holding the securities in the portfolio.

Foreign Exchange Market

9.27 The foreign exchange market has undergone substantial liberalisation, both in terms of freedom for market participants as well as a liberalised exchange and payments system for current and capital transactions. Improvements in the market microstructure are undertaken as a result of continuous monitoring and consultations with market participants. The Reserve Bank continued to liberalise foreign exchange market and the payments regime with a view to i) paving the way for a smooth transition to the Foreign Exchange Management Act (FEMA), 1999 from the Foreign Exchange Regulation Act (FERA), 1973; ii) enabling a phased movement to capital account convertibility and iii) providing a hassle free and prompt exchange and payments system.

9.28 Regulations issued under FEMA would allow units in the Special Economic Zones (SEZs) to credit their entire exchange earnings to EEFC accounts. Limit for advance remittances towards import without any guarantee was raised to US \$ 25,000 (from the existing limit of US \$ 15,000). Passport endorsement about the release of foreign exchange for purposes other than private visits was made non-mandatory, while foreign nationals employed in India were permitted to credit 75 per cent of their salary to foreign currency accounts abroad subject to tax deduction on the entire salary.

9.29 As already referred to in Section VIII, in order to contain volatility in the foreign exchange market, an interest rate surcharge of 50 per cent on import finance was introduced on May 26, 2000 and as conditions stabilised it was withdrawn on January 6, 2001. In the context of fluctuating international prices of crude oil, importers/ exporters of crude oil and petroleum products were permitted to hedge their exposure to price risk.

9.30 The progressive liberalisation of capital account transactions continued to receive policy attention. In respect of Indian investment abroad, Indian companies were allowed to acquire foreign companies or make direct investment in joint ventures/wholly owned subsidiaries abroad i) up to US \$ 50 million (with an additional US \$ 25 million in case of Myanmar and SAARC countries other than Nepal, Bhutan and Pakistan), on an annual basis through the automatic route without the earlier three-year profitability condition and ii) by utilising the entire proceeds (from the earlier 50 per cent) of their American Depository Receipts (ADR)/Global Depository Receipts (GDR). The Reserve Bank also introduced a new facility for block allocation of foreign exchange for companies that have exhausted their US \$ 50 million limit on fulfilling certain eligibility criteria. The facility of acquiring shares of foreign companies in the same area of core activity up to US \$ 100 million or an amount equivalent to ten times of their exports, whichever was higher, after issuance of ADRs/GDRs was extended to all companies irrespective of the sector of activity.

9.31 As regards overseas investment, the ban on such investments by registered partnerships was removed. Partnerships in certain professional services, *viz.*, chartered accountancy, legal services, medical and health care services, information technology and entertainment software services are now allowed to invest abroad in foreign concerns in the same line of activity up to US \$ 1 million under the automatic route and beyond US \$ 1 million with the approval of the Reserve Bank. Partnership firms in other activities would, however, require prior approval of the Reserve Bank for their investment proposals. Indian nationals who have the benefit of Employee Stock Option (ESOP) Scheme in foreign owned companies are now allowed to invest up to US \$ 20,000 per annum (as against the earlier US \$ 10,000 in a block of five years).

9.32 Indian companies will now be allowed to sponsor ADR/GDR issues with an overseas depository against bulk shares held by share holders wishing to use this option at issue prices determined by the lead manager subject to the condition of repatriation within a month and the provisions for the Foreign Currency Convertible Bonds and Ordinary Shares (through the Depository Receipt Mechanism) Scheme 1993.

9.33 Several steps were taken to improve the climate for foreign investment in India. Necessary changes in FEMA Regulations have been effected to facilitate a two-way fungibility in ADR/GDR issues of Indian companies, subject to sectoral caps, wherever applicable, under which stockbrokers in India would be able to (subject to Government guidelines) purchase shares and deposit them with the Indian custodian for the issuance of ADRs/GDRs by the overseas depository to the extent of the ADRs/GDRs that have been converted into underlying shares. Foreign institutional investors (FIIs) were allowed to invest up to 49 per cent (revised up from 40 per cent) of the paid-up capital of Indian companies with the approval of the general body of the share holders by a special resolution. Foreign venture capital investors (FVCI) could invest in an Indian venture capital undertaking (IVCU)/venture capital fund (VCF) or a scheme floated by such VCFs in accordance with regulations framed for the purpose.

9.34 In order to educate the public about the various facilities available for the use of foreign exchange, the Reserve Bank has published a Citizen's Charter. Detailed "helplines" were also set up at the Reserve Bank's offices at Ahmedabad, Bangalore, Hyderabad and New Delhi with exclusive telephone, fax and electronic media arrangements to provide necessary clarifications to

the public on enquiries relating to foreign exchange transactions. Customer service meetings are held every quarter in each of the Bank's regional offices. Banks have also been advised to provide easy encashment facilities of foreign currency and travellers' cheques at a number of locations, especially airports and other important tourist centres. With a view to ensuring that credit to customers' accounts for non-trade related inward remittances is not delayed, Authorised Dealers (ADs) were advised to make payments immediately and the purpose of remittance could be obtained subsequently under the reporting requirements of the Reserve Bank. The cut-off limit for reporting non-export receipt of inward remittance was increased from Rs.1,00,000 to US \$ 10,000.

9.35 As an extension of the overall objective of interest rate deregulation, banks were allowed to choose current swap rates to form the base for fixing the ceiling interest rates in the case of FCNR(B) deposits. The ceiling interest rate on FCNR(B) deposits was revised downward to LIBOR/ SWAP rates from the earlier level of LIBOR/SWAP plus 50 basis points for the corresponding maturity. In order to impart greater flexibility in the pricing of rupee interest rate derivatives and facilitate integration between money and forex markets, interest rates implied in the foreign exchange forward market could now be used as a benchmark for *FRA/IRS* in addition to the existing domestic money and debt market rates.

INSTITUTIONAL MEASURES

9.36 Recent monetary policy statements have laid emphasis on structural measures to improve the functioning of financial markets. A consensus approach emerging out of a consultative process has been adopted for the institution of these measures involving interaction of working groups and technical committees with experts and market participants, seminars, and by inviting public opinion. The inter-departmental Financial Markets Committee, which has been operating since 1997, monitors the daily financial market developments while undertaking policy decisions.

9.37 One of the products of this consultative process is the establishment of a Clearing Corporation with the State Bank of India as the chief promoter. The Corporation once operationalised would facilitate clearing and settlement of transactions in money, Government securities and foreign exchange markets. It would help to open up the repo market to bonds of public sector undertakings (PSUs) and financial institutions. The working of the Corporation is expected to minimise credit risk and enable the management of collateral efficiently ([Box IX.1](#)).

9.38 The medium-term objective with regard to the money market is to develop the call/notice money market into a pure inter-bank market. Broadening the repo market and activating other short-term financial instruments for non-banks is a concomitant pursuit. The phased evolution of the LAF towards becoming the primary instrument for liquidity management and the gradual removal of specific liquidity facilities are consistent with this objective.

9.39 The separation of the functions of debt management and monetary management is regarded as a desirable medium-term objective, conditional upon development of the Government securities market, durable fiscal correction and an enabling legislative environment. The separation of the two functions is expected to have significant changes in the functioning of

the Government securities market. The existing Public Debt Act is sought to be repealed and replaced by a new Government Securities Act. The new Act will simplify the procedures for transactions in Government securities, allow lien marking/pledging of securities as also electronic transfer in demat form. Attendant legislative changes are envisaged under the Fiscal Responsibility Bill and amendments to Reserve Bank of India Act to enable greater flexibility and operational effectiveness in the conduct of monetary policy in the new environment. The amendments to various legal acts are also expected to bring about greater compatibility with various innovations taking place in banking operations.

Box IX.1 Clearing Corporation

A Clearing Corporation establishes and records obligations and settlement of transactions arising from trading executed by market participants as per the applicable rules specific to such trade. It facilitates large scale operations by eliminating the counterparty risk, thus, giving rise to scale efficiency and a reduction in the post-trade processing costs for market participants. The Clearing Corporation plays the role of a Central Counter Party (CCP) to all transactions and guarantees settlement of trade executed through its rules and regulations thus eliminating counter party risk. It interposes itself as buyer to each seller member and as seller to each buyer member in a defined trade giving rise to two new contracts - between the CCP and the buyer and the CCP and the seller - replacing the single original contract between two parties. The legal process of executing such counter party induction is called 'Novation'.

The CCP system helps in reducing risks and operational costs to participants through better risk management via substitution of one counter party for many, reduced volume of settlement on account of multilateral netting and settlement guarantees, standardised processing and market anonymity resulting in increased capacity and liquidity through netting of exposures in trading. The efficiency and stability of the system hinges on proper risk management which varies according to instruments, market sophistication and depth.

The cost-benefit analysis of a CCP system should be judged with respect to risk bearing capacity. The standard risk management practices followed by CCP are (i) daily maintenance and monitoring of members' eligibility standards defined through capital base, operational capabilities and trading practices, followed by the analysis of daily exposures of members to the CCP and their collateralisation which provides additional protection depending on legal certainty, the quality of collateral, member compliance, *etc.* and (ii) analysis of the level of protection required for the CCP based on the level of exposure which requires continuous valuation of collateral on marking to market basis to reduce default risk. The risk management and collateralisation depends on methodology, periodicity, accesses various available sources of funds like i) margin cover of the defaulting member ii) additional default/participant fund contribution of the defaulting member meant for transferring significant part of the cost to the defaulting member thereby safeguarding the interest of other members (iii) excess assets held by the defaulting member at other CCPs linked through cross-guarantee arrangements, (iv) other members' participant fund contributions and CCP's assessment rights (mutualising the risk), (v) insurance cover (laying off the risk), (vi) reserves of the CCP and (vii) capital of the CCP as final line of defence. The thresholds and triggers to move from one source of fund to other typically depend on rules framed by the Clearing Corporation regarding procedures to meet the default risk.

A Clearing Corporation for clearing of money, Government securities and foreign exchange markets is being set up in India. "The Clearing Corporation of India Ltd." will have an authorised capital of Rs. 50 crore. It will be owned by the market participants and promoted by the State Bank of India (SBI), Bank of Baroda, HDFC Bank, ICICI, IDBI and LIC. It will be managed by a Board of Directors headed by a non-executive Chairman. It will facilitate extension of repos market to non-Government securities and enlargement of market participants, act as a triparty agent for efficient management of collateral in consonance with international practices and act as CCP through novation thereby minimising counter-party risk. The Corporation will also manage a Settlement Guarantee Fund thereby minimising settlement risk.

References

1. Central Counter Parties- Development, Co-operation and Consolidation - a paper issued by the DTCC, New York, December 2000.
2. CPSS-IOSCO Task Force: Consultative Report on Recommendations of Securities Settlement System released for comments in January 2001.
3. Standards of Risk Management for Central Counter Party Clearing Houses released by the European Association of Central Counter Party Clearing Houses in 2001.

9.40 An electronic Negotiated Dealing System (NDS) is proposed to be introduced with a view to facilitating transparent electronic bidding in auctions and secondary market transactions in Government securities on a real-time basis. It will encompass all SGL account holders and all transactions in gilts, Treasury Bills, repos, call/ notice money and term money, CPs, CDs and derivatives ([Box IX.2](#)). In order to promote retail access to Government securities, an order driven screen-based trading in Government securities on the stock exchanges is under review.

9.41 In the context of the growing integration of financial markets and the market orientation of monetary policy, two separate Advisory Committees were constituted by the Reserve Bank on money and Government securities markets with members comprising academicians, professionals and financial market participants. With the commonality of issues concerning development of these markets, the two Committees were unified into a single Technical Advisory Committee on Money and Government Securities Markets in July 1999 for a term of two years. The Committee reviews further efforts for: (i) deepening and widening the money and Government securities markets; (ii) developing a liquid secondary market; (iii) establishing linkages among market segments; (iv) instituting infrastructure, legal and institutional arrangements for trading, transfer and settlement in the context of the emerging payments system; (v) product/market development and advice on the policies and practices and (vi) improving risk management, accounting, disclosure, settlement, legal frameworks, *etc.*

9.42 The Committee held ten meetings up to August 2001 on several issues relating to their terms of reference, *viz.*, : (i) Interest Rate Swaps and Forward Rate Agreements; (ii) Development of Repos Market; (iii) Revolving Underwriting Facility (RUF); (iv) Retailing of Government Securities; (v) Guidelines relating to Commercial Paper, and Documentation and Procedures; (vi) Operations in Treasury Bills Market; (vii) Liquidity Adjustment Facility; (viii) Valuation of banks' investment Portfolio; (ix) Setting up of a Clearing Corporation; (x) Private placement of bonds (investments by banks and financial Institutions); (xi) Security Settlement risk and intra-day liquidity; (xii) Phasing out of non-bank entities from the call/notice money market; (xiii) Auction Formats for sale of Government Securities ; (xiv) Trading in Government Securities on Stock Exchanges; (xv) Negotiated Dealing System (NDS) and (XVI) Introduction of STRIPs.

Box IX.2
NDS and PDO Computerisation

An integrated project on Negotiated Dealing System (NDS) and computerisation of the Reserve Bank's Public Debt Office (PDO) has been initiated to facilitate electronic bidding in auctions and secondary market transactions in Government securities on a real-time basis. Call money, notice/term money, Government securities including Treasury Bills, repos, certificates of deposit, and commercial paper markets would be covered in the first phase. Interest rate swaps (IRS) and forward rate agreements (FRAs) markets would be covered in the second phase. The system can be used for daily LAF auctions. Banks, PDs and financial institutions with subsidiary general ledger (SGL) and current accounts with the Reserve Bank would be eligible to be members. The system will facilitate screen-based trading, provision of on-line trade information, reporting through trade execution system for settlement, centralised SGL and database systems with distributed servicing, inter-regional PDO connectivity, connectivity to participants and scaleable architecture. The entire project will be developed in five modules comprising secondary market operations (NDS), primary market operations, SGL Settlement and basic data maintenance, PDO operations and corporate events, and relief bonds.

The solution envisages a NDS linked to trade execution system (TES) which will be a front-end system and the Securities Settlement System (as a back-end system). NDS will be an interface between the members (SGL account holders) and the PDOs for facilitating settlement of deals done in Government securities and Treasury Bills. The member terminals would facilitate primary and secondary market operations. Pooled Terminal facility provided at all regional offices of PDOs would facilitate use by SGL account holders not having member terminals. The entire system will operate in a networked environment and INFINET will provide the backbone for communication. It will provide for reporting of trades executed through exchanges for information dissemination and settlement in addition to deals done through the NDS.

The NDS, integrated with the Securities Settlement System (SSS) will lead to efficiency in trading, settlement, interest payments and other improvements in services to investors in Government securities as the automated system will have minimum response time. The shut period for trading will also be reduced.

Outlook

9.43 The medium-term agenda would be to monitor smooth implementation of the various structural and technological measures which have already been announced. In the short-end of the financial market spectrum, the strategy of transforming the call money into a pure inter-bank market and development of the repo market to provide increased access to non-bank participants would be pursued with an emphasis on managing the transition. The integration of the various market segments would equilibrate short-term positions of banks as well as non-banks. Furthermore, efforts would be made to facilitate transparent electronic bidding in auctions and secondary market transactions in Government securities on a real-time basis and integration with EFT and RTGS. Institutional and technological arrangements for settling transactions through the delivery-versus-payment (DVP) system of the Reserve Bank on T + 1 basis will be strengthened in order to improve cash and liquidity management among money market participants and sensitise them to NDS. The operationalisation of Clearing Corporation would prepare the ground for reaping efficiency gains.

X - Financial Regulation and Supervision

[Developments During 2000-01](#)

[Scheduled Commercial Banks](#)

[Co-operative Banking](#)

[Financial Institutions](#)

[Non-Banking Financial Companies](#)

[Institutional Measures](#)

Introduction

10.1 The Reserve Bank is entrusted with the supervision of the banking system in India under the provisions of the Banking Regulation Act, 1949 and the Reserve Bank of India Act, 1934. The Reserve Bank regulates select financial institutions (FIs) and non-banking financial companies (NBFCs) under Chapter IIIB of the Reserve Bank of India Act. Consequent upon amendments to Chapters IIIB, IIIC and V, through the Reserve Bank of India (Amendment) Act in 1997, the Reserve Bank introduced a comprehensive regulatory framework in respect of NBFCs, including compulsory registration in terms of the amended Section 45-IA.

10.2 Structural and organisational changes in the financial system since the early 1990s under the impact of financial sector reforms and globalisation have fundamentally transformed the regulatory function. The large macroeconomic and social costs of recent financial crises have lent urgency to the worldwide quest for institutional arrangements and processes which enable efficient and appropriate oversight of financial systems. Drawing from the recommendations of the Committee on the Financial System (Chairman: Shri M. Narasimham), 1991, and the Committee on Banking Sector Reforms (Chairman: Shri M. Narasimham), 1998, financial sector reforms have consisted of reduction of statutory preemptions by way of changes in the policy environment, institutional strengthening, infusion of competition and establishment of a pro-active and comprehensive regulatory and supervisory framework.

10.3 Developments during 2000-01 cover the activities of the Board for Financial Supervision (BFS) and institutional performance - spanning commercial and co-operative banks, financial institutions and NBFCs - in terms of various parameters of supervision, *i.e.*, capital adequacy, provisioning, asset classification and income recognition, restructuring / rescheduling/ renegotiations of loans, non-performing assets, disclosure and exposure norms and entry norms for new private sector banks as well as for banks and NBFCs entering insurance business. Co-ordination issues between banks and financial institutions, issues in the supervision of co-operative banks and off-site supervision are also discussed. The subsection on institutional measures, which are directed towards strengthening and broadening the ambit of regulation and supervision over the medium-term and which apply across institutions in the financial sector, cover developments relating to macro-prudential indicators, risk-based supervision, universal banking, consolidated supervision and the initiatives undertaken in assessing the applicability of international standards to the Indian financial system.

DEVELOPMENTS DURING 2000-01

10.4 The BFS, set up in November 1994 under the Reserve Bank of India (Board for Financial Supervision) Regulations, is entrusted with the supervision of commercial banks, select FIs and NBFCs. The directions of the BFS are implemented by the Reserve Bank's Department of Banking Supervision (DBS), which supervises scheduled commercial banks (except regional rural banks), the Financial Institutions Division (FID) of DBS, which supervises select FIs and the Department of Non-Banking Supervision (DNBS), which supervises the NBFCs. The BFS has approved a new strategy of supervision comprising, *inter alia*, (i) the setting up of an off-site surveillance system for in-house monitoring of banks and other credit institutions, building a 'Memory' on all supervised institutions and setting up of a Market Intelligence and Surveillance Unit (MISU); (ii) restructuring of the system of bank inspections in terms of focus, process, reporting and follow-up; (iii) strengthening the statutory audit of banks and enlarging the role of auditors in the supervisory process; and (iv) strengthening the internal defence of the supervised institutions as an extension of the task of supervision. While on-site inspections in the case of domestic banks are based on the CAMELS model (capital adequacy, asset quality, management, earnings, liquidity and systems and controls), foreign banks are inspected on the basis of the CACS model (capital adequacy, asset quality, compliance and systems). The off-site monitoring system for surveillance over banks, introduced in 1995, has since been extended to select FIs and NBFCs as well. In the case of NBFCs, the supervisory framework consists of a four-pronged mechanism comprising (i) on-site inspection on the CAMELS pattern, *viz.*, capital adequacy, assets, management, earnings, liquidity, systems and procedures; (ii) off-site monitoring through periodic control returns from NBFCs using state-of-the-art information technology; (iii) an effective market intelligence network; and (iv) a system of submission of exception reports by statutory auditors of NBFCs.

10.5 During 2000-01 (July-June), the BFS reviewed the annual financial inspection in respect of 27 public sector banks, a consolidated report of the local head offices of the State Bank of India, 26 private sector banks, 50 foreign banks and 6 all-India FIs. During the year, 877 urban co-operative banks were inspected as against 828 banks during 1999-2000. In case of NBFCs, out of the 36,683 applications for the certificate of registration (CoR), 13,618 applications were approved and only 771 were permitted to accept public deposits as at end-June 2001. Besides, 270 regular inspections (and 1,193 scrutinies) were completed during the year. The Board also reviewed the monitoring with regard to bank frauds and house-keeping in public sector banks including reconciliation of entries in inter-branch accounts, inter-bank accounts (including *nostro* accounts) and balancing of the books of accounts of select FIs and NBFCs. Besides delineating the course of action to be pursued in respect of institution-specific supervisory concerns, the BFS also provided guidance on several regulatory and supervisory concerns.

Scheduled Commercial Banks

Capital Adequacy

10.6 Scheduled commercial banks are required to maintain a minimum capital to risk-weighted assets ratio (CRAR) of 9 per cent since the year ended March 2000 and to assign a risk-weight of 2.5 per cent to cover market risk in respect of all securities including securities outside the SLR from the year ended March 2001 (in addition to the risk-weight prescribed for covering credit risk). Besides, some capital cushion was required to be provided for market risk. In April

2000, banks were advised to assign a risk-weight of 100 per cent for State Government guaranteed securities issued by defaulting entities and not on all the securities issued or guaranteed by the concerned State Government. Furthermore, banks were required to assign a 20 per cent risk-weight on all loans and advances granted to their staff which are fully covered by superannuation benefits and mortgage of house/flat. This stipulation was extended to FIs as well.

10.7 Deposits placed with the National Bank for Agriculture and Rural Development (NABARD)/Small Industries Development Bank of India (SIDBI) in lieu of the shortfall in banks' advances to the priority sector *vis-a-vis* the prescribed target were assigned a 100 per cent risk-weight as these deposits are in lieu of assets that carry a similar risk-weight.

Risk-Weighting and Provisioning Norms: Credit Guarantee Trust for Small Industries

10.8 The concessions in risk-weighting and provisioning norms applicable to DICGC/ECGC guaranteed advances were extended, *mutatis mutandis*, to advances covered by the guarantee scheme of the Credit Guarantee Trust for Small Industries.

Provisioning

10.9 It was clarified that the provision of 0.25 per cent on the standard assets of scheduled commercial banks would be applicable on a global portfolio basis and not on domestic advances alone. From October 2000, the general provision on standard assets was included in Tier II capital, together with other "general provisions and loss reserves", up to a maximum of 1.25 per cent of the total risk-weighted assets. Banks have also been advised to make, on prudential considerations, provisions in excess of the minimum prescribed by the Reserve Bank, based on their own perceptions of risks in respective accounts. As a further prudential measure, banks were required to transfer not less than 25 per cent of their net profit (before appropriations but after adjustment/provision for staff bonus) to the reserve fund as against the statutory minimum of 20 per cent.

Asset Classification

10.10 The existing norms relating to restructuring/rescheduling/renegotiation of terms of the standard and sub-standard loan assets in respect of banks and FIs were reviewed in the light of the international best practices and the Basel Committee guidelines, and norms were prescribed for asset classification immediately after restructuring/ renegotiation/rescheduling in respect of standard and sub-standard assets. Norms were also prescribed for the treatment of provisions against upgradation of restructured/ renegotiated/rescheduled assets. It was decided that a rescheduling of the instalments of principal alone, in the case of a standard asset, would not cause such assets to be classified in the sub-standard category provided the loan/credit facility is fully secured. Further, a rescheduling of the interest element would not cause an asset to be downgraded to the substandard category subject to the condition that the amount of sacrifice, if any, in the element of interest, measured in present value terms, is either written off or provision is made to the extent of the sacrifice involved. Under similar conditions, a sub-standard asset could continue to be classified as sub-standard even after restructuring, if the asset is either written off or fully secured and the sacrifice, if any in interest, is either written off or fully

provided for. The guidelines do not apply to doubtful assets.

Classification and Valuation of Investments

10.11 In order to make the valuation of the banks' investment portfolio reflective of the purpose for which such investments were made, commercial banks were required to classify their entire investment portfolio, with effect from September 30, 2000 (as on March 31, 2001, in the case of select FIs) under three categories, viz., "held to maturity", "available for sale" and "held for trading". Investments under "available for sale" are to be marked to market at the year-end or at more frequent intervals. Investments under "held for trading" category are to be marked to market monthly or at more frequent intervals. Guidelines were also issued for the classification of investments, shifting of investments among the three categories, valuation of the investments, methodology for booking profit/ loss on sale of investments and providing for depreciation. The holdings under the "held to maturity" category are not to exceed 25 per cent of the total investments. In case of RRBs, the existing categorisation of their investments into SLR and non-SLR securities would continue, as they do not trade in securities. The RRBs would be exempted from marking to market norms in respect of SLR/approved securities up to March 2002, although non-SLR securities would have to be marked to market scrip-wise at the year-end or at more frequent intervals.

Investments in Privately Placed Unrated Debentures, etc.

10.12 Banks were advised to put in place appropriate systems to ensure that investment in privately placed unrated instruments is made in accordance with the systems and procedures prescribed under the respective bank's investment policy approved by the board. Banks were also advised to introduce a suitable format of disclosure requirements in respect of private placement issues, on the lines of the model format recommended by the Technical Group on Non-SLR Investments, with the approval of the board. The bank boards should lay down the policy and prudential limits on investments in bonds and debentures including a cap on unrated issues and on private placement basis, sub-limits for PSU bonds, corporate bonds, guaranteed bonds, issuer ceiling, etc. The policy laid down by banks should prescribe stringent appraisal of issues, especially by non-borrower customers, provide for an internal system of rating for non-borrower customers, stipulate entry-level minimum ratings/quality standards, lay down proper risk management systems, etc.

Voluntary Retirement Scheme

10.13 In case of expenditure under the Voluntary Retirement Scheme (VRS), the Reserve Bank, in consultation with the Institute of Chartered Accountants of India (ICAI), advised banks that: (i) the liability in case of *ex-gratia* payment should be recognised in the accounting year in which the decision to accept the voluntary retirement of the employee is taken and communicated to the concerned person and unless expended in the same period, should be treated as deferred revenue expenditure; (ii) the excess of terminal benefits over the actuarial provisions should be treated as deferred revenue expenditure unless expended in the same year; (iii) leave encashment expenditure should be treated as current expenditure, unless the same is actuarialised for all employees, in which case, the excess over provisions may be treated as deferred revenue

expenditure and amortised over a period not exceeding five years; (iv) the period of deferment should be restricted to a maximum of five years including the year of acceptance of the VRS application by the bank; and (v) bonds issued in relation to VRS payments, net of unamortised deferred revenue expenditure, could be treated as Tier-II capital.

Non-Performing Assets

10.14 The performance of Indian banks in respect of their non-performing assets has shown an improvement in recent years ([Table 10.1](#)). With a view to further tightening prudential norms, the concept of "past due" in respect of the identification of non-performing assets (NPAs), which allowed a grace period of 30 days beyond the due date, was dispensed with effective March 31, 2001. In order to move towards international best practices and to ensure greater transparency, it was announced in the April 2001 monetary and credit policy statement that from the year ending March 31, 2004, the 90-day default norm, as against the existing norm of 180 days, would be adopted in the classification of advances as NPAs. As a facilitating measure, banks were advised to move over to the charging of interest at monthly rests by April 1, 2002. Banks would have to upgrade their Management Information Systems (MIS) for collecting data on loans where the default has occurred for more than 90 days and commence making additional provisions for such loans from the year ending March 31, 2002, with a view to strengthening their balance sheets and ensuring smooth transition to the 90-day norm. In this regard, banks' action plans would be monitored by the Reserve Bank on a half-yearly basis.

Table 10.1 : Frequency Distribution of Net NPAs to Net Advances - Scheduled Commercial Banks

Year	Public Sector Banks		Private Sector Banks		Foreign Banks
	SBI Group	Nationalised	Old	New	
1	2	3	4	5	6
1996-97					
Up to 10 %	5	12	22	9	36
Above 10 % and up to 20 %	3	6	3	Nil	1
Above 20 %	Nil	1	Nil	Nil	2
1997-98					
Up to 10 %	4	13	21	9	33
Above 10 % and up to 20 %	4	5	4	Nil	6
Above 20 %	Nil	1	Nil	Nil	3
1998-99					
Up to 10 %	4	14	16	9	27
Above 10 % and up to 20 %	4	4	4	Nil	10
Above 20 %	Nil	1	3	Nil	3
1999-2000					
Up to 10 %	7	15	17	8	32
Above 10 % and up to 20 %	1	4	6	Nil	6
Above 20 %	Nil	Nil	1	Nil	4
2000-01 P					

Up to to 10%	8	14	17	8	31
Above 10% and up to 20%	Nil	5	3	Nil	6
Above 20%	Nil	Nil	3	Nil	5

P Provisional.

Notes: 1. The Bareilly Corporation Bank Ltd. was amalgamated with Bank of Baroda with effect from June 3, 1999.

2. The Sikkim Bank Ltd. was amalgamated with Union Bank of India with effect from December 22, 1999.

3. The Times Bank Ltd. was merged with HDFC Bank Ltd. with effect from February 26, 2000.

4. The branches of the British Bank of the Middle East in India were amalgamated with HSBC with effect from September 25, 1999.

5. The Bank of Madura Limited was amalgamated with ICICI Bank Limited with effect from March 10,2001

Divergence in NPAs - Clarifications

10.15 Divergences have persisted in the assessment of NPAs by banks, statutory auditors and the Reserve Bank inspectors. Based on the recommendations of a Working Group, as per the directions of the BFS, user-friendly guidelines in a question-answer format were issued in June 2001.

Debt Recovery

10.16 Guidelines in respect of the Settlement Advisory Committee (SAC), issued in May 1999, were revised in July 2000 for the compromise settlement of chronic NPAs of all sectors including the small sector. The guidelines provide a simplified, non-discretionary and non-discriminatory mechanism for recovery of NPAs. The revised guidelines cover accounts which have become doubtful assets or loss assets as on March 31, 1997 and also sub-standard accounts as on March 31, 1997 which became doubtful or loss assets subsequently, with an outstanding balance of Rs.5 crore and below. The time-frame for the revised guidelines, operative till March 31, 2001, was extended up to June 30, 2001 and banks have been given time up to September 30, 2001 for processing these applications/cases. All public sector banks have been directed to uniformly follow these guidelines, so that they maximise recovery of NPAs within the stipulated time. In order to make increased use of the forum of *Lok Adalats* to settle disputes involving smaller amounts, banks and FIs were also provided the following guidelines for implementation: (i) ceiling of amount for coverage under *Lok Adalats* would be up to Rs.5 lakh; (ii) the scheme may include all NPA accounts, both suit-filed and non-suit filed accounts, which are in the doubtful and loss category; (iii) the settlement formula has to be flexible and left to the boards of directors of banks and FIs, keeping in view certain essential parameters; and (iv) the banks and FIs should get in touch with State/district/*taluk* level authorities for organising *Lok Adalats*.

Disclosure Norms

10.17 With effect from March 31, 2000, banks are required to disclose in their balance sheets

the following information: (i) the maturity pattern of deposits, borrowings, investments, loans and advances and foreign currency assets and liabilities; (ii) movements in NPAs; and (iii) lending to sensitive sectors (*e.g.*, capital market, real estate and commodities). This is in addition to the extant disclosure stipulations regarding the capital adequacy ratio, Tier-I and Tier-II capital, percentage of shareholding of the Government of India, percentage of net NPAs to net advances, amount of provision made towards NPAs, depreciation in the value of investments and income tax during the year, amount of subordinated debt raised as Tier-II capital, the gross value of investments in India and outside India, the aggregate provisions for depreciation separately on investments in India and outside India and the net value of investments in India and outside India, interest income as a percentage of average working funds, non-interest income as a percentage of average working funds, operating profits as percentage of working funds, return on assets, business (deposits plus credit) per employee and profit per employee. The total exposure to sensitive sectors as on March 31, 2000 by scheduled commercial banks stood at Rs.19,669 crore, comprising 4.4 per cent of total advances. As a move towards greater transparency, banks are required to disclose the following additional information in respect of restructured loan assets in their published annual accounts under the 'Notes on Accounts', effective March 31, 2001: amount of (i) loan assets subjected to restructuring; (ii) standard assets subjected to restructuring; and (iii) sub-standard assets subjected to restructuring, respectively.

Exposure Norms

10.18 The exposure ceiling in respect of an individual borrower was reduced from 25 per cent to 20 per cent of the bank's capital funds, effective April 1, 2000. Where the existing level of exposure, as on October 31, 1999, was more than 20 per cent, banks are expected to reduce the exposure to the 20 per cent limit over a two-year period, *i.e.*, by end-October 2001. In consultation with banks, the Reserve Bank announced fresh guidelines in respect of the concept of "capital funds", measurement of credit exposure and the level of the exposure limit. The exposure ceiling is to be computed in relation to total capital in India as defined under capital adequacy standards (Tier I and Tier II), effective March 31, 2002. Non-fund based exposures are to be reckoned at hundred per cent and in addition, banks should include forward contracts in foreign exchange and other derivative products like currency swaps and options at their replacement cost value in determining the individual/group borrowers exposure ceiling, effective April 1, 2003. The exposure ceiling for a single borrower was further revised downwards from the existing 20 per cent of a bank's capital funds to 15 per cent, effective March 31, 2002. Group exposure limits were also revised downwards from the existing 50 per cent of a bank's capital funds to 40 per cent with effect from March 31, 2002. Only in the case of financing of infrastructure projects, the group exposure limit is extendable by an additional 10 per cent, *i.e.*, up to 50 per cent.

10.19 The guidelines for banks' exposure to capital markets were reviewed based on the recommendations of the Standing Technical Committee of Reserve Bank-SEBI officials on banks' financing of equities and investments in shares and guidelines were issued on November 10, 2000. Banks were advised that within the overall exposure to sensitive sectors, a bank's exposure to the capital market by way of investments in shares, convertible debentures and units of equity-oriented mutual funds should not exceed 5 per cent of outstanding domestic credit (excluding inter-bank lending and advances outside India) as on March 31 of the previous year.

On a further review and in line with the recommendations of the Reserve Bank-SEBI Technical Committee, revised guidelines were issued on

May 11, 2001. Banks could acquire shares, debentures and units of mutual funds, *etc.*, for direct investment in shares/debentures, *etc.*, at their own risk and for issuing loans and advances to individuals and share-broking entities for investment in capital markets on their own account. Shares/debentures may be assigned to banks by individuals and corporates as collateral and additional security for certain approved purposes which do not involve stockbroking or investment in the capital market. In terms of these guidelines, banks' exposure to capital markets in all forms was restricted to 5 per cent of total advances (including Commercial Paper) outstanding as on March 31 of the previous year. The ceiling of 5 per cent would cover : (i) direct investments in equity shares and convertible bonds and debentures; (ii) advances against shares to individuals for investment in equity shares (including IPOs), bonds and debentures, units of equity-oriented mutual funds; and (iii) secured and unsecured advances to stock brokers and guarantees issued on behalf of stock brokers. A uniform margin of 40 per cent was prescribed on all advances/financing of IPOs/guarantees. A minimum cash margin of 20 per cent (within the margin of 40 per cent) was prescribed in respect of guarantees issued by banks.

10.20 Norms in respect of risk management and internal control systems for banks were specified. Banks making investments in equity shares/debentures, financing of equities and issue of guarantees within the 5 per cent ceiling were encouraged to build up adequate expertise in equity research as warranted by their scale of operations and formulate a transparent policy and procedure for investment in shares, *etc.*, with the approval of their boards. The investment and the audit committees, set up by their boards, primarily responsible for taking the investment decision as also for the surveillance and monitoring of such investments. As regards the valuation and disclosure requirements, equity shares in the banks' portfolios, whether held as primary security or as collateral for advances or guarantees, or as investment, should be marked to market, preferably on a daily basis, but at least on a weekly basis. Banks are required to disclose the total investments made in equity shares, convertible bonds and debentures, units of equity-oriented mutual funds and aggregate advances against shares in the 'Notes on Accounts' to their balance sheets. The guidelines are subject to review by the Reserve Bank-SEBI Technical Committee after six months.

Repatriation of GDRs/ADRs Proceeds

10.21 Considering the fact that banks which are raising capital abroad for improving their capital base have largely rupee-denominated assets and that most of the risk limits are linked to their capital, banks and FIs are required to repatriate the entire proceeds of GDRs/ADRs soon after the issue process is completed. The provision is applicable to direct investments in banks made by NRIs/OCBs, foreign banking companies or finance companies, including multilateral institutions.

Guidelines for Entry Norms for New Private Sector Banks

10.22 The banking industry has been experiencing the rigours of intensifying competition, on the one hand, and a tightening of prudential regulations, on the other. In view of these emerging

trends, the Reserve Bank revised the entry norms for new banks in January 2001. The minimum capital for eligible entities was set at Rs.200 crore to be raised to Rs.300 crore in three years. A minimum contribution of promoters was set at 40 per cent of the paid-up capital, with a lock-in period of five years, with the NRI participation restricted to 40 per cent of paid-up capital. Eligible entities were required to achieve an initial CRAR of not less than 10 per cent and priority sector lending of not less than 40 per cent of total net bank credit. Guidelines were also set out to ensure an arm's-length relationship between investing companies and promoter groups to prevent connected lending. Guidelines were also issued for the conversion of NBFCs to scheduled banks.

10.23 The guidelines for entry of new private sector banks were revised to make the issue of licences selective and restricted to the applicants who can meet stringent prudential requirements and provide efficient customer service. As per the guidelines, the applications received by the Reserve Bank for setting up of new banks till March 31, 2001, will be screened by a High-Level Advisory Committee, headed by Dr. I.G. Patel, former Governor, Reserve Bank, before granting in-principle approval by the Reserve Bank. The Committee has submitted its report.

Norms for Banks/NBFCs Entering Insurance

10.24 Under the Insurance Regulatory and Development Authority (IRDA) Act, 1999, banks and registered NBFCs have been permitted to enter the insurance business. Insurance has been notified by the Central Government as a permissible form of business that could be undertaken by banks under Section 6 (1) (o) of the Banking Regulation Act, 1949. The norms are intended to ensure that risks involved in the insurance business do not get transferred to the bank/NBFC and that the banking/NBFC business does not get contaminated. The maximum equity contribution that a bank/NBFC could hold in a joint venture company on risk participation basis will normally be 50 per cent of the paid-up capital of the insurance company subject to compliance with any rules and regulations laid down by the IRDA/Central Government. On a selective basis, the Reserve Bank could permit a higher equity contribution by a promoter bank/NBFC, subject to divestment within a prescribed period. In proposals with a foreign partner contributing 26 per cent of equity, more than one public sector bank or private sector bank or NBFC could be allowed to participate in the equity of the insurance joint venture with the approval of IRDA/FIPB. Banks are required to meet specific criteria of entry on the basis of the latest available audited balance sheet. Banks/NBFCs which are not eligible as joint venture participants can make investments up to 10 per cent of the net worth of the bank or 10 per cent of owned fund of the NBFC or Rs.50 crore, whichever is lower, in the insurance company, for providing infrastructure/services support, and without any contingent liability for the bank. The banks/NBFCs, as also their subsidiaries, are allowed to undertake distribution of insurance products on agency basis without any risk participation.

Off-site Supervision

10.25 Under the Off-site Monitoring and Surveillance System (OSMOS), introduced in 1995, banks are required to submit DSB returns to the Reserve Bank. These returns, collected on a quarterly basis, are used for the purpose of prudential supervision of banks in between on-site inspections. The first *tranche* covers data on assets and liabilities, capital adequacy, operating

results, asset quality, large exposures, connected lending and the ownership pattern of banks. The second *tranche* covers data on exposure of banks to interest rate and liquidity risks (both in domestic and foreign currencies). A new return to capture key data on operations of domestic subsidiaries of banks has been introduced in September 2000 under the second *tranche*. Apart from these returns, banks are required to submit the balance sheet analysis and bank profile statements annually. The OSMOS database forms the main input for the half-yearly reviews on macro-prudential indicators. In future, this database is expected to constitute the core of the risk-based supervision framework.

Other Supervisory Initiatives

10.26 The State Bank of India (SBI) has incorporated a Credit Information Bureau (CIB) in collaboration with HDFC Limited and foreign technology partners to develop an institutional mechanism for sharing of information on borrowers/ potential borrowers among banks and FIs, within the confines of the existing legislation. In order to strengthen the legal mechanism for making the functioning of CIB effective, a draft master legislation covering its responsibilities, rights and obligations of the member credit institutions and safeguarding of the privacy rights, was forwarded to the Central Government.

10.27 With a view to developing an 'informal monitoring mechanism' along with the formal channels of supervision, the Reserve Bank activated the Market Intelligence Cell, which seeks to gather discrete information on banks, normally outside the structured reporting system.

10.28 A scheme of Prompt Corrective Action (PCA) based on certain triggers is being developed as a supervisory tool. The scheme is aimed at taking prompt action at an early stage for banks showing incipient signs of weakness and is in addition to the existing supervisory tools.

10.29 The Reserve Bank had set up a Working Group, in consultation with the Central Government, to examine the contents of the calendar of reviews for public sector banks and suggest changes as it was felt that the scope and content of some of the prescribed reviews were not meeting the intended objectives and required suitable changes in the light of the recent developments in the banking sector. Based on the Group's recommendations, a revised calendar of reviews, effective August 1, 2000, was prescribed for public sector banks. This contains three parts, *viz.*, the reviews to be put up to (i) the board of directors; (ii) the management committee; and (iii) the audit committee of the board. The reviews prescribed cover all the functional areas of the banks in an exhaustive manner.

Co-operative Banking

Provisioning

10.30 Provisions towards standard assets for urban co-operative banks (UCBs) are not required to be netted from gross advances, as earlier, but to be shown separately as "Contingent Provisions against Standard Assets" under Other Funds and Reserves in the balance sheet. In case, banks are already maintaining excess provisions, under the Bad and Doubtful Debt

Reserve, the additional provision required for standard assets could be segregated from that reserve and parked under the head "Contingent Provisions against Standard Assets" with the approval of their boards.

Non-performing Assets

10.31 Advances granted to units placed under rehabilitation packages approved by the Board for Industrial and Financial Reconstruction (BIFR) and/or term-lending institutions, in the case of UCBs, are treated as NPAs. For additional credit facilities to them, provisioning norms apply only after a period of one year from the date of disbursement. This relaxation has been made applicable to SSI units, which have been marked as sick by banks themselves.

Exposure Norms

10.32 The credit exposure ceiling in respect of an individual borrower was reduced to 20.0 per cent (from 25.0 per cent) of the capital funds of an UCB, effective April 1, 2000. In case, the existing exposure level as on March 31, 2000 was in excess of 20.0 per cent, it would have to be reduced to 20.0 per cent by end-March 2002. The definition of capital fund has been broadened to include balances held under the building fund in addition to the share capital and statutory reserves.

Registration and Licensing Policy of New Urban Co-operative Banks (UCBs)

10.33 In order to ensure better financial health and improved corporate governance, the Reserve Bank revised the entry point norms (EPNs) for new UCBs upwards in line with the recommendations of the High Power Committee on Urban Co-operative Banks (Chairman: Shri K. Madhava Rao). It was stipulated that, at all times, there should at least be two directors with suitable banking experience or relevant professional qualifications. The promoters should not be defaulters to any financial institution or bank. No criminal proceedings should have been instituted against the promoters and promoters should not be associated as directors with any chit fund/ NBFC/co-operative bank.

Conversion of Co-operative Credit Societies into Urban Co-operative Banks

10.34 In line with the guidelines issued under recommendations of the High Power Committee, a co-operative credit society, as defined under provisions of the Section 5(ccii) of the Banking Regulations Act, 1949 (as applicable to cooperative societies), may apply for conversion into an UCB if it possesses net owned funds and total membership not less than the Entry Point Capital and membership norms, respectively, prescribed for setting up new UCBs as indicated above. It should have (i) been making profits in each of the previous three consecutive years; (ii) secured 'A' class audit rating for the last three years successively; and (iii) a CRAR that should not be less than the ratio prescribed by the Reserve Bank.

10.35 The periodicity of inspection of UCBs was revised. All weak urban co-operative banks and scheduled urban co-operative banks would be inspected annually (including weak scheduled banks). Well-managed non-scheduled banks would be inspected once in three years. All other

non-scheduled banks would be inspected once in two years. In case of newly licensed banks, supervisory efforts would be stringent from the initial period itself with a view to avoiding financial difficulties in the nascent stage.

Issues in Supervision

10.36 The asymmetry in the application of prudential norms and regulatory systems for UCBs *vis-a-vis* commercial banks has been the subject of attention in the recent period. The involvement of two authorities (Central Government/State Governments and the Reserve Bank) in the regulation of UCBs has resulted in overlapping jurisdiction and difficulties in carrying out administrative/ prudential measures with the required speed and stringency. In order to strengthen the efficacy of the Reserve Bank's regulation/ supervision over UCBs, important measures were announced in the monetary and credit policy for 2001-02 ([Box X.1](#)). Further, the recommendations of the High Power Committee for amending the provisions in the Banking Regulation Act for strengthening the Reserve Bank's regulations over UCBs are under consideration of the Reserve Bank and the Central Government.

Box X.1 Strengthening Supervision of Urban Co-operative Banks

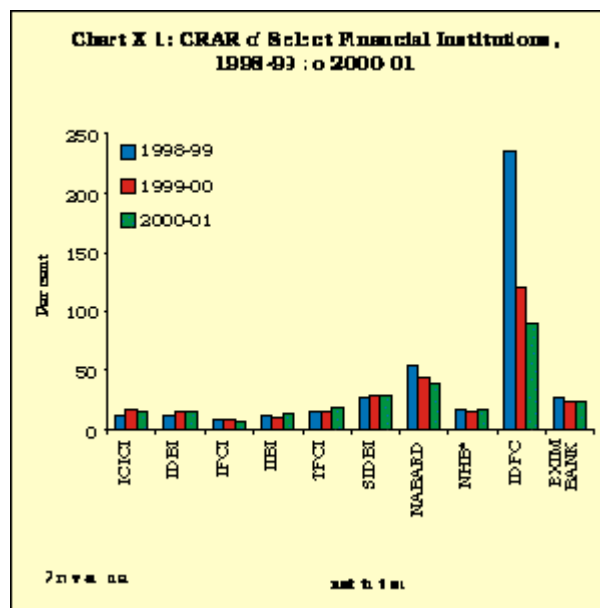
- No fresh proposals for lending directly or indirectly against security of shares either to individuals or any other entity (with effect from April 19, 2001).
- Borrowings in the call/notice money market on a daily basis not to exceed 2.0 per cent of their aggregate deposits as at end-March of the previous financial year.
- No increase in term deposits with other UCBs. Present term deposits to be unwound before end-June 2002.
- The SLR component to be maintained in the form of Government and other approved securities for non-scheduled UCBs with NDTL of Rs.25 crore and above raised from 10.0 per cent to 15.0 per cent, and from nil to 10.0 per cent for UCBs with NDTL less than Rs.25 crore. For scheduled UCBs, the same increased from 15.0 per cent to 20.0 per cent (increased levels to be achieved by end-March 2002).
- With effect from April 1, 2003, scheduled UCBs to maintain their entire SLR assets of 25.0 per cent of NDTL only in Government and other approved securities.

10.37 In the light of the recent experience, an option meriting consideration is the setting up of a new apex supervisory body, which can take over the entire inspection/supervisory functions in relation to scheduled and non-scheduled UCBs. At present there are 2,084 UCBs, of which 51 are scheduled. This apex body could be under the control of a separate high-level supervisory board consisting of representatives of the Central Government, State Governments, the Reserve Bank as well as experts and may be given the responsibility of inspection and supervision of UCBs and ensure their conformity with prudential, capital adequacy and risk-management norms as laid down by the Reserve Bank. The Reserve Bank is in consultation with the Central Government regarding this proposal.

Financial Institutions

Capital Adequacy

10.38 Analogous to the regulations for scheduled commercial banks, select all-India FIs are required to maintain a minimum capital to risk-weighted assets ratio of 9 per cent since the year ended March 2000 and to assign a risk-weight of 2.5 per cent to cover market risk in respect of the entire investment portfolio from the year ended March 31, 2001 over and above the 20 per cent/100 per cent risk-weight already assigned for credit risk in non-Government/non-approved securities ([Chart X.1](#)). FIs are also required to assign a risk-weight of 100 per cent for State Government guaranteed securities issued by defaulting entities. A risk weight of 20 per cent should be assigned to all such loans and advances granted by the FIs to their own employees as are covered by superannuation benefits and mortgage of flats/houses. All other loans and advances to own employees should, however, be subject to a 100 per cent risk weight.



Provisioning

10.39 In May 2000, the netting of provision against standard assets from gross advances was discontinued in respect of select all-India FIs. These provisions are to be shown separately as "Contingent Provision against Standard Assets" under "Other Liabilities and Provisions" in the balance sheets. This provision is not eligible for inclusion in Tier II capital or reckoned for arriving at net NPAs. In October 2000, this stipulation was amended in the light of international best practices to allow FIs to include the "General Provisions on Standard Assets" in their supplementary (Tier-II) capital. However, the provisions on standard assets along with other "General Provisions and Loss Reserves" should not exceed 1.25 per cent of the total risk-weighted assets. Effective May 30, 2000, the excess provision towards depreciation on equity investments should be appropriated to the "Investment Fluctuation Reserve Account" (IFRA) instead of the "Capital Reserve Account" (CRA) and is eligible for inclusion in Tier II capital. The existing amount of excess provision towards depreciation on investment held in the CRA is also to be transferred to the IFRA. The amount held in the IFRA could be utilised in future to meet the depreciation requirement on investments. The extra provision needed in the event of

depreciation in the value of investments is to be debited to the profit and loss account and if required, an equivalent amount may be transferred from the IFRA as a 'below-the-line' item after determining the profit for the year.

Classification and Valuation of Investments

10.40 In April 2000, FIs were required to value the investments in mutual fund units at market rates, as per stock exchange quotations, if available. Otherwise, the latest net asset value (NAV) declared by the mutual fund in respect of each particular scheme should be used for valuation. Pursuant to the recommendations of an informal group set up by the Reserve Bank, the guidelines for classification and valuation of investments by FIs were revised with effect from March 31, 2001, so as to bring the norms in consonance with the international best practices. The guidelines, *inter alia*, required FIs to classify their entire investment portfolio as on March 31, 2001 as 'held to maturity', 'available for sale' and 'held for trading'.

Asset Classification and Income Recognition

10.41 In order to bring parity in the NPA norms for banks and FIs, an asset of an FI would be treated as non-performing if interest and/ or instalment of principal remain overdue for more than 180 days with effect from the year ended March 31, 2002, as against the present norm of an overdue period of 365 days or more in respect of principal and more than 180 days in respect of interest. Guidelines issued to public sector banks for recovery of dues relating to NPAs were extended to all the central public financial institutions (*viz.*, IDBI, IFCI Ltd., IDFC Ltd., IIBI Ltd., TFCI Ltd., Exim Bank, NABARD, SIDBI and NHB) FIs were required to issue notices by August 31, 2000, to eligible defaulting borrowers to avail of the opportunity for a one-time settlement of their outstanding dues. Subsequently, the period for giving notice was extended up to September 30, 2000. The guidelines for settlement of the outstanding dues, which were to be operational up to March 31, 2001, were later extended up to June 30, 2001. FIs have also been given time up to September 30, 2001 for processing applications and cases in this regard.

Exposure Norms

10.42 In line with the best international practices, the Reserve Bank has decided to adopt the concept of "capital fund" as defined under capital adequacy standards for determining the exposure ceiling for the FIs, effective March 31, 2002. Effective from March 31, 2002, the exposure ceiling for 'single borrower' would be brought down from 20.0 per cent to 15.0 per cent of capital funds. Similarly, in case of group borrowers, the ceiling would be brought down from 50.0 per cent to 40.0 per cent and this ceiling is extended by an additional 10.0 per cent in the case of infrastructure projects, *i.e.*, up to 50.0 per cent. At present, in respect of non-fund based credit limits, only 50.0 per cent of such limits or outstandings, whichever is higher, is required to be taken into account for computing the extent of exposure. However, effective April 1, 2003, it should be reckoned at 100 per cent value. At present, derivative products, such as, forward rate agreements (FRAs) and interest rate swaps (IRS), *etc.*, are also captured for computing the exposure by applying the credit conversion factors to the notional principal amounts as per the 'original exposure method'. Effective April 1, 2003, FIs should also include forward contracts in foreign exchange and other derivative products such as currency swaps,

options, *etc.*, at their “replacement costs”.

Disclosure Norms

10.43 Effective 2000-01, FIs are required to disclose as part of their 'Notes on Accounts', the following details, *viz.*, CRAR, core CRAR and supplementary CRAR, amount of subordinated debt raised and outstanding as Tier-II capital, risk-weighted assets, shareholding pattern, asset quality and credit concentration, maturity pattern of domestic and foreign currency assets and liabilities and details on operating results. Besides, they have to disclose details relating to loan assets and substandard assets which have been subjected to restructuring separately.

Advances against Shares and Debentures

10.44 In September 2000, FIs were required to ensure that whenever the limits of advances granted to a borrower against the security of shares/debenture exceeded Rs.10 lakh, the shares/debentures are transferred in the name of the FI concerned. With amendments to the SEBI (Depositories and Participants) Regulations, 1996 to facilitate pledge of dematerialised securities, the FIs could invoke the pledge in case of default by the borrower, subject to the provisions of the pledge documents and the depository would register the FI as beneficial owner.

Resource Mobilisation by Financial Institutions

10.45 Under the guidelines as modified on June 21, 2000, FIs are not required to seek the Reserve Bank's prior approval/registration for raising of resources by way of issue of bonds (both public issue and private placement) subject to the fulfilment of certain conditions, *viz.*, (i) a minimum maturity of 3 years; (ii) call/ put or both options, if any, not to be exercisable before the expiry of one year from the date of issue of bonds; (iii) the YTM offered, at the time of issue of bonds, including those with call/put options, not exceeding 200 basis points above YTM on the Government of India securities of equal residual maturities; and (iv) the 'exit' option on the bonds not to be offered before the end of one year from the date of issue.

10.46 The outstanding total resources mobilised at any point of time by an individual FI, including funds mobilised under the 'umbrella limit' prescribed by the Reserve Bank should not exceed 10 times its net owned funds (NoF) as per the latest audited balance sheet. The limit fixed for raising resources by FIs would be only an enabling provision. It was clarified that the resource requirements along with the maturity structure and the interest rate offered thereon would need to be arrived on a realistic basis and derived, *inter alia*, from a sound system of ALM/risk management.

10.47 In case of floating rate bonds, FIs are required to seek prior approval from the Reserve Bank, with regard to the 'reference rate' selected and the methods of floating rate determination. Prudential requirements set by other regulatory authorities such as the SEBI, *etc.*, also apply.

10.48 A format of consolidated returns in respect of raising of resources by all India FIs through money market instruments and bonds was introduced and the same was revised on December 5, 2000, to facilitate inclusion of additional information on short-term borrowings and

data on commercial paper, which has been included under the one-time 'umbrella limit'.

Rating for Public Deposits of FIs

10.49 The rating for term deposits accepted by all India FIs was made mandatory, effective November 1, 2000, in order to improve the functional efficiency of the market.

Co-ordination Issues Between Banks and FIs

10.50 Pursuant to the recommendations of the Working Group on Harmonising the Role and Operations of Development Financial Institutions and Banks (Chairman: Shri S.H. Khan), a Standing Co-ordination Committee was constituted in August 1999 under the *aegis* of the IDBI with representatives from select FIs and banks. Projects jointly financed by banks and FIs give rise to certain operational issues which, it was felt, could be better addressed through a more effective and closer co-ordination between the two sets of lenders, *viz.*, banks and FIs. Therefore, attention was focused on large projects jointly financed by banks and FIs in order to avoid delays and facilitate better solutions to the common problems. With these ends in view, select banks and FIs evolved ground rules in certain areas for consideration and adoption by banks and FIs, comprising, *inter alia*, a time-frame for sanction of facilities, asset classification across consortium members, disciplining borrowers through changes in their management, adoption of a group approach to borrowers, levy of charges in problem accounts and sharing of securities and cash flows.

Supervisory System for FIs

10.51 As a part of the integrated supervisory strategy, a Prudential Supervisory Reporting System (PSRS) for an on-going off-site surveillance was introduced in July 1999 to periodically obtain the essential data pertaining to prudential concerns of the Reserve Bank and to help the build-up of the MIS on prudential parameters within the FIs. The PSRS, patterned broadly on the lines of the off-site surveillance system initially prescribed for the banks, comprises seven returns - three quarterly, two half yearly and two annual -covering assets and liabilities of the FIs, capital adequacy, operational results, asset quality, ownership and control, large credit and the list of subsidiaries/associates.

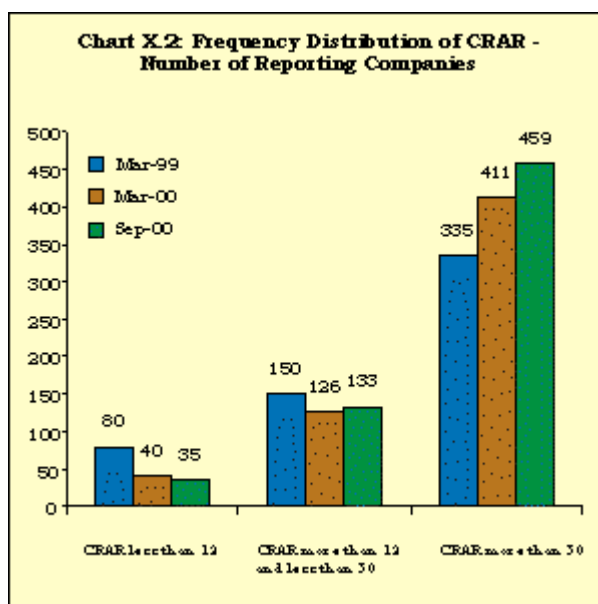
10.52 Changes in the practices/procedures followed in conducting the financial inspection of FIs were effected from January 24, 2001. Information requirements of the inspection team would be advised to the FIs at least a month before the commencement of inspection to ensure better time management and efficiency of the examination process. Before the commencement of inspection, the management of the FIs would be requested to make a presentation to the inspection team on their perspective of risk exposures and the manner in which these risks were addressed in the past and the future strategy in this regard. With a view to strengthening the on-site inspection mechanism, inspections would be conducted annually instead of once in two years. The inspection of all ten FIs would be taken up during the inspection cycle 2001-2002 with reference to the date of balance sheet of the FIs for the accounting year 2000-2001.

Non-Banking Financial Companies

Capital Adequacy

10.53 The norms relating to CRAR have been made applicable to NBFCs accepting/holding public deposits with effect from end-March 1998. These stipulate that every such NBFC shall maintain a minimum CRAR consisting of Tier-I and Tier-II capital which should not be less than 10 per cent on or before March 31, 1998 and 12 per cent on or before March 31, 1999, of its aggregate risk-weighted assets and of risk-adjusted value of off-balance sheet items. Further, the equipment-leasing and hire-purchase finance companies without minimum investment grade credit rating were allowed to take public deposits only if they had a CRAR of 15 per cent and above. Moreover, the requirement of CRAR for loan and investment companies accepting public deposits was also raised to 15 per cent. The total of Tier-II capital will be limited to a maximum of hundred per cent of Tier I capital for the purpose of compliance with norms.

10.54 As regards the frequency distribution of CRAR for NBFCs, as many as 537 out of 577 companies (93.1 per cent) had a CRAR of 12 per cent and above, as at end-March 2000, with as many as 411 companies (71.2 per cent) registering a CRAR in excess of 30 per cent. As at the end of September 2000, as many as 592 out of 627 reporting companies (94.4 per cent) reported a CRAR equal to or in excess of the stipulated minimum with as many as 459 companies (73.2 per cent) having a CRAR above 30 per cent ([Chart X.2](#)).



Asset Liability Management

10.55 The Reserve Bank introduced an ALM system for NBFCs for effective risk management in their various portfolios. Initially, the ALM system has been made applicable to NBFCs which have an asset size of Rs.100 crore or more or public deposits of Rs.20 crore or more as per their balance sheet as on March 31, 2001. The guidelines would be fully operational by the year ending March 31, 2002. The NBFCs not qualifying at present have also been advised to put in place an ALM system so that these guidelines apply to all NBFCs.

10.56 Residuary Non-Banking Companies (RNBCs) are required to invest not less than 80 per cent of their deposits in a prescribed manner. They have been permitted to invest up to two per cent of the aggregate deposit liabilities in the schemes of mutual funds approved by the SEBI along with the schemes of the Unit Trust of India (UTI), subject to an overall ceiling of ten per cent of investment in the various mutual fund schemes taken together. The two per cent sub-ceiling would not be applicable to schemes of the UTI.

Public Deposits by Non-Banking Financial Companies

10.57 Public deposits of NBFCs comprise all deposits except those by way of borrowing from (i) the Central/State governments; (ii) FIs, (iii) international bodies; (iv) inter-corporate deposits; (v) banks; (vi) mutual funds; and (vi) secured debentures, *etc.* Receipt of money from persons who fall in the category of relatives of directors of the NBFC as specified in the Companies Act, 1956 was exempted from the definition of 'public deposit' as defined in the NBFC Acceptance of Public Deposits' (Reserve Bank) Direction 1998. Money received by NBFCs by issue of CP is exempted from the purview of public deposits. The maximum rate of interest that the NBFCs, miscellaneous non-banking companies (chit fund companies) and Nidhi companies can pay on their public deposits was reduced, effective April 1, 2001, from 16 per cent to 14 per cent per annum. In respect of the RNBCs, on and from July 1, 2000, the floor interest rates payable was lowered by two percentage points to 6 per cent per annum, to be compounded annually, on amounts deposited in lump sum or at monthly or at longer intervals and 4 per cent per annum (to be compounded annually) on the amounts deposited under daily deposit schemes.

10.58 The Supreme Court upheld the constitutional validity and reasonableness of the provisions of Section 45-S of the Reserve Bank of India Act, 1934 that prohibits unincorporated bodies engaged in the business of financial institution from accepting public deposits except from certain specified relatives. By virtue of this judgement, about 3,000 writ petitions pending before various high courts all over India challenging the constitutional validity of Section 45-S of the Act were dismissed.

Rationalisation of Returns submitted by NBFCs

10.59 The formats of all the returns to be submitted by the NBFCs, RNBCs and chit fund companies at quarterly, half-yearly and annual intervals were rationalised with a view to improving the reporting of supervisory information and facilitating electronic processing of these returns. A monthly return on the repayment of deposits was prescribed for NBFCs holding public deposits but whose applications for CoRs under Section 45-IA of Reserve Bank of India Act, 1934 were rejected or cancelled, if granted. The returns on the asset-liability position of the NBFCs holding public deposits of Rs.20 crore and above for the purpose of monetary and liquidity aggregates were expanded to include items of supervisory information and also for picking up early warning signals of deterioration in their financial health.

Other Supervisory Initiatives

10.60 The Reserve Bank has taken an active role in educating the general public and the NBFC

personnel in order to familiarise them with the need for having better systems and procedures for improving compliance with the regulatory framework. The campaign comprises a three-pronged strategy consisting of advertisements in print media, spots on electronic media and informal publicity through seminars, press meets, *etc.* At the same time, police officials and officials of the State Governments were trained to equip them with the skills of pro-actively dealing with unscrupulous elements in the NBFC sector. The Reserve Bank continues to follow up with various State Governments and the Union Territories for enacting legislation for protection of depositors' interest. Five States have enacted the Protection of Interest of Depositors (in Financial Establishments) Acts, while three State Governments have taken necessary steps for enactment.

Miscellaneous Issues in Regulation and Supervision

10.61 The Reserve Bank undertook several initiatives in recent years to amend the relevant laws with a view to developing the legal infrastructure for financial sector reforms. The major legal reforms initiated in the banking sector in the recent months encompass areas such as security laws, the Negotiable Instruments Act, fraud on banks and the regulatory framework of banking. The Reserve Bank also forwarded its recommendations to the Central Government for comprehensive amendments to the Reserve Bank of India Act, 1934 and the Banking Regulation Act, 1949. The Financial Companies Regulation Bill, 2000 incorporating provisions contained in the Chapters IIIB and IIIC of the Reserve Bank of India Act, 1934, with certain modifications and certain new safeguards to protect the interests of the depositors and regulate the financial institutions in a more effective manner, has been referred to the Standing Committee on Finance.

Institutional Measures

10.62 Contemporaneous with the operational dispensation of the regulatory and supervisory functions, the Reserve Bank has been undertaking structural measures to strengthen the financial system and improve the efficiency of financial intermediation. In general, measures for institutional reform have emerged out of a consultative approach involving policy authorities, market participants, technical committees and advisory groups, as well as experts within the country and abroad. These structural measures have focused on improving the institutional infrastructure for a sound and resilient financial system, strengthening prudential and supervisory norms consistent with the organisational changes occurring in financial institutions, and developing the appropriate technological architecture. During 2000-01, emphasis was placed on developing financial markets, improvement in risk management and internal control mechanisms, debt recovery and upgradation of the payment and settlement system.

Macro-Prudential Indicators (MPIs)

10.63 The association of financial sector crises with problems in the real sector and the increasing severity of financial crises have prompted central banks all over the world to move to a system of preventive supervision. This consists of identifying early warning indicators to anticipate crises and undertake prompt corrective action to prevent crises before they occur. Under the new approach, early warning indicators combine the use of micro-prudential indicators of the supervised institutions (*i.e.*, banks, FIs and NBFCs), with macro-economic

indicators to constitute macro-prudential indicators. In this regard, an inter-departmental group was constituted and a pilot review of MPIs for the half-year ended March 2000 was finalised, followed by a review for September 2000. Over time, these reviews are expected to act as the foundation of an early warning system ([Box X.2](#)).

Risk-Based Supervision

10.64 In India, the simultaneous dismantling of controls and strengthening of the financial sector has posed challenges to regulation. In line with international best practices, the Reserve Bank has been gradually developing a risk-based supervision methodology, while simultaneously refining on-site inspection procedures.

10.65 The services of reputed international consultants were engaged to develop an overall plan for moving towards risk-based supervision (RBS) in India incorporating international supervisory best practices. Pricewaterhouse Coopers (PwC), London was appointed as consultant for the project with the assistance of the Department for International Development (DFID) of the UK. The consultant submitted a report to the Reserve Bank in May 2001. The RBS project is slated to enter the implementation stage.

Universal Banking

10.66 The FIs are expected to continue to have a special role in the Indian financial system pending the development of the debt market in terms of liquidity and depth. They also have the option to transform into a bank provided the prudential norms as applicable to banks are satisfied. In recognition of the need for a transition path towards universal banking, several operational and regulatory issues would need to be addressed. These, *inter alia*, relate to reserve requirements, permissible activities, disposal of non-banking assets, composition of the board, prohibition on floating charge of assets, nature of subsidiaries, restrictions on investments, connected lending, licensing, branch network, assets in India, formats of annual reports, managerial remuneration of chief executives, deposit insurance, authorised dealers' licence, priority sector lending and prudential norms. In April 2001, FIs were advised to work out the transition paths for their evolution towards universal banks and submit the same to the Reserve Bank.

Box X.2 Macro-Prudential Indicators: The Indian Initiatives

The micro-prudential intensive supervisory framework in India has exhibited a certain degree of macro-prudential orientation in the recent years. Unlike the micro-prudential intensive framework that emphasises institution-specific idiosyncratic risks, macro-prudential analysis intends to identify and contain systemic risks. The financial stability assessment framework is strengthened and becomes more effective when macro-prudential dimension of surveillance supplements the micro-prudential analysis. The micro-prudential perspective is essentially a bottom-up approach in which soundness of each institution can ensure a sound financial system. The macro-prudential perspective that uses aggregated prudential indicators of soundness follows a top-down approach. As a result, when risks to the system as a whole are identified on the basis of the signals received from a core set of macro-prudential indicators (MPIs), specific institutions that could be vulnerable are identified using the information reported regularly to the supervisor.

In the literature on banking/financial crises, several common indicators of vulnerabilities have been identified based on the experience of different episodes of crises in different countries. Macro-economic indicators typically display a distinctive pattern before the onset of a crisis as also during the period when the crisis unfolds. Macroeconomic indicators (MEIs) therefore, form a critical sub-set of the MPIs. Aggregated micro-prudential indicators (AMPIs) - representing aggregation of supervisory micro-prudential indicators across all institutions in a financial system - constitute the other important subset of the MPIs. Given the limited research on AMPIs, the recent initiatives focus only on developing a core set of AMPIs which appear to be relevant when seen in the context of the recent episodes of financial crises. Important AMPIs include indicators such as capital ratios, sectoral credit concentration, non-performing loans and provisions, connected lending, leverage ratios, return on assets, expense ratios, maturity structure of assets and liabilities, liquid asset ratios, sensitivity to market risk, foreign-currency denominated lending, *etc.* Besides AMPIs and MEIs, MPIs also include market-based indicators like credit ratings, sovereign yield spreads and market prices of financial instruments.

One commonly used framework for analysing the financial health of an individual institution is the CAMELS indicator set. In India, the micro-prudential framework for regulation and supervision of individual institutions uses a set of indicators facilitating: (i) peer group analysis based on critical financial ratios, and (ii) development of supervisory bank rating systems involving assignment of ratings based on the behaviour of certain indicators in relation to pre-specified norms/benchmarks. Both these approaches primarily use CAMELS based indicators. A Prompt Corrective Action framework based on some of these micro-prudential indicators (particularly CRAR, net NPAs and Return on Assets) is also expected to be operationalised so as to trigger corrective action at the earliest possible sign of weakness and to prevent any major deterioration in a bank's performance. To strengthen the effectiveness of the micro-prudential framework, efforts are under way to develop a core set of MPIs for India. In the March and September 2000 reviews, the objective was essentially to generate time-series information on AMPIs for the major financial institutions being supervised by the Reserve Bank and to identify major areas of systemic vulnerability as per the signals received from these AMPIs. Given the Reserve Bank's jurisdictions over supervision, AMPIs at present relate to scheduled commercial banks, NBFCs, select all-India FIs and PDs. In the absence of any established theoretical/empirical framework to explain the causal interactions between AMPIs and MEIs, an attempt was made in the first two reviews to identify certain linkages that could facilitate specifying a model of early warning for India in subsequent reviews.

Like the MPI based models trying to link MEIs and AMPIs, there are certain other statistical models which estimate rating changes for individual banks based on the behaviour of certain financial and non-financial variables (helping in triggering rating downgrades before complete information on CAMELS become available). Certain bank/institution specific models - known generally as "failure or survival prediction models" - also try to identify the probability of failure using certain economic and financial indicators based on their respective empirical importance in explaining a bank failure. Such models either rank the risk-based on certain probabilities assigned to each determinant of bank failure or use a bivariate probit technique. To simplify the use of indicators, there have been attempts to capture all the critical indicators of vulnerability in a few major composite indicators (*i.e.*, index of exchange market pressure, index of banking system vulnerability, and index of external vulnerability) by applying some arbitrary risk scoring (*i.e.*, different risk scoring for different values of each variable) and arbitrary weights (for generating composite indicators through aggregation across a set of select core indicators of vulnerability).

References

1. Crockett, Andrew, (2000), "Marrying the micro and macro-prudential dimensions of financial stability", address at *the 11th International Conference of Banking Supervisors*, Basel, September 20-21.
2. Evans, Owen, Alfredo M. Leone, Mahinder Gill and Paul Hilbers, (2000), "Macro-prudential Indicators of Financial System Soundness", *IMF Occasional Papers*, No. 192.

Issues in Ownership

10.67 At present, the Reserve Bank holds a substantial stake in the State Bank of India (SBI), National Housing Bank (NHB), Infrastructure Development Finance Company (IDFC), Deposit

Insurance and Credit Guarantee Corporation (DICGC), National Bank for Agriculture and Rural Development (NABARD), Bharatiya Reserve Bank Note Mudran Limited (BRBNML), Discount and Finance House of India (DFHI) and Securities Trading Corporation of India (STCI). The Narasimham Committee on Banking Sector Reforms was of the view that ideally, the Reserve Bank should not own the institutions it regulates in view of the conflict of interest that may arise between the ownership and supervisory roles of the Reserve Bank. In the Discussion Paper prepared by the Reserve Bank on Harmonising the Role and Operations of Development Financial Institutions and Banks (January 1999), it was suggested that in order to enable the Reserve Bank to concentrate on its regulatory and supervisory functions, the ownership of financing institutions could ideally be delinked from the Reserve Bank through transfer of such ownership to the Government. The Reserve Bank accepted the recommendation for transfer of ownership of its shares in the SBI, NHB and NABARD to the Central Government. The Reserve Bank also plans to initiate the process in respect of IDFC at an appropriate time.

International Standards

10.68 The Reserve Bank has been making efforts to ensure the convergence of its supervisory norms and practices to international best practices with the long-term vision of aligning the Indian banking system with global standards. As a member of the Core Principles Liaison Group (CPLG) since August 1998, the Reserve Bank was nominated by the CPLG to the Working Group on Capital set up by them to provide the perspectives of the non G-10 countries in the drafting of the new capital adequacy framework.

10.69 The Reserve Bank released its views on the new capital adequacy framework in April 2000 with a view to generating a national debate. It was pointed out that where banks are of a simple structure and have subsidiaries, the Accord could be adopted on stand-alone basis with the full deduction of equity contribution made to subsidiaries from the total capital. Secondly, for assigning preferential risk -weights for banking book assets (excluding claims on the sovereign)-preference has been expressed for assessments made by the domestic rating agencies as opposed to external rating agencies. The scepticism about the role of external rating agencies is based on the premise that different external rating agencies not only employ different sets of parameters, but also the mix and weightage of objective and subjective factors vary across agencies. Thirdly, the Reserve Bank is of the opinion that the risk-weighting of banks should be de-linked from that of the sovereign in which they are incorporated and instead, preferential risk-weights in the range of 20-50 per cent on a graded scale could be assigned on the basis of risk assessments by domestic agencies.

10.70 The Basel Committee on Banking Supervision (BCBS) released its New Capital Accord in January 2001 ([Box X.3](#)). The feedback received from a few banks indicates the need for substantial upgradation of the existing MIS, risk management practices and procedures and technical skills of the staff. Banks would, therefore, need to initiate necessary steps to ensure that they are equipped to adopt the New Accord.

10.71 The Reserve Bank has forwarded its comments on the New Accord to the Basel Committee. First, as the complexity and sophistication of the proposals restrict their universal

application in emerging markets, the spirit of flexibility, universal applicability and discretion to national supervisors, consistent with the macroeconomic conditions specific to emerging markets, need to be preserved, while finalising the New Accord. Secondly, the New Accord should initially be applied to all internationally active banks. Further, a simplified standardised approach may be evolved for other banks and the national supervisors should have discretion to implement the New Accord in a phased manner. Thirdly, to ensure uniform application across all jurisdictions, the Basel Committee should define internationally active and significant banks. In this regard, the Reserve Bank is of the view that all banks with cross-border business exceeding 15 per cent of their total business may be classified as internationally active. Significant banks may be defined as those banks with complex structures and whose market share in the total assets of the domestic banking system exceeds one per cent. Fourthly, to moderate the cross-holdings of capital, the Basel Committee may consider prescribing a material limit (10 per cent of total capital) up to which cross-holdings of capital and other regulatory investments could be permitted and any excess investments above the limit would be deducted from total capital. Finally, External Credit Assessment Institutions (ECAIs) should not be assigned the direct responsibility for risk assessment of banking book assets. Ratings of organisations such as Export Credit Agencies (ECAs), which publicly disclose their risk scores, rating process and procedures, subscribe to the publicly disclosed OECD methodology and qualify for use by national supervisors, may be used for assigning preferential risk - weights.

Box X.3 The New Basel Capital Accord

The 1988 Basel capital adequacy norms, which set down the agreement among G-10 central banks to apply common minimum capital standards to their banking industries, almost entirely addressed credit risk. The business of banking, risk management practices, supervisory approaches and financial markets each have undergone significant changes since then. The Basel Committee on Banking Supervision (BCBS) brought out their Consultative Paper on New Capital Adequacy Framework in June 1999 and a second revision in January 2001 after an informed public debate with a view to tuning the capital adequacy framework to fast paced changes in the institutional structure and to address the dissatisfaction with the 'one-size-fits-all' tenet of the capital adequacy ratio requirements. A final round of consultations will end in 2002 and the final Accord will take effect by 2005.

The Accord rests on the three pillars of (i) minimum capital requirement; (ii) supervisory review process; and (iii) market discipline. While the current definition of capital and the minimum requirement of 8 per cent of capital to risk-weighted assets has been retained, the revised Accord will be extended on a consolidated basis to holding companies of banking groups and will refine the measurement of risks. While retaining the measurement of market risk, the Accord emphasises the measurement of operational risk and credit risk (either by the standardised or the internal rating-based (IRB) approaches). In case of the standardised approach, although the risk measurement would be the same, there would be four categories for claims on corporates - 20 per cent, 50 per cent, 100 per cent and 150 per cent - of risk weightage as against the present single uniform risk weight of 100 per cent. The IRB approach, on the other hand, will be allowed to use its internal estimates of the borrower's creditworthiness to assess credit risk in the portfolio subject to strict methodological and disclosure standards. The supervisory review emphasises the need for banks to develop sound internal processes to assess the adequacy of capital based on a thorough evaluation of its risks, which in turn could be evaluated by supervisors. With a view to bolstering market discipline through enhanced disclosure by banks, the New Accord sets out disclosure requirements in several areas, including the way in which banks calculate their capital adequacy and their risk assessment methods.

The New Accord is expected to foster a healthy market-based banking system. The advanced risk management techniques could prove a challenge to the emerging economies, especially given the lack of adequate supervisory skills and the need to shift scarce supervisory resources away from direct supervision towards implementation of these specific proposals.

References :

1. Basel Committee on Banking Supervision, (2001), *The New Basel Capital Accord*, Bank for International Settlements.
2. The Economist, (2001), '*Banks New Capital Standards*', January 20-26, London.
3. Mayer, L., (2001), "The New Basel Capital Proposal", *BIS Review*, No.40.

International Standards and Codes: Indian Initiatives

10.72 The Reserve Bank appointed a Standing Committee on International Financial Standards and Codes (Chairman: Dr.Y.V. Reddy) in December 1999, in consultation with the Government, in order to (i) identify and monitor developments in global standards and codes being evolved in the context of international developments; (ii) consider the applicability of these standards and codes to the Indian financial system; and (iii) chalk out a road map for aligning India's standards and practices to the evolving international standards. The Financial Stability Forum (FSF), established in April 1999 in order to promote international financial stability by improving the functioning of markets and reducing systemic risk through information exchange and international cooperation in supervision and surveillance of financial markets, identified a dozen areas grouped into three areas, *viz.*, macroeconomic policy and data transparency (covering monetary and financial policy transparency, fiscal policy transparency, data dissemination and data compilation), institutional and market infrastructure (covering insolvency, corporate governance, accounting, auditing, payment and settlement and market integrity) and financial regulation and supervision (covering banking supervision, securities regulation and insurance supervision) for priority implementation. The Standing Committee has constituted ten advisory groups comprising of non-official experts, in the areas of banking supervision, bankruptcy laws, corporate governance, data dissemination, fiscal transparency, insurance regulation, international accounting and auditing, monetary and financial transparency, payment and settlement system and securities market regulation to examine the feasibility and time frame of compliance with international best practices ([Box X.4](#)).

10.73 The Indian approach follows an internationally acclaimed systematic three-step process of (i) identification of standards and codes in relevant areas; followed by (ii) an in-depth assessment of the issues pertaining to the present status of applicability, relevance and the existing degree of compliance, the feasibility of compliance and the earmarking of the possible time frame for transition given the prevailing legal and institutional practices by experts; and thereafter, (iii) mapping a comprehensive course of possible actions for achieving the best practices, with due prioritisation of some of the more important codes and standards. The reports of all the advisory groups have already been placed in the public domain. This would be buttressed by efforts for the widest possible dissemination including by means of seminars and workshops to foster a national debate and generate a consensus towards the necessity of change and sensitise the regulatory authorities, agencies and institutions about the priority areas of action.

Box X.4

International Financial Standards and Codes: Recommendations of Advisory Groups

The Advisory Group on Banking Supervision (Chairman: Shri M.S. Verma) assessed the position of the Indian banking system and its regulation and supervision *vis-à-vis* the principles laid down in 16 different papers brought out by the Basel Committee on Banking Supervision. These have been grouped under seven major areas, *viz.*, core principles, corporate governance, internal control, credit risk, loan accounting, transparency and disclosures, financial conglomerates and cross-border banking. The Group concluded that, given the level of complexity and development of the Indian banking sector, the level of compliance with the standards and codes is of a high order. Wherever there are significant gaps, these can be remedied within a reasonable time-frame and, as such, are not cause for immediate concern provided that necessary amendments to laws, wherever required, are put in place without delay. The Group has stressed the need for making directors on bank boards conversant with issues such as risk management and for setting accountability standards for boards and greater transparency and disclosures in respect of their constitution and functioning. A recurring theme in the Group's report is the need to put in place scientific risk management systems in banks. In the opinion of the Group, banks are handicapped in implementing a reliable credit rating and other risk management systems due to (i) lack of qualified personnel; (ii) absence of reliable high frequency historical data; and (iii) lack of proper appreciation of risk management concepts at the middle and senior management levels. The Group has called for introducing the concept of materiality in the matter of disclosures and also greater disclosures in respect of, *inter alia*, significant concentrations of credit risk, movement in provisions, cumulative provisions and transactions with affiliated and related parties and large shareholders. While the overall compliance in respect of internal control principles is high, the Group has stressed the need for action in areas such as performance-related compensation, quality of management information systems and in increasing the awareness about risks involved in and the controls required in working in a computerised environment. To better supervise financial conglomerates, the Group has recommended that the Reserve Bank consider introducing formalised coordination between different regulators. It has also recommended designation of one of the regulators involved as a primary regulator and co-ordinator with clearly assigned roles and responsibilities. The Group has also called for greater co-ordination and sharing of information between supervisors across borders. In the future, the methods of supervision would have to become increasingly risk-based with greater reliance on the boards of banks themselves and the external auditors.

The Advisory Group on Bankruptcy Laws (Chairman: Dr. N.L. Mitra) recommended a comprehensive bankruptcy code incorporating the provisions relating to reorganisation, winding up and liquidation of a corporate entity, and settlement of all other related issues including cross-border insolvency. The Group suggested the repeal of Sick Industrial Companies (Special Provisions) Act and abolition of Board for Industrial and Financial Reconstruction (BIFR). The Group also favoured the institution of a dedicated high court bench as bankruptcy court and the replacement of the office of the Official Liquidator with a professional bankruptcy institution known as the "Trustee". The Group also recommended the evolution of an effective trigger point for bankruptcy, time-bound bankruptcy proceedings, prioritisation of claims and orderly and effective insolvency procedures. The Group further recommended a special procedure for banks and financial institutions and for the institutions in the businesses like insurance, non-bank financing, telecommunications, *etc.* For public sector undertakings and Government companies, the Group recommended the same procedure as applicable to other corporate entities.

The Advisory Group on Corporate Governance (Chairman: Dr R.H. Patil) made recommendations regarding the Group's areas of responsibilities of the board to stake holders/shareholders, selection procedures for the appointment of directors of the board, size and the composition of the board, committees to oversee the practice of corporate governance, disclosure and transparency standards, role of shareholders, role of auditors, *etc.* spanning the institutional categories of the private corporate sector, banks and the development financial institutions and Central and State public sector enterprises set up under the Companies Act. The Report has observed that since most of the Indian companies belong to the East Asian "insider" model, where the promoters dominate governance, it is essential to bring reforms quickly so as to make boards of corporates/banks/financial institutions/public sector enterprises more professional and truly autonomous. As the statutory framework for corporate governance has already been enshrined in the Companies Act, the Group has felt that it is desirable to amend the Companies Act suitably for enforcing good governance practices in India. To improve governance mechanism in public sector units, the Group has recommended transferring of the actual governance functions to the boards from the concerned administrative ministries and strengthening the boards by streamlining the appointment process of directors. Further, the Group has underlined the need for public sector banks to maintain a high degree of transparency in regard to disclosure of information.

The Advisory Group on Data Dissemination (Chairman: Dr. Vaidyanathan, *vice* the late Dr. Pravin M. Visaria) pointed out that there were a large number of data categories under which India had been disseminating information more frequently and with a shorter time-lag than those prescribed by the IMF's Special Data Dissemination Standard (SDDS). The Group concurred with the position taken by the official agencies in this respect that India should opt for "flexibility" option pertaining to the data on labour market as it would be difficult to generate quarterly data on employment, unemployment and wages/earnings using the ILO's sophisticated concepts, definitions and classifications because of the large agricultural sector and also of sizeable unorganised segments in the non-farm sector. Regarding the standard on international investment position (IIP) required in the SDDS, the Group noted that if the data on IIP could be made available before September 30, 2002, India would be fully compliant in this category. So far as the data template on international reserves and foreign currency liquidity is concerned, the Group observed that the data put up by India compares favourably with those of many other countries and that a view has to be taken for disclosing such information based on the disclosure of information as practiced by many other developing countries. The Group proposed compilation of forward-looking indicators, *viz.*, the surveys of business expectations and greater co-ordination between various agencies with a view to refine data dissemination in respect of general government operations (or total public sector operations) including the data for these two sub-sectors.

The Advisory Group on Fiscal Transparency (Chairman: Dr. Montek Singh Ahluwalia) was of the view that current fiscal practices at the central government level satisfy the minimum requirements of the IMF's Code of Good Practices on Fiscal Transparency in many areas. Though there are deficiencies in some important areas, many of these will be substantially addressed once the Fiscal Responsibility and Budget Management Bill (FRBMB) is enacted. The Group has recommended amplifying the scope of the FRBMB to include the essential elements of a budget law, list macro-economic assumptions regarding GDP growth, inflation, export and import growth, the current account deficit, savings and investment rates, and project major categories of expenditure and revenue for two years ahead. The Group also recommends the implementation of the FRBMB proposal, requiring that the Reserve Bank end the practice of providing direct support to government securities at the primary issue stage, by the end of three years. The other important recommendations relate to increased reporting on contingent liabilities, major tax expenditures and *quasi* fiscal activities; quantification of fiscal risks, fuller discussion of the consolidated position of central and state governments especially regarding basic fiscal balance measures; availability of information on the overall public sector balance, government equity and outstanding loans to public sector enterprises and the Oil Pool Account deficit. The simplification of the tax structure, with greater use of information technology, especially electronic filing, is also recommended. Fiscal practices at the state level were felt to be generally behind the standards achieved at the central government level. The Group recommended that the Finance Secretaries Forum could review the report and determine a set of minimum standards on transparency, which all state governments should achieve within a three-year period.

The Advisory Group on Insurance Regulation (Chairman: Shri R. Ramakrishnan) was of the view that the Indian position of allowing foreign companies to operate through joint venture arrangements with an Indian company with a share holding not exceeding 26 per cent in the paid-up capital of the insurer, was broadly comparable with international practices. While the Indian requirements in respect of minimum capital requirements, deposit requirements, business plan and reinsurance were adequate, the Group recommended that minimum capital levels could be fixed for each class of business rather than on aggregate basis. The Group favored the "file and proceed" requirements in respect of new insurance products adopted in India, but recommended that the actuarial certification, premium rate tables and benefit design should be treated as public information in the interest of transparency. With regard to actuarial and solvency issues, the Group observed that the Indian standard is on par with the international norm in the matter of estimating the liability under life insurance policies, while that in relation to solvency margin requirements is actually more stringent. While there do exist certain gaps in evaluating general insurance technical reserves, the Group was of the view that these could be addressed in due course. The Group recommended that unit-linked life insurance business could be brought under the definition of life insurance business, with closer co-ordination between the regulators. While the Indian standard regarding the taxation of life insurance companies is at par with the international practice, the Group proposed that the transfer to the catastrophe reserve could be allowed in certain cases to be made out of pre-taxed profits.

The Advisory Group on International Accounting and Auditing (Chairman: Shri Y.H. Malegam) reviewed the availability of various accounting and auditing standards in India and compared them with the corresponding international standards. In case of the Indian accounting standards (AS), while the International Accounting Standards (IAS) served as a benchmark from the angle of statutory recognition, the US Generally Accepted

Accounting Principles (US GAAP) served as a yardstick from the practical perception of the investor. With regard to the Indian auditing standards, standards issued by the International Auditing Practices Committee (IAPC) of the International Federation of Accountants (IFAC) served as the reference point. The Group noted that the Accounting Standards Board (ASB) of the Institute of Chartered Accountants of India (ICAI) had, at the time of submission of the report, issued 19 standards, which were on par with those of international standards subject to differences owing to country-specific applicable laws, customs usages and trade practices. The Auditing Practices Committee (APC) of the ICAI had issued 20 statements on Standard Auditing Practices (SAPs) and four additional statements on auditing which were anchored on the international standards. The Group also discussed the agenda for the future and, in particular, addressed issues pertaining to bridging the gap between AS and IAS, restructuring of the ASB with a view to making it autonomous within the ICAI, the need for a single standard setting authority, the need for convergence of corporate and tax laws associated with various accounting standards and how to position an effective implementation procedure for the accounting standards in India.

The Advisory Group on Transparency in Monetary and Financial Policies (Chairman: Shri M. Narasimham) has recommended that the Government should set out objectives to the central bank, with parliamentary endorsement and accord it the necessary autonomy to fulfill its responsibilities, if necessary by amending the Reserve Bank of India Act. The Group was of the view that the Government should consider setting a medium-term objective for monetary policy, viz., the inflation rate to the central bank. In the view of the Group, a reasonable degree of fiscal responsibility is also necessary to provide the central bank reasonable headroom to operate monetary policy. The Group also recommended the setting up of a monetary policy committee (MPC) comprising the Governor, Deputy Governors and three other members drawn from the Central Board who are knowledgeable in the areas of macroeconomics, monetary analysis, central banking policy and operations in banking and finance.

The Advisory Group on Payments and Settlement System (Chairman: Shri M.G. Bhide), recommended extensive legal reform especially empowering the Reserve Bank to supervise the payment and settlement system, institution of a framework for ensuring at least the Lamfalussy standards for the deferred net settlement (DNS) and such suitable framework for RTGS systems and spread of electronic-based transactions through appropriate price incentives *etc.* The Group was of the view that the Reserve Bank should eventually come out of the role of a payment systems provider except for funds settlement. The Group recommended, *inter alia*, the introduction of rolling settlement in the liquid segment of the equity market, allowing current account facility with the Reserve Bank to the clearing corporations for ensuring settlement facility on the books of the Reserve Bank as an interim measure pending the eventual grant of a limited purpose banking licence to them with appropriate prudential guidelines thereon, building up of an institutional mechanism for centralised collection of information, their dissemination to market participants and prudential guidelines for implementing cross-margining across markets in order to deal with problems arising from participants undertaking multiple exposures in various markets at any point in time and permitting securities borrowing and lending systems for institutions in both the debt and equity segments in India. The Group has also recommended the establishment of a clearing agent abroad by the Clearing Corporation of India (CCI), institution of a separate guarantee fund for the foreign exchange clearing, appropriate integration between the participating banks and the CCI and their interface with the real-time gross settlement (RTGS) system.

The Advisory Group on Securities Market Regulation (Chairman: Shri Deepak Parekh), which compared the Indian standards with the principles laid down by the International Organisation of Securities Market Regulation (IOSCO), emphasised the need to strengthen inter-regulator co-operation, preferably by bestowing legal status to the High Level Group on Capital Markets (HLGCM). The Group observed that regulatory co-operation would be more effective if designated functionaries (not necessarily only at the top level) are allowed to share specified market information on a routine and automatic basis. The Group favoured the demutualisation of stock exchanges as a necessary step for promotion of fairness and investor protection as the conflict of interest, inherent in the current ownership and governance structures of many stock exchanges, could render self-regulation ineffective. The Group recommended that SEBI's authority over enforcement of securities regulation needed to be enhanced, *inter alia*, by providing SEBI disgorgement powers that would effectively deter market players from regulatory violations. As regards legal issues, the Group highlighted the need for (i) inclusion of both regulatory responsibilities and the authority to carry them out in the same legislation; (ii) a shift from institutions-specific regulation to market-specific regulation; and (iii) simplification and streamlining of the legal framework. In respect of mutual funds, the Group underlined (i) the need for bringing UTI under the purview of SEBI; (ii) introduction and implementation of international accounting principles across the mutual fund industry; and (iii) reduction of discretion of the asset management company (AMC) in adopting valuation of thinly traded/non-traded securities.

10.74 The Reserve Bank also constituted Working Groups to devise revised strategies of on-site supervision over banks for continuous supervision. Some of the important steps taken on the basis of their recommendations include changes in the frequency of inspections, restructuring of reporting formats, introduction of the system of off-site monitoring and the introduction of the CAMELS rating system.

10.75 A multi-disciplinary Working Group (Chairman: Shri Vipin Mallik) was set up to examine the scope for the introduction of consolidated accounting and quantitative techniques for consolidated supervision, in line with the international best practices. A Working Group (Chairman: Shri G. Sitharaman) was set up to prepare a technical paper covering concerns about systemic risk in the banking system, particularly in view of its role in the payments and settlement system, depositor and *niche* interests. Another Working Group was constituted by the Government in July 2000 (Chairman: Shri M.R. Umarji), to examine the vesting of power with banks and financial institutions for taking possession and sale of securities without intervention of the courts and to draft a Bill for consideration of the Government. The Working Group has submitted its report to the Government along with the draft Bill titled "Creation and Enforcement of Security Interest by Banks and Financial Institutions Bill, 2001". The Bill has been placed on the Reserve Bank's website on August 3, 2001 for a period of one month, inviting views and comments of organisations and interested persons.

10.76 The Government of India constituted an Expert Committee under the chairmanship of Shri T. R. Andhyarujina for the purpose of formulating specific proposals to give effect to the suggestions made by Narasimham Committee II relating to changes needed in the legal framework. The Committee submitted its report in February 2000. As a follow-up, Government of India constituted a Working Group (Chairman: Shri S. H. Bhojani, with Shri M. R. Umarji, as a member from the Reserve Bank) on asset securitisation in July 2000 to examine the Expert Committee's recommendations for implementation. This Working Group has drafted a Bill on asset securitisation for enactment and submitted to the Government.

10.77 In view of the increasing level and complexity of frauds in the banking industry, the Reserve Bank has constituted a Committee on Legal Aspects of Bank Frauds (Chairman: Dr. N.L. Mitra) to define financial frauds, lay down procedural laws, examine the process of investigation of bank frauds and prosecution of persons involved.

10.78 The Task Force, set up by the Central Government under the chairmanship of Shri Jagdish Capoor, to study the co-operative credit system, suggested several measures to strengthen the co-operative credit system. It has recommended that the societies should be run professionally on business principles through development of staff and local leadership, reducing Government control. Cooperative banks should have freedom to take investment decisions without the prior clearance from the Registrar of Co-operative Societies and the interest rate spread available to primary agricultural co-operative societies (PACS) should be adequate to meet costs, leaving some surplus. State governments could adopt the prescribed Model Co-operative Societies Act or dovetail the essential features of the same in their respective State Co-operative Societies Acts so as to ensure democratic functioning of cooperatives with least interference from State Government and leaving banking functions clearly under the governance of Banking

Regulation Act. There should be effective supervision of lower tiers of the co-operative credit system by visits by officials of the higher tiers and introduction of audit of co-operatives by chartered accountants. The Task Force has recommended several structural changes such as an exit route for unviable units and integration of long-term and short-term cooperative credit structures. In case such integration is not possible, both types of institutions are to be allowed to handle long-term as well as short-term credit. The Task Force recommended rehabilitation of potentially viable units through a package of measures which encompasses financial, operational, organisational and systemic aspects after studying its viability and possibility of turnaround in five to seven years.

The financial burden of rehabilitation will be shared by members contributing 20 per cent (10 per cent in case of long-term structure) of the requirement by mobilising additional share capital, with the balance amount provided by Central and State Governments by way of interest bearing bonds to be redeemed in a phased manner. A committee approach to write off what is clearly not recoverable and compromise settlements is suggested. It has also suggested that the provisions of the existing Debt Recovery Tribunals may be extended to co-operative banks where the loan size is more than Rs.1 lakh so as to expedite recovery of chronic overdues. Setting up a Co-operative Rehabilitation and Development Fund at NABARD by contribution from the Central Government and another Mutual Assistance Fund at the State level by contribution from co-operative institutions in the state concerned are other recommendations of the Task force.

10.79 A Committee set up under the chairmanship of Shri P. Sabanayagam for examining various aspects of the functioning of the Nidhi Companies to suggest an appropriate policy framework for overall improvement of the Nidhi Companies and for restoring the confidence of investing public, submitted its report to the Central Government in September 2000. The Department of Company Affairs (DCA), Government of India has issued notifications containing guidelines for Nidhis as on July 26, 2001 towards implementing some of the recommendations of the Sabanayagam Committee after deliberations with the Reserve Bank, representatives of the Chamber of Nidhis, Federation of Mutual Benefit Funds *etc.*

Consolidated Supervision

10.80 In recent times, there has been a renewed focus on empowering supervisors to undertake consolidated supervision of bank groups. The Core Principles for Effective Banking Supervision issued by the BCBS have underscored this requirement as an independent principle, which requires that bank supervisors have the ability to supervise banking groups on a consolidated basis. Consolidated supervision is defined as "an overall evaluation (qualitative as well as quantitative) of the strength of a group to which a large bank belongs, in order to assess the potential impact of other group companies on the bank". A major element of this approach is the production of financial reports on a consolidated basis which combine the assets and liabilities and off-balance sheet items of banks and their related companies, treating them in effect as if they were a single entity.

10.81 The Reserve Bank has taken several initiatives to move towards a system of consolidated supervision. In the second half of 2000-01, banks were advised to voluntarily build in the risk-weighted components of their subsidiaries into their own balance sheet on a notional basis, at par

with the risk-weights applicable to the bank's own assets. Banks were directed to earmark additional capital in their books over a period of time so as to obviate the possibility of impairment of their net worth when the switchover to a unified balance sheet for the group as a whole is adopted. The additional capital required was to be provided in the banks' books in phases, beginning from the year ended March 2001. To further the aim of consolidated supervision, the Reserve Bank advised banks to annexe the balance sheet, profit and loss account, report of the board of directors and the report of the auditors in respect of each of their subsidiaries to their own balance sheets beginning from the year ended March 2001.

10.82 Recent developments in the capital market and in the co-operative banking system have thrown up new challenges for the conduct of the regulatory functions. The multiplicity of regulatory authorities in several segments of the financial system has often hindered the containment of systemic risk arising out of imprudent behaviour of a few small entities. It is in this context that the Reserve Bank has been seeking a clearer definition of its regulatory role. For this purpose, it has been involving public opinion as well as expert assessment of the need for enabling changes in the legislative framework for financial regulation ([Box X.5](#)).

Box X.5 Unified Financial Supervision

The ambit of regulation could be determined either by institutions, functions, markets or products. The blurring of distinctions between the four implies that the regulatory jurisdictions would tend to overlap. While some countries have a single regulator, others have either a regulator for each sector or a combination of sectors, such as combined securities and insurance regulation, banking and securities and banking and insurance. A unified regulator was introduced in the UK in 1997 and subsequently Japan, South Korea, Chile, South Africa, Germany, France and Canada have followed suit. Practitioners of unified regulation are more common in developed countries as opposed to emerging/transition economies. The USA, on the contrary, represents a situation of multiple supervisory authorities (*e.g.*, the Federal Reserve, Federal Deposit Insurance Corporation and the Office of the Comptroller of Currency), although recent legislative changes have to some extent diluted the compartmentalisation of the regulatory framework (Table).

Table : Select Regulatory Structures

Structure	No. of countries
1	2
Separate agencies for each of the three key sectors*	35
Securities and insurance regulations combined	3
Combined banking and securities regulation	9
Combined banking and insurance regulation	13
Unified supervision (in central bank)	3
Unified supervision (outside central bank)	10

* The three key sectors are banking, insurance and securities.

Source: Abrams and Taylor (2000), sample 73 countries.

While the revealed preference among countries is for a regulatory structure based on specialised agencies, the balance of argument tends to suggest that in less developed countries, banking supervision is best conducted under the authority of the central bank.

The case for unified supervision is based on a better assessment of creditworthiness, taking into account liquidity, solvency and prudential behaviour, economies of scale due to pooling of resources, minimisation of the costs incurred by supervised entities, avoidance of regulatory arbitrage, lowering of the potential for moral hazard

associated with the lender of last resort function and speed of regulatory response. Furthermore, unified supervision complements the monetary authority's market intelligence system. International co-operation is facilitated due to a single contact point for all regulatory issues.

On the other hand, the blurring of the distinction between banking, securities and insurance activities, the emergence of multi-functional conglomerates operating in a globalised environment are developments, which, *inter alia*, have been cited as arguments for a renewed focus on the structural aspect of financial regulation. Issues of moral hazard in unified regulation associated with lack of clarity in the face of multiple objectives set for a single authority and concentration of power in a single authority leading to excessive regulation have also been cited as arguments against unified financial supervision. Furthermore, there could be diseconomies of scale due to rigid and bureaucratic structure in the single authority. There are several arrangements whereby either single or multiple regulators can function while ensuring appropriate coordination, pooling of resources and clarity of roles and responsibilities. Under any system, issues of information exchange and co-ordination are critical. Regulatory objectives, coverage, skills, operational effectiveness and credibility are the elements which will determine the choice of regulatory regime. Irrespective of the choice, rationale, scope, and limits, the objectives and the instruments need to be clarified so as to place public expectations from regulators in the appropriate perspective. At a legislative level, changes to distinguish owners, regulators and market participants are essential. Designing and managing these changes requires a combination of political will and professional skill.

References :

1. Abrams, R.K. and M.W. Taylor, (2000), "Issues in the Unification of Financial Sector Supervision", *IMF Working Paper*, No.213, IMF, Washington DC.
2. Bank for International Settlements, (1999), "Supervision of Financial Conglomerates", paper prepared by the *Joint Forum on Financial Conglomerate*, February.
3. Briault, C., (1999), "The Case for a Single National Services Regulator", *FSA Occasional Paper*, No.2, Financial Services Authority, London.
4. Goodhart, C.A.E., (2000), "Whither Central Banking", *11th C.D.Deshmukh Memorial Lecture*, Reserve Bank of India, December.
5. Reddy, Y.V., (2001), "Issues in Choosing Between Single and Multiple Regulators of Financial System", *Reserve Bank of India Bulletin*, June.

XI - Public Debt Management

[Developments During 2000-01](#)

[Central Government](#)

[State Governments](#)

[Institutional Measures](#)

Introduction

11.1 The Reserve Bank manages the public debt of the Central and the State Governments and also acts as a banker to them under the provisions of the Reserve Bank of India Act, 1934. While these functions become obligatory in the case of the Central Government (under the Sections 20 and 21), the Reserve Bank undertakes similar functions for the State Governments by agreement with the Government of the respective State (under Section 21 A).

11.2 All State Governments, with the exception of Jammu and Kashmir and Sikkim, had entered into agreements with the Reserve Bank for the purpose of both the aforesaid functions. These two States have agreements only for the limited purpose of the management of their public debt. Consequent upon the reorganisation of three States, *viz.*, Bihar, Madhya Pradesh and Uttar Pradesh, the new States, *viz.*, Jharkhand, Chattisgarh and Uttaranchal have also entered into agreements with the Reserve Bank, entrusting it the twin functions of public debt management and banking. Simultaneously, the ways and means advances (WMA) limits, the minimum balances which the States are required to keep with the Reserve Bank and the outstanding debt have been apportioned amongst the reorganised States as per the provisions of the respective State Reorganisation Acts.

11.3 The Central Government entered into an agreement with the Reserve Bank in 1994 to phase out the system of automatic monetisation of budget deficit through creation of *ad hoc* Treasury Bills within a period of three years. Accordingly, the system of deficit financing through the creation of *ad hocs* was abolished with effect from April 1, 1997. Under a new arrangement, a WMA scheme was introduced to facilitate bridging of temporary mismatches in the Central Government's cash flows. The growing market orientation of debt management policy has, in turn, placed increased emphasis on the timing, speed of response to market developments and in general, greater skills in active debt management. The objective of debt management policy is clearly emerging in terms of raising resources from the market at the minimum cost while containing the refinance risk and its consistency with the monetary policy objectives. The introduction of Primary Dealers (PDs) in 1996, with a view to developing the Government securities market is another important institutional development in the area of public debt management. Recognising the fact that liquidity in the Government securities market would narrow the bid-ask spreads and reduce the cost of borrowing, initiatives have been undertaken in recent years to consolidate loans and develop benchmark securities. Reissuance of existing loans has, over the past few years, facilitated the emergence of benchmark securities as also improved market liquidity for government paper. In order to reduce the refinancing risk, greater emphasis has been placed on managing the maturity structure of Government loans.

11.4 The WMA limits for the State governments, made effective from March 1, 1999 based on the recommendations of the Informal Advisory Committee on Ways and Means Advances constituted by the Reserve Bank (Chairman: Shri B.P.R. Vithal), were revised under the WMA Scheme 2001, effective February 1, 2001. The State Governments have adopted the auction system for raising a part of their market borrowings since January 1999.

11.5 Public debt management continues to be constrained by the large and growing borrowing programme of the Government, which exerts pressure on the absorptive capacity of the market. During 2000-01, the Reserve Bank continued its policy of combining auctions, private placements and open market operations with a view to minimising the cost of public debt, as also to contain volatility in interest rates, reducing the monetary impact of the Government borrowing programme and supporting the monetary policy stance for a softer interest rate environment. The Reserve Bank had to moderate the pressure of the Government borrowing programme as well as the impact of the brief reversal of the monetary stance warranted by foreign exchange market volatility on interest rates. This was achieved by combining devolvments/private placements when money market conditions were tight followed by net open market sales when liquidity conditions improved.

11.6 Developments in public debt management during 2000-01, which are covered in the following sub-section, encompass movements in the WMA to the Central and State governments, issuance of treasury bills and movements in their yields along with improvements in operating procedures, issuance of dated securities and the strategy of passive consolidation through reissuances, the consequent impact on yields and maturity structure of debt. The sub-section on institutional measures, which follows, deals with the separation of function of debt management and monetary policy, the implications of the Fiscal Responsibility Bill for public debt management, changes in ways and means advances for States, prudential norms in respect of investments in State Government guaranteed securities, changes envisaged in the legal framework, the work of various groups in the area of public debt management and a medium-term perspective.

DEVELOPMENTS DURING 2000-01

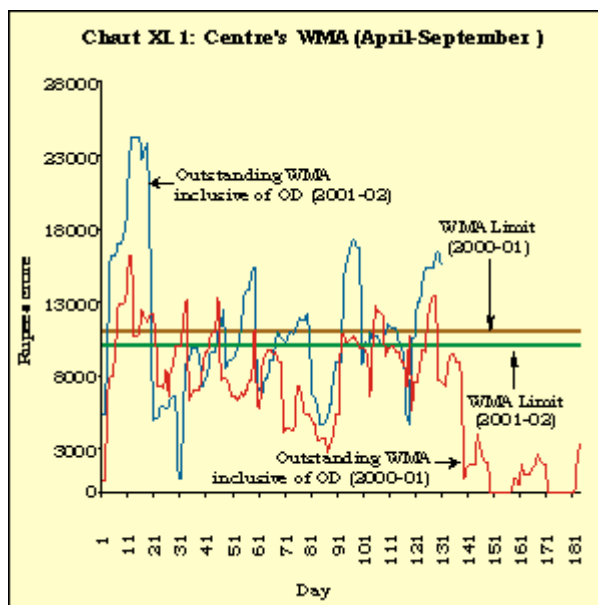
Central Government

Ways and Means Advances

11.7 The arrangements in respect of the WMA to the Central Government and its rate of interest and the minimum balance required to be maintained with the Reserve Bank for the fiscal year 2000-01 remained the same as in the previous year. These were: (i) limits of Rs.11,000 crore for the first half of the year (April to September) and Rs.7,000 crore for the second half of the year (October to March), with the Reserve Bank authorised to trigger fresh floatation of market loans when 75 per cent of the WMA limit is utilised by the Government; (ii) the interest rate on the WMA at the Bank Rate and on overdraft at the Bank Rate *plus* two percentage points; (iii) the minimum balance maintained by the Government with the Reserve Bank at Rs.100 crore on Fridays and Rs.10 crore on other days; and (iv) limiting of overdrafts to ten consecutive working days. For 2001-02, the WMA limits have been scaled down to Rs.10,000 crore during

the first half of the year and Rs.6,000 crore during the second half of the year.

11.8 The outstanding WMA availed by the Centre from the Reserve Bank, at Rs.5,395 crore, as at end-March 2001 was higher than Rs.982 crore, as at end-March 2000. The Central Government took recourse to WMA for the major part of the year except for a few days between August-September 2000 and December 2000 - March 2001. The surplus recorded was automatically invested by the Reserve Bank in dated securities from its own portfolio. The Government resorted to overdrafts (ODs) on seven occasions in the first half and on four occasions in the second half for periods ranging from 1 to 6 days (Charts XI.1, XI.2 and Table 11.1). During 2001-02 (up to August 8, 2001), the Central Government resorted to overdrafts on 8 occasions for periods ranging from 1 to 10 days.



Treasury Bills

11.9 During 2000-01, the day of payment in respect of 14-day and 91-day Treasury Bills was changed from Saturday to the next working day. The notified amount for the fortnightly auctions for the sale of 364-day Treasury Bills was hiked from Rs.500 crore per auction to Rs.750 crore per auction from the auction on December 13, 2000 to gain the advantage similar to a floating rate loan, improve the volumes in the treasury bill market and facilitate the emergence of a benchmark rate.

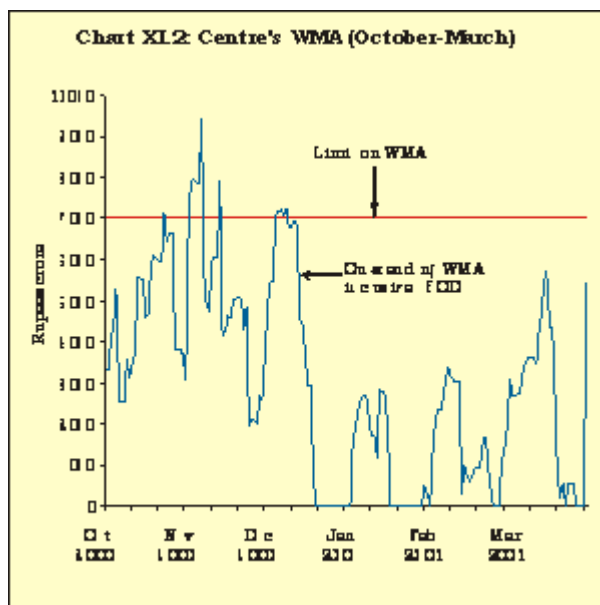
Table 11.1 : Overdraft (OD) Position of the Central Government

Month	No. of Occasions	No. of days in OD	(Amount in Rupees crore)
			Amount (range)
1	2	3	4
2000			

April	2	6,5	712-5,107
May	3	2,3,1	38-2,312
June	Nil	Nil	Nil
July	1	4	1,126-1,718
August	1	3	1,103-2,479
September	Nil	Nil	Nil
October	1	1	115
November	2	5,1	863-2,432
December	1	5	67-242

2001

January	Nil	Nil	Nil
February	Nil	Nil	Nil
March	Nil	Nil	Nil
April	1	10	556-14,193
May	2	3,5	199-5,346
June	1	10	303-2,173
July	4	5,1,8,2	30-7,165



11.10 As a sequel to the Monetary and Credit Policy announcement for 2001-02, effective May 14, 2001, the auctions of 14-day and 182-day Treasury Bills were discontinued and the notified amount for the 91-day Treasury Bill auctions was raised to Rs.250 crore from Rs.100 crore. Furthermore, the issue days of the 91-day Treasury Bill auctions have been synchronised in such a way that they become fungible with 364-day Treasury Bills.

11.11 The gross amount mobilised during 2000-01 through 14-day auction Treasury Bills (at Rs.10,480 crore inclusive of non-competitive bids, with a notified amount of Rs.100 crore per auction) and aggregate non-competitive bids (Rs.5,280 crore) were lower than in 1999-2000. The

net amount was also lower, especially due to large redemptions. The Reserve Bank's subscription, at 7 per cent of the total issues, was about the same (percentage-wise) as in the preceding year. In the case of 91-day Treasury Bills, with a notified amount of Rs.100 crore per auction and aggregate non-competitive bids amounting to Rs.2,055 crore during 2000-01, the net issues were higher although the gross mobilisation at Rs.7,255 crore was lower as compared with 1999-2000. The Reserve Bank's subscription, at 12 per cent of the total issues, was lower than 19 per cent during 1999-2000. The gross mobilisation through issuance of 182-day Treasury Bills (at Rs.2,600 crore, with a notified amount retained at Rs.100 crore per auction) as well as net issuance were lower during 2000-01 as compared with 1999-2000. The subscription by the Reserve Bank at about 10 per cent (Rs.251 crore) of the total issues was lower than 22 per cent in 1999-2000. The gross mobilisation through issuance of 364-day Treasury Bills at Rs.15,000 crore was higher as compared with 1999-2000, reflecting the increase in the notified amount. The net issues were, however, lower than that in 1999-2000. The subscription by the Reserve Bank was lower at 12.0 per cent (Rs.1,827 crore) of the total issues in 2000-01, as compared to 17 per cent in the previous year. The aggregate net amount raised through all the treasury bills at Rs.2,085 crore during 2000-01 was lower as compared with Rs.4,245 crore during 1999-2000. The average cut-off yields of all treasury bills, except those of 14-day maturity, softened during 2000-01 relative to 1999-2000 ([Table 11.2](#)). The trend towards softening in cut-off yields of treasury bills continued during 2001-02 (up to August 10, 2001).

11.12 The system of minimum bidding commitment by the PDs, which covers more than 100 per cent of the notified amounts at treasury bill auctions, reduces the possibility of devolvement on the Reserve Bank. The Reserve Bank, however, continues to take devolvement, if necessary, to provide appropriate signals in terms of the cut-off yield and deflect short-term pressures to enable orderly market conditions.

Dated Securities

11.13 Under the market borrowing programme, comprising dated securities and 364-day Treasury Bills, the Central Government mobilised Rs.73,787 crore (net) and Rs.1,15,183 crore (gross), respectively, during 2000-01. The actual borrowing remained within the budgeted limit in contrast to the increase in gross and net terms of about 19.0 per cent and 27.0 per cent, respectively, in 1999-2000 and of about 18.0 per cent, and 30.0 per cent, respectively, in 1998-99 over the budgeted level ([Chart XI.3](#)).

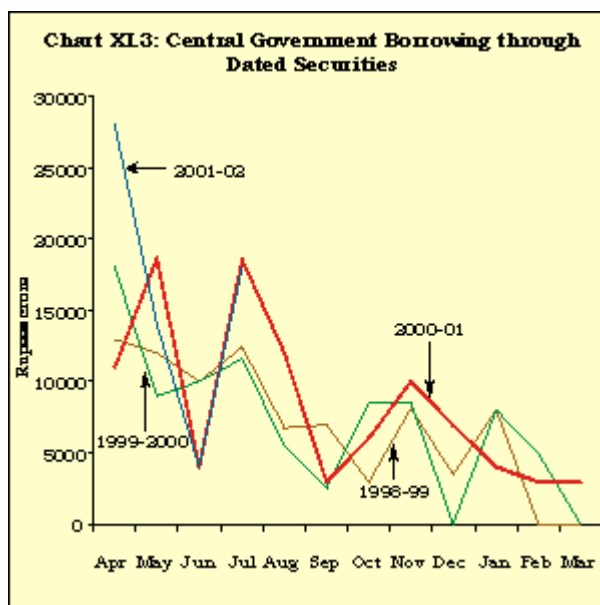


Table 11.2 : Issuance of Treasury Bills – Summary Statistics

Auction Treasury Bill	(Amount in Rupees crore)											
	Average cut-off yield (per cent)			Gross amount			Net amount			Outstanding amount		
	2001 02*	2000 -01	1999 2000	2001 -02*	2000 -01	1999 -2000	2001 -02*	2000 -01	1999 2000	2001 -02*	2000 -01	1999 2000
1	2	3	4	5	6	7	8	9	10	11	12	13
14-day \$	7.41	8.23	8.23	1,100	10,480	16,453	-100	-225	125	Nil	100	325
91-day	7.51	8.98	9.03	6,665	7,255	8,155	3,670	310	20	5,500	1,830	1,520
182-day \$	8.44	9.43	9.68	300	2,600	2,900	-700	0	1,300	700	1,300	1,300
364-day	8.03	9.76	10.09	7,500	15,000	13,000	2,500	2,000	2,800	17,500	15,000	13,000

* Up to August 10, 2001.

\$ Effective May 14, 2001, the auctions of 14-day and 182-day Treasury Bills were discontinued.

11.14 Dated securities aggregating Rs.1,00,183 crore were issued during 2000-01 as against Rs.86,630 crore in 1999-2000. About two-thirds of the issuance took place during the first half of the year when there was seasonal slackening in credit demand from the non-government sector. As the limited absorptive capacity of the market acts as a constraint on the amount that could be issued at any point of time, the Government had to enter the market on a number of occasions keeping in view the liquidity conditions and the Government's cash flows/ WMA position. A total of 31 loans (comprising 18 reissues and 13 fresh loans) were floated on 26 occasions (including private placement of 5 loans with the Reserve Bank) in 2000-01, as against 30 loans on 21 occasions (with private placement of 8 loans) in the previous year. The gross and net amounts raised through issue of Government of India dated securities during 2001-02 (up to August 10 2001) were Rs.70,000 crore and Rs. 56 ,025 crore , respectively. This included private placements of five loans for Rs.21,000 crore with the Reserve Bank.

11.15 In order to deepen liquidity in the Government securities market by building up large volumes in key benchmark securities, the Reserve Bank continued its strategy of passive consolidation through reissuance of the existing securities . Alignment of coupon payment dates enabled by reissuance of existing loans will also facilitate development of Separate Trading of Registered Interest and Principal Securities (STRIPS) in future ([Box XI.1](#)).With a view to containing the refinancing risk new issuances also became necessary when the outstanding amount in any loan could not be increased beyond a limit.

Box XI.1
STRIPS in the Government Securities Market

STRIPS is an acronym for Separate Trading of Registered Interest and Principal Securities and stripping is a process of separating a standard coupon-bearing bond into the principal component and individual coupons. To illustrate, a 5-year coupon-bearing bond can be stripped into a principal component and a set of 10 individual coupons (assuming half yearly coupon payments) which can be traded separately. The stripped securities, which act as zero-coupon bonds, represent the direct obligations of the Government in an official STRIPS market. The stripping process impacts neither the direct cost nor the timing/quantum of the underlying cash flow and only facilitates transferring of the ownership right of individual cash flows. By the creation of securities of varied maturities from a single coupon-bearing instrument, STRIPS cater to diverse investor groups with myriad risk profiles and investment horizons and facilitates an efficient debt management strategy (especially evening out the short-term concentration of redemption pattern) of reducing the refinancing risk. It also offers much greater leverage to hedge funds.

The current system of pricing of bonds on a yield-to-maturity (YTM) basis discounts the entire series of cash flows at the same single rate although they accrue at different points of time. The implicit assumption of investors holding the bond till maturity and the reinvestments of the intermediate cash flows at the same YTM may not often hold in reality. The conventional yield curve, thus, plots the YTM of a series of coupon bearing bonds against their terms to maturity with any point on it indicating the single rate at which all the cash flows pertaining to a security are discounted. In fact, if the forward curve is sharply upward sloping, the YTM of a low coupon security should be more than a high coupon security of identical tenor. This coupon effect, as it is known, is totally missed if the decisions are based on YTM. On the other hand, the pricing of STRIPS is based on a zero-coupon curve where any point indicates the rate at which a single separate cash flow should be discounted. An important factor contributing to the efficiency of STRIPS pricing is the liquidity in the underlying bond issues and the alignment of coupon payment dates across a number of bonds.

In the Indian case, with the domination by captive investors like banks, insurance companies and provident funds in the Government securities market and with a shift in banks' investment behaviour based on considerations other than SLR, such as capital adequacy, income recognition and provisioning norms as well as asset liability management (ALM) requirements, STRIPS are expected to provide the requisite flexibility to the debt managers and address the asset-liability mismatches of the banking sector so far as their government securities investment portfolios are concerned. The extant policy stance of reissuance of existing loans and alignment of coupon payment dates across loans facilitating creation of volumes in certain benchmark securities is creating an environment for STRIPS. Requisite provisions were made in the draft Government Securities Act, which is expected to replace the existing Public Debt Act, 1944 to facilitate the introduction of STRIPS.

Table 11.3 : Weighted Average Yield and Maturity for Market Loans of Central Government.

Year	(Per cent/year)		
	<u>Ranges of YTM's at Primary Issues</u>	Weighted	Range of Weighted

	Under 5 years	5-10 years	Over 10 years	Average Maturity of Yield	Average Loans	Average Maturity
1	2	3	4	5	6	7
1995-96	13.25-13.73	13.25-14.00	-	13.75	2-10	5.7
1996-97	13.40-13.72	13.55-13.85	-	13.69	2-10	5.5
1997-98	10.85-12.14	11.15-13.05	-	12.01	3-10	6.6
1998-99	11.40-11.68	11.10-12.25	12.25-12.60	11.86	2-20	7.7
1999-2000	-	10.73-11.99	10.77-12.45	11.77	5.26-19.61	12.6
2000-01	9.47-10.95	9.88-11.69	10.47-11.70	10.95	2.89-20	10.6
2001-02 (up to August 10, 2001)	-	9.22-9.81	9.36-11.00	10.00	7.37-20	13.5

- Not applicable.

11.16 Along with the development of the financial markets, interest rates on Government securities have provided the benchmark for the spectrum of interest rates in the system. Accordingly, during 2000-01, the Reserve Bank continued with the policy of combining the absorption of loans in the primary issuance market, either through private placements or by taking devolvments at the auctions coupled with timely open market operations in order to contain the pressure on interest rates in the economy in general, to reduce the cost of borrowing to the Government and to minimise the monetary impact of debt management. During the year, the initial subscription by the Reserve Bank to the total primary issuance of dated securities, at around 31 per cent of the total issues (Rs.31,151 crore), was similar to that resorted to during 1999-2000. The weighted average cost of primary issuance during the year was lower at 10.95 per cent as against 11.77 per cent during the previous year ([Table 11.3](#)).

11.17 The Reserve Bank has pursued a strategy of elongating the maturity pattern of the outstanding Government debt through the issuance of long-term paper to reduce the refinancing risk ([Chart XI.4](#), [Tables 11.4](#) and [11.5](#)). The weighted average maturity of debt issued during the year through dated securities increased from 6.6 years in 1997-98 to 7.7 years in 1998-99 and to 12.6 years in 1999-2000. Uncertainties in the financial markets during the first half of 2000-01 as also the need to meet investor preference for lower market risk necessitated issuance of shorter-term securities. As a consequence, the weighted average maturity of new issuances during 2000-01 dipped to 10.6 years. Further, the range of maturities of loans issued was 2.89 years to 20 years during 2000-01 as against 5.26 years to 19.61 years during 1999-2000. Despite the elongation of maturities, interest rates on government securities have softened in recent years.

Table 11.4 : Maturity Profile of Market Loans of Central Government.

Year	(Per cent)					
	Outstanding at end of Year			Raised during the Year		
	Under 5 years	5-10 years	Over 10 years	Under 5 years	5-10 years	Over 10 years
1	2	3	4	5	6	7
1995-96	38	30	31	42	58	0
1996-97	45	29	26	50	50	0
1997-98	41	41	18	18	82	0

1998-99	41	42	16	18	68	14
1999-00	37	39	24	0	35	65
2000-01	27	47	26	6	41	53

Table 11.5 : Repayment Schedule for Market Loans of Central Government(as at end-March 2001) P

(Rupees crore)

End-March	Amount of Repayment
1	2
2001-2002	26,499
2002-2003	27,420
2003-2004	32,909
2004-2005	34,316
2005-2006	32,631
2006-2007	34,894
2007-2008	34,151
2008-2009	36,223
2009-2010	34,195
2010-2011	38,609
2011-2012	19,610
2012-2013	11,255
2013-2014	15,691
2014-2015	18,588
2015-2016	18,857
2016-2017	13,130
2017-2018	0
2018-2019	12,632
2019-2020	0
2020-2021	7,000

P Provisional.

State Governments

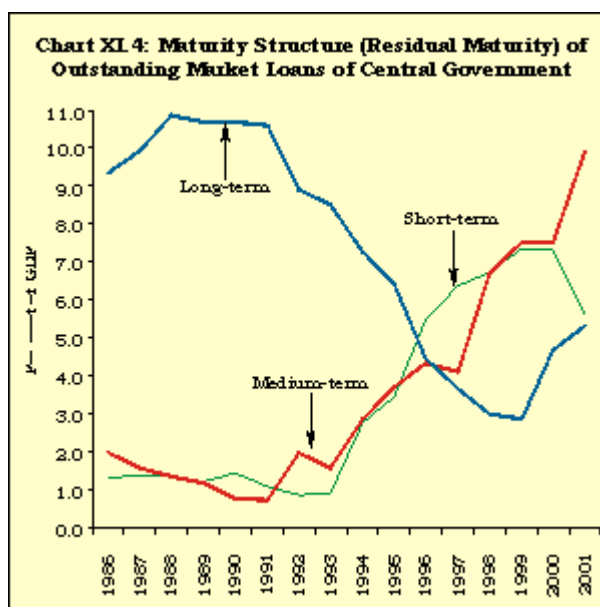
Ways and Means Advances

11.18 The aggregate outstanding WMA of all States as on March 31, 2001 amounted to Rs.6,811 crore (including the overdraft of Rs.3,060 crore) as compared with Rs.7,519 crore (including the overdraft of Rs.4,093 crore) as at end-March 2000 ([Table 11.6](#)).

Table 11.6 : WMA, Special WMA and Overdraft of States

(Rupees crore)

Month	Weekly Average											
	Normal WMA			Special WMA			Overdraft			Investment in Treasury Bills		
	2001 -02	2000 -01	1999- 2000	2001 -02	2000 -01	1999- 2000	2001 -02	2000 -01	1999 2000	2001 -02	2000 -01	1999 -2000
1	2	3	4	5	6	7	8	9	10	11	12	13
April	3,925	2,288	1,175	666	767	176	1,863	2,392	1,420	2,832	1,481	6,322
May	2,638	1,610	1,091	345	496	155	681	469	174	3,483	1,610	6,560
June	2,223	1,464	1,198	331	478	333	508	467	183	4,664	2,550	6,761
July	2,875	2,376	1,663	491	879	429	863	546	397	4,219	1,486	5,619
August		1,775	1,377		344	333		368	316		3,170	6,110
September		1,791	1,215		535	135		460	286		3,190	6,644
October		2,554	1,742		681	516		935	518		1,645	5,485
November		2,770	2,087		602	758		983	784		1,244	3,398
December		2,387	2,055		806	723		921	895		2,066	2,630
January		2,862	2,456		927	945		1,058	1,053		1,808	1,571
February		3,398	2,458		583	810		765	1,003		2,678	1,690
March		3,481	2,366		704	853		2,109	1,863		2,726	1,319



11.19 An analysis of the WMA and overdraft position of State Governments reveals considerable pressure on liquidity management of States during 2000-01. Three States could not clear their overdrafts with the Reserve Bank within the stipulated time limit and consequently the Reserve Bank had to stop payments on their behalf.

11.20 The States' holding of 14-day intermediate Treasury Bills at end-March 2001 amounted to Rs.3,852 crore as compared with Rs.2,292 crore as at end-March 2000. The State Governments are also allowed to submit non-competitive bids in the treasury bill auctions conducted by the Reserve Bank.

Table 11.7 : Market Borrowings of State Governments, 2000-01

State	(Rupees crore)	
	Net 2	Gross 3
1	1,399.2	1,399.2
1. Andhra Pradesh	16.22	16.22
2. Arunachal Pradesh	362	379.9
3. Assam	603.28	638.62
4. Bihar	188.68	194.92
5. Chhattisgarh	80	80
6. Goa	521.99	559.22
7. Gujarat	468.3	488.38
8. Haryana	233.09	233.09
9. Himachal Pradesh	238.61	238.61
10. Jammu and Kashmir	204.21	216.17
11. Jharkhand	825.58	825.58
12. Karnataka	540	577.42
13. Kerala	514.83	532.04
14. Madhya Pradesh	770.15	809.15
15. Maharashtra	21.3	25.2
16. Manipur	70	70
17. Meghalaya	34.97	34.97
18. Mizoram	100	104.95
19. Nagaland	689.71	689.71
20. Orissa	345	361.7
21. Punjab	1,119.37	1,182.07
22. Rajasthan	25	25
23. Sikkim @	1050	1,092.48
24. Tamil Nadu	75.55	79.95
25. Tripura	1,489.55	1,489.55
26. Uttar Pradesh	78.89	78.89
27. Uttaranchal	814.66	877.36
28. West Bengal	12,880.14	13,300.35
Total		

Memo Item

Total (2001-02) (up to August 13, 2001) 6,777

@ Allocation mentioned at the level actually raised.

Dated Securities

11.21 The gross and net borrowings of State Governments amounted to Rs. 13,300 crore and Rs. 12,880 crore, respectively, during 2000-01. The States were initially allocated a net market borrowing limit of Rs.11,230 crore (Rs.11,650 crore, gross) for 2000-01 ([Table 11.7](#)). After this

was completed by January 2001, an additional allocation of Rs.1,650 crore was made to 10 State Governments. As a part of the policy to move towards the system of auctioning of State loans, the State Governments were allowed the option of raising 5 to 35 per cent of the allocated borrowings through auctions along with the flexibility to decide the timing since 1999. The States which opted for such auctions during 2000-01 raised an aggregate amount of Rs.1,670 crore at cut-off rates ranging between 11.57 per cent and 11.80 per cent ([Table 11.8](#)). During 2001 -02 (up to August 13), the States raised an amount of Rs.6,777 crore , including the amount of Rs.1,470 crore raised through auctions by five States.

Table 11.8: Summary of Auction Results: Market Borrowings of States

State	Date of Auction	Amount of issue (Rupees crore)	Cut-off yield (Per cent)	GoI10-year* (approx.) Secondary Market yield (Per cent)
1	2	3	4	5
1. West Bengal	08.08.2000	250	11.80	11.43
2. Maharashtra	08.08.2000	280	11.70	11.43
3. Andhra Pradesh	08.08.2000	400	11.80	11.43
4. Tamil Nadu	08.08.2000	290	11.70	11.43
5. Kerala	29.08.2000	200	11.75	11.42
6. Karnataka	05.12.2000	250	11.57	11.32
7. Kerala	17.04.2001	200	10.53	10.25
8. Gujarat	20.07.2001	190	9.50	9.35
9. Gujarat	06.08.2001	250	9.40	9.10 \$
10. Andhra Pradesh	13.08.2001	475	9.53	9.25
11. Madhya Pradesh	13.08.2001	105	9.55	9.25
12. West Bengal	13.08.2001	250	9.72	9.25

* Traded security having residual maturity nearest to 10-year.

\$ For about 8 years maturity.

11.22 The weighted average cost of borrowing of the State government dated securities declined significantly during 2000-01 in line with the trend during the second half of the 1990s ([Table 11.9](#)).

Table 11.9 : Weighted Average Yield of State Government Loans

Year	(Per cent per annum)	
	State Government Securities	
	Range	Weighted Average
1	2	3
1995-96	14.00	14.00
1996-97	13.75 - 13.85	13.83
1997-98	12.30 - 13.05	12.82
1998-99	12.15 - 12.50	12.35

1999-2000	11.00 - 12.25	11.89
2000-01	10.50 - 12.00	10.99
2001-02 (up to August 13)	9.40 - 10.53	10.20

11.23 The State-wise maturity profile of loans as well as the repayment schedule are presented in [Table 11.10](#) and [Table 11.11](#), respectively.

Table 11.10 : Maturity Profile of State Government Loans (end-March 2001)P

(Rupees crore)

State	0-5 years	6-10 years	Over 10 years	Total
1	2	3	4	5
1. Andhra Pradesh	1,739	7,057	339	9,135
2. Arunachal Pradesh	14	55	5	74
3. Assam	493	1,750	38	2,281
4. Bihar	1,666	4,322	389	6,377
5. Chhattisgarh	0	70	0	70
6. Goa	41	317	10	368
7. Gujarat	728	3,007	98	3,833
8. Haryana	397	1,300	67	1,764
9. Himachal Pradesh	130	779	26	935
10. Jammu and Kashmir	208	714	37	959
11. Jharkhand	0	123	0	123
12. Karnataka	795	3,538	158	4,491
13. Kerala	1,053	3,253	193	4,499
14. Madhya Pradesh	1,036	3,698	164	4,898
15. Maharashtra	1,173	3,841	189	5,203
16. Manipur	60	172	12	244
17. Meghalaya	65	301	13	379
18. Mizoram	30	135	0	165
19. Nagaland	105	457	16	578
20. Orissa	1,203	3,487	247	4,937
21. Punjab	545	2,009	41	2,595
22. Rajasthan	1,183	5,079	204	6,466
23. Sikkim	34	170	7	211
24. Tamil Nadu	1,371	4,214	233	5,818
25. Tripura	73	332	17	422
26. Uttar Pradesh	3,277	10,226	576	14,079
27. Uttaranchal	0	16	0	16
28. West Bengal	1,360	4,216	271	5,847

P Provisional.

**Table 11.11: Repayment Schedule for Market Loans of State Governments
(as at end - March 2001) P**

(Rupees crore)

End-March	Amount of Repayment
1	2
2001-2002	1,446
2002-2003	1,789
2003-2004	4,145
2004-2005	5,123
2005-2006	6,274
2006-2007	6,551
2007-2008	11,554
2008-2009	14,400
2009-2010	16,261
2010-2011	15,870
2011-2012	3,349

P Provisional.

Consolidated Sinking Fund (CSF)

11.24 The Consolidated Sinking Fund (CSF) was set up in 1999-2000 to meet redemption of market loans of State Governments. Each State Government has to contribute 1 to 3 per cent of its outstanding market loans each year to the Fund. The accretions to the Fund are invested in Government of India securities. The Fund is administered by Central Accounts Section (CAS), Nagpur of the Reserve Bank. As on June 30, 2001, 10 States had subscribed to the CSF and the face value of securities purchased by them amounted to about Rs.671 crore.

INSTITUTIONAL MEASURES

11.25 The separation of the functions of debt management and monetary management is regarded as a desirable medium-term objective, conditional upon development of the government securities market, durable fiscal correction and an enabling legislative framework. The separation of the two functions is expected to have significant effects on the functioning of the government securities market. The Working Group on Separation of Debt Management from Monetary Management, which submitted its report to the Reserve Bank in December 1997, recommended, *inter alia*, the separation of the two functions and establishment of a company under the Indian Companies Act to take over the debt management function. The Union Budget, 2000-01 expressed the need to accord greater operational flexibility to the Reserve Bank for the conduct of monetary policy and regulation of the financial system. The existing Public Debt Act is sought to be repealed and replaced by a new Government Securities Act. The new Act will simplify the procedures for transactions in Government securities, allow lien marking/pledging of securities as also electronic transfer in a dematerialised form. The new Act has been passed by the Legislatures of most of the States. Attendant legislative changes are envisaged under the Fiscal Responsibility Bill and the Reserve Bank of India Act to enable greater flexibility and operational effectiveness in the conduct of monetary policy in the new environment. The Reserve Bank has proposed amendments to the Reserve Bank of India Act, 1934 which would take away the mandatory nature of management of public debt by the Reserve Bank and vest the discretion

with the Central Government to undertake the management of the public debt either by itself or to assign it to some other independent body, if it so desires. The amendments to various legal acts are also expected to bring about greater compatibility with innovations taking place in banking operations.

11.26 During 2000-01, significant progress has been made in the development and integration of financial markets, introduction of new instruments and participants, strengthening of the institutional infrastructure and greater clarity in the regulatory structure. During 2000-01, amendments to the Securities Contracts (Regulation) Act, 1956 demarcated the regulatory roles of the Reserve Bank and the SEBI in the financial markets and established the regulatory jurisdiction of the Reserve Bank over money and government securities markets.

11.27 The recent monetary and credit policy statements of the Reserve Bank stressed that the major constraint in the evolution of an independent debt management function is the continuing fiscal dominance over financial markets. The durable solution for more efficient conduct of these policies is a substantial and enduring fiscal correction. The proposed Fiscal Responsibility Bill is expected to bring in reasonable control over the fiscal deficit. Apart from the elimination of the revenue deficit and the reduction of the fiscal deficit to 2.0 per cent of GDP by March 31, 2006, the proposed Bill envisages prohibition of direct borrowing by the Central Government from the Reserve Bank after three years except by way of advances to meet temporary cash needs.

11.28 In line with the recommendations of the Group of State Finance Secretaries, the Reserve Bank announced the following measures under the State Governments' 'WMA Scheme 2001', effective from February 1, 2001 : (i) the total normal WMA limits fixed at Rs.5,283 crore as per the Vithal Committee formula based on revenue receipts and capital expenditure for the three years ended 1999-2000; (ii) the special WMA continued to be linked to the State Governments' investments in Government of India securities; (iii) States allowed to run overdrafts for 12 consecutive working days instead of 10 days under the earlier scheme; (iv) five working days' notice period instead of the existing notice period of three working days to the States to bring down the overdraft amount within the level of 100 per cent of the normal WMA limit; (v) the other provisions of the scheme remain the same as per the earlier scheme; and (vi) the above scheme subject to review at the end of two years.

11.29 Consequent upon the creation of three new States, *i.e.*, Chhattisgarh, Jharkhand and Uttaranchal, the minimum balance and WMA limits were apportioned between the old and new States on the basis of the revenue sharing formula adopted by the Central Government. There was a uniform 30 per cent hike in WMA limits for all the six states involved, to take care of mismatches that may arise consequent to the division. Besides, overdraft regulations were partially relaxed in respect of these States. This was the position before the introduction of the WMA Scheme 2001.

11.30 During February 2001, it was decided that: (i) the existing normal WMA limit would continue for the reorganised States and the Reserve Bank would review the position in September 2001 when provisional accounts data become available; (ii) the relaxation of the five days' limit for the reorganised States would be extended up to March 31, 2002; (iii) loan-wise bifurcation, repayment schedule and coupon payments together with the months of such

payments would be forwarded to the respective States by the Reserve Bank; (iv) for the determination of the limits on special WMA, the holdings or balances as on December 30, 2000 would be bifurcated between the respective States (investment made by States after the appointed date would be included in the holdings of the respective States); and (v) the outstanding State Development loans would continue in the name of the successor States (old states) and the servicing costs (interest payments and repayment of maturing loans) in respect of these outstanding loans would be met from the successor States' reconstituted cash accounts with the Reserve Bank, with the Reserve Bank arranging to transfer specified portions (as per the ratio of population) of these servicing charges from the new States. This is in consonance with the provisions of the respective Reorganisation Acts, 2000 of the States.

11.31 In pursuance of the recommendations of the Committee on State Government Guarantees in February 1999, the Reserve Bank advised banks that with effect from 2000-01, investments in State Government guaranteed securities outside the market borrowing programme would attract risk weight of 20 per cent. In case of default, such investments are to be treated as NPAs and 100 per cent risk weight is to be attached with adequate provisioning. The States which have not been honouring guarantees and have arrears in payment of interest/principal in guaranteed bonds have been sensitised to the need to make prompt payment in order that response to the market borrowing of the State is not jeopardised. Some of the States have requested the Reserve Bank to earmark a portion of fresh issuance towards arrears in servicing guaranteed bonds. Whereas Gujarat (1963), Karnataka (1999), Sikkim (2000) and West Bengal (2001) have introduced statutory ceilings on guarantees, Rajasthan (1999) and Assam (2000) have imposed administrative ceilings. Tamil Nadu has taken the decision to charge the guarantee commission on outstanding guaranteed amount.

11.32 With the issue of fiscal transparency coming to the fore, the Core Group for implementing the recommendations of the Committee on Voluntary Disclosure Norms for State Governments (January 2001) suggested that the States which have already started publishing "Budget at a Glance", should be encouraged to disseminate more information on a time series basis, especially data on major fiscal indicators, *viz.*, revenue deficit, primary deficit, tax revenue, interest payments, subsidies, contingent liabilities including guarantees *etc.* The Group also recommended that the other States should be persuaded to initiate necessary steps towards publishing "Budget at a Glance" and also time series data on some fiscal indicators. In the medium term, the States are encouraged to move towards publishing a detailed 'Budget Summary' under the supervision and periodic review by the State Finance Secretaries Forum.

11.33 The sixth conference of the State Finance Secretaries was held in April 2000. Issues deliberated upon were the need for a system of on-line reporting of transactions to facilitate better funds management, auction systems for market borrowings of States, measures to deal with managing the interest burden, State guarantees and envisaged legislative changes. In the seventh conference in November 2000, issues discussed included the system of WMA and market borrowings for States, debt servicing, ceiling on guarantees, the Calamity Relief Fund and the macroeconomic implications of public accounts. In the eighth conference in May 2001, the issues discussed included market borrowing of states, state guarantees and guarantee redemption fund, interest burden on States and finances of local bodies.

11.34 The active stance of the debt management policy pursued in the recent years would be continued in 2001-02. The market borrowing programme of the Centre for the year has been placed at Rs.1,18,852 crore (net Rs.77,353 crore) and that of the States provisionally at Rs.12,648 crore (net, Rs.11,201 crore). Easy liquidity conditions have enabled the smooth issuance of the borrowing programmes of the Centre and States. While the ideal situation for the debt manager is one in which the market absorbs the entire debt issuances, the Reserve Bank subscribes to primary market loans in view of the large market borrowing requirements of the Government and the need to ensure orderly market conditions. The operational framework of debt management policy would, therefore, continue to combine private placement/ devolvments with open market operations so as to ensure absorption of the public debt without undue pressure on the conduct of monetary policy or on the cost of the debt. Lengthening of the maturity structure would also be continued along with reissuances and price-based auctions to smoothen the yield curve. As in the recent past, the debt management operations will have to be carefully timed with market liquidity conditions and expectations so that there are no undue pressures on the monetary policy preference for a softer interest rate environment.

XII - Currency Management

Developments During 2000-01 Institutional Measures

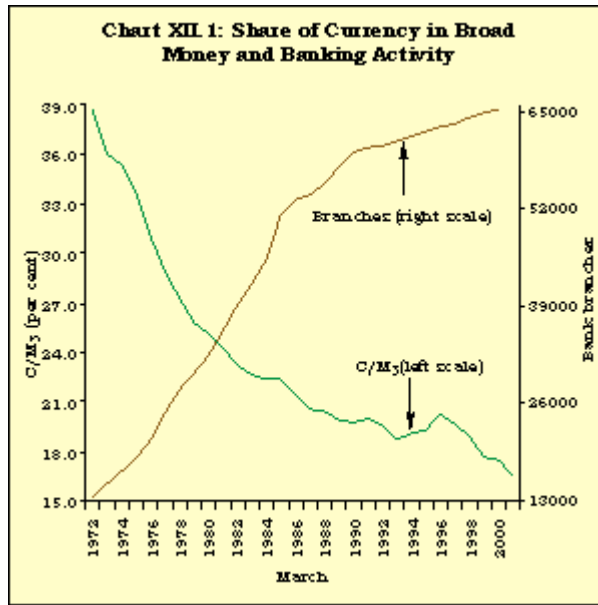
Introduction

12.1 The Reserve Bank is entrusted with the function of note issue and currency management by the preamble to the Reserve Bank of India Act, 1934 and by the specific provisions of Section 3 of the Act. It acts as the sole currency authority under Section 22 for the issue of bank notes. Section 38 requires the Government to put one rupee coins and one rupee notes into circulation only through the Reserve Bank. The function of note issue and currency management is discharged through 18 regional Issue offices/sub-offices and a wide network of currency chests maintained by banks and Government treasuries spread across the country. Consequent upon the formation of the new States of Chattisgarh, Jharkhand and Uttaranchal, the jurisdiction of currency operations in the newly created States has been retained as hitherto with the Issue offices of Nagpur and Bhopal, Patna and Kanpur, respectively, and necessary arrangements have been made for currency distribution and accounting.

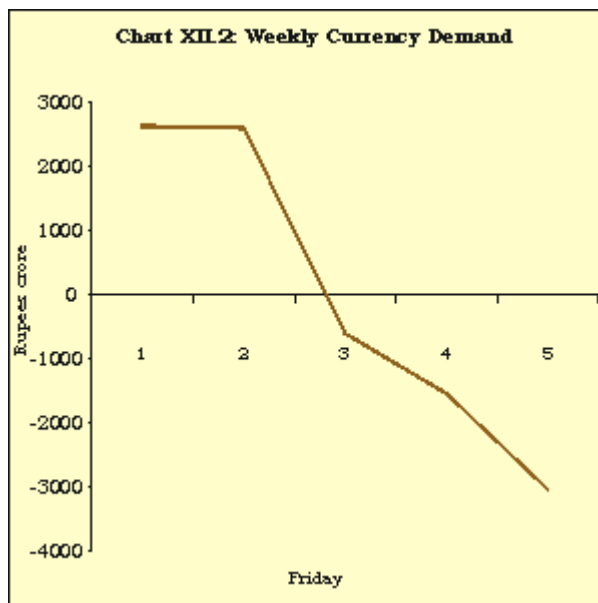
12.2 There has been a phenomenal growth both in the value and volume of currency in circulation over the years. The value of currency, including coins, rose from Rs.172 crore in March 1935 to Rs.2,18,205 crore as at end-March 2001. During the same period, the number of notes in circulation (Re.1 and above) increased from 124 million pieces to over 38,000 million pieces. Currency management has involved efforts to achieve self-sufficiency in the production of currency notes and coins with a judicious denomination-mix, improvement in the efficiency of distribution networks and withdrawal and destruction of notes, technology upgradation and enhancement in the security features of currency notes.

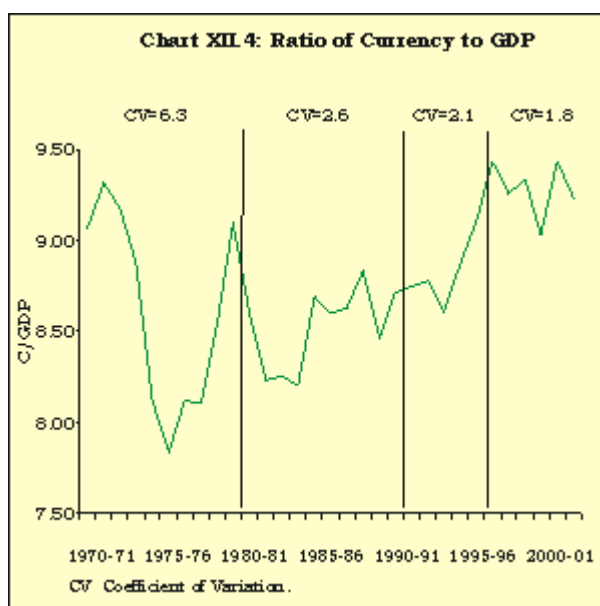
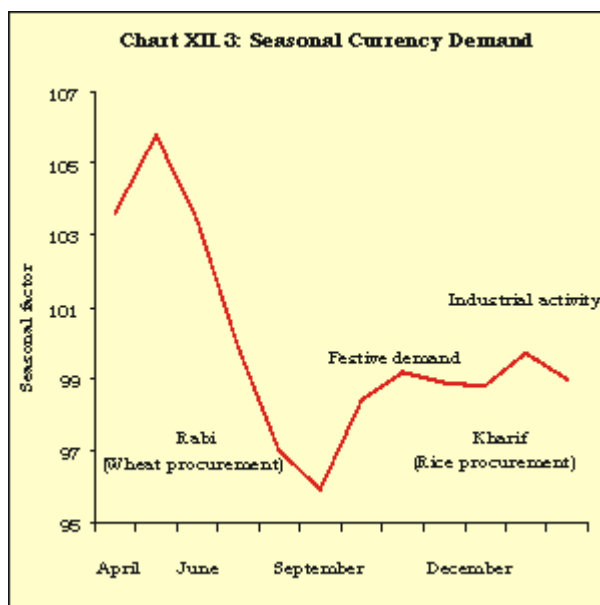
12.3 Developments during the year in the conduct of currency management focus on the importance of currency in overall economic activity, patterns of the behaviour of cash demand, the composition of currency in circulation in terms of denomination, activities of currency chests and developments in note issue. Security features in bank notes are discussed in the context of the monitoring of counterfeit notes. The sub-section on institutional measures with medium-term implications covers the policy for clean notes circulation, mechanisation and technology upgradation and the currency museum.

DEVELOPMENTS DURING 2000-01



12.4 Cash remains an important mode of payment in the Indian economy, notwithstanding the persistent decline in the share of currency in broad money during 1970-2000 following the spread of the bank branch network after bank nationalisation ([Chart XII.1](#)). Currency is an important indicator of economic activity, especially in rural India and its behavioural pattern throws up many interesting insights. Cash demand tends to increase in the beginning of the month when salaries are spent and tapers off at the end of the month when consumer spending returns to business accounts ([Chart XII.2](#)). Similarly, currency seasonality, by and large, mirrors the seasonality in economic activity ([Chart XII.3](#)). The variance of the ratio of currency to GDP at current market prices, an indicator of the role of currency in economic activity, has stabilised since the mid-1980s ([Chart XII.4](#)).





12.5 Average cash demand, represented by currency in circulation (*i.e.*, the issue of notes from the Reserve Bank *plus* the currency liabilities of the Government) decelerated to 9.1 per cent during 2000-01 - a single digit growth rate for the first time since 1975-76 - from 16.3 per cent during the previous year, partly reflecting the slowdown in economic activity. Currency in circulation increased, on a year-on-year basis, by 11.8 per cent as on August 10, 2001 as compared with 10.5 per cent as on August 11, 2000.

Denomination-wise Currency in Circulation

12.6 Denomination-wise, Rs.50 and above constituted 93.0 per cent of the total notes in circulation in value terms and 51.7 per cent in terms of volume at the end of March 2001 ([Table](#)

[12.1](#)).

Table 12.1 : Denomination-wise Notes and Coins Issued (as at end–March 2001)

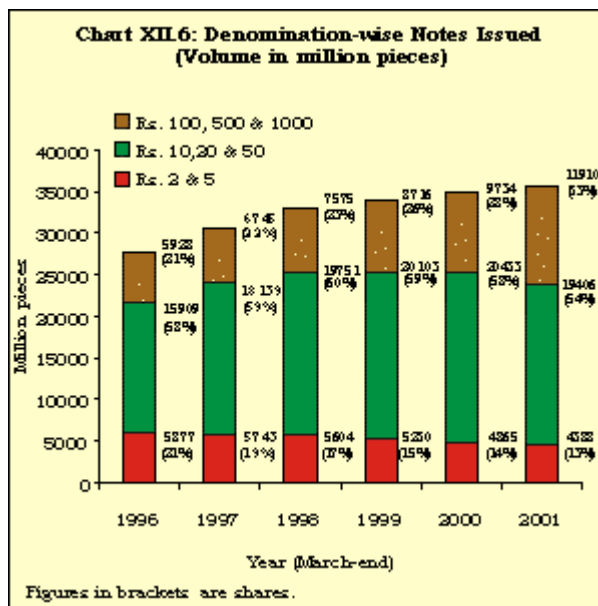
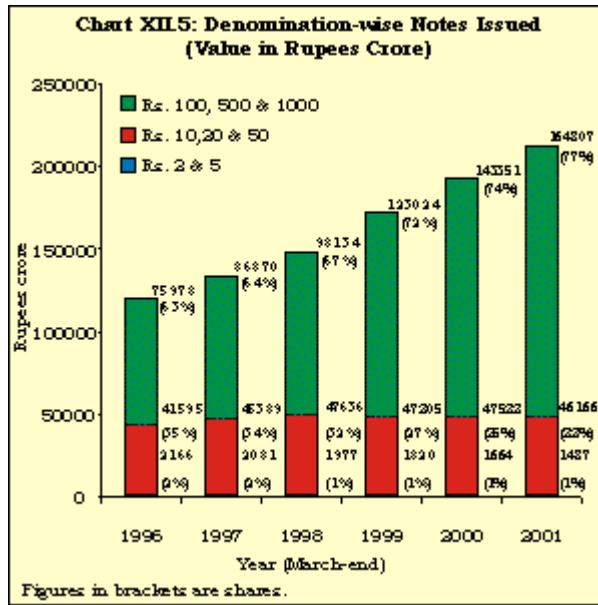
Denomination	Value		Volume	
	Rupees crore	Share (per cent)	Million pieces	Share (per cent)
1	2	3	4	5
Notes				
Rs.2, Rs.5	1,487	0.7	4,388	12.3
Rs.10	12,336	5.8	12,336	34.6
Rs.20	1,012	0.5	506	1.4
Rs.50	32,818	15.4	6,564	18.4
Rs.100	1,08,141	50.9	10,814	30.3
Rs.500	5 2,947	24.9	1,059	2.9
Rs.1000	3,719	1.8	37	0.1
Total#	2,12,460	100.0	35,704	100.0
Coins				
Re.1 notes	307	5.9	3,066	4.2
Re.1 coins	1,389	26.5	13,890	18.8
Rs.2 coins	814	15.5	4,070	5.5
Rs.5 coins	1,544	29.4	3,088	4.2
Small coins@	1,188	22.7	49,667	67.3
Total*	5,242	100.0	73,781	100.0

*. Excluding Rs. 10 commemorative coins valued at Rs. 4 crore

@ Excluding 1p, 2p, 3p and *anna*-pie coins valued at Rs.112 crore.

Adjusted for notes in transit within the Reserve Bank.

The growth in the share of various denomination groups of notes during 1996 to 2001 in terms of value and volume shows a gradual shift towards higher denomination notes ([Charts XII.5](#) and [6](#)).



Currency Chests

12.7 The number of currency chests operated by commercial banks and Government treasuries increased to 4,386 in March 2001 from 4,242 in March 2000 (Table 12.2). With a view to expanding the network for currency management, 144 additional currency chests were established/upgraded from repositories during the year. In order to exercise a greater control on currency chest operations, it is proposed to reduce the number of repositories either by converting them into currency chests or closing them down.

Table 12.2 : Number of Currency Chests

Name of agency	No. of Currency Chests as on March 31	
	2001	2000
1	2	3
Treasuries	453	425
SBI and its Associates	3,050	2,945
Nationalised Banks	842	832
Private Sector Banks	22*	21*
Co-operative Banks	0	0
Reserve Bank	19	19
Total	4,386	4,242

* Including 5 chests of the Jammu & Kashmir Bank Limited.

Note issue

12.8 During 2000-01, the Reserve Bank issued new notes in the Mahatma Gandhi series with a portrait of Mahatma Gandhi in the watermark. With a view to meeting the need for settlement of high value transactions, the Reserve Bank reintroduced bank notes of the Rs.1,000 denomination in unregistered form in October 2000 following an amendment to the High Denomination Bank Notes Demonetisation Act, 1978. It may be mentioned that the Rs.1,000 denomination notes along with Rs.5,000 and Rs.10,000 notes in registered form had been demonetised in 1978 under the aforesaid Act. Further, new Rs.500 notes with a revised colour scheme were introduced in November 2000 to facilitate easy distinction from Rs.100 notes. In addition to the usual security features, both these notes incorporate additional overt security features such as optically variable ink (colour shifting ink) and readable security threads ([Box XII.1](#)). The Reserve Bank has also reintroduced the issue of Rs.5 notes in the existing design with the Ashoka Pillar watermark to supplement the supply of coins.

Box XII.1 Overt Security Features in Indian Bank Notes

Bank notes issued by different countries throughout the world contain distinct, easily recognisable security features to facilitate the detection of genuine notes *vis-a-vis* forgeries. Indian bank notes issued by the Reserve Bank have certain common overt security features, *viz.*, watermark, security thread, *intaglio* printing, *etc.* The Reserve Bank, like other central banks the world over, changes the design of bank notes from time to time, *inter alia*, as an anti-counterfeit measure.

The Reserve Bank has introduced bank notes in the Mahatma Gandhi series since 1996 and has so far issued Rs.1,000, Rs.500, Rs.100, Rs.50 and Rs.10 notes in this series. These have been designed with a number of salient security features:

- *Watermark*: These notes contain the Mahatma Gandhi watermark with a light and shade effect and multi-directional lines in the watermark window.
- *Security Thread*: The Rs.1,000 notes introduced in October 2000 contain a readable, windowed security thread alternately visible on the obverse with the inscriptions, '1000' and 'RBI', but totally embedded on the reverse. The Rs.500 and Rs. 100 notes have a security thread with similar visible features and the inscriptions and 'RBI'.

When held against the light, the security threads on the Rs.1000, Rs.500 and Rs. 100 notes can be seen as one continuous line. The Rs.10 and Rs.50 notes contain a readable, fully embedded windowed security thread. Notes issued prior to the introduction of the Mahatma Gandhi series have a plain, non-readable fully embedded security thread.

- *Latent Image*: On the obverse side of the Rs.1000, Rs.500, Rs.100 and Rs.50 notes, a vertical band on the right side of the Mahatma Gandhi's portrait contains a latent image showing the respective denominational value in numeral. The latent image is visible only when the note is held horizontally at the eye level.
- *Microletterings*: This feature appears between the vertical band and the Mahatma Gandhi portrait. It contains the word 'RBI' in Rs.10. The notes of denominations Rs.50 and above also contain the denominational value of the notes in micro-letters. This feature can be seen better under a magnifying glass.
- *Intaglio Printing* : The portrait of Mahatma Gandhi, the Reserve Bank seal, guarantee and promise clause, the Ashoka Pillar emblem on the left, and the Governor's signature are printed in *intaglio*, i.e., in raised prints, which can be felt by touch, in the Rs.50, Rs.100, Rs.500 and Rs.1000 notes.
- *Identification Mark*: A special feature in *intaglio* print has been introduced on the left of the watermark window on all notes except the Rs.10 note. This feature is in different shapes for various denominations (Rs.50-Square, Rs.100-Triangle, Rs.500-Circle, Rs.1000-Diamond) and helps the visually impaired to identify the denomination.
- *Fluorescence* : Number panels of the notes are printed in fluorescent ink. The notes also have optical fibres. Both can be seen when the notes are exposed to an ultra-violet lamp.
- *Optically Variable Ink*: This is a new security feature incorporated in the Rs.1000 and Rs.500 notes with the revised colour scheme introduced during this year. The numerals 1000 and 500 on the obverse of Rs.1000 and Rs.500 notes, respectively, are printed in optically variable ink, i.e., a colour-shifting ink. The colour of the numeral 1000/500 appears green when the note is held flat but would change to blue when the note is held at an angle.
- The notes in the denominations of Rs.10, Rs.20, Rs.50 and Rs.100 issued prior to the Mahatma Gandhi series contain the Ashoka Pillar watermark and the Ashoka Pillar effigy. The Rs.500 notes issued in 1987 bear the Ashoka Pillar watermark and the Mahatma Gandhi portrait.

Exchange of Mutilated Notes

12.9 During 2000-01, various offices of the Reserve Bank settled claims with respect to mutilated notes under the Reserve Bank's Note Refund Rules involving 168 lakh pieces as compared with 188 lakh pieces in 1999-2000. The currency chest branches of the State Bank of India and its associates and other public sector banks, which have been delegated full powers for the exchange of mutilated notes under the Note Refund Rules, settled claims for the exchange of 237 lakh pieces during the year as compared with 328 lakh pieces in 1999-2000. The decline in the exchange under the Note Refund Rules is, *inter alia*, due to the Reserve Bank's decision to redefine a note in two pieces as a soiled note, which was hitherto treated as a mutilated note for exchange. A large number of such notes are now being exchanged across the counters of the Issue offices and bank branches.

Counterfeit Notes

12.10 During 2000-01, 1,02,687 pieces of counterfeit notes were detected at the Reserve Bank's regional offices and branches of commercial banks as compared with 37,523 pieces during 1999-2000 ([Table 12.3](#)).

12.11 Although the counterfeit notes detected were minuscule as compared with the notes in circulation, the widespread appearance of comparatively good quality counterfeit notes in higher denominations became an issue of attendant public concern. Various anti-counterfeit measures were taken to counter forged notes. First, the Reserve Bank launched a public awareness campaign through print and the electronic media all over the country regarding the security features in bank notes. Second, additional security features like optically variable ink (colour-shifting ink) in the denominational numeral in notes of denominations of Rs.1,000 and Rs.500 with a revised colour-scheme were introduced. Banks were instructed to freely accept Rs.500 notes. Thirdly, the old design Rs.500 notes in the Ashoka Pillar series in which counterfeiting was noticed are being phased out from circulation. Banks are instructed to equip their branches with ultraviolet detectors and the staff from banks, Government departments, the police and other enforcing agencies are being regularly trained on security features in bank notes to facilitate the detection of forgeries.

Table 12.3 : Counterfeit Notes Detected

Denomination	2000-01	1999-2000
1	2	3
Rs.1,000	6	0
Rs.500	56,888	16,781
Rs.100	43,082	19,001
Rs.50	1,832	887
Rs.20	127	125
Rs.10	752	729
Total (pieces)	1,02,687	37,523
Value (Rs.)	3,28,59,860	1,03,44,700

Note: Does not include the counterfeit notes seized by the police and other enforcement agencies.

Currency Note Presses

12.12 Bank notes are printed at four note presses, of which the Currency Note Press, Nashik and Bank Note Press, Dewas are owned by the Central Government and the presses at Mysore and Salboni are owned by the Bharatiya Reserve Bank Note Mudran Limited, a wholly owned subsidiary of the Reserve Bank. The presses at Mysore and Salboni were made fully operational during 1999-2000. Following modernisation of the presses at Nashik and Dewas the combined capacity of the four presses has been augmented considerably so as to meet future requirements, besides current demand, with the flexibility to achieve an appropriate denomination mix. The combined installed capacity of these note presses is about 18,000 million pieces per annum. During 2000-01, an expenditure of Rs.1,121 crore was incurred towards printing of currency notes, as compared with Rs. 1,066 crore in 1999-2000.

Gujarat Earthquake

12.13 Following the Gujarat earthquake in January 2001, arrangements were made for meeting

the cash requirements arising out of the relief operations. Additional remittances were despatched to the Reserve Bank's Ahmedabad office for the purpose. A few currency chests in the worst affected districts suffered damages. Appropriate salvage operations were launched with the help of the local administration. No loss of treasure was reported.

INSTITUTIONAL MEASURES

Clean Note Policy

12.14 The Reserve Bank has initiated various measures to usher in clean notes in circulation. The printing capacity at the four notes presses has been augmented with a view to meeting the demand-supply gap in currency. While the Government has been importing Rupee coins to supplement indigenous production, there is a need to augment production in order to achieve the medium-term objective of self-sufficiency in currency production.

12.15 The distribution of notes through the banking system has improved with the increased supply and augmentation of stock of fresh notes. The feasibility of expanding the channels for distribution of coins beyond the banking system is being explored. Automatic coin dispensing machines are being commissioned at select regional offices of the Reserve Bank on pilot basis to cater to low volume requirements.

Mechanisation

12.16 The Reserve Bank has embarked upon mechanisation of currency processing operations in the Issue offices. For handling the increasing quantum of notes received for examination, the Reserve Bank has commissioned Currency Verification and Processing (CVP) systems at the Bhopal and Chandigarh Issue offices as a pilot project. These systems can sort the notes into issuable and non-issuable categories, detect counterfeit notes and destroy the non-issuable notes in an eco-friendly manner through shredding and briquetting systems. Six more offices are proposed to be equipped with such systems for examination and disposal of soiled notes. The Kolkata, Mumbai, Navi Mumbai and New Delhi offices have been equipped with shredding and briquetting systems for destruction of notes and similar systems are being commissioned in other offices. Note processing will be mechanised in the remaining offices in a phased manner with the Issue accounting function computerised in 14 offices.

Currency Museum

12.17 The Reserve Bank has undertaken the task of setting up a Currency Museum in Mumbai with display and archival facilities of contemporary and ancient monetary artefacts and coins for preserving and educating the public about the currency history in India. The design layout for the Museum has been prepared by the National Institute of Design, Ahmedabad. The Reserve Bank has set up a web site for the proposed museum, which covers aspects related to Indian currency, coinage and banking and gives the security features of contemporary banknotes.

Outlook

12.18 The medium-term agenda of the Reserve Bank would be to continue its effort to provide clean notes and even out supply-demand mismatches through self-sufficiency in production capacity and by improving the efficiency and network of distribution channels. The present system of arrangement of distribution of fresh notes and coins and withdrawal of soiled notes would be reviewed for establishing a more effective distribution network for currency management. The strategy would be to reap efficiency gains through the mechanisation of note processing in all the Issue offices in a phased manner to supplement the manual system for a quicker disposal of notes. The shredding and briquetting systems compatible with the CVP systems in the offices would be put in place in a phased manner for the eco-friendly disposal of soiled notes. Increasing emphasis would be placed on computerisation of cash operations in the Reserve Bank offices in a phased manner for effective and efficient handling of increasing volumes of cash demand across geographical areas. Necessary measures would be taken to improve the longevity of notes by obviating multiple stapling of bank note packets which along with other measures would help realise the objective of clean and efficient notes circulation.

XIII - Payment and Settlement Systems

[Developments During 2000-01](#) [Institutional Measures](#)

Introduction

13.1 The Reserve Bank has been playing a central role in the reform of the payment and settlement system in India, particularly since January 1995. While the apex-level National Payments Council, constituted by the Reserve Bank in May 1999, lays down the broad policy parameters, the design and development of a national state-of-the-art robust payment and settlement system is entrusted to a multi-disciplinary Payment Systems Group which is guided by the Payment Systems Advisory Committee.

13.2 Modernisation of the payment and settlement system has been accorded high priority in the agenda of financial sector reforms in India during the 1990s in view of its role as a key determinant of the efficiency of financial intermediation and financial system stability. Technology has been the driving force behind the payment and settlement system reforms. While computerisation has been at the base of the reform process, connectivity of branches of banks by means of networking of computers and inter-connectivity of banks has been a focus area of attention. The operationalisation of the INdian FIAncial NETwork (INFINET) in June 1999, by the Institute for Development and Research in Banking Technology (IDRBT), Hyderabad represents a major step forward in providing a communication network for the exclusive use of banks and financial institutions in the form of a Closed User Group.

13.3 Reforms in the payment and settlement systems have been driven by the three-pronged approach of consolidation, development and integration. The consolidation of the existing payment systems in the form of Computerised Cheque Clearing (CCC), Electronic Clearing Services (ECS) and Electronic Funds Transfer (EFT) was a thrust area during the year. Development included initiatives aimed at opening new clearing houses, designing multiple net settlement systems, technology upgradation relating to modes of payment and funds transfer and the implementation of systems aimed at better funds management by banks and their constituents. The integration of these strategies within the Reserve Bank and across the financial sector would ensure completion of the reform process. The ultimate objective is to set up a Real Time Gross Settlement (RTGS) system in an on-line environment in which various payment and settlement systems would be integrated. Several factors have impacted upon the pace and sequencing of payment system reform, *viz.*, (i) the different degrees of computerisation in the financial system; (ii) geographical spread of the banking sector; (iii) defining the regulatory role of the Reserve Bank in relation to the payment systems; (iv) systemic risks in payment and settlement systems; (v) legal infrastructure; and (vi) impact of payment and settlement system reforms on the conduct of monetary policy.

13.4 Issues relating to clearing operations, electronic funds movement systems, the Centralised Funds Management System (CFMS) and the process of moving towards a RTGS are discussed in the sub-section on developments during the year. This is followed by discussion on institutional measures for the modernisation of the payment and settlement system covering consolidation of

the existing systems and improvement in operational efficiency, upgradation of technology and the expansion of electronic services and security considerations in an integrated payment and settlement system. The important issues covered are queuing and message processing for the RTGS, strengthening of the INFINET, including Structured Financial Messaging Solution (SFMS), security services, legal issues, the deliberations of the working groups set up by the Reserve Bank on systems reform and a medium-term perspective for the on-going modernisation of the payment and settlement system.

DEVELOPMENTS DURING 2000-01

13.5 The imperatives for accelerating the integrated development of the payment system are emerging out of the rising turnovers in the financial markets and integration of various segments in response to financial sector reforms. The switchover from physical currency to paper-based payment instruments and to electronic media has warranted technological upgradation in clearing arrangements. This is reflected in the rising value of transactions put through cheque clearances, the ECS and the EFT ([Table 13.1](#)).

Table 13.1 : Clearing and Settlement Operations

Transaction	Rupees crore	
	2000-01	1999-00
1	2	3
Cheque clearances through MICR	22,642	21,727
Cheque Clearances in four Metropolitan Centres	21,871	19,679
Ratio of Cheque Clearance to GDP#	489.0*	471.7
Value of ECS Transactions	3,642	1,475
Value of EFT Transactions	137	79
Daily Turnover in Financial Markets		
Central Government Dated		
Securities Market	4,512	3,389
Call/Notice Money Market	32,157	33,382
Equity Market (BSE)	3,984	2,729
Equity Market (NSE)@	5,337	3,303

* Estimated.

In per cent.

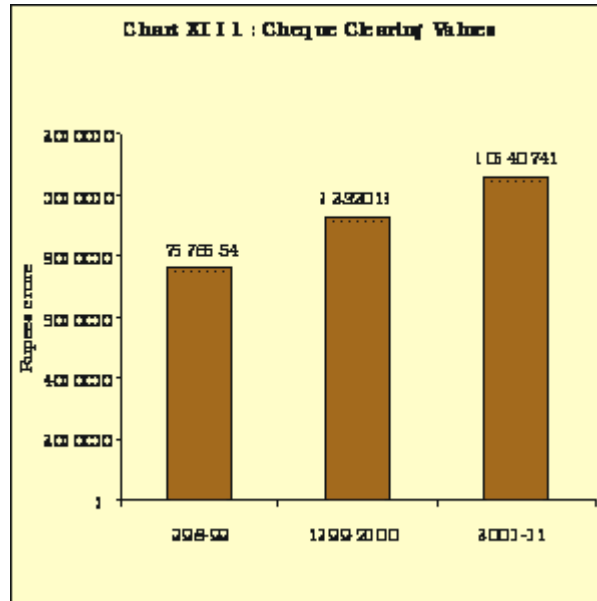
@ Pertains to capital market segment.

Clearing Functions

13.6 In line with international trends, the value of transactions cleared through the domestic cheque clearing system has grown rapidly, showing an increase of 14.2 per cent during 2000-01 over and above the growth rate of 21.9 per cent in the previous year ([Chart XIII.1](#)). The ratio of cheque clearance values to GDP has been showing a consistent growing trend.

13.7 Continuing the process of introduction of MICR-based cheque processing at centres with substantial clearing volumes, seven more centres were brought under the purview of MICR-based clearing during the year taking the total number of MICR centres to twenty three. MICR-

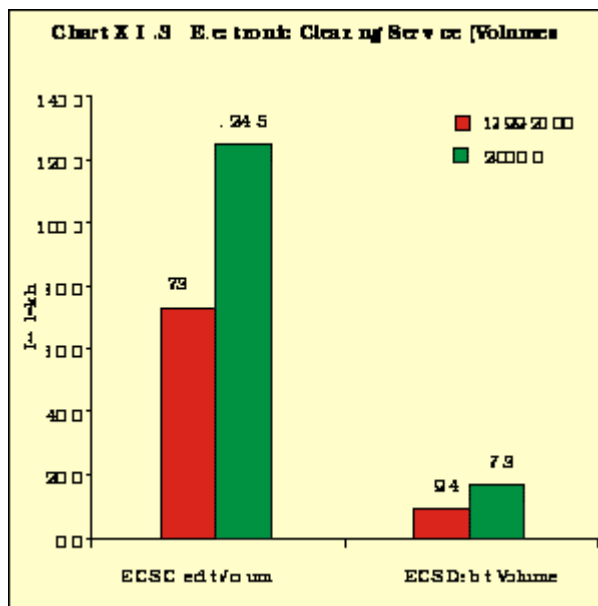
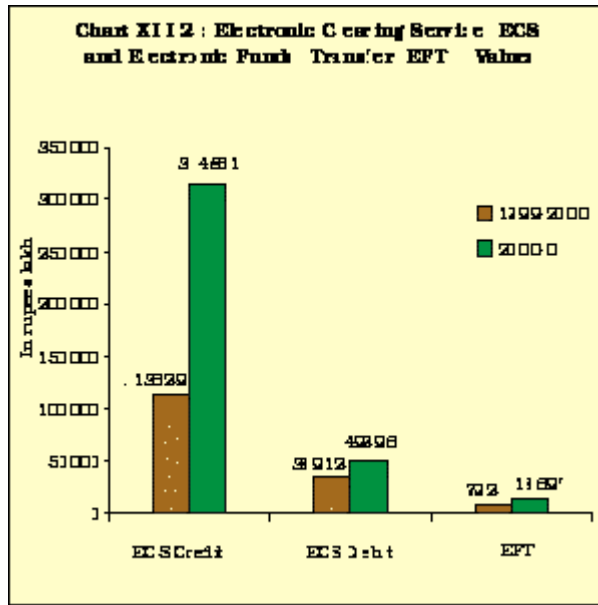
based clearing at seven more centres has been planned for implementation in the near future. Clearing operations are now centred around the 986 clearing houses in the country, with about 65 per cent of the value routed through the computerised clearing houses at the major centres where the MICR technology is in use.



Electronic Funds Movement Systems

13.8 Emphasis continued to be given to increasing the levels of usage of electronic funds movement systems. During 2000-01, six more centres were added to the ECS - Debit Clearing network while eleven more centres were included under the coverage of EFT. Substantial growth was registered in the usage of the ECS -Credit Clearing with 217 users availing of this facility as on March 31, 2001 as against 179 users as on March 31, 2000. The number of users increased to 235 by July 31, 2001. Volumes of ECS - Credit Clearing transactions reached a level of 124.5 lakh during 2000-01, registering a growth rate of 70.4 per cent over the previous financial year. ECS - Debit Clearing too registered an impressive growth of 83.4 per cent, ending the year with a volume of 17.28 lakh transactions ([Charts XIII.2](#) and [XIII.3](#)).

13.9 The EFT, intended to be a mechanism for retail funds transfer, showed a substantial growth during 2000-01. While the average volume of transactions under the EFT increased by 7.3 per cent, the rise in terms of value was 72.9 per cent. Fifteen centres are now part of the EFT network, bringing the total number of bank branches connected by the EFT network to about 8,500.



13.10 The thrust on the large-scale usage of electronic-based funds movement in the form of the ECS - both for credit and debit - and the EFT is being further strengthened. Recognising the need for funds movement across cities in a networked environment, the facility of the 'Centralised ECS Credit', whereby a corporate user could furnish ECS data at one centre with the credit to be disbursed at many other centres, is being provided. The scheme ensures quick, safe and efficient movement of funds for repetitive small value transactions such as credit of interest arising from fixed deposits, dividend from shares, refund amounts and the like.

Centralised Funds Management System

13.11 The development of the Centralised Funds Management System (CFMS), which enables funds managers of banks to obtain a national position of balances in their accounts with the Reserve Bank, was completed during the year, with the software ready for installation at the four major metropolitan centres. The first phase of the project providing for the 'funds enquiry' stage is being implemented and banks can obtain information on their funds position at any point of time. The second phase of the project, scheduled to be completed during 2001-02, would encompass funds transfers across the seventeen locations of the Reserve Bank where Deposit Accounts Departments (DADs) exist.

Real Time Gross Settlement System

13.12 The process of finalising the RTGS design specifications covering the entire gamut of the policy, operational and implementation issues was completed during the year. A Systems Requirements Specification (SRS) document was created for serving as the base for the process of tendering from international software houses which have implemented the RTGS elsewhere in the world. The process of evaluation of the technical bids of the potential vendors was completed and commercial evaluation of the tenders is under progress.

INSTITUTIONAL MEASURES

13.13 The Reserve Bank continued to focus on the phased strengthening of existing paper-based systems, expansion of clearing and settlement mechanisms to cover all the centres of banking activity in the country, setting up of regional and zonal clearing grids, improving collection and clearing of inter-city cheques and expanding the coverage of applications to cover customer payments and cheques, currency chest transfers as well as transactions in Government securities. Upgradation of technology, introduction and expansion of electronic payment services such as EFT and ECS, technological improvement in the existing cheque clearing services with the introduction of imaging of cheques and standardisation of technology platforms constitute the developmental initiatives. Integrated securities and funds settlement, money market dealing systems, the RTGS system and the linking of all centres of financial activity through a reliable communication network comprise the agenda for an integrated payment and settlement system.

13.14 One of the essential requirements of the RTGS system is the need to provide additional liquidity to the participants. The Reserve Bank is working out the modalities of providing intra-day credit, on a collateralised basis, in the form of repos to be settled/adjusted by the end of the day. These credit facilities would be provided at a flat rate irrespective of the quantum of credit.

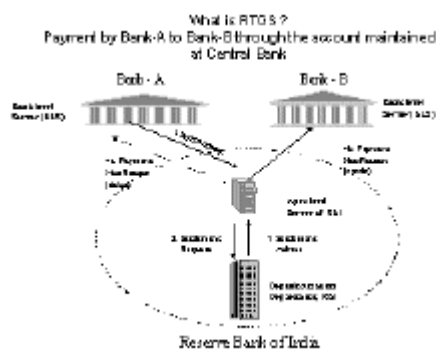
13.15 A key component of the RTGS system is the sub-system of queuing of RTGS messages pending settlement. While the general principle of 'First-in-First-Out' (FIFO) would be the base for the queuing mechanism for the Indian RTGS system, there would be enhancements in the form of priority assignment and potential gridlock identification by the software on the basis of pending queues ([Box XIII.1](#)).

13.16 Initiatives for the establishment of the RTGS hinge upon participants (*i.e.*, banks, SGL account holders including those of the Primary Dealers and secondary dealers of government securities) joining the INFINET. The network, which initially comprised of only the public

sector banks, has been opened up for participation by the other categories of members and 57 members are now part of the network. As many as 667 VSATs have also been installed for facilitating the members' access to the network. The rules and regulations governing the membership to INFINET have been finalised. The INFINET would ensure that messages are sent across participant institutions in a safe and secured mode using the SFMS ([Box XIII.2](#)).

Box XIII.1 Queuing and Message Processing for RTGS

The RTGS provides for continuous (*i.e.*, in real time) processing and settlement of funds transfers. The entire system is based on the concept of the 'Y' topology, which ensures that payment messages emanate from a sending bank and are received by the Reserve Bank through an intermediate processor - the Inter-Bank Funds Transfer Processor (IFTP)-with the beneficiary bank receiving the intimation of credit from the settlement account processor combined with the IFTP.



There would essentially be two sets of queues: for testing for funds availability *en route* to the Integrated Accounting System (IAS) *via* the IFTP of the Reserve Bank and for processing of the debit / credit requests received from the IAS. All transactions would be queued and submitted for funds availability testing on a FIFO basis, *i.e.*, all transactions will be queued in the order in which they were received and the "oldest" transaction in each participant's queue will be tested first. Participants would have the facility to assign priorities to their transactions in most cases, apart from high value multi-lateral net settlement batch transactions such as the operations of the clearing houses and the Reserve Bank (*e.g.*, open market operations). Transactions which fail a funds availability test of the IAS will be returned to the payment queue to be retested periodically. Transactions remaining in the queue at the end of the day after the time for the 'squaring-up' is completed would be removed from the queue and not processed any further. In order to avoid any grid lock situation, there would be an optimising algorithm provided for in the RTGS software which would scan the pending queues periodically during the day - to identify potential grid lock situations and the processing of pending items against matching banks would be performed by the software.

13.17 A key prerequisite for the operationalisation of the INFINET is the level of computerisation in banks. As a result of time-bound schedules imposed on banks for their computerisation, as many as 26 public sector banks achieved the level of 70 per cent of business captured through computerisation, as on June 30, 2001.

Securities Services Systems

13.18 Technological infrastructure requirements for the development of the market for government securities have necessitated the setting up of the Securities Services System, which

is a software-driven trading and settlement system for government securities in a dematerialised environment constituting the Subsidiary General Ledger (SGL) accounts.

13.19 Two basic modules are being developed, *i.e.*, the Negotiated Dealing System (NDS) and the Securities Settlement System (SSS), both of which envisage the setting up of centralised Public Debt Office (PDO) software ([Box IX.2](#)). The development of the software is at an advanced stage and the first set of modules are under trial runs from July 2001. The access to the modules by the constituents including the primary dealers (PDs) in government securities would be through the INFINET.

Legal Issues

13.20 A critical requirement for the acceleration of payments system reform is the appropriate legal framework. The Information Technology Act, 2000 provides for electronic (or magnetic) data to be treated as valid proof in a court of law. The Act, however, specifically states that nothing contained therein would be applicable to negotiable instruments (NI), which continue to be governed by the provisions of the Negotiable Instruments Act, 1881. A Committee set up under the chairmanship of the Principal Legal Adviser of the Reserve Bank to suggest amendments to the NI Act has submitted its recommendations to the Central Government.

13.21 Yet another legal requirement in respect of the payment system-as per the Core Principles of the Bank for International Settlements-is the need for a well-founded legal base for netting systems. On the basis of experiences of other countries where such legislation exists, the Reserve Bank has decided to initiate payment system legislation for which purpose an international consultant firm assisted by an Indian legal expert has been retained. This process would result in the framing of the draft payment system laws which would be the basis for the payment systems predominantly based on newer technology including those on electronic mode. The Task Force on Legal Issues set up by the National Payments Council is examining the need for amendments to various acts as also the need for framing new legislation for the regulation of multiple electronic payments.

Box XIII.2 Structured Financial Messaging Solution (SFMS) on INFINET

The Structured Financial Messaging Solution (SFMS), based on international message standards (SWIFT), is being implemented over the INFINET with a view to ensuring secured message transmission in terms of both computer and communication security. The SFMS, with the hub located at the IDRBT, Hyderabad (on TANDEM computer systems), will be connected to the bank branch network through individual bank gateways. While inter-bank transactions will be archived at the central hub with a bank-level retrieval facility, intra-bank messages would be stored by the bank gateway, though the central hub would take over the function of the bank gateway in case of a bank gateway failure. The SFMS will also have a

RTGS / FIN copy module as is obtaining in the SWIFT.

Public key cryptography would play an important role in providing the needed security services including confidentiality, authentication, non-repudiation and integrity. A Public Key Infrastructure (PKI) would be implemented over the INFINET. Public keys would be bound to their owners by public key certificates - an electronic record that binds the public key of the owner with the public-private key pair - signed by a trusted entity designated as the Certification Authority (CA) who would vouch for the identity of users. The IDRBT would be

functioning as the CA for messages transmitted over the INFINET.

13.22 The internal Working Group on Internet Banking (Chairman: Shri S.R. Mittal) has suggested several measures with a view to ensuring that the authenticity of the message across the Internet is maintained and that only valid users can have recourse to the facility, in addition to the messages being transmitted in a safe mode without being tampered with. The Working Group on Improvements in Monitoring of Clearing Systems (Chairman: Dr. R.B. Barman) has made recommendations relating to measures aimed at risk reduction in clearing systems and accounting of clearing with the purpose of accounting return clearing settlements on the same day. The Advisory Group on Payment and Settlement System (Chairman: Shri M.G. Bhide) to the Standing Committee on International Financial Standards and Codes recommended payment and settlement system reform in line with international best practices ([Box X.4](#)).

13.23 As part of internal improvements, five working groups were constituted for framing the road map for computerisation in the Reserve Bank, to assess the training needs of employees, for process re-engineering of the Banking Department and the house-keeping departments, and for mandatory use of electronic modes of communication within the Reserve Bank. The reports of the Working Groups on a road map for computerisation in the Reserve Bank, the first part of the process re-engineering (House-Keeping), and the mandatory use of electronic modes of communication and assessment of training needs of employees have been submitted.

Outlook

13.24 The Reserve Bank proposes to continue developmental efforts aimed at the setting up of an efficient state-of-the-art payment and settlement system. With a view to moving to the RTGS, the implementation of the initial modules and the development of an IAS have been planned in the immediate future. Pending a full-scale RTGS, the CFMS would be extended. Full imaging is proposed to be implemented at all the four National Clearing Cells (NCC) managed by the Reserve Bank. Besides, the Reserve Bank plans to put in place the NDS and to operationalise the Securities Settlement System by extending the INFINET services to all the banks and eligible financial institutions, with suitable PKI security features. The Reserve Bank would prepare a payment system 'Vision Document' to lay the road map for the adoption of the measures recommended for payment system reforms. The enactment of suitable electronic funds related acts including those for payment systems using electronic channels would also be necessary to develop an efficient payment and settlement system.

XIV - Human Resource Development and Organisational Matters

Developments During 2000-01

Introduction

14.1 The content of human resource development (HRD) within the Reserve Bank has been undergoing significant changes along with the complexities characterising its role in the emerging economic and financial environment. Within the constraints of a relatively rigid organisational, pay and staff structure, the Reserve Bank has been following a strategy of meeting the evolving requirements through innovations in the approach to the development of a professional cadre and fortification of human skill formation through training, promotion, recruitment and transfers. There is an increasing emphasis, to the extent feasible, on the need for constant improvement and adaptation in strategies for placement, career development, performance management, incentive structures and organisational re-engineering.

14.2 Issues relating to promotion, transfer and placement policies, training in the various colleges and zonal training centres (ZTCs) of the Reserve Bank, deputation of officers for training in India and abroad including specialised training in supervision, computer technology, training of personnel of other organisations including those from other countries and workshops are covered under this chapter. Other aspects of human resource development such as developments in technology, promotion of Hindi, industrial relations and staff strength, database management and warehousing, research activities under the Development Research Group, operations and initiatives of the Regulations Review Authority (RRA), parliamentary committees, appointments and retirements relating to the central/local boards and appointment/retirement of executives and visits of foreign dignitaries are also covered.

DEVELOPMENTS DURING 2000-01

14.3 In order to enhance the motivation of officers and staff, the heads of central office departments, regional offices and the training colleges were advised to initiate measures to create an atmosphere of openness and trust, encourage collaboration, team spirit and proactive and innovative behaviour, improve work ethics, empower and motivate employees and help them develop leadership skills. Five Regional HRD cells, each with an HRD Officer, were set up on an experimental basis. The HRD cells are expected to strengthen the hands of Regional Directors and heads of departments in carrying out various HRD activities.

Training

Bankers Training College, Mumbai

14.4 The Bankers Training College conducted 113 programmes in which 2,436 participants were trained during 2000-01 as compared with 95 programmes in which 2,137 participants were trained in 1999-2000.

Reserve Bank Staff College, Chennai

14.5 The Reserve Bank Staff College conducted 140 programmes during 2000-01 in which 2,949 officers were trained as against 109 programmes benefiting 2,489 officers in 1999-2000. The College also conducted the 36th programme on "Investment and Retirement Planning" for retiring officers.

College of Agricultural Banking, Pune

14.6 The College of Agricultural Banking (CAB) conducted 153 programmes in which 3,179 officers were trained during 2000-01 as against 124 programmes in which 2,596 officers were trained in 1999-2000. It has been decided to establish a Training and Research Centre for Non-Banking Financial Companies (NBFCs).

Zonal Training Centres

14.7 The zonal training centres (ZTCs) at the four metropolitan centres cater exclusively to the training needs of employees in Class III and Class IV. During 2000-01, the ZTCs conducted 100 programmes for 2,013 Class III employees and 17 programmes for 313 Class IV employees as against 86 programmes involving 1,660 employees in Class III and 16 programmes involving 312 employees in Class IV in 1999-2000. Under the Retirement and Investment Planning Programme, 110 in Class III and 97 in Class IV employees were trained during the year.

Deputation of Officers for Training in India and Abroad

14.8 During 2000-01, 383 officers were deputed by the Reserve Bank to participate in training programmes, seminars and conferences organised by various external management/banking institutes in India. In addition, 49 officers were deputed for 36 weeks of training at select commercial banks under the scheme of Commercial Bank Training (8th Batch). A training programme on Attitudinal Development and Customer Service was conducted for the Cash Department staff in New Delhi by an external agency. Sixty one members of staff including assistant treasurers, tellers, coin note examiners (CNE), *etc.*, benefited from the programme. One hundred and twenty two officers were deputed by the Reserve Bank to attend training courses, seminars, conferences, workshops, *etc.*, conducted by banking and financial institutions in 22 countries abroad. Under the Golden Jubilee Scheme, four officers were selected in 2000-01 for pursuing higher studies abroad. The total number of officers deputed under the scheme stands at 59. During 2000-01, one officer was selected and granted study leave for pursuing higher studies under the Study Leave Scheme and another officer was granted sabbatical under the scheme for grant of sabbatical to senior officers.

Specialised Training in Supervision

14.9 The Department of Banking Supervision (DBS) has undertaken a number of training initiatives to equip its officers to supervise banks more effectively in the new banking environment. These initiatives, which began in 1999-2000, focus mainly on training in the area of risk management and inspection of banks in a computerised environment, using new tools and techniques. The concepts learned in these programmes were reinforced by on-job-training (OJT)

with various foreign and private sector banks during February-July 2000. The DBS organised a two-week training programme on Integrated Bank Management and Supervision covering areas such as risk assessment and management, Asset Liability Management (ALM), internal controls, accounting principles and NPA analysis, with 25 officers of the rank of Assistant General Manager attending this programme. The DBS also organised a training programme, with the help of outside consultants, to train its officers in the use of Audit Command Language (ACL), a powerful data extraction and interrogation software tool for inspection in a computerised environment. The training programme was conducted in two phases, introductory and advanced. A training programme on electronic data processing (EDP) Audit, conducted by the Institute of Chartered Accountants of India (ICAI), was organised in August 2000 for the officers of the Department. A training policy for officers focusing on enabling the officers to achieve the level of competence required to fulfil their individual roles and career expectations was approved by the Board for Financial Supervision (BFS) in August 2000.

Training Programmes for NBFC Personnel

14.10 The Department of Non-Banking Supervision (DNBS) also conducted training programmes for executives of NBFCs in order to familiarise them with the genesis and focus of the Reserve Bank's regulations. These programmes aim to disseminate a better understanding of the role and responsibilities of the NBFCs to their depositors as also to the Reserve Bank, as well as of systems and procedures, so as to improve their regulatory compliance. These programmes have been conducted at the CAB, Pune and replicated at Chandigarh and Jalandhar. Similar programmes are also planned to be held at other centres.

Training of Police Officials

14.11 One-day special seminars for the personnel of State Governments and the police were conducted to equip them with the skills to detect illegal deposit taking by NBFCs or unincorporated bodies engaged in financial activities and to apprehend the wrong doers as also to protect the interests of depositors. Three such seminars were conducted by the Reserve Bank's Chennai office, and a programme each at Belapur (Mumbai), Panaji and Chandigarh. Faculty support was provided to the Central Bureau of Investigation (CBI) Academy at Ghaziabad on issues pertaining to NBFCs.

Training in Computer Technology

14.12 The Reserve Bank continued to provide incentives to staff members to acquire qualifications in the field of computers. The scheme of base-level computer training for officers and Class III employees introduced by the Reserve Bank in November 1995 to cope with the increasing training needs in this area was liberalised. Regional offices and Central Office departments were delegated powers to depute officers and Class III employees to reputed computer training institutions to gain working knowledge of computers. Up to end-June 2001, 2,948 Class III employees and 1,276 officers were trained. Furthermore, with a view to enabling the officers to acquire more proficiency and skills in computer related areas which are directly linked to their job performance, 297 officers in various offices and departments were imparted training under the scheme during the year. In addition, 98 officers were deputed to various

training institutions such as the Indian Institute of Management, Administrative Staff College of India and National Institute of Bank Management during 2000-01 for computer training.

Training Imparted to Officials from Other Countries

14.13 During 2000-01, 115 officials from 11 countries, viz., Bahrain, Bangladesh, Bhutan, Ghana, Iran, Japan, Nepal, Sri Lanka, Sudan, Tanzania and Uganda were trained/provided study attachment facilities at the Reserve Bank's training establishments and central office departments. The Bankers Training College also conducted an off-site programme in Tanzania on computer-based financial and accounting system.

Development Centre Workshops

14.14 Three workshop-cum-labs on Development Centre were conducted, one each with the help of the Academy of Human Resources Development (AHRD), Hyderabad, Institute of Banking Personnel Selection (IBPS), Mumbai, and Alpha Assessment Centre, Mumbai. After gaining experience from the outside experts, the Reserve Bank has started conducting full-fledged Development Centre programmes in its training colleges with limited support from outside consultants. Two such programmes were conducted at CAB, Pune for Grade C officers.

Technological Development

14.15 A sophisticated Human Resources Information System (HRIS) application package has been developed in-house. The ORACLE-based HRIS, with a client-server architecture, is being maintained at the Reserve Bank's Central Office at Mumbai and is being installed at the regional offices/central office departments as well.

Promotion Policy

14.16 With effect from 2001, officers in Grade 'B' being considered for promotion to Grade 'C' are required to appear for an interview to be conducted by the Reserve Bank Services Board, for determining their suitability for promotion. A comprehensive review of the existing Performance Appraisal system for officers is in progress, with inputs from an outside expert and a cross-section of officers from offices at various centres.

14.17 A career progression/development strategy for direct recruit officers in Grade 'B' was initiated. Pending finalisation of a formal system for this purpose, an officer was designated as a Nodal Officer to devise measures for enhancing, in the organisational context, the faculties, competence and aptitude of these officers. The Nodal Officer is expected to periodically interact with the directly recruited officers and monitor their training during probation, placement, rotation, career-growth and motivation level.

14.18 A scheme to grant out of turn promotion/ increments for outstanding sports persons was introduced, on the lines of the scheme in vogue in the public sector banks. It would also be applicable to handicapped sports persons. The earlier existing scheme for deputation/ secondment/tour of duty of Reserve Bank officers with other organisations was streamlined and

widened in scope. The objectives of the revised scheme are to broaden officers' perspectives, provide them with alternative job experience and career opportunities and lend temporary manpower support to other organisations in the public interest.

Transfer and Placement Policy

14.19 The Reserve Bank's transfer and placement policy introduced in February 1996 was revised. The revised policy seeks to forge the transfer system into an effective policy instrument to achieve the organisational objectives, as also to minimise the dislocation and inconvenience associated with transfers, dovetailing the placement policy with the transfer system.

Summer Placement Scheme

14.20 The Reserve Bank's Summer Placement Scheme, which enables students pursuing postgraduate programmes in management to work on relevant short-duration summer projects in the Reserve Bank, was revised. The main highlights of the revised scheme include improvement in stipend paid, enlargement of the scope of the scheme to cover the students pursuing postgraduate courses in computer applications (MCA) in universities and institutes affiliated to universities and delegation of powers to certain offices for conducting the complete summer placement exercise locally.

Placements for Recently Retired /About to Retire Staff of the Bank

14.21 In response to a request received from Maxwell Stamp Plc., UK for details of recently retired or about-to-retire staff who might be interested in offers of suitable post-retirement placement, the Reserve Bank forwarded applications from senior officers interested in such placements.

Reserve Bank Employees' Early Severance Scheme

14.22 An Early Severance Scheme (ESS) was introduced which covers all categories of Reserve Bank's permanent employees. The objective is to provide employees who have been superseded more than once and wish to take voluntary retirement with a financial incentive to reduce their demotivation on account of their non-selection for promotion.

Promotion of Hindi

14.23 The Reserve Bank continued its efforts for promotion of the use of Hindi consistent with the Official Language Policy. Hindi workshops and training programmes were arranged for imparting training to officers and other staff for doing work in Hindi. The training establishments of the Reserve Bank conducted 15 programmes on bilingual software packages besides conducting separate sessions on the use of Hindi on computers in the computer training programmes of a general nature.

14.24 The year was celebrated as the Golden Jubilee Year of Rajbhasha in the Reserve Bank. Three publications containing major achievements of the Reserve Bank in various fields were

brought out, including the compilation of important decisions of Official Language Implementation Committee of the Reserve Bank. The Reserve Bank launched its website in Hindi which contains valuable information for public sector banks and financial institutions. The first issue of "Hindi Interface", a quarterly newsletter on computer bilingualisation, was also brought out by the Reserve Bank.

Industrial Relations

14.25 The industrial relations remained peaceful during 2000-01. The Reserve Bank reached settlements with the All India Reserve Bank Employees' Association (AIRBEA) and the All India Reserve Bank Workers' Federation (AIRBWF) on their Charter of Demands in regard to revision of pay and allowances and other service conditions. These settlements also provided for increased productivity and commitment to ensure good customer service through greater degree of computerisation and streamlining of systems and procedures. The Charter of Demands in respect of officers was also settled through discussions with the Officers' Associations.

Recruitment

14.26 During 2000, the Reserve Bank recruited 371 employees, of which 106 were from Scheduled Castes (SC) and Scheduled Tribes (ST) categories constituting 28.6 per cent of total recruitment ([Table 14.1](#)).

Table 14. 1 : Recruitment During 2000

Category	Total Recruited	Of which		Percentage	
		SC	ST	SC	ST
1	2	3	4	5	6
1. Class I	80	21	17	26.3	21.3
2. Class III	90	15	1	16.7	1.1
3. Class IV	201	37	15	18.4	7.5
<i>of which</i>					
a) Sweepers	26	8	5	30.8	19.2
b) Others	175	29	10	16.6	5.7
Total	371	73	33	19.7	8.9

SC : Scheduled Caste;

ST : Scheduled Tribe

14.27 The staff strength as on December 31, 2000 stood at 31,275 as compared with 31,737 a year ago. Of the total staff, 7,924 belonged to the SC/ST ([Table 14.2](#)).

14.28 The Reserve Bank's Liaison Officer for SC/ST employees conducted the inspection of reservation rosters maintained at the Reserve Bank's New Delhi office. Meetings between the Management and the representatives of the All India Reserve Bank Scheduled Caste/Scheduled Tribe and Buddhist Employees Federation were held on four occasions during the year to discuss issues relating to the implementation of reservation policy in the Reserve Bank. In accordance

with the Central Government's policy on reservation for Other Backward Classes (OBCs), the Reserve Bank has introduced 27 per cent reservation in favour of OBCs in its recruitments. The total representation of OBCs in the Reserve Bank as at end-December 2000 was 65 (0.82 per cent) in Class I, 68 (0.49 per cent) in Class III and 323 (3.38 per cent) in Class IV.

14.29 The total strength of ex-servicemen in the Reserve Bank as at end-December 2000 stood at 117 in Class I, 596 in Class III and 1,154 in Class IV. The total number of physically handicapped employees in Class I, Class III and Class IV cadres in the Reserve Bank stood at 60, 316 and 149, respectively, as at end-December 2000.

Premises Department

14.30 During 2000-01, the infrastructure facilities in a number of the Reserve Bank's existing premises were upgraded/renovated for smooth functioning in a computerised environment. A state-of-the-art backbone/ structured cabling system to integrate all the local area networks (LAN) was commissioned in 14 offices with the ultimate objective of connecting all the offices of the Reserve Bank at user level through the INFINET/the Reserve Bank's Wide Area Network (WAN) and creating a secure payment system backbone for applications like RTGS, EFT *etc.* New generation electronic telephone exchanges with voice mail system were installed in certain offices. To enhance security and surveillance, a closed circuit TV system was provided in four offices.

**Table 14. 2 : Total Staff Strength During 1999 and 2000
(As at end-December)**

Cadre	Category-wise strength						Per cent to total strength	
	Total strength		SC		ST		SC	ST
	2000	1999	2000	1999	2000	1999		
1	2	3	4	5	6	7	8	9
Class I	7,881	7,481	776	718	208	184	9.8	2.6
Class III	13,837	14,641	2,067	2,174	1,093	1,111	14.9	7.9
Class IV	9,557	9,615	2,976	2,947	804	792	31.1	8.4
Total	31,275	31,737	5,819	5,839	2,105	2,087	18.6	6.7

Central Database Management System for Reserve Bank of India

14.31 The first phase of the Data Warehouse project, Central Database Management System (CDBMS), was completed during the year. The study of existing operational information systems and information requirements of the Reserve Bank was completed. Individual department-wise reports were consolidated into a Bank-level report wherein information requirements for decision support were cast into analytical domains or subject areas.

14.32 The second phase, covering the design of technical architecture, data modeling and detailed system design for the selected subject areas, has been taken up. The Technical Committee appointed by the Policy Group has also finalised the broad contours of the hardware and software components of the CDBMS. A separate Working Group examined issues relating to information security, and access privileges/restrictions both within and outside the Bank. Initial modules of the CDBMS are expected to be operational in a year ([Box XIV.1](#)).

Development Research Group

14.33 Since its inception in 1991, the Development Research Group (DRG), has served as a forum for constructive debate and interaction among professional economists and policy makers on subjects of current interest. Since March 2001, the DRG handles the arrangements relating to the Reserve Bank's endowment scheme. It would seek to establish formal links with the research units of domestic financial institutions in order to build up a financial sector research network as well as to track the research activities of major central banks. It would, in collaboration with relevant departments of the Reserve Bank and training institutes, also strive to upgrade the analytical and technical skills of the Reserve Bank staff.

Box XIV.1

Data Warehouse - Technology for Decision Support

A data warehouse is a state-of-the-art system of database management defined as a subject-oriented, integrated, time-variant and non-volatile collection of data in support of the management's decision support process. It creates a decision support environment that leverages data stored across various sources, organises it into a standardised format and schema and delivers it to the decision makers across the organisation in such a manner that enables them to access, view and analyse information irrespective of their technical skill level. Recent technological developments such as multi-dimensional databases, On-Line Analytical Processing (OLAP) tools, client /server architecture, web publishing tools, *etc.*, have made it possible to conceive and build an integrated data repository which allows users quick and multi-faceted access to this repository.

Source systems or operational systems are not part of the data warehouse but they represent the data capturing and processing systems which provide data to the warehouse at pre-determined intervals.

The dimensional data warehouse (Central repository and data marts) is the most important component of data warehouse and a modeling discipline called dimensional modeling is used for designing as against entity-relationship (E/R) modeling used in relational database management system. The OLAP is a new generation *ad hoc* query and reporting tool that provides a unified multi-dimensional view of large quantities of data. The OLAP tools incorporate a user interface designed to make exploration of the data in a highly user-friendly way within the spreadsheet paradigm. When the model is defined directly to a relational database, the technology is known as Relational OLAP (ROLAP). Alternatively, when a specialised multidimensional database (MDDDB) is created in accordance with the model, the technology is known as Multidimensional OLAP (MOLAP). Metadata contains information about data such as definition, structure, and content of the system, end-user views, and data sources. It includes integration and transformation rules used to populate the database, history of update and refreshments, security authorisation, etc. End-user data access tools for the data warehouse could be based on the traditional client-server architecture or on the more recent browser based interface. The tools also provide limited standard analytical capabilities, with a facility to download the data into the user machines for more rigorous analysis using specialised tools.

References

1. Inmon, W. H. (1996), *Building the Data Warehouse*, John Wiley and Sons, Inc.

2. Kimball, Ralph. (1996), "*Data Warehouse Toolkit*", John Wiley & Sons, Inc.

14.34 During 2000-01, the DRG completed and published four studies entitled "Productivity in Major Manufacturing Industries in India", "Modernising Indian Agriculture: Priority Tasks and Critical Policies", "Capital Adequacy Requirements and Behaviour of Commercial Banks in India: An Analytical and Empirical Study" and "A Leading Index for India's Exports". Taking these four studies into account, the DRG has so far published twenty-three studies on a wide range of subjects relating to monetary policy, public finance, financial markets, real activity and the external sector. The DRG also undertook a study on the Public Accounts of State Governments at the behest of the Finance Secretaries of State Governments, the broad findings of which were presented at the Seventh Conference of State Finance Secretaries at the Reserve Bank in November 2000.

Dissemination Policy

14.35 Transparency is the cornerstone of dissemination policy in the Reserve Bank under which information on areas relating to the economy, banking and financial sector is released with stringent standards of quality and timeliness. Dissemination of information takes place through several channels such as press releases, publications - regular and occasional - notifications, Frequently Asked Questions (FAQs), advertisements and the website. The annual April and October monetary and credit policy statements, speeches and interviews given by senior executives articulate the Reserve Bank's assessment of the economy and the financial system.

14.36 During 2000-01, the Reserve Bank continued to release data under the Special Data Dissemination Standards (SDDS) of the IMF. The education drive for depositors of Non-Banking Finance Companies (NBFCs) initiated in 1999-2000 received greater focus and intensity in 2000-01. The objective of the drive was to empower the depositors of NBFCs to make good investment decisions. For this purpose, the Reserve Bank released advertisements in print and electronic media. Four separate films were produced and released on Doordarshan's national and regional channels as also on Star News and Zee News with a total telecast time of over 10,600 seconds. Advertisements were also released in 24 publications published in 13 languages. Efforts were undertaken to familiarise the public with the security features of genuine currency notes. For this purpose, a film depicting security features of Rs.500 notes was released in electronic media. An advertisement was also released on the subject with focus on vernacular languages. In all, two rounds of advertisements were released in 43 publications in 13 languages.

14.37 During the year under review, the Government of India authorised branches of commercial banks to sell and service Relief Bonds. Information was provided to the general public about the availability of these bonds at bank branches close to them and in demat form through advertisements. Three films were released on DD National, DD Metro, Star News, Start Plus and Zee News with a total telecast time of over 10,000 seconds. Advertisements were released in 14 publications in two languages.

14.38 A new initiative was taken by several offices and departments in setting up helpdesks to clarify doubts raised by the general public regarding the Reserve Bank's policy through e-mail. The maximum number of queries, received and attended, related to exchange control issues.

14.39 Apart from such special efforts, the Reserve Bank continued to use the regular channels of information dissemination, namely, press releases and the website. During the year under review, the Reserve Bank issued 1,755 press releases and added 850 mega-bytes (MBs) of material to its website taking the volume of information available on the website to over 1.6 giga-bytes (GB). To pro-actively reach information to the public, the Reserve Bank offered to send by e-mail information in packets. For this purpose, it provided a registration form on its website. A total of 1,815 requests were received by end-June 2001; a total of 920 and 695 requests were received in respect of the Monetary and Credit Policy Statements announced in October 2000 and April 2001, respectively.

14.40 The Library of the Department of Economic Analysis and Policy in the Central Office has an important role in the storage and provision of information services within the Reserve Bank. It has a collection of about 1,26,000 books and other documents, 802 journals and financial reports, a CD ROM collection of 950 and on line access to various electronic databases, for books, journals, journal articles and other publications. The Library provides information support to various departments, training colleges and libraries in regional offices. During 2000-01, electronic information dissemination was made operational, using an integrated library application software and Corporate Mail with effect from January 2001. During the year the Library also organised library user training programmes.

Regulations Review Authority

14.41 The Regulations Review Authority (RRA), which was constituted in the Reserve Bank on April 1, 1999, for reviewing the central bank's rules, regulations and reporting systems, on the basis of suggestions in this regard from the public at large, market participants and other users of Bank's services, ceased to operate from the close of business on March 31, 2001 on expiry of its term. The Reserve Bank has, however, decided to make the review exercise an integral part of its internal system in view of the favourable response to the scheme. Accordingly, an alternate mechanism was put in place under the charge of an Executive Director for dealing with such applications from April 1, 2001. This is in consonance with the Reserve Bank's endeavour to further simplify procedures, reduce paper work and improve customer service, on an on-going basis.

14.42 During two years of its operations, the RRA received a number of suggestions covering various spheres of activities in the Bank and several of them were implemented. This has helped to remove the redundancies in the reporting system, simplify rules and internal procedures in various functional departments and enabled better customer service. It also created an awareness in the Reserve Bank to be more responsive to the public needs. A major achievement of the RRA was preparation of master circulars on important areas of compliance by banks and institutions for the benefit of its users.

Parliamentary Committees

14.43 The Public Accounts Committee of the Lok Sabha headed by Shri N.D Tiwari, Member of Parliament visited the Reserve Bank on July 10, 2000 and held discussions with the officials,

inter alia, on matters relating to management of internal debt.

14.44 The Standing Committee on Finance, headed by Shri Shivraj V. Patil, recorded the oral evidence of the officials of the Reserve Bank at Mumbai on September 18, 2000 in regard to the objectives, performance and future prospects of financial institutions.

14.45 The Parliamentary Committee on Welfare of SCs & STs, headed by Shri Ratilal Kalidas Varma, Member of Parliament held discussions with the officials of the Reserve Bank during its visit to Mumbai on October 16, 2000.

14.46 The department-related Parliamentary Standing Committee on Industry, headed by Shri Ramdas Agarwal, held discussions with the officials of the Reserve Bank at Mumbai on June 15, 2001 on credit to SSI sector by financial institutions.

14.47 The Parliamentary Committee on the Welfare of SCs & STs, headed by Shri Kariya Munda, visited Mumbai on June 28, 2001 and had discussions with the officials of the Reserve Bank.

14.48 The officials of Reserve Bank of India made presentations on the Financial Responsibility and Budget Management Bill, 2000 before the Standing Committee on Finance at New Delhi on various dates during April-June 2001.

Central Board/Local Boards

14.49 Dr. Bimal Jalan was re-appointed as Governor for a further period of two years commencing from November 22, 2000.

14.50 Shri Vepa Kamesam and Shri G.P. Muniappan were appointed as Deputy Governors of the Bank with effect from July 1, 2001.

14.51 Shri Ajit Kumar, Finance Secretary, Government of India, Ministry of Finance, Department of Economic Affairs, was nominated as the Government nominee Director on the Central Board under Section 8(1) (d) of the RBI Act, 1934 with effect from November 23, 2000 in place of Dr. E.A.S. Sarma.

14.52 Shri Y.H. Malegam was re-appointed as Member of the Western Area Local Board of the Reserve Bank with effect from November 27, 2000 and was re-nominated as Director of the Central Board under Section 8(1)(b) of the RBI Act, 1934 with effect from the same date. Prof. Mihir Rakshit, Dr. A.P.J. Abdul Kalam and Shri K. Madhava Rao were appointed as Members of the Eastern, Northern and Southern Area Local Boards of the Reserve Bank respectively, with effect from November 27, 2000 and were nominated as Directors of the Central Board under Section 8(1)(b) of the RBI Act, 1934 from the respective Local Boards, with effect from the same date. S/Shri J.J. Irani, P.N. Dhar and E.A. Reddy ceased to be the Directors of the Central Board with effect from November 27, 2000.

14.53 Shri K.P. Singh, Prof. V.S. Vyas, Shri D.S. Brar, Prof. C.N.R. Rao, Shri H.P. Ranina,

Shri N.R. Narayana Murthy, Shri R.N. Tata, Dr. Amrita Patel, Shri Suresh Krishna and Dr. A.S. Ganguly were nominated as Directors on the Central Board of the Reserve Bank with effect from November 27, 2000 under Section 8(1)(c) of the RBI Act, 1934. Dr. S.S. Johl, Dr. C.H. Hanumantha Rao, Dr. Bhai Mohan Singh, Dr. M.L. Shahare, Shri Vipin Malik and Shri G. Ramachandran ceased to be the Directors of the Central Board with effect from November 27, 2000.

14.54 S/Shri P. D. Chitlangia, A.K. Saikia, Sovan Kanungo and Smt. Kiran Ghai were appointed as Members of the Eastern Area Local Board of the Reserve Bank under Section 9 (1) of the RBI Act, 1934, with effect from May 24, 2001, and Dr. Subrata Ganguly and Dr. Subir Chowdhury ceased to be Members with effect from the said date.

14.55 Shri Prem Nath Khanna, Dr. Ram Nath, Shri Mitha Lal Mehta and Dr. Pritam Singh were appointed as Members of the Northern Area Local Board of the Reserve Bank under Section 9 (1) of the RBI Act, 1934, with effect from May 24, 2001 and Smt. Shobhana Bhartia, Shri Brij Mohan Lall and Shri D.H. Pai Panandikar ceased to be Members with effect from the said date.

14.56 Shri K. Venkatesan, Shri Dattaraj V. Salgaocar, Shri Jayanti Lal Bavjibhai Patel and Prof. Mahendra Singh Sodha were appointed as Members of the Western Area Local Board of the Reserve Bank under Section 9 (1) of the RBI Act, 1934, with effect from May 24, 2001, in place of Dr. Bakul H. Dholakia, Shri Pradip Pannalal Shah, Dr. Neelkanth A. Kalyani and Shri Inder Chand Jain, who ceased to be Members with effect from the said date.

14.57 Dr. Ashok Kumar Lahiri, Shri C.P. Nair, Shri S. Ramachander and Dr. M. Govinda Rao were appointed as Members of the Southern Area Local Board of the Reserve Bank under Section 9 (1) of the RBI Act, 1934, with effect from May 24, 2001 and Shri N. Sankar and Shri D. Seetharamaiah ceased to be Members with effect from the said date.

14.58 Consequent upon reconstitution of the Central Board of the Reserve Bank with effect from November 27, 2000, the Board for Financial Supervision (BFS) and the three SubCommittees of the Central Board were also reconstituted in consultation with the Central Board at its meeting held on December 21, 2000. Directors Shri Y.H. Malegam, Dr. Amrita Patel, Shri K. Madhava Rao and Dr. A.S. Ganguly were nominated on the Board for Financial Supervision. BFS was set up by the Central Board of the Reserve Bank of India by means of statutory regulations made in 1994 under Section 58(2) of the Reserve Bank of India Act, 1934, to perform the functions and exercise the powers of supervision and inspection under the aforesaid Act and the Banking Regulations Act, 1949 in relation to different sectors of the financial system, such as banking companies, financial institutions and non-banking institutions. Governor is the Chairman of the BFS and the three Deputy Governors of the Reserve Bank are its members, with one of them, *viz.*, Shri G.P. Muniappan nominated as Vice Chairman.

14.59 The Inspection and Audit SubCommittee (IASC), constituted by the Central Board of the Reserve Bank in the year 1992 to review the Inspection and Audit Reports on various Regional Offices and Central Office Departments, as also their compliance reports, at periodic intervals with a view to giving a sharper focus to the internal audit and inspection exercise and tailoring them towards maximum productivity and efficiency of operations, was reconstituted with

Director, Shri H.P.Ranina as its Chairman and three other Directors *viz.*, Professor V.S. Vyas, Shri D.S.Brar and Shri Suresh Krishna as members. Deputy Governor and Executive Director in-charge of the Inspection Department and Executive Director in-charge of the Department of Administration and Personnel Management are other members of the IASC, with Chief General Manager in charge of Inspection Department as its Member-Secretary.

14.60 The Building Sub-Committee, which advises the Central Board on matters relating to building projects of the Bank, was reconstituted with Director Dr. Amrita Patel as the Chairman and Director Shri K.P. Singh as the other Member. There has not been any change in the four technical members of the Sub-Committee, who are engineers/architects of repute. Deputy Governor and Executive Director in charge of the Premises Department are *ex-officio* members of the Building SubCommittee, with the Chief General Manager, Premises Department as its Secretary.

14.61 Director Shri Ratan N. Tata was nominated as the Chairman of the Staff SubCommittee of the Central Board, with Director Prof. Mihir Rakshit as the other Member. Deputy Governor and Executive Director in-charge of Department of Administration and Personnel Management are *ex-officio* Members of the Sub-Committee with the Chief General Manager in charge of the Department of Administration and Personnel Management as its Member Secretary. The Sub-Committee looks into the matters relating to staffing pattern in the Reserve Bank and sanction of posts in various cadre of employees.

14.62 Shri. S.P. Talwar and Shri Jagdish Capoor, Deputy Governors retired from the Bank's service from the close of business on June 30, 2001.

14.63 Shri R.K. Seshadri, former Deputy Governor passed away on August 20, 2000.

14.64 Shri G. Ramanujam, former Director on the Central Board of the Bank passed away on June 26, 2001.

Appointment/Retirement of Executives

14.65 Dr. A. Vasudevan, Executive Director retired from the Bank's service from the close of business on August 31, 2000.

14.66 Shri D.P. Sarda was appointed as Executive Director with effect from September 1, 2000.

14.67 Dr. R.B. Barman was appointed as Executive Director with effect from November 3, 2000.

14.68 Shri I.D. Agarwal, Executive Director retired from the Bank's service from the close of business on December 31, 2000.

14.69 Shri M.G. Srivastava, Executive Director retired from the Bank's service from the close of business on January 31, 2001.

14.70 Shri S. L. Parmar was appointed as Executive Director with effect from February 1, 2001.

14.71 Shri P. R. Gopala Rao, Executive Director, retired from the Bank's service from the close of business on February 28, 2001.

14.72 Shri K.L. Khetarpaul was appointed as Executive Director with effect from March 1, 2001.

14.73 Shri G.P. Muniappan, Executive Director, retired from the Bank's service from the close of business on March 31, 2001.

14.74 Shri Mohammad Tahir was appointed as Executive Director with effect from April 1, 2001.

14.75 Shri J. R. Guha was appointed as Executive Director of Deposit Insurance & Credit Guarantee Corporation (DICGC) with effect from May 1, 2001.

Foreign Dignitaries

14.76 Prof. Willem H. Buiter, Chief Economist, European Bank for Reconstruction and Development, London, visited the Reserve Bank on October 16, 2000 to deliver the seventh L.K. Jha Memorial Lecture.

14.77 A delegation of 8 officials from People's Bank of China, headed by Ms. Yao Guiqin, Deputy Director General, visited the Reserve Bank from November 29, 2000 to December 5, 2000 on a Study Tour.

14.78 Prof. Charles Goodhart, Norman Sosnow Professor of Banking and Finance, London School of Economics, London, visited the Reserve Bank on December 7, 2000 to deliver the Eleventh C.D. Deshmukh Memorial Lecture.

14.79 Mr. Phil Goff, Minister of Foreign Affairs and Trade, New Zealand, visited the Reserve Bank on March 5, 2001.

14.80 Mr. Rob Wright, Deputy Minister (Trade), Canada, visited the Reserve Bank on March 19, 2001.

Auditors

14.81 The accounts of the Reserve Bank were audited by M/s. Kapoor Tandon & Co., Kanpur, M/s. N.C. Rajagopal & Co., Chennai, M/s. P.K. Mitra & Co., Calcutta, M/s. R. K. Khanna & Co., New Delhi, M/s. Chandabhoy & Jassoobhoy, Mumbai and M/s. P. B. Vijayaraghavan & Co., Chennai. While the first three audit firms were re-appointed, the latter three have been appointed for the first time by the Central Government.

XV - The Reserve Bank's Accounts for 2000-01

[Income](#)

[Expenditure](#)

[Appropriation](#)

[Balance Sheet](#)

[Assets](#)

15.1 The key financial results of the Reserve Bank's operations during the year are presented in this chapter.

INCOME

15.2 The total income of the Reserve Bank for the year 2000-01 (July-June), declined by Rs. 112.10 crore (0.5 per cent) from Rs. 21,960.97 crore to Rs. 21,848.87 crore. The decline in income was mainly due to decrease in earnings from domestic sources. However, the earnings from foreign sources increased substantially; its share in total income also increased from 29.7 per cent in 1999-2000 to 46.2 per cent in 2000-01. The sources of income are set out in [Table 15.1](#).

Income from Foreign Sources

15.3 During the accounting year ended June 30, 2001, the Reserve Bank's net earnings from the deployment of foreign currency assets including gold increased by Rs. 3,571.35 crore (54.8 per cent) from Rs.6,514.73 crore in 1999-2000 to Rs.10,086.08 crore in 2000-01 due to the higher average level of foreign currency assets at Rs.1,68,577 crore in 2000-01 as against Rs.1,40,275 crore in 1999-2000 and also a higher return on these assets. In percentage terms, the net earnings on foreign currency assets and gold increased from 4.6 per cent in 1999-2000 to 6.0 per cent in 2000-01 due to higher interest earnings. Excluding gains/losses on account of securities transactions, the net earnings on foreign currency assets and gold worked out to 5.8 per cent for 2000-01 as against 5.0 per cent for 1999-2000. There was capital gain (net) on sale of securities at Rs. 378.38 crore (realised capital gain of Rs.606.08 crore and depreciation of Rs.227.70 crore) during the year 2000-01 as compared to capital loss of Rs. 464.68 crore (depreciation of Rs.496.53 crore and realised capital gain of Rs. 31.85 crore) in 1999-2000. The foreign securities held in the Reserve Bank's portfolio are valued at the end of every month at the lower of book value or market rate. If the market rate is lower than the book value, depreciation to the same extent is adjusted against current income. Appreciation is neither taken to profit and loss account nor to the reserves. Such unrealised appreciation in the value of foreign securities held in the Reserve Bank's portfolio at the end of June 2001 was Rs.703.29 crore as against Rs. 216.97 crore at the end of June 2000.

Table 15.1 : Income

Item	(Rupees crore)				
	2000-01	1999-2000	1998-99	1997-98	1996-97

1	2	3	4	5	6
A. Foreign Sources					
Interest, Discount, Exchange, Commission	10,086.08	6,514.73	6,306.59	5,687.34	4,585.66
B. Domestic Sources					
Interest	11,314.12	14,928.38	12,642.96	7,999.73	6,954.88
Discount	211.59	323.11	87.74	21.37	1,601.88
Exchange	0.85	0.14	0.19	0.37	0.25
Commission	210.37	185.62	175.02	365.03	105.16
Rent realised and others	25.86	8.99	7.83	9.80	9.03
Total – Domestic	11,762.79	15,446.24	12,913.74	8,396.30	8,671.20
Total Income (Gross) [A+B]	21,848.87	21,960.97	19,220.33	14,083.64	13,256.86
C. Less transfer to :					
(i) Contingency Reserve	6,202.57	6,554.50	8,917.65	2,158.72	4,204.92
(ii) Asset Development Reserve	704.78	711.55	1,274.59	1,181.71	
Total (i + ii)	6,907.35	7,266.05	10,192.24	3,340.43	4,204.92
Total Income (Net)	14,941.52	14,694.92	9,028.09	10,743.21	9,051.94

Income from Domestic Sources

15.4 Domestic income declined by Rs.3,683.45 crore (23.8 per cent) from Rs.15,446.24 crore in 1999-2000 to Rs.11,762.79 crore in 2000-01. This was mainly due to the decline of Rs.3,198.31 crore in the profits booked on sale of Rupee Securities *i.e.*, from Rs.3,280.54 crore in 1999-2000 to Rs.82.23 crore in 2000-01.

15.5 The interest income received on the Reserve Bank's investment in Government Securities also declined by an amount of Rs.293.22 crore from Rs.8,962.32 crore in 1999-2000 to Rs.8,669.10 crore in 2000-01 due to depreciation in the value of Government Securities adjusted in interest income account. The discount earned on Treasury Bills also came down during 2000-01 due to significantly lower purchases by the Reserve Bank in primary and secondary markets. Despite the reduction in the interest rates applicable to the Ways and Means advances, the interest income on these advances showed a marginal rise of Rs.32.30 crore from Rs.715.83 crore in 1999-2000 to Rs.748.13 crore in 2000-01, reflecting increased recourse by the Central and State Governments to this facility. Interest earnings from loans and advances to banks/financial institutions also rose by Rs.292.33 crore from Rs.1,337.84 crore in 1999-2000 to Rs.1,630.17 crore in 2000-01.

EXPENDITURE

15.6 Total expenditure of the Reserve Bank increased by Rs. 246.60 crore (4.6 per cent) from Rs. 5,340.92 crore in 1999-2000 to Rs. 5,587.52 crore in 2000-01 ([Table 15.2](#)). The increase was largely in respect of non-establishment expenses.

Interest Payment

15.7 Interest payment increased by Rs.22.92 crore (1.2 per cent) from Rs.1,971.88 crore in

1999-2000 to Rs.1,994.80 crore in 2000-01.

Establishment Expenditure

15.8 Establishment expenditure increased by Rs. 24.10 crore (2.8 per cent) from Rs.846.75 crore in 1999-2000 to Rs.870.85 crore in 2000-01.

Table 15.2 : Expenditure

Item	(Rupees crore)				
	2000-01	1999-2000	1998-99	1997-98	1996-97
1	2	3	4	5	6
I. Interest Payment	1,994.80	1,971.88	1,976.64	1,999.23	1,912.60
of which :					
a) Scheduled Banks	1,660.83	1,656.18	1,652.76	1,639.16	1,520.44
b) Payment in lieu of service charges on borrowings from IMF payable to Government of India		7.82	45.51	103.28	183.66
II. Establishment	870.85	846.75	683.59	848.43	519.48
III. Non-Establishment	2,721.87	2,522.29	1,884.86	1,914.45	1,352.43
of which :					
a) Agency charges	1,160.70	1,193.62	924.02	884.25	829.93
b) Security printing	1,122.78	1,068.44	733.96	834.23	386.48
IV. Total [I+II+III]	5,587.52	5,340.92	4,545.09	4,762.11	3,784.51

Non-establishment Expenditure

15.9 Expenditure towards agency charges decreased by Rs.32.92 crore (2.8 per cent) from Rs.1,193.62 crore in 1999-2000 to Rs.1,160.70 crore in 2000-01. However, expenditure on security printing, comprising cost of printing of currency notes, cheque forms *etc.*, increased by Rs. 54.34 crore (5.1 per cent) from Rs.1,068.44 crore in 1999-2000 to Rs.1,122.78 crore in 2000-01 mainly due to the rise in supplies of note forms. Further, the expenditure under the head 'Printing and Stationery' which includes computer consumables and related software, has increased by Rs.75.83 crore from Rs. 12.93 crore during 1999-2000 to Rs. 88.76 crore during 2000-01 on account of the replacement of the cheque processing software for use in the mainframe computer systems in the National Clearing Cells (NCCs) of the Reserve Bank at the four metropolitan centres.

APPROPRIATION

Net Disposable Income

15.10 The net disposable income of the Reserve Bank for the year 2000-01 amounted to Rs.9,354.00 crore. Since 1991-92, transfers to statutory funds on a significant scale have been discontinued. However, pending amendment to the Reserve Bank of India Act, 1934 for vesting in the Reserve Bank the discretion in the matter of transfer to statutory funds from the profits of the Reserve Bank, a token contribution of Rupees one crore each, has been made to the four funds. The appropriation of the net disposable income is summarised in [Table 15.3](#).

Surplus transferable to Government of India

15.11 The surplus transferable to the Central Government for the year 2000-01 amounted to Rs.9,350 crore, inclusive of Rs.1,479 crore towards interest differential on special securities converted into marketable securities ([Table 15.3](#)). In the year 1997-98, special securities of the order of Rs.20,000 crore carrying interest at 4.6 per cent per annum held by the Reserve Bank were converted into marketable securities at market related rates to augment the stock of eligible securities in the Reserve Bank's investment portfolio for open market operations. The above transfer is intended to compensate the Government for the difference in interest expenditure, which the Government had to bear consequent upon the conversion.

Table 15.3 : Appropriation of Net Disposable Income

Item	(Rupees crore)	
	2000-01	1999-2000
1	2	3
Total Income (Net)	14,941.52	14,694.92
Total Expenditure	5,587.52	5,340.92
Net Disposable Income	9,354.00	9,354.00
Less : Transfer to Funds *	4.00	4.00
Surplus transfer to Government	9,350.00	9,350.00
of which :		
i) Towards Normal Transfer	7,871.00	7,871.00
ii) Interest differential on account of conversion of special securities into marketable securities	1,479.00	1,479.00

* An amount of Rupees one crore each transferred to NIC (LTO) Fund, NRC(LTO) Fund, NRC(Stabilisation) Fund and NHC(LTO) Fund during each of the two years.

BALANCE SHEET

Liabilities

National Industrial Credit (Long Term Operations) Fund

15.12 The National Industrial Credit (Long Term Operations) Fund was established by the Reserve Bank in July 1964 with an initial corpus of Rs.10 crore and annual contributions from the Reserve Bank's disposable surplus in terms of Section 46-C(1) of the Reserve Bank of India

Act, 1934 for the purpose of making loans and advances to eligible financial institutions. Consequent upon the announcement in the Union Budget for 1992-93, the Reserve Bank decided to discontinue the practice of crediting large sums to the said Fund. Subsequently, no further disbursements from the Fund have been made. It was decided in 1997-98 to transfer the unutilised balance in the Fund arising from repayments to Contingency Reserve (CR) on a year-to-year basis. Accordingly, an amount of Rs.400 crore has been transferred to CR in 2000-01 as against Rs.350 crore transferred in the preceding year.

Deposits – Banks

15.13 'Deposits - Banks' represent balances maintained by the banks in current account with the Reserve Bank mainly for maintaining Cash Reserve Ratio (CRR) and as working funds for clearing adjustments. The aggregate deposits of scheduled commercial banks with the Reserve Bank increased by Rs.13,253.51 crore (21.8 per cent) from Rs. 60,854.47 crore as on June 30, 2000 to Rs.74,107.98 crore as on June 30, 2001 mainly due to the rise in the quantum of demand and time liabilities on which scheduled commercial banks are required to maintain CRR. The aggregate deposits of the scheduled state co-operative banks, other scheduled co-operative banks, non-scheduled state co-operative banks and other banks increased by Rs.581.81 crore (18.3 per cent) from Rs.3,180.78 crore as on June 30, 2000 to Rs.3,762.59 crore as on June 30, 2001.

Deposits – Others

15.14 'Deposits - Others' include deposits from financial institutions, employees' provident fund deposits, surplus earmarked pending transfer to the Government and sundry deposits. Deposits under this head have declined by Rs.148.14 crore (0.9 per cent) from Rs.16,469.99 crore as on June 30, 2000 to Rs.16,321.85 crore as on June 30, 2001 due to fall in deposits of foreign central banks.

Other Liabilities

15.15 'Other Liabilities' include the internal reserves and provisions of the Reserve Bank and net credit balance in the RBI General Account. These liabilities have increased by Rs.9,419.17 crore (14.5 per cent) from Rs.65,069.30 crore as on June 30, 2000 to Rs.74,488.47 crore as on June 30, 2001 mainly on account of increase in the levels of internal reserves.

15.16 The reserves, *viz.*, Contingency Reserve, Asset Development Reserve, Exchange Fluctuation Reserve and Exchange Equalisation Account, *etc.*, reflected in 'Other Liabilities' are in addition to the 'Reserve Fund' of Rs.6,500 crore held by the Reserve Bank as a distinct balance sheet head.

Exchange Fluctuation Reserve and Exchange Equalisation Account

15.17 Gains/losses on valuation of foreign currency assets and gold due to movements in the exchange rates and/or prices of gold are not booked in profit and loss account but in a separate account called Exchange Fluctuation Reserve (EFR), which represents accumulated net gain on

valuation of foreign currency assets and gold. During 2000-01, there was an accretion of Rs.1,516.01 crore to the EFR raising the balance to Rs.29,124.44 crore as on June 30, 2001 from Rs.27,608.43 crore as on June 30, 2000. This was mainly on account of appreciation in the value of foreign currency assets. The EFR at the end of June 2001 was equivalent to 14.2 per cent of foreign currency assets and gold holdings of the Reserve Bank, as against 16.8 per cent at the end of June 2000. The balance in Exchange Equalisation Account (EEA) is utilised to meet exchange losses on accrual basis in respect of liabilities under schemes involving exchange guarantees provided by the Reserve Bank in respect of funds parked by Indian Financial Institutions. After meeting the exchange difference on foreign currency funds parked by these institutions (since withdrawn fully on February 5, 2001), the balance in the EEA as on June 30, 2001 stood at Rs.49.46 crore. Balances in EFR and EEA are given in [Table 15.4](#).

Table 15.4 : Balances in Exchange Fluctuation Reserve and Exchange Equalisation Account

(Rupees crore)

As on June 30	Exchange Fluctuation Reserve	Exchange Equalisation Account
1	2	3
1997	10,080.93	758.89
1998	25,143.03	639.00
1999	24,823.29	618.61
2000	27,608.43	791.27
2001	29,124.44	49.46

Contingency Reserve and Asset Development Reserve

15.18 The Reserve Bank maintains a Contingency Reserve (CR) to enable it to absorb unexpected and unforeseen contingencies. The Reserve Bank has been pursuing a pro-active policy of strengthening the CR and has accordingly set an indicative target of 12 per cent of the Reserve Bank's total assets to be achieved in phases by the year 2005, subject to review, if considered essential. The balance in CR has gone up from Rs.29,911.56 crore as on June 30, 2000 to Rs.36,514.13 crore as on June 30, 2001 due to the transfer of Rs.6,202.57 crore from income and transfer of the unutilised balance of Rs.400 crore from National Industrial Credit (Long Term Operations) Fund in 2000-01. The balance in CR was sufficient to meet contingent liabilities as on June 30, 2001.

15.19 In order to meet the internal capital expenditure and make investments in its subsidiaries and associate institutions, the Reserve Bank had created, in 1997-98, a separate Asset Development Reserve (ADR) with the aim of reaching one per cent of the Reserve Bank's total assets within the overall target of 12 per cent set for CR. In the year 2000-01, an amount of Rs.704.78 crore was transferred from income to ADR raising its level from Rs.3,167.85 crore as on June 30, 2000 to Rs. 3,872.63 crore as on June 30, 2001. As a proportion of total assets, CR and ADR together constituted 9.9 per cent of total assets of the Reserve Bank as on June 30,

2001 as against 9.2 per cent as on June 30, 2000. Balances in CR and ADR as at end-June are given in [Table 15.5](#).

Table 15.5 : Balances in Contingency Reserve and Asset Development Reserve

(Rupees crore)

As on June 30	Balance in CR	Balance in ADR	Total	Percentage to total assets
1	2	3	4	5
1997	11,230.69	-	11,230.69	4.5
1998	13,789.41	1,181.71	14,971.12	5.1
1999	23,007.06	2,456.30	25,463.36	7.6
2000	29,911.56	3,167.85	33,079.41	9.2
2001	36,514.13	3,872.63	40,386.76	9.9

ASSETS

Foreign Currency Assets

15.20 The foreign currency assets comprise foreign securities held in Issue Department, balances held abroad and investments in foreign securities held in Banking Department. Such assets rose from Rs.1,50,901.13 crore as on June 30, 2000 to Rs.1,91,226.06 crore as on June 30, 2001. In US dollar terms, these assets rose from US \$ 33.77 billion as on June 30, 2000 to US \$ 40.65 billion as on June 30, 2001.

Investment in Government of India Rupee Securities

15.21 Investment in Government of India Rupee Securities which stood at Rs.1,48,908.36 crore as on June 30, 2000 increased by Rs.8,119.05 crore (5.5 per cent) to Rs. 1,57,027.41 crore as on June 30, 2001.

Investments in Shares of Subsidiaries and Associate Institutions

15.22 The Reserve Bank's investments in the shares of its subsidiaries and associate institutions have increased by Rs.1,200 crore on account of conversion of advance contribution made towards capital of NABARD (during the period from 1996-97 to 1998-99) into its capital and transfer of the same amount to the Reserve Bank's investment account during the current accounting year ([Table 15.6](#)).

Table 15.6 : Investments in Shares of Subsidiaries/Associate Institutions

(Rupees crore)

Institutions

Book value of shares

		held as at	
		30.6.2001	30.6.2000
1		2	3
1.	Deposit Insurance and Credit Guarantee Corporation	50.00	50.00
2.	NABARD	1,450.00	250.00
3.	State Bank of India	1,222.73	1,222.73
4.	Discount and Finance House of India	20.99	20.99
5.	Securities Trading Corporation of India Ltd.	72.06	72.06
6.	National Housing Bank	350.00	350.00
7.	Bharatiya Reserve Bank Note Mudran Ltd.	800.00	800.00
8.	Infrastructure Development Finance Co. Ltd.	150.00	150.00
	Total	4,115.78	2,915.78

Other Assets

15.23 'Other Assets' comprise mainly dead stock, gold holdings in the Banking Department, amounts spent on projects pending completion, staff advances, *etc.* The level of 'Other Assets' has decreased by Rs. 591.29 crore (4.2 per cent) from Rs.13,972.81 crore as on June 30, 2000 to Rs.13,381.52 crore as on June 30, 2001 mainly due to transfer of advance contribution of Rs.1,200 crore to NABARD towards its capital to the Reserve Bank's investment account as explained in paragraph 15.22 above.

Auditors

15.24 The accounts of the Reserve Bank for the year 2000-01 were audited by M/s. N. C. Rajagopal & Co., Chennai, M/s. Kapoor Tandon & Co., Kanpur, M/s. P.K.Mitra & Co., Kolkata, M/s. Chandabhoy & Jassoobhoy, Mumbai, M/s. R. K. Khanna & Co., New Delhi and M/s. P. B.Vijayaraghavan & Co., Chennai appointed by the Central Government.

RESERVE BANK OF INDIA BALANCE SHEET AS AT 30TH JUNE 2001 ISSUE DEPARTMENT

				(Rupees Thousands)	
1999-2000	LIABILITIES	2000-2001	1999-2000	ASSETS	2000-2001
Rs.		Rs.	Rs.		Rs.
	Notes held in the			Gold Coin and Bullion :	
15,29,23	Banking Department	16,07,87	10761,25,93	(a) Held in India	10753,13,72
201486,11,42	Notes in circulation	<u>226374,82,89</u>	-	(b) Held outside India	-
			<u>86700,00,00</u>	Foreign Securities	<u>106700,00,00</u>
201501,40,65	Total Notes issued	226390,90,76			
			97461,25,93	Total	117453,13,72
			115,30,85	Rupee Coin	115,47,97
			103924,83,87	Government of India	
				Rupee Securities	108822,29,07

				Internal Bills of Exchange and other Commercial Paper	
201501,40,65	Total Liabilities	226390,90,76	201501,40,65	Total Assets	226390,90,76
BANKING DEPARTMENT					
1999-2000 Rs.	LIABILITIES	2000-2001 Rs.	1999-2000 Rs.	ASSETS	2000-2001 Rs.
5,00,00	Capital paid-up	5,00,00	15,29,23	Notes	16,07,87
6500,00,00	Reserve Fund	6500,00,00	13,01	Rupee Coin	27,22
4633,00,00	National Industrial Credit (Long Term Operations) Fund	4234,00,00	10,79	Small Coin	19,53
	National Housing Credit (Long Term Operations) Fund	884,00,00	-	Bills Purchased and Discounted :	-
			-	(a) Internal	-
			-	(b) External	-
			-	(c) Government Treasury Bills	-
	Deposits		32371,86,53	Balances Held Abroad	84391,70,96
	(a) Government		79728,58,63	Investments	52805,26,01
100,01,44	(i) Central Government	100,57,70	5298,00,00	Loans and Advances to :	
41,14,10	(ii) State Governments	41,13,26	2386,65,37	(i) Central Government	9014,00,00
	(b) Banks			(ii) State Governments	3603,33,89
60854,46,74	(i) Scheduled Commercial Banks	74107,97,74	8712,61,15	Loans and Advances to :	
	(ii) Scheduled State Co-operative Banks	926,45,87	-	(i) Scheduled Commercial Banks	3616,03,35
845,53,64	(iii) Other Scheduled Co-operative Banks		215,88,00	(ii) Scheduled State Co-operative Banks	2,09,34
			-	(iii) Other Scheduled Co-operative Banks	58,50,00
1624,99,51	(iv) Non-Scheduled State Co-operative Banks	1758,71,79	5104,70,01	(iv) Non-Scheduled State Co-operative Banks	-
52,35,21	(v) Other Banks	47,92,98	5187,26,15	(v) NABARD	5826,35,27
657,89,27	(c) Others	1029,48,09		(vi) Others	3285,49,47
16469,99,00	Bills Payable	16321,84,89		Loans, Advances and Investments from National Industrial Credit (Long Term Operations) Fund :	
743,95,87	Other Liabilities	652,00,73		(a) Loans and Advances to :	
			1740,00,00	(i) Industrial Development Bank of India	1440,00,00
65069,30,47		74488,46,62	697,00,00	(ii) Export Import Bank of India	617,00,00
			170,00,00	(iii) Industrial Investment Bank of India Ltd.	160,00,00
			2004,75,00	(iv) Others	2004,75,00
				(b) Investments in bonds/debentures issued by :	
				(i) Industrial Development Bank of India	-
				(ii) Export Import Bank of India	-
				(iii) Industrial Investment Bank of India Ltd.	-
				(iv) Others	-
				Loans, Advances and Investments from National Housing Credit (Long Term Operations) Fund :	
			875,00,00	(a) Loans and Advances to National Housing Bank	875,00,00
				(b) Investments in bonds/debentures issued by National Housing Bank	-
			13972,81,38	Other Assets	13381,51,76
158480,65,25	Total Liabilities	181097,59,67	158480,65,25	Total Assets	181097,59,67

Significant Accounting Policies and Notes to the Accounts as per Annexure.

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 30TH JUNE 2001

		(Rupees Thousands)	
1999-2000 Rs.	INCOME	2000-2001 Rs.	
14694,92,17	Interest, Discount, Exchange, Commission etc. ¹	14941,51,55	
14694,92,17	EXPENDITURE		Total 14941,51,55

1971,87,87	Interest		1994,80,44
846,75,36	Establishment		870,84,77
47,65	Directors' and Local Board Members' Fees and Expenses		36, 53
16,81,63	Remittance of Treasure		36,77,68
1193,62,39	Agency Charges		1160,69,64
1068,43,68	Security Printing (Cheque, Note forms etc.)		1122,78,07
12,93,16	Printing and Stationery		88,76,26
18,68,19	Postage and Telecommunication Charges		16,84,79
44,94,69	Rent, Taxes, Insurance, Lighting etc.		47,39,32
64,35	Auditors' Fees and Expenses		81,95
1,49,64	Law Charges		2,00,11
81,23,32	Depreciation and Repairs to Bank's Property		105,61,35
83,00,24	Miscellaneous Expenses		139,80,64
<u>5340,92,17</u>		Total	<u>5587,51,55</u>
9354,00,00	Available Balance		9354,00,00
	LESS: Contribution to:		
	National Industrial Credit (Long Term Operations) Fund	1,00,00	
	National Rural Credit (Long Term Operations) Fund ²	1,00,00	
	National Rural Credit (Stabilisation) Fund ²	1,00,00	
	National Housing Credit (Long Term Operations) Fund	1,00,00	
4,00,00			4,00,00
<u>9350,00,00</u>	Surplus payable to Central Government		<u>9350,00,00</u>

1. After making the usual or necessary provisions in terms of section 47 of the Reserve Bank of India Act, 1934.

2. These funds are maintained by National Bank for Agriculture and Rural Development (NABARD).

K. B. Chakraborti
Chief General Manager

G. P. Muniappan
Deputy Governor

Vepa Kamesam
Deputy Governor

Y. V. Reddy
Deputy Governor

Bimal Jalan
Governor

REPORT OF THE AUDITORS

TO THE PRESIDENT OF INDIA

We, the undersigned Auditors of the Reserve Bank of India, do hereby report to the Central Government upon the Balance Sheet of the Bank as at 30th June, 2001 and the Profit and Loss Account for the year ended on that date.

We have examined the above Balance Sheet of the Reserve Bank of India as at 30th June, 2001 and the Profit and Loss Account of the Bank for the year ended on that date and report that where we have called for information and explanations from the Bank, such information and explanations have been given and have been satisfactory.

In our opinion and according to the best of our information and explanations given to us and as shown by the books of account of the Bank, the Balance Sheet read with Significant Accounting Policies and Notes to the Accounts is a full and fair Balance Sheet containing all necessary particulars and is properly drawn up in accordance with the Reserve Bank of India Act, 1934 and Regulations framed thereunder so as to exhibit a true and correct view of the state of the Bank's affairs.

M/s. N.C. Rajagopal & Co.	M/s. Kapoor Tandon & Co.	M/s. P.K. Mitra & Co.	M/s. Chandabhoy & Jassoobhoy	M/s. R.K.Khanna & Co.	M/s. P. B. Vijayaraghavan & Co.
Auditors	Auditors	Auditors	Auditors	Auditors	Auditors

Dated August 16,2001

RESERVE BANK OF INDIA

SIGNIFICANT ACCOUNTING POLICIES AND NOTES TO THE ACCOUNTS 2000-01

SIGNIFICANT ACCOUNTING POLICIES

1. CONVENTION

The financial statements are prepared in accordance with the Reserve Bank of India Act, 1934 and the notifications issued thereunder and in the form prescribed by the Reserve Bank of India General Regulations, 1949.

Historical cost basis of accounting is used except where it is modified to reflect revaluation.

The accounting practices and policies followed in the statements, unless otherwise stated, are consistent with those followed in the previous year.

2. REVENUE RECOGNITION

Income and expenditure are recognised on accrual basis except dividend and interest on advances to staff (other than housing loan) which are accounted on receipt basis. Only realised gains are recognised. Provision for outstanding expenditure is made for unpaid bills in each case of Rs.1 lakh and above. Balances unclaimed and outstanding for more than three consecutive years in certain transitory accounts including Drafts Payable Account, Payment Orders Account, Sundry Deposits Account, Remittance Clearance Account and Earnest Money Deposit Account are reviewed and written back to the Bank's income. Claims in this respect are considered and charged against Bank's income as and when paid.

Income and expenditure in foreign currency are translated on the basis of exchange rates prevailing on the last business day of the preceding week.

3. GOLD AND FOREIGN CURRENCY ASSETS AND LIABILITIES

(a) Gold

Gold is valued at the end of the month at 90 per cent of the daily average price quoted at London for the month. The rupee equivalent is determined on the basis of the exchange rate prevailing on the last business day of the month. Gains/losses arising therefrom are adjusted to the Exchange Fluctuation Reserve.

(b) Foreign Currency Assets and Liabilities

All foreign currency assets and liabilities are translated at the exchange rates prevailing on the last business day of the week and also on the last business day of the month.

At the year end, assets and liabilities in foreign currencies are translated at the exchange rates prevailing on the last business day except in cases where rates are contractually fixed. Foreign securities are valued at lower of book value or market price prevailing on the last business day of each month except foreign treasury bills which are valued at cost. The depreciation is adjusted against current income.

Forward exchange contracts are evaluated half-yearly and net loss, if any, is provided for.

Profit/loss on sale of foreign currency assets is recognised with respect to the book value. Exchange gains and losses arising from translation of foreign currency assets and liabilities are accounted for in Exchange Fluctuation Reserve and remain adjusted therein.

4. RUPEE SECURITIES

Rupee securities, other than Treasury bills, held in the Issue and Banking Departments, are valued at lower of book value or market price or rates based on the yield curve prevailing on the last business day of the month where the market price for such securities is not available. The depreciation in the value is adjusted against current income. Treasury bills are valued at cost.

5. SHARES

Investments in shares are valued at cost.

6. FIXED ASSETS

Fixed Assets are stated at cost less depreciation.

Depreciation on computers, motor vehicles, office equipments, furniture and electrical fittings, *etc.*, is charged on a straight-line basis. Depreciation on other assets including premises and

fixtures is charged on written-down value basis.

Depreciation on fixed assets is charged only if held for a period of more than six months as at the year end.

7. RETIREMENT BENEFITS

The liability on account of retirement benefits and leave encashment to employees is estimated based on an actuarial valuation.

8. CONTINGENCY RESERVE AND ASSET DEVELOPMENT RESERVE

Contingency Reserve represents the amount provided on a year-to-year basis for meeting unexpected and unforeseen contingencies including depreciation in value of securities, exchange guarantees and risks arising out of monetary/exchange rate policy compulsions.

In order to meet the internal capital expenditure and make investments in subsidiaries and associate institutions a further specified sum is provided and credited to the Asset Development Reserve.

9. NATIONAL INDUSTRIAL CREDIT (LONG TERM OPERATIONS) FUND

Unutilised balance in the Fund, arising from repayments, is transferred to Contingency Reserve on a year-to-year basis.

NOTES TO THE ACCOUNTS

1. SURPLUS TRANSFER TO GOVERNMENT OF INDIA

Surplus transferable to the Government includes an amount of Rs.1,479 crore representing interest differential pertaining to the period April 1, 2000 – March 31, 2001 on account of conversion of special securities into marketable securities.

2. RBI GENERAL ACCOUNT

RBI General Account represents inter-office transactions and balances under reconciliation. Reconciliation of the entries is in progress and necessary adjustments are being effected as and when ascertained.

3. RESERVE FUND

The Reserve Fund comprises initial contribution of Rs. 5 crore made by the Government of India and appreciation of Rs. 6,495 crore on account of revaluation of gold up to October 1990. Subsequent gains/losses on monthly revaluation of gold are taken to Exchange Fluctuation Reserve.

4. DEPOSITS - OTHERS

(Rupees crore)

Particulars	As at June 30, 2001	As at June 30, 2000
1	2	3
I. Rupee Deposits from Foreign Central Banks and Foreign Financial Institutions	3,404.06	3,559.79
II. Deposits from Indian Financial Institutions	336.92	243.31
III. Accumulated Retirement Benefits	2,970.11	2,590.88
IV. Surplus transferable to Government of India	9,350.00	9,350.00
V. Miscellaneous	260.76	726.01
Total	16,321.85	16,469.99

5. OTHER LIABILITIES

I. Contingency Reserve

Balance at the beginning of the year	29,911.56	23,007.06
Add : Transfer from National Industrial Credit (Long Term Operations) Fund *	400.00	350.00
Add : Accretion during the year	6,202.57	6,554.50
Balance at the end of the year	36,514.13	29,911.56

II. Asset Development Reserve

Balance at the beginning of the year	3,167.85	2,456.30
Add : Accretion during the year	704.78	711.55
Balance at the end of the year	3,872.63	3,167.85

III. Exchange Fluctuation Reserve

Balance at the beginning of the year	27,608.43	24,823.29
Add : Net Accretion during the year	1,516.01	2,785.14
Balance at the end of the year	29,124.44	27,608.43

IV. Exchange Equalisation Account

Balance at the beginning of the year	791.27	618.61
Add : Net Accretion/Net Utilisation(-) during the year	(-)741.81	172.66
Balance at the end of the year	49.46	791.27

V. Provision for net debit entries in RBI General Account for the period upto June 30, 1992

57.80	57.80
-------	-------

VI.	Provision for Outstanding Expenses	1,228.02	1,201.78
VII.	Miscellaneous	3,641.99	2,330.61
	Total (I to VII)	74,488.47	65,069.30

*Represents transfer of the unutilised balance in the Fund arising from repayments.

6. FOREIGN CURRENCY ASSETS

(Rupees crore)

Particulars	As at June 30, 2001	As at June 30, 2000
1	2	3
I. Held in Issue Department	1,06,700.00	86,700.00
II. Held in Banking Department -		
a) Included in Investments	134.35	31,829.27
b) Balances Held Abroad	84,391.71	32,371.86
Total	1,91,226.06	1,50,901.13

Notes: (i) As on June 30, 2001 there were outstanding forward sale contracts of US dollar equivalent to Rs.3,876.10 crore (as against US dollar equivalent to Rs.8,214.82 crore as at June30, 2000). There were also forward purchase contracts of US dollar equivalent to Rs.112.90 crore outstanding as at June 30, 2001(as against US dollar equivalent to Rs.637.21 crore as at June 30, 2000).

(ii) Uncalled amount on partly paid shares of the Bank for International Settlements as at June 30, 2001 - Rs.66.75 crore.

7. OTHER ASSETS

(Rupees crore)

Particulars	As at June 30, 2001	As at June 30, 2000
1	2	3
I. Fixed Assets (net of accumulated depreciation)	390.33	342.52
II. Gold	2,409.64	2,411.66
III. Income accrued but not received	7,288.53	6,410.41
IV. (i) Advance to National Bank for Agriculture and Rural Development towards capital	-	1,200.00*
(ii) Advance to Infrastructure Development		

	Finance Co.Ltd.	-	350.00*
V.	Miscellaneous	3,293.02	3,258.22
	Total	13,381.52	13,972.81

* Transferred to Bank's Investment Account during the year 2000-01.

8. INTEREST, DISCOUNT, EXCHANGE, COMMISSION, ETC.

Interest, Discount, Exchange, Commission, *etc.*, include the following items.

Particulars	Year ended 2001	(Rupees crore)
		Year ended June 30, 2000
1	2	3
(i) Profit on sale of Foreign and Rupee Securities	688.31	3,312.39
(ii) Rent realised	18.78	8.92
(iii) Net profit on sale of Bank's property	7.08	0.08

Annexure

CHRONOLOGY OF MAJOR POLICY ANNOUNCEMENTS: APRIL 2000 – JULY 2001

Date	POLICY ANNOUNCEMENTS
	I. MONETARY POLICY MEASURES
2000	
April	<ol style="list-style-type: none">1• The Reserve Bank reduced the Bank Rate by 1.0 percentage point to 7.0 per cent, effective from the close of business on April 1, 2000.<ul style="list-style-type: none">• The Reserve Bank reduced the fixed repo rate by 1.0 percentage point from 6.0 per cent to 5.0 per cent, effective April 1, 2000.• The Reserve Bank reduced the saving deposit rate of scheduled commercial banks from 4.5 per cent to 4.0 per cent, effective April 1, 2000.• CRR was reduced by 1.0 percentage point to 8.0 per cent in two stages of 0.5 percentage point each, from the fortnights beginning April 8 and April 22, 2000, respectively.27• In order to facilitate the movement of short-term money market rate within a corridor, impart greater stability and facilitate the emergence of a short-term rupee yield curve, it was announced that a full-fledged Liquidity Adjustment Facility (LAF) operated through repos and reverse repos would be progressively introduced with effect from June 5, 2000. In the first stage, it was proposed that the Additional Collateralised Lending Facility (ACLF) would be replaced by variable rate repo auctions with same day settlement; in the second stage, the Collateralised Lending Facility (CLF) and Level-I liquidity support would be replaced by variable rate repo auctions (some minimum support to PDs would be continued but at interest rate linked to variable rate in the daily repos auctions as determined by the Reserve Bank), and in the third stage, with full computerisation of Public Debt Office and introduction of Real Time Gross Settlement System (RTGS), repo operations through electronic transfers would be introduced and in the final stage LAF would possibly be operated at different timings of the same day.<ul style="list-style-type: none">• In order to impart greater flexibility in the pricing of rupee interest rate derivatives and facilitate integration between money and forex markets, interest rates implied in the foreign exchange forward market could be used as a benchmark for FRA/IRS in addition to the existing domestic money and debt market rates.• The minimum maturity of CDs was reduced from 3 months to 15 days in order to bring it at par with other instruments like CPs and term deposits.• It was decided to permit banks to offer, at their discretion, differential rates of interest also on NRE/FCNR(B) term deposits on size group basis. For NRE term deposits, banks were allowed to offer differential rates of interest on single term deposit of Rs.15 lakh and above as in the case of domestic deposits. For FCNR(B) deposits, it was decided to allow banks to have discretion to decide currency-wise minimum eligible quantum qualifying for such differential rates of interest. The interest rates so offered were, however, subject to the overall ceiling prescribed under the scheme. In order to make the market more 'on line', it was decided to give the banks the options to choose at their discretion, the current swap rates

while offering FCNR(B) deposits.

- It was decided that the facility to non-bank entities for routing transactions through Primary Dealers (PDs) would be extended from end-June 2000 to end-December 2000 and simultaneously steps will be initiated to extend repo facility to such entities through Subsidiary General Ledger (SGL) II Accounts.
 - Select all-India Financial Institutions (AIFIs) were given flexibility in the matter of fixing interest rates on term deposits.
 - In order to facilitate operational flexibility to existing lenders to adjust their asset liability structure by widening the repo market and improve the participation of the non-bank entities, a time bound programme of withdrawing permission to non-bank entities for lending in call/notice money market coinciding with the development of the repo market was announced.
 - In order to provide more deployment avenues within the country and at the same time to exploit the synergy between the lending expertise of a few banks with the vast branch network of the others, it was decided that gold mobilised under the Gold Deposit Scheme could be lent to other authorised banks for similar use as per the specified guidelines. Such borrowings of gold would be treated as inter-bank liabilities and be exempt from CRR.
- May** 3• With a view to providing further flexibility to banks and enabling them to choose an optimum strategy of holding reserves depending upon their intra-period cash flows, the requirement of minimum 85 per cent of the CRR balances on the first 13 days to be maintained on a daily basis was reduced to 65 per cent from the fortnight beginning May 6, 2000.
- 25** • An interest rate surcharge of 50 per cent of the lending rate on import finance was imposed with effect from May 26, 2000. Essential categories, such as export related imports, bulk imports in respect of crude oil, petroleum products, fertilisers, edible oil and other essential commodities imported through Government agencies were exempted from interest surcharge.
- July** 6• The Reserve Bank issued draft guidelines for the issue of commercial paper (CP). It was proposed to permit all-India financial institutions to issue CPs, to allow issue of CPs in maturities ranging from 15 days to one year in denominations of Rs.5 lakh or its multiples, to facilitate corporates to issue CPs to the extent of 50 per cent of working capital (fund-based) limit under automatic route, to permit FIIs to invest in CP within their 30 per cent limit of debt instruments, to encourage issue/holding of CP in dematerialised form, to enable credit rating agencies (CRA) to have discretion on the validity period of the rating and to assign clear roles for issuer, financing banking company, issuing and paying agent and CRA.
- 21•** After a review of the recent developments in the international and domestic financial markets, including the foreign exchange market, the Reserve Bank raised the Bank rate by 1 percentage point to 8.0 per cent with effect from the close of business on July 21, 2000. Further it was announced that the CRR would be hiked by 0.5 percentage point to 8.5 per cent in two stages of 0.25 percentage point each, effective from the fortnights beginning July 29 and August 12, 2000, respectively, and all refinance limits available to banks (including those for CLF), as a temporary measure, would be reduced by 25.0 per cent each in two stages of the eligible limits as per the existing formula.

- Oct. 6•** It was announced that the Reserve Bank would issue Banknotes in the denomination of Rs.1,000 in the Mahatma Gandhi Series with effect from October 9, 2000.
- 10•** Following the recommendations of Narasimham Committee II, the Reserve Bank widened the repo market by permitting the non-bank participants maintaining current and SGL accounts with the Reserve Bank to undertake both repos and reverse repos, reducing the minimum maturity of repo transactions to 1 day, making state government securities eligible for repos and opening of its purchase window to impart liquidity to government securities whenever situation warrants. As suggested by the Committee, it is necessary to move towards a pure inter-bank call money market as early as possible. However, as the repo market was not yet broad-based and deep, the permission granted to select corporates for routing call money transactions through PDs was further extended from December 2000 to June 2001.
- In order to make necessary transitional provisions in respect of non-bank institutions including FIs and MFs, before the call money market is confined to only banks/PDs, it was decided to constitute a Group to suggest smooth phasing out by a planned reduction in their access to call/notice money market.
 - New guidelines were released on issue of CPs, accounting for the suggestions on draft revised guidelines circulated in July 2000, for providing flexibility, depth and vibrancy in the CP market while retaining the prudential safeguards and transparency. In particular, the guidelines were to enable companies in the services sector to more easily meet their short-term working capital needs. CP is now allowed to be issued as a 'stand alone' product. Banks and FIs would have the flexibility to fix working capital limits duly taking into account resource pattern of companies' financing, including CPs.
 - With a view to providing flexibility and depth to the secondary market, it was decided to withdraw the restriction on transferability period for CDs issued by both banks and financial institutions.
- Nov. 15•** It was announced that the Reserve Bank would issue banknotes in the denomination of Rs.500 in the Mahatma Gandhi Series, in revised colour scheme with effect from November 18, 2000.
- 2001**
- Jan. 6•** The interest rate surcharge of 50 per cent on import finance, which was in force since May 26, 2000, was withdrawn with effect from January 6, 2001. Furthermore, the minimum rate for interest rate charge of 25 per cent on overdue export bills, in force since May 26, 2000, was also withdrawn with effect from January 6, 2001 thereby giving banks the freedom to decide the appropriate rate of interest on overdue export bills.
- Feb. 16•** The Reserve Bank reduced the Bank Rate by 50 basis points to 7.5 per cent effective close of business on February 16, 2001 and lowered the CRR by 50 basis points to 8.0 per cent in two stages of 0.25 percentage point each, effective from fortnights beginning February 24 and March 10, 2001, respectively.
- March 1•** On a further review, the Bank Rate was reduced from 7.5 per cent to 7.0 per cent effective close of business on March 1, 2001.
- 12•** The Technical Group Report on phasing out of non-banks from call/notice money

market was submitted. It recommended three-stage reductions in call money lendings by non-bank participants (including mutual funds and insurance companies). In the first stage, the recommendation was to permit lending up to 70 per cent of their average daily lendings during 2000–01 for a period of three months after which the lending limit may be reduced to 40 per cent in the second stage. In the third stage, by which time Clearing Corporation is expected to be operationalised, their lendings may be reduced to 10 per cent for a period of three months to enable them to be familiar with the operations of the Clearing Corporation.

- 15•** The Government of India reduced the interest rate payable on Relief Bonds issued under 9 per cent Relief Bonds, 1999 Scheme from 9 per cent per annum to 8.5 per cent per annum with effect from March 15, 2001.
- April 19•** In the Monetary and Credit Policy for 2001-02, the LAF progressed into its second stage by splitting the standing liquidity facilities available from the Reserve Bank to scheduled commercial banks under CLF and export credit refinance, and to PDs under liquidity support facility into normal facility and back-stop facility approximately in the ratio of 2:1. While the normal facility was made available at the Bank Rate, the back-stop facility was provided at a variable daily rate (1.0 percentage point above the reverse repo cut-off during the day or 2.0-3.0 percentage points above the repo cutoff in case no reverse repo bid is accepted or 2.0-3.0 percentage points above the National Stock Exchange-Mumbai-Inter-Bank Offer Rate (NSE-MIBOR), if no repo or reverse repo bids are accepted during the day).
- In order to rationalise export credit refinance, with effect from the fortnight beginning May 5, 2001, scheduled commercial banks were provided export credit refinance to the extent of 15.0 per cent of the outstanding export credit eligible for refinance as at the end of the second preceding fortnight. The existing refinance limit as on May 4, 2001 as per current formula would constitute the minimum limit available for a bank up to March 31, 2002.
 - The procedural modifications under LAF included introduction of multiple price auction (instead of existing uniform price auction), advancement of the auction timing by 30 minutes, reduction of minimum bid size for LAF from Rs.10 crore to Rs.5 crore, introduction of additional options to switch over to overnight fixed rate repos and discretion to introduce longer term repos, whenever required. The revised LAF was made effective from May 8, 2001.
 - The requirement for Prime Lending Rate (PLR) to be the floor interest rate on loans or credit limits above Rs.2 lakh was relaxed and the banks were allowed to offer loans at below-PLR rates to exporters or other creditworthy borrowers including public sector enterprises (PSEs) based on a transparent policy cleared by their Boards. However, PLR was still to serve as a ceiling interest rate for loans up to Rs.2 lakh and banks were to continue declaring the maximum spread of interest rates over PLR.
 - The interest rates on export credit extended by banks were rationalised by prescribing ceiling rate linked to PLRs of the respective banks in case of all categories including pre-shipment credit.
 - In order to usher in pure inter-bank call money market, the Monetary and Credit

Policy of 2001-02 announced permission of the corporates to route their call money transactions through PDs to continue up to June 30, 2001 as decided earlier and reduction of lending of other non-bank institutions in the call/notice money market successively to 85.0 per cent, 70.0 per cent, 40.0 per cent and 10.0 per cent of their average daily lendings in the call money market during 2000-01 in stage I beginning from May 5, 2001, stage II with effect from date of operationalisation of Clearing Corporation, stage III with effect from three months after stage II and stage IV with effect from three months after stage III, respectively. After the onset of stage IV, the Reserve Bank would notify a date from which non-banks would not be permitted to lend in the call/ notice money market.

- The minimum maturity period of wholesale term deposits of Rs.15 lakh and above was reduced from 15 days to 7 days in order to facilitate flexibility in investment of short-term funds by non-banks.
 - The requirement of minimum daily average of 65.0 per cent of CRR balances during a reporting fortnight except the reporting Friday was reduced to 50.0 per cent for the first seven days of the reporting fortnight while maintaining minimum requirement of 65.0 per cent for the remaining seven days including the reporting Friday with effect from the fortnight beginning August 11, 2001.
 - The interest rate on eligible balances kept by the scheduled commercial banks (except RRBs) with the Reserve Bank under CRR was increased from 4.0 per cent to 6.0 per cent from the fortnight beginning April 21, 2001 and at a subsequent stage to be announced later, interest paid was to be at the Bank Rate.
 - Effective fortnight beginning August 11, 2001 the inter-bank term liabilities of maturity of 15 days and above were made exempt from the prescription of minimum CRR requirement of 3.0 per cent.
 - To improve the infrastructure for facilitating efficient funds management, the Reserve Bank decided to set up a Structured Financial Messaging backbone Solution for which Society for World-wide Inter-bank Financial Telecommunication (SWIFT) like message formats have been finalised and circulated to the banks to encompass various types of intra and inter-bank applications including those of government transactions, debt-related transactions and currency chest transfer data.
 - Regulation Review Authority (RRA) ceased to exist from March 31, 2001 after completion of its term. However, to examine suggestions received from general public at large for reviewing Bank's rules, from April 1, 2001, the Bank has put in place a mechanism under the charge of an Executive Director for dealing with such applications.
 - A package of special relief measures for the State of Gujarat such as freezing of loans classification status, special limit of sanction up to Rs.1 lakh for rehabilitating small business, loans up to Rs.2 lakh for repairs/ reconstruction, additional limits/rescheduling of existing limits to SSI, loans up to Rs.10 lakh at PLR, relief/concession to exporters, soft loan to NHB for providing assistance for reconstruction of houses, *etc.* were announced.
- 30•** Banks, FIs, PDs and SDs have been permitted to make fresh investments and hold CP only in dematerialised form effective from June 30, 2001. Their outstanding investments in scrip form would be converted into dematerialised form by October

31, 2001.

- Effective from October 31, 2001, banks, FIs, PDs and SDs would be permitted to make fresh investments and hold bonds and debentures privately placed or otherwise only in dematerialised form.
- May 12•** The Reserve Bank reduced the CRR by 50 basis points from 8.0 per cent to 7.5 per cent, effective from the fortnight beginning May 19, 2001.
- 22•** It was announced that the Reserve Bank would re-introduce bank notes of denomination Rs.5 in the existing design with effect from May 25, 2001.
- June 4•** It was announced that the system of multiple price method of repo and reverse repo auctions would continue until further notice. Moreover, the rate for back-stop facility would be between 1.0 to 3.0 percentage points over NSE-MIBOR, as may be decided by the Reserve Bank, when no bids for repo or reverse repo auctions have been received/accepted.

II. INTERNAL DEBT MANAGEMENT POLICIES

2000

- April 1•** The arrangements for the fiscal year 2000-01 in respect of Ways and Means Advances (WMA) to the Government of India, the rate of interest and the minimum balance required to be maintained with the Reserve Bank effective April 1, 2000 were to be same as those in 1999-2000.
- 27•** The restriction that no sale deal should be entered into without actually having the securities in the investment portfolio at the time of sale was removed and entities were permitted to sell the securities after allotment, thus enabling sale, settlement and transfer on the same day.
- Special facility for securities settlement was proposed to be introduced for banks and PDs having SGL accounts for providing smooth securities settlement.
 - The liquidity support to PDs was reviewed and it was decided to take into account not only the bidding commitment but also the performance of PDs in both primary and secondary markets for this support. The payment of commissions for Treasury Bills was withdrawn with effect from June 5, 2000 as PDs were no longer required to take devolvements.
- Aug. 23•** PDs were allowed “switch facility” to swap their long-dated government securities with 364-day Treasury Bills available in the list of open market operations. Reserve Bank offered to purchase from August 24 three dated Government of India securities against sale for an equal amount in face value of 364-day Treasury Bills.
- Sept. 26•** The Reserve Bank announced, with effect from October 3, 2000, an introduction of a special fund facility for banks and PDs to provide intra-day funds to facilitate the settlement of securities transactions in case of a gridlock occurring on account of shortage of funds on a gross basis in the current account of one or more SGL account holders especially when transactions are linked. Banks and PDs who are eligible for CLF/liquidity support facility at the Bank Rate would be made eligible. Credit was made available on a collateralised basis against undrawn CLF/primary dealers liquidity support (PDLs) at Bank Rate with equal interest cost sharing by all the beneficiary participants.
- Oct. 3•** A scheme was introduced for automatic invocation by the SGL Account holder of

undrawn refinance/ liquidity support from the Reserve Bank for facilitating smooth securities settlement to banks and PDs only.

- 10• With a view to encouraging investors to hold Government securities in a scrip-less form and to ensure that entities holding securities in custody employ practices and procedures so that constituents' securities are appropriately accounted and kept safe, a set of guidelines governing the maintenance of the Constituents' SGL Accounts was issued.
 - 27• With the creation of three new States (Jharkhand, Uttaranchal and Chhattisgarh) special arrangements were made for the WMA: apportioning the minimum balances and WMA limits between the respective old and new States on the basis of revenue sharing formula adopted by Government of India, increasing the WMA limits uniformly by 30 per cent for all the six states to take care of mismatches that may arise out of the division and partial relaxation of overdraft (OD) regulations. As per the existing provision, the OD regulation scheme stipulated a three-day limit for clearing/ reducing OD below normal limits, if it exceeded 100 per cent of normal WMA. This provision was relaxed for both the new and successor states (old states) up to March 31, 2001. However, the clause of suspension would persist, if any of the States continues to be in OD for 10 consecutive working days.
- Dec.
- 9• The notified amount in respect of auctions of 364-day Treasury Bills was enhanced from Rs.500 crore to Rs.750 crore.
 - 11• New capital adequacy guidelines were issued for PDs taking into account credit and market risks faced by them. PDs were asked to submit capital adequacy returns on a quarterly basis with effect from September 30, 2000. For meeting the market risk capital charges, Tier-III capital was specifically introduced in accordance with international norms. PDs were asked to calculate their market risk charges with help of the higher of the capital charges obtained from standardised method and the Value at Risk method.
- 2001
- Jan.
- 10• On the basis of the recommendations of the Informal Group of State Finance Secretaries, the Reserve Bank revised the normal WMA limits (WMA Scheme 2001) to 2.4 per cent and 2.9 per cent, respectively, for non-special category States and special category States, of the average of revenue receipts and capital expenditure for 1997-98, 1998-99 and 1999-2000 with effect from February 1, 2001, thereby increasing the present limit by 34 per cent to Rs.5,296 crore. The period of availing OD was extended from 10 working days to 12 working days as an *ad hoc* measure and the restriction period for bringing the OD level down to within 100 per cent normal WMA was extended from 3 days to 5 days. The entire scheme for the WMA would be reviewed by the Reserve Bank after two years in light of the emerging conditions in State finances.
 - 12• In pursuance to the decision in the meeting of the State Finance Secretaries held at the Reserve Bank on June 12, 1999, the Core Group on 'Voluntary Disclosure Norms for State Governments', which was constituted to enhance transparency in the disclosures of the State Budgets, submitted its report.
 - 27• In view of the unprecedented nature of the calamity in Gujarat, the Reserve Bank relaxed the WMA limits and the terms of OD regulations for Gujarat initially for a period of one month till the end of February 2001 and later extended up to April

2001.

- March 2•** In-principle approval to become PDs in Government securities market was given to four more entities *viz.*, Banc of America Securities (India) Pvt. Ltd., Subsidiary of Bank of Baroda, HSBC Primary Dealership (India) Pvt. Ltd. and Standard Chartered - UTI Securities India Pvt. Ltd. This was in addition to the 15 PDs already working in the Government securities market.
- April 1•** The revised arrangements in respect of WMA to the Government of India for 2001-02 came into effect from April 1, 2001. Accordingly, the limit for WMA would be lower at Rs.10,000 crore for the first half of the year and Rs.6,000 crore for the second half. The other provisions of the scheme would remain the same.
- 19•** In the Monetary and Credit Policy 2001-02, it was decided to discontinue 14-day and 182-day Treasury Bills auctions and increase the notified amount for 91-day Treasury Bill auction to Rs.250 crore and also to synchronise the dates of payment for both 91-day and 364-day Treasury Bills with a view to provide adequate fungible stock of Treasury Bills of varying maturities and to activate secondary market. The notified amount in the case of 364-day Treasury Bill auctions was, however, to remain at Rs.750 crore. These changes became effective from the week beginning May 14, 2001.
- In pursuance of announcement in Union Budget 2001-02, it was proposed to replace the Public Debt Act by the Government Securities Act.
 - An electronic Negotiated Dealing System (NDS) was proposed to be introduced by June 2001 with a view to facilitating transparent electronic bidding in auctions and secondary market transactions on a real time basis.
 - It was proposed that while the current eligibility criteria for accreditation as a SD would continue, the existing liquidity support from the Reserve Bank would be discontinued.
 - Effective June 2, 2001 all the transactions in Government securities settled through the Delivery *versus* Payment (DvP) system of the Reserve Bank was to be made on T plus 1 basis in order to enable participants to prepare themselves for a Negotiated Dealing System (NDS).
 - To promote retail access in Government securities, screen-based trading in Government securities would be introduced.
 - It was proposed to discuss with the Government the feasibility of separation of government debt management function from the Reserve Bank with the passing of Fiscal Responsibility Bill and amendments to Reserve Bank of India Act.
 - To encourage retail participation in the primary market for Government securities, a scheme to provide retail investors, on a non-competitive basis, an allocation of up to 5 per cent of notified amount would be introduced.
 - There would be an extension of uniform price auction format to the auctions of dated securities, on a selective and experimental basis.
- 20•** The Reserve Bank granted final approval to HSBC Primary Dealership India Private Limited to operate as a primary dealer in the Government Securities market thereby increasing the number of primary dealers to sixteen.
- 30•** As announced earlier, a national level Clearing Corporation with the name “The Clearing Corporation of India Ltd.,” was registered as a limited liability company under the Companies Act, 1956 at the initiative of the Reserve Bank with SBI as

chief promoter for facilitating smooth clearing and settlement of transactions in forex, Government securities and money markets.

III. FINANCIAL SECTOR MEASURES 2000

2000

- April** 4• FIs were to value the investments in Mutual Funds (MFs) units at the market rates as per Stock Exchange quotation, if available. Otherwise, the latest Net Asset Value (NAV) declared by the MF in respect of each particular scheme should be used for valuation.
- April** 8• FIs may enter into ready forward contracts through the treasury bills, dated securities of GoI and State Governments in accordance with certain terms and conditions specified by the Reserve Bank.
- 24• The Reserve Bank advised that (a) banks need to assign risk weight of 100 per cent on those State Government guaranteed securities that are issued by the defaulting entities and not on all the securities issued or guaranteed by the concerned State Government; (b) no provision need be made for a period of one year in respect of additional credit facilities granted to SSI units which are identified as sick where rehabilitation packages/ nursing programme have been drawn by the banks themselves or under consortium arrangements, and (c) the general provision of 0.25 per cent on Standard Assets should be made on global portfolio basis and not on domestic advances alone.
- It was decided that lending by banks to NBFCs for on-lending to agriculture be reckoned as priority sector lending.
- 27• Banks were advised to voluntarily build-in the risk weighted components of their subsidiaries into their own balance sheets on notional basis at par with the risk weights applicable to bank's own assets.
- The Reserve Bank announced a move towards risk-based supervision (RBS) of banks. The RBS approach entails monitoring of banks by allocating supervisory resources and focusing supervisory attention according to the risk profile of each institution.
 - The Reserve Bank decided to enhance the ceiling for classifying advances for financing distribution of inputs for allied activities, such as cattle-feed, poultry-feed, *etc.*, as indirect advances to agriculture to Rs.15 lakh from Rs.5 lakh.
 - Realising the need for better institutional mechanism for sharing of credit-related information, banks and FIs were advised to make the necessary in-house arrangements for gathering and collecting of such information in one place for transmitting it to the Credit Information Bureau.
 - With regard to deposit insurance, the Reserve Bank announced that a new law in supercession of the existing enactment is required to be enacted to implement the recommendations of the Advisory Group on Reforms in Deposit Insurance in India and the task of preparation of the new draft law has been taken up.
- 28• It was decided to authorise Regional Rural Banks (RRBs) which have minimum working capital of Rs.25 crore and satisfy other listed criteria to open/maintain Non-Resident (Ordinary/External) accounts in rupees.
- May** 5• Select AIFIs were advised that the provision for Standard Assets need not be netted from gross advances, but shown separately as "Contingent Provision against

Standard Assets” under “Other Liabilities and Provisions” in the balance sheets. This provision would not be eligible for inclusion in Tier II Capital and the provision for Standard Assets should not be reckoned for arriving at net NPAs.

- 25• Interest rate surcharge of 50 per cent of the actual lending rate on credit extended by the FIs for imports was reintroduced as a temporary measure.
- 26• In line with banks, FIs were advised to charge interest at the rate of 25 per cent per annum (minimum) in respect of overdue export bills from the date bills fall due for payment and also to ensure that the exporters do not delay repatriation of export proceeds beyond the due date.
 - The exemption granted to RRBs from the practice of marking to market norms in respect of the SLR securities was further extended to another two financial years, viz., 2000-01 and 2001-02.
- 30• FIs were advised to assign a risk weight of 100 per cent only on those State Government guaranteed securities issued by the defaulting entities and not on all securities issued by State Governments.
 - The FIs were advised that the excess provision towards depreciation on investments should be appropriated to ‘Investment Fluctuation Reserve Account’ (IFRA) instead of ‘Capital Reserve Account’ (CRA) and will be eligible for inclusion in Tier II Capital.
- June 9• Any NBFC registered with the Reserve Bank having net owned fund (NOF) of Rs.2 crore as per last audited balance sheet was permitted subject to the Reserve Bank’s approval, to undertake insurance business as an agent of insurance company on fee basis, without any risk participation. All registered NBFCs having minimum owned fund of Rs.500 crore that satisfy the eligibility criteria prescribed by the Reserve Bank were permitted to undertake insurance business with risk participation, subject to safeguards. Companies which are not eligible for undertaking insurance business with risk participation can make straight investment up to 10 per cent of their owned fund or Rs.50 crore whichever is lower, in the equity of insurance companies subject to fulfilment of certain criteria. In all the above three cases, the NBFCs registered with the Reserve Bank require prior approval of the Reserve Bank.
- June 21• FIs are not required to seek Reserve Bank’s issue-wise prior approval/registration for raising of resources by way of issue of bonds (both public issue and private placement) subject to the fulfilment of certain specified terms and conditions.
- 29• Banks were advised not to charge interest tax in respect of any chargeable interest accruing or arising after March 31, 2000.
- 30• The Reserve Bank announced rationalisation of some of the regulations applicable to NBFCs and RNBCs. Provisioning norms for NBFCs in respect of lease and hire purchase assets were rationalised. RNBCs were permitted to invest in the schemes of SEBI approved mutual funds besides UTI subject to certain ceilings. The floor on interest rates payable by the RNBCs was lowered by two percentage points. Compliance with prudential norms has been made a pre-condition for deposit acceptance by RNBCs. Deposits from the relative of a Director of an NBFC were exempted from the purview of public deposits. The NBFCs were also advised to brand their certificates of registration as ‘deposit taking companies’ or ‘non-deposit taking companies’. The returns to be submitted by NBFCs were modified

and rationalised.

- July**
- 14• A revised calendar of reviews effective from August 1, 2000 was prescribed for public sector banks. The revised calendar contains three parts *viz.*, reviews to be put up to i) the Board of Directors, ii) the Management Committee and iii) Audit Committee of the Board. The reviews prescribed cover in an exhaustive manner all the functional areas of the banks.
 - 20• Considering the fact that banks and FIs which are raising capital abroad for improving their capital base have largely rupee denominated assets and that most of the risk limits are linked to their capital, banks and FIs were advised to repatriate the entire proceeds of GDRs/ADRs soon after the issue process is completed. The provision would be applicable to direct investments in banks and FIs made by NRIs/OCBs, foreign banking companies or finance companies, including multilateral institutions.
 - 27• Revised guidelines for recovery of dues relating to NPAs of public sector banks were announced. These covered NPAs relating to all sectors including the small sector and were operative up to March 31, 2001.
 - 28• For recovery of dues relating to NPAs, all the Central Public Financial Institutions were advised to implement the modified guidelines which provides a simplified, non-discretionary and non-discriminatory mechanism for recovery of the stock of NPAs.
 - 31• The Reserve Bank prepared a Discussion Paper on Prompt Corrective Action (PCA). The schedule of prompt corrective actions under the broader PCA regime was worked out based on three parameters: CRAR, net NPAs to net advances and Return on Assets. Trigger points were set under each of the three parameters taking into account the practicality of implementation in the Indian context.
- Aug.**
- 7• It was decided that each bank should compute its minimum share of housing finance allocation for 2000-01 at 3 per cent of its incremental deposits as on last reporting Friday (LRF) of March 2000 over the corresponding figure for LRF of March 1999.
 - It was decided that banks should assign 100 per cent risk weight to the loans and advances granted by them to their own staff instead of the existing practice of assigning zero weight. Further, all such loans were to be shown under “Other Assets” in Schedule 11 of the Balance Sheet indicating the aggregate quantum with a suitable footnote.
 - 9• It was decided that any bank intending to undertake insurance as per the guidelines should obtain prior approval of the Reserve Bank before engaging in such business. Banks having minimum net worth of Rs.500 crore, and satisfying other criteria in regard to capital adequacy, profitability *etc.*, were allowed to undertake insurance business through joint venture on risk participation basis. Reserve Bank would consider equity contribution in the joint venture to the tune of 50 per cent. Banks which were not to satisfy the above criteria would be allowed on a ‘without participation’ basis up to 10 per cent of their net worth or Rs.50 crore, whichever was lower, as strategic investors.
 - 29• It was clarified that rupee subordinated debts raised by banks as Tier II capital, would not be considered for inclusion in capital funds for the purpose of determining the exposure ceilings to individual/group borrowers.

- Sept.** 2• Corporates desirous to avail hedging facility for underlying exposures in crude oil/petroleum products were permitted to approach the Reserve Bank for one-time approval subject only to monthly reporting of transactions through authorised dealers.
- 23• All commercial banks (including foreign banks) operating in India have been advised to transfer not less than 25 per cent of their net profit (before appropriations but after adjustments/provisions for staff bonus) to the reserve fund as against statutory minimum of 20 per cent.
- Oct.** 5• The Reserve Bank issued guidelines for sanction of working capital finance to Information Technology (IT) and Software Industry.
- 6• The scheduled commercial banks were permitted sale of Government securities after they have been allotted the same in the issues of primary auctions without actually holding the securities at the time of sale subject to some terms and conditions.
- 10• The mid-term Monetary and Credit Policy announced the following prudential policy measures: (a) general provision on standard assets was allowed to be included in Tier II capital (subject to a maximum of 1.25 per cent of the total risk weighted assets) in line with international best practices, (b) public sector banks were directed to attach the balance sheet in respect of each of their subsidiaries to their balance sheet beginning from the year ending March 31, 2001 in order to bring more transparency and move towards consolidated supervision, (c) the concept of past due in respect of non-performing assets, (grace period of 30 days) was to be dispensed with, effective March 31, 2001 on account of the improvements in the payment and settlement systems, recovery climate and upgradation of technology in the banking systems.
- In order to improve functional efficiency of market, rating was made mandatory for the term deposits accepted by all-India financial institutions with effect from November 1, 2000.
 - Since Boards of the banks already decide the PLR and spreads, with a view to give further operational autonomy, banks were permitted to formulate transparent policy of the penal/additional interest to be charged by them in cases of default in repayment, non-submission of financial statements, *etc.* with the approval of their Boards.
 - Banks were permitted to decide margin based on their commercial judgement on free sale sugar and hitherto prescribed margin stood withdrawn with effect from October 10, 2000.
- 11• In the light of best international practices, the FIs were permitted to include the “General Provision on Standard Assets” in their supplementary (Tier II) capital. It was also stipulated that the provisions on standard assets along with other ‘general provisions and loss reserves’ should not exceed 1.25 per cent of the total risk weighted assets.
- 16• As regards the flow of credit to SSI sector, in the light of the decision of the Group of Ministers, the Reserve Bank advised banks that, while sanctioning/renewing credit limits to their large corporate borrowers (*i.e.*, borrowers who enjoy working capital limits of Rs.10 crore and above from the banking system), they should fix separate sub-limits, within the overall limits, specifically for meeting payment

obligations in respect of purchases from SSIs either on cash basis or bill basis. Banks may ensure that sale proceeds/other receipts of the borrower are credited to this account on a pro-rata basis.

- Reserve Bank issued revised guidelines on classification and valuation of the investment portfolio. As per these, banks were to classify their entire investment portfolio as on September 30, 2000, under three categories, *viz.*, 'held to maturity', 'available for sale' and 'held for trading'. In the balance sheet, the disclosure would continue to be as per six classifications, *viz.* 'Government securities', 'other approved securities', 'shares', 'debentures & bonds', 'subsidiaries/joint ventures' and 'others (CP, Mutual Fund Units, *etc.*). While securities under 'available for sale' and 'held for trading' were to be marked to market, 'held to maturity' investments were not to be marked to market.
- Nov. 8•** In pursuance of the mid-term review of Monetary and Credit Policy, the Reserve Bank issued a set of guidelines governing the maintenance of the Constituents' SGL Accounts in the Reserve Bank with a view to encourage holding of securities safely in scripless form.
- 9•** Effective half year ended March 2001, the entire investment portfolio of FIs have to be classified into the three categories *viz.*, 'held to maturity', 'held for trading' and 'available for sale'.
- Nov. 10•** As recommended by the RBI-SEBI Technical Committee report, the final guidelines on bank financing of equities and investment in shares were issued. A bank was allowed to invest up to 5 per cent of its total outstanding domestic credit (excluding inter-bank lendings and advances outside India) as on March 31 of the previous year in capital market by way of investments in shares, convertible debentures and units of mutual funds (other than debt funds). Credit substitutes like commercial papers, non-convertible debentures, *etc.* were not to be reckoned as part of credit portfolio for arriving at the ceiling on bank's investments in shares and debentures.
- The Reserve Bank set up a multi-disciplinary working group (Chairman: Shri Vipin Mallik) to look into the introduction of consolidated accounting and other quantitative techniques of consolidated supervision of bank groups.
- 20•** As regards income recognition, asset classification and provisioning, urban co-operative banks were advised that no provision would need to be made for a period of one year in respect of additional credit facilities granted to SSI units which are identified as sick and where rehabilitation packages/ nursing programmes have been drawn by the banks themselves or under consortium arrangements.
- 22•** The FIs were permitted to undertake transactions in securities among themselves or with banks and non-banks clients through members of the Bombay Stock Exchange (BSE) directly.
- 23•** Banks were advised that the practice of submitting credit proposals in excess of Rs.1 crore to the Reserve Bank for approval may be discontinued in respect of sensitive commodities coming under selective credit control with immediate effect. Banks will, henceforth, have the freedom to sanction such credit proposals in terms of their individual loan policies.
- 28•** Certain categories of credit for imports were exempted from the levy of interest rate surcharge.

- 29• The Reserve Bank set up a multi-disciplinary working group (Chairman: G. Sitharaman) to look into the introduction of risk based internal inspection/audit in banks in India and to make suitable recommendations.
- Dec.** 5• Format for reporting on raising of resources by select AIFIs have been amended to include 'commercial paper' under the one time 'umbrella limit'.
- 8• Due to the improvements in the financial sector during the past few years, it was decided to dispense with 'past due' concept with effect from March 31, 2001. Accordingly, urban co-operative banks were advised that as from that date, an NPA shall be an advance where (a) interest and /or instalment of principal remain overdue for a period of more than 180 days in respect of a Term Loan, (b) the account remains 'out of order' for a period of more than 180 days, in respect of an OD/ Cash Credit (CC), (c) the bill remains overdue for a period of more than 180 days, in the case of bills purchased and discounted, (d) interest and/or instalment of principal remains overdue for two harvest seasons, but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and (e) any amount to be received remains overdue for a period of more than 180 days in respect of other accounts.
- 21• Banks were advised that review of the progress in implementation of guidelines on Risk Management Systems in banks, which was so far being undertaken by the Boards of the banks at half yearly intervals must henceforth be undertaken at quarterly intervals.
- 2001**
- Jan.** 3• The revised guidelines for licensing of new banks in the private sector were issued which stipulated a minimum initial paid-up capital of the new bank of Rs.200 crore to be raised to Rs.300 crore within three years from the commencement of business with minimum 40 per cent as promoter's contribution subject to a lock-in period of 5 years and dilution of any excess stake after one year. The rest could be raised through public issue or private placement with NRI participation in the primary equity limited to 40 per cent and within this limit a restriction of 20 per cent for any foreign banking company or finance company (including multilateral institutions) as a technical collaborator or a co-promoter. However, while the new bank should not be promoted by an industrial house, individual companies can invest up to 10 per cent of the bank's equity. No extension of credit facilities from the bank to the promoters and companies investing up to 10 per cent. NBFCs with good track record desirous of conversion to a bank should also meet the above criteria as well as should have capital adequacy of not less than 12 per cent and net NPAs of not more than 5 per cent. The bank would be required to maintain a minimum capital adequacy ratio of 10 per cent, priority sector target of 40 per cent of net bank credit and open 25 per cent of branches in rural and semi-urban areas.
- Jan.** 13• Interest rate surcharge on import finance was withdrawn for FIs.
- 18• In the case of urban co-operative banks, it was decided to consider the amounts held under the head "Building Fund" also as eligible to be treated as part of free reserves and will be taken into account for calculating "Capital Funds" for the purpose of determining exposure norms.
- 24• Certain changes in the practices and procedure of conducting financial inspection by the Reserve Bank in respect of FIs were introduced.

- 30• The Reserve Bank clarified the accounting and prudential regulatory treatment of expenditure on account of Voluntary Retirement Scheme (VRS). VRS related expenditure would comprise (a) *ex-gratia* payment of a sum equal to 2 months pay for every year of service rendered or pay for the remaining period of service, whichever is less and (b) terminal benefits like gratuity, pension/ provident fund, commutation of pension, encashment of accumulated leave, cost of reimbursement of travel and transportation at the time of retirement, *etc.*
- Feb. 2• The Reserve Bank advised banks about the exemption granted by the Central Government to all associations (other than political parties) from provision of Foreign Contribution (Regulation) Act, 1976 to accept foreign contribution without obtaining a formal approval from the Central Government, in cash or kind, to provide relief to earthquake victims in Gujarat with effect from February 1, 2001 up to March 31, 2001, subject to certain terms and conditions. Banks were also asked to advise all their branches, in particular those situated in Gujarat, to ensure immediate credit of payments received towards relief of Gujarat earthquake victims with collection of remittance particulars later.
- Subsequent to the release of the Second Consultative Document on the New Capital Adequacy Framework, banks were advised to study the Consultative Document and assess their preparedness in regard to existing Management Information System (MIS), risk management systems and technical skills of staff in order to adopt the new Accord.
 - 6• With a view to assisting exporters affected by the earthquake in Gujarat, banks have been advised (i) to extend the period of packing credit at concessional rate even beyond 360 days in deserving cases where the goods are likely to be exported (the concessional rate ranges between 10-13 per cent); (ii) to convert the overdue packing credit into term loans after taking into account the availability of ECGC claim, repayable in suitable instalments; (iii) not to classify the overdue loans as NPA in respect of (i) and (ii) above but to treat as NPA if interest and instalment of principal remains unpaid for 180 days, after it has become overdue, taking into account the revised due date fixed by the banks.
 - 7• In respect of jointly financed projects, in order to ensure effective and closer co-ordination between banks and FIs, select banks and FIs evolved certain ground rules on certain areas for consideration and adoption by them.
 - 12• The following special relief package of measures was introduced for persons in the districts and blocks notified by the Government of Gujarat as having been affected by the earthquake of January 26, 2001:
 - i) Loan classification status in case of borrowers affected by the earthquake was frozen on an 'as-is-where-is' basis up to March 31, 2003.
 - ii) In regard to standard assets, no demand for recovery to be made for two years.
 - iii) In regard to loans not classified as standard assets, no penalties to be levied in the event of non-receipt of repayments due during the next two years.
 - iv) The banks are to charge simple interest rate of 10 per cent per annum till March 31, 2003 and thereafter normal interest to be charged.
 - v) Small traders, small business, self employed and small road transporters are to be sanctioned special limits up to Rs.1 lakh for restoration/rehabilitation of their business at interest rates not exceeding PLR.

- vi) Provision for grant of loans up to Rs.2 lakh for repairs/reconstruction of houses/business premises damaged by earthquake.
- vii) Concessions were extended to affected persons in the rate of interest and processing fee being charged by banks was waived.
- viii) In the case of agricultural loans, banks are not to recover either principal or interest from the affected farmers for a period of two years and reschedule the amounts not collected during the two years for a period up to seven years.
- ix) Limit on consumption loan was raised to Rs.2000.

- Feb. 26•** In the context of transition of the banks and the AIFIs from a regulated to a deregulated regime, the need for more effective co-ordination among banks and the FIs was increasingly being felt, particularly in respect of large value projects jointly financed by banks and FIs. In this context, a meeting of select banks and FIs convened by IDBI finalised the Ground Rules on the following issues pertaining to financing of such projects:
- a) Timeframe for sanction of facilities
 - b) Asset classification across consortium members
 - c) Disciplining borrowers - change in management
 - d) Levy of charges in the problem accounts
 - e) Group approach for borrowers
 - f) Sharing of securities and cash flows, and
 - g) Treatment of restructured accounts for the asset classification purposes.
- The Reserve Bank circulated the above ground rules among banks and FIs and advised them to implement these rules in letter and spirit in the interest of the banks and FIs and the economy.
- 28•** Banks were advised to assign 20 per cent risk weight on all loans and advances to staff which were fully covered by superannuation benefits and mortgage of flat/house and classify under “Advances” in Schedule 9 of the balance sheet all interest bearing loans and advances granted to their staff. However, all non-interest bearing loans and advances to their own staff was to be included in “Others” under “Other Assets” in Schedule 11 of the balance sheet.
- March 2•** With regard to the provision of credit to SSI sector, in line with the recommendations of the Nayak Committee, the Reserve Bank advised banks to make further improvements in the following areas: (a) delegation of adequate discretionary powers to branch officials for sanction of credit facilities, (b) issuing acknowledgements of the loan proposals received, (c) providing technical expertise in the branches, (d) providing credit to the tiny sector, (e) maintenance of loan application registers in a comprehensive manner, (f) referring proposals liable for rejection/curtailment in the amount of finance to the next higher authority.
- 3•** The Reserve Bank advised banks to prepare an action plan for issuing Kisan Credit Cards (KCCs) to all eligible borrowers in agricultural sector within next three years and keep the Reserve Bank informed in case of change of targets in future.
- 22•** In order to keep a special watch on receipt and utilisation of foreign contribution received for providing relief to the earthquake victims in different parts of Gujarat, the Reserve Bank directed all commercial banks to furnish a monthly report in respect of receipt of foreign contributions by Associations/Organisations in India under Foreign Contribution (Regulation) Act, 1976.

- It was clarified that all deposits placed by banks with NABARD/SIDBI *in lieu* of shortfall in advance to priority sector *vis-a-vis* the prescribed target would attract 100 per cent risk weight since these deposits were *in lieu* of shortfall in assets which carry 100 per cent risk weight.
- 23•** The Reserve Bank announced that select all-India Term Lending and Refinancing Institutions were to disclose certain important financial ratios/data in their published Annual Reports as part of the 'Notes on Accounts' to enable the auditors to authenticate the information. These included (a) CRAR, core CRAR and supplementary CRAR, (b) amount of subordinated debt raised and outstanding as Tier-II capital, (c) risk weighted assets (on-and off-balance sheet, separately), (d) shareholding pattern as on date of the balance sheet, (e) net NPA to net loans and advances, (f) amount and percentage of net NPAs under prescribed asset classification categories, (g) provisions made during the year towards standard assets, NPAs, investments, (h) movements in net NPAs, (i) credit exposure as a percentage of capital funds and as percentage to total assets, (j) credit exposure to five largest industrial sectors as percentage to total loan assets (k) maturity pattern of rupee assets and liabilities, (l) maturity pattern of foreign currency assets and liabilities, (m) interest income as a percentage to average working funds, (n) non-interest income as a percentage to average working funds, (o) operating profit as a percentage to average working funds, (p) return on average assets and (q) net profit per employee.
- March 28•** Norms relating to restructuring/rescheduling/re-negotiation of terms of the standard and substandard loan assets, was reviewed in the light of the international best practices and revised guidelines for FIs were issued.
- Public sector banks were instructed to (a) annex only the annual accounts and Auditors' report of the subsidiaries to its balance sheet, (b) make available the Directors' report in respect of the subsidiaries on the web site of the parent bank, (c) continue the above procedure till such time the bank switches over to the consolidated balance sheet system.
- 30•** Guidelines were issued by the Reserve Bank regarding classification and provisioning norms for restructured accounts in the standard and sub-standard categories.
- 31•** The maximum rate of interest that NBFCs can pay on their public deposits was reduced from 16 per cent to 14 per cent per annum. The new ceiling was also extended to miscellaneous non-banking companies (chit funds) and Nidhi companies as applicable to the deposits accepted by them as per the directions prescribed by the Reserve Bank.
- April 4•** The Reserve Bank advised the co-operative banks facing liquidity problems in their day-to-day operations in the wake of the Gujarat earthquake to approach public sector banks and also PDs for repo facilities against their holdings of eligible government securities and, in the event of a shortfall, approach the Reserve Bank for special liquidity support against the eligible holdings of appropriate assets for temporary periods up to 90 days.
- 10•** The operation of the guidelines for a simplified, non-discriminatory and non-discretionary mechanism for settlement of dues relating to NPAs with outstanding up to Rs.5 crore was extended up to June 30, 2001 in respect of banks.

18• The operation of the guidelines for simplified, non-discriminatory and non-discretionary mechanism for settlement of dues relating to NPAs with outstanding up to Rs. 5 crore was extended up to June 30, 2001 in respect of central public FIs.

19• Banks were permitted to formulate fixed deposit schemes specifically for senior citizens offering higher and fixed rates of interest as compared to normal deposits of any size.

- In order to facilitate better ALM, banks were given freedom to exercise their discretion to disallow premature withdrawal of large deposits held by entities other than individuals and Hindu Undivided Families subject to informing the depositors in advance. The period of renewal of overdue domestic deposits at interest rate prevailing on the date of maturity was made 14 days and in the case of the overdue period exceeding 14 days where the depositors placed the entire amount of overdue deposit or a portion thereof as a term deposit, banks were allowed to prescribe their own interest rate for the overdue period on the amount so placed as term deposits. Banks, however, have to inform the depositors in advance of their policy for renewal of overdue deposits.
- In order to move towards international best practices and impart greater transparency, it was decided to introduce classification of loan as non-performing when the interest and/or instalment of principal remain overdue for a period of more than 90 days from the year ending March 31, 2004. Banks were advised to make additional provisions from the year ending March 31, 2002 to facilitate smooth transition.
- Effective from the year 2001-02, audit firms recommended by private sector banks for appointment as Statutory Central Auditors (SCAs) would have to satisfy certain minimum standards like minimum number of full time partners, number of chartered accountants exclusively associated, number of professional audit staff, *etc.*
- In line with international best practices, it was decided that the concept of capital funds in India as defined under capital adequacy standards for determining exposure ceiling uniformly by domestic and foreign banks would be made effective from March 31, 2002.
- It was decided that non-fund based exposures should be reckoned at 100 per cent and banks should include forward contracts in foreign exchange and other derivative products at their replacement cost, effective from April 1, 2003.
- In regard to exposure ceiling, the Reserve Bank announced reduction of exposure limit for single borrower from the existing 20.0 per cent to 15.0 per cent, effective from March 31, 2002 and group exposure limit from the existing 50.0 per cent to 40.0 per cent of capital funds, effective from March 31, 2002; for financing infrastructure projects, the limit is extendable by another 10.0 per cent, *i.e.*, up to 50.0 per cent.

April 19• For greater transparency in the operation of borrowal accounts, the Reserve Bank advised banks for bi-annual circulation of defaulters list of Rs.1 crore and above in the doubtful or loss category, and also to obtain the consent of borrowers to disclose their names in the event of default.

- The interim prudential measures for urban co-operative banks (UCBs) proposed to provide greater security to depositors and members included stopping of direct or

indirect lending by UCBs to individuals or corporates against security of shares with immediate effect, unwinding of existing lending to stock brokers or direct investment in shares, limiting of their borrowings from call money market up to 2.0 per cent of their aggregate deposits as at end-March in the previous financial year, no permission for increase in their term deposits in other UCBs and unwinding of existing term deposits by June 2002, increases in their SLR holdings in government and other approved securities as per cent of NDTL by March 2002 from 15 to 20 per cent for scheduled UCBs; from 10 to 15 per cent for non-scheduled UCBs with deposits base of Rs. 25 crore and above and from zero to 10.0 per cent in case of other non-scheduled UCBs), maintenance of the entire SLR of 25 per cent of NDTL for scheduled UCB only in government and other approved securities with effect from April 1, 2003 and maintenance of investment in Government securities of scheduled as well as non-scheduled UCBs only in SGL accounts with Reserve Bank or in constituent SGL Accounts of public sector banks and PDs.

- Reserve Bank proposed a new apex supervisory body which can take over the entire inspection/ supervisory functions in relation to scheduled and non-scheduled UCBs. This apex body could be under the control of a separate high level supervisory board consisting of representatives of Central Government, State Governments, Reserve Bank as well as experts and it may be given the responsibility of inspection/and supervision of UCBs and ensuring their conformity with prudential, capital adequacy and risk management norms laid down by the Reserve Bank.
- In order to improve the functioning of co-operative banks on a professional basis and also to substantially improve the entry point norms and stiffer prudential and other parameters, State Governments were to be requested to implement the recommendations of Madhava Rao Committee at the earliest.
- 23•** As per the revised guidelines for classification and valuation of investment, all urban co-operative banks were directed to classify their entire investment portfolio under 'held to maturity', 'available for sale' and 'held for trading' with investments under the latter two categories marked to market. These instructions would be applicable with effect from March 31, 2002.
- 25•** Pursuant to High Power Committee's recommendation, Capital to Risk weighted Assets Ratio (CRAR) has been made applicable to UCBs in a phased manner. Over a period of three years, UCBs should fall in line with the discipline applicable to commercial banks.
- 26•** To bring convergence in the norms for asset classification between FIs and banks over a reasonable period of time, effective from the year ending March 31, 2002, the credit facility of a financial institution would be treated as non-performing if interest and/or principal remains overdue for more than 180 days in a year.
- 28•** The Reserve Bank clarified the approach to universal banking for all-India term lending and refinancing institutions. Illustratively, the salient operational and regulatory features to be addressed by the FIs for conversion into a Universal Bank included those with respect to (a) reserve requirements, (b) permissible activities, (c) disposal of non-banking assets, (d) composition of the Board, (e) prohibition on floating charge of assets, (f) nature of subsidiaries, (g) restriction on investments,

(h) connected lending, (i) licensing, (j) branch network, (k) assets in India, (l) format of annual reports, (m) managerial remuneration of Chief Executive Officers, (n) deposit insurance, (o) AD's licence, (p) priority sector lending, and (q) prudential norms.

- 30•** With effect from June 30, 2001, banks, FIs, PDs and SDs were directed to make fresh investments and hold CP only in dematerialised form. Outstanding investments in scrip form in the books of these institutions should also be converted into dematerialised form by October 31, 2001.
- May 2•** Guidelines were issued for compromise settlement of dues of banks and financial institutions through *Lok Adalats*.
- May 11•** As per the revised guidelines issued on Bank Financing of Equities and Investments in Shares, the ceiling of 5 per cent was made applicable to total exposure of a bank to stock markets with sub-ceilings for total advances to all stock brokers and market makers as well as individual stockbroking entities, its associate/interconnected companies. The 5 per cent ceiling will be computed in relation to the total advances (including CPs) as on March 31 of the previous year as against total outstanding domestic credit as on March 31 of the previous year under the earlier guidelines. The Margining system was rationalised and simplified to a stipulation of a uniform margin of 40 per cent on all advances/guarantees with a minimum cash margin of 20 per cent (within the margin of 40 per cent) in respect of guarantees issued by banks. Banks were not permitted to take arbitrage operations themselves or extend credit facilities directly or indirectly to stockbrokers for arbitrage operations in Stock Exchanges. Banks were permitted to acquire shares from secondary markets with a *proviso* of no sale of shares without actually holding of the same in their investment accounts. The responsibilities relating to investment and surveillance functions were segregated with the Investment Committee associated with the decision making of investments in shares/advances against shares and with the Audit Committee to be set up by the Board to undertake surveillance and monitoring of these decisions.
- June 7•** Banks were advised to put in place appropriate systems to ensure that investment in privately placed unrated instruments were made in accordance with the systems and procedures prescribed under the respective bank's investment policy approved by the Board. Banks were also advised to introduce suitable format of disclosure requirements in respect of private placement issues, on the lines of the Model Format recommended by the Technical Group on Non-SLR Investments, with the approval of the Board.
- It was also prescribed that the Boards of banks should lay down policy and prudential limits on investments in bonds and debentures including cap on unrated issues and on private placement basis, sub-limits for PSU bonds, corporate bonds, guaranteed bonds, issuer ceiling, *etc.* The policy laid down by banks should prescribe stringent appraisal of issues, especially by non-borrower customers, provide for an internal system of rating for non-borrower customers, stipulate entry level minimum ratings/quality standards, lay down proper risk management systems, *etc.*
- 20•** In line with the best international practices, the Reserve Bank has decided to adopt the concept of 'capital fund' as defined under capital adequacy standards for

- determining exposure ceiling for the FIs, effective March 31, 2002.
- 27•** Asset Liability Management (ALM) guidelines for NBFCs (including RNBCs) were announced as a part of the overall system for effective risk management in their various portfolios. To begin with, all the NBFCs which have an asset size of Rs.100 crore and above or public deposits of Rs.20 crore and above as per their balance sheet as on March 31, 2001 should put in place an ALM system which is required to be fully operational by the year ending March 31, 2002. Chit funds and Nidhis have been presently kept out of the purview of these guidelines.
- The monies received by NBFCs by issue of CP in accordance with the IECD guidelines dated October 10, 2000 have been exempted from the purview of public deposits. Procedure for accounting of repossessed lease/hire purchase assets was clarified. A uniform practice of computing the amount of outstanding public deposit liabilities net of TDS actually paid and remitted to Government has been advised to all NBFCs for adoption. Statutory auditors of NBFCs were advised that their observations on contravention of RBI Act/Directions should also form part of their reports to the shareholders of the company. Companies which have been issued Certificate of Registration (CoR) with authorisation to accept public deposits, but which have subsequently repaid all the public deposits or placed in the requisite amounts in deposits with scheduled commercial banks for the purpose, have been given an option either to convert themselves into companies without authorisation to accept public deposits or comply with all the regulatory requirements as applicable to companies which have been granted authorisation to accept public deposits.
- July 2•** Banks have been advised to provide a personal insurance package to all Kisan Credit Cards (KCC) holders to cover them against accidental death or permanent disability up to a maximum amount of Rs.50,000 and Rs.25,000, respectively. As per a model scheme advised to the banks, the premium burden will be shared by KCC issuing banks and KCC holders in the ratio of 2:1.

IV. CAPITAL MARKET POLICIES

(i) Securities and Exchange Board of India (SEBI) 2000

2000

- April 7•** SEBI modified guidelines for 100 per cent one-stage book-building process. Under the new guidelines, a maximum of 60 per cent of the issue was allowed to be allotted to institutional investors and at least 15 per cent to non-institutional investors applying for more than 1000 shares. The remaining 25 per cent could be allotted to small investors on a *pro-rata* basis. One-stage 100 per cent book-building was permitted with bidding centres at all cities with stock exchanges.
- SEBI permitted mutual funds to invest in mortgage backed securities of investment grade and above. This amendment is expected to augment the funds available for the housing sector.
- May 24•** SEBI liberalised investment norms for mutual funds by allowing open-ended schemes to invest up to five per cent of their net asset value (NAV) in equity shares or equity related instruments of unlisted companies. Investment limit in such equities was kept unchanged at 10 per cent for close-ended schemes.
- SEBI granted approval for trading in futures contracts based on the BSE Sensex

and S&P CNX Nifty indices. Clearing house of BSE and clearing corporation of NSE were also permitted to deal in derivative contracts.

- June**
- 7• SEBI increased the maximum investment limit for mutual funds in listed companies from 5 per cent to 10 per cent of NAV in respect of open-ended funds. Also, any change in the fundamental attributes of a scheme was allowed to be made without the consent of three fourths of the unit holders provided that unit holders are given the exit option at NAV without any exit load.
 - 9• SEBI issued a code of conduct on advertisement for MFs banning them from making any assurance or claims based on past performance, *etc.* that might mislead the public.
 - 14• In the secondary market, SEBI permitted introduction of daily and weekly carry forward system with maturities of 1,2,3,4 and 5 days in the rolling settlement. It also permitted stock exchanges to introduce continuous net settlement (CNS). For the existing carry forward system SEBI allowed increase in the existing limit to Rs.40 crore from Rs. 20 crore with a 5 per cent increase in the margin on the incremental limit. However, the present limit of 75 days for carrying forward trades was discontinued.
 - 15• SEBI tightened the entry norms for IPOs by modifying the Disclosure and Investor Protection (DIP) guidelines. According to the new guidelines, the IPOs of size up to 5 times the pre-issue networth was allowed only if the company had a record of profitability and networth as specified in the guidelines. Companies without such a track record or the issue size beyond 5 times the pre-issue net worth were allowed to make IPOs only through the book-building route with 60 per cent of the issue to be allotted to qualified institutional borrowers (QIBs). SEBI also stipulated the lock-in period of shares issued on preferential basis by listed companies to any person for a period of one year.
- July**
- 4• SEBI issued guidelines specifying eligibility criteria and risk containment measures for automated lending and borrowing mechanism (ALBM), a quasi-derivative instrument introduced by NSE, in line with the modified carry forward system.
 - 7• Following the recommendations of the Committee on Accounting Standards (Chairman: Shri Y.H. Malegam), SEBI made it mandatory for the listed companies to provide their half-yearly results on the basis of limited review by its auditors.
- Aug.**
- 2• SEBI permitted internet trading on wireless media using Wireless Application Protocol (WAP) subject to the adherence of all the requirements stipulated for internet based trading.
 - 9• SEBI asked the Asset Management Companies (AMCs) to maintain records in support of each investment decision indicating the data, facts and opinion on the investment made in equity and debt securities.
- Sept.**
- 4• Malegam Committee set up by SEBI recommended that securities held by MFs should be classified as NPAs if either the principal or interest is not received for six months instead of one year after the due date, as under the earlier norms. MFs will have to disclose NPAs and illiquid securities in portfolio every six months.
 - 14• SEBI Board approved the SEBI (Venture Capital Funds)(Amendment) Regulations, 2000 and also the SEBI (Foreign Venture Capital Investors) Regulations, 2000. Besides defining a Venture Capital Fund and Undertaking, the

- Regulations stipulated a minimum corpus of Rs.5 crore for a VCF, investment criteria, disclosure standards, *etc.* Furthermore, it provided that a VCF seeking to avail itself of the tax/pass-through benefit will have to divest from the investment within a period of one year from the listing of the venture capital undertaking.
- Oct. 13•** SEBI introduced the facilities of Continuous Net Settlement (CNS), Carry Forward under Rolling Settlement (CFRS) and Automated Lending and Borrowing Mechanism under Rolling Settlement (ALBRS) for fifteen scrips under rolling settlements.
- 14•** SEBI has set parameters for the eligibility criteria for selection of scrips for ALBM and Modified Carry Forward Segment (MCFs) and for liquidity. Under the minimum liquidity criteria, liquidity would be measured by four parameters *viz.*, trading volume, number of trades, trading frequency and velocity of trades or on the basis of impact cost, which should be less than 2.5 per cent.
- 16•** The Advisory Committee on Mutual Funds of SEBI decided to reduce the initial offer period to 30 days from a maximum 45 days at present and stipulated that within the next 30 days the scheme should dispatch statements of accounts and should open for ongoing sale and repurchase. Other measures include standardisation of the format for half-yearly disclosure of portfolio, transfer of unclaimed redemption amount to a pool account and following minimum international standards for trading by the employees to avoid conflict of interest, front running and insider trading.
- Nov 28•** . SEBI abolished the 'no delivery' period for corporate actions for the companies whose securities are traded in the compulsory dematerialised form to reduce the possibilities of the price manipulation. Other measures include reduction in the current requirement of 90 days gap between two book closures to 30 days, upholding the legal validity of the use of digital signature on contract notes, mandatory client code and minimum floating stock requirement for continuous listing.
- SEBI simplified the procedures for FIIs permitting them to go ahead with clients' order and do the registration later within a day or two. The move will help the FIIs to proceed with execution of requests of clients, who are mostly from outside the country without waiting for SEBI clearance for each transaction.
- 29•** SEBI directed MFs to disclose the total outstanding exposure in derivative instruments as well as their total investments in foreign securities, ADRs and GDRs by the schemes in their half-yearly disclosures.
- Dec. 2•** SEBI issued guidelines for online issue of shares which include connectivity of the registrar to the issue with the stock exchange, appointment of registered broker with obligation to pay on behalf of the clients in case the latter fails to meet his commitment and prohibition of the stock exchanges to use their settlement/trade guarantee fund for honouring broker commitments.
- 9•** SEBI allowed disclosure of material information during trading hours but stipulated that such announcement should be made within 15 minutes of the conclusion of the Board meeting in which the decision was taken.
- 22•** SEBI changed the eligibility criteria for overseas investment by the Indian MFs. As per the new norms the US \$ 10 million floor was removed and SEBI decided to apportion the US \$ 500 million limit of overseas investments among Indian MFs.

UTI was made eligible for a ceiling of US \$ 50 million.

2001

- Jan 13•** To tighten market surveillance, SEBI asked the stock exchanges to maintain order data for 5 years and brokers to keep client ID for 7 years. Besides, it decided to evolve code of ethics for elected directors, strengthen the stock watch system and empower the exchanges to act against errant members and monitor advisory services.
- Feb. 1•** SEBI laid down norms for disclosure of interest by SEBI regulated intermediaries giving public investment advice.
- 6•** SEBI has allowed stock exchanges to use up to 25 per cent of the trade guarantee fund (TGF) or the settlement guarantee fund (SGF) as a cover of initial public offerings (IPOs) offered under the secondary market group.
- March 7•** The Risk Management Group of the SEBI banned all naked short sales for the next two settlements across all exchanges with immediate effect. The SEBI order applied to all scrips in MCFS and Borrowing and Lending of Securities Systems (BLESS) on the BSE and ALBM on the NSE.
- April 30•** SEBI decided that the MFs shall disclose large unitholdings in the scheme which are over 25 per cent of the NAV. The information on the number of such investors and total holdings by them in percentage terms shall be disclosed in the allotment letters after the initial public offerings and also in the annual and half-yearly results.
- May 8•** SEBI laid down guidelines relating to procedures and code of conduct for transactions in securities by the key personnels of the AMCs so that there is no conflict of interest between the transactions of employees and the MFs and interests of investors are not affected adversely.
- 9•** SEBI issued guidelines to Registrars to Issue and Companies for unified procedure for handling and processing of transfer documents/bad delivery documents/stock invests *etc.*
- 11•** SEBI stipulated that the applications, details regarding the application and application monies received from the investors investing in the issue of a body corporate and the final certificate are to be furnished to the Registrar to the issue, the lead manager and the body corporate before the expiry of seven working days after the date of closure of the issue.
- 14•** SEBI announced significant changes in the capital market. These measures included: (a) banning of all deferral products including badla, bringing in 414 scrips accounting for 95 per cent of trading volumes within the ambit of rolling settlements from July 2, 2001, (b) allowing index based and individual stock based options, (c) introduction of uniform Monday-to-Friday settlement cycle across all SEs for all scrips not in the rolling mode, (d) a code of conduct and a preventive framework against insider trading, (e) removal of price bands for all stocks in the rolling mode from July 2, 2001 and for the entire market from January 2, 2002 and introduction of a market wide circuit breaker system which would be applied at three stages of the index movements, (f) shifting the margining system from net basis to gross basis (sales and purchases) with effect from September 3 and (g) introduction of 99 per cent value at risk (VAR)-based margin system for all scrips in the compulsory rolling settlement with effect from July 2, 2001 *etc.*

- 22• SEBI advised the Stock Exchanges to desist from the practice of granting conditional listing to the companies.
 - 29• SEBI stipulated that the intermediaries regulated by SEBI or any of its employees shall not render any investment advice about any security in the publicly accessible media unless a disclosure of his/employees' or his dependent family members' interest in the said security has been made while rendering such advice.
 - June** 20• SEBI tightened the norms relating to the risk containment measures to be adopted by the derivative exchange/segment and the Clearing House/Corporation for the trading and settlement of option contracts on stocks. While exchanges are free to decide the particular risk management model the framework shall be consistent with the risk management guidelines mandated by the L.C. Gupta Committee.
 - 25• The restriction on short sales announced in March 7, 2001 was withdrawn with effect from July 2, 2001 as all deferral products were banned after that.
- (ii) Government of India**

2000

- Oct.** 6• The Department of Company Affairs (DCA) conferred 12 officials of SEBI the power to punish companies for their misstatement in prospectus, non-issue of shares and non-payment of dividends.

2001

- Feb.** 28• Exemption of long-term capital gains tax arising out of sale of securities and units if such gains are reinvested in primary issues of shares of public companies.
 - Increase in the ceiling for investment by FIIs from 40 per cent to 49 per cent with the approval of the shareholders through a special resolution in the General Body Meeting.
 - Companies were permitted to invest all ADR/GDR proceeds abroad. Two way fungibility was announced for ADRs/GDRs. Converted local shares can be reconverted into ADRs/GDRs while being subject to sectoral caps, wherever applicable.

- July** 20• The Government notified that companies in the IT, telecom, media and entertainment sectors would be allowed to tap the market with a minimum offering of 10 per cent of their equity. All public issues through this route would have to satisfy the criterion of minimum Rs.100 crore issue size, follow book-building route with allocation of 60 per cent to Qualified Institutional Buyers (QIBs) and maintain a minimum floating stock post-listing on a continuous basis.
- 25• The Government reconstituted the Disinvestment Commission under the chairmanship of Dr. R.H. Patil. The body will have a two-year term and will advise the Government on the disinvestment of PSUs.

(iii) Reserve Bank of India 2000

2000

- June** 23• Reserve Bank relaxed the guidelines for bond issues by financial institutions (FIs) where the requirement of issue-wise prior approval/registration for raising of resources by way of bonds was done away with subject to fulfillment of certain conditions relating to maturity period, exit options and rate of return on the bond.
- Oct.** 10• Reserve Bank, in consultation with SEBI decided, in principle, to move over in due course to order-driven screen-based trading in Government securities on the stock exchanges.

(iv) Insurance Regulatory and Development Authority (IRDA) 2000

2000

- Aug. 19•** IRDA has stipulated that insurance companies have to confirm their compliance with the shareholding pattern requirements specified under the IRDA Act, 2000. Earlier, it directed that insurance companies would have to restrict their investment in an equity instrument to a maximum of 20 per cent with the total capital employed at any given time.

V. EXTERNAL SECTOR POLICIES a) Trade Policy 2000

a) Trade policy

2000 The Directorate General of Foreign Trade (DGFT) made the following changes in the Export Import (EXIM) policy, 1997-2002:

- July 20•** The sale of tea by Export Oriented Units (EOUs) and units in Export Processing Zones (EPZs) in Domestic Tariff Area (DTA) was banned.
- Sept. 29•** The Export Promotion Capital Goods (EPCG) licence holders were allowed to source the capital goods from other domestic manufacturers subject to an application for the issuance of Advance Licence for Deemed Exports for the import of inputs. The domestic manufacturer could also replenish the inputs including components after supply of capital goods to the EPCG licence holders.
- Oct. 19•** Capital goods and spares that have become obsolete/surplus may either be exported or disposed off in the DTA on payment of applicable duties.
- Nov. 24•** The compliance of all the conditions of the Standard of Weights and Measures (Packaged Commodity) Order, 1977, as applicable to domestic producers was imposed for imports of packaged commodities.
- Dec. 4•** With a view to simplify operating regime, Special Economic Zones (SEZs), EPZs and EOUs were exempted from industrial licensing requirement for establishment of projects for manufacture of items reserved for small scale sector.
- 15•** In order to prevent the import of sub-standard goods, the import of 131 items were subjected to compliance of the mandatory Indian quality standards as applicable to domestic goods. For compliance of these requirements, all manufacturers/exporters of these products to India were required to register themselves with the Bureau of Indian Standards (BIS).

2001

- Feb. 28** With a view to safeguard interests of domestic producers in the context of the proposed complete removal of Quantitative Restrictions (QRs) and also to boost exports, the Union Budget for 2001-02 announced the following major policies:
- a ten-year tax holiday to the developers of SEZs on the same lines as developers of industrial parks;
 - a provision to exempt anti-dumping duty or safeguard duty on goods imported by 100 per cent EOUs, units in the Free Trade Zones (FTZs) or in the SEZs;
 - a provision for exemption from safeguard duty on Tariff Rate Quota (TRQ) basis;
 - a New Textile Policy (including exemption from *ad-valorem* excise structure for independent textile processors and abolition of the 16 per cent countervailing duty on 12 textile machinery items) and initiation of a scheme for setting up of integrated apparel parks;
 - a proposal to do away with the ten per cent surcharge on custom duties and

- reducing the peak custom tariff from 38.5 per cent to 35 per cent;
- an increase in the rates of customs duty on crude edible oils ranging from 35 per cent to 55 per cent to a uniform rate of 75 per cent and on refined oils from 45/65 per cent to 85 per cent;
- Increase in the basic custom duty on the imports of second-hand cars to 105 per cent and the customs duty on tea and coffee, copra, coconut and desiccated coconut from 35 per cent to 70 per cent;
- reduction in customs duties on 159 specified textiles machines from 15 per cent to 5 per cent, on IT and telecom products and their inputs and components from their current levels to 15 per cent, on silk waste, cotton waste and flax fibre reduced from 35 per cent/25 per cent to 15 per cent, on cut and polished coloured gem stones from 35 per cent to 15 per cent and on gold from Rs.400 per ten grams to Rs.250 per ten grams.

March 31 The salient features of the modified EXIM policy for 1997-2002 are as follows:

- Setting up of product specific Agricultural Export Zones (AEZs) for promoting agricultural exports is envisaged and extending the benefits of Duty Exemption Scheme and the EPCG Scheme to the agro sector as well;
- A new scheme of Market Access Initiative (MAI) was evolved in order to help the industry in research and development, market research, specific market and product studies, warehousing and retail marketing infrastructure in select countries and direct market promotion activities through media advertising and buyer-seller meets;
- With respect to SEZs, Foreign Direct Investment (FDI) was permitted under automatic route for all manufacturing sectors, except a small negative list;
- The SEZs developers have been allowed duty free import/procurement from DTA for development of SEZs to give a boost for development of integrated infrastructure for exports;
- The units in SEZs were allowed to bring back their proceeds in 365 days and retain 100 per cent of proceeds in Exchange Earners Foreign Currency (EEFC) account;
- The SEZs developers would be made eligible for various entitlements as provided for in the Income Tax Act;
- Quantitative Restrictions (QRs) on the remaining 715 items have been removed thereby completely eliminating the QRs;
- With complete removal of QRs, certain measures were announced to protect the interests of the domestic industry. The imports of items like wheat, rice, maize, petrol, diesel, Aviation Turbine Fuel (ATF) and urea were permitted only through the designated State Trading Enterprises following commercial principles of functioning in accordance with Article XVII of GATT;
- Import of all primary products of plant and animal origin would be subject to import permits to be issued by the Ministry of Agriculture after an import risk analysis based on Sanitary and Phyto-sanitary measures and provisions;
- The import of new and second-hand cars was to be allowed subject to certain conditions;
- Import of foreign liquor, processed food products and tea wastes would be subject to already existing domestic regulations concerning health and hygiene;
- The entitlement for Annual Advance Licence facility was increased from 125 per

- cent to 200 per cent of the FOB value of preceding year exports;
 - Validity of Duty Free Replenishment Certificate (DFRC) scheme was extended from 12 months to 18 months;
 - Validity of Duty Entitlement Passbook (DEPB) scheme was extended up to the last day of the month in which case the same is expiring;
 - The Restricted Import Licensing, Export Licensing and Clarification committees were abolished;
 - There would be no time limit for filing application for golden status;
 - The facility of electronic filing of applications was extended to 29 out of 31 offices of DGFT, facility of offline filing was introduced and that of electronic filing was extended to all categories of licences.
- June 22•** In order to speed up the approval process, the Government constituted a single Board of Approval for EPZs/SEZs/EOUs as a matter of procedural simplification.
- 2000**
- b) Foreign Exchange Market**
- April 22•** It was decided to raise the monetary ceiling of advance remittances undertaken by Authorised Dealers (ADs) on behalf of importers against bank guarantee from an international bank of repute situated abroad furnished by an overseas supplier from US \$ 15,000 to US \$ 25,000.
- 24•** With a view to further liberalising investment by Foreign Institutional Investors (FIIs) in Indian companies in the primary/secondary markets in India, Indian companies (other than Banking Companies) were permitted to enhance the aggregate ceiling on investment from 30 per cent to 40 per cent of issued and paid-up capital of the Indian company.
- May 16•** The Diamond Dollar Account (DDA) Scheme was introduced. Under this scheme, firms and companies dealing in the purchase/sale of diamonds, with a track record of at least three years in import/export of diamonds and having an average annual turnover of Rs.5 crore or above during the preceding three license years were permitted to carry out their business through DDA with not more than two ADs. The DDA were to be maintained in current accounts with the balances subject to CRR and SLR requirements. Furthermore, firms and companies maintaining foreign currency accounts, excluding EEFC accounts, with banks in India or abroad, were not eligible to maintain DDA.
- 25•** The Reserve Bank indicated that it will meet partly or fully the government debt service payments directly as considered necessary.
- The Reserve Bank decided to make arrangements to meet fully or partly the foreign exchange requirements for import of crude oil by the Indian Oil Corporation.
 - The Reserve Bank also announced that it will continue to sell the US dollars through SBI in order to augment supply in the market or intervene directly as considered necessary to meet any temporary demand-supply imbalances.
 - Exporters were advised by the Reserve Bank not to delay repatriation of export proceeds beyond the due date. In order to discourage any delay in realisation of export proceeds, it was decided that in respect of overdue export bills, banks will charge interest at 25 per cent per annum (minimum) from the date the bill falls due for payment.
 - The Reserve Bank reiterated that ADs acting on behalf of FIIs were free to

approach the Reserve Bank to procure foreign exchange at the prevailing market rate. Depending on market conditions, the Reserve Bank would either sell the foreign exchange directly or advise the concerned bank to buy it in the market.

- Banks were advised by the Reserve Bank to enter into transactions in the forex market only on the basis of genuine requirements and not for the purpose of building up speculative positions. The Reserve Bank also indicated that it would monitor the position closely.
- June 1•** The Foreign Exchange Management Act (FEMA) replaced the existing Foreign Exchange Regulation Act (FERA), 1973 with effect from June 1, 2000. The FEMA consolidated and amended the law relating to foreign exchange with the objectives of facilitating external trade and payments and of promoting the orderly development and maintenance of foreign exchange market in India.
- 14•** The limit for ECB approvals given by the Reserve Bank was increased to US \$ 100 million under all windows. Even in cases of pre-payments, approved by the Government, the Reserve Bank was empowered to give all such approvals. The facility of domestic rupee denominated structured obligations to be credit enhanced by international banks/financial institutions/joint ventures was extended to those NBFCs, which were registered with the Reserve Bank, had earned profits during the last three years and had “AA” or equivalent rating from a reputed credit rating agency.
- July 14•** FDI up to 100 per cent was allowed for business to business e-commerce subject to the condition that such companies divest 26 per cent of their equity in favour of the Indian public in five years, if these companies were listed in other parts of the world.
- July 14•** The dividend balancing condition was removed for FDI in the remaining 22 consumer industries.
- The upper limit of Rs.1,500 crore for FDI in projects of electricity generation, transmission and distribution (other than atomic reactor power plants) was removed.
 - The limit of FDI in oil refining sector under automatic route was raised from the existing 49 per cent to 100 per cent.
- Aug. 14•** The Reserve Bank instructed ADs to direct exporters to scale down the balances in accounts held under EEFC scheme to 50 per cent of the amount as on August 11, 2000 and convert the excess amount into rupees by August 23, 2000, to permit them future accretions only up to 50 per cent of the existing eligibility and in liquid form as current/savings accounts and hold in abeyance the credit facilities available against such accounts.
- 24•** To deal with applications relating to import of goods and services into India, ADs were advised to sell foreign exchange or transfer rupees to non-resident account towards payment for imports into India, from any foreign country, in conformity with the EXIM Policy in vogue and the Rules framed by the Government of India and the Directions issued by Reserve Bank from time of time under the Act.
- ADs were advised to follow normal banking procedures and the provisions of Uniform Customs and Practices for Documentary Credits (UCPDC), *etc.*, while opening letters of credit for import into India on behalf of their customers.
- Sept. 5•** The Reserve Bank operationalised the automatic route for External Commercial

Borrowings (ECBs) up to \$ 50 million. The refinancing of existing ECBs was also brought under automatic route.

- Importers/exporters of crude oil and petroleum products were permitted to hedge their exposure to price risk.
- 26• General permission was granted to a resident, being a principal debtor, to make payment to a person resident outside India who has met the liability under a guarantee. Accordingly, in cases where the liability is met by the non-resident out of funds remitted to India or by debit to his FCNR/ NRE account, the repayment may be made by credit to the FCNR/NRE/NRO/NRSR account of the guarantor provided the amount remitted/credited shall not exceed the rupee equivalent of the amount paid by the non-resident guarantor against the invoked guarantee.
- Oct. 10• The facility under EEFC Accounts was reviewed and the earlier entitlements were restored to facilitate quick export related payments and reduce transaction costs. The banks were thus permitted to credit 70 per cent of inward remittances with respect to the EEFC accounts of 100 per cent EOUs and units in EPZs, Software Technology Park or Electronic Hardware Technology Park and 50 per cent of the inward remittances in respect of others. However, the EEFC accounts were to be held as current accounts *albeit* with continuance of cheque-issuing facility. No bank credit facility, either fund-based or non-fund based, was to be provided against these accounts.
- 19• State Bank of India was permitted to float a scheme called 'India Millennium Deposits (IMDs)'. ADs were permitted to grant loans in non-repatriable rupees, in India, to the holders of IMDs for personal purposes, and for carrying on business activities except for the purpose of relending or carrying on agricultural/plantation activities or for investment in real estate business. NRIs (and not OCBs) were also permitted to be granted loans in non-repatriable rupees for acquisition of immovable property in terms of Foreign Exchange Management (Acquisition and transfer of immovable property in India) Regulations, 2000 subject to certain conditions. ADs were permitted to grant loans to the account holders for the purpose of making direct investment in India on non-repatriation basis. ADs were also permitted to grant loans/overdrafts to individuals/firms/companies resident in India against the collateral of IMDs, subject to usual norms and the stipulated conditions .
- 30• ADs were allowed advance remittance for any current account transactions for which the release of foreign exchange is admissible, provided the amount of advance remittance does not exceed US \$ 25,000 or its equivalent. Where the amount exceeds US \$ 25,000 or its equivalent, a guarantee from a bank of international repute situated outside India or a guarantee from an AD in India, if such a guarantee is issued against the counter-guarantee of a bank of international repute situated outside India, should be obtained from the overseas beneficiary. The ADs is to ensure that the beneficiary of the advance remittance has fulfilled his obligations under the contract or agreement with the remitter in India.
- Dec. 7• In the case of remittances in foreign currency towards purchase of websites, which offer earnings in US Dollars and/or in other foreign currency, on incremental basis, depending on the number of new clients/ customers added to the chain (thereby making the operation of such schemes akin to money circulation), it was

clarified that ADs should not allow remittances to operators of such schemes and/or to any other overseas company carrying on such types of activities. ADs may, however, allow remittance if they are satisfied that the website is being sold unconditionally and the remitter is purchasing it for developing it for his present/future business and not for the purpose of adding further members to the chain. For this purpose, ADs should satisfy themselves about the bonafides of the overseas company and/or the operators and the scheme, through proper documents.

- Dec. 30•** A supplementary statement of receipts, for purposes other than exports, involving amounts equivalent to Rs.1,00,000 and above at present is required to be submitted with the R-Return. The cut-off limit of Rs.1,00,000 was raised to US \$ 10,000 effective fortnight ending January 15, 2001 onwards. ADs were also advised to ensure that credits to the customers' accounts arising out of the inward remittances received from NRIs were not delayed for the sake of indicating the purpose of remittance in the supplementary statement. The "purpose" may be ascertained after affording credit and then reported to the Reserve Bank.

2001

- Jan. 6•** General permission was granted to SEBI registered Foreign Venture Capital Investors (FVCIs) to invest in Indian Venture Capital Undertaking (IVCU) or in a Venture Capital Fund (VCF). No permission from Foreign Investment Promotion Board (FIPB) is needed. The Reserve Bank would allow the registered FVCIs to maintain a foreign currency account and a convertible rupee account to facilitate their investments. No pricing norms, either for entry or for exit, have been prescribed. The FVCIs are also allowed to obtain forward cover from ADs.

- Feb. 6•** Extending concessions on pre-shipment credit likely to be delayed for exporters affected by the earthquake in Gujarat, the banks were advised to extend up to the original period from less than 180 days.
- 17•** At present, requests from ADs for funding of their Asian Clearing Union (ACU) dollar accounts with commercial banks in participating countries on "Spot" basis are required to be made in form ACU-1, in duplicate, to the Department of External Investments & Operations (DEIO), Reserve Bank of India, Mumbai. It was decided that requests from ADs for funding their ACU dollar accounts with commercial banks in participating countries as well as for repatriation of the excess liquidity in the ACU dollar accounts of their correspondent banks maintained with them, would be accepted in ACU-1 and ACU-2 format, respectively, by DEIO, Reserve Bank, Mumbai on "Tom" basis also in addition to "Spot" basis, with effect from March 1, 2001.
- 22•** In consultation with the Government of India, it was decided to withdraw the facility to FIIs/NRIs/OCBs and FVCIs to purchase shares or convertible debentures of Indian companies engaged in the print media sector. The restriction shall also apply to purchase of shares and convertible debentures by NRIs and OCBs on non-repatriation basis.
- 27•** The units in SEZs were permitted to credit 100 per cent of their foreign exchange receipts to EEFC accounts except foreign exchange acquired by way of purchase against rupees from any person resident in India other than another unit in a SEZ.
- The limit of currency notes of Government of India or Reserve Bank that any

person resident in India can take outside India, except to Nepal or Bhutan, was increased to not exceeding Rs.5000. The Reserve Bank was also empowered to permit a person, on an application made to it and on being satisfied, to take or send out of India or bring into India currency notes of Government of India/Reserve Bank of India of value exceeding Rs.5000 subject to such terms and conditions as the Reserve Bank may stipulate.

- March 2•** Pursuing the announcement in the Budget Speech for 2001-2002, the Reserve Bank liberalised the Capital Account by allowing Indian companies (a) wishing to make acquisitions of foreign companies or direct investment abroad in Joint Ventures/Wholly Owned Subsidiaries to invest up to US \$ 50 million annually through Automatic Route without being subject to the three-year profitability condition (instead of the earlier block of three-year with a profitability condition) and (b) to invest up to 100 per cent of the proceeds of their ADR/GDR issues for acquisitions of foreign companies and direct investments in Joint Ventures and Wholly Owned Subsidiaries (instead of the earlier ceiling of 50 per cent).
- A new facility for additional Block Allocation of foreign exchange to companies with proven track record which have already exhausted the limit of US \$ 50 million available under the Automatic Route for investment/ acquisition overseas was also instituted by the Reserve Bank.
 - Any Indian company that has issued ADRs/GDRs may acquire shares of foreign companies engaged in the same area of core activity up to an amount of US \$ 100 million or an amount equivalent to ten times of their exports in a year, whichever is higher (instead of the earlier facility available only to Indian companies in certain sectors).
 - Two-way fungibility in ADR/GDR issues of Indian companies was introduced, subject to sectoral caps, wherever applicable. Stock brokers in India could purchase shares and deposit these with the Indian Custodian for issue of ADRs/GDRs by the overseas depository to the extent of the ADRs/ GDRs that have been converted into underlying shares.
 - Indian companies were allowed to sponsor ADR/GDR issues with an overseas depository against shares held by its shareholders who wish to use this option. The issue price shall be determined by the lead manager to the issue and the issue proceeds shall be repatriated within one month. The sponsoring company shall have to comply with the provisions of the Scheme for Issue of Foreign Currency Convertible Bonds and Ordinary Shares (through Depository Receipt Mechanism) Scheme, 1993 and guidelines issued there under by the Central Government.
 - The ban on overseas investments by registered partnership firms was removed. Partnership firms providing certain specified professional services, *viz.* Chartered Accountancy, Legal services, Medical and Health care services, Information Technology and Entertainment Software related services were made eligible to invest abroad in foreign currency in the same line of activity up to US \$ 1 million under Automatic Route. For such investments exceeding US \$ 1 million approval of the Reserve Bank was made necessary.
 - Indian employees who have the benefit of Employees Stock Options (ESOP) schemes in foreign owned companies can now invest up to US \$ 20,000 per annum. Earlier this facility was available only to the extent of US \$ 10,000 in a

block of five years.

- FIIs can invest in a company under the portfolio investment route up to 24 per cent of the paid up capital of the company. This can be increased to 40 per cent with the approval of the General Body of the shareholders by a special resolution. This limit was increased from 40 per cent to 49 per cent.
- Reserve Bank ammended the notification issued under the Foreign Exchange Management Act by adding that a registered broker in India may purchase shares of an Indian Company on behalf of a person resident outside India, for the purpose of converting the shares so purchased into ADRs/ GDRs, provided that the shares are purchased on a recognised stock exchange and the Indian company has issued ADRs/GDRs.

April 19• The ceiling interest rate of the FCNR(B) deposits was revised downward to LIBOR/SWAP rates from the existing level of LIBOR/SWAP plus 50 basis points for the corresponding maturity.

- In order to reduce the effective interest rate on export credit, to introduce healthy competition and provide exporters greater choice to avail banking services with reference to interest rates, quality of service and transaction cost, interest rate on export credit extended by banks was rationalised by indicating it as ceiling rate linked to PLR of respective banks; for preshipment credit up to 180 days, ceiling rate applicable would be 1.5 percentage points below PLR. Ceiling on foreign currency loans for exports by banks was reduced to LIBOR plus 1.0 percentage point.
-

Index of Appendix Tables

I. Monetary and Economic Policy Environment

[I.1 Select Macroeconomic and Financial Indicators](#)

[I.2 Interest Rate Structure of Scheduled Commercial Banks](#)

[I.3 Interest Rates on Export Credit](#)

II. The Real Economy

[II.1 Growth Rates and Sectoral Composition of Real Gross Domestic Product](#)

[II.2 Quarterly Growth Rates and Sectoral Composition of Real Gross Domestic Product](#)

[II.3 Gross Domestic Saving and Investment](#)

[II.4 Financial Saving of the Household Sector \(Gross\)](#)

[II.5 Agricultural Production](#)

[II.6 Procurement, Off-take and Stocks of Foodgrains](#)

[II.7 Trends in Index of Industrial Production](#)

[II.8 Growth in Index of Seventeen Major Industry Groups of Manufacturing Sector](#)

[II.9 Frequency Distribution of Growth Rates of Seventeen Major Industry Groups of Manufacturing Sector](#)

[II.10 Use-based Classification of Industrial Production](#)

[II.11 Growth of Infrastructure Industries](#)

III. Money, Credit and Prices

[III.1 Variations in Reserve Money](#)

[III.2 Reserve Bank of India Survey](#)

[III.3 Variations in Money Stock](#)

[III.4 New Monetary Aggregates](#)

[III.5 Liquidity Aggregates](#)

[III.6 Important Banking Indicators-Scheduled Commercial Banks](#)

[III.7 Commercial Bank Survey](#)

[III.8 Sectoral Deployment of Gross Bank Credit](#)

[III.9 Industry-wise Deployment of Gross Bank Credit](#)

[III.10 Reserve Bank's Accommodation to Scheduled Commercial Banks](#)

[III.11 Variations in Index Numbers of Wholesale Prices](#)

[III.12 Variations in Wholesale Prices – Weighted Contributions](#)

[III.13 Annualised Variations in Price Indices](#)

IV. Government Finances

[IV.1 Measures of Deficit of the Central Government](#)

[IV.2 Major Items of Receipts and Expenditures of the Central Government](#)

[IV.3 Direct and Indirect Tax Revenues of Central and State Governments](#)

[IV.4 Financing of Gross Fiscal Deficit of the Central Government](#)

[IV.5 Budgetary Operations of State Governments](#)

[IV.6 Combined Receipts and Disbursements of Central and State Governments](#)

[IV.7 Outstanding Liabilities of the Central Government](#)

[IV.8 Financing of State Governments' Gross Fiscal Deficit](#)

[IV.9 Market Borrowings of Central and State Governments and their Sponsored Institutions](#)

V. Financial Markets

[V.1 Repo / Reverse Repo Auctions under Liquidity Adjustment Facility](#)

[V.2 Issue of Certificates of Deposit By Scheduled Commercial Banks](#)

[V.3 Commercial Paper](#)

[V.4 A Profile of Central Government Dated Securities](#)

[V.5 Issues of Central Government Dated Securities](#)

[V.6 Secondary Market Transactions in Government Securities](#)

[V.7 Profile of Treasury Bills](#)

[V.8 New Capital Issues by Non-Government Public Limited Companies](#)

[V.9 Share Price Indices](#)

[V.10 Assistance Sanctioned and Disbursed by Financial Institutions](#)

VI. External Sector

[VI.1 India's Overall Balance of Payments](#)

[VI.2 India's Foreign Trade](#)

[VI.3 India's Exports of Principal Commodities](#)

[VI.4 India's Imports of Principal Commodities](#)

[VI.5 Invisibles by Category of Transactions](#)

[VI.6 Composition of Capital Inflows](#)

[VI.7 External Assistance](#)

[VI.8 India's Foreign Exchange Reserves](#)

[VI.9 India's External Debt](#)

[VI.10 Indices of Real Effective Exchange Rate \(REER\) and Nominal Effective Exchange Rate \(NEER\) of the Indian Rupee](#)

[VI.11 Select Economic Indicators - World](#)

Appendix Table I.1: Select Macroeconomic and Financial Indicators

Item	2000-01P	1999-2000P	1998-99	1997-98	1996-97	Average	
						1992-93 to 1999-2000 (8 years)	1980-81 to 1989-90 (10 years)
1	2	3	4	5	6	7	8
1. Real GDP (% change)	5.2 (R.E.)	6.4 (Q.E.)	6.6P	4.8	7.8	6.4	5.8
2. Industrial Production (% change) #	5.1	6.7	4.1	6.6	6.1	6.6 &	7.8 \$
3. Agricultural Production (% change) @	-6.5	-0.7	7.9	-5.7	9.3	2.6	5.2
4. Foodgrains Production (Million tonnes)	196.1	208.9	203.6	192.3	199.4	192.5	146.5
5. Gross Domestic Saving Rate (% of GDP)	..	22.3	22.0	23.5	23.2	23.1	19.4
6. Gross Domestic Investment Rate (% of GDP)	..	23.3	23.0	25.0	24.5	24.4	21.2
7. Central Government Finances (% of GDP)							
a) Total Revenue Receipts	9.4(R.E.)	9.3	8.5	8.8	9.2	9.1	9.8
b) Total Expenditure	15.4(R.E.)	15.2	15.9	15.2	14.7	15.6	17.7
c) Revenue Deficit	3.5(R.E.)	3.5	3.8	3.1	2.4	3.1	1.7
d) Gross Fiscal Deficit @ @	5.1(R.E.)	5.4	6.4	5.8	4.9	5.7	6.8
e) Net RBI Credit to Centre	0.3(R.E.)	-0.3	0.7	0.8	0.1	0.5	2.1
f) Interest Payments	4.6(R.E.)	4.6	4.4	4.3	4.4	4.3	2.6
g) Domestic Debt	50.6(R.E.)	49.2	47.5	47.5	45.4	47.8	41.7
8. Monetary Aggregates (% change)							
a) Broad Money (M3)	16.7	14.6 +	19.4+	18.0+	16.2+	17.2+	17.2
b) Narrow Money (M1)	11.1	10.6	15.4	11.3	12.0	14.8	15.1
c) Reserve Money	8.1	8.2	14.5	13.2	2.8	14.0	16.9
9. Scheduled Commercial Banks (% change)							
a) Aggregate Deposits	18.4	13.9 +	19.3 +	18.4+	16.5+	17.1+	18.1
b) Bank Credit	17.3	18.2	13.8	16.4	9.6	17.0	16.8
c) Non-Food Credit	14.9	16.5	13.0	15.1	10.9	16.7	17.8
d) Investments in Government Securities	22.1	24.7	19.4	17.7	20.2	20.6	19.4
10. Wholesale Price Index (% change) ##							
a) Point-to-Point	4.9	6.5	5.3	4.5	5.4	7.6	7.5
b) Average	7.2	3.3	5.9	4.4	4.6	7.2	8.0
11. Consumer Price Index - Industrial Workers (% change)							
a) Point-to-Point	2.5	4.8	8.9	8.3	10.0	8.3	8.9
b) Average	3.8	3.4	13.1	6.8	9.4	8.8	9.1
12. BSE Sensitive Index (% change)	-27.3	41.4	-13.6	9.9	5.5	14.7	22.3
13. Trade and Balance of Payments							
a) Exports in US \$ (% change)	20.4	10.8	-5.1	4.6	5.3	9.8	8.1
b) Imports in US \$ (% change)	-0.2	17.3	2.2	6.0	6.7	12.8	7.2
c) Current Account (% of GDP)	-0.5	-1.0	-1.0	-1.4	-1.2	-1.2	-2.0
d) Capital Account (% of GDP)	1.0	2.2	2.0	2.4	2.1	2.2	1.7

- available. period. years).
- & Average 1992-93 to 2000-01 (9 years).
 - # Base : 1993-94 =100 for columns 2 to 6, 1980-81=100 as also 1993-94=100 for column 7 and 1970=100 as also 1980-81=100 for column 8.
B.E. : Budget Estimates.. R.E. : Revised Estimates
 - E Estimated. Q.E. : Quick Estimates.
 - @ Base : Triennium ending 1980-81 = 100. Index of Agricultural Production is based on the latest production estimates (including the latest production figures of Tea, Coffee and other crops).
 - @ Since 1999-2000, gross fiscal deficit excludes States' share in small savings collections.
 - @
 - + Revised in line with the new accounting standards and consistent with the methodology suggested by the Working Group on Money Supply : Analytics and Methodology of Compilation (June 1998). The revision is in respect of pension and provident funds with commercial banks which are classified as other demand and time liabilities and includes those banks which have reported such changes so far.
 - ## The base year for the WPI series has been revised from 1981-82 to 1993-94 from 1994-95 onwards.

Appendix Table I.2: Interest Rate Structure of Scheduled Commercial Banks

(Per cent per annum)

Item	Rates as on										
	Jan 28, 2000	Feb 25, 2000	Apr 28, 2000	June 30, 2000	Aug 25, 2000	Sept 29, 2000	Jan 26, 2001	Feb 23, 2001	March 30, 2001	May 04, 2001	August 06, 2001
1	2	3	4	5	6	7	8	9	10	11	12
A. Lending Rates											
<i>Size of Credit Limit</i>											
1. Up to Rs. 2 lakh #	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR	Not exceeding PLR
2. Over Rs. 2 lakh : (Prime Lending Rate)*	12.00-12.50	12.00-12.50	11.25-11.75	11.25-11.75	11.25-12.00	12.00-12.50	12.00-12.50	12.00-12.50	11.00-12.00	11.00-12.00	11.00-12.00
a. Maximum Spread over PLR	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00	3.50-4.00
B. Deposit Rates											
<i>Category of Account</i>											
1. Current Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2. Savings	4.50	4.50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
3. Term Deposits @											
a) Up to and including one year	5.00-7.50	5.00-7.50	4.50-7.00	4.50-7.50	4.50-7.25	4.75-7.25	5.00-7.25	5.00-7.50	5.25-7.25	5.00-7.25	5.00-7.00
b) > 1-2 years	8.00-9.00	8.00-9.00	8.00-8.50	8.00-8.50	8.5	8.5	8.5	8.5	8.5	8.00-8.50	8.00-8.50
c) > 2-3 years	9.5	9.5	8.50-9.00	8.50-9.00	9.00	9.00	9	9.00-9.50	9	8.50-9.00	8.50-9.00
d) > 3 years	10.50	10.00-10.50	9.50-10.00	9.50	9.50-10.00	10.00	10.00	10.00	9.50-10.00	9.00-9.50	9.00-9.50
Memo Item :											
Bank Rate ##	8.0	8.0	7.0 (April 1, 2000)	7.0	8.0 (July 22, 2000)	8.0	8.0	7.5 (February 16, 2001)	7.0 (March 2, 2001)	7.0	7.0

* Data relates to major public sector banks.

Effective April 1998, credit limits of over Rs. 25,000 and up to Rs. 2 lakh have been merged and are specified as up to Rs. 2 lakh.

@ The minimum maturity period of term deposits is 15 days, effective April 29, 1998. Data relate to major public sector banks.

The change in the Bank Rate was made effective from the close of business of respective dates indicated in the bracket.

Appendix Table I.3 : Interest Rates on Export Credit

		(Per cent per annum)						
Export Credit		Rates Effective						
		May 5, 2001#	May 26, 2000	October 29, 1999	April 1, 1999	August 6, 1998	April 30, 1998	January 1, 1998
1		2	3	4	5	6	7	8
1. Pre-shipment Credit								
	i) Up to 180 days	≤ PLR-1.5 PP	10.00	10.00	10.00	9.00	11.00	12.00
	ii) Beyond 180 days and up to 270 days	≤ PLR+1.5 PP	13.00	13.00	13.00	12.00	14.00	14.00
	iii) Against incentives receivable from Government covered by ECGC Guarantee up to 90 days	≤ PLR-1.5 PP	10.00	10.00	10.00	9.00	11.00	12.00
2. Post-shipment Credit								
	i) Demand Bills for transit period (as specified by FEDAI)	≤ PLR-1.5 PP	≤ 10.00	≤ 10.00	≤ 10.00	≤ 9.00	≤ 11.00	≤ 11.00
	ii) Usance Bills (for total period comprising usance period of export bills, transit period as specified by FEDAI and grace period wherever applicable)							
	a) Up to 90 days	≤ PLR-1.5 PP	≤ 10.00	≤ 10.00	≤ 10.00	≤ 9.00	≤ 11.00	≤ 11.00
	b) Beyond 90 days and up to six months from the date of shipment	≤ PLR+1.5 PP	12.00	12.00	12.00	11.00	13.00	13.00
	c) Beyond six months from the date of shipment		-	-	-	-	-	20.00* (Min.)
	iii) Against incentives receivable from Government covered by ECGC Guarantee (up to 90 days)	≤ PLR-1.5 PP	≤ 10.00	≤ 10.00	≤ 10.00	≤ 9.00	≤ 11.00	≤ 11.00
	iv) Against undrawn balance (up to 90 days)	≤ PLR-1.5 PP	≤ 10.00	≤ 10.00	≤ 10.00	≤ 9.00	≤ 11.00	≤ 11.00
	v) Against retention money (for supplies portion only) payable within one year from the date of shipment (up to 90 days)	≤ PLR-1.5 PP	≤ 10.00	≤ 10.00	≤ 10.00	≤ 9.00	≤ 11.00	≤ 11.00
3. Deferred Credit								
	Deferred credit for the period beyond 180 days	Free	Free	Free	Free	Free	Free (FDA)	Free (FDA)
4. Export Credit, not otherwise specified								
	a) Pre-shipment credit	Free	Free	Free	Free	Free	Free	
	b) Post-shipment credit	Free @	25.00 (Min.)	Free	20.00 (Min.)	20.00 (Min.)	20.00 (Min.)	20.00* (Min.)

FDA From the date of advance.

≤ Not Exceeding

Min. Minimum.

- : Not Applicable.

* Chronic cases, *i.e.*, overdue as on July 1, 1997 are exempted.

PP Percentage points

These are ceiling rates, banks would be free to charge any rate below the ceiling rate.

@ From 06.01.2001 onwards.

Note : 'Free' means banks are free to charge interest at rates decided by them keeping in view the PLR and spread guidelines.

Appendix Table II.1: Growth Rates and Sectoral Composition of Real Gross Domestic Product (At 1993-94 Prices)

(Per cent)

Sector	Growth Rate				Share in real GDP		
	2000-01#	1999-2000*	1998-99@	1994-95 to 1999-2000	2000-01#	1999-2000*	1998-99@
1	2	3	4	5	6	7	8
1. Agriculture and Allied Activities	0.2	0.7	7.1	3.2	24.0	25.2	26.6
<i>of which :</i>					(0.9)	(2.8)	(28.5)
Agriculture	..	0.3	7.9	3.1	..	23.2	24.6
2. Industry	5.3	6.1	2.8	7.4	21.8	21.8	21.9
<i>of which :</i>					(22.3)	(20.8)	(9.8)
a) Mining and quarrying	3.7	1.7	1.3	4.8	2.3	2.3	2.4
b) Manufacturing	5.6	6.8	2.5	7.9	17.1	17.1	17.0
c) Electricity, gas and water supply	4.7	5.2	6.4	6.8	2.4	2.5	2.5
3. Services	7.5	9.4	8.0	8.5	54.2	53.0	51.5
<i>of which :</i>					(76.8)	(76.4)	(61.8)
a) Construction	5.5	8.1	6.1	6.4	5.1	5.1	5.0
b) Trade, hotels and restaurants	6.9\$	7.9	7.0	9.2	22.3\$	14.6	14.4
c) Transport, storage and communication	..	8.3	7.3	8.7	..	7.3	7.2
d) Financing, insurance, real estate and business services	9.1	10.1	8.4	8.5	13.2	12.7	12.3
e) Community, social and personal services	7.8	11.8	9.9	8.5	13.5	13.2	12.6
4. Gross Domestic Product at factor cost	5.2	6.4	6.6	6.7	100.0	100.0	100.0

Revised Estimates.

* Quick Estimates.

@ Provisional Estimates.

.. Not separately available.

\$ Corresponds to 'trade, hotels and restaurants' and 'transport, storage and communication'.

Note: Figures in brackets indicate relative contributions of the sectors to the real GDP growth.

Source: Central Statistical Organisation, Government of India.

Appendix Table II.2: Quarterly Growth Rates and Sectoral Composition of Real Gross Domestic Product (At 1993-94 Prices)

Sector	2000-01				1999-2000				1998-99			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Agriculture and Allied Activities	0.6 (24.4)	0.5 (18.7)	1.0 (29.0)	-1.4 (23.0)	4.5 (25.8)	1.2 (19.8)	-0.7 (30.2)	-1.3 (24.2)	4.2 (26.4)	4.9 (20.8)	5.5 (32.3)	10.9 (26.0)
2. Industry	6.6 (22.3)	5.4 (23.9)	6.1 (20.5)	3.2 (21.1)	4.7 (22.2)	6.3 (24.1)	6.3 (20.3)	6.8 (21.3)	4.2 (22.7)	3.6 (24.0)	2.3 (20.2)	3.1 (21.1)
<i>of which :</i>												
a) Manufacturing	7.0 (17.5)	6.0 (18.8)	6.1 (16.0)	3.5 (16.6)	5.8 (17.4)	6.5 (18.8)	7.1 (15.9)	7.6 (16.6)	3.3 (17.6)	3.2 (18.8)	1.8 (15.7)	3.1 (16.4)
b) Mining and quarrying	5.0 (2.3)	3.8 (2.4)	4.4 (2.1)	1.9 (2.3)	-0.7 (2.3)	3.0 (2.5)	0.9 (2.2)	3.6 (2.3)	4.4 (2.5)	4.3 (2.5)	1.8 (2.3)	0.1 (2.4)
c) Electricity, gas and water supply	5.7 (2.5)	3.0 (2.7)	7.8 (2.3)	2.5 (2.3)	2.8 (2.5)	8.3 (2.8)	5.5 (2.2)	4.2 (2.3)	10.4 (2.7)	5.6 (2.7)	6.3 (2.3)	6.4 (2.3)
3. Services	8.6 (53.3)	8.5 (57.4)	7.0 (50.5)	6.3 (55.9)	9.9 (52.1)	8.0 (56.1)	10.7 (49.5)	9.3 (54.6)	6.6 (50.8)	13.6 (55.2)	11.4 (47.5)	4.8 (52.9)
<i>of which :</i>												
a) Trade, hotels, restaurants, transport, storage and communication	9.7 (22.4)	7.3 (23.3)	6.6 (21.7)	4.5 (22.0)	8.1 (21.7)	7.5 (23.0)	8.2 (21.4)	8.3 (21.9)	9.2 (21.5)	12.2 (22.7)	8.8 (21.0)	8.9 (21.4)
b) Financing, insurance, real estate and business services	9.5 (13.3)	9.8 (14.4)	8.0 (12.3)	9.3 (13.0)	10.6 (12.9)	10.6 (13.9)	10.8 (12.0)	8.5 (12.3)	1.5 (12.5)	16.4 (13.4)	30.7 (11.5)	-7.4 (12.0)
c) Community, social and personal services	6.0 (12.3)	9.2 (14.1)	7.5 (11.7)	8.3 (16.0)	14.0 (12.3)	6.2 (13.7)	16.9 (11.4)	11.0 (15.3)	7.0 (11.6)	16.7 (13.7)	3.1 (10.4)	10.6 (14.6)
d) Construction	8.4 (5.3)	8.4 (5.6)	5.2 (4.7)	0.7 (5.0)	6.4 (5.2)	7.8 (5.5)	7.5 (4.7)	10.3 (5.1)	7.8 (5.2)	5.7 (5.4)	3.3 (4.6)	4.5 (4.9)
4. Gross Domestic Product at factor cost	6.1 (100.0)	6.2 (100.0)	5.0 (100.0)	3.8 (100.0)	7.3 (100.0)	6.2 (100.0)	6.1 (100.0)	6.0 (100.0)	5.4 (100.0)	9.2 (100.0)	7.5 (100.0)	5.9 (100.0)

Notes: 1. Figures in brackets are percentage shares to GDP.
2. Quarters Q1, Q2, Q3 and Q4 denote April-June, July-September, October-December and January-March, respectively.
3. Data are provisional.

Source: Central Statistical Organisation.

Appendix Table II.3: Gross Domestic Saving and Investment

Item	Per cent of GDP (at current market prices)				Amount in Rupees crore		
	1999- 2000*	1998- 99@	1997- 98@	1993-94 to 1996-97	1999- 2000*	1998- 99@	1997- 98@
1	2	3	4	5	6	7	8
1. Household Saving	19.8	19.1	17.8	18.3	3,86,913	3,36,469	2,71,383
<i>of which :</i>							
a) Financial Assets	10.5	10.9	9.9	10.5	2,05,898	1,92,511	1,50,198
b) Physical Assets	9.2	8.2	8.0	7.8	1,81,015	1,43,958	1,21,185
2. Private corporate sector	3.7	3.7	4.2	4.1	71,879	64,608	63,486
3. Public sector	-1.2	-0.8	1.5	1.5	-23,220	-14,345	23,381
4. Gross Domestic Saving	22.3	22.0	23.5	23.9	4,35,572	3,86,732	3,58,250
5. Net capital inflow	1.0	1.0	1.5	1.2	19,656	18,087	22,302
6. Gross Domestic Capital Formation	23.3	23.0	25.0	25.1	4,55,228	4,04,819	3,80,552
7. Errors and omissions	0.6	1.9	2.1	1.8	10,805	32,801	31,410
8. Gross Capital Formation	22.7	21.2	22.9	23.3	4,44,423	3,72,018	3,49,142
<i>of which :</i>							
a) Public sector	7.1	6.4	6.6	7.9	1,38,186	1,12,069	1,00,653
b) Private corporate sector	6.4	6.6	8.4	7.6	1,25,221	1,15,991	1,27,304
c) Household sector	9.2	8.2	8.0	7.8	1,81,015	1,43,958	1,21,185

* Quick Estimates.

@ Provisional Estimates.

Source: Central Statistical Organisation.

Appendix Table II.4 : Financial Saving of the Household Sector (Gross): Percentage Distribution

Item	1999- 2000*	1998- 99@	1997- 98@	1996- 97	1995- 96	1994- 95	1993- 94
1	2	3	4	5	6	7	8
1. Financial Saving (Gross)	100.0 (12.1)	100.0 (12.5)	100.0 (11.4)	100.0 (11.6)	100.0 (10.4)	100.0 (14.4)	100.0 (12.8)
a) Currency	8.9 (1.1)	10.0 (1.2)	7.4 (0.8)	8.6 (1.0)	13.4 (1.4)	10.9 (1.6)	12.2 (1.6)
b) Deposits	37.1 (4.5)	41.9 (5.2)	47.2 (5.4)	48.2 (5.6)	42.1 (4.4)	45.5 (6.5)	42.6 (5.4)
i) with banks	27.1	30.7	37.4	25.6	26.5	35.3	27.9
ii) with non-banking companies	3.6	3.6	3.9	16.3	10.7	7.9	10.6
iii) with co-operative banks & societies	6.5	7.7	6.1	6.4	5.9	3.0	5.2
iv) trade debt (net)	-0.1	-0.1	-0.2	-0.2	-1.0	-0.8	-1.1
c) Shares and debentures	6.7 (0.8)	3.4 (0.4)	2.9 (0.3)	6.5 (0.8)	7.4 (0.8)	11.9 (1.7)	13.5 (1.7)
i) private corporate business	1.4	1.5	1.3	3.6	6.7	8.0	7.5
ii) co-operative banks and societies	-	0.1	0.1	0.1	0.1	0.1	0.1
iii) units of UTI	0.4	0.9	0.3	2.4	0.2	2.7	4.3
iv) bonds of PSUs	-	-	0.1	0.1	0.1	0.1	0.5
v) mutual funds (other than UTI)	4.8	1.0	1.1	0.3	0.3	1.1	1.2
d) Claims on government	12.2 (1.5)	12.9 (1.6)	12.8 (1.5)	7.4 (0.9)	7.8 (0.8)	9.1 (1.3)	6.3 (0.8)
i) investment in government securities	0.9	0.6	1.6	0.4	0.4	0.1	0.4
ii) investment in small savings, <i>etc.</i>	11.3	12.3	11.2	7.0	7.4	9.0	5.9
e) Insurance funds	12.1 (1.5)	10.7 (1.3)	11.2 (1.3)	10.1 (1.2)	11.3 (1.2)	7.8 (1.1)	8.7 (1.1)
i) life insurance funds	11.3	10.0	10.5	9.5	10.5	7.2	8.0
ii) postal insurance	0.2	0.2	0.3	0.3	0.3	0.2	0.2
iii) state insurance	0.6	0.4	0.4	0.4	0.5	0.5	0.5

f) Provident and pension funds	23.1	21.2	18.6	19.1	18.1	14.7	16.7
	(2.8)	(2.6)	(2.1)	(2.2)	(1.9)	(2.1)	(2.1)

* Quick Estimates. @ Provisional Estimates.

Notes : Figures in brackets are percentage to GDP at current market prices.

Source : Central Statistical Organisation.

Appendix Table II. 5 : Agricultural Production

(Million tonnes)					
Crop	2000-01 A	1999-2000	1998-99	1997-98	1996-97
1	2	3	4	5	6
1. All Crops: Annual Growth Rate \$	-6.5	-0.7	7.9	-5.7	9.3
i) Foodgrains	-6.3	2.2	6.1	-3.2	10.1
ii) Non-foodgrains	-6.6	-4.8	10.5	-9.5	8.3
2. Foodgrains (a+b)	196.1	208.9	203.6	192.3	199.4
i) Rice	86.3	89.5	86.1	82.5	81.7
ii) Wheat	68.5	75.6	71.3	66.3	69.4
iii) Coarse cereals	30.2	30.5	31.3	30.4	34.1
iv) Pulses	11.1	13.4	14.9	13.0	14.3
a) Kharif	103.1	104.9	102.9	101.6	103.9
i) Rice	74.4	76.7	72.7	72.5	71.3
ii) Coarse cereals	24.0	23.2	25.1	24.8	27.1
iii) Pulses	4.7	4.9	5.1	4.3	5.5
b) Rabi	93.0	104.0	100.7	90.7	95.5
i) Rice	11.9	12.8	13.4	10.0	10.4
ii) Wheat	68.5	75.6	71.3	66.4	69.4
iii) Coarse cereals	6.2	7.2	6.3	5.6	7.0
iv) Pulses	6.4	8.4	9.8	8.7	8.8
3. Non-foodgrains					
i) Oilseeds ++	18.2	20.9	24.8	21.3	24.4
ii) Sugarcane	300.3	299.2	288.7	279.5	277.6
iii) Cotton @	9.4	11.6	12.3	10.9	14.2
iv) Jute & Mesta +	10.4	10.5	9.8	11.0	11.1
v) Tea *	823.4	805.6	870.4	810.6	780.0
vi) Coffee *	301.2	292.0	265.0	228.0	205.9

A Advance estimate as on June 29, 2001.

\$ Based on Index of Agricultural Production with base triennium ending 1981-82 = 100.

@ Million bales of 170 kg. each.

+ Million bales of 180 kg. each.

* Million kilograms and data for tea on a calendar year basis.

++ For nine oil seeds out of eleven in all.

Note : Index of Agricultural Production is based on the latest production estimates (including the latest production figures of Tea, Coffee and other crops).

Appendix Table II.6 : Procurement, Off-Take and Stocks of Foodgrains

Fiscal year	(Million tonnes)								
	Procurement			Off-take			Stocks *		
	Rice	Wheat	Total@	Rice	Wheat	Total @	Rice	Wheat	Total @
1	2	3	4	5	6	7	8	9	10
1995-96	9.91	12.33	22.24	11.63	12.72	24.35	13.06	7.76	20.82
1996-97	11.86	8.16	20.03	12.31	13.32	25.63	13.17	3.24	16.41
1997-98	14.52	9.30	23.82	11.20	7.76	18.96	13.05	5.08	18.12
1998-99	11.56	12.65	24.22	11.83	8.90	20.73	12.16	9.66	21.82
1999-00	17.28	14.14	31.43	12.42	10.63	23.05	15.72	13.19	28.91
2000-01	20.10	16.35	36.46	10.22	7.73	17.95	23.19	21.50	44.98
First Quarter (April-June)									
2000-01	1.90	16.15	18.06	2.57	1.38	3.95	14.49	27.76	42.25
2001-02\$	2.68	20.47	23.15	2.34	2.72	5.07	22.75	38.92	61.96

* Stocks are as at end-March.

@ Includes coarse grains.

\$ Procurement as on June 29, 2001.

Source : Ministry of Food and Consumer Affairs, Government of India.

Appendix Table II.7: Trends in Index of Industrial Production
(BASE : 1993-94=100)

Sector	Mining & Quarrying		Manufacturing		Electricity		General	
Weight	10.47		79.36		10.17		100.00	
Period	Index	Growth Rate (per cent)	Index	Growth Rate (per cent)	Index	Growth Rate (per cent)	Index	Growth Rate (per cent)
1	2	3	4	5	6	7	8	9
1996-97	118.2	-2.0	133.6	7.3	122.0	4.0	130.8	6.1
1997-98	126.4	7.0	142.5	6.6	130.0	6.6	139.5	6.6
1998-99	125.4	-0.8	148.8	4.4	138.4	6.4	145.2	4.1
1999-2000	126.7	1.0	159.4	7.1	148.5	7.3	154.9	6.7
2000-01	131.4	3.7	167.9	5.4	154.4	4.0	162.7	5.1
1999-2000								
April-June	120.6	-0.6	152.3	6.5	144.2	4.5	148.1	5.6
July-September	122.1	2.4	153.4	6.9	149.3	11.1	149.7	6.9
October-December	127.9	-0.1	160.0	7.4	146.1	7.7	155.2	6.7
January-March	136.1	2.4	172.0	7.7	154.5	6.2	166.4	7.1
April-September	121.3	0.9	152.8	6.7	146.7	7.8	148.9	6.3
October-March	132.0	1.1	166.0	7.6	150.3	6.9	160.8	6.9
2000-01								
April-June	125.0	3.7	162.1	6.4	151.5	5.1	157.1	6.1
July-September	126.7	3.8	162.4	5.9	152.2	1.9	157.6	5.3
October-December	134.9	5.5	169.0	5.7	157.3	7.6	164.3	5.9
January-March	138.8	2.0	178.2	3.6	156.8	1.4	171.9	3.3
April-September	125.9	3.7	162.3	6.2	151.8	3.5	157.4	5.7
October-March	136.9	3.7	173.6	4.6	157.0	4.5	168.1	4.5

Source : Central Statistical Organisation.

**Appendix Table II.8 : Growth in Index of Seventeen Major Industry
Groups of Manufacturing Sector
(BASE : 1993-94 = 100)**

Industry Group	Weight	Index		Percentage Variation		Relative Contribution (Per cent)	
		2000-01	1999-2000	2000-01	1999-2000	2000-01	1999-2000
1	2	3	4	5	6	7	8
I. Acceleration (2000-01)							
1. Metal products and parts (except machinery and equipment)	2.81	158.5	137.8	15.0	-1.2	8.7	-0.6
2. Rubber, plastic, petroleum and coal products	5.73	153.4	137.2	11.8	-1.1	13.8	-1.0
3. Other manufacturing industries	2.56	159.1	142.5	11.6	-16.1	6.3	-8.2
4. Food products	9.08	154.5	140.3	10.1	4.1	19.2	6.0
5. Textile products (including wearing apparel)	2.54	162.4	156.1	4.0	2.0	2.4	0.9
6. Wood and wood products, furniture & fixtures	2.70	104.3	101.4	2.9	-16.2	1.2	-6.3
7. Jute and other vegetable fibre textiles (except cotton)	0.59	105.8	105.0	0.8	-0.9	0.1	-0.1
II. Deceleration (2000-01)							
8. Leather and leather & fur products	1.14	150.0	135.5	10.7	13.7	2.5	2.2
9. Basic chemicals & chemical products (except products of petroleum and coal)	14.00	176.6	164.6	7.3	9.9	25.0	24.5
10. Machinery and equipment other than transport equipment	9.57	195.8	182.5	7.3	17.8	18.9	31.1
11. Wool, silk and man-made fibre textiles	2.26	209.3	197.8	5.8	11.9	3.9	5.6
12. Beverages, tobacco and related products	2.38	200.4	192.1	4.3	7.6	2.9	3.8
13. Cotton textiles	5.52	127.3	123.7	2.9	6.8	3.0	5.1
14. Basic metal and alloy industries	7.45	149.6	146.9	1.9	5.0	3.0	6.2
III. Negative (2000-01)							
15. Non-metallic mineral products	4.40	218.2	220.8	-1.2	24.4	-1.7	22.5
16. Transport equipment and parts	3.98	190.3	194.1	-2.0	5.7	-2.2	4.9
17. Paper & paper products and printing, publishing & allied industries	2.65	164.0	180.5	-9.1	6.3	-6.5	3.3
Manufacturing (Total)	79.36	167.9	159.4	5.4	7.1	100.0	100.0

Note : The relative contribution is computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relevant industry group.

Source: Central Statistical Organisation.

**Appendix Table II.9: Frequency Distribution of Growth Rates of
Seventeen Major Industry Groups of Manufacturing Sector -
1996-97 to 2000-01**

Industry Group	Weight	(Number of years)					
		Negative %	0-5 %	5-10 %	10-15 %	15+ %	5+ % = (5+6+7)
1	2	3	4	5	6	7	8
1. Food products	9.08	1	3	-	1	-	1
2. Beverages, tobacco and related products	2.38	-	1	1	2	1	4
3. Cotton textiles	5.52	1	2	1	1	-	2
4. Wool, silk and man-made fibre textiles	2.26	-	1	1	2	1	4
5. Jute and other vegetables fibre textiles (except cotton)	0.59	3	1	-	-	1	1
6. Textile products (including wearing apparel)	2.54	1	2	2	-	-	2
7. Wood and wood products, furniture and fixtures	2.70	3	1	1	-	-	1
8. Paper and paper products and printing, publishing and allied industries	2.65	1	-	3	-	1	4
9. Leather and leather & fur products	1.14	-	1	2	2	-	4
10. Basic chemicals and chemical products (except products of petroleum and coal)	14.00	-	1	3	1	-	4
11. Rubber, plastic, petroleum and coal products	5.73	1	1	1	2	-	3
12. Non-metallic mineral products	4.40	1	-	2	1	1	4
13. Basic metal and alloy industries	7.45	1	2	2	-	-	2
14. Metal products and parts (except machinery and equipment)	2.81	1	-	2	-	2	4
15. Machinery and equipment other than transport equipment	9.57	-	2	2	-	1	3
16. Transport equipment and parts	3.98	1	1	1	1	1	3
17. Other manufacturing industries	2.56	2	1	-	1	1	2

Source : Central Statistical Organisation.

**Appendix Table II.10 : Use-Based Classification of Industrial
Production**
(BASE : 1993-94=100)

Industry Group	Weight	Index		Growth Rate (per cent)			
		2000-01	2000-01	1999-2000	1998-99	1997-98	1996-97
1	2	3	4	5	6	7	8
1. Basic Goods	35.57	148.9	3.9	5.5	1.7	6.8	3.0
			(25.5)	(27.5)	(13.7)	(35.2)	(17.1)
2. Capital Goods	9.26	166.2	1.7	6.9	12.6	5.8	11.4
			(3.4)	(10.1)	(27.8)	(7.9)	(16.3)
3. Intermediate Goods	26.51	177.4	4.7	8.8	6.1	8.0	8.1
			(26.9)	(37.4)	(41.9)	(33.2)	(36.1)
4. Consumer Goods	28.66	165.2	8.0	5.7	2.2	5.5	6.2
			(44.8)	(24.2)	(15.6)	(24.4)	(29.8)
a) Consumer Durables	5.36	227.6	14.6	14.1	5.6	7.8	4.6
			(19.9)	(13.6)	(8.7)	(7.4)	(4.8)
b) Consumer Non-durables	23.30	150.8	5.8	3.2	1.1	4.9	6.6
			(24.8)	(10.6)	(6.5)	(16.9)	(25.2)
General	100.00	162.7	5.1	6.7	4.1	6.6	6.1
			(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Note : Figures in brackets are relative contributions. Relative contribution is computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relevant industry group.

Source : Central Statistical Organisation.

Appendix Table II.11 : Growth of Infrastructure Industries
(BASE : 1993-94=100)

Industry Group	Weight	Index 2000-01	Growth Rate (per cent)				
			2000-01	1999-2000	1998-99	1997-98	1996-97
1	2	3	4	5	6	7	8
1. Electricity	10.17	154.3	4.0 (28.6)	7.2 (30.3)	6.6 (86.3)	6.6 (42.8)	3.8 (37.4)
2. Coal	3.22	125.5	3.1 (6.0)	3.3 (3.7)	-2.1 (-7.9)	3.6 (7.0)	5.7 (16.9)
3. Steel	5.13	198.7	6.1 (28.8)	15.0 (37.4)	1.3 (11.0)	6.3 (25.5)	5.8 (35.0)
4. Cement	1.99	173.6	-0.9 (-1.6)	14.3 (12.9)	5.7 (16.3)	9.1 (12.5)	9.6 (19.4)
5. Crude Petroleum	4.17	120.2	1.6 (4.1)	-2.4 (-3.6)	-3.4 (-17.3)	2.9 (7.6)	-4.7 (-20.5)
6. Petroleum Refinery Products	2.00	194.5	20.7 (32.9)	25.4 (19.5)	5.2 (12.4)	3.7 (4.5)	7.0 (12.8)
Composite Index of Infrastructure Industries #	26.68	158.5	5.0 (100.0)	9.1 (100.0)	2.8 (100.0)	5.7 (100.0)	3.7 (100.0)

Estimate based on weighted industry-wise index.

Note: Figures in brackets are relative contributions. Relative contribution is computed as the ratio (in percentage terms) of the change in the index of the respective industry group to the change in the overall index adjusted for the weight of the relevant industry group.

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

Appendix Table III.1 : Variations in Reserve Money

(Amount in Rupees crore)

Item	Variations										
	Outstanding as on March 31, 2001 P	Financial year								April-June	
		2000-01P		1999-2000		2001-02P		2000-01P			
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10		
I. Reserve Money (1+2+3)	3,03,311	22,757	8.1	21,269	8.2	10,493	3.5	-5,625	-2.0		
1. Currency in Circulation	2,18,205	21,143	10.7	21,215	12.1	13,524	6.2	9,185	4.7		
2. Bankers' Deposits with the RBI	81,477	1,017	1.3	757	0.9	-3,389	-4.2	-16,425	-20.4		
<i>of which :</i>											
Scheduled Commercial Banks	77,796	15	0.0	75	0.1	-3,470	-4.5	-16,927	-21.8		
3. 'Other' Deposits with the RBI	3,630	596	19.6	-703	-18.8	359	9.9	1,615	53.2		
II. Sources of Reserve Money											
(1+2+3+4+5-6)											
1. Net RBI Credit to Government (a+b)	1,53,877	5,613	3.8	-4,275	-2.8	15,742	10.2	8,303	5.6		
a) Net RBI credit to Central	1,46,534	6,705	4.8	-5,587	-3.8	19,523	13.3	14,393	10.3		
Government (i-ii)											
i) Claims on Central Government	1,49,353	7,301	5.1	-6,291	-4.2	16,805	11.3	12,270	8.6		
ii) Deposits of Central Government	2,819	596	26.8	-704	-24.1	-2,718	-96.4	-2,123	-95.5		
b) Net RBI credit to State											
Governments (i-ii)	7,343	-1,092	-12.9	1,312	18.4	-3,781	-51.5	-6,089	-72.2		
i) Claims on State governments	7,343	-1,092	-12.9	1,312	18.4	-3,740	-50.9	-6,048	-71.7		
ii) Deposits of State governments	0	0	--	0	--	41	—	41	—		
2. RBI's Claims on Commercial and Co-operative banks	12,965	-3,820	-22.8	3,524	26.6	-2,239	-17.3	-1,529	-9.1		
<i>of which :</i>											
Loans and Advances to											
Scheduled Commercial Banks	5,042	-4,471	-47.0	3,256	52.0	-1,426	-28.3	-801	-8.4		
3. RBI's Credit to Commercial Sector	13,287	-1,983	-13.0	3,044	24.9	-3,111	-23.4	-3,153	-20.6		
4. Net Foreign Exchange Assets of the RBI	1,97,175	31,295	18.9	27,927	20.2	7,187	3.6	-1,824	-1.1		
5. Government's Currency Liabilities to the Public	5,354	776	16.9	732	19.0	0	0.0	182	4.0		
6. Net Non-monetary	79,345	9,123	13.0	9,682	16.0	7,086	8.9	7,605	10.8		
Liabilities of the RBI											
7. Net Domestic Assets of the RBI (1+2+3+5-6)	1,06,136	-8,538	-7.4	-6,658	-5.5	3,306	3.1	-3,802	-3.3		

P Provisional.

-- Not applicable.

Appendix Table III.2 : Reserve Bank of India (RBI) Survey

(Amount in Rupees crore)

Item	Outstanding as on March 31,	Variations								
		Financial year				April-June				
		2000-01P		1999-2000		2001-02P		2000-01P		
		2001P	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10	
Components										
C.I	Currency in Circulation	2,18,205	21,143	10.7	21,215	12.1	13,524	6.2	9,185	4.7
C.II	Bankers' Deposits with the RBI	81,477	1,017	1.3	757	0.9	-3,389	-4.2	-16,425	-20.4
	C.II.1 Scheduled Commercial Banks	77,796	15	0.0	75	0.1	-3,470	-4.5	-16,927	-21.8
C.III	'Other' Deposits with the RBI	3,630	596	19.6	-703	-18.8	359	9.9	1,615	53.2
C.IV	Reserve Money (C.I+C.II+C.III = S.I + S.II + S.III - S.IV - S.V)	3,03,311	22,757	8.1	21,269	8.2	10,493	3.5	-5,625	-2.0
Sources										
S.I	RBI's Domestic Credit (S.I.1+S.I.2+S.I.3)	1,80,128	-191	-0.1	2,292	1.3	10,391	5.8	3,621	2.0
S.I.1	Net RBI credit to the Government (S.I.1.1+S.I.1.2)	1,53,877	5,613	3.8	-4,275	-2.8	15,742	10.2	8,303	5.6
	S.I.1.1 Net RBI credit to the Central Government (S.I.1.1.1+S.I.1.1.2+S.I.1.1.3+S.I.1.1.4-S.I.1.1.5)	1,46,534	6,705	4.8	-5,587	-3.8	19,523	13.3	14,393	10.3
	S.I.1.1.1 Loans and Advances to the Central Government	5,395	4,413	449.4	-2,060	-67.7	3,619	67.1	4,316	439.5
	S.I.1.1.2 Investments in Treasury Bills	482	-1,388	-74.2	1,107	145.1	-3	-0.6	5	0.3
	S.I.1.1.3 Investments in dated Government Securities	1,43,398	4,301	3.1	-5,376	-3.7	13,150	9.2	7,936	5.7
	S.I.1.1.3.1 Central Government Securities	40,298	4,065	11.2	-5,358	-12.9	13,150	32.6	7,700	21.3
	S.I.1.1.4 Rupee Coins	77	-25	-24.6	37	57.6	38	49.8	13	12.7
	S.I.1.1.5 Deposits of the Central Government	2,819	596	26.8	-704	-24.1	-2,718	-96.4	-2,123	-95.5
	S.I.1.2 Net RBI credit to State Governments	7,343	-1,092	-12.9	1,312	18.4	-3,781	-51.5	-6,089	-72.2
S.I.2	RBI's Claims on Banks	6,365	-4,536	-41.6	3,288	43.2	-1,466	-23.0	-750	-6.9
	S.I.2.1 Loans and Advances to Scheduled Commercial Banks	5,042	-4,471	-47.0	3,256	52.0	-1,426	-28.3	-801	-8.4
S.I.3	RBI's Credit to Commercial Sector	19,887	-1,267	-6.0	3,279	18.3	-3,885	-19.5	-3,932	-18.6
	S.I.3.1 Loans and Advances to Primary Dealers	5,010	-1,962	-28.1	3,205	85.1	-2,949	-58.9	-3,135	-45.0
	S.I.3.2 Loans and Advances to NABARD	6,600	716	12.2	235	4.2	-774	-11.7	-779	-13.2
S.II	Government's Currency Liabilities to the Public	5,354	776	16.9	732	19.0	0	0.0	182	4.0
S.III	Net Foreign Exchange Assets of the RBI	1,97,175	31,295	18.9	27,927	20.2	7,187	3.6	-1,824	-1.1
	S.III.1 Gold	12,711	-263	-2.0	414	3.3	522	4.1	200	1.5
	S.III.2 Foreign Currency Assets	1,84,482	31,557	20.6	27,512	21.9	6,666	3.6	-2,023	-1.3
S.IV	Capital Account	73,764	10,463	16.5	10,340	19.5	976	1.3	10,197	16.1
S.V	Other Items (net)	5,582	-1,339	-19.4	-659	-8.7	6,109	109.5	-2,592	-37.4

Note : 1. Data are provisional.

2. The details of the compilation of the new monetary aggregates are available in the report of the Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), June 1998. A link series between the old and present monetary series has been published in the article entitled "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999.

Appendix Table III.3 : Variations in Money Stock

(Amount in Rupees crore)

Item	Outstanding as		Variations							
	on March 31,		April-June							
	2001 P	2000-01P	1999-2000		2001-02P		2000-01P			
1	2	3	4	5	6	7	8	9	10	
I. Broad Money (M₃) (1+2+3)	13,11,583	1,87,409	16.7	1,43,214	14.6	63,451	4.8	52,982	4.7	
1. Currency with the Public	2,09,562	20,480	10.8	20,138	11.9	12,310	5.9	8,507	4.5	
2. Aggregate Deposits with Banks (a+b)	10,98,391	1,66,333	17.8	1,23,779	15.3	50,783	4.6	42,861	4.6	
a) Demand Deposits	1,66,599	16,918	11.3	13,293	9.7	1,898	1.1	1,494	1.0	
b) Time Deposits \$	9,31,792	1,49,414	19.1	1,10,486	16.4	48,884	5.2	41,367	5.3	
3. 'Other' Deposits with the RBI	3,630	596	19.6	-703	-18.8	359	9.9	1,615	53.2	
II. Narrow Money (M₁)[I.1+I.2(a)+I.3]	3,79,791	37,994	11.1	32,728	10.6	14,567	3.8	11,615	3.4	
III. Sources of Money Stock (M₃) (1+2+3+4-5)										
1. Net Bank Credit to Government (A+B)	5,12,380	71,002	16.1	54,702	14.1	39,878	7.8	29,088	6.6	
A. Net RBI credit to Government (a+b)	1,53,877	5,613	3.8	-4,275	-2.8	15,742	10.2	8,303	5.6	
a. Net RBI credit to Central Government	1,46,534	6,705	4.8	-5,587	-3.8	19,523	13.3	14,393	10.3	
b. Net RBI credit to State Governments	7,343	-1,092	-12.9	1,312	18.4	-3,781	-51.5	-6,089	-72.2	
B. Other banks' credit to Government	3,58,504	65,389	22.3	58,977	25.2	24,136	6.7	20,784	7.1	
2. Bank Credit to Commercial Sector (a+b)	6,73,216	86,652	14.8	90,574	18.3	4,271	0.6	21,646	3.7	
a) RBI's credit to commercial sector	13,287	-1,983	-13.0	3,044	24.9	-3,111	-23.4	-3,153	-20.6	
b) Other banks' credit to commercial sector	6,59,929	88,635	15.5	87,530	18.1	7,382	1.1	24,799	4.3	
3. Net Foreign Exchange Assets of Banking Sector (a+b)	2,49,820	44,172	21.5	27,794	15.6	7,187	2.9	927	0.5	
a) RBI's net foreign exchange assets	1,97,175	31,295	18.9	27,927	20.2	7,187	3.6	-1,824	-1.1	
b) Other banks' net foreign exchange assets	52,645	12,877	32.4	-132	-0.3	0	0.0	2,751	6.9	
4. Government's Currency Liabilities to the Public	5,354	776	16.9	732	19.0	0	0.0	182	4.0	
5. Banking Sector's Net Non-Monetary Liabilities other than Time Deposits (a+b)	1,29,186	15,192	13.3	30,588	36.7	-12,115	-9.4	-1,139	-1.0	
a) Net non-monetary liabilities of RBI	79,345	9,123	13.0	9,682	16.0	7,086	8.9	7,605	10.8	
b) Net non-monetary liabilities of other banks (residual)	49,841	6,069	13.9	20,906	91.4	-19,201	-38.5	-8,744	-20.0	
Memo Items : Select Monetary Ratios										
1. M ₃ Multiplier	4.32									
2. Bankers' Reserves to Aggregate Deposits Ratio	7.4									
3. Currency to Aggregate Deposits Ratio	19.1									

P Provisional.

\$ Includes Resurgent India Bonds worth Rs. 17,945 crore since August 28, 1998 and India Millennium Deposits worth Rs. 25,662 crore since November 17, 2000.

Note : Revised in line with the new accounting standards and consistent with the methodology suggested by the Working Group on Money Supply : Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), June 1998. The revision is in respect of pension and provident funds with commercial banks which are classified as other demand and time liabilities and includes those banks which have reported such changes so far.

Appendix Table III.4 : New Monetary Aggregates

(Amount in Rupees crore)

Item	Outstanding as on March 31, 2001P	Variations								
		Financial year				April-June				
		2000-01P		1999-2000		2001-02P		2000-01P		
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	
1	2	3	4	5	6	7	8	9	10	
Monetary Aggregates										
M ₁ (C.I+C.II.1+C.III)	3,78,431	36,635	10.7	32,728	10.6	15,967	4.2	11,232	3.3	
NM ₂ (M ₁ +C.II.2.1)	758,914	89,182	13.3	81,338	13.8	38,798	5.1	28,384	4.2	
NM ₃ (NM ₂ +C.II.2.2+C.IV = S.I+S.II+S.III-S.IV-S.V)	12,26,514	1,53,238	14.3	1,42,342	15.3	66,353	5.4	49,067	4.6	
Components										
C.I Currency with the Public	2,09,445	20,363	10.8	20,137	11.9	12,294	5.9	8,415	4.5	
C.II Aggregate Deposits of Residents (C.II.1+C.II.2)	10,10,873	1,32,447	15.1	1,21,314	16.0	54,049	5.3	39,317	4.5	
C.II.1 Demand Deposits	1,65,357	15,676	10.5	13,295	9.7	3,315	2.0	1,203	0.8	
C.II.2 Time Deposits of Residents (C.II.2.1+C.II.2.2)	8,45,516	1,16,771	16.0	1,08,019	17.4	50,735	6.0	38,114	5.2	
C.II.2.1 Short-term Time Deposits	3,80,482	52,547	16.0	48,608	17.4	22,831	6.0	17,151	5.2	
C.II.2.1.1 Certificates of Deposits (CDs)	1,012	-471	-31.8	-3,772	-71.8	166	16.4	-265	-17.9	
C.II.2.2 Long-term Time Deposits	4,65,034	64,224	16.0	59,410	17.4	27,904	6.0	20,963	5.2	
C.III 'Other' Deposits with the RBI	3,630	596	19.6	-703	-18.8	359	9.9	1,614	53.2	
C.IV Call/Term Funding from Financial Institutions	2,566	-168	-6.1	1,594	139.8	-349	-13.6	-279	-10.2	
Sources										
S.I Domestic Credit (S.I.1+S.I.2)	13,11,156	1,72,571	15.2	1,69,996	17.6	49,887	3.8	49,054	4.3	
S.I.1 Net Bank Credit to the Government (S.I.1.1+S.I.1.2)	5,12,509	71,130	16.1	54,702	14.1	39,838	7.8	29,209	6.6	
S.I.1.1 Net RBI credit to the Government	1,53,877	5,613	3.8	-4,275	-2.8	15,742	10.2	8,303	5.6	
S.I.1.2 Credit to the Government by the Banking System	3,58,632	65,517	22.4	58,977	25.2	24,096	6.7	20,906	7.1	
S.I.2 Bank Credit to the Commercial Sector (S.I.2.1+S.I.2.2)	7,98,647	1,01,440	14.5	1,15,295	19.8	10,049	1.3	19,845	2.8	
S.I.2.1 RBI Credit to the Commercial Sector	19,887	-1,267	-6.0	3,279	18.3	-3,885	-19.5	-3,932	-18.6	
S.I.2.2 Credit to the Commercial Sector by the Banking System	7,78,760	1,02,708	15.2	1,12,016	19.9	13,934	1.8	23,777	3.5	
S.I.2.2.1 Other Investments (Non-SLR Securities)	1,19,046	15,994	15.5	23,269	29.2	2,140	1.8	4,339	4.2	
S.II Government's Currency Liabilities to the Public	5,354	776	16.9	732	19.0	0	0.0	182	4.0	
S.III Net Foreign Exchange Assets of the Banking Sector (S.III.1+S.III.2)	1,61,246	18,850	13.2	17,585	14.1	12,170	7.5	-1,222	-0.9	
S.III.1 Net Foreign Exchange Assets of the RBI	1,97,175	31,295	18.9	27,927	20.2	7,187	3.6	-1,824	-1.1	
S.III.2 Net Foreign Currency Assets of the Banking System	-35,929	-12,445	53.0	-10,341	78.7	4,983	-13.9	602	-2.6	
S.IV Capital Account	1,54,240	18,822	13.9	12,797	10.4	6,137	4.0	14,768	10.9	
S.V Other items (net)	97,002	20,135	26.2	33,174	75.9	-10,433	-10.8	-15,820	-20.6	

Note : 1. Data are provisional.

2. The details of the compilation of the new monetary aggregates are available in the report of the Working Group on Money Supply : Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), June 1998. A link series between the old and present monetary

series has been published in the article entitled "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999.

Appendix Table III.5 : Liquidity Aggregates (Outstanding Amounts)

(Amount in Rupees crore)

Month	NM ₃	Postal Deposits	Liabilities of Financial Institutions (FIs)					Public Deposits with NBFCs	L ₃ (9+10)	
			L ₁ (2+3)	Term Money Borrowings	CDs	Term Deposits	Total (5+6+7)			L ₂ (4+8)
1	2	3	4	5	6	7	8	9	10	11
1999-2000										
April	9,44,754	22,579	9,67,333	957	1,803	4,711	7,471	9,74,804		
May	9,54,246	22,897	9,77,143	528	1,428	4,951	6,907	9,84,050		
June	9,59,655	23,273	9,82,928	637	1,427	5,011	7,075	9,90,003	19,304	10,09,307
July	9,75,222	23,638	9,98,860	533	1,517	5,349	7,399	10,06,259		
August	9,84,896	23,996	10,08,892	557	1,577	6,151	8,285	10,17,177		
September	10,00,853	24,397	10,25,250	372	1,579	6,680	8,631	10,33,881	18,683	10,52,564
October	10,12,945	24,785	10,37,730	422	1,618	6,348	8,388	10,46,118		
November	10,20,371	25,173	10,45,544	436	1,635	7,265	9,336	10,54,880		
December	10,43,374	25,785	10,69,159	481	1,646	6,996	9,123	10,78,282	18,951	10,97,233
January	10,54,973	25,938	10,80,911	287	1,718	7,025	9,030	10,89,941		
February	10,59,966	26,240	10,86,206	245	1,738	7,050	9,033	10,95,239		
March	10,73,275	27,556	11,00,831	540	1,738	7,117	9,395	11,10,226	18,327	11,28,553
2000-01										
April	10,97,728	27,711	11,25,439	202	1,827	7,135	9,164	11,34,603		
May	11,07,122	28,001	11,35,123	802	3,109	7,430	11,341	11,46,464		
June	11,22,343	28,843	11,51,186	981	3,154	7,790	11,925	11,63,111	17,866	11,80,977
July	11,22,203	29,469	11,51,672	1,218	2,967	8,217	12,402	11,64,074		
August	11,31,260	30,123	11,61,383	937	2,769	7,994	11,700	11,73,083		
September	11,43,488	30,684	11,74,172	1,063	2,490	8,751	12,304	11,86,476	19,971	12,06,447
October	11,65,207	31,271	11,96,478	479	2,575	8,278	11,332	12,07,810		
November	11,72,153	31,813	12,03,966	597	2,657	8,363	11,617	12,15,583		
December	11,85,781	32,478	12,18,259	667	2,663	8,227	11,557	12,29,816	20,134	12,49,950
January	11,94,704	32,702	12,27,406	740	2,556	8,388	11,684	12,39,090		
February	12,06,727	33,165	12,39,892	1,147	2,547	8,564	12,258	12,52,150		
March	12,26,514	33,165	12,59,679	1,877	2,498	8,536	12,911	12,72,590	20,134	12,92,724

CDs: Certificates of Deposits.

L₁, L₂ and L₃: Liquidity Aggregates.

NBFCs: Non-Banking Financial Companies.

Notes: 1. Figures are provisional.

2. The methodology of the compilation of the liquidity aggregates are available in the "New Monetary and Liquidity Aggregates", *RBI Bulletin*, November 2000, which also presented the liquidity series from April 1993 onwards. The acronym NM₃ is used to distinguish the new monetary aggregate as proposed by the Working Group.

3. While L₁ and L₂ are compiled on a monthly basis, L₃ is compiled on a quarterly basis.

4. Postal Deposits comprise post office savings bank deposits, post office time deposits, post office recurring deposits, other deposits and post office cumulative time deposits.
5. FIs, here, comprise IDBI, IFCI, ICICI, EXIM Bank, IIBI, SIDBI, NABARD, NHB, TFCI and IDFC.
6. Estimates of public deposits are generated on the basis of returns received from all NBFCs with public deposits of Rs. 20 crore and more as had been recommended by the Working Group representing approximately 90 per cent of the global figure. The global figure has been derived by blowing up the sample estimates.
7. Wherever data are not available, the estimates for the last available month have been repeated.

Appendix Table III.6 : Important Banking Indicators-Scheduled Commercial Banks

(Amount in Rupees crore)

Item	Outstanding as on March 23, 2001		Variations							
			Financial year				First Quarter			
			2000-01		1999-2000		2001-02P		2000-01	
	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10	
1. Gross Demand and Time Liabilities	11,33,480	1,85,122	19.5	1,27,915	15.6	50,548	4.5	39,993	4.2	
(2+3+4+6)										
2. Aggregate Deposits (a+b)	9,62,618	1,49,273	18.4	99,319	13.9	50,457	5.2	40,562	5.0	
(i) Excl. IMDs (a+b (i))	9,36,956	1,23,611	15.2							
a. Demand deposits	1,42,552	15,186	11.9	9,943	8.5	3,727	2.6	2,873	2.3	
b. Time deposits	8,20,066	1,34,088	19.5	89,376	15.0	46,730	5.7	37,689	5.5	
(i) Excl. IMDs	7,94,404	1,08,426	15.8							
3. Other Borrowings #	2,566	-168	-6.1	1,594	139.8	-349	-13.6	-279	-10.2	
4. Other Demand and Time Liabilities	91,208	12,766	16.3	18,369	30.6	2,427	2.7	-1,491	-1.9	
5. Borrowings from the RBI	3,896	-2,595	-40.0	3,597	124.3	-280	-7.2	2,222	34.2	
6. Inter-bank Liabilities	77,088	23,250	43.2	8,634	19.1	-1,987	-2.6	1,201	2.2	
7. Bank Credit (a+b)	5,11,434	75,476	17.3	67,121	18.2	7,223	1.4	23,976	5.5	
a. Food Credit	39,991	14,300	55.7	8,875	52.8	10,349	25.9	7,491	29.2	
b. Non-food Credit	4,71,443	61,176	14.9	58,246	16.5	-3,126	-0.7	16,485	4.0	
8. Investments (a+b)	3,70,160	61,216	19.8	54,349	21.3	23,966	6.5	18,930	6.1	
a. Government securities	3,40,035	61,579	22.1	55,239	24.7	23,426	6.9	18,839	6.8	
b. Other approved securities	30,125	-363	-1.2	-889	-2.8	540	1.8	91	0.3	
9. Cash in hand	5,658	328	6.2	968	22.2	864	15.3	420	7.9	
10. Balances with the RBI	59,544	2,125	3.7	-6,129	-9.6	14,782	24.8	3,435	6.0	
11. Inter-Bank Assets	62,355	18,907	43.5	8,661	24.9	-160	-0.3	-5,492	-12.6	
12. Credit-Deposit Ratio (%)	53.1	—	50.6	—	67.6	—	14.3	—	59.1	
13. Non-food Credit-Deposit Ratio (%)	49.0	—	41.0	—	58.6	—	-6.2	—	40.6	
14. Investment-Deposit Ratio (%)	38.5	—	41.0	—	54.7	—	47.5	—	46.7	
Memo Items:										
I. Non-Deposit Resources (1-2-11+II)	1,09,520	17,916	21.2	19,866	27.7	251	-2.6	4,923	-6.6	
II. Bills Rediscounted with Financial Institutions	1,013	975	251.3	-69	-15.1	-313	-30.9	67	17.8	
III. Call Money Borrowings from Financial Institutions	8,723	953	12.3	1,289	19.9	-4,125	-47.3	761	9.8	

P Provisional.

Other than from RBI/IDBI/NABARD/EXIM Bank.

Note : Revised in line with the new accounting standards and consistent with the methodology suggested by the Working Group on Money Supply : Analytics and Methodology of Compilation (June 1998). The revision is in respect of pension and provident funds with

commercial banks which are classified as other demand and time liabilities and includes those banks which have reported such changes so far.

Appendix Table III.7 : Commercial Bank Survey

(Amount in Rupees crore)

Variable	Outstanding as on March 23, 2001	Variations							
		Financial year				April-June			
		2000-01P		1999-2000		2001-02P		2000-01P	
		Absolute	Per cent	Absolute	Per cent	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5	6	7	8	9	10
Components									
C.I Aggregate Deposits of Residents (C.I.1+C.I.2)	8,76,521	1,16,809	15.4	96,853	14.6	49,652	5.7	38,981	5.1
C.I.1 Demand Deposits	1,42,552	15,186	11.9	9,943	8.5	3,727	2.6	2,873	2.3
C.I.2 Time Deposits of Residents (C.I.2.1+C.I.2.2)	7,33,969	1,01,624	16.1	86,909	15.9	45,926	6.3	36,109	5.7
C.I.2.1 Short-term Time Deposits	3,30,286	45,731	16.1	39,109	15.9	20,667	6.3	16,249	5.7
C.I.2.1.1 Certificates of Deposits (CDs)	1,012	-471	-31.8	-3,772	-71.8	166	16.4	-265	-17.9
C.I.2.2 Long-term Time Deposits	4,03,683	55,893	16.1	47,800	15.9	25,259	6.3	19,860	5.7
C.II Call/Term Funding from Financial Institutions	2,566	-168	-6.1	1,594	139.8	-349	-13.6	-279	-10.2
Sources									
S.I Domestic Credit (S.I.1+S.I.2)	9,90,458	1,50,107	17.9	145,162	20.9	33,554	3.4	41,542	4.9
S.I.1 Credit to the Government	3,40,035	61,579	22.1	55,239	24.7	23,426	6.9	18,839	6.8
S.I.2 Credit to the Commercial Sector (S.I.2.1+S.I.2.2+S.I.2.3+S.I.2.4)	6,50,424	88,528	15.8	89,924	19.1	10,127	1.6	22,703	4.0
S.I.2.1 Bank Credit	5,11,434	75,476	17.3	67,121	18.2	7,223	1.4	23,976	5.5
S.I.2.1.1 Non-food Credit	4,71,443	61,176	14.9	58,246	16.5	-3,126	-0.7	16,485	4.0
S.I.2.2 Net Credit to Primary Dealers	-133	-2,262	-106.2	1,375	182.4	221	-166.2	-5,836	-274.1
S.I.2.3 Investments in Other Approved Securities	30,125	-363	-1.2	-889	-2.8	540	1.8	91	0.3
S.I.2.4 Other Investments (in non-SLR Securities)	1,08,998	15,678	16.8	22,316	31.4	2,143	2.0	4,472	4.8
S.II Net Foreign Currency Assets of Commercial Banks (S.II.1-S.II.2-S.II.3)	-35,929	-12,445	53.0	-10,341	78.7	4,983	-13.9	602	-2.6
S.II.1 Foreign Currency Assets	51,646	19,650	61.4	-7,518	-19.0	5,886	11.4	2,496	7.8
S.II.2 Non-resident Foreign Currency Repatriable Fixed Deposits	86,097	32,464	60.5	2,466	4.8	804	0.9	1,580	2.9
S.II.3 Overseas Foreign Currency Borrowings	1,478	-369	-20.0	357	24.0	99	6.7	314	17.0
S.III Net Bank Reserves (S.III.1+S.III.2-S.III.3)	61,306	5,047	9.0	-8,757	-13.5	15,926	26.0	1,632	2.9
S.III.1 Balances with the RBI	59,544	2,125	3.7	-6,129	-9.6	14,782	24.8	3,435	6.0
S.III.2 Cash in Hand	5,658	328	6.2	968	22.2	864	15.3	420	7.9
S.III.3 Loans and Advances from the RBI	3,896	-2,595	-40.0	3,597	124.3	-280	-7.2	2,222	34.2
S.IV Capital Account	63,513	6,878	12.1	2,743	5.1	4,403	6.9	4,297	7.6
S.V. Other items (net) (S.I+S.II+S.III-S.IV-C.I-C.II)	73,235	19,189	35.5	24,875	85.3	756	1.0	777	1.4
S.V.1 Other Demand & Time Liabilities (net of S.II.3)	89,730	13,135	17.1	18,012	30.7	2,328	2.6	-1,805	-2.4
S.V.2 Net Inter-Bank Liabilities (other than to PDs)	14,601	2,082	16.6	1,348	12.1	-1,607	-11.0	857	6.8

Note : 1. Data are provisional.

2. The details of the compilation of the new monetary aggregates are available in the report of the Working Group on Money Supply : Analytics and Methodology of Compilation (Chairman: Dr. Y.V. Reddy), June 1998. A link series between the old and present monetary series has been published in the article entitled "New Monetary Aggregates: An Introduction", RBI Bulletin, October 1999.

Appendix Table III.8 : Sectoral Deployment of Gross Bank Credit

(Amount in Rupees crore)

Sector	Outstanding as on March 23, 2001	Variations	
		2000-01	1999-2000
1	2	3	4
I. Gross Bank Credit (1+2)	4,69,153	68,335	58,806
1. Public Food Procurement Credit	39,991	14,300	8,875
2. Non-food Gross Bank Credit (A+B+C+D)	4,29,162	54,035	49,931
		(100.0)	(100.0)
A. Priority Sectors	1,53,861	22,034	17,216
		(40.8)	(34.5)
a) Agriculture	51,587	7,206	4,747
		(13.3)	(9.5)
b) Small Scale Industries	55,925	3,111	4,331
		(5.8)	(8.7)
c) Other Priority Sectors	46,349	11,717	8,138
		(21.7)	(16.3)
B. Industry (Medium and Large)	1,62,582	15,263	16,803
		(28.2)	(33.7)
C. Wholesale Trade (other than food procurement)	20,396	3,578	2,853
		(6.6)	(5.7)
D. Other Sectors	92,323	13,160	13,059
		(24.4)	(26.2)
<i>of which :</i>			
i. Housing	16,137	2,037	2,696
ii. Consumer Durables	5,563	1,708	765
iii. Non-Banking Financial Companies	7,812	634	1,096
iv. Loans to Individuals against shares and debentures/bonds	1,694	-452	521
v. Real Estate Loans	1,783	139	19
vi. Other Non-Priority Sector Personal Loans	18,027	2,618	3,120
vii. Advances against Fixed Deposits	19,785	909	3,770
viii. Tourism and Tourism related Hotels	996	96	288
II. Export Credit	45,321	6,203	3,227
(included under item I.2)		(11.5)	(6.5)
III. Net Bank Credit	4,67,206	69,001	58,728
(including inter-bank participation)			

- Note:** 1. Data are provisional and relate to 50 selected scheduled commercial banks (49 for March 2001) which account for about 90-95 per cent of Bank Credit of all scheduled commercial banks. Gross Bank Credit includes bills rediscounted with the RBI, IDBI, EXIM Bank and other approved financial institutions and Net Bank Credit data include inter-bank participations. Net bank credit data are exclusive of bills rediscounted with the RBI, IDBI, EXIM Bank and other approved financial institutions.
2. Data on priority sector advances at item 2A do not include investments in special bonds of specified institutions and investment in venture capital which are treated as eligible for inclusion under priority sector lending.
3. Net bank credit used for computation of priority sector lending targets as given in *para* 3.38 etc. is net bank credit as defined at item III above less FCNR (B) and NRRR deposits.
4. Figures in brackets are proportions to incremental non-food gross bank credit.

Appendix Table III.9 : Industry-Wise Deployment of Gross Bank Credit

(Amount in Rupees crore)

Industry	Outstanding as on March 23, 2001	Variations	
		2000-01	1999-2000
1	2	3	4
Industry	2,18,507	18,374	21,134
(Small, Medium and Large)			
1. Coal	1,034	-92	12
2. Mining	1,303	63	-120
3. Iron and Steel	19,380	581	508
4. Other Metals and Metal Products	6,345	51	376
5. All Engineering	23,363	294	1,556
of which Electronics	5,281	148	261
6. Electricity	9,131	1,693	625
7. Cotton Textiles	13,226	1,544	1,252
8. Jute Textiles	844	-50	50
9. Other Textiles	11,983	-1,020	1,003
10. Sugar	4,682	850	494
11. Tea		1058	24
209			
12. Food Processing	6,346	360	1,236
13. Vegetable Oils & <i>vanaspati</i>	2,875	-83	248
14. Tobacco and Tobacco Products	963	-30	-12
15. Paper and Paper Products	3,468	325	205
16. Rubber and Rubber Products	2,195	132	49
17. Chemicals, Dyes, Paints <i>etc.</i>	23,918	478	3,511
<i>of which :</i>			
i) Fertilisers	5,228	651	1,000
ii) Petro-Chemicals	6,111	-74	1,437
iii) Drugs and Pharmaceuticals	5,380	-313	370
18. Cement	3,842	218	878
19. Leather and Leather Products	2,757	93	122
20. Gems and Jewellery	6,581	1,175	1,282
21. Construction	3,175	439	167
22. Petroleum	11,572	2,603	3,453
23. Automobiles including trucks	4,401	373	900
24. Computer Software	1,223	201	275
25. Infrastructure	10,787	3,544	1,298
i) Power	4,684	1,395	1,180
ii) Telecommunications	3,644	1,652	-281
iii) Roads and Ports	2,459	497	399
26. Other Industries	42,055	4,608	1,557

Data are provisional and relate to 50 selected scheduled commercial banks (49 SCBs in March 2001).

Appendix Table III.10 : Reserve Bank's Accommodation to Scheduled Commercial Banks

(Amount in Rupees crore)

Item	2001-02		2000-01		1999-2000	
	June	March	December	September	June	March
1	2	3	4	5	6	7
1. Export Credit Refinance						
A) Limit	9,221	7,192	6,722	6,215	11,273	10,579
a) Normal	6,150					
b) Backstop	3,071					
B) Outstanding	3,553	3,252	5,988	4,648	8,490	6,291
a) Normal	3,467					
b) Backstop	86					
2. Collateralised Lending Facility (CLF)						
A) Limit	657	657	657	657	1,314	1,314
a) Normal	438					
b) Backstop	219					
B) Outstanding	63	240	317	245	223	161
a) Normal	63					
b) Backstop	0					
3. Additional Collateralised Lending Facility (ACLF)						
A) Limit						1,314
B) Outstanding						39
Memo Items :						
1. Aggregate Export Credit \$	44,287	45,387	44,292	43,339	41,814	40,460
2. Export Credit eligible for Refinance	37,604	38,765	37,607	36,436	35,627	34,576
3. Aggregate Export Credit as percentage of Net Bank Credit	7.8	8.9	8.9	9.3	9.2	9.3

\$ Inclusive of Rupee export credit, pre-shipment credit in foreign currency (PCFC), rediscounting of export bills abroad (EBR) and overdue export credit.

Note : 1. Data pertain to the last reporting Friday of the month.

2. The CLF / ACLK was introduced on April 24, 1999 and ACLK was withdrawn effective June 5, 2000.

3. The export credit refinance and CLF Limits were reduced by 50 per cent in two steps of 25 per cent each effective from July 29 and August 12, 2000.

4. Effective May 5, 2001, the export credit refinance and CLF facilities were split up into 2/3rd =(normal) and 1/3rd = (backstop).

Appendix Table III.11 : Variations in Index Numbers Of Wholesale Prices
(BASE : 1993-94 = 100)

Major Group/Sub-group/Commodity	Weight	Variations				End-June	
		Point-to-point basis		Average basis		Point-to-point basis	
		2000-01	1999-00	2000-01	1999-00	2001P	2000
1	2	3	4	5	6	7	8
All Commodities	100.000	4.9	6.5	7.2	3.3	5.2	6.6
I. Primary Articles	22.025	-0.4	4.0	2.9	1.1	3.1	5.1
1. Food articles	15.402	-2.8	7.1	3.0	3.8	2.0	5.7
a) Cereals	4.406	-5.5	4.7	-2.6	17.8	-3.1	2.5
i) Rice	2.449	-2.3	3.3	-2.2	17.2	-1.0	1.6
ii) Wheat	1.384	-4.3	5.1	1.1	15.2	-0.7	7.2
b) Pulses	0.603	7.1	10.7	8.1	3.7	4.8	9.7
c) Fruits and vegetables	2.917	-2.9	-0.7	3.8	-16.9	23.2	3.5
d) Milk	4.367	0.4	15.8	10.6	8.5	-1.3	10.4
e) Eggs, fish and meat	2.208	-2.1	10.1	6.9	2.7	-2.1	14.6
f) Condiments and spices	0.662	-13.8	1.0	-10.7	2.9	-10.5	-11.8
g) Other food articles	0.239	5.1	-15.2	-15.3	-7.4	0.3	-11.8
i) Tea	0.157	12.6	-15.6	-16.2	1.9	3.6	-12.6
ii) Coffee	0.082	-6.4	-14.5	-13.7	-21.7	-6.4	-10.0
2. Non-food articles	6.138	6.0	-3.5	2.7	-5.8	6.4	3.7
a) Fibres	1.523	7.4	-3.6	8.1	-10.4	5.6	7.0
Raw cotton	1.357	7.8	-7.0	6.7	-11.7	3.5	4.9
b) Oilseeds	2.666	2.8	-8.0	-3.1	-10.2	4.3	3.0
3. Minerals	0.485	13.5	-11.6	2.6	-0.5	1.1	-1.4
II. Fuel, Power, Light and Lubricants	14.226	15.0	26.7	28.5	9.0	14.5	26.8
1. Coking coal	0.241	11.0	0.0	1.9	0.0	11.0	0.0
2. Mineral oils	6.990	17.0	41.6	41.4	11.8	16.0	41.8
3. Electricity	5.484	11.5	15.1	18.6	7.5	11.5	15.1

III. Manufactured Products	63.749	3.8	2.4	3.3	2.7	3.1	2.1
1. Sugar, <i>Khandsari</i> and <i>Gur</i>	3.929	-6.1	2.9	-1.8	1.6	-3.4	-1.6
i) Sugar	3.619	-0.9	3.6	3.8	1.5	-4.3	4.9
ii) <i>Khandsari</i>	0.173	0.0	0.0	0.0	-5.1	5.8	0.0
iii) <i>Gur</i>	0.060	-1.8	4.0	-0.9	-0.5	8.4	3.4
2. Edible oils	2.755	-4.8	-17.9	-15.3	-12.3	4.4	-14.8
3. Cotton textiles	4.215	6.3	-1.9	4.7	-0.3	1.4	4.1
4. Chemicals and chemical products	11.931	4.0	5.5	6.0	6.4	3.3	4.8
5. Cement	1.731	20.3	-0.7	6.5	-1.9	18.7	-3.1
6. Iron and steel	3.637	1.3	1.3	1.7	1.3	-0.1	1.3
7. Machinery and tools	8.363	9.5	-0.5	5.9	0.1	7.3	2.8
8. Transport equipments and parts	4.295	5.8	4.7	5.9	3.0	3.9	5.0

P Provisional.

Appendix Table III.12 : Variations in Wholesale Prices - Weighted Contributions
(BASE : 1993-94 = 100)

Major Group/Sub-group/Commodity	Weight	(Per cent)					
		Point-to-point basis		Average basis		End-June	
		2000-01	1999-00	2000-01	1999-00	2001P	2000
1	2	3	4	5	6	7	8
All Commodities	100.000	100.0	100.0	100.0	100.0	100.0	100.0
I. Primary Articles	22.025	-2.1	14.6	9.7	8.1	14.2	18.5
1. Food articles	15.402	-10.0	18.8	7.4	20.1	6.8	15.2
a) Cereals	4.406	-5.8	3.8	-2.0	25.8	-3.1	2.0
i) Rice	2.449	-1.3	1.4	-0.9	13.4	-0.5	0.7
ii) Wheat	1.384	-1.4	1.3	0.3	6.9	-0.2	1.7
b) Pulses	0.603	1.0	1.1	0.8	0.8	0.7	1.0
c) Fruits and vegetables	2.917	-1.9	-0.3	1.6	-19.8	13.3	1.6
d) Milk	4.367	0.4	10.5	6.6	10.9	-1.2	7.1
e) Eggs, fish and meat	2.208	-1.1	4.1	2.5	2.2	-1.1	5.8
f) Condiments and spices	0.662	-2.7	0.2	-1.5	0.9	-1.8	-1.9
g) Other food articles	0.239	0.2	-0.5	-0.5	-0.6	0.0	-0.5
i) Tea	0.157	0.3	-0.3	-0.4	0.1	0.1	-0.3
ii) Coffee	0.082	-0.1	-0.2	-0.2	-0.7	-0.1	-0.1
2. Non-food articles	6.138	7.0	-3.4	2.3	-11.7	7.4	3.4
a) Fibres	1.523	2.2	-0.9	1.7	-5.6	1.7	1.7
Raw cotton	1.357	2.1	-1.6	1.3	-5.8	0.9	1.1
b) Oilseeds	2.666	1.3	-3.2	-1.1	-8.8	2.0	1.1
3. Minerals	0.485	0.9	-0.7	0.1	-0.1	0.1	-0.1
II. Fuel, Power, Light and Lubricants	14.226	55.9	63.1	63.1	41.4	50.8	61.5
1. Coking coal	0.241	0.6	0.0	0.1	0.0	0.5	0.0
2. Mineral oils	6.990	33.0	45.6	44.4	25.7	29.2	44.8
3. Electricity	5.484	16.3	15.0	16.6	13.9	15.3	14.5
III. Manufactured Products	63.749	45.7	22.9	27.6	49.9	34.7	19.5
1. Sugar, <i>Khandsari and Gur</i>	3.929	-5.2	1.9	-1.1	2.1	-2.5	-1.0
i) Sugar	3.619	-0.6	1.9	1.8	1.6	-2.8	2.6
ii) <i>Khandsari</i>	0.173	0.0	0.0	0.0	-0.3	0.2	0.0
iii) <i>Gur</i>	0.060	0.0	0.0	0.0	0.0	0.1	0.0
2. Edible oils	2.755	-2.0	-7.2	-5.0	-10.2	1.6	-5.3
3. Cotton textiles	4.215	5.2	-1.3	2.8	-0.5	1.1	2.6
4. Chemicals and chemical products	11.931	10.3	10.8	10.7	24.1	8.2	9.4
5. Cement	1.731	6.0	-0.2	1.4	-0.9	5.2	-0.7
6. Iron and steel	3.637	0.8	0.7	0.8	1.3	0.0	0.7
7. Machinery and tools	8.363	12.4	-0.5	5.5	0.2	9.2	2.9
8. Transport equipments and parts	4.295	4.7	2.9	3.3	3.7	3.0	3.0

P Provisional.

**Appendix Table III.13 : Annualised Variations in Price Indices
(Point-to-Point Basis)**

Year/ Month	(Per cent)			
	Wholesale Price Index @	CPI for Industrial Workers \$	CPI for Urban Non-manual Employees +	CPI for Agricultural Labourers*
1	2	3	4	5
1996-97	5.4 (4.6)	10.0 (9.4)	10.2 (9.3)	10.5 (9.0)
1997-98	4.5 (4.4)	8.3 (6.8)	7.2 (6.9)	3.8 (3.4)
1998-99	5.3 (5.9)	8.9 (13.1)	9.0 (11.3)	8.8 (11.0)
1999-00	6.5 (3.3)	4.8 (3.4)	5.0 (4.5)	3.4 (4.4)
2000-01	4.9 (7.2)	2.5 (3.8)	5.6 (5.6)	-2.0 (-0.3)
1999-2000				
April	3.9	8.4	7.9	8.1
May	3.1	7.7	7.5	8.0
June	2.2	5.3	6.1	6.7
July	2.0	3.2	4.2	5.2
August	2.8	3.2	4.5	5.1
September	3.2	2.1	3.8	4.4
October	3.2	0.9	2.9	3.6
November	2.8	0.0	2.0	1.9
December	3.3	0.5	2.6	2.0
January	3.6	2.6	3.8	2.7
February	4.4	3.6	4.4	3.0
March	6.5	4.8	5.0	3.4
2000-01				
April	6.2	5.5	6.2	4.1
May	6.6	5.0	5.8	4.0
June	6.6	5.2	5.8	3.0
July	6.6	5.0	5.7	2.0
August	6.1	4.0	5.1	0.0
September	8.0	3.5	4.8	-1.3
October	7.3	2.7	5.0	-3.2
November	7.8	2.7	5.3	-3.2
December	8.6	3.5	5.9	-2.6
January	8.6	3.2	5.9	-2.0
February	7.5	3.0	5.9	-2.3
March	5.5	2.5	5.6	-2.0
2001-02				
April	5.5	2.3	4.7	-2.0
May	5.6	2.5	4.9	-2.3
June	5.2P	3.4	5.5	..

P Provisional.

@ Base : 1993-94=100.

+ Base : 1984-85=100.

.. Not Available.

\$ Base : 1982=100.

* Base : 1986-87=100.

Note : Figures in brackets are on average basis.

Appendix Table IV.1 : Measures of Deficit of the Central Government

(Rupees crore)						
Year	Fiscal Deficit		Primary Deficit		Net RBI	Revenue
	Gross	Net	Gross	Net	Credit +	Deficit
1	2	3	4	5	6	7
1990-91	44,632	30,692	23,134	17,924	14,746	18,562
	(37,606)		(16,108)			
1991-92	36,325	24,624	9,729	8,961	5,508	16,261
	(30,844)		(4,248)			
1992-93	40,173	30,232	9,098	11,644	4,257	18,574
	(35,909)		(4,834)			
1993-94	60,257	45,994	23,516	24,331	260	32,716
	(55,257)		(18,516)			
1994-95	57,703	40,313	13,644	12,050	2,130	31,029
	(48,030)		(3,970)			
1995-96	60,243	42,432	10,198	10,806	19,855	29,731
	(50,253)		(208)			
1996-97	66,733	46,394	7,255	9,022	1,934	32,654
	(56,242)		(-3236)			
1997-98	88,937	63,062	23,300	22,748	12,914	46,449
	(73,204)		(7,567)			
1998-99	1,13,349	79,944	35,467	32,138	11,800	66,976
	(89,560)		(11,678)			
1999-2000	1,04,717	89,910	14,468	33,539	-5,588	67,596
2000-2001(RE)	1,11,972	1,01,402	11,305	38,741	6,705	77,369
2001-2002(BE)	1,16,314	1,07,469	4,014	36,747	..	78,821
As Percentage to GDP at Current Market Prices						
1990-91	7.85	5.40	4.07	3.15	2.59	3.26
	(6.61)		(2.83)			
1991-92	5.56	3.77	1.49	1.37	0.84	2.49
	(4.72)		(0.65)			
1992-93	5.37	4.04	1.22	1.56	0.57	2.48
	(4.80)		(0.65)			
1993-94	7.01	5.35	2.74	2.83	0.03	3.81
	(6.43)		(2.15)			
1994-95	5.70	3.98	1.35	1.19	0.21	3.06
	(4.74)		(0.39)			
1995-96	5.07	3.57	0.86	0.91	1.67	2.50
	(4.23)		(0.02)			
1996-97	4.88	3.39	0.53	0.66	0.14	2.39
	(4.11)		(-0.24)			
1997-98	5.84	4.14	1.53	1.49	0.85	3.05
	(4.81)		(0.50)			
1998-99	6.45	4.55	2.02	1.83	0.67	3.81
	(5.09)		(0.66)			
1999-2000	5.35	4.59	0.74	1.71	-0.29	3.45
2000-2001(RE)	5.13	4.64	0.52	1.77	0.31	3.54
2001-2002(BE)	4.70#	4.34 @	0.16 @	1.48 @	..	3.18 @

Average (1991-92 to 1999-2000)	4.92*	4.15	0.61 *	1.51	0.52	3.01
---------------------------------------	-------	------	--------	------	------	------

RE Revised Estimates. BE Budget Estimates. .. Not Available.

(-) Indicates Surplus.

+ As per RBI records after closure of Government accounts.

As per the Union Budget Speech 2001-2002.

@ Worked out on the basis of the implicit nominal GDP underlying the Budget Estimates of GFD/GDP ratio of 4.7 per cent for 2001-2002.

* Net of States' share in small savings.

Notes:

1. The revenue deficit denotes the difference between revenue receipts and revenue expenditure. The net RBI credit to the Central Government is the sum of the RBI's holdings of i) Treasury Bills, ii) Government of India dated securities and iii) rupee coins and iv) Loans and Advances from the Reserve Bank to the Centre since April 1, 1997 adjusted for the Centre's cash balances with the Reserve Bank. The gross fiscal deficit is the excess of total expenditure including loans, net of recoveries over revenue receipts (including external grants) and non-debt capital receipts. The net fiscal deficit is the difference between gross fiscal deficit and net lending. The gross primary deficit is the difference between the gross fiscal deficit and interest payments. The net primary deficit denotes net fiscal deficit *minus* net interest payments.
2. Figures in parentheses are excluding States' share in small savings as per the new system of accounting followed since 1999-2000.

Source : Central Government Budget Documents and Reserve Bank records.

Appendix Table IV. 2 : Major Items of Receipts and Expenditures of the Central Government

(Rupees cr													
Item	2001-2002 (BE)	2000-2001 (RE)	2000-2001 (BE)	1999-2000	1998-99	1997-98	1996-97	1995-96	1994-95	1993-94	1992-93	1991-92	Ave 1991-' 1999-:
1	2	3	4	5	6	7	8	9	10	11	12	13	
1. Total Receipts (2+5)	3,75,223 (15.16)	3,35,523 (15.36)	3,38,487 (15.51)	2,98,084 (15.23)	2,79,549 (15.90)	2,32,963 (15.30)	1,87,823 (13.73)	1,68,468 (14.18)	1,59,778 (15.78)	1,30,893 (15.23)	1,10,306 (14.74)	1,04,559 (16.00)	(1:
2. Revenue Receipts (3+4)	2,31,745 (9.36)	2,06,166 (9.44)	2,03,673 (9.33)	1,81,513 (9.28)	1,49,485 (8.50)	1,33,886 (8.79)	1,26,279 (9.23)	1,10,130 (9.27)	91,083 (8.99)	75,453 (8.78)	74,128 (9.90)	66,031 (10.11)	(9
3. Tax Revenue (Net to Centre)	1,63,031 (6.59)	1,44,403 (6.61)	1,46,209 (6.70)	1,28,271 (6.55)	1,04,652 (5.95)	95,672 (6.28)	93,701 (6.85)	81,939 (6.90)	67,454 (6.66)	53,449 (6.22)	54,044 (7.22)	50,069 (7.66)	(6
4. Non-tax Revenue <i>of which :</i>	68,714 (2.78)	61,763 (2.83)	57,464 (2.63)	53,242 (2.72)	44,833 (2.55)	38,214 (2.51)	32,578 (2.38)	28,191 (2.37)	23,629 (2.33)	22,004 (2.56)	20,084 (2.68)	15,962 (2.44)	(2
a) Interest Receipts	41,578 (1.68)	38,006 (1.74)	36,721 (1.68)	33,878 (1.73)	30,076 (1.71)	25,323 (1.66)	22,106 (1.62)	18,419 (1.55)	15,797 (1.56)	15,078 (1.75)	12,487 (1.67)	10,933 (1.67)	(3
b) Dividend and Profits	16,229 (0.66)	14,159 (0.65)	11,204 (0.51)	9,553 (0.49)	7,584 (0.43)	5,181 (0.34)	3,854 (0.28)	3,248 (0.27)	2,716 (0.27)	2,451 (0.29)	2,493 (0.33)	1,058 (0.16)	((
5. Capital Receipts	1,43,478 (5.80)	1,29,357 (5.92)	1,34,814 (6.18)	1,16,571 (5.96)	1,30,064 (7.40)	99,077 (6.51)	61,544 (4.50)	58,338 (4.91)	68,695 (6.78)	55,440 (6.45)	36,178 (4.83)	38,528 (5.90)	(:
6. Total Expenditure (7 + 8)	3,75,223 (15.16)	3,35,522 (15.36)	3,38,487 (15.51)	2,98,084 (15.23)	2,79,340 (15.89)	2,32,053 (15.24)	2,01,007 (14.69)	1,78,275 (15.01)	1,60,739 (15.87)	1,41,853 (16.51)	1,22,618 (16.38)	1,11,414 (17.05)	(1:
7. Revenue <i>Expenditure of which :</i>	3,10,566 (12.55)	2,83,535 (12.98)	2,81,098 (12.88)	2,49,109 (12.73)	2,16,461 (12.31)	1,80,335 (11.85)	1,58,933 (11.62)	1,39,861 (11.77)	1,22,112 (12.06)	1,08,169 (12.59)	92,702 (12.38)	82,292 (12.60)	(1:
a) Interest Payments	1,12,300 (4.54)	1,00,667 (4.61)	1,01,266 (4.64)	90,249 (4.61)	77,882 (4.43)	65,637 (4.31)	59,478 (4.35)	50,045 (4.21)	44,060 (4.35)	36,741 (4.28)	31,075 (4.15)	26,596 (4.07)	(4
b) Subsidies	29,801 (1.20)	26,949 (1.23)	21,380 (0.98)	24,706 (1.26)	23,593 (1.34)	18,540 (1.22)	15,499 (1.13)	12,666 (1.07)	11,854 (1.17)	11,605 (1.35)	10,824 (1.45)	12,253 (1.88)	(3
c) Defence	42,041 (1.70)	39,682 (1.82)	40,661 (1.86)	35,216 (1.80)	29,861 (1.70)	26,174 (1.72)	20,997 (1.53)	18,841 (1.59)	16,426 (1.66)	14,978 (1.74)	12,109 (1.62)	11,442 (1.75)	(3
8. Capital Disbursements <i>of which :</i>	64,657 (2.61)	51,987 (2.38)	57,389 (2.63)	48,975 (2.50)	62,879 (3.58)	51,718 (3.40)	42,074 (3.08)	38,414 (3.23)	38,627 (3.81)	33,684 (3.92)	29,916 (4.00)	29,122 (4.46)	(3
Capital Outlay	40,647 (1.64)	26,532 (1.21)	32,919 (1.51)	24,037 (1.23)	17,909 (1.02)	17,525 (1.15)	14,195 (1.04)	14,099 (1.19)	14,891 (1.47)	13,230 (1.54)	13,619 (1.82)	11,400 (1.74)	(3
9. Developmental Expenditure * <i>of which :</i>	1,57,513 (6.36)	1,40,560 (6.44)	1,34,637 (6.17)	1,30,256 (6.66)	1,37,257 (7.81)	1,10,994 (7.29)	94,197 (6.88)	84,427 (7.11)	82,803 (8.18)	72,464 (8.43)	65,479 (8.75)	59,313 (9.08)	(3
Social Sector	38,573 (1.56)	34,519 (1.58)	30,661 (1.41)	31,913 (1.63)	29,012 (1.65)	24,755 (1.63)	20,209 (1.48)	18,701 (1.57)	15,178 (1.50)	12,020 (1.40)	7,261 (0.97)	6,817 (1.04)	(3
10. Non-Developmental Expenditure *	2,29,964 (9.29)	2,06,085 (9.44)	2,13,580 (9.79)	1,76,533 (9.02)	1,50,298 (8.55)	1,27,820 (8.40)	1,12,217 (8.20)	98,632 (8.30)	82,402 (8.14)	73,586 (8.56)	60,584 (8.09)	55,170 (8.44)	(8

Memo Items :

1. Interest Payments as per cent of	48.46	48.83	49.72	49.72	52.10	49.02	47.10	45.44	48.37	48.69	41.92	40.28	4
--	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	---

Revenue Receipts														
2.	Revenue Deficit as per cent of Gross Fiscal Deficit	67.77	69.10	69.58	64.55	59.09	52.23	48.93	49.35	53.77	54.29	46.24	44.77	5
3.	Net RBI Credit to the Centre as per cent of Gross Fiscal Deficit	..	5.99	..	-5.34	10.41	14.52	2.90	32.96	3.69	0.43	10.60	15.16	

BE Budget Estimates.

RE Revised Estimates.

.. Not Available.

* Data on developmental and non-developmental expenditures are inclusive of other commercial departments.

Note : Figures in brackets are percentages to GDP.

Source : Central Government budget documents and Reserve Bank records.

Appendix Table IV.3 : Direct and Indirect Tax Revenues of Central and State Governments

(Rupees crore)

Year	Centre (Gross)			States @			Centre and States Combined			
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total	
1	2	3	4	5	6	7	8	9	10	
1990-91	11,024	46,489	57,513	3,243	26,808	30,051	14,267	73,297	87,564	
(a)	19.2	80.8	100.0	10.8	89.2	100.0	16.3	83.7	100.0	
(b)	1.9	8.2	10.1	0.6	4.7	5.3	2.5	12.9	15.4	
1991-92	15,207	52,059	67,266	3,840	31,568	35,408	19,047	83,627	1,02,674	
(a)	22.6	77.4	100.0	10.8	89.2	100.0	18.6	81.4	100.0	
(b)	2.3	8.0	10.3	0.6	4.8	5.4	2.9	12.8	15.7	
1992-93	18,132	56,434	74,566	4,353	35,573	39,926	22,485	92,007	1,14,492	
(a)	24.3	75.7	100.0	10.9	89.1	100.0	19.6	80.4	100.0	
(b)	2.4	7.5	10.0	0.6	4.8	5.3	3.0	12.3	15.3	
1993-94	20,298	55,392	75,690	5,032	41,545	46,577	25,330	96,937	1,22,267	
(a)	26.8	73.2	100.0	10.8	89.2	100.0	20.7	79.3	100.0	
(b)	2.4	6.4	8.8	0.6	4.8	5.4	2.9	11.3	14.2	
1994-95	26,966	65,328	92,294	7,014	48,765	55,779	33,980	1,14,093	1,48,073	
(a)	29.2	70.8	100.0	12.6	87.4	100.0	22.9	77.1	100.0	
(b)	2.7	6.5	9.1	0.7	4.8	5.5	3.3	11.3	14.6	
1995-96	33,563	77,661	1,11,224	8,040	55,587	63,627	41,603	1,33,248	1,74,851	
(a)	30.2	69.8	100.0	12.6	87.4	100.0	23.8	76.2	100.0	
(b)	2.8	6.5	9.4	0.7	4.7	5.4	3.5	11.2	14.7	
1996-97	38,891	89,871	1,28,762	8,403	62,675	71,078	47,294	1,52,546	1,99,840	
(a)	30.2	69.8	100.0	11.8	88.2	100.0	23.7	76.3	100.0	
(b)	2.8	6.6	9.4	0.6	4.6	5.2	3.5	11.1	14.6	
1997-98	48,274	90,946	1,39,220	6,469	71,624	78,093	54,743	1,62,570	2,17,313	
(a)	34.7	65.3	100.0	8.3	91.7	100.0	25.2	74.8	100.0	
(b)	3.2	6.0	9.1	0.4	4.7	5.1	3.6	10.7	14.3	
1998-99	46,595	97,202	1,43,797	10,804	78,468	89,272	57,399	1,75,670	2,33,069	
(a)	32.4	67.6	100.0	12.1	87.9	100.0	24.6	75.4	100.0	
(b)	2.7	5.5	8.2	0.6	4.5	5.1	3.3	10.0	13.3	
1999-2000*	57,960	1,13,792	1,71,752	13,079	89,361	1,02,440	71,039	2,03,153	2,74,192	
(a)	33.7	66.3	100.0	12.8	87.2	100.0	25.9	74.1	100.0	
(b)	3.0	5.8	8.8	0.7	4.6	5.2	3.6	10.4	14.0	
2000-2001* (BE)	72,105	1,28,183	2,00,288	15,627	1,05,857	1,21,484	87,732	2,34,040	3,21,772	
(a)	36.0	64.0	100.0	12.9	87.1	100.0	27.3	72.7	100.0	
(b)	3.3	5.9	9.2	0.7	4.9	5.6	4.0	10.7	14.7	
2000-2001* (RE)	74,467	1,23,854	1,98,321	14,665	1,04,866	1,19,531	89,132	2,28,720	3,17,852	
(a)	37.5	62.5	100.0	12.3	87.7	100.0	28.0	72.0	100.0	
(b)	3.4	5.7	9.1	0.7	4.8	5.5	4.1	10.5	14.6	
2001-2002* (BE)	85,275	1,41,374	2,26,649	15,816	1,24,462	1,40,278	1,01,091	2,65,836	3,66,927	
(a)	37.6	62.4	100.0	11.3	88.7	100.0	27.6	72.4	100.0	
(b)	3.4	5.7	9.2	0.6	5.0	5.7	4.1	10.7	14.8	
Memo Items :										
(Average)										
1991-2000	(a)	29.4	70.6	100.0	11.4	88.6	100.0	22.8	77.2	100.0
	(b)	2.7	6.5	9.2	0.6	4.7	5.3	3.3	11.2	14.5

RE Revised Estimates.

BE Budget Estimates.

@ Excludes States' share in Central taxes as reported in Central Government Budget documents.

* Data Regarding State Governments are provisional (See Notes to Appendix Table IV.5).

(a) Represents percentages to total tax revenue.

(b) Represents percentages to GDP.

Source : Central and State Governments Budget Documents.

**Appendix Table IV.4 : Financing of Gross Fiscal Deficit of the
Central Government**

Year	Internal Finance				External Finance	Total Finance/ Gross Fiscal Deficit (5+6)
	Market	Other	91-day Treasury	Total		
	Borrowings #	Liabilities @	Bills +	(2+3+4)		
1	2	3	4	5	6	7
1980-81	2,679 (32.3)	1,862 (22.4)	2,477 (29.9)	7,018 (84.6)	1,281 (15.4)	8,299 (100.0)
1985-86	4,884 (22.4)	10,209 (46.7)	5,315 (24.3)	20,408 (93.4)	1,449 (6.6)	21,857 (100.0)
1990-91	8,001 (17.9)	22,103 (49.5)	11,347 (25.4)	41,451 (92.9)	3,181 (7.1)	44,632 (100.0)
1991-92	7,510 (20.7)	16,539 (45.5)	6,855 (18.9)	30,904 (85.1)	5,421 (14.9)	36,325 (100.0)
1992-93	3,676 (9.2)	18,866 (47.0)	12,312 (30.6)	34,854 (86.8)	5,319 (13.2)	40,173 (100.0)
1993-94	28,928 (48.0)	15,295 (25.4)	10,960 (18.2)	55,183 (91.6)	5,074 (8.4)	60,257 (100.0)
1994-95	20,326 (35.2)	32,834 (56.9)	961 (1.7)	54,121 (93.8)	3,582 (6.2)	57,703 (100.0)
1995-96	33,087 (54.9)	17,031 (28.3)	9,807 (16.3)	59,925 (99.5)	318 (0.5)	60,243 (100.0)
1996-97	20,012 (30.0)	30,550 (45.8)	13,184 (19.7)	63,746 (95.5)	2,987 (4.5)	66,733 (100.0)
1997-98	32,499 (36.5)	56,257 (63.3)	-910 (-1.0)	87,846 (98.8)	1,091 (1.2)	88,937 (100.0)
1998-99	68,988 (60.9)	42,650 (37.6)	-209 (-0.2)	1,11,429 (98.3)	1,920 (1.7)	1,13,349 (100.0)
1999-2000	70,277 (67.1)	32,396 (30.9)	864 (0.8)	1,03,537 (98.9)	1,180 (1.1)	1,04,717 (100.0)
2000-2001 (BE)	76,383 (68.6)	34,936 (31.4)	- -	1,11,319 (100.0)	-44 -	1,11,275 (100.0)
2000-2001 (RE)	77,947 (69.6)	30,845 (27.5)	2,605 (2.3)	1,11,397 (99.5)	575 (0.5)	1,11,972 (100.0)
2001-2002 (BE)	77,353 (66.5)	37,096 (31.9)	- -	1,14,449 (98.4)	1,865 (1.6)	1,16,314 (100.0)

(Rupees crore)

- RE Revised Estimates. BE Budget Estimates. - Negligible.
- # Also includes Zero Coupon Bonds, loans in conversion of maturing Treasury Bills, 364-day Treasury Bills, *etc.*
- @ Other liabilities comprise small savings, state provident funds, special deposits, reserve funds, Treasury Bills excluding 364-day Treasury Bills, *etc.*. With effect from 1999-2000, small savings and public provident funds are represented through NSSF's investment in Central government securities.
- + Variations in 91-day Treasury Bills issued net of changes in cash balances with the RBI up to March 31, 1997. Since April 1, 1997 these figures represent draw down of cash balances.
- Note** 1. Figures in brackets represent percentages to total finance (gross fiscal deficit).
2. Since 1999-2000 gross fiscal deficit excludes States' share of small savings.
- Source :** Central Government Budget Documents and Reserve Bank records.

Appendix Table IV.5 : Budgetary Operations of State Governments

A : Measures of Deficit of State Governments

(Rupees crore)							
Year	Fiscal Deficit		Primary Deficit		Net RBI Credit*	Conventional Deficit	Revenue Deficit
	Gross	Net	Gross	Net			
1	2	3	4	5	6	7	8
1990-91	18,787	14,532	10,132	8,280	420	-72	5,309
1991-92	18,900	15,746	7,956	10,123	-340	156	5,651
1992-93	20,892	15,770	7,681	6,497	176	-1,829	5,114
1993-94	20,596	16,263	4,795	5,188	591	462	3,812
1994-95	27,697	23,507	8,284	9,459	48	-4,468	6,156
1995-96	31,426	26,695	9,494	10,556	16	-2,849	8,201
1996-97	37,251	33,460	11,675	16,055	898	7,041	16,114
1997-98	44,200	39,135	14,087	16,932	1,543	-2,103	16,333
1998-99	74,254	66,209	38,380	37,814	5,579	3,520	43,642
1999-2000P	90,765	78,596	45,805	42,925	1,312	2,992	53,709
2000-2001 (RE)@	94,821	87,810	41,072	44,173	-1,092	2,626	51,445
2001-2002 (BE)@	94,028	86,513	30,308	31,560	..	649	48,424
As Percentage to GDP at Current Market Prices							
1990-91	3.3	2.6	1.8		0.1	-	0.9
1991-92	2.9	2.4	1.2		-0.1	-	0.9
1992-93	2.8	2.1	1.0		-	-0.2	0.7
1993-94	2.4	1.9	0.6		0.1	0.1	0.4
1994-95	2.7	2.3	0.8		-	-0.4	0.6
1995-96	2.6	2.2	0.8		-	-0.2	0.7
1996-97	2.7	2.4	0.9		0.1	0.5	1.2
1997-98	2.9	2.6	0.9		0.1	-0.1	1.1
1998-99	4.2	3.8	2.2		0.3	0.2	2.5
1999-2000P	4.6	4.0	2.3		0.1	0.2	2.7
2000-2001 (RE)@	4.3	4.0	1.9		-	0.1	2.4
2001-2002 (BE)@	3.8	3.5	1.2		..	-	2.0

B : Select Budgetary Variables of State Governments

Item	(Per cent)			
	2001-2002@ (BE)	2000-2001@ (RE)	1999-2000P	1990-2000 (Average)
1	2	3	4	5
1. GFD / Total Expenditure (excluding recoveries) +	25.2	27.7	30.7	21.4
2. Revenue Deficit / Revenue Expenditure +	14.8	17.2	20.8	9.3
3. Conventional Deficit / Aggregate Disbursements +	0.2	0.7	0.9	-0.1
4. Revenue Deficit / GFD +	51.5	54.3	59.2	34.8
5. Non-Developmental Revenue Expenditure / Revenue Receipts +	50.4	48.7	50.9	39.6
6. Interest Payments/Revenue Receipts +	22.8	21.7	21.9	16.5
7. Developmental Expenditure / GDP	9.3	10.2	9.5	10.2
<i>of which :</i>				
Social Sector Expenditure / GDP	5.8	6.2	5.9	5.7
8. Non-Developmental Expenditure / GDP	5.8	5.6	5.6	4.6
9. States' Tax Revenue/GDP	5.8	5.5	5.2	5.3
10. States' Non Tax Revenue / GDP	1.3	1.4	1.5	1.7

RE Revised Estimates.

BE Budget Estimates.

- Negligible.

.. Not Available.

GFD Gross Fiscal Deficit.

P Provisional.

(-) Indicates surplus for the deficit indicators.

* Data pertain to State Governments having accounts with the Reserve Bank of India.

@ Provisional data relate to the budgets of 26 State Governments including the National Capital Territory of Delhi, of which 4 States are Vote-on-Account.

+ Includes Additional Resources Mobilisation of Rs.1,997.2 crore in 2001-2002.

Note : 1. The net RBI credit to State Governments is the sum of loans and advances given to them by the RBI net of their deposits with the RBI.

2. Additional Resource Mobilisation (ARM) has been tentatively placed at Rs.1,997.2 crore in 2001-2002 as per the budget speeches. These have been included in Revenue Receipts, in the absence of detailed break-ups.

Source : Budget Documents of the State Governments and RBI Records.

Appendix Table IV.6 : Combined Receipts and Disbursements of Central and State Governments

Item	(Rupees crore)					
	2001-2002	2000-2001	2000-2001	1999-2000	Percentage Variation	
	(BE)	(RE)	(BE)	(Accounts)	Col.2 over Col.3	Col.3 over Col.5
1	2	3	4	5	6	7
I. Total Receipts (A+B)	6,75,243	6,07,280	5,92,124	5,39,802	11.2	12.5
A. Revenue Receipts (1+2)	4,47,963	3,95,045	3,85,322	3,41,510	13.4	15.7
1. Tax Receipts (a+b)	3,64,927	3,16,352	3,21,772	2,74,192	15.4	15.4
a) Direct Taxes	1,01,091	89,132	87,732	71,039	13.4	25.5
b) Indirect Taxes	2,63,836	2,27,220	2,34,040	2,03,153	16.1	11.8
2. Non-tax receipts	83,036	78,693	63,550	67,318	5.5	16.9
<i>of which:</i>						
Interest receipts	18,479	17,553	15,220	18,056	5.3	-2.8
B. Capital Receipts	2,27,280	2,12,235	2,06,802	1,98,292	7.1	7.0
<i>of which:</i>						
a) State Provident Funds (Net)	20,033	19,827	20,174	21,035	1.0	-5.7
b) Recovery of loans & advances	9,439	11,877	6,548	5,903	-20.5	101.2
II. Total Disbursements (A+B+C)	6,75,892	6,09,906	5,96,231	5,42,794	10.8	12.4
A. Developmental Expenditure(a+b+c)	3,40,623	3,17,503	2,97,082	2,71,650	7.3	16.9
a) Revenue	2,68,497	2,51,665	2,31,859	2,19,058	6.7	14.9
b) Capital	56,678	46,331	47,953	35,685	22.3	29.8
c) Loans and Advances	15,448	19,507	17,270	16,907	-20.8	15.4
B. Non-Developmental Expenditure(a+b+c)	3,25,079	2,85,773	2,92,720	2,57,060	13.8	11.2
a) Revenue	3,01,372	2,66,936	2,71,495	2,39,219	12.9	11.6
<i>of which:</i>						
Interest payments	1,44,153	1,23,852	1,24,834	1,10,098	16.4	12.5
b) Capital	22,058	16,567	19,518	13,240	33.1	25.1
c) Loans and Advances	1,649	2,270	1,707	4,601	-27.4	-50.7
C. Others (a + b) @	10,190	6,630	6,429	14,084	53.7	-52.9
a) Revenue	5,339	5,259	5,125	4,539	1.5	15.9
b) Capital	4,851	1,371	1,304	9,545	253.8	-85.6
III. Overall Surplus(+) / Deficit(-)	-649	-2,626	-4,107	-2,992	-	-
Memorandum Items :						
1. Expenditure on Social Sector #	1,81,875	1,69,370	1,57,331	1,47,092	7.4	15.1
	(7.3)	(7.8)	(7.2)	(7.5)		
2. Total Social Services	1,48,833	1,37,162	1,30,409	1,19,457	8.5	14.8
<i>of which :</i>	(6.0)	(6.3)	(6.0)	(6.1)		
(i) Education	69,941	67,621	64,643	62,262	3.4	8.6
	(2.8)	(3.1)	(3.0)	(3.2)		
(ii) Medical, Public Health & Family Welfare and Water Supply & Sanitation	32,621	30,582	30,433	25,565	6.7	19.6
	(1.3)	(1.4)	(1.4)	(1.3)		
3. Combined Domestic Liabilities*	15,26,862	13,32,520	13,72,734	11,45,594	14.6	16.3
	(61.7)	(61.0)	(62.9)	(58.5)		
a) Centre	12,56,356	11,05,207	11,22,895	9,62,592	13.7	14.8
	(50.8)	(50.6)	(51.5)	(49.2)		
b) States	5,91,509	5,03,613	4,98,839	4,19,821	17.5	20.0
	(23.9)	(23.1)	(22.9)	(21.5)		

RE Revised Estimates.

BE Budget Estimates.

- @ Comprise discharge of internal debt, compensation and assignments to local bodies and Panchayati Raj institutions in respect of State Governments.
- # Social Sector expenditure comprises outlay on social services, rural development and food subsidy. Rural development, although forms a part of economic services, is included in social sector expenditure on account of its immense importance for development of social infrastructure in rural areas.
- * The domestic liabilities of the Centre and States do not add up to the combined domestic liabilities on account of inter- governmental adjustments.

Note: 1. Figures in brackets are percentages to Gross Domestic Product.

2. Data include Commercial Departments in respect of Central Government's Revenue Account.

3. Data regarding State Governments are provisional (See Notes to Appendix Table IV.5 for details).

4. Tax Receipts are net of surcharge transferred to National Calamity Contingency Fund for the years 2000-01 and 2001-02.

Source: Budget Documents of Central and State Governments.

Appendix Table IV.7 : Outstanding Liabilities of the Central Government

(Rupees crore)

Year	Internal Debt	Small Savings, Deposits, Provident Funds and Other Accounts	Reserve Funds and Deposits	Total Domestic Liabilities (2+3+4)	External Liabilities*	Total Liabilities (5+6)
1	2	3	4	5	6	7
1990-91	1,54,004 (27.1)	1,07,107 (18.8)	21,922 (3.9)	2,83,033 (49.8)	31,525 (5.5)	3,14,558 (55.3)
1991-92	1,72,750 (26.4)	1,21,500 (18.6)	23,464 (3.6)	3,17,714 (48.6)	36,948 (5.7)	3,54,662 (54.3)
1992-93	1,99,100 (26.6)	1,36,802 (18.3)	23,753 (3.2)	3,59,655 (48.0)	42,269 (5.6)	4,01,924 (53.7)
1993-94	2,45,712 (28.6)	1,60,355 (18.7)	24,556 (2.9)	4,30,623 (50.1)	47,345 (5.5)	4,77,968 (55.6)
1994-95	2,66,467 (26.3)	1,92,222 (19.0)	28,993 (2.9)	4,87,682 (48.2)	50,929 (5.0)	5,38,611 (53.2)
1995-96	3,07,869 (25.9)	2,13,435 (18.0)	33,680 (2.8)	5,54,983 (46.7)	51,249 (4.3)	6,06,232 (51.0)
1996-97	3,44,476 (25.2)	2,39,042 (17.5)	37,919 (2.8)	6,21,437 (45.4)	54,239 (4.0)	6,75,676 (49.4)
1997-98	3,88,998 (25.6)	2,91,867 (19.2)	42,097 (2.8)	7,22,962 (47.5)	55,332 (3.6)	7,78,294 (51.1)
1998-99	4,59,696 (26.1)	3,33,261 (19.0)	41,595 (2.4)	8,34,552 (47.5)	57,254 (3.3)	8,91,806 (50.7)
1999-2000	7,14,254 (36.5)	2,00,830 (10.3)	47,508 (2.4)	962,592 (49.2)	58,437 (3.0)	10,21,029 (52.2)
2000-2001(RE)	8,04,528 (36.8)	2,52,778 (11.6)	47,901 (2.2)	11,05,207 (50.6)	58,428 (2.7)	11,63,635 (53.3)
2001-2002(BE)	8,92,935 (36.1)	3,12,636 (12.6)	50,785 (2.1)	12,56,356 (50.8)	59,594 (2.4)	13,15,949 (53.2)

RE Revised Estimates. BE Budget Estimates.

* At book value, *i.e.*, based on the historical exchange rate.

Note : 1. Figures in brackets represent percentages to GDP.

2. Since 1999-2000, Centre's share in small savings collections is converted into Central Government securities and are part of internal debt.

Source: Central Government Budget Documents.

Appendix Table IV.8 : Financing of State Governments' Gross Fiscal Deficit

(Rupees crore)								
Year	Loans from the Central Government (net)	Market Borrowings(net)	others#	Gross Fiscal Deficit (2+3+4)	States' Outstanding Liabilities (end March)			States' Outstanding Liabilities as per cent to GDP at current market prices
					Total+	Loans & Advances from the Centre	Market Loans	
1	2	3	4	5	6	7	8	9
1990-91	9,978 (53.1)	2,556 (13.6)	6,253 (33.3)	18,787 (100.0)	1,10,289	74,117	15,618	19.4
1991-92	9,373 (49.6)	3,305 (17.5)	6,222 (32.9)	18,900 (100.0)	1,26,338	83,491	18,923	19.3
1992-93	8,921 (42.7)	3,500 (16.8)	8,471 (40.5)	20,892 (100.0)	1,42,178	92,412	22,426	19.0
1993-94	9,533 (46.3)	3,620 (17.6)	7,443 (36.1)	20,596 (100.0)	1,60,077	1,01,945	26,058	18.6
1994-95	14,760 (53.3)	4,075 (14.7)	8,862 (32.0)	27,697 (100.0)	1,84,527	1,16,705	30,133	18.2
1995-96	14,801 (47.1)	5,888 (18.7)	10,737 (34.2)	31,426 (100.0)	2,12,225	1,31,505	36,021	17.9
1996-97	17,547 (47.1)	6,515 (17.5)	13,189 (35.4)	37,251 (100.0)	2,43,525	1,49,053	42,536	17.8
1997-98	23,676 (53.6)	7,280 (16.5)	13,244 (30.0)	44,200 (100.0)	2,81,207	1,72,729	49,816	18.5
1998-99	31,057 (41.8)	10,467 (14.1)	32,730 (44.1)	74,254 (100.0)	3,41,978	2,03,786	60,283	19.4
1999-2000P	32,656 (36.0)	12,636 (13.9)	45,474 (50.1)	90,765 (100.0)	4,19,821	2,36,442	72,919	21.5
2000-2001 (RE)*	32,033 (33.8)	12,567 (13.3)	50,221 (53.0)	94,821 (100.0)	5,03,613	2,68,475	85,486	23.1
2001-2002 (BE)*	33,633 (35.8)	10,666 (11.3)	49,730 (52.9)	94,028 (100.0)	5,91,509	3,02,108	96,151	23.9

RE Revised Estimates.

BE Budget Estimates.

P Provisional.

Include loans from financial institutions, provident funds, reserve funds, deposits and advances, etc.

+ Includes internal debt, loans and advances from the Central Government and Provident Funds, etc.

* Provisional data relate to the budgets of 26 State Governments.

Note : 1. Figures in brackets are percentages to the Gross Fiscal Deficit.

2. Data on outstanding liabilities of the State Governments have been revised taking into account the latest available information.

3. GFD adjusted for provisional ARM of Rs. 1,997.2 crore in 2001-2002 (B.E.).

Source: Budget Documents of State Governments and Combined Finance and Revenue Accounts of the Union and State Governments.

Appendix Table IV.9: Market Borrowings of Central and State Governments and their Sponsored Institutions

(Rupees crore)

Government/Authority	Gross			Repayments			Net		
	2001-02(BE)	2000-01+	1999-2000+	2001-02(BE)	2000-01+	1999-2000+	2001-02(BE)	2000-01+	1999-2000+
1	2	3	4	5	6	7	8	9	10
1. Central Government (a+b)	1,18,852	1,15,183	99,630	41,499	41,396	26,553	77,353	73,787	73,077
a) Dated Securities	99,352	1,00,183	86,630	26,499	28,396	16,353	72,853	71,787	70,277
b) 364-day Treasury Bills	19,500	15,000	13,000	15,000	13,000	10,200	4,500	2,000	2,800
2. State Governments	12,648	13,300	13,706	1,446	420	1,301	11,201P	12,880	12,405
3. Institutions Sponsored by State Governments (relate to SFCs and SLDBs / SCARDBs) #	..	..	367 (510)	..	..	178	..	..	350
Grand Total (1+2+3)	..	..	1,13,703	..	..	28,032	..	..	85,832

P Provisional allocations.

.. Not Available BE Budget Estimates. + Actuals as per Reserve Bank Records.

Shortfall in gross allocation in relation to net allocation and repayments during 1999-2000 is due to the non-allocation of borrowings to some SFCs.

Note : Figures in brackets represent allocated amount.

Source : Central Government Budget Documents and Reserve Bank records.

Appendix Table V.1 : Repo/Reverse Repo Auctions under Liquidity Adjustment Facility

(Amount in Rupees crore)

LAF Date (#)	Repo/Reverse Repo period (Day(s))	Repo					Reverse Repo					Net injections(+)/ absorption (-) of liquidity [(11)-(6)]	Outstanding@ Amount	
		Bids received		Bids accepted		Cut-Off Rate (%)	Bids received		Bids accepted		Cut-Off Rate (%)			
		Num- ber	Amo- unt	Num- ber	Amo- unt		Num- ber	Amo- unt	Num- ber	Amo- unt				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2000-01														
June 05	1	1	1,000	-	-	-	13	940	1	10	9.05	10	-10	
June 06	1	2	75	-	-	-	11	565	-	-	-	-	-	
June 07	1	1	15	-	-	-	30	1,445	26	1,285	9.00	1,285	-1,285	
June 08	1	1	20	-	-	-	34	2,430	31	2,260	9.00	2,260	-2,260	
June 09	3	1	60	-	-	-	52	4,320	41	3,850	9.05	3,850	-3,850	
June 12	1	-	-	-	-	-	62	4,620	34	2,855	9.25	2,855	-2,855	
June 13	1	1	45	-	-	-	77	5,560	28	2,625	9.55	2,625	-2,625	
June 14	2	-	-	-	-	-	73	5,465	27	2,480	10.85	2,480	-2,480	
June 16	3	-	-	-	-	-	31	2,530	-	-	-	-	-	
June 19	1	-	-	-	-	-	48	3,550	16	1,350	13.50	1,350	-1,350	
June 20	1	-	-	-	-	-	52	4,305	42	3,815	14.00	3,815	-3,815	
June 21	1	3	110	-	-	-	39	3,085	28	2,325	13.50	2,325	-2,325	
June 22	1	-	-	-	-	-	40	2,790	1	40	13.00	40	-40	
June 23	3	1	30	-	-	-	34	2,480	4	220	13.05	220	-220	
June 26	1	-	-	-	-	-	29	1,840	3	250	13.05	250	-250	
June 27	1	-	-	-	-	-	22	1,375	5	510	12.60	510	-510	
June 28	1	-	-	-	-	-	12	380	1	15	12.25	15	-15	
June 29	4	-	-	-	-	-	6	255	-	-	-	-	-	
July 03	1	-	-	-	-	-	3	120	-	-	-	-	-	
July 04	1	-	-	-	-	-	1	50	-	-	-	-	-	
July 05	1	-	-	-	-	-	1	50	-	-	-	-	-	
July 10	1	1	1,500	1	1,500	7.00	-	-	-	-	-	-1,500	1,500	
July 11	1	-	-	-	-	-	2	85	-	-	-	-	-	
July 13	1	-	-	-	-	-	4	185	3	160	9.00	160	-160	
July 14	3	-	-	-	-	-	1	40	-	-	-	-	-	
July 18	1	-	-	-	-	-	1	15	-	-	-	-	-	
July 20	1	1	2,500	1	2,500	7.00	1	25	-	-	-	-2,500	2,500	
July 21	3	1	2,500	-	-	-	15	2,035	1	300	10.00	300	-300	
July 24	1	1	5,000	1	5,000	8.00	-	-	-	-	-	-5,000	5,000	
July 25	1	1	4,000	1	4,000	8.00	-	-	-	-	-	-4,000	4,000	
July 26	1	3	5,050	3	5,050	8.00	-	-	-	-	-	-5,050	5,050	
July 27	1	4	7,150	4	7,150	8.00	-	-	-	-	-	-7,150	7,150	
July 28	3	3	2,105	3	2,105	8.00	-	-	-	-	-	-2,105	2,105	
July 31	1	1	4,000	1	4,000	8.00	-	-	-	-	-	-4,000	4,000	
August 01	1	2	6,525	2	6,525	8.00	-	-	-	-	-	-6,525	6,525	
August 02	1	3	6,135	3	6,135	8.00	-	-	-	-	-	-6,135	6,135	
August 03	1	2	525	2	525	8.25	-	-	-	-	-	-525	4,655	
	4*	11	4,125	9	4,095	10.00	-	-	-	-	-	-4,095	-	
	7*	2	35	2	35	10.00	-	-	-	-	-	-35	-	
August 04	3	9	1,950	9	1,950	11.50	5	400	-	-	-	-1,950	8,925	
	4*	25	2,880	23	2,845	12.00	-	-	-	-	-	-2,845	-	
	7*	5	145	-	-	-	-	-	-	-	-	-	-	
August 07	1	17	4,155	14	4,125	12.50	2	400	-	-	-	-4,125	11,140	
	4*	36	4,185	35	4,135	14.50	-	-	-	-	-	-4,135	-	
August 08	1	26	3,645	26	3,645	14.00	1	100	-	-	-	-3,645	10,140	
	3*	31	2,385	29	2,325	15.00	-	-	-	-	-	-2,325	-	
August 09	1	29	1,970	14	1,370	14.00	3	300	1	100	16.00	-1,270	8,485	
	5*	17	750	14	720	15.50	-	-	-	-	-	-720	-	
August 10	1	7	395	6	370	14.00	2	1,050	1	1,000	16.00	630	8,475	
	4*	21	1,925	21	1,925	15.00	-	-	-	-	-	-1,925	-	
August 11	3	34	4,240	30	3,210	14.00	1	60	-	-	-	-3,210	7,135	
	5*	13	1,290	12	1,280	14.00	-	-	-	-	-	-1,280	-	
August 14	2	17	1,120	14	1,075	14.50	-	-	-	-	-	-1,075	4,620	

	4*	26	2,275	25	2,265	15.00	-	-	-	-	-	-2,265	-
August 16	1	19	1,365	17	1,345	14.50	1	150	-	-	-	-1,345	6,385
	6*	35	2,860	31	2,775	15.00	-	-	-	-	-	-2,775	-
August 17	1	16	1,900	13	1,825	14.50	-	-	-	-	-	-1,825	8,985
	5*	29	2,140	27	2,120	15.00	-	-	-	-	-	-2,120	-
August 18	4	18	3,375	12	3,030	15.00	5	380	-	-	-	-3,030	7,925
	6*	7	330	-	-	-	-	-	-	-	-	-	-
August 22	1	36	5,850	34	5,830	14.50	-	-	-	-	-	-5,830	8,440
	3*	32	2,620	31	2,610	15.00	-	-	-	-	-	-2,610	-
August 23	1	36	5,020	34	5,000	14.50	-	-	-	-	-	-5,000	11,700
	5*	36	4,110	34	4,090	15.00	-	-	-	-	-	-4,090	-
August 24	1	24	3,180	21	3,115	14.50	-	-	-	-	-	-3,115	12,020
	5*	32	2,235	29	2,205	15.00	-	-	-	-	-	-2,205	-
August 25	3	39	5,720	34	5,625	14.50	1	75	-	-	-	-5,625	13,385
	5*	21	1,475	20	1,465	15.00	-	-	-	-	-	-1,465	-
August 28	1	17	1,795	17	1,795	14.50	-	-	-	-	-	-1,795	11,875
	3*	54	6,410	54	6,410	15.00	-	-	-	-	-	-6,410	-
August 29	1	10	385	10	385	14.50	-	-	-	-	-	-385	10,625
	6*	29	2,375	28	2,365	15.00	-	-	-	-	-	-2,365	-
August 30	1	4	430	2	350	14.25	2	125	1	25	15.00	-325	10,655
	6*	29	1,735	25	1,555	14.50	-	-	-	-	-	-1,555	-
August 31	4	19	1,695	9	1,240	13.50	-	-	-	-	-	-1,240	6,370
	6*	15	2,140	10	1,210	14.00	-	-	-	-	-	-1,210	-
September 04	1	22	5,210	22	5,210	12.00	-	-	-	-	-	-5,210	15,245
	4*	52	7,270	52	7,270	13.00	-	-	-	-	-	-7,270	-
September 05	1	28	3,415	28	3,415	12.00	-	-	-	-	-	-3,415	19,115
	3*	51	7,230	50	7,220	13.00	-	-	-	-	-	-7,220	-
September 06	1	8	1,340	6	1,320	12.00	2	75	1	50	13.50	-1,270	17,170
	5*	23	1,485	21	1,360	13.00	-	-	-	-	-	-1,360	-
September 07	1	2	310	2	310	11.00	2	200	-	-	-	-310	18,290
	4*	29	2,400	24	2,130	12.00	-	-	-	-	-	-2,130	-
September 08	3	22	3,870	20	3,820	10.50	1	100	-	-	-	-3,820	10,575
	5*	21	3,285	19	3,265	11.00	-	-	-	-	-	-3,265	-
September 11	1	5	1,785	3	1,675	10.00	-	-	-	-	-	-1,675	9,320
	3*	29	4,540	26	4,380	11.00	-	-	-	-	-	-4,380	-
September 12	1	1	185	-	-	-	-	-	-	-	-	-	13,390
	3*	35	5,895	32	5,745	10.50	-	-	-	-	-	-5,745	-
September 13	1	1	200	-	-	-	1	10	-	-	-	-	11,925
	5*	20	2,215	13	1,800	10.25	-	-	-	-	-	-1,800	-
September 14	1	-	-	-	-	-	1	10	-	-	-	-	9,805
	5*	14	2,335	13	2,260	10.00	-	-	-	-	-	-2,260	-
September 15	3	7	390	7	390	10.00	1	10	-	-	-	-390	4,840
	5*	6	390	6	390	10.00	-	-	-	-	-	-390	-
September 18	1	17	1,305	16	1,295	10.00	-	-	-	-	-	-1,295	11,675
	3*	31	7,750	29	7,730	10.00	-	-	-	-	-	-7,730	-
September 19	1	27	3,990	22	3,940	10.00	-	-	-	-	-	-3,940	14,045
	3*	22	2,060	18	1,985	10.00	-	-	-	-	-	-1,985	-
September 20	1	21	6,175	21	6,175	10.00	-	-	-	-	-	-6,175	16,660
	5*	12	805	10	770	10.00	-	-	-	-	-	-770	-
September 21	1	27	8,650	27	8,650	10.00	-	-	-	-	-	-8,650	14,325
	5*	20	2,920	20	2,920	10.00	-	-	-	-	-	-2,920	-
September 22	3	36	6,880	36	6,880	10.00	-	-	-	-	-	-6,880	10,570
	5*	12	1,490	-	-	-	-	-	-	-	-	-	-
September 25	1	15	1,345	15	1,345	10.00	-	-	-	-	-	-1,345	9,715
	3*	13	5,450	13	5,450	10.00	-	-	-	-	-	-5,450	-
September 26	1	10	1,140	9	1,115	10.00	-	-	-	-	-	-1,115	10,240
	3*	11	3,675	11	3,675	10.00	-	-	-	-	-	-3,675	-
September 27	1	8	500	7	490	10.00	-	-	-	-	-	-490	10,110
	6*	5	495	5	495	10.00	-	-	-	-	-	-495	-
September 28	1	2	35	-	-	-	-	-	-	-	-	-	8,620
	6*	5	4,450	5	4,450	10.00	-	-	-	-	-	-4,450	-
September 29	4	5	1,780	5	1,780	10.00	-	-	-	-	-	-1,780	6,725
	6*	2	210	-	-	-	-	-	-	-	-	-	-
October 03	1	17	2,960	12	2,505	9.75	-	-	-	-	-	-2,505	16,230
	3*	28	10,455	21	9,275	9.75	-	-	-	-	-	-9,275	-
October 04	1	14	4,355	14	4,355	9.50	-	-	-	-	-	-4,355	18,635
	5*	27	5,200	23	5,005	9.50	-	-	-	-	-	-5,005	-
October 05	1	17	4,665	15	2,140	9.25	-	-	-	-	-	-2,140	18,150
	5*	13	1,790	11	1,730	9.25	-	-	-	-	-	-1,730	-
October 06	3	6	1,850	6	1,850	9.00	-	-	-	-	-	-1,850	8,890

	5*	5	305	5	305	9.25	-	-	-	-	-	-305	-
October 09	1	6	1,380	5	1,370	8.75	-	-	-	-	-	-1,370	9,765
	3*	13	7,350	5	6,360	8.75	-	-	-	-	-	-6,360	-
October 10	1	2	510	2	510	8.50	-	-	-	-	-	-510	11,460
	3*	7	4,410	5	4,285	8.50	-	-	-	-	-	-4,285	-
October 11	1	1	300	-	-	-	5	600	-	-	-	-	10,645
	5*	1	400	-	-	-	-	-	-	-	-	-	-
October 12	1	-	-	-	-	-	4	600	-	-	-	-	8,985
	5*	1	4,700	1	4,700	8.50	-	-	-	-	-	-4,700	-
October 13	3	4	3,500	1	3,000	8.50	11	1,515	5	975	10.25	-2,025	7,700
October 16	1	-	-	-	-	-	15	1,760	15	1,760	10.25	1,760	9,700
	3*	3	5,500	1	5,000	8.50	-	-	-	-	-	-5,000	-
October 17	1	1	3,000	1	3,000	8.50	7	625	3	475	10.25	-2,525	8,000
October 18	1	9	4,000	9	4,000	8.50	-	-	-	-	-	-4,000	10,050
	5*	10	1,070	8	1,050	8.50	-	-	-	-	-	-1,050	-
October 19	1	11	2,695	11	2,695	8.50	-	-	-	-	-	-2,695	4,200
	5*	9	455	9	455	8.50	-	-	-	-	-	-455	-
October 20	3	4	2,125	4	2,125	8.50	-	-	-	-	-	-2,125	3,630
October 23	1	1	2,000	1	2,000	8.50	-	-	-	-	-	-2,000	4,555
	4*	3	2,200	2	2,100	8.50	-	-	-	-	-	-2,100	-
October 24	1	1	2,000	1	2,000	8.25	-	-	-	-	-	-2,000	4,600
	3*	1	500	1	500	8.25	-	-	-	-	-	-500	-
October 25	2	2	2,045	2	2,045	8.00	-	-	-	-	-	-2,045	5,145
	5*	1	500	1	500	8.00	-	-	-	-	-	-500	-
October 27	3	3	4,270	3	4,270	8.00	-	-	-	-	-	-4,270	5,770
	5*	1	1,000	1	1,000	8.00	-	-	-	-	-	-1,000	-
October 30	1	1	2,000	1	2,000	8.00	-	-	-	-	-	-2,000	7,125
	3*	2	4,125	2	4,125	8.00	-	-	-	-	-	-4,125	-
October 31	1	2	810	2	810	8.00	-	-	-	-	-	-810	7,935
	3*	1	2,000	1	2,000	8.00	-	-	-	-	-	-2,000	-
November 01	1	1	700	1	700	8.00	1	20	-	-	-	-700	6,825
November 06	1	-	-	-	-	-	7	315	4	165	10.00	165	2,335
	3*	3	3,000	1	2,500	8.00	-	-	-	-	-	-2,500	-
November 07	1	-	-	-	-	-	37	3,320	36	3,310	10.00	3,310	-810
November 08	1	-	-	-	-	-	37	3,445	37	3,445	10.00	3,445	-945
November 09	1	-	-	-	-	-	61	5,890	60	5,880	10.00	5,880	-5,880
November 10	3	-	-	-	-	-	63	6,755	63	6,755	10.00	6,755	-6,755
November 13	1	-	-	-	-	-	38	4,355	38	4,355	10.00	4,355	-4,355
November 14	1	-	-	-	-	-	32	3,205	31	3,195	10.00	3,195	-3,195
	3*	1	4,500	-	-	-	-	-	-	-	-	-	-
November 15	1	1	130	1	130	8.00	19	1,500	17	1,480	10.00	1,350	-1,220
November 16	1	1	500	1	500	8.00	-	-	-	-	-	-500	500
November 17	3	-	-	-	-	-	1	25	-	-	-	-	-
November 20	1	1	4,000	1	4,000	8.00	2	125	-	-	-	-4,000	12,000
	3*	1	8,000	1	8,000	8.00	-	-	-	-	-	-8,000	-
November 21	1	2	3,720	2	3,720	8.00	-	-	-	-	-	-3,720	11,720
November 22	1	1	210	1	210	8.00	-	-	-	-	-	-210	11,210
	5*	1	3,000	1	3,000	8.00	-	-	-	-	-	-3,000	-
November 23	1	2	2,760	2	2,760	8.00	-	-	-	-	-	-2,760	5,760
	5*	1	2,500	-	-	-	-	-	-	-	-	-	-
November 27	1	1	4,000	1	4,000	8.00	-	-	-	-	-	-4,000	4,000
November 28	1	1	8,000	1	8,000	8.00	-	-	-	-	-	-8,000	8,000
November 29	1	2	175	2	175	8.00	-	-	-	-	-	-175	175
November 30	1	2	200	2	200	8.00	-	-	-	-	-	-200	200
December 01	3	3	400	3	400	8.00	-	-	-	-	-	-400	400
December 04	1	2	6,100	2	6,100	8.00	-	-	-	-	-	-6,100	6,100
December 05	1	1	6,000	1	6,000	8.00	-	-	-	-	-	-6,000	6,000
December 06	1	1	5,000	1	5,000	8.00	-	-	-	-	-	-5,000	5,000
December 07	1	3	4,225	3	4,225	8.00	-	-	-	-	-	-4,225	4,225
December 08	3	4	4,850	4	4,850	8.00	-	-	-	-	-	-4,850	4,850
December 11	1	1	100	1	100	8.00	-	-	-	-	-	-100	100
December 12	1	-	-	-	-	-	1	300	-	-	-	-	-
December 14	1	1	225	1	225	8.00	-	-	-	-	-	-225	225
December 22	4	-	-	-	-	-	8	1,050	6	350	10.00	350	-350
December 26	1	-	-	-	-	-	43	4,810	42	4,660	10.00	4,660	-4,660
December 27	2	-	-	-	-	-	40	4,885	40	4,885	10.00	4,885	-4,885
December 29	3	-	-	-	-	-	2	560	2	560	10.00	560	-560

January 01	1	-	-	-	-	-	30	4,785	30	4,785	10.00	4,785	-4,785
January 02	1	-	-	-	-	-	22	3,935	22	3,935	10.00	3,935	-3,935
January 03	1	-	-	-	-	-	19	3,130	18	3,115	10.00	3,115	-3,115
January 04	1	-	-	-	-	-	16	2,285	12	2,205	10.00	2,205	-2,205
January 05	3	-	-	-	-	-	2	425	1	400	10.00	400	-400
January 10	1	-	-	-	-	-	5	850	3	700	10.00	700	-700
January 11	1	-	-	-	-	-	3	125	-	-	-	-	-
January 12	3	-	-	-	-	-	29	3,160	29	3,160	10.00	3,160	-3,160
January 15	1	-	-	-	-	-	7	480	6	430	10.00	430	-430
January 16	1	-	-	-	-	-	18	1,865	17	1,855	10.00	1,855	-1,855
January 17	1	-	-	-	-	-	27	2,695	26	2,685	10.00	2,685	-2,685
January 18	1	-	-	-	-	-	23	2,560	22	2,550	10.00	2,550	-2,550
January 19	3	-	-	-	-	-	32	3,985	31	3,975	10.00	3,975	-3,975
January 22	1	-	-	-	-	-	16	1,405	15	1,395	10.00	1,395	-1,395
January 23	1	-	-	-	-	-	8	1,205	7	1,195	10.00	1,195	-1,195
January 24	1	-	-	-	-	-	4	280	3	270	10.00	270	-270
January 25	4	-	-	-	-	-	10	1,110	9	1,100	10.00	1,100	-1,100
January 29	1	-	-	-	-	-	6	1,320	5	1,310	10.00	1,310	-1,310
January 30	1	-	-	-	-	-	3	460	2	450	10.00	450	-450
January 31	1	-	-	-	-	-	5	745	4	735	10.00	735	-735
February 01	1	-	-	-	-	-	5	990	4	980	10.00	980	-980
February 02	3	1	4,500	1	4,500	8.00	2	400	2	400	10.00	-4,100	4,100
February 05	1	2	6,100	2	6,100	8.00	-	-	-	-	-	-6,100	6,100
February 06	1	2	6,100	2	6,100	8.00	2	100	-	-	-	-6,100	6,100
February 07	1	1	6,000	1	6,000	8.00	1	50	-	-	-	-6,000	6,000
February 08	1	1	6,000	1	6,000	8.00	-	-	-	-	-	-6,000	6,000
February 09	3	1	35	1	35	8.00	-	-	-	-	-	-35	35
February 12	1	1	4,000	1	4,000	8.00	1	200	-	-	-	-4,000	4,000
February 13	1	1	3,000	1	3,000	8.00	-	-	-	-	-	-3,000	3,000
February 14	1	1	4,000	1	4,000	8.00	1	20	-	-	-	-4,000	4,000
February 15	1	-	-	-	-	-	3	320	-	-	-	-	-
February 16	4	-	-	-	-	-	8	615	6	575	10.00	575	-575
February 20	2	1	6,000	1	6,000	7.50	-	-	-	-	-	-6,000	6,000
February 26	1	1	4,000	1	4,000	7.50	-	-	-	-	-	-4,000	4,000
February 27	1	1	6,500	1	6,500	7.50	-	-	-	-	-	-6,500	6,500
February 28	1	2	7,150	2	7,150	7.50	-	-	-	-	-	-7,150	7,150
March 01	1	1	6,500	1	6,500	7.50	-	-	-	-	-	-6,500	6,500
March 02	3	1	5,000	1	5,000	7.00	-	-	-	-	-	-5,000	5,000
March 05	2	1	7,500	1	7,500	7.00	-	-	-	-	-	-7,500	7,500
March 07	1	1	500	1	500	7.00	-	-	-	-	-	-500	500
March 09	3	2	2,550	2	2,550	7.00	2	175	1	150	9.00	-2,400	2,400
March 13	1	2	7,550	2	7,550	7.00	-	-	-	-	-	-7,550	7,550
March 14	1	2	140	2	140	7.00	-	-	-	-	-	-140	140
March 15	1	-	-	-	-	-	3	145	-	-	-	-	-
March 16	3	1	7,500	1	7,500	7.00	8	1,035	8	1,035	9.00	-6,465	6,465
March 19	1	1	8,000	1	8,000	7.00	-	-	-	-	-	-8,000	8,000
March 20	1	2	7,600	2	7,600	7.00	-	-	-	-	-	-7,600	7,600
March 21	1	1	5,000	1	5,000	7.00	1	10	-	-	-	-5,000	5,000
March 23	4	2	4,600	2	4,600	7.00	-	-	-	-	-	-4,600	4,600
March 27	1	-	-	-	-	-	7	1,285	7	1,285	9.00	1,285	-1,285
March 28	1	-	-	-	-	-	28	3,630	27	3,580	9.00	3,580	-3,580
March 29	1	-	-	-	-	-	29	4,420	29	4,420	9.00	4,420	-4,420
March 30	4	-	-	-	-	-	32	5,015	32	5,015	9.00	5,015	-5,015
March 31	3	8	8,675	8	8,675	7.00	28	2,305	28	2,305	9.00	-6,370	1,355
2001-02													
April 03	1	5	1,520	5	1,520	7.00	1	50	1	50	9.00	-1,470	1,470
April 04	5	9	17,675	9	17,675	7.00	-	-	-	-	-	-17,675	17,675
April 09	1	7	13,820	7	13,820	7.00	-	-	-	-	-	-13,820	13,820
April 10	1	7	16,885	7	16,885	7.00	-	-	-	-	-	-16,885	16,885
April 11	1	7	18,160	7	18,160	7.00	-	-	-	-	-	-18,160	18,160
April 12	4	6	19,170	6	19,170	7.00	-	-	-	-	-	-19,170	19,170
April 16	1	5	13,715	5	13,715	7.00	-	-	-	-	-	-13,715	13,715
April 17	1	6	17,265	6	17,265	7.00	-	-	-	-	-	-17,265	17,265
April 18	1	7	11,115	7	11,115	7.00	-	-	-	-	-	-11,115	11,115
April 19	1	4	600	4	600	7.00	-	-	-	-	-	-600	600
April 20	3	3	11,375	3	11,375	7.00	-	-	-	-	-	-11,375	11,375
April 23	1	2	8,200	2	8,200	7.00	1	50	-	-	-	-8,200	8,200

April 24	1	3	5,600	3	5,600	7.00	-	-	-	-	-	-5,600	5,600
April 25	1	2	5,300	2	5,300	7.00	-	-	-	-	-	-5,300	5,300
April 26	1	2	3,700	-	-	-	-	-	-	-	-	-	-
April 27	3	8	5,610	5	110	6.75	-	-	-	-	-	-110	110
April 30	2	2	4,010	-	-	-	8	880	3	410	8.75	410	-410
May 02	1	1	7,000	-	-	-	1	50	-	-	-	-	-
May 03	1	1	4,000	1	4,000	6.75	-	-	-	-	-	-4,000	4,000
May 04	4	1	5,750	1	5,750	6.75	-	-	-	-	-	-5,750	5,750
May 08	1	-	-	-	-	-	3	275	1	50	8.75	50	-50
May 09	1	-	-	-	-	-	43	5,095	35	4,850	8.75	4,850	-4,850
May 10	1	-	-	-	-	-	49	6,095	36	5,630	8.75	5,630	-5,630
May 11	3	-	-	-	-	-	47	6,570	36	6,215	8.75	6,215	-6,215
May 14	1	-	-	-	-	-	25	3,365	17	3,105	8.75	3,105	-3,105
May 15	1	1	4,000	-	-	-	7	640	6	620	8.75	620	-620
May 16	1	-	-	-	-	-	6	735	4	585	8.75	585	-585
May 17	1	3	3,000	-	-	-	25	3,015	21	2,895	8.75	2,895	-2,895
May 18	3	-	-	-	-	-	27	4,430	23	4,310	8.75	4,310	-4,310
May 21	1	-	-	-	-	-	16	2,760	13	2,590	8.75	2,590	-2,590
May 22	1	-	-	-	-	-	15	1,415	10	1,145	8.75	1,145	-1,145
May 23	1	1	6,500	-	-	-	8	505	4	390	8.75	390	-390
May 24	1	2	6,500	1	2,750	6.75	-	-	-	-	-	-2,750	2,750
May 25	3	1	8,500	1	4,250	6.75	-	-	-	-	-	-4,250	4,250
May 28	1	2	7,005	1	5	6.50	-	-	-	-	-	-5	5
May 29	1	1	10,500	1	10,500	6.50	-	-	-	-	-	-10,500	10,500
May 30	1	1	6,500	1	6,500	6.50	-	-	-	-	-	-6,500	6,500
May 31	1	2	6,600	2	6,600	6.50	-	-	-	-	-	-6,600	6,600
June 01	3	1	7,800	1	7,800	6.50	-	-	-	-	-	-7,800	7,800
June 04	2	1	6,000	1	6,000	6.50	-	-	-	-	-	-6,000	6,000
June 06	1	1	6,000	1	6,000	6.50	-	-	-	-	-	-6,000	6,000
June 07	1	-	-	-	0	-	4	260	1	200	8.50	200	-200
June 08	3	-	-	-	0	-	1	350	1	350	8.50	350	-350
June 11	1	1	3,500	1	1,500	6.50	1	100	1	100	8.50	-1,400	1,400
June 12	1	1	5,000	1	5,000	6.50	-	-	-	-	-	-5,000	5,000
June 13	1	1	5,000	1	5,000	6.50	-	-	-	-	-	-5,000	5,000
June 20	1	1	2,500	1	2,500	6.50	-	-	-	-	-	-2,500	2,500
June 21	1	2	4,600	2	4,600	6.50	-	-	-	-	-	-4,600	4,600
June 22	3	1	600	1	600	6.50	-	-	-	-	-	-600	600
June 25	1	1	3,300	1	3,300	6.50	-	-	-	-	-	-3,300	3,300
June 26	1	1	5,650	1	5,650	6.50	-	-	-	-	-	-5,650	5,650
June 27	1	1	3,000	1	3,000	6.50	-	-	-	-	-	-3,000	3,000
June 29	3	1	5	-	-	-	-	-	-	-	-	-	-
July 02	1	1	6,500	1	3,250	6.50	-	-	-	-	-	-3,250	3,250
July 03	1	1	6,000	1	6,000	6.50	-	-	-	-	-	-6,000	6,000
July 04	1	2	10,000	2	6,000	6.50	-	-	-	-	-	-6,000	6,000
July 05	1	6	11,780	6	5,930	6.50	-	-	-	-	-	-5,930	5,930
July 06	3	2	11,800	2	11,800	6.50	-	-	-	-	-	-11,800	11,800
July 09	1	2	3,600	2	3,600	6.50	1	250	1	250	8.50	-3,350	3,350
July 10	1	1	600	1	600	6.50	-	-	-	-	-	-600	600
July 11	1	2	5,600	2	5,600	6.50	-	-	-	-	-	-5,600	5,600
July 13	3	-	-	-	-	-	2	60	2	60	8.50	60	-60
July 16	1	-	-	-	-	-	1	20	1	20	8.50	20	-20
July 17	1	-	-	-	-	-	1	10	1	10	8.50	10	-10
July 20	3	1	1,500	1	1,500	6.50	-	-	-	-	-	-1,500	1,500
July 26	1	-	-	-	-	-	1	100	1	100	8.50	100	-100
July 27	3	-	-	-	-	-	19	1,875	19	1,875	8.50	1,875	-1,875
July 31	1	2	3,850	2	1,925	6.50	-	-	-	-	-	-1,925	1,925
Aug 01	1	1	4,000	1	4,000	6.50	-	-	-	-	-	-4,000	4,000
Aug 02	1	2	5,005	2	5,005	6.50	-	-	-	-	-	-5,005	5,005
Aug 03	3	1	6,000	1	6,000	6.50	-	-	-	-	-	-6,000	6,000
Aug 06	1	1	500	1	500	6.50	-	-	-	-	-	-500	500

* In addition to the regular auctions with same day settlement under the scheme of Liquidity Adjustment Facility, repo auctions for varying repo periods were introduced w.e.f. August 3, 2000.

@ Net of reverse repo.

Working days, on which no bid was received under LAF auctions, have been excluded.

Appendix Table V.2 : Issue of Certificates of Deposit by Scheduled Commercial Banks

(Amount in Rupees crore)

Fortnight ended	Total Outstanding	Rate of Discount (Per cent)@	Fortnight ended	Total Outstanding	Rate of Discount (Per cent)@	Fortnight ended	Total Outstanding	Rate of Discount (Per cent)@			
1	2	3	4	5	6	7	8	9			
1999			2000			2001					
January	1	3,667	8.00 - 17.35	January	14	1,401	8.50 - 11.00	January	12	1,180	7.25 - 11.00
	15	3,824	8.50 - 17.50		28	1,385	8.00 - 11.00		26	1,197	7.25 - 10.75
	29	3,689	9.00 - 12.50	February	11	1,374	8.00 - 11.00	February	9	1,153	7.25 - 11.00
February	12	4,549	8.00 - 12.75		25	1,280	7.75 - 13.24		23	1,187	6.75 - 12.00
	26	4,171	9.50 - 17.32	March	10	1,243	7.85 - 12.78	March	9	1,050	7.25 - 11.00
March	12	3,897	7.75 - 12.55		24	1,227	7.50 - 12.00		23	771	5.50 - 11.00
	26	3,717	8.00 - 12.50	April	7	1,264	6.50 - 14.00	April	6	1,042	6.50 - 11.00
April	9	3,494	7.00 - 12.50		21	1,273	6.75 - 11.00		20	905	7.00 - 11.00
	23	3,421	7.00 - 11.75	May	5	872	8.00 - 12.82	May	4	1,011	5.00 - 10.80
May	7	3,364	8.00 - 13.00		19	945	8.00 - 11.70		18	935	6.30 - 11.50
	21	2,744	8.00 - 12.00	June	2	933	8.00 - 11.16	June	1	960	6.80 - 10.50
June	4	2,346	8.50 - 13.00		16	974	5.50 - 13.35		15	979	5.00 - 10.00
	18	2,268	7.50 - 11.00		30	1,041	8.00 - 15.70		29	921	6.80 - 10.25
July	2	2,111	6.25 - 11.50	July	14	1,129	5.50 - 14.00				
	16	2,217	6.25 - 10.90		28	1,211	5.50 - 12.75				
	30	2,091	7.50 - 11.00	August	11	1,094	8.00 - 14.60				
August	13	2,003	6.50 - 11.00		25	1,149	6.50 - 11.25				
	27	1,921	8.00 - 11.50	September	8	1,120	8.50 - 11.75				
September	10	1,932	8.50 - 14.20		22	1,153	8.00 - 13.50				
	24	1,933	6.25 - 11.75	October	6	1,364	5.00 - 12.80				
October	8	1,868	6.75 - 11.00		20	1,695	6.30 - 14.06				
	22	1,754	6.75 - 13.40	November	3	1,660	7.50 - 11.35				
November	5	1,705	8.25 - 11.93		17	1,626	8.50 - 12.28				
	19	1,453	7.50 - 11.25	December	1	1,344	8.00 - 11.00				
December	3	1,498	8.00 - 11.00		15	1,303	7.75 - 11.00				
	17	1,467	8.50 - 11.00		29	1,135	7.78 - 10.50				
	31	1,418	8.50 - 11.00								

@ Effective discount rate range per annum.

Appendix Table V.3 : Commercial Paper*

(Amount in Rupees crore)							
Date		Total Outstanding	Typical Effective Rates of Discount (Per cent)	Fortnight ended		Total Outstanding	Typical Effective Rates of Discount (Per cent)
1		2	3	4		5	6
1999							
January	15	5,411	9.75 - 13.00	April	15	5,634	9.58 - 12.25
	31	5,261	9.60 - 13.45		30	5,606	9.35 - 11.00
February	15	5,151	10.15 - 12.75	May	15	6,599	9.00 - 11.50
	28	5,368	10.20 - 13.00		31	7,232	8.20 - 12.50
March	15	5,149	8.50 - 13.25	June	15	7,485	8.90 - 11.50
	31	4,770	9.10 - 13.25		30	7,627	9.25 - 11.75
April	15	5,029	9.15 - 12.00	July	15	7,127	9.35 - 11.85
	30	5,833	9.10 - 12.75		31	7,325	9.50 - 12.25
May	15	6,590	9.33 - 12.50	August	15	6,406	9.25 - 12.00
	31	6,899	9.00 - 12.50		31	5,672	9.71 - 12.80
June	15	7,363	9.10 - 12.50	September	15	5,577	10.05 - 12.75
	30	7,679	9.30 - 12.38		30	5,931	11.24 - 12.75
July	15	6,311	9.30 - 12.00	October	15	5,574	10.30 - 12.50
	31	7,239	9.25 - 12.10		31	5,633	10.14 - 13.50
August	15	7,419	9.05 - 12.25	November	15	6,317	10.45 - 12.00
	31	7,678	9.10 - 12.50		30	7,364	10.00 - 12.07
September	15	7,293	9.61 - 12.70	December	15	8,040	9.93 - 13.00
	30	7,658	10.00 - 13.00		31	8,343	9.75 - 12.25
October	15	6,689	9.91 - 11.75				
	31	6,161	10.20 - 12.50	2001			
November	15	6,153	9.40 - 12.50	January	15	7,796	10.00 - 11.98
	30	6,524	10.00 - 12.80		31	7,188	10.04 - 11.50
December	15	7,565	10.00 - 12.40	February	15	7,296	10.05 - 10.40

	31	7,803	9.90 - 12.27		28	7,246	9.15 - 11.15
2000				March	15	6,991	9.25 - 11.50
January	15	7,747	9.05 - 11.65		31	5,847	8.75 - 11.25
	31	7,814	9.00 - 13.00	April	15	6,295	9.30 - 12.00
February	15	7,693	9.25 - 12.05		30	7,034	9.10 - 11.50
	29	7,216	9.20 - 11.00	May	15	6,982	9.10 - 10.75
March	15	6,436	9.85 - 12.25		30	7,314	8.80 - 11.03
	31	5,663	10.00 - 12.00	June	15	7,985	8.65 - 10.25
					30	8,566	8.49 - 10.40
				July	15	8,019	8.19 - 9.80
					31	7,275	8.01 - 11.50

* Issued at face value by companies.

Appendix Table V.4 : A Profile of Central Government Dated Securities

(Amount in Rupees crore)

Item	2000-01	1999-2000	1998-99
1	2	3	4
1. Gross Borrowing	1,00,183	86,630	83,753
2. Repayments	28,396	16,353	14,803
3. Net Borrowings	71,787	70,277	68,950
4. Weighted Average Maturity (in years)	10.60	12.64	7.71
5. Weighted Average Yield (per cent)	10.95	11.77	11.86
6. A. Maturity Distribution - Amount			
a) Up to 5 years	12,500	..	26,399
b) Above 5 and up to 10 years	35,000	30,000	46,030
c) Above 10 years	52,683	56,630	11,324
Total	1,00,183	86,630	83,753
B. Maturity Distribution (per cent)			
a) Up to 5 years	12.48	.	31.52
b) Above 5 and up to 10 years	34.94	35.00	54.96
c) Above 10 years	52.58	65.00	13.52
Total	100.00	100.00	100.00
7. Price-Based Auctions-Amount	65,000	75,000	
8. Yield (per cent)			
Minimum	9.47	10.72	11.10
	(2 years, 11 months)	(8 years, 3 months)	(5 years)
Maximum	11.70	12.45	12.60
	(11 years, 9 months)	(19 years, 8 months)	(20 years)
9. Yield - Maturity Distribution-wise			
A. Less than 10 years			
Minimum	9.47	10.72	11.10
	(2 years, 11 months)	(8 years, 3 months)	(5 years)
Maximum	11.69	11.74	11.98
	(9 years, 10 months)	(7 years, 11 months)	(6 years)
B. 10 years			
Minimum	11.30	11.48	11.70
Maximum	11.30	11.99	12.25
C. Above 10 years			
Minimum	10.47	10.76	12.25
	(14 years)	(14 years, 9 months)	(12 years)
Maximum	11.70	12.45	12.60
	(11 years, 9 months)	(19 years, 8 months)	(12 years)

Memo Item :

1. Initial Subscriptions by RBI	31,151	27,000	38,205
2. Open Market Operations by RBI - Net Sales	19,218	35,369	26,348
3. Monetised Deficit	6,705	-5,587	11,800
4. Ways and Means Advances to Centre (Outstandings) (as on March 31)	5,395	982	3,042
.. Not applicable.			

Note : Figures in brackets represent residual maturity in years

Appendix Table V.5 : Issues of Central Government Dated Securities

Nomenclature of loan	Issue / Auction Particulars				Bids/Application received			Bids / Application Accepted		
	Date of Auction	Date of Issue	Tenor of (Years)	Residual Maturity (Years)	Notified Amount/ Tap Amount	Number	Face Value	Number	Others	Allocation to PDs (Devlmt.)
1	2	3	4	5	6	7	8	9	10	11
2000-01										
12.29 per cent Government Stock, 2010 \$	11-Apr-00	13-Apr-00	10	9.79	5,000	385	11,609.76	131	5,000.00	0.00
9.90 per cent Government Stock, 2005	20-Apr-00	22-Apr-00	5	5	3,000	186	5,457.03	108	3,000.00	0.00
10.70 per cent Government Stock, 2020	20-Apr-00	22-Apr-00	20	20	3,000	166	5,992.50	26	425.50	2,574.50
12.25 per cent Government Stock, 2010 \$	03-May-00	04-May-00	12	10.16	6,000	191	5,993.50	170	5,005.50	480.00
11.10 per cent Government Stock, 2003 \$	15-May-00	16-May-00	5	2.89	2,500	183	4,897.00	76	2,500.00	0.00
11.68 per cent Government Stock, 2006 \$	15-May-00	16-May-00	7	5.9	2,500	208	6,125.70	75	2,500.00	0.00
10.79 per cent Government Stock, 2015 @@	-	19-May-00	15	15	2,683.45	55	2,683.45	55	2,683.45	-
10.95 per cent Government Stock, 2011 #	29-May-00	30-May-00	11	11	5,000	172	3,973.00	11	114.00	-
11.90 per cent Government Stock, 2007 \$	08-June-00	09-June-00	9	6.97	4,000	104	2,904.05	70	1,505.00	935.00
10.95 per cent Government Stock, 2011 \$ P	-	03-July-00	11	10.91	3,000	-	-	-	-	-
10.20 per cent Government Stock, 2005 #	11-July-00	12-July-00	5	5	3,000	235	7,274.50	54	3,000.00	-
11.03 per cent Government Stock, 2012 #	17-July-00	18-July-00	12	12	2,500	200	6,183.75	105	2,500.00	-
11.75 per cent Government Stock, 2004 \$	25-July-00	26-July-00	6	3.9	4,000	70	2,214.00	13	455.00	-
11.00 per cent Government Stock, 2006 P	-	28-July-00	6	6	3,000	-	-	-	-	-
11.30 per cent Government Stock, 2010 P	-	28-July-00	10	10	3,000	-	-	-	-	-
11.43 per cent Government Stock, 2015 P	-	07-Aug-00	15	15	6,000	-	-	-	-	-
10.70 per cent Government Stock, 2020 \$ P	-	28-Aug-00	20	19.65	3,000	-	-	-	-	-
11.40 per cent Government Stock, 2008 #	30-Aug-00	31-Aug-00	8	8	3,000	51	2,264.00	9	250.00	1,480.00
11.40 per cent Government Stock, 2008 \$	28-Sep-00	29-Sep-00	8	7.92	3,000	135	4,030.00	104	2,625.00	0.00
11.30 per cent Government Stock, 2010 \$	05-Oct-00	06-Oct-00	10	9.81	3,000	204	7,087.22	78	3,000.00	0.00
11.03 per cent Government Stock, 2012 \$	25-Oct-00	27-Oct-00	12	11.73	3,000	210	8,160.72	77	3,000.00	0.00
11.99 per cent Government Stock, 2009 \$	06-Nov-00	07-Nov-00	9	8.42	3,000	224	9,037.30	9	3,000.00	0.00
11.03 per cent Government Stock, 2012 \$	13-Nov-00	14-Nov-00	12	11.68	4,000	200	5,635.75	167	4,000.00	0.00
11.50 per cent Government Stock, 2011 #	23-Nov-00	24-Nov-00	11	11	3,000	141	5,772.02	105	3,000.00	0.00
11.30 per cent Government Stock, 2010 \$	12-Dec-00	13-Dec-00	10	9.63	3,000	272	8,198.59	72	3,000.00	0.00
11.43 per cent Government Stock, 2015 \$	26-Dec-00	27-Dec-00	15	14.61	3,000	218	5,147.00	122	3,000.00	0.00
11.60 per cent Government Stock, 2020 #	26-Dec-00	27-Dec-00	20	20	1,000	53	1,340.75	0	0.00	0.00
12.30 per cent Government Stock, 2016 \$	15-Jan-01	16-Jan-01	17	15.46	1,500	170	5,083.00	42	1,500.00	0.00
12.25 per cent Government Stock, 2010 \$	15-Jan-01	16-Jan-01	12	9.46	2,500	239	6,421.67	81	2,500.00	0.00
10.47 per cent Government Stock, 2015 #	10-Feb-01	12-Feb-01	14	14.00	3,000	231	10,290.00	63	3,000.00	0.00
11.43 per cent Government Stock, 2015 \$	29-Mar-01	30-Mar-01	15	14.35	3,000	161	4,397.13	57	1,089.13	1,910.87
2001-02										
10.95 per cent Government Stock, 2011 \$	12-Apr-01	16-Apr-01	11	10.12	4,000	289	13,772.68	57	4,000.00	0.00
11.40 per cent Government Stock, 2008 \$	18-Apr-01	19-Apr-01	8	7.37	4,000	238	8,325.00	130	4,000.00	0.00
10.71 per cent Government Stock, 2016 #	18-Apr-01	19-Apr-01	15	15.00	2,000	184	8,032.50	29	2,000.00	0.00
11.50 per cent Government Stock, 2011 \$ P	-	20-Apr-01	11	10.59	4,000	-	-	-	-	-
10.71 per cent Government Stock, 2016 \$ P	-	20-Apr-01	15	15.00	4,000	-	-	-	-	-
11.60 per cent Government Stock, 2020 \$ PT	-	20-Apr-01	20	19.69	4,000	-	-	-	-	-
11.50 per cent Government Stock, 2011 \$	27-Apr-01	30-Apr-01	11	10.57	4,000	216	9,316.01	88	4,000.00	0.00
10.45 per cent Government Stock, 2018 #	27-Apr-01	30-Apr-01	17	17.00	2,000	257	8,287.00	25	2,000.00	0.00
10.47 per cent Government Stock, 2015 \$	17-May-01	18-May-01	14	13.73	4,000	320	11,257.75	108	4,000.00	0.00
9.81 per cent Government Stock, 2013 #	29-May-01	30-May-01	12	12.00	3,000	243	7,064.77	82	3,000.00	0.00
10.25 per cent Government Stock, 2021#	29-May-01	30-May-01	20	20.00	2,000	196	7,440.51	27	2,000.00	0.00
10.25 per cent Government Stock, 2021 \$ P	-	30-May-01	20	20.00	5,000	-	-	-	-	-
11.03 per cent Government Stock, 2012 \$ P	-	20-Jun-01	12	11.08	4,000	-	-	-	-	-
9.39 per cent Government Stock, 2011 #	29-Jun-01	02-Jul-01	10	10.00	4,000	303	11,080.84	102	4,000.00	-
10.45 per cent Government Stock, 2018 \$	29-Jun-01	02-Jul-01	17	16.83	2,000	223	5,235.95	42	2,000.00	-
9.81 per cent Government Stock, 2013 \$	07-Jul-01	09-Jul-01	12	11.89	4,000	238	8,252.33	143	4,000.00	-
10.25 per cent Government Stock, 2021 \$	07-Jul-01	09-Jul-01	20	19.89	3,000	172	4,989.77	117	3,000.00	-
9.39 per cent Government Stock, 2011 \$	25-Jul-01	26-Jul-01	10	9.93	5,000	251	8,066.50	167	5,000.00	-
10.03 per cent Government Stock, 2019 #	8-Aug-01	9-Aug -01	18	18.00	2,000	133	4,320.79	65	2,000.00	-
9.81 per cent Government Stock , 2013 \$	8-Aug-01	9-Aug -01	12	11.81	4,000	159	4,427.00	98	2,586.00	735

\$ Re-issues. @@ Tap issue, closed on 23/05/2000. P Private Placement with RBI. # Yield-based Auction. PT Private Placement cum tap sale.

Appendix Table V.6 : Secondary Market Transactions in Government Securities

Item	Transaction In Government Securities											
	2000-2001											
	April	May	June	July	August	September	October	November	December	January	February	March
1	2	3	4	5	6	7	8	9	10	11	12	13
I. OUTRIGHT TRANSACTIONS												
1. Central Government Securities	39,535.78 (90.15)	39,098.96 (90.20)	18,801.15 (88.55)	43,285.31 (90.62)	18,245.25 (76.81)	22,830.17 (81.18)	25,465.15 (82.70)	53,847.95 (91.74)	43,501.82 (88.90)	75,749.06 (93.69)	70,896.65 (90.41)	57,855.00 (87.16)
2. State Government Securities	126.55 (0.29)	184.00 (0.42)	33.36 (0.16)	165.19 (0.35)	606.50 (2.55)	87.27 (0.31)	193.15 (0.63)	347.57 (0.59)	365.71 (0.75)	366.36 (0.45)	224.91 (0.29)	270.48 (0.41)
3. Treasury Bills (a+b+c+d)	4,195.17 (9.57)	4,065.61 (9.38)	2,398.06 (11.29)	4,317.08 (9.04)	4,902.83 (20.64)	5,205.79 (18.51)	5,134.97 (16.68)	4,499.50 (7.67)	5,067.84 (10.36)	4,732.05 (5.85)	7,293.89 (9.30)	8,249.19 (12.43)
a) 14-day	295.14 (0.67)	489.69 (1.13)	287.95 (1.36)	437.28 (0.92)	308.42 (1.30)	489.44 (1.74)	432.98 (1.41)	298.55 (0.51)	313.18 (0.64)	342.06 (0.42)	567.69 (0.72)	505.17 (0.76)
b) 91-day	874.96 (2.00)	589.15 (1.36)	455.78 (2.15)	610.00 (1.28)	618.62 (2.60)	592.56 (2.11)	755.82 (2.45)	764.62 (1.30)	836.86 (1.71)	397.85 (0.49)	1,293.48 (1.65)	972.84 (1.47)
c) 182-day	494.26 (1.13)	547.60 (1.26)	477.37 (2.25)	272.75 (0.57)	456.89 (1.92)	524.74 (1.87)	462.51 (1.50)	589.11 (1.00)	401.86 (0.82)	236.92 (0.29)	591.54 (0.75)	720.94 (1.09)
d) 364-day	2,530.81 (5.77)	2,439.17 (5.63)	1,176.96 (5.54)	2,997.05 (6.27)	3,518.90 (14.81)	3,599.05 (12.80)	3,483.66 (11.31)	2,847.22 (4.85)	3,515.94 (7.18)	3,755.22 (4.64)	4,841.18 (6.17)	6,050.24 (9.12)
Total (1+2+3)	43,857.50 (100.00)	43,348.57 (100.00)	21,232.57 (100.00)	47,767.58 (100.00)	23,754.58 (100.00)	28,123.23 (100.00)	30,793.27 (100.00)	58,695.02 (100.00)	48,935.37 (100.00)	80,847.47 (100.00)	78,415.45 (100.00)	66,374.67 (100.00)
II. REPO TRANSACTIONS												
1. Central Government Securities	6,187.15 (100.00)	5,098.89 (94.85)	7,855.94 (94.04)	5,591.10 (86.98)	5,101.86 (79.45)	8,493.95 (88.56)	9,002.70 (73.36)	13,141.97 (89.03)	11,417.00 (84.68)	15,272.15 (86.49)	10,697.34 (83.40)	11,211.99 (88.85)
2. State Government Securities	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	6.11 (0.05)	9.58 (0.06)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3. Treasury Bills (a+b+c+d)	0.00 (0.00)	277.00 (5.15)	497.67 (5.96)	837.00 (13.02)	1,319.71 (20.55)	1,097.25 (11.44)	3,263.97 (26.60)	1,609.25 (10.90)	2,065.79 (15.32)	2,385.00 (13.51)	2,129.00 (16.60)	1,406.75 (11.15)
a) 14-day	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
b) 91-day	0.00 (0.00)	0.00 (0.00)	90.00 (1.08)	55.00 (0.86)	105.00 (1.64)	0.00 (0.00)	20.00 (0.16)	0.00 (0.00)	70.00 (0.52)	95.00 (0.54)	75.00 (0.58)	145.00 (1.15)
c) 182-day	0.00 (0.00)	0.00 (0.00)	45.50 (0.54)	36.00 (0.56)	231.00 (3.60)	0.00 (0.00)	230.95 (1.88)	192.00 (1.30)	25.00 (0.19)	60.00 (0.34)	5.00 (0.04)	165.00 (1.31)
d) 364-day	0.00 (0.00)	277.00 (5.15)	362.17 (4.34)	746.00 (11.61)	983.71 (15.32)	1,097.25 (11.44)	3,013.02 (24.55)	1,417.25 (9.60)	1,970.79 (14.62)	2,230.00 (12.63)	2,049.00 (15.97)	1,096.75 (8.69)
Total (1+2+3)	6,187.15 (100.00)	5,375.89 (100.00)	8,353.61 (100.00)	6,428.10 (100.00)	6,421.57 (100.00)	9,591.20 (100.00)	12,272.78 (100.00)	14,760.80 (100.00)	13,482.79 (100.00)	17,657.15 (100.00)	12,826.34 (100.00)	12,618.74 (100.00)
III. Grand Total (I+II)												
I as percentage of III	87.64	88.97	71.77	88.14	78.72	74.57	71.50	79.91	78.40	82.07	85.94	84.03
II as percentage of III	12.36	11.03	28.23	11.86	21.28	25.43	28.50	20.09	21.60	17.93	14.06	15.97

Notes : 1. Figures in brackets indicate percentages to total outright/repo transactions. Auction of 14-day and 182-day Treasury Bills were discontinued w.e.f. the week beginning May 14, 2001.
2. Repos transactions exclude second leg of transactions.

Appendix Table V.7 : Profile of Treasury Bills

(Amount in Rupees crore)				
Item	2000-01	1999-2000	1998-99	1997-98
1	2	3	4	5
1. Implicit Yield at Cut-off Price (per cent)				
14-day Treasury Bills				
Minimum	6.26	6.52	5.47	4.95
Maximum	10.97	8.87	9.39	7.30
Average	8.23	8.23	7.79	5.80
91-day Treasury Bills				
Minimum	7.91	8.25	7.17	5.72
Maximum	10.47	9.46	10.05	7.33
Average	8.98	9.03	8.57	6.83
182-day Treasury Bills				
Minimum	8.42	8.96	..	..
Maximum	10.42	9.97	..	..
Average	9.43	9.68	..	..
364-day Treasury Bills				
Minimum	8.66	9.31	7.97	7.98
Maximum	10.91	10.33	10.72	9.42
Average	9.76	10.09	9.51	8.46
2. Gross Issues				
14-day Treasury Bills	10,480	16,453	18,150	69,237
91-day Treasury Bills	7,255	8,155	16,697	13,200
182-day Treasury Bills	2,600	2,900	..	..
364-day Treasury Bills	15,000	13,000	10,200	16,247
3. Net Issues				
14-day Treasury Bills	-225	125	-40	240
91-day Treasury Bills	310	20	-100	-4,100
182-day Treasury Bills	0	1,300	..	..
364-day Treasury Bills	2,000	2,800	-6,047	8,006

4. Outstanding at Year/Period End				
14-day Treasury Bills	100	325	200	240
91-day Treasury Bills	1,830	1,520	1,500	1,600
182-day Treasury Bills	1,300	1,300	..	..
364-day Treasury Bills	15,000	13,000	10,200	16,247

.. Not applicable.

Note : Non-competitive bids allowed to certain entities like State Governments result in the difference between notified amount and actual amounts issued and outstanding.

Appendix Table V.8 : New Capital Issues by Non-Government Public Limited Companies

(Amount in Rupees crore)

Security and Type of Issue	2000-2001		1999-2000		1998-99	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5	6	7
1) Equity Shares (a+b)	134	2,666.5	69	2,752.5	33	2,562.7
	(57)	(1,267.3)	(48)	(2,169.3)	(19)	(1,325.8)
a) Prospectus	116	2,365.5	46	1,657.3	15	340.5
	(52)	(1,219.9)	(32)	(1,405.9)	(7)	(181.0)
b) Rights	18	301.0	23	1,095.2	18	2,222.2
	(5)	(47.4)	(16)	(763.4)	(12)	(1,144.8)
2) Preference Shares (a+b)	2	142.2	-	-	3	59.7
a) Prospectus	-	-	-	-	-	-
b) Rights	2	142.2	-	-	3	59.7
3) Debentures (a+b)	2	90.2	1	30.0	5	190.7
a) Prospectus	-	-	-	-	2	61.3
b) Rights	2	90.2	1	30.0	3	129.4
Of which:						
i) Convertible (a+b)	1	36.2	1	30.0	5	190.7
a) Prospectus	-	-	-	-	2	61.3
b) Rights	1	36.2	1	30.0	3	129.4
ii) Non-Convertible (a+b)	1	54.0	-	-	-	-
a) Prospectus	-	-	-	-	-	-
b) Rights	1	54.0	-	-	-	-
4) Bonds (a+b)	7	2,050.0	9	2,370.8	7	2,200.0
a) Prospectus	7	2,050.0	9	2,370.8	7	2,200.0
b) Rights	-	-	-	-	-	-
5) Total (1+2+3+4)	145	4,948.9	79	5,153.3	48	5,013.1
a) Prospectus	123	4,415.5	55	4,028.1	24	2,601.8
b) Rights	22	533.4	24	1,125.2	24	2,411.3

- Notes:**
1. Data are provisional.
 2. Equity shares exclude bonus shares.
 3. Figures in brackets indicate data in respect of premium on capital issues, which are included in respective totals.
 4. Figures exclude data on private placement and offer for sale.
 5. Preference shares include cumulative convertible preference shares and equi-preference shares.
 6. Convertible debentures include partly convertible debentures.
 7. Non-convertible debentures include secured premium notes and secured deep discount bonds.
 8. Data are compiled from prospectus /circulars/advertisements issued by companies, replies given by the

companies to the Reserve Bank's questionnaire, information received from stock exchanges, press reports, *etc.*

Appendix Table V.9 : Share Price Indices

Year/Month	BSE SENSEX (Base : 1978-79=100)				S&P CNX Nifty (Base :03.11.1995=1000)			
	Average@	High	Low	End of the Year/Month	Average@	High	Low	End of the Year/Month
1	2	3	4	5	6	7	8	9
Financial Year								
1998-99	3,295 (-13.6)	4,281 -	2,764 -	3,740 (-3.9)	955 (-12.2)	1,213 -	809 -	1,078 (-3.5)
1999-2000	4,659 (41.4)	5,934 -	3,245 -	5,001 (33.7)	1,369 (43.3)	1,756 -	931 -	1,528 (41.8)
2000-01	4,270 (-8.4)	5,542 -	3,541 -	3,604 (-27.9)	1,335 (-2.5)	1,625 -	1,125 -	1,148 (-24.9)
Month								
2000								
April	4,905	5,542	4,511	4,658	1,469	1,625	1,359	1,407
May	4,253	4,694	3,920	4,434	1,407	1,422	1,224	1,380
June	4,675	4,864	4,325	4,749	1,452	1,507	1,349	1,471
July	4,647	4,964	4,188	4,280	1,445	1,533	1,318	1,333
August	4,330	4,477	4,186	4,477	1,351	1,394	1,311	1,394
September	4,417	4,764	4,032	4,090	1,371	1,468	1,266	1,272
October	3,820	4,160	3,594	3,711	1,202	1,298	1,136	1,173
November	3,928	4,029	3,789	3,998	1,241	1,273	1,201	1,268
December	4,081	4,285	3,827	3,972	1,291	1,354	1,212	1,264
2001								
January	4,152	4,372	3,955	4,327	1,317	1,380	1,254	1,372
February	4,310	4,438	4,070	4,247	1,372	1,417	1,296	1,351
March	3,808	4,272	3,541	3,604	1,214	1,358	1,125	1,148
Memo Item @ :	2000-01	1999-2000	1998-99	1997-98	2000-01	1999-2000	1998-99	1997-98
a) Co-efficient of variation(%)	8.8	13.2	11.8	7.9	7.5	14.7	11.4	7.2
b) Dispersion (Range)	2,001	2,689	1,517	1,338	500	825	404	353

@ Based on daily indices.

Note : Figures in brackets are percentage variations over the previous year.

Source : The Stock Exchange, Mumbai and the National Stock Exchange.

Appendix Table V.10 : Assistance Sanctioned and Disbursed by Financial Institutions

(Rupees crore)						
Institution	2000-2001P		1999-2000P		1998-1999	
	S	D	S	D	S	D
1	2	3	4	5	6	7
A. All India Development Banks (1 to 5)	99,428.1 (97,032.2)	59,581.1 (57,768.4)	85,172.1 (81,815.8)	54,570.3 (51,986.6)	71,615.5 (68,702.0)	46,488.2 (44,192.7)
1. IDBI	28,711.1 (28,163.1)	17,498.3 (16,936.6)	26,966.5 (25,786.5)	17,059.4 (16,036.5)	23,744.7 (23,653.1)	14,470.1 (14,368.0)
2. IFCI	1,858.5	2,120.9	2,080.0	3,272.1	4,445.2	4,819.3
3. ICICI	56,092.0	31,964.6	43,522.8	25,835.7	32,370.6	19,225.1
4. SIDBI	10,820.6 (8,972.7)	6,441.4 (5,190.4)	10,264.7 (8,088.4)	6,963.5 (5,402.7)	8,879.8 (6,057.9)	6,285.2 (4,091.8)
5. IIBI	1,945.9	1,555.9	2,338.1	1,439.6	2,175.2	1,688.5
B. Specialised Financial Institutions (6 to 8)	339.3	253.6	246.4	259.8	241.3	160.8
6. IVCF	3.8	3.3	8.1	11.9	10.7	10.4
7. ICICI Venture	229.9	189.6	155.9	136.2	19.4	18.1
8. TFCI	105.6	60.7	82.4	111.7	211.2	132.3
C. Investment Institutions (9 to 11)	17,899.9	12,693.5	15,812.2	12,764.0	10,042.9	9,647.0
9. LIC	10,867.2	7,095.0	6,825.5	5,634.3	4,829.6	4,824.9
10. UTI	5,972.3	4,599.9	6,845.0	5,162.1	3,898.6	3,435.9
11. GIC \$	1,060.4	998.6	2,141.7	1,967.6	1,314.7	1,386.2
D. Total Assistance by All-India Financial Institutions (A+B+C)	1,17,667.3 (1,15,271.4)	72,528.2 (70,715.5)	1,01,230.7 (97,874.4)	67,594.1 (65,010.4)	81,899.7 (78,986.2)	56,296.0 (54,000.5)
E. State-level Institutions (12 and 13)	..	..	4,043.4	3,583.8	3,891.3	3,190.2
12. SFCs	2,897.7	1,980.6	2,395.2	1,842.6	2,180.1	1,809.2
13. SIDCs	..	..	1,648.2	1,741.2	1,711.2	1,381.0
F. Total Assistance by All Financial Institutions (AFIs)	..	..	1,05,274.1 (1,01,917.8)	71,177.9 (68,594.2)	85,791.0 (82,877.5)	59,486.2 (57,190.7)

P Provisional.

.. Not available.

S Sanctions.

D Disbursements.

\$ Include figures for public sector bonds.

- Note :** 1. Data adjusted for inter-institutional flows are indicated in bracket. This involves adjustment in regard to IDBI/SIDBI's refinance to SFCs and SIDCs seed capital as also loans to and subscription to shares and bonds of financial institutions.
2. TDICI Limited has been renamed as ICICI Venture Funds Management Company Limited with effect from October 8, 1998.
3. IVCF : IFCI Venture Funds Management Company Limited.
- Source :** IDBI and respective financial institutions.

Appendix Table VI.1 : India's Overall Balance of Payments

Item	Rupees crore				US \$ million			
	2000-2001	1999-2000	1998-99	1997-98	2000-2001	1999-2000	1998-99	1997-98
1	2	3	4	5	6	7	8	9
A. Current Account								
1. Exports, f.o.b.	2,05,287	1,62,753	1,44,436	1,32,703	44,894	37,542	34,298	35,680
2. Imports, c.i.f.	2,70,663	2,40,112	1,99,914	1,90,508	59,264	55,383	47,544	51,187
3. Trade Balance	-65,376	-77,359	-55,478	-57,805	-14,370	-17,841	-13,246	-15,507
4. Invisibles, net	53,945	57,028	38,689	36,922	11,791	13,143	9,208	10,007
a) 'Non-factor' Services	11,401	17,670	9,114	4,943	2,478	4,064	2,165	1,319
b) Income	-17,414	-15,431	-14,967	-13,204	-3,821	-3,559	-3,544	-3,521
c) Private Transfers	58,412	53,132	43,242	43,765	12,798	12,256	10,280	11,830
d) Official Transfers	1,546	1,657	1,300	1,418	336	382	307	379
5. Current Account Balance	-11,431	-20,331	-16,789	-20,883	-2,579	-4,698	-4,038	-5,500
B. Capital Account								
1. External Assistance, net	2,079	3,915	3,484	3,463	427	901	820	907
a) Disbursements	13,527	13,339	11,506	10,827	2,942	3,074	2,726	2,885
b) Amortisation	-11,448	-9,424	-8,022	-7,364	-2,515	-2,173	-1,906	-1,978
2. Commercial Borrowings, net	18,832	1,360	18,557	14,558	4,011	313	4,362	3,999
a) Disbursements	43,091	13,823	30,624	27,211	9,324	3,187	7,226	7,371
b) Amortisation	-24,259	-12,463	-12,067	-12,653	-5,313	-2,874	-2,864	-3,372
3. Short-term Credit, net	321	1,633	-3,116	-530	105	377	-748	-96
4. NRI Deposits, net	10,567	6,709	4,060	4,325	2,317	1,540	960	1,125
5. Foreign Investment, net	23,267	22,501	10,169	19,961	5,102	5,191	2,412	5,390
6. Rupee Debt Service	-2,763	-3,059	-3,308	-2,784	-617	-711	-802	-767
7. Other Capital, net @	-10,704	12,269	6,036	-2,388	-2,322	2,833	1,431	-714
8. Capital Account	41,599	45,328	35,882	36,605	9,023	10,444	8,435	9,844
C. Errors & Omissions	-2,506	2,773	-848	931	-588	656	-175	167
D. Overall Balance (A(5)+B(8)+C)	27,662	27,770	18,245	16,653	5,856	6,402	4,222	4,511
E. Monetary Movements (F+G)	-27,662	-27,770	-18,245	-16,653	-5,856	-6,402	-4,222	-4,511
F. IMF, Net	-115	-1,122	-1,652	-2,286	-26	-260	-393	-618
G. Reserves and Monetary Gold (Increase -, Decrease +)	-27,547	-26,648	-16,593	-14,367	-5,830	-6,142	-3,829	-3,893

@ Includes delayed export receipts, advance payments against imports, loans to non-residents by residents and banking capital.

Note : 1. Gold and silver brought by returning Indians have been included under imports, with a *contra* entry in private transfer receipts.
2. Data on exports and imports differ from those given by the Directorate General of Commercial Intelligence and Statistics (DGCI&S), Ministry of Commerce, Government of India, on account of differences in coverage, valuation and timing.

Appendix Table VI.2 : India's Foreign Trade

Item	Rupees crore			US \$ million			SDR million		
	2000-01P	1999-00	1998-99	2000-01P	1999-00	1998-99	2000-01P	1999-00	1998-99
1	2	3	4	5	6	7	8	9	10
I. Exports (a+b)	2,02,510 (26.9)	1,59,561 (14.2)	1,39,753 (7.4)	44,328 (20.4)	36,822 (10.8)	33,219 (-5.1)	34,009 (25.6)	27,072 (11.4)	24,299 (-5.4)
a. POL @	8,310 (6296.7)	130 (-65.5)	376 (-71.3)	1,819 (5967.4)	30 (-66.5)	89 (-74.6)	1,396 (6231.7)	22 (-66.3)	65 (-74.7)
b. Non-oil	1,94,200 (21.8)	1,59,431 (14.4)	1,39,377 (8.2)	42,509 (15.5)	36,792 (11.1)	33,129 (-4.4)	32,613 (20.6)	27,050 (11.6)	24,234 (-4.6)
II. Imports (a+b)	2,26,773 (5.2)	2,15,528 (20.9)	1,78,332 (15.7)	49,639 (-0.2)	49,738 (17.3)	42,389 (2.2)	38,084 (4.1)	36,567 (17.9)	31,007 (1.9)
a. Oil and POL	71,497 (30.8)	54,649 (103.0)	26,919 (-11.3)	15,650 (24.1)	12,611 (97.1)	6,399 (-21.6)	12,007 (29.5)	9,272 (98.1)	4,681 (-21.8)
b. Non-oil	1,55,277 (-3.5)	1,60,880 (6.3)	1,51,413 (22.3)	33,989 (-8.5)	37,127 (3.2)	35,990 (8.0)	26,077 (-4.5)	27,295 (3.7)	26,327 (7.7)
III. Trade Balance (I-II)	-24,264	-55,967	-38,579	-5,311	-12,916	-9,170	-4,075	-9,496	-6,708
a. Oil Balance (I.a-II.a)	-63,187	-54,519	-26,543	-13,831	-12,581	-6,309	-10,611	-9,250	-4,615
b. Non-oil Balance (I.b-II.b)	38,923	-1,448	-12,036	8,520	-334	-2,861	6,537	-246	-2,093

P Provisional.

@ Petroleum, oil and lubricants

Note: Figures in brackets are percentage variations over the previous year.

Source: DGCI & S.

Appendix Table VI.3 : India's Exports of Principal Commodities

Commodity Group	Rupees crore					US \$ million				
	2000-01P	1999-00	1998-99	Percentage Variation		2000-01P	1999-00	1998-99	Percentage Variation	
				(2)/(3)	(3)/(4)				(7)/(8)	(8)/(9)
1	2	3	4	5	6	7	8	9	10	11
I. Primary Products	32,713 (16.2)	28,271 (17.7)	29,146 (20.9)	15.7	-3.0	7,161 (16.2)	6,524 (17.7)	6,928 (20.9)	9.8	-5.8
A. Agricultural and Allied Products	27,423 (13.5)	24,301 (15.2)	25,387 (18.2)	12.8	-4.3	6,003 (13.5)	5,608 (15.2)	6,034 (18.2)	7.0	-7.1
<i>of which :</i>										
1. Tea	1,976	1,785	2,265	10.7	-21.2	432	412	538	5.0	-23.5
2. Coffee	1,189	1,435	1,728	-17.1	-17.0	260	331	411	-21.4	-19.4
3. Rice	2,926	3,126	6,281	-6.4	-50.2	641	721	1,493	-11.2	-51.7
4. Oil Meal	2,045	1,638	1,942	24.8	-15.6	448	378	462	18.4	-18.1
5. Marine Products	6,368	5,125	4,369	24.3	17.3	1,394	1,183	1,038	17.9	13.9
B. Ores and Minerals	5,290 (2.6)	3,970 (2.5)	3,759 (2.7)	33.3	5.6	1,158 (2.6)	916 (2.5)	893 (2.7)	26.4	2.5
II. Manufactured Goods	1,57,662 (77.9)	1,28,761 (80.7)	1,08,506 (77.6)	22.4	18.7	34,511 (77.9)	29,714 (80.7)	25,791 (77.6)	16.1	15.2
<i>of which :</i>										
A. Leather and Manufactures	8,915 (4.4)	6,891 (4.3)	6,987 (5.0)	29.4	-1.4	1,951 (4.4)	1,590 (4.3)	1,661 (5.0)	22.7	-4.2
B. Chemicals and Related Products	26,908 (13.3)	20,395 (12.8)	16,867 (12.1)	31.9	20.9	5,890 (13.3)	4,707 (12.8)	4,009 (12.1)	25.1	17.4
1. Basic Chemicals, Pharmaceuticals and Cosmetics	16,739	13,382	11,168	25.1	19.8	3,664	3,088	2,655	18.7	16.3
2. Plastic and Linoleum	4,153	2,616	1,984	58.7	31.8	909	604	472	50.6	28.0
3. Rubber, Glass, Paints and Enamels, etc.	4,319	3,006	2,656	43.7	13.2	945	694	631	36.3	9.9
4. Residual Chemicals and Allied Products	1,697	1,390	1,059	22.1	31.4	371	321	252	15.8	27.5
C. Engineering Goods	31,348 (15.5)	22,325 (14.0)	18,780 (13.4)	40.4	18.9	6,862 (15.5)	5,152 (14.0)	4,464 (13.4)	33.2	15.4
D. Textiles	49,149 (24.3)	39,544 (24.8)	34,932 (25.0)	24.3	13.2	10,758 (24.3)	9,126 (24.8)	8,303 (25.0)	17.9	9.9
<i>of which :</i>										
1. Cotton Yarn, Fabrics, Made-ups, etc.	15,988	13,388	11,661	19.4	14.8	3,500	3,090	2,772	13.3	11.5
2. Readymade Garments	25,471	20,648	18,364	23.4	12.4	5,575	4,765	4,365	17.0	9.2
3. Manmade Yarn, Fabrics, Made-ups, etc.	4,835	3,516	2,945	37.5	19.4	1,058	811	700	30.5	15.9
E. Gems and Jewellery	33,761 (16.7)	32,509 (20.4)	24,945 (17.8)	3.8	30.3	7,390 (16.7)	7,502 (20.4)	5,929 (17.8)	-1.5	26.5
F. Handicrafts	3,053 (1.5)	2,897 (1.8)	2,664 (1.9)	5.4	8.8	668 (1.5)	669 (1.8)	633 (1.9)	0.0	5.6
G. Carpets	2,657 (1.3)	2,795 (1.8)	2,287 (1.6)	-5.0	22.2	582 (1.3)	645 (1.8)	544 (1.6)	-9.8	18.7
1. Handmade	2,041	2,161	1,722	-5.5	25.5	447	499	409	-10.4	21.8
2. Millmade	505	489	431	3.1	13.5	110	113	102	-2.2	10.2
3. Silk	111	145	134	-23.7	8.5	24	34	32	-27.6	5.3
III. Petroleum, Crude and Products	8,310 (4.1)	130 (0.1)	376 (0.3)	6296.7	-65.5	1,819 (4.1)	30 (0.1)	89 (0.3)	5967.4	-66.5
IV. Others	3,825 (1.9)	2,400 (1.5)	1,725 (1.2)	59.4	39.1	837 (1.9)	554 (1.5)	410 (1.2)	51.2	35.1

Total Exports (I+II+III+IV)	2,02,510	1,59,561	1,39,753	26.9	14.2	44,328	36,822	33,219	20.4	10.8
--------------------------------------	-----------------	-----------------	-----------------	-------------	-------------	---------------	---------------	---------------	-------------	-------------

P Provisional.

Note : 1. Figures in brackets represent percentage to total exports.

2. Leather and manufactures include finished leather, leather goods, leather garments, footwear of leather and its components and saddlery and harness.

3. Engineering goods comprise ferro alloys, aluminium other than products, non-ferrous metal, manufactures of metals, machine tools, machinery and equipments, transport equipments, residual engineering items, iron and steel bar/rod, *etc.*, primary and semi-finished iron and steel, electronic goods, computer software and project goods.

4. Textiles include readymade garments, cotton yarn, fabric made-ups, *etc.*, manmade textiles made-ups, *etc.*, natural silk textiles, wool and woollen manufactures, coir and coir manufactures and jute manufactures.

Source : DGCI& S.

Appendix Table VI.4 : India's Imports of Principal Commodities

Commodity Group	Rupees crore					US \$ million				
	Percentage Variation					Percentage Variation				
	2000-01P	1999-00	1998-99	(2)/(3)	(3)/(4)	2000-01P	1999-00	1998-99	(7)/(8)	(8)/(9)
1	2	3	4	5	6	7	8	9	10	11
I. Bulk Imports	94,830	85,132	55,660	11.4	53.0	20,758	19,646	13,230	5.7	48.5
	(41.8)	(39.5)	(31.2)			(41.8)	(39.5)	(31.2)		
A. Petroleum, Petroleum Products and Related Material	71,497	54,649	26,919	30.8	103.0	15,650	12,611	6,399	24.1	97.1
	(31.5)	(25.4)	(15.1)			(31.5)	(25.4)	(15.1)		
B. Bulk Consumption Goods	6,543	10,473	10,619	-37.5	-1.4	1,432	2,417	2,524	-40.7	-4.3
	(2.9)	(4.9)	(6.0)			(2.9)	(4.9)	(6.0)		
1. Cereals and Cereal Preparations	85	962	1,210	-91.1	-20.6	19	222	288	-91.6	-22.9
2. Edible Oil	5,933	8,046	7,589	-26.3	6.0	1,299	1,857	1,804	-30.1	2.9
3. Pulses	494	355	709	39.2	-50.0	108	82	168	32.1	-51.4
4. Sugar	31	1,111	1,111	-97.2	0.0	7	256	264	-97.3	-2.9
C. Other Bulk Items	16,791	20,010	18,121	-16.1	10.4	3,675	4,618	4,307	-20.4	7.2
	(7.4)	(9.3)	(10.2)			(7.4)	(9.3)	(10.2)		
1. Fertilisers	3,407	6,063	4,528	-43.8	33.9	746	1,399	1,076	-46.7	30.0
a) Crude	1,000	885	834	13.0	6.0	219	204	198	7.2	2.9
b) Sulphur and Unroasted Iron Pyrites	402	502	280	-20.0	79.3	88	116	67	-24.1	74.1
c) Manufactured	2,006	4,676	3,414	-57.1	37.0	439	1,079	811	-59.3	33.0
2. Non-Ferrous Metals	2,404	2,370	2,513	1.5	-5.7	526	547	597	-3.8	-8.5
3. Paper, Paperboard and Manufactures including Newsprint	2,057	1,938	1,957	6.1	-1.0	450	447	465	0.7	-3.8
4. Crude Rubber, incl. Synthetic and Reclaimed	690	621	612	11.2	1.5	151	143	145	5.4	-1.5
5. Pulp and Waste Paper	1,274	1,106	991	15.3	11.6	279	255	236	9.3	8.3
6. Metalliferrous Ores and Metal Scrap	3,424	3,789	3,046	-9.6	24.4	750	874	724	-14.3	20.8
7. Iron and Steel	3,533	4,124	4,474	-14.3	-7.8	773	952	1,064	-18.7	-10.5
II. Non-Bulk Imports	1,31,943	1,30,397	1,22,672	1.2	6.3	28,881	30,092	29,159	-4.0	3.2
	(58.2)	(60.5)	(68.8)			(58.2)	(60.5)	(68.8)		
A. Capital Goods	40,135	38,850	42,341	3.3	-8.2	8,785	8,965	10,064	-2.0	-10.9
	(17.7)	(18.0)	(23.7)			(17.7)	(18.0)	(23.7)		
1. Manufactures of Metals	1,763	1,755	1,599	0.4	9.8	386	405	380	-4.7	6.6
2. Machine Tools	997	1,133	1,459	-12.0	-22.4	218	261	347	-16.5	-24.6
3. Machinery except Electrical and Electronics	12,583	11,895	12,808	5.8	-7.1	2,754	2,745	3,045	0.3	-9.8
4. Electrical Machinery except Electronics	2,157	1,897	1,771	13.7	7.1	472	438	421	7.8	4.0
5. Electronic Goods incl. Computer Software	16,795	12,972	10,036	29.5	29.3	3,676	2,994	2,386	22.8	25.5
6. Transport Equipment	2,939	4,925	3,358	-40.3	46.7	643	1,137	798	-43.4	42.4
7. Project Goods	2,901	4,273	11,309	-32.1	-62.2	635	986	2,688	-35.6	-63.3
B. Mainly Export Related Items	36,794	39,508	30,001	-6.9	31.7	8,054	9,117	7,131	-11.7	27.9
	(16.2)	(18.3)	(16.8)			(16.2)	(18.3)	(16.8)		
1. Pearls, Precious and Semi-Precious Stones	21,967	23,556	15,820	-6.7	48.9	4,808	5,436	3,760	-11.5	44.6
2. Chemicals-Organic and Inorganic	11,140	12,420	11,290	-10.3	10.0	2,438	2,866	2,684	-14.9	6.8
3. Textile Yarn, Fabrics, etc.	2,725	2,333	1,922	16.8	21.4	596	538	457	10.8	17.9
4. Cashew Nuts, Raw	962	1,198	969	-19.7	23.7	211	277	230	-23.8	20.1
C. Others	55,015	52,039	50,330	5.7	3.4	12,042	12,009	11,963	0.3	0.4
	(24.3)	(24.1)	(28.2)			(24.3)	(24.1)	(28.2)		
<i>of which :</i>										
1. Gold and Silver	20,224	20,393	21,339	-0.8	-4.4	4,427	4,706	5,072	-5.9	-7.2
2. Artificial Resins and Plastic Materials	2,529	3,118	2,843	-18.9	9.7	554	719	676	-23.0	6.5
3. Professional, Scientific and Optical Goods	3,902	3,660	3,451	6.6	6.1	854	845	820	1.1	3.0
4. Coal, Coke and Briquettes etc.	5,040	4,368	4,121	15.4	6.0	1,103	1,008	980	9.4	2.9
5. Medicinal and Pharmaceutical Products	1,701	1,616	1,615	5.3	0.1	372	373	384	-0.1	-2.9
6. Chemical Materials and Products	1,504	1,563	1,640	-3.8	-4.7	329	361	390	-8.7	-7.4

7. Non-Metallic Mineral Manufactures	789	710	674	11.1	5.3	173	164	160	5.3	2.2
Total Imports (I+II)	2,26,773	2,15,528	1,78,332	5.2	20.9	49,639	49,738	42,389	-0.2	17.3

P Provisional.

Note : Figures in brackets represent percentage to total imports.

Source : DGCI& S.

Appendix Table VI.5 : Invisibles by Category of Transactions

Item	Rupees crore				US \$ million				
	2000-2001	1999-2000	1998-99	1997-98	2000-2001	1999-2000	1998-99	1997-98	
	1	2	3	4	5	6	7	8	9
I. Non-factor Services, net	11,401	17,670	9,114	4,943	2,478	4,064	2,165	1,319	
Receipts	86,613	68,137	55,527	35,102	18,870	15,709	13,186	9,429	
Payments	75,212	50,467	46,413	30,159	16,392	11,645	11,021	8,110	
i) Travel, net	1,369	3,898	5,277	5,541	294	897	1,250	1,477	
Receipts	14,505	13,166	12,603	10,880	3,168	3,036	2,993	2,914	
Payments	13,136	9,268	7,326	5,339	2,874	2,139	1,743	1,437	
ii) Transportation, net	-5,711	-3,050	-3,157	-2,548	-1,257	-703	-755	-686	
Receipts	8,750	7,400	8,109	6,805	1,913	1,707	1,925	1,836	
Payments	14,461	10,450	11,266	9,353	3,170	2,410	2,680	2,522	
iii) Insurance, net	614	479	473	210	135	109	112	57	
Receipts	1,176	1,004	945	890	257	231	224	240	
Payments	562	525	472	680	122	122	112	183	
iv) G.N.I.E., net	1,455	1,356	1,160	444	316	312	272	116	
Receipts	3,012	2,523	2,520	1,038	657	582	597	276	
Payments	1,557	1,167	1,360	594	341	270	325	160	
v) Miscellaneous, net	13,674	14,987	5,361	1,296	2,990	3,449	1,286	355	
Receipts	59,170	44,044	31,350	15,489	12,875	10,153	7,447	4,163	
Payments	45,496	29,057	25,989	14,193	9,885	6,704	6,161	3,808	
II. Income, net	-17,414	-15,431	-14,967	-13,204	-3,821	-3,559	-3,544	-3,521	
Receipts	10,823	8,373	8,133	5,795	2,366	1,931	1,935	1,561	
Payments	28,237	23,804	23,100	18,999	6,187	5,490	5,479	5,082	
III. Private Transfers, net	58,412	53,132	43,242	43,765	12,798	12,256	10,280	11,830	
Receipts	58,756	53,280	43,494	43,930	12,873	12,290	10,341	11,875	
Payments	344	148	252	165	75	34	61	45	
IV. Official Transfers, net	1,546	1,657	1,300	1,418	336	382	307	379	
Receipts	1,556	1,659	1,305	1,418	338	382	308	379	
Payments	10	2	5	0	2	0	1	0	
V. Invisibles, net (I to IV)	53,945	57,028	38,689	36,922	11,791	13,143	9,208	10,007	
Receipts	1,57,748	1,31,449	1,08,459	86,245	34,447	30,312	25,770	23,244	
Payments	1,03,803	74,421	69,770	49,323	22,656	17,169	16,562	13,237	

GNIE : Government, Not Included Elsewhere.

Appendix Table VI.6 : Composition of Capital Inflows

Variable	2000-01	1999-2000	1998-99	1997-98	1996-97	1995-96	1994-95	1993-94	1992-93	1991-92	1990-91
1	2	3	4	5	6	7	8	9	10	11	12
Total Capital Inflows (net) (US \$ million)	9,023	10,444	8,435	9,844	12,006	4,089	8,502	8,895	3,876	3,910	7,056
<i>of which: (in per cent)</i>											
1. Non-debt Creating Inflows	56.6	49.7	28.6	54.8	51.3	117.5	57.9	47.6	14.3	3.4	1.5
a) Foreign Direct Investment	26.0	20.7	29.4	36.2	23.7	52.4	15.8	6.6	8.1	3.3	1.4
b) Portfolio Investment	30.6	29.0	-0.8	18.6	27.6	65.1	42.1	41.0	6.2	0.1	0.1
2. Debt Creating Inflows	69.3	23.1	54.4	52.4	61.7	57.7	25.0	21.3	39.9	77.4	83.3
a) External Assistance	4.7	8.6	9.7	9.2	9.2	21.6	17.9	21.4	48.0	77.7	31.3
b) External Commercial Borrowings #	44.5	3.0	51.7	40.6	23.7	31.2	12.1	6.8	-9.2	37.2	31.9
c) Short-term Credits	1.2	3.6	-8.9	-1.0	7.0	1.2	4.6	-8.6	-27.8	-13.2	15.2
d) NRI Deposits \$	25.7	14.7	11.4	11.4	27.9	27.0	2.0	13.5	51.6	7.4	21.8
e) Rupee Debt - Service	-6.8	-6.8	-9.5	-7.8	-6.1	-23.3	-11.6	-11.8	-22.7	-31.7	-16.9
3. Other Capital @	-25.9	27.2	17.0	-7.2	-13.0	-75.2	17.1	31.1	45.8	19.2	15.2
4. Total (1 to 3)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memo Item :											
Stable flows *	68.2	67.4	109.7	82.4	65.4	33.7	53.3	67.6	121.6	113.1	84.7

Refers to medium and long-term borrowings.

\$ Including NRNR Deposits.

@ Includes delayed export receipts, advance payments against imports, loans to non-residents by residents and banking capital.

* Stable flows are defined to represent all capital flows excluding portfolio flows and short-term trade credits.

Appendix Table VI.7 : External Assistance

Item	Rupees crore			US \$ million		
	2000-01 P	1999-00 R	1998-99 R	2000-01 P	1999-00 R	1998-99 R
1	2	3	4	5	6	7
1. Loans	13,475	13,227	12,343	2,893	2,987	2,859
2. Grants	727	1,070	895	156	246	213
3. Gross Utilisation (1+2)	14,202	14,297	13,238	3,049	3,233	3,072
4. Repayments	11,659	9,686	8,880	2,503	2,233	2,105
5. Interest Payments	5,427	5,465	5,192	1,165	1,260	1,231
6. Net (3-4-5)	-2,884	-854	-834	-619	-260	-264

P Provisional. R Revised.

Note : 1. Loans are inclusive of non-government loans but exclusive of suppliers' credits and commercial borrowings.
2. Grants are exclusive of PL 480-II grants.
3. Repayments include amortisation of civilian debt owed to Russia and hence do not tally with the data given in Appendix Table VI.1.

Source : Controller of Aid, Accounts and Audit, Government of India.

Appendix Table VI.8 : India's Foreign Exchange Reserves

End of Month	Foreign Exchange Reserves (Rupees crore)				Foreign Exchange Reserves (US \$ million)				Total Foreign Exchange Reserves (in SDR million)	Movement in Foreign Exchange Reserves (in SDR million) @	Reserve Position in the Fund (in SDR million)+
	SDRs*	Gold \$	Foreign Currency Assets	Total (2+3+4)	SDRs	Gold	Foreign Currency Assets	Total (6+7+8)			
1	2	3	4	5	6	7	8	9	10	11	12
March 1993	55	10,549	20,140	30,744	18	3,380	6,434	9,832	7,033	317	212
March 1994	339	12,794	47,287	60,420	108	4,078	15,068	19,254	13,631 (11,156)	6,598 (6,141)	212
March 1995	23	13,752	66,005	79,780	7	4,370	20,809	25,186	16,137 (13,786)	2,506 (2,630)	212
March 1996	280	15,658	58,446	74,384	82	4,561	17,044	21,687	14,841 (12,167)	-1,296 (-1,619)	212
March 1997	7	14,557	80,368	94,932	2	4,054	22,367	26,423	19,052 (16,576)	4,211 (4,409)	212
March 1998	4	13,394	1,02,507	1,15,905	1	3,391	25,975	29,367	21,983 (19,891)	2,931 (3,315)	212
March 1999	34	12,559	1,25,412	1,38,005	8	2,960	29,522	32,490	23,928 (22,150)	1,945 (2,259)	489
June 1999	1	11,732	1,32,505	1,44,238	-	2,706	30,559	33,265	24,901 (23,279)	973 (1,129)	489
September 1999	5	11,850	1,32,946	1,44,801	1	2,717	30,485	33,203	23,927 (22,372)	-1 (222)	489
December 1999	18	12,791	1,39,134	1,51,943	4	2,939	31,992	34,935	25,453 (23,715)	1,525 (1,565)	489
March 2000	16	12,973	1,52,924	1,65,913	4	2,974	35,058	38,036	28,240 (26,435)	4,312 (4,285)	489
June 2000	38	13,173	1,50,901	1,64,112	8	2,948	33,774	36,730	27,466 (25,665)	-774 (-770)	489
September 2000	8	13,057	1,50,195	1,63,260	2	2,834	32,602	35,438	27,304 (25,523)	-936 (-912)	489
December 2000	7	13,143	1,74,207	1,87,357	2	2,811	37,264	40,077	30,759 (29,005)	2,519 (2,570)	489
March 2001	11	12,711	1,84,482	1,97,204	2	2,725	39,554	42,281	33,540 (31,781)	5,300 (5,346)	489
June 2001	20	13,163	1,91,226	2,04,409	4	2,798	40,652	43,454	34,884 (33,041)	1,344 (1,260)	489

* At Rupee-SDR exchange rate at the end of the respective month.

\$ Gold has been valued close to international market price.

@ Variations over the previous March.

+ Cover drawal of Reserve Position in the Fund.

Note : 1. Gold holdings include acquisition of gold worth US \$ 191 million from the Government during 1991-92, US \$ 29.4 million during 1992-93, US \$ 139.3 million during 1993-94, US \$ 315.0 million during 1994-95 and US \$ 17.9 million during 1995-96. On the other hand, 1.27 tonnes of gold amounting to Rs 43.55 crore (US \$11.97 million), 38.9 tonnes of gold amounting to Rs 1485.22 crore (US \$ 376.0 million) and 0.06 tonnes of gold amounting to Rs. 2.13 crore (US \$ 0.5 million) were repurchased by the Central Government on November 13, 1997, April 1, 1998 and October 5, 1998 respectively for meeting its redemption obligation under the Gold Bond Scheme. 2. Conversion of foreign currency assets into US dollar and SDRs was done at exchange rates supplied by the IMF up to March 1999. Effective April 1, 1999, the conversion is at New York closing exchange rate.

3. Figures in brackets represent reserves adjusted for gold revaluation, pursuant to the practice of valuing gold reserves close to international market price, effective October 17, 1990.

Appendix Table VI.9 : India's External Debt

(As at the end of March)

Item	Rupees crore			US \$ million		
	2001P	2000R	1999R	2001P	2000R	1999R
1	2	3	4	5	6	7
I. Multilateral	1,45,064	1,37,085	1,29,571	31,103	31,438	30,534
A. Government borrowing	1,27,738	1,20,280	1,14,434	27,388	27,584	26,967
i) Concessional	88,924	84,022	78,912	19,066	19,269	18,596
a) IDA	87,679	82,693	77,660	18,799	18,964	18,301
b) Others	1,245	1,330	1,252	267	305	295
ii) Non-concessional	38,814	36,258	35,522	8,322	8,315	8,371
a) IBRD	26,314	25,335	25,724	5,642	5,810	6,062
b) Others	12,500	10,923	9,798	2,680	2,505	2,309
B. Non-Government borrowing	17,327	16,805	15,137	3,715	3,854	3,567
i) Concessional	0	0	0	0	0	0
ii) Non-concessional	17,327	16,805	15,137	3,715	3,854	3,567
a) Public sector	12,472	12,179	10,706	2,674	2,793	2,523
IBRD	7,164	6,929	6,344	1,536	1,589	1,495
Others	5,308	5,250	4,362	1,138	1,204	1,028
b) Financial institutions	3,372	3,096	2,720	723	710	641
IBRD	1,017	999	1,057	218	229	249
Others	2,355	2,097	1,663	505	481	392
c) Private sector	1,483	1,531	1,710	318	351	403
IBRD	1,147	1,173	1,311	246	269	309
Others	336	358	399	72	82	94
II. Bilateral	77,534	79,256	74,253	16,624	18,176	17,498
A. Government borrowing	59,373	60,899	57,062	12,730	13,966	13,447
i) Concessional	58,076	59,359	56,379	12,452	13,613	13,286
ii) Non-concessional	1,297	1,539	683	278	353	161
B. Non-Government borrowing	18,162	18,358	17,190	3,894	4,210	4,051
i) Concessional	3,829	4,020	2,737	821	922	645
a) Public sector	1,502	1,487	526	322	341	124
b) Financial institutions	2,327	2,533	2,211	499	581	521
c) Private sector	0	0	0	0	0	0
ii) Non-concessional	14,332	14,337	14,453	3,073	3,288	3,406
a) Public sector	5,037	4,753	5,190	1,080	1,090	1,223
b) Financial institutions	4,277	4,151	4,362	917	952	1,028
c) Private sector	5,018	5,433	4,901	1,076	1,246	1,155
III. International Monetary Fund	0	113	1,218	0	26	287

IV. Trade Credit	27,228	29,560	28,809	5,838	6,779	6,789
a) Buyers' credit	17,266	18,733	18,099	3,702	4,296	4,265
b) Suppliers' credit	4,851	5,581	5,534	1,040	1,280	1,304
c) Export credit component of bilateral credit	5,051	5,163	4,901	1,083	1,184	1,155
d) Export credit for defence purposes	61	83	276	13	19	65
V. Commercial Borrowing	1,12,416	86,578	88,876	24,103	19,855	20,944
a) Commercial bank loans	46,342	44,015	43,891	9,936	10,094	10,343
b) Securitized borrowings \$ (inclu. FCCBs)	63,207	39,179	41,319	13,552	8,985	9,737
c) Loans/secritized borrowings, etc. with multilateral/bilateral guarantee and IFC(W)	2,868	3,270	3,433	615	750	809
d) Self Liquidating Loans	0	113	233	0	26	55
VI. NRI & FC(B&O) Deposits (one-year and above maturity)	71,975	59,137	50,048	15,432	13,562	11,794
VII. Rupee Debt *	17,224	19,138	20,076	3,693	4,389	4,731
a) Defence	15,438	17,211	18,005	3,310	3,947	4,243
b) Civilian +	1,786	1,927	2,071	383	442	488
VIII. Total Long-term Debt (I to VII)	4,51,442	4,10,868	3,92,850	96,793	94,225	92,577
IX. Short-term Debt	16,147	17,150	18,137	3,462	3,933	4,274
a) NRI deposits (less than 1 year maturity)	3,689	5,970	8,852	791	1,369	2,086
b) Others (trade related) @	12,458	11,180	9,285	2,671	2,564	2,188
X. Gross Total	467,589	4,28,018	4,10,987	1,00,255	98,158	96,851
<i>Concessional Debt</i>	1,68,053	1,66,540	1,58,104	36,032	38,193	37,258
As % of Total Debt	35.9	38.9	38.5	35.9	38.9	38.5
<i>Short Term Debt</i>	16,147	17,150	18,137	3,462	3,933	4,274
As % of Total Debt	3.5	4.0	4.4	3.5	4.0	4.4

Memo Items:

Debt Indicators:

1. Debt Stock - GDP Ratio (in per cent)	21.4	21.9	23.4	21.4	21.9	23.4
2. Debt Service Ratio(%) (for fiscal year)	17.1	16.2	17.8	17.1	16.2	17.8

P Provisional. R Revised.

\$ Includes net investment by 100 per cent FII debt funds, Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs).

* Debt owed to Russia denominated in Rupees and converted at current exchange rates, payable in exports.

+ Includes Rupee suppliers' credit from end-March 1990 onwards.

@ This does not include suppliers' credit of up to 180 days for which no estimates are available.

Notes: 1. Multilateral loans do not include revaluation of IBRD pooled loans and exchange rate adjustment. under IDA loans for Pre-1971 credits.

2. Debt-service ratio from the year 1992-93 includes the revised private transfer *contra-entry* on account of

gold and silver imports.

Appendix Table : VI.10: Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee

Year/Month	36 - country bilateral trade weights*		5 - country bilateral trade weights**	
	REER #	NEER	REER #	NEER
1	2	3	4	5
1993-94	61.59	44.69	100.00	100.00
1994-95	66.04	43.37	105.81	96.09
1995-96	63.62	39.73	102.29	87.69
1996-97	63.81	38.97	103.43	86.38
1997-98	67.02	40.01	105.84	86.43
1998-99	63.44	36.34	97.79	76.45
1999-2000	63.30	35.46	96.74	74.22
2000-2001 P	66.46	35.52	100.76	73.77
2000-01P				
April	66.29	36.01	100.62	74.94
May	67.21	36.53	102.08	76.00
June	65.30	35.40	99.24	73.73
July	65.65	35.57	99.73	73.97
August	65.15	35.23	99.14	73.38
September	66.08	35.56	100.55	74.17
October	67.53	35.64	102.07	73.77
November	67.24	35.46	101.62	73.39
December	66.46	34.97	100.85	72.65
January	66.35	34.95	100.44	72.46
February	66.72	35.23	100.82	72.99
March	67.61	35.66	102.04	73.74
2001-02				
April P	68.20	35.91	102.89	74.20
May P	68.18	35.94	102.78	74.26
June P	69.05	36.26	103.72	74.87

P Provisional.

* Base: 1985=100

** Base: 1993-94=100

The 36-country and 5-country REER indices have been recalculated from April 1994 and April 1993 onwards, respectively, using the new Wholesale Price Index (WPI) series (Base : 1993-94=100).

Appendix Table VI.11: Select Economic Indicators - World

Item	2002\$	2001\$	2000	1999	1998	1997	1996
1	2	3	4	5	6	7	8
I. World Output (% Change)	3.9	3.2	4.8	3.5	2.8	4.2	4.0
i) Advanced economies	2.7	1.9	4.1	3.4	2.7	3.5	2.9
ii) Developing countries	5.6	5.0	5.8	3.8	3.5	5.8	6.5
a) Developing Asia	6.3	5.9	6.9	6.1	4.0	6.6	8.2
b) Africa	4.4	4.2	3.0	2.3	3.3	2.9	5.7
c) Middle East, Malta and Turkey	4.6	2.9	5.4	0.8	3.6	5.4	4.8
d) Western Hemisphere	4.4	3.7	4.1	0.2	2.3	5.3	3.6
iii) Countries in Transition	4.2	4.0	5.8	2.6	-0.9	1.6	-0.5
II. Inflation- CPI (% Change)							
i) Advanced economies	1.8	2.1	2.3	1.4	1.5	2.1	2.4
ii) Developing countries	4.8	5.7	6.1	6.7	10.4	9.9	15.4
a) Developing Asia	3.3	2.8	1.9	2.5	7.7	4.8	8.3
III. Fiscal Balance #							
i) Advanced economies	-0.9	-0.8	-0.3	-1.4	-1.6	-1.6	-2.7
ii) Developing countries	-3.0	-3.2	-3.2	-4.2	-3.9	-2.4	-2.2
a) Developing Asia	-4.1	-4.1	-4.2	-4.2	-3.5	-2.5	-2.0
IV. Net Capital Flows*							
(US \$ billion)							
Emerging Market Economies**							
i) Net private capital flows	106.2	56.5	32.6	69.8	53.0	120.3	224.2
ii) Net private direct investment	155.8	150.5	143.9	150.3	151.0	144.9	120.2
iii) Net private portfolio investment	26.2	20.2	25.0	21.5	0.7	42.9	85.2
iv) Net official flows	7.4	5.9	4.8	10.6	62.1	56.8	0.9
v) Net other private capital flows	-75.8	-114.2	-136.2	-101.9	-98.7	-67.5	18.7
V. World Trade @	6.5	6.7	12.4	5.3	4.2	10.1	6.5
Imports							
i) Advanced economies	6.5	6.7	11.4	7.9	5.7	9.3	6.2
ii) Developing countries	7.9	8.8	16.9	1.6	-0.6	10.6	8.1
Exports							
i) Advanced economies	6.2	6.2	11.4	5.0	3.8	10.6	6.0
ii) Developing countries	7.0	7.1	15.7	4.1	5.3	12.0	9.2
Terms of Trade							
i) Advanced economies	0.8	0.2	-2.2	0.1	1.4	-0.6	-0.3
ii) Developing countries	-1.6	-1.4	6.2	3.8	-7.0	-0.3	1.4
VI. Current Account Balance							
(US \$ billion)							
i) Advanced economies	-264.6	-268.7	-246.1	-133.1	34.8	95.1	42.3
ii) Developing countries	-40.0	..	46.0	-18.5	-92.2	-60.5	-74.5
a) Developing Asia	11.6	22.5	35.9	46.7	47.0	8.8	-38.9

\$ Projections. .. Not available.

Central Government balance as percentage of GDP.

* Net capital flows comprise net direct investment, net portfolio investment, and other long and short-term net

investment flows including official and private borrowing.

** Emerging markets include developing countries, countries in transition, Korea, Singapore and Israel.

@ World trade in volume of goods and services in annual percentage change.

Source : World Economic Outlook, May 2001.

List of Abbreviations

ACL	– Audit Command Language
ACLF	– Additional Collateralised Lending Facility
ACU	– Asian Clearing Union
ADPC	– Asian Disaster Preparedness Centre
ADRs	– American Depository Receipts
ADs	– Authorised Dealers
AEZs	– Agricultural Export Zones
AHRD	– Academy of Human Resources Development
AIFIs	– All India Financial Institutions
AIRBEA	– All India Reserve Bank Employees’ Association
AIRBWF	– All India Reserve Bank Workers’ Federation
AL	– Autonomous Liquidity
ALBM	– Automated Lending and Borrowing Mechanism
ALBRS	– Automated Lending and Borrowing Mechanism under Rolling Settlement
ALM	– Asset Liability Management
AMCs	– Asset Management Companies
AMPIs	– Aggregated Micro-prudential Indicators
APEDA	– Agricultural and Processed Food Products Exports Development Authority
APL	– Above Poverty Line
ARI	– Agro Rural Industries
ARM	– Additional Resource Mobilisation
ASI	– Annual Survey of Industries
ATF	– Aviation Turbine Fuel
BCBS	– Basle Committee on Banking Supervision
BFS	– Board for Financial Supervision
BIFR	– Board for Industrial and Financial Reconstruction
BIS	– Bank for International Settlements
BIS	– Bureau of Indian Standards
BLESS	– Borrowing and Lending of Securities Scheme
BoP	– Balance of Payments
BPL	– Below Poverty Line
BRBNML	– Bharatiya Reserve Bank Note Mudran Ltd
BR/NA	– Bid amount Received to Notified Amount ratio
BSE Sensex	– Bombay Stock Exchange Sensitive Index
CA	– Certification Authority
CAD	– Current Account Deficit
CAMELS	– Capital Adequacy, Asset Quality, Management, Earning, Liquidity and Systems and Controls
CAS	– Central Accounts Section
CBI	– Central Bureau of Investigation
CCC	– Computerised Cheque Clearing
CCI	– Clearing Corporation of India
CCP	– Central Counter Party
CCTV	– Closed Circuit TV
CDBMS	– Central Database Management System

CDs	– Certificate of Deposits
CENVAT	– Central Value Added Tax
CFMS	– Centralised Funds Management System
CIB	– Credit Information Bureau
c.i.f.	– Cost, Insurance and Freight
CLF	– Collateralised Lending Facility
CMG	– Crisis Management Group
CNS	– Continuous Net Settlement
CoR	– Certificate of Registration
CPI	– Consumer Price Index
CPI-IW	– Consumer Price Index for Industrial Workers
CPLG	– Core Principles Liaison Group
CP	– Commercial Paper
CR	– Contingency Reserve
CRA	– Capital Reserve Account
CRAs	– Credit Rating Agencies
CRAR	– Capital to Risk-weighted Assets Ratio
CRF	– Calamity Relief Fund
CRR	– Cash Reserve Ratio
CSF	– Consolidated Sinking Fund
CSO	– Central Statistical Organisation
CVP	– Currency Verification and Processing
DAP	– Detailed Action Plan
DAPM	– Department of Administration and Personnel Management
DBS	– Department of Banking Supervision
DCA	– Department of Company Affairs
DDAS	– Diamond Dollar Account Scheme
DEPB	– Duty Entitlement PassBook
DES	– Duty Exemption Scheme
DFHI	– Discount and Finance House of India
DFID	– Department for International Development
DFRC	– Duty Free Replenishment Certificate
DGCI&S	– Directorate General of Commercial Intelligence and Statistics
DGFT	– Directorate General of Foreign Trade
DICGC	– Deposit Insurance and Credit Guarantee Corporation
DL	– Discretionary Liquidity
DNBS	– Department of Non-Banking Supervision
DNS	– Deferred Net Settlement
DRG	– Development Research Group
DRTs	– Debt Recovery Tribunals
DTA	– Domestic Tariff Area
DvP	– Delivery versus Payment
E/R	– Entity-Relationship
ECAIs	– External Credit Assessment Institutions
ECAs	– Export Credit Agencies
ECBs	– External Commercial Borrowings

ECS	– Electronic Clearing Services
EEFC	– Exchange Earners' Foreign Currency
EFC	– Eleventh Finance Commission
EFR	– Exchange Fluctuation Reserve
EFF	– Electronic Fund Facility
EFT	– Electronic Funds Transfer
EOUs	– Export-Oriented Units
EPCG	– Export Promotion Capital Goods
EPNs	– Entry Point Norms
ESOPs	– Employees' Stock Options Plan
ESS	– Early Severance Scheme
EXIM	– Export-Import
FAQs	– Frequently Asked Questions
FCA	– Foreign Currency Asset
FCNR (B)	– Foreign Currency Non- Resident Accounts (Banks)
FDI	– Foreign Direct Investment
FEMA	– Foreign Exchange Management Act
FERA	– Foreign Exchange Regulation Act
FID	– Financial Institutions Division
FIs	– Financial Institution(s)
FIFO	– First-in-First-Out
FIIIs	– Foreign Institutional Investors
FIMMDA	– Fixed Income Money Market and Derivatives Association
FIPB	– Foreign Investment Promotion Board
FRAs	– Forward Rate Agreements
FRBMB	– Fiscal Responsibility and Budget Management Bill
FTZs	– Free Trade Zones
FVCIIs	– Foreign Venture Capital Investors
FVCFI	– Foreign Venture Capital Fund Investors
GATT	– General Agreement on Tariff and Trade
GB	– Giga-Bytes
GCF	– Gross Capital Formation
GDCF	– Gross Domestic Capital Formation
GDP	– Gross Domestic Product
GDRs	– Global Depository Receipts
GDS	– Gross Domestic Saving
GFD	– Gross Fiscal Deficit
GoI	– Government of India
GRF	– Guarantee Redemption Fund
GSM	– Government Securities Market
HRIS	– Human Resources Information System
IAS	– Integrated Accounting System
IBRD	– International Bank for Reconstruction and Development
IBPS	– Institute of Banking Personnel Selection
ICAI	– Institute of Chartered Accountants of India
ICDs	– Inter-Corporate Deposits

ICOR	– Incremental Capital Output Ratio
IDBI	– Industrial Development Bank of India
IDRBT	– Institute for Development and Research in Banking Technology
IDFs	– Infrastructure Development Funds
IDFC	– Infrastructure Development Finance Company
IEBR	– Internal and Extra Budgetary Resources
IFCI	– Industrial Finance Corporation of India
IFRA	– Investment Fluctuation Reserve Account
IFTP	– Inter-Bank Funds Transaction Processor
IIBI	– Industrial Investment Bank of India Limited
IIP	– Index of Industrial Production
IIP	– International Investment Position
ILAF	– Interim Liquidity Adjustment Facility
IMF	– International Monetary Fund
IMDs	– India Millennium Deposits
INFINET	– INdian FINancial NETwork
IOSCO	– International Organisation of Securities Commissions
IRS	– Interest Rate Swaps
IPOs	– Initial Public Offerings
IRB	– Internal Rating Based
IRDA	– Insurance Regulatory and Development Authority
ISPs	– Internet Service Providers
IT	– Information Technology
IVCU	– Indian Venture Capital Undertaking
KCC	– Kisan Credit Cards
KVIBs	– Khadi and Village Industries Boards
KVIC	– Khadi and Village Industries Commission
LAF	– Liquidity Adjustment Facility
LIBOR	– London Inter-Bank Offer Rate
LIC	– Life Insurance Corporation of India
LCs	– Letter of Credits
LPA	– Long Period Average
LRF	– Last Reporting Friday
M&As	– Mergers and Acquisitions
MAI	– Market Access Initiative
M ₃	– Broad Money
MBs	– Mega-Bytes
MCFS	– Modified Carry Forward System
MDDB	– Multi-Dimensional Database
MEIs	– Macro-Economic Indicators
MFs	– Mutual Funds
MFSS	– Mutual Fund Services System
MICR	– Magnetic Ink Character Recognition
MIS	– Management Information System
MISU	– Market Intelligence and Surveillance Unit
MOLAP	– Multidimensional OLAP

MoUs	– Memoranda of Understanding
MPIs	– Macro-Prudential Indicators
MRTS	– Mass Rapid Transport Systems
MSP	– Minimum Support Price
NABARD	– National Bank for Agriculture and Rural Development
NAS	– National Accounts Statistics in India
NAV	– Net Asset Value
NBC	– Net Bank Credit
NBFCs	– Non-Banking Financial Companies
NCC	– National Clearing Cell
NCCF	– National Calamity Contingency Fund
NCMC	– National Crisis Management Committee
NDA	– Net Domestic Assets
NDS	– Negotiated Dealing System
NEER	– Nominal Effective Exchange Rate
NFA	– Net Foreign Assets
NHB	– National Housing Bank
NI	– Negotiable Instruments
NIC	– National Industrial Classification
NM ₃	– New Broad Money Aggregate
NoF	– Net Owned Funds
NPAs	– Non-Performing Assets
NRERA	– Non-Resident External Rupee Account
NRIs	– Non-Resident Indians
NR(NR)RD	– Non Resident (Non Repatriable) Rupee Deposit
NSCCL	– National Securities Clearing Corporation Limited
NSE	– National Stock Exchange
NSE-MIBOR	– National Stock Exchange- Mumbai Inter-Bank Offer Rate
OCBs	– Overseas Corporate Bodies
ODs	– Overdrafts
OJT	– On the Job Training
OLAP	– On Line Analytical Processing
OMO	– Open Market Operations
OMSS	– Open Market Sales Scheme
OSMOS	– Off-site Monitoring and Surveillance System
OWS	– Other Welfare Schemes
PCA	– Prompt Corrective Action
PCBs	– Primary Co-operative Banks
PDAI	– Primary Dealers’ Association of India
PDLs	– Primary Dealers’ Liquidity Support
PDO	– Public Debt Office
PDs	– Primary Dealers
PEER	– Programme for Enhancement of Emergency Response
PKI	– Public Key Infrastructure
PLRs	– Prime Lending Rates
POL	– Petroleum, Oil and Lubricants

PSBs	– Public Sector Banks
PSRS	– Prudential Supervisory Reporting System
PSEs	– Public Sector Enterprises
PSUs	– Public Sector Undertakings
PwC	– Pricewaterhouse Coopers
QIBs	– Qualified Institutional Buyers
QRs	– Quantitative Restrictions
RATE	– Risk Assessment, Tools of Supervision, Evaluation
RBI	– Reserve Bank of India
RBS	– Risk Based Supervision
RD	– Revenue Deficit
RE	– Revised Estimates
REC	– Rural Electrification Corporation
REER	– Real Effective Exchange Rate
RIBs	– Resurgent India Bonds
RIDF	– Rural Infrastructure Development Fund
RNBCs	– Residuary Non-Banking Companies
ROLAP	– Relational OLAP
RRA	– Regulations Review Authority
RTGS	– Real Time Gross Settlement
SACs	– Settlement Advisory Committees
S&P	– Standard and Poor
SBI	– State Bank of India
SCBs	– Scheduled Commercial Banks
SCRA	– Securities Contract (Regulations) Act
SDRs	– Special Drawing Rights
SDDS	– Special Data Dissemination Standard
SEBI	– Securities and Exchange Board of India
SEBs	– State Electricity Boards
SERC	– State Electricity Regulatory Commission
SEZs	– Special Economic Zones
SFCs	– State Financial Corporations
SFMS	– Structured Financial Messaging System
SGF	– Settlement Guarantee Fund
SGL	– Subsidiary General Ledger
SHGs	– Self-Help Groups
SIA	– Secretariat for Industrial Approval
SICA	– Sick Industrial Companies (Special Provisions) Act
SIDBI	– Small Industries Development Bank of India
SLBC	– State Level Bankers Committee
SRS	– Systems Requirements Specification
SSIs	– Small Scale Industries
SSS	– Securities Settlement System
SSSBE	– Small Scale Service/ Business Enterprises
STCI	– Securities Trading Corporation of India
STRIPS	– Separate Trading of Registered Interest and Principal of Securities

TES	– Trade Execution System
TFP	– Total Factor Productivity
TOT	– Terms of Trade
TPDS	– Targeted Public Distribution System
TRIPs	– Trade Related Intellectual Property Rights
TRQ	– Tariff Rate Quota
UCBs	– Urban Co-operative Banks
UCPDC	– Uniform Customs and Procedures for Documentary Credit
UNDP	– United Nations Development Project
UTI	– Unit Trust of India
VAR	– Vector Autoregression
VCF	– Venture Capital Fund
VRS	– Voluntary Retirement Scheme
WDM	– Wholesale Debt Market
WEO	– World Economic Outlook
WMA	– Ways and Means Advances
WPI	– Wholesale Price Index
WTO	– World Trade Organisation
YTM	– Yield-to-Maturity
ZTCs	– Zonal Training Centres

This Report can also be accessed on Internet URL : www.rbi.org.in