CONTENTS

MID-TERM REVIEW OF MONETARY AND CREDIT POLICY FOR THE YEAR 2001-2002

The Statement on Mid-term Review of Monetary and Credit Policy consists of three parts: I. Mid-term Review of Macroeconomic and Monetary Developments in 2001-02; II. Stance of Monetary Policy for the Second Half of 2001-02; and III. Financial Sector Reforms and Monetary Policy Measures.

I. Mid-term Review of Macroeconomic and Monetary Developments in 2001-02

Domestic Developments

2. The annual Statement on monetary and credit policy, released on April 19, 2001 projected a GDP growth of 6.0 to 6.5 per cent for the year 2001-02. This projection was based on the assumptions of a reasonable monsoon, good performance of exports and a revival of the industrial sector beginning second quarter of the year. As per the latest information available from the India Meteorological Department, the behaviour of the South-West monsoon this year has been better than last two years, with 30 out of 35 sub-divisions showing normal or excess rainfall. According to the current estimates of the Ministry of Agriculture, *kharif* output this year is expected to increase by 2.5 million tonnes to 105.6 million tonnes. Assuming a normal North-East monsoon, agricultural growth in 2001-02 is expected to be significantly higher than the previous year.

3. While agricultural performance is encouraging, the position regarding revival of industrial sector and export growth in the first half of the current year is not favourable. According to the latest estimates released by the Central Statistical Organisation, growth rate of industrial production during April-August 2001 was lower at 2.2 per cent as against 5.6 per cent in the corresponding period of the previous year. The deceleration in growth was observed across the sectors. Manufacturing sector recorded a much lower growth rate of 2.5 per cent as compared with 6.1 per cent in the previous year. While basic goods, intermediate goods and consumer durables have shown lower growth during April-August 2001 as compared with the corresponding period of the previous year, capital goods sector continues to show a negative growth rate (- 8.0 per cent as against 4.3 per cent) reflecting a sluggish investment demand. The performance of the infrastructure industries, a stimulant for industrial activity, also remained at a low key. The composite index of six infrastructure industries, *viz.,* electricity, coal, steel, cement, crude petroleum and refinery products registered a substantially lower growth of 1.2 per cent during April-August 2001 as against 6.9 per cent in the corresponding period of the previous year. While cement, electricity and petroleum refinery products recorded lower growth rates than those in the

corresponding period of the previous year, coal and crude petroleum showed negative growth rates. Export growth has also been negative. According to the latest information available, exports in US dollar terms during the period April-August 2001 declined by 2.3 per cent against a growth of 21.1 per cent in the corresponding period last year.

4. Taking into account the positive developments regarding the likely rate of growth in agriculture during the current year on the one hand, and the unfavourable behaviour of industrial and export sectors on the other, on balance, the projection of 6.0 to 6.5 per cent growth rate for the year 2001-02 now appears optimistic.

5. In view of the global uncertainty, and the impact of global slowdown on exports as well as domestic growth, a firm projection of revised growth rate for the year as a whole is difficult. According to the latest International Monetary Fund (IMF) projections, which may be revised downward again, the global growth rate during the current year is expected to be of the order of 2.6 per cent and almost all developing as well as industrialised countries are likely to show a substantially lower growth than projected a few months ago. Recent growth projections for the Indian economy made by the IMF, other international agencies as well as domestic research and monitoring agencies have also ranged widely from 4.5 to over 6.0 per cent. Balancing various factors, and assuming no further serious disruption in the world economic environment, at this stage, a projection in the range of 5.0 to 6.0 per cent growth rate in the current year may be reasonable for the purpose of credit and monetary management. India is likely to be one of the very few countries in the world which would show a growth rate of this order in the current year.

6. The relatively sombre outlook for industrial growth is reflected in the credit flow during the period April-October 5, 2001. The expansion of bank credit and other flows to the commercial sector from the banking system remained sluggish due to subdued industrial growth and depressed investment demand. Scheduled commercial banks' credit increased by 6.1 per cent (Rs.31,104 crore) upto October 5, 2001 as against an increase of 9.7 per cent (Rs.42,211 crore) in the corresponding period of the previous year. Food credit increased by Rs.10,211 crore as against Rs.7,193 crore in the previous year reflecting higher procurement operations. The increase in non-food bank credit by 4.4 per cent (Rs.20,894 crore) was lower as against an increase of 8.5 per cent (Rs.35,018 crore) in the corresponding period of the previous year. In late September and early October 2001, however, some pick-up in non-food bank credit is discernible.

7. The increase in scheduled commercial banks' investments in bonds/debentures/shares of public sector undertakings and private corporate sector, commercial paper (CP), etc., was 4.3 per cent (Rs.3,333 crore) (upto September 21, 2001) as compared with an increase of 4.6 per cent (Rs.2,873 crore) in the corresponding period of the previous year. Together with such investments, the increase

in total flow of resources from scheduled commercial banks to the commercial sector was only 4.4 per cent (Rs.24,227 crore) as against 8.0 per cent (Rs.37,891 crore) in the corresponding period of the previous year. The year-on-year growth in resource flow was 12.0 per cent as against 20.2 per cent a year ago.

8. Scheduled commercial banks' investments in instruments issued by financial institutions and mutual funds this year declined by Rs.300 crore as against a decline of Rs.255 crore last year. Total resource flow to the commercial sector including capital issues, Global Depository Receipts (GDRs) and borrowings from financial institutions was Rs.64,734 crore during the financial year so far as compared with Rs.83,178 crore in the previous year. Most of the debt issues by both private corporates and public sector units are on private placement basis which has caused some regulatory concerns. (This issue is addressed in Part III of this Review).

9. The feedback on credit flows received from banks reveals that at a disaggregated level during April-August 2001, there was an increase in scheduled commercial banks' credit to agriculture, housing, consumer durables, personal loans, tourism, other textiles, pharmaceuticals, automobiles, construction and infrastructure. On the other hand, decline in credit was observed in petroleum, coal, cotton textiles, jute textiles, tobacco, vegetable oils, all engineering and wholesale trade.

10. In the current financial year upto October 5, 2001, money supply (M_3) increased by 8.2 per cent (Rs.1,08,102 crore) as compared to 8.3 per cent (Rs.93,762 crore) in the corresponding period of the previous year. On an annual basis, growth in M_3 at 16.6 per cent was higher than the growth of 15.3 per cent a year ago. Aggregate deposits of scheduled commercial banks increased by 9.1 per cent (Rs.87,895 crore) as compared with an increase of 8.9 per cent (Rs.72,687 crore) in the corresponding period of the previous year. On an annual basis, growth in aggregate deposits at 18.6 per cent was higher than that of 15.4 per cent a year ago. In view of the adverse developments in the other segments of the financial market, the relative attractiveness of bank deposits seems to have increased. If the surge in deposit growth continues, it may pose a challenge to the banking system in deploying resources, particularly in the context of sluggishness in credit and investment demand.

11. Reserve money increased by 1.8 per cent (Rs.5,516 crore) in the current financial year upto October 12, 2001 as compared to an increase of 1.6 per cent (Rs.4,427 crore) in the corresponding period of the previous year. On the sources side, while net RBI credit to the Central Government showed a modest increase of 4.5 per cent (Rs.6,552 crore) as compared to an increase of 14.9 per cent (Rs.20,859 crore) in the corresponding period of the previous year, RBI's net foreign exchange assets increased significantly by 9.9 per cent (Rs.19,531 crore) in sharp contrast to a decline of 2.1 per cent (- Rs.3,469 crore) during the corresponding period of the previous year. RBI's subscriptions to primary issues of

Central Government dated securities (Rs.21,679 crore) was more than offset by net open market sales (Rs.22,275 crore). There was also reduced reliance on standing facilities due to comfortable liquidity conditions. On the components side, while currency in circulation increased by 5.7 per cent (Rs.12,461 crore) as compared to 6.2 per cent (Rs.12,138 crore), bankers' deposits with RBI declined by 8.3 per cent (- Rs.6,766 crore) as against a decline of 9.8 per cent (- Rs.7,871 crore) reflecting the impact of reduction in Cash Reserve Ratio (CRR). On balance, the reserve money expansion is expected to remain moderate during 2001-02.

12. Annual inflation, as measured by variations in Wholesale Price Index (WPI), on a point-to-point basis, on October 6, 2001 was 3.2 per cent as against 7.4 per cent a year ago. Annual inflation, as measured by Consumer Price Index (CPI) for industrial workers on a point-to-point basis, was 5.2 per cent in August 2001 as against 4.0 per cent a year ago.

13. The contribution to inflation emanating from 'fuel, power, light and lubricants' sub-group (weight 14.2) was moderate at 5.7 per cent this year (compared to 31.4 per cent last year). The annual inflation rate, excluding the impact of price increases of this energy related sub-group was at 2.6 per cent. While prices of primary articles (weight 22.0) recorded an increase of 4.6 per cent, manufactured products (weight 63.7) registered an increase of 1.8 per cent. Among primary articles, the increase in prices was concentrated in a few articles such as fruits and vegetables, oilseeds and pulses. In manufactured products, the increase in prices of edible oils and cement was relatively high. The inflation outlook for the year appears comfortable as agricultural growth prospects remain positive, and foodgrain stocks are very high.

14. The Union Budget for 2001-02 placed the net and gross market borrowings of the Central Government respectively at Rs.77,353 crore and Rs.1,18,852 crore. Upto October 20, 2001, the Central Government completed net market borrowings of Rs.66,647 crore and gross borrowings of Rs.96,251 crore. The government market borrowing programme during 2001-02 has been conducted by elongating the maturity pattern and at a lower cost. The weighted average maturity of borrowings was 13.9 years this year as against 10.6 years last year. The weighted average yield on government borrowings through dated securities was lower by nearly 100 basis points at 9.96 per cent this year as against 10.95 per cent last year. In its debt management, RBI continued to combine auction issues with acceptance by private placement of dated securities consistent with market conditions. The total private placement of dated securities with RBI during the current year so far was Rs.21,679 crore. In order to neutralise the monetary impact of private placements, RBI conducted outright open market operations (OMO) sales of government securities to the tune of Rs.27,359 crore (upto October 20, 2001).

15. Gross fiscal deficit of the Central Government at Rs.56,079 crore upto August 2001 was higher by about 54 per cent over the corresponding period of last year and constituted about one half of the budget estimate for the current year. Similarly, revenue deficit (Rs.43,640 crore) accounted for above 55 per cent of the budget estimate for the year as a whole. Gross fiscal deficit as a proportion of GDP so far has been higher at 2.3 per cent as against 1.7 per cent in the corresponding period of the previous year.

16. A steady increase in net foreign currency assets of the Reserve Bank combined with subdued real economic activity created a situation of excess liquidity during most part of the first half of the year. The Reserve Bank, therefore, had to actively manage liquidity not only through outright OMO sales of securities but also through its daily Liquidity Adjustment Facility (LAF). The average daily absorption through repo transactions under LAF amounted to about Rs.3,600 crore.

17. Scheduled commercial banks' investments in government securities this year (upto October 5, 2001) has been significantly large at Rs.43,664 crore as compared with Rs.25,636 crore in the corresponding period of the previous year. Commercial banks already hold government securities much in excess of the prescribed Statutory Liquidity Ratio (SLR), to the extent of Rs.1,29,450 crore, constituting 36.3 per cent of NDTL.

18. The overall interest rate structure which had come down substantially in the last two years, continued to show a softening trend. The prime lending rates (PLRs) of public sector banks, which were ranging between 11.75 and 13.00 per cent in September 2000, softened to 10.0-13.0 per cent in March 2001 and further to 10.0-12.5 per cent by mid-October 2001. As banks are permitted to lend to exporters and their prime customers at sub-PLR rates, the cost of bank borrowings to such corporates has come down even further. Long-term domestic deposit rates of public sector banks declined from 10.5 per cent in March 2001 to 9.5 per cent by mid-October 2001; however, at the shorter end there was a marginal increase by 25 basis points.

19. As announced in the annual policy Statement of April 2001, during the first half of the fiscal year, the Reserve Bank continued to provide appropriate liquidity through its repo operations. Barring a few days, the overnight call money rate remained around 7.0 per cent during the entire period, and the overall easy liquidity conditions were reflected in the response to daily repos conducted by RBI. The interest rate environment also remained fairly soft with yields on 10-year Government paper declining by about 100 basis points (on top of a decline of about 170 basis points in the previous two years). The weighted average discount rate on CP of 61 to 90-day maturity declined from 11.74 per cent in end-September 2000 to 9.71 per cent in end-March 2001 and further to 8.58 per cent by end-September 2001. This constitutes a decline of as much as 3.16 percentage points in the discount rate on such paper over the past year.

External Developments

20. The world economy, which had slowed down considerably during the first eight months of the year 2001, experienced one of its worst shocks in the aftermath of the September 11 events in the US. All segments of the financial markets, particularly the equity markets, were badly affected. While global financial markets have stabilised in the past four weeks, the outlook for growth and recovery in the world economy remains highly uncertain. The outlook for growth in major industrialised countries as also the emerging economies has become adverse with estimated growth rates being scaled down. According to the latest World Economic Outlook brought out by the IMF, the downturn in the emerging markets of Asia is likely to continue for a longer period than that anticipated earlier. The advanced economies are expected to grow by only 1.3 per cent during 2001 as compared with 3.8 per cent last year. However, according to the IMF, India and China are expected to be less affected by this downturn. India is relatively insulated from this global slowdown because of its lower share of trade in GDP and service oriented and cost efficient information technology sector. Since these growth projections were made before September 11, it is likely that actual global growth will be even less than projected. The chances of world economy sliding into a recessionary phase are now believed to be much greater than that a few weeks ago.

21. India was also affected by the global economic slowdown and instability in financial markets. Equity markets, which had shown a fall of about 360 points between end-March and end-August 2001, declined further, and BSE Sensex, the Index of the Mumbai Stock Exchange, touched an eight year low on September 21, 2001. It has since gained 417 points to reach 3017 by October 19, 2001. There was net capital outflow of Foreign Institutional Investors (FIIs) by about US $ 179 million in September 2001. Foreign exchange markets also became volatile with the rupee showing a depreciation of 1.3 per cent *vis-à-vis* US dollar during the 10-day period of September 11-20, 2001. The consequent uncertainties affected the bond market, particularly the government securities market.

22. Adverse external developments after September 11, and their effect on India's financial markets, necessitated a quick response to provide appropriate liquidity and overall comfort to the markets. In order to stabilise domestic financial markets, RBI announced the following measures during the period September 15-25, 2001:

- On September 15, 2001, despite some emerging pressures in the forex market, RBI announced that it does not intend to presently shift its monetary policy stance in regard to keeping interest rates stable with adequate liquidity. RBI further assured the markets that it will be prepared to sell foreign exchange directly or indirectly, if it considers it necessary to do so, to meet any unusual supply-demand gap in view of the prevailing uncertainties.

- In view of the extraordinary circumstances in the government securities market, RBI opened a purchase window for select government securities on an auction basis.
- On September 20, 2001, in consultation with the Government of India, Indian companies were permitted to increase the FII investment limit upto the sectoral cap/statutory ceiling, as applicable.
- With effect from September 22, 2001, banks were allowed to finance stock brokers for margin trading for an initial period of 60 days (*i.e.,* up to November 22, 2001) in actively traded scrips which form part of the National Stock Exchange (NSE) Nifty and BSE Sensex within the overall existing ceiling of bank exposure to capital market.
- On September 24, 2001, in consultation with the Government of India, a special financial package was announced, for large value exports of six select products, which were internationally competitive and had high value addition.
- With effect from September 26, 2001, interest rates charged by scheduled commercial banks on pre-shipment and post-shipment rupee export credit were reduced by 1.0 percentage point for a period of six months (upto March 31, 2002).

23. The above measures had the desired effect of moderating possible panic reactions and reducing volatility in financial markets, particularly in money, forex and government securities markets. While financial markets are generally stable, liquidity is adequate, and interest rate environment is favourable, so far, there is no perceptible upturn in industrial output. This continues to be a matter of serious concern. It is to be hoped that as global markets gain back momentum after some time, it will have a favourable impact on the investment climate in India also.

24. The annual monetary policy Statements of last two years as well as mid-term Reviews have attempted to highlight the main lessons emerging from our experience in managing the external sector during periods of external and domestic uncertainties. The recent experience has once again highlighted the need for continuous vigilance and the importance of building adequate safety nets to withstand the effects of unexpected shocks and market uncertainties. In this context, India's exchange rate policy of focusing on managing volatility with no fixed rate target, while allowing the underlying demand and supply conditions to determine the exchange rate movements over a period in an orderly way, has stood the test of time. Despite several unexpected external and domestic developments, India's external situation has remained satisfactory. RBI will continue to follow the same approach of watchfulness, caution and flexibility in regard to the forex market. It will continue to monitor closely, as in the past, the developments in the financial markets at home and abroad, and

carefully coordinate its market operations with appropriate monetary, regulatory and other measures as considered necessary from time to time.

25. India's foreign exchange reserves have increased sharply by over US $ 10 billion from US $ 34.9 billion as on October 20, 2000 to US $ 45.1 billion by October 19, 2001. India's sustained efforts to build an adequate level of foreign exchange reserves in the last few years have also been fully vindicated by recent developments. As pointed out in previous policy Statements, 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 and other requirements. 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 investment and other types of capital flows; the unanticipated pressures on the balance of payments arising out of external shocks (such as, the impact of the East Asian crisis in 1997-98 or increase in oil prices in 1999-2000 or recent events in the US); and movements in the repatriable foreign currency deposits of Non-resident Indians (NRIs). Taking these factors into account, India's foreign exchange reserves are at present comfortable. However, there can be no cause for complacency. We must continue to ensure that, leaving aside short-term variations in reserve levels, the quantum of reserves in the long run is in line with the rate of growth in the economy, the share of external sector in the economy and the size of risk-adjusted capital flows. This will provide us with greater security against unfavourable or unanticipated developments of the type witnessed recently as well as during earlier years.

26. On account of global slowdown, exports have not done well during the current year. India's exports during the first five months of the current financial year at about US $ 17.1 billion registered a decline of 2.3 per cent over the corresponding period of the previous year. Imports increased by 2.5 per cent as against an increase of 13.8 per cent last year. Trade deficit in the first five months of the current financial year at US $ 4.6 billion was higher than that of US $ 3.7 billion in the same period last year. Oil imports declined by 6.1 per cent in US dollar terms as compared with a large increase of 78.7 per cent in the corresponding period of the previous year on account of moderation of international oil prices. Non-oil imports increased by 6.7 per cent during April-August 2001 as against a decline of 3.2 per cent in the corresponding period of the previous year. While the surplus on the non-oil account declined from US $ 2.9 billion to US $ 1.1 billion, the deficit on oil account decreased from US $ 6.5 billion during April-August 2000 to US $ 5.7 billion during April-August 2001. For the rest of the year, there is some uncertainty about the likely course of international oil prices. If the average oil prices for the rest of the financial year are assumed

to be at US $ 25.0 per barrel, the oil import bill for 2001-02 will be in the range of US $ 17.5-18.0 billion as against actual imports of US $ 15.6 billion in the previous year. However, on present reckoning, it is expected that the current account deficit for the year 2001-02 will still be well below 2.0 per cent of GDP and no significant pressures on balance of payments are expected on this account.

27. A strong effort to accelerate the growth of exports is essential for long-term viability of balance of payments as well as for generation of income and employment in the economy. As mentioned earlier, as part of the efforts to provide support to exporters during the prevailing period of global uncertainty, the Reserve Bank advised reduction in ceiling interest rates on rupee export credit by 1.0 percentage point across the board for a period of six months. It may be emphasised that so far as interest cost to the exporters is concerned, taking into account forward premia, the effective interest cost on six-month rupee export credit is only 3.0-4.0 per cent (assuming a forward premia of 5.0 per cent), which is internationally competitive. Similarly, exporters are free to avail of foreign currency loans in the currency of their choice at internationally competitive rates. Foreign currency loans from banks in India can be availed of by exporters at LIBOR plus a maximum of 1.0 percentage point.

28. In the past three years, several measures have also been introduced to ensure timely delivery of credit to exporters at reasonable cost and removal of procedural hassles. It was announced in the last annual policy Statement that a survey of exporters' satisfaction would be conducted through an independent agency. Accordingly, the work of the survey has been entrusted to National Council of Applied Economic Research (NCAER), New Delhi. NCAER has launched the survey on August 31, 2001 and has started interacting with bank officials and exporters/export organisations at various centres in the country.

29. In the recent period, procedures for financial transactions such as remittances, investments and maintenance of bank accounts, etc., for non-residents have been considerably simplified. Foreign direct investment (FDI) is permitted under the automatic route for most activities except in certain circumstances and for a very small negative list. Indian companies are allowed to increase the FII investment limit upto the sectoral caps/statutory ceilings as applicable. A number of steps have been taken to improve liquidity in the American Depository Receipt/ Global Depository Receipt (ADR/GDR) market and to give opportunity to Indian shareholders to divest their shareholding in the ADR/GDR market abroad. Indian companies wishing to make acquisitions of foreign companies or direct investment abroad in Joint Ventures/ Wholly Owned Subsidiaries can now invest upto US $ 50 million on an annual basis through automatic route with additional block allocation of foreign exchange subject to certain conditions.

30. Over a period, considerable flexibility has been given to the corporates to hedge their

forex exposure in the market. Instruments available to the corporates for hedging their exchange risks include forward cover, currency options, foreign currency-rupee swaps, hedging of the loan exposures, etc. Banks are also allowed to hedge their asset-liability portfolio, after obtaining necessary policy approval in this regard from their top management.

31. It is, however, observed that sometimes a noticeable portion of the corporate foreign currency commitments tend to remain unhedged by the corporates on the basis of their perceptions of the market and these could impact the overall financial status of the corporates under severe uncertainties. It is, therefore, desirable for banks which have large exposures to such corporates to put in place a system for monitoring such unhedged external exposures. Illustratively, banks could consider introducing a periodical review of the unhedged portion of foreign currency exposures of the corporates whose total exposure is relatively large (say, above US $ 25 million or so) through a suitable reporting system.

32. The Reserve Bank will continue with its efforts to simplify procedures, reduce documentation requirements and further liberalise opportunities for productive investment in India by NRIs and others and by Indian corporates/entities abroad. Further suggestions from experts, corporates and market participants in these areas are welcome, and can be sent by e-mail at **helpnri@rbi.org.in** .

II. Stance of Monetary Policy for the Second Half of 2001-02

33. The annual policy Statement of April 2001 had indicated that under normal circumstances and barring emergence of any adverse and unexpected developments in domestic or external sectors, the overall stance of monetary policy for 2001-02 will be:

- Provision of 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, to continue the present stable interest rate environment with a preference for softening to the extent the evolving situation warrants.

34. During the first half of the year, as pointed out in the previous section, in the conduct of monetary policy, it was feasible to maintain adequate liquidity in the market, primarily through flexible operation of repos and reverse repos under LAF combined with OMO, when necessary. Notwithstanding a high level of market borrowing by the Government, it was also feasible to maintain a stable interest rate environment, with further softening of interest rates.

35. At the short end of the market, the average call money rate came down sharply from 8.6 per cent in early-April to 7.0 per cent in mid-October 2001. During this period, the

LAF repo rate also came down from 7.0 per cent to 6.5 per cent. The CRR was reduced by 50 basis points to 7.5 per cent, effective May 19, 2001, augmenting lendable resources of the banking system by Rs.4,500 crore. Responding to these operations, the interest rates in other money market instruments also showed a declining trend. For example, the primary yield on 91-day Treasury Bills declined by 150 basis points from 8.5 per cent to 7.0 per cent between April and mid-October 2001. During the same period, primary yield on 364-day Treasury Bills fell by 168 basis points from 8.85 per cent to 7.17 per cent. The discount rates on CP also showed a similar trend. At the long end of the market, the secondary market yields on government paper in the range of 10-20 years have softened from 10.08-10.70 per cent in April to 9.12-9.92 per cent by mid-October 2001.

36. The decline in inflation rate since the mid-1990s, despite occasional supply and external shocks has had a positive impact on inflation expectations. Because of this, it has been possible to reduce nominal interest rates on a sustained basis despite a high level of fiscal deficit and other structural rigidities. While the risks of inflation are relatively low, as of now, in the context of ample liquidity already available in the system, RBI will continue to carefully manage the liquidity with a judicious mix of the range of instruments available with it.

37. Despite several uncertainties, the fundamentals of the economy as reflected in moderate inflation, stable and low interest rates, high foreign exchange reserves, large foodgrain stocks and competitive advantage of information technology related industries, are still strong. The prospects for agricultural growth during this year remain positive. Global and domestic inflationary outlook currently continues to be favourable. It is, therefore, proposed to continue with the overall stance of monetary policy announced in the April Statement for the remaining half of the current year and ensure that all legitimate requirements for credit are met consistent with price stability. Unless circumstances change unexpectedly, RBI will also endeavour to maintain the current interest rate environment.

38. The Bank Rate will continue to remain the principal signaling instrument in so far as RBI is concerned, providing directional guidance to the extent feasible, to general level of interest rates. The LAF rates would operate around the Bank Rate, with a flexible corridor, as more active operating instruments for day-to-day liquidity management and steering short-term interest rates.

39. While all efforts will be made to maintain the current stance of monetary policy, two caveats are necessary in order to ensure that banks and market participants do not take too complacent a view on the current monetary and interest rate environment. First, in their portfolio management, banks, primary dealers (PDs) and other market participants must explicitly take into account that the interest rate environment can change quite dramatically within a very short period of time. The substantial decline in interest rates in the last couple of years has resulted in

large gains, realised and unrealised, to holders of medium and long-term securities. It is of utmost importance that these gains are not frittered away or used for illiquid market operations. The time when market conditions are favourable is also the time to build adequate reserves to guard against any possible reversal of the interest rate environment in future due to unexpected developments. Difficulties faced by banks, PDs and other market operators in the first quarter of the last fiscal year, i.e., 2000-01, when interest rates had to be increased by RBI (in order to check volatility in the foreign exchange market consequent upon sharp and frequent increases in the international interest rates) provides a valuable lesson in this regard.

40. Second, it needs to be recognised that in view of certain structural characteristics of our financial system, the scope for further softening in lending rates by banks and other financial intermediaries is limited. Following are some of the factors which reduce downward flexibility in the interest rate structure in India:

- Banks, particularly public sector banks, continue to be the primary mobilisers of domestic financial savings (in addition to Provident Funds, Small Saving Schemes, and Life Insurance Corporation). Holders of term deposits in banks generally belong to fixed income groups and expect a reasonable nominal interest rate, in excess of the long-term rate of inflation. The recent reductions in deposit rates and return on small savings have caused widespread concern among depositors because of lack of other risk-free avenues for financial savings. This constrains the ability of banks to effect further reduction in their lending rates without affecting their deposit mobilisation and the growth of financial savings over the medium-term.
- Banks have been given the freedom to offer "variable" interest rates on longer-term deposits. However, for various reasons, the preference of depositors as well as the traditional practice with banks tended to favour fixed interest rates on term deposits. This practice has effectively reduced the flexibility that banks have in lowering their lending rates in the short run, since the rates on the existing stock of deposits cannot be lowered.
- For public sector banks, the average cost of funds is over 7.0 per cent, and for many private sector banks, the average cost is even higher. The non-interest operating expenses generally work out to 2.5 to 3.0 per cent of total assets, putting pressure on the required spread over cost of funds. Relatively high overhang of Non-Performing Assets (NPAs) pushes up further the lending rates.
- There is a persistent and large volume of market borrowing requirements of the Government giving an upward bias to the interest rate structure.

- In view of the above rigidities in cost, spread, and tenor of deposits, the link between variation in the RBI's Bank Rate and the actual lending rates of banks, particularly at lower levels, is not as strong in India as in industrialised countries. PLRs of banks for commercial credit are entirely within the purview of the banks, and are not set by the Reserve Bank. Decisions in regard to interest rates, therefore, have to be taken by banks themselves in the light of various factors, including their own cost of funds, their transaction costs, interest rates ruling in the non-banking sector, etc.

41. It is necessary to continue with the on-going efforts to reduce the impact of the above structural constraints on the flexibility of our interest rate structure. Recently, the Government has taken important steps to reduce the prevailing interest rates on contractual savings like Provident Funds and National Saving Schemes. A more sustainable and flexible interest rate regime for contractual savings has also been recommended by the Expert Committee set up by the Government (Chairman: Dr. Y.V. Reddy). It will also be highly desirable for banks to move over to a variable interest rate structure on longer-term deposits as early as possible. Since interest rates could vary in both directions, depending on the phase of the business cycle and inflationary outlook, a variable interest rate regime on long-term deposits does not necessarily imply lowering of the average interest rate earned by depositors over a period of time (compared with a fixed rate regime, which favours old deposits over new deposits when interest rates are coming down, and *vice versa* when rates are moving in the opposite direction). In addition, banks have to put in their best efforts to reduce their operating costs over time by improving productivity and increasing their volume of lending.

III. Financial Sector Reforms and Monetary Policy Measures

42. The Reserve Bank has, in recent years announced various structural measures to strengthen the financial system and improve the functioning of the different segments of financial markets. The annual policy Statements and the mid-term Reviews assess the progress in these areas and also propose appropriate additional measures as necessary, in the light of experience and after appropriate consultations with banks, other financial institutions, and experts. As financial markets in the last few months have been affected by several uncertainties and some turbulence, it may be useful to review the impact of recent developments on long-term objectives of financial sector reforms before we deal with some of the specific measures.

Recent Financial Market Developments

43. Developments in equity market since March 2001, and involvement of a few banks in providing substantial support to a few stock-

broking entities, contrary to RBI guidelines and normal prudential requirements, have raised concerns regarding the potential vulnerability in India's financial sector. Fortunately, so far as the banking sector is concerned, the unethical and unwarranted lending practices on a significant scale were confined to only a few relatively small private sector banks, and one fairly large Urban Co-operative Bank (UCB). As such, it was possible, through temporary and limited liquidity support measures, to avoid the "contagion" spreading from their activities in the equity market to the banking sector as a whole or to other important segments of the financial sector, particularly the money and government securities markets. Nevertheless, the recent experience in equity market, and its aftermath, have thrown up new challenges for the regulatory and supervisory system as well as for standards of corporate governance in banks.

44. First and foremost, it is essential to enforce all prudential norms and strengthen them further in order to minimise the possibility of contagion spreading from one segment of the market to another or from one defaulting institution to a number of inter-connected financial entities. The scope for "regulatory forbearance" has to be minimised in the event of emerging weaknesses in a financial institution (irrespective of whether its ownership is co-operative, public or private). In the past few years, the Reserve Bank has introduced a series of prudential measures for capital adequacy, income recognition and provisioning in respect of NPAs, disclosure and transparency in accounting, and risk containment. Certain additional legislative and other measures are also under consideration of the Government. It is of utmost importance that all deposit-taking financial intermediaries – irrespective of whether they are in the public sector or in the private sector, whether they are commercial banks or co-operative banks, whether they are non-banks or financial institutions – should fully adhere to the prudential guidelines.

45. The Reserve Bank recognises the need to strengthen its monitoring system for enforcement of prudential and risk management guidelines, and for taking swift action, wherever possible under relevant laws, against defaulting entities. Measures for off-site monitoring and inspection, particularly in respect of weak banks and co-operative institutions, have already been introduced. RBI proposes to further strengthen its monitoring and supervisory machinery and procedures, in consultation with banks and other financial institutions, as necessary.

46. As pointed out in the annual policy Statement of April 2001, the prudential norms and the regulatory system prescribed for UCBs have traditionally been relatively soft, in comparison with those for commercial banks. This is partly on account of historical reasons, and partly due to their size being generally small and the preferential treatment of co-operative structure in general. At present, three authorities are involved in regulatory and promotional aspects concerning UCBs – the Central Government (in case of banks having multi-state presence), State Governments and

RBI. At times, this results in overlapping jurisdiction and difficulties in carrying out administrative/prudential measures with the required speed and stringency. The recent experience has also shown that irresponsible and unethical behaviour on the part of even a few co-operative banks in the country can have some contagion effect beyond the particular area or the State concerned and may cause severe harm to depositors, including smaller co-operative banks and impair confidence in the system. It is, therefore, necessary to ensure that prudential guidelines in respect of these banks are strengthened to protect public deposits, pending legal and institutional reforms.

47. The April 2001 policy Statement had, therefore, proposed some new prudential measures, particularly in regard to maintenance and safety of securities held under the prescribed SLR, lending against shares, and the degree of access to call money market. In order to minimise any immediate financial impact on UCBs, precautions were taken to introduce new prudential measures with a prospective date and allow sufficient time for UCBs to implement them in the interest of their members. Some State level apex co-operative banks have represented against these measures on the ground that they may affect their financial operations and reduce their flexibility.

48. The Reserve Bank welcomes the on-going constructive dialogue with UCBs and their representative associations. It will be prepared to further improve/modify specific measures subject only to one condition, *i.e.,* providing an adequate, workable and transparent mechanism for protection of public deposits held in the co-operative sector. Needless to say that a viable co-operative financial system has to be such that interests of both the "borrowing" entities as well as the "depositing" public are protected. Past experience, even though confined to some errant co-operative banks, has made it abundantly clear that inter-bank co-operative deposits and lack of adequate secured liquid assets have substantially compromised the depositors' interests. As a result, public confidence in the co-operative banking sector as a whole has also been shaken. In the interest of the growth of the co-operative sector itself, there is no option but to devise a viable and transparent system for reasonable protection of public deposits.

49. As mentioned earlier, three authorities (Central and State Governments and RBI) are presently involved in regulating, supervising and/or administering UCBs. There are as many as 2,084 UCBs of which 51 are scheduled and the rest are non-scheduled UCBs. In view of their large number as well as their dispersed and local character, their supervision and inspection pose special problems. At present, while accounts of UCBs are required to be audited by State Governments, there has been substantial delay in completing audit of a large number of UCBs. RBI conducts statutory inspections normally once in two years in respect of scheduled UCBs, once in two to three years in respect of non-scheduled UCBs, while the identified weak banks are inspected

on annual basis. Several committees, including a high power committee set up by RBI in May 1999 under the Chairmanship of Shri K. Madhava Rao, have made wide-ranging recommendations for eliminating dual control and for improving the functioning of the co-operative banks. Most of these recommendations have been accepted by RBI, but recommendations requiring legislative action at the level of State Governments have yet to be implemented.

50. In order to overcome supervisory problems arising from the present three-pronged and multi-level institutional system (consisting of the Centre, States and RBI), the Reserve Bank has suggested setting up of a new Apex Supervisory Body for the entire urban co-operative banking sector. It has proposed that this Apex body could be under the control of a separate high-level supervisory Board consisting of representatives of the Central Government, State Governments, RBI as well as experts and it could be given the responsibility of inspection/and supervision of UCBs and ensuring their conformity with prescribed prudential, capital adequacy and risk-management norms. The Reserve Bank has also forwarded its detailed proposals to the Central Government for setting up the Apex Supervisory Body.

51. Recent events have also brought to the fore the need for Boards of banks and financial institutions to exercise proper vigilance and supervision over the functioning of commercial banking and other financial institutions. In recent years, as part of on-going financial sector reforms, much greater autonomy and powers have been entrusted to their Boards, to lay down effective internal guidelines and procedures for transparency, disclosure, risk and asset-liability management. Yet, it has been noticed that in some cases, the policy laid down by the Boards was either flouted with impunity or the Board itself had failed to lay down appropriate internal guidelines for minimising risks and over-lending to certain entities without adequate security. If problems of the type which have surfaced recently are to be avoided in the future, within the framework of a deregulated and liberal financial system, the role of Boards becomes crucial. The Reserve Bank proposes to set up a consultative group of directors of a select group of commercial banks and financial institutions to suggest, for consideration by the Government/RBI, measures that should be taken to strengthen the internal supervisory role of Boards.

52. In the rest of this section, an attempt is made to review the progress in respect of various monetary and other measures announced in recent years, and to propose some further measures of immediate as well as long-term importance.

Monetary Measures

(a) Bank Rate

53. On the basis of a review of macroeconomic and monetary developments, the Bank Rate is being reduced by 0.50 percentage point from 7.0 per cent to 6.50 per cent with effect from the close of business today (October 22, 2001).

At this level, it is the lowest Bank Rate since May 1973.

(b) Cash Reserve Ratio - Reduction and Rationalisation

54. All scheduled commercial banks [excluding Regional Rural Banks (RRBs)] are, at present, required to maintain with the Reserve Bank of India a cash reserve ratio (CRR) of 7.5 per cent of their net demand and time liabilities (NDTL). While the statutory minimum requirement of CRR maintenance at 3.0 per cent is obligatory on the banks, additional CRR, ranging between 4.5 per cent and 12.0 per cent since 1981, has been imposed from time to time in order to reduce the overflow of liquidity due to excessive money supply in the economy. At the same time, over a period, various exemptions given to the banks on certain specific categories of liabilities for the CRR requirement resulted in the effective CRR being different from the prescribed level in respect of individual banks. The effective CRR for different banks vary depending upon the composition of their liabilities, and for the banking system as a whole, effective CRR, at present is of the order of 6.3 per cent. Exemptions and multiple prescriptions over time made in response to specific requirements have increased the complexity of CRR as an instrument of liquidity management. With a view to rationalising CRR prescription and moving towards the long-term goal of keeping CRR normally at the statutory level, important changes are proposed below in respect of the coverage as well as the level of CRR for the banking system:

- It is proposed to reduce the CRR by 200 basis points to 5.50 per cent from 7.50 per cent of NDTL. Effective from the fortnight beginning November 3, 2001, CRR will be reduced to 5.75 per cent; and effective fortnight beginning December 29, 2001, the CRR will be reduced further to 5.50 per cent of NDTL.
- At the same time, all the exemptions on the liabilities will be withdrawn except inter-bank liabilities, for the computation of NDTL (for requirement of maintenance of CRR) with effect from fortnight beginning November 3, 2001.

55. It is expected that these changes will facilitate the development of a short term yield curve, develop money market, reduce the regulatory arbitrage between banks and non-banks, enhance the availability of lendable resources with the banks and improve the efficiency of indirect instruments in the conduct of monetary policy. At the present level of NDTL, the combined impact of the above two measures will result in augmenting lendable resources of the banking system by about Rs.8,000 crore (about Rs.6,000 crore effective from November 3, 2001).

56. It may, however, be emphasised that while the proposed CRR reduction is consistent with the medium term objective, and the current circumstances of relatively low level of economic activity and reasonable inflation, RBI will continue to use the CRR instrument in both directions for liquidity management in addition

to other instruments (such as, the LAF).

c) *Interest on Cash balances Maintained with RBI*

57. All scheduled commercial banks (excluding Regional Rural Banks) are paid interest on eligible cash balances maintained with RBI under CRR requirement at the rate of 6.0 per cent per annum effective April 21, 2001 against 4.0 per cent earlier. In the annual policy Statement of April 2001, it was announced that at a subsequent stage, interest will be paid at the Bank Rate. Accordingly, with effect from fortnight beginning November 3, 2001, the interest paid on eligible cash balances will be at the Bank Rate *(i.e.*, 6.5 per cent).

Liquidity Adjustment Facility - Progress

58. The Liquidity Adjustment Facility (LAF), introduced since June 5, 2000, has emerged as an effective and flexible instrument for influencing liquidity on a day-to-day basis. A package of measures was announced in the annual policy Statement in April 2001 encompassing changes in operating procedures of LAF, a strategy for smooth transition of call money market to pure inter-bank market and a programme for rationalisation of liquidity support available to the system. A set of complementary measures in money and government securities markets was also introduced.

59. On the whole, this package of measures had a positive impact. The LAF has rendered the necessary flexibility to RBI to operate on liquidity and to some extent to signal interest rates in the short-term money market. The LAF operations, combined with strategic OMO, have evolved into the principal operating procedure of monetary policy of the Reserve Bank in the short-run. The effectiveness of LAF would be further strengthened as the system moves towards a pure inter-bank call/notice money market coupled with the growth of a deep and liquid repo/reverse repo market for non-bank participants. Effective May 2001, non-banks are permitted to lend upto 85 per cent of their average daily lending during 2000-01. This has not caused any strain on the market with average daily aggregate lending in call money market improving to Rs.19,600 crore during May-September 2001 compared to Rs.10,900 crore during the corresponding period of the previous year. Volatility in call money rates has also come down significantly. It is encouraging to note that the volume of repo operations by non-bank participants has been increasing in the recent period.

60. In the context of improving the effectiveness of LAF, it is reiterated that in addition to overnight repos, RBI will also have the discretion to introduce longer-term repos upto 14-day period as and when required.

Commercial Paper-Dematerialised Holding

61. RBI issued fresh guidelines for issuance of Commercial Paper on October 10, 2000 relaxing the terms and conditions and streamlining the procedures. As indicated in the annual policy Statement of April 2001,

banks, Financial Institutions (FIs), PDs and Satellite Dealers (SDs) are now permitted to make fresh investments and hold CP only in dematerialised form, effective June 30, 2001. In this context, Fixed Income Money Market and Derivatives Association of India (FIMMDA) circulated a "Report of FIMMDA Working Group on Primary Markets Relating to Market Conventions and Guidelines for Commercial Paper". After extensive discussions on legal and related issues with depositories and RBI and after considering suggestions received from corporates, members of FIMMDA and other market players, the operational guidelines in respect of CP in dematerialised form were made public by FIMMDA on June 29, 2001. Further, to facilitate conversion of physicals into demat, FIMMDA, in consultation with market participants, depositories and RBI, prepared the related guidelines and made them public on October 3, 2001. These guidelines seem to be working reasonably well, and no changes are being proposed at present.

Development of Government Securities Market

62. Following the announcement made in the Union Budget for 2001-02, certain measures were announced in the annual policy Statement for the development of government securities market. Progress in regard to these measures is reviewed below:

- As announced in the annual policy Statement, 14-day and 182-day Treasury Bills (TBs) have been withdrawn from the week beginning May 14, 2001. The notified amount of 91-day TBs has been simultaneously increased to Rs.250 crore. It has also been ensured that both the 91-day and 364-day TBs mature on the same day in order to facilitate the availability of adequate fungible stocks of TBs of varying maturities in the secondary market. Increased attractiveness of TBs is evident from the fact that no devolvement on the Reserve Bank has taken place in Treasury Bill auctions and the bid-coverage ratio, particularly with respect to 364-day TBs, has also improved.
- A Negotiated Dealing System (NDS) is being introduced with a view to facilitating electronic bidding in auctions and secondary market transactions in government securities and dissemination of information on trades on a real-time basis. The technology infrastructure related to NDS has been tested with the involvement of all market participants, in Local Area Network (LAN) and Wide Area Network (WAN) environments. Parallel runs are expected in November 2001.
- The Clearing Corporation of India Limited (CCIL) was registered on April 30, 2001 under the Companies Act, 1956 with the State Bank of India as the chief promoter. Initially, the CCIL will be clearing all transactions in government securities and repos reported on the NDS of RBI and also rupee/US dollar forex spot and

forward deals. The operationalisation of CCIL, linked to the NDS, is expected to commence with a test run in November 2001.

- Necessary amendments to notification issued by the Government for introduction of uniform price auction format for auctions of dated securities are being proposed. With the approval of the Government, the new auction format will be introduced on an experimental basis.
- A scheme of retail participation, including the middle segment encompassing Provident Funds, trusts, etc., in the primary market for government securities on non-competitive basis has been finalised in consultation with market participants and the Technical Advisory Committee on Money and Government Securities Markets (TAC). The details of the scheme will be finalised soon.
- The Reserve Bank has prepared a consultative paper drawing a road map for developing Separate Trading of Registered Interest and Principal of Securities (STRIPS). This is being placed on the RBI website inviting comments and suggestions from market participants.

Review of the Satellite Dealer System

63. The Satellite Dealer system was introduced in 1996 to serve as a second tier to PDs in the government securities market with the particular objective of promoting retail segment. The experience with SDs shows that in practice, SDs' role in retailing of government securities has remained very limited. Even as a complementary service, the SD system is perceived to result in higher transaction costs to retail investors. Many of them being broking firms with limited capital strength and having wider presence in non-government securities business have also raised some supervisory concerns.

64. In the light of the above experience, the Reserve Bank has decided to undertake a review of the SD system in close consultation with SDs, PDs and the TAC. The review will consider the role carved out for SDs in the development of retail market, particularly in the context of the expanding role of PDs, emerging alternative mechanism of retailing government securities on the screen-based trading in exchanges, and the supervisory concerns in monitoring SDs' operations. The review will examine the scope for establishing a better linkage between SDs and PDs and thereby improving the SD system as an effective distribution channel at a retail level for government securities.

Prudential Measures

(a) Credit Information Bureau

65. A mention was made in the annual policy Statement of April 2001 about the setting up of the Credit Information Bureau (CIB) to collect, process and share credit information on the borrowers among banks and FIs. With

a view to strengthen the legal mechanism, a draft legislation covering, *inter alia,* responsibilities of the Bureau, rights and obligations of the member credit institutions and safeguarding of the privacy rights has been forwarded to the Government. Pending such amendments, as a first step towards activating CIB, it has been decided to initiate the process of collection and dissemination of some relevant information, within the existing legal framework.

66. In order to operationalise the process of collection and dissemination of the data on credit information by the CIB, RBI will constitute a Group drawing representation from CIB, Indian Banks' Association (IBA), select banks and FIs. The Group will examine the possibility of the CIB performing the role of collecting and disseminating information on the list of suit-filed accounts and the list of defaulters, including willful defaulters, which is presently handled by RBI. The Group will also examine the other aspects of information collection and dissemination, such as, the extent, periodicity and coverage including the feasibility of supplying such information on-line, to members in future. Ideally, it should also be possible to work out in future a 'query mode' to provide any additional information needed and considered appropriate, on specific requests from members, including particulars relating to directors in the defaulting companies, as long as it is legally permissible. The Group will study all these issues and submit a report in one month's time. The transfer of work will be notified separately, thereafter.

(b) Non-SLR Investments by Banks and Financial Institutions

67. It has been observed that, of the investments by banks, a significant proportion of the banks' investments in non-SLR securities is through the private placement route. The non-transparent practices in this market could be a matter of concern. RBI had accordingly issued guidelines in June 2001 regarding the due diligence to be undertaken, the disclosures to be obtained and the credit risk analysis to be made in regard to privately placed investments especially for unrated instruments. Banks have been advised to adopt an internal system of rating for issues of non-borrowers, whether rated or otherwise, and adopt prudential limits to mitigate adverse impact of concentration and illiquidity. Banks have also been advised to put in place proper risk management systems for capturing and analysing the risks so as to take timely remedial measures. A further review of non-SLR investments in the light of recent developments reveals that the ease of mobilising funds through privately placed debt issues could lead to the use of such funds for risky purposes other than what is disclosed in the offer document.

68. In order to contain the risks arising out of non-SLR investment portfolio of banks and FIs, in particular through the private placement route, it is proposed to issue further prudential guidelines to be observed by banks. These guidelines, *inter alia*, would cover: (i) the need for strengthening of internal rating systems, periodically tracking the rating changes in

respect of issuers; (ii) fixing of prudential limits, with separate sub-limits for unrated, unquoted and privately placed instruments; (iii) review by Board on total investments/disinvestments, regulatory compliance, rating changes in respect of issuers and non-performing investments; and (iv) disclosures in 'Notes on Accounts' regarding issuer composition and non-performing investments. A draft of detailed operating guidelines are being issued separately, which will be finalised after further consultation with banks and FIs.

69. For effective risk management, it is necessary to put in place appropriate arrangements for collecting and sharing of information regarding amounts of debt raised by corporates from the market, including through CPs, etc. It is proposed to constitute a Working Group to evolve a framework for collecting and sharing by banks/FIs of information on private placement of debt with CIB as a convenor, and representatives, *inter alia,* of banks, FIs and RBI. The proposed Working Group will, *inter alia*, analyse the status in regard to existing stock of debt, and its use for the purpose of evolving suitable guidelines in this regard. The Group will give its report in one month.

70. There is also a need for dissemination of information on secondary market trades in privately placed debt and to this end, banks and FIs have already been advised that effective October 31, 2001, they will be permitted to make fresh investments and hold bonds and debentures, privately placed or otherwise, only in dematerialised form. Outstanding investments should also be converted into demat form by June 2002. Transactions in such bonds could be reported by the National Securities Depository Limited/ Central Depository Services Limited (NSDL/ CDSL), with whom transfers of title are reported. To enable the transparency of the trades including nomenclature of the bonds, amount traded and the price at which traded, banks and FIs could evolve a reporting mechanism and the NSDL/CDSL can in turn disseminate such information to the market.

71. The above arrangements would apply uniformly to all bonds issued by corporates, banks, FIs and State and Central Government sponsored institutions directly or as Special Purpose Vehicles (SPVs). In regard to bonds guaranteed explicitly or implicitly through letters of comfort, etc., mere availability of such guarantee should not determine the credit decision, and banks and FIs should undertake due diligence on the intrinsic viability and bankability of projects financed through issuance of such bonds. This will go a long way in ensuring efficient use of resources made available by banks and FIs, besides ensuring their creditworthiness. Overall, any proposal of direct or indirect financing of government budgets, directly or through SPVs should be eschewed and proposals should be for specific monitorable projects, particularly in capital-intensive and high-cost sectors, including infrastructure. Components of financing and returns need to be well defined and assessed.

(c) Transparency and Accounting Standards

72. Over a period, banks were advised to disclose in the 'Notes on Accounts' in the balance sheet, the details of the maturity pattern of loans and advances, investments, deposits and borrowings, movements in NPAs, exposure to sensitive sectors, etc. As a further step in ensuring transparency and credibility of their financial positions, it has been decided that banks should furnish the following additional disclosures in the 'Notes on Accounts' in their balance sheets, from the year ending March 2002: (i) movement of provisions held towards NPAs and (ii) movement of provisions held towards depreciation on investments.

73. The Accounting Standards issued by the Institute of Chartered Accountants of India (ICAI) establish the standards which have to be complied with by corporate entities so as to ensure that they present a true and fair view of the financial position of the entity. These standards are periodically being revised by ICAI, consistent with international accounting standards. Certain difficulties in the adoption of the standards as finalised by the ICAI have been reported by banks. It has, therefore, been decided to set up a Working Group comprising representatives of ICAI, banks and RBI to identify the compliance as also gaps in compliance with the accounting standards and recommend steps to eliminate/ reduce the gaps.

Supervision and Monitoring

74. The Reserve Bank had introduced in 1999 off-site returns to monitor liquidity and interest rate risks on quarterly basis with the intention to finally move over to a fortnightly reporting system. The quarterly system has now stabilised. Further progress made in respect of certain announcements made in the annual policy Statement of April 2001 is reviewed below:

- The Basel Committee on Banking Supervision (BCBS) released the second set of consultative documents on New Capital Accord. RBI has forwarded its comments to Basel Committee, which have also been put on RBI website in May 2001.
- A scheme of Prompt Corrective Action (PCA), based on pre-determined trigger points, is planned as part of continued efforts to enhance the existing supervisory framework. The Reserve Bank, after examining the comments/suggestions received from scheduled commercial banks on the scheme, has sought the Government's views before implementation.
- In order to involve banks in the smooth switch-over to Risk-based Supervision (RBS) process, the Reserve Bank has released a discussion paper seeking comments/ suggestions of experts/public. The discussion paper highlights the initiatives and action required in setting up of a comprehensive risk management system, adoption of risk-based audit system, upgradation of management information and

information technology systems, establishment of dedicated compliance units and resolving HRD and training related issues. It is planned to hold a pilot run of the RBS approach in due course.

Settlement of Non-Performing Assets

75. In July 1995, RBI had issued broad guidelines to scheduled commercial banks for compromise or negotiated settlement of NPAs. In May 1999, in order to facilitate settlement of NPAs in the small sector, the Reserve Bank issued guidelines for the constitution of Settlement Advisory Committees (SACs) in public sector banks. Banks had, however, represented that much progress could not be made in the recovery of NPAs despite setting up of SACs. Accordingly, in July 2000, in consultation with the Government, RBI had circulated simplified, non-discretionary and non-discriminatory guidelines to provide a one-time impetus to reduction of the stock of chronic NPAs by the recovery of dues relating to public sector banks which covered accounts upto Rs.5 crore in all sectors including the small scale sector, but excluded any cases of willful default, fraud or malfeasance. These guidelines specified the coverage of the scheme, the settlement formula including the amount and cut-off date, and the manner of payment of the settled dues.

76. The settlement scheme laid out by these guidelines was operative till June 2001 and all applications received upto this date were to be processed by September 30, 2001. Under this scheme, the public sector banks have recovered a total sum of Rs.2,192 crore in respect of 5.23 lakh accounts as on July 30, 2001.

77. Some representations have been received for further extension of the scheme. Given that the purpose of these guidelines was to provide an opportunity for “one-time settlement” within the specified time period, and sufficient time has already been provided, it is not proposed to extend this scheme. However, the broad framework provided for settlement in the 1995 guidelines will continue to be in place, and banks are free to design and implement their own policies for recovery and write-off incorporating compromise and negotiated settlements with the approval of their Boards, particularly for old and unresolved cases falling under the NPA category. In this respect, the experience with the one-time settlement scheme may also be taken into account. It is important, however, to ensure that any scheme formulated by bank Boards is simple, non-discriminatory and transparent so that all eligible cases are accorded equal treatment.

Urban Co-operative Banks

78. The annual policy Statement of April 2001 had announced a proposal to set up a new Apex Supervisory Body to take over the entire inspection/supervisory functions relating to scheduled and non-scheduled Urban Co-operative Banks (UCBs) in consultation with the Central Government. As a follow-up, after discussing various issues involved, RBI has

submitted a draft Bill on setting up of a separate Supervisory Authority to the Central Government.

79. A Working Group constituted by the Reserve Bank to evolve asset-liability management (ALM) guidelines for UCBs has since submitted its Report. The Reserve Bank has circulated the Report to select UCBs for their comments. Based on the feedback, guidelines will be issued to scheduled UCBs. In order to strengthen the supervisory mechanism, RBI has since introduced off-site monitoring system for scheduled UCBs.

80. In the annual policy Statement of April 2001, the UCBs were advised not to entertain any fresh proposals for lending directly or indirectly against security of shares either to individuals or any other entity and that such loans to individuals which had already been disbursed upto permissible amounts should continue only till the contracted date. In response to representations received from UCBs and their federations, it is now proposed to allow UCBs to grant loans to individuals against security of shares, subject to the following parameters:

(i) Loans against shares/debentures may be granted to individuals to meet contingencies and personal needs or for subscribing to rights or new issues of shares/debentures or for purchase in the secondary market. Loans against primary/collateral security of shares/debentures will be limited upto Rs.5 lakh, if the security is in physical form, and upto Rs.10 lakh, if the security is in demat form. Aggregate of all such loans should be within the overall ceiling of 20.0 per cent of the owned funds of the bank, and margin of 40.0 per cent should be maintained in all cases of such loans.

(ii) It is essential that before accepting shares as security, UCBs should put in place a risk management system. UCBs should also have Audit Committee of their Boards of Directors and all the approved loan proposals should be placed before the Audit Committee at least once in two months. Details of loans sanctioned should be reported to the Board in the subsequent Board meeting. The Management and Audit Committees should ensure that all loans against shares are made only to those individuals who are not in any way connected with any stock-broking activity or stock-broking entity.

(iii) UCBs which have outstanding loans to individuals can renew them upto permissible amounts beyond the contracted date on merits, subject to the above conditions.

(iv) As before, UCBs should ensure that there is no direct investment by them in either primary or secondary market under any circumstances.

81. As per the annual policy Statement of April 2001, UCBs were required to achieve certain higher proportion of their SLR holding in the form of government and other approved

securities as a percentage of their Net Demand and Time Liabilities (NDTL) by March 31, 2002. UCBs and their federations have represented that, in current market conditions, many smaller UCBs were facing genuine difficulties in adhering to the time schedule in achieving the prescribed levels of SLR holding. In response to these representations, it is proposed to modify the time-frame for achieving the prescribed levels of SLR holding in the following manner:

SLR Investments of UCBs: Revised Time-frame

Category of UCBs	Minimum SLR holding in government and other approved securities as per cent of NDTL			
	Present	Earlier proposed for March 31, 2002	Now proposed for March 31, 2002	Now proposed for September 30, 2002
Non-Scheduled UCBs				
1. UCBs with NDTL of Rs.25 crore and above	10.0%	15.0%	12.5%	15.0%
2. UCBs with NDTL of less than Rs.25 crore	Nil	10.0 %	7.5%	10.0%
Scheduled UCBs	15.0 %	20.0 %	17.5 %	20.0%*

* It may be clarified that so far as scheduled UCBs are concerned, with effect from April 1, 2003, the entire prescribed level of 25 per cent SLR holding has to be only in government and other approved securities.

It is possible that a number of UCBs in any of the categories have already achieved as on October 20, 2001 or were nearer to the target set for end-March or end-September 2002. Notwithstanding the revision in the time-frame as proposed above, such UCBs are advised not to bring down their present level of SLR holding in government and other approved securities as a proportion of their NDTL.

82. The Reserve Bank has already issued guidelines relating to capital adequacy norms to be followed by UCBs. It is clarified that, under the existing guidelines, the scheduled UCBs are required to achieve the capital adequacy norms gradually by March 2004 and the non-scheduled UCBs by March 2005. This time-table provides sufficient time for UCBs to meet the prescribed capital adequacy requirements, and UCBs are urged to gradually build up their owned capital in the interest of their depositors.

Credit Delivery Mechanism

(a) "Loan System" for Delivery of Bank Credit

83. RBI had introduced a "Loan System" for delivery of bank credit in April 1995 prescribing the composition of working capital finance into loan and cash credit components. The "Loan System" has been extended in phases to cover larger number of borrowers and also a larger component of the working capital finance. At present, the "Loan System" is applicable to borrowers enjoying working capital limit of Rs.10 crore and above from the banking system; the loan component of the working capital limit of such borrowers has been fixed at a high level of not less than 80 per cent.

84. The "Loan System" was introduced to minimise the risks of cash and liquidity management on the part of the banking system, caused by volatile movements in cash credit component of working capital. In the current environment of short-term investment opportunities available to both corporates and banks, banks will henceforth have the freedom to change the composition of working capital by increasing the cash credit component beyond 20 per cent, for working capital limits of Rs.10 crore and above, if they so desire. It is expected that banks will appropriately price each of the two components of working capital finance, taking into account the impact of such decisions on their cash and liquidity management.

(b) Consortium Arrangement for Food Credit

85. A Committee consisting of representatives of banks, RBI, Government of India and Food Corporation of India was constituted by the Reserve Bank for undertaking a review of the consortium arrangement for food credit. The Committee submitted its report in September 2001. The Report of the Committee is under consideration in consultation with the concerned agencies and the Government.

(c) Kisan Credit Cards

86. It has been observed that the introduction of Kisan Credit Cards (KCCs) Scheme for eligible agricultural farmers has proved to be successful. To accelerate the scheme to cover all eligible agricultural farmers within the next 3 years, the Reserve Bank has advised all banks about their targets to be achieved for 2001-02. During 2000-01, public sector banks had issued 23.90 lakh KCCs, close to the target and during the first quarter of 2001-02, they have issued 3.85 lakh KCCs.

Universal Banking

87. It may be recalled that the policy regarding approach to Universal Banking was enunciated in the annual policy Statement of April 2000. The salient operational and regulatory issues to be addressed by the financial institutions for conversion into a universal bank was also communicated by RBI through a circular dated April 28, 2001. While no formal proposal has so far been received by RBI from any financial institution for transformation into a universal bank, some of them have expressed their intent to move in this direction. The Reserve Bank welcomes the interest shown by some financial institutions

in this regard and encourages them to formulate appropriate and detailed proposals for smooth conversion into universal banks, if they so wish. The Reserve Bank intends to process applications promptly in the light of considerations outlined in RBI's circular to FIs on approach to Universal Banking in April 2001.

88. In processing a specific proposal, the overwhelming consideration of the Reserve Bank will be to meet the strategic objectives of the concerned financial institution for meeting the varied needs of different categories of customers, while at the same time ensuring healthy competition in the financial system through transparent and equitable regulatory framework applicable to all the participants in banking business. It should, however, be recognised that the movement towards universal banking should foster stability and efficiency of the financial system, but by itself it cannot provide a viable or sustainable solution to the operational problems of individual institutions arising from low capitalisation, high level of NPAs, large asset–liability mismatches, liquidity, etc. While taking a flexible view on each application, the Reserve Bank will pay particular attention to the primary need to ensure safety of public deposits, especially of small depositors, and to promote the continued stability of the financial system as a whole, and of the banking system in particular.

Non-Banking Financial Companies

89. The Reserve Bank had received applications for Certificate of Registration (CoR) from 36,505 Non-Banking Financial Companies (NBFCs), of which, 13,815 applications were approved and 18,355 were rejected as at the end of August 2001. Only 776 NBFCs have been permitted to accept public deposits, of which 27 NBFCs were holding public deposits of Rs.50 crore and above.

90. The companies whose applications for CoR have been rejected or the companies whose CoR has been cancelled, should continue to repay their deposits on due dates and dispose of their financial assets within three years. They are also advised to submit the returns at prescribed periodicity to RBI.

91. The ALM guidelines issued in June 2001 would become fully operational by March 31, 2002. The NBFCs were, however, advised to commence trial run of the ALM process for the half year ended September 30 and for the half year beginning October 2001. The NBFCs may bring to the notice of RBI any difficulties being faced by them for appropriate consideration.

92. As pointed out in earlier policy Statements, RBI places substantial importance to further development of the NBFC sector along prudent lines. NBFCs are in a position to deliver credit to the decentralised sector and to small borrowers at the local level in response to local requirements, particularly for financing of transport and other equipment. RBI has, therefore, been discussing with the informal Advisory Group of NBFCs, and also with various NBFC associations, the need to promote the formation of a Self Regulatory Organisation

(SRO), particularly for the benefit of smaller NBFCs. So far, there has not been much progress by the NBFC sector in finalising a scheme for formation of SRO. RBI would continue with its efforts to encourage the NBFC sector to devise a viable mechanism for instituting a self regulatory system for this sector.

Technology Upgradation

93. In order to bring improvements in the payment and settlement system, some important measures taken by the Reserve Bank were announced in the annual policy Statement of April 2001. To facilitate banks to effectively participate in the payment and settlement systems and to provide a road map of the various payment system projects, a draft Payment System Vision Document was prepared; based on the feedback received from banks and comments of the members of apex bodies such as the National Payments Council, the Vision Document is being finalised. The other steps being taken up include the use of "imaging" of cheques as a precursor for cheque truncation, which would be facilitated by the recommendations of the Working Group on amendments to the Negotiable Instruments Act, 1881 and the introduction of internet banking services.

94. With a view to further improve the technology based infrastructure of banks and also enable them to effectively use the facilities offered by the Reserve Bank in the payment and settlement system, the following further measures are proposed:

- The Indian Financial Network (INFINET) is already available for use by all banks and common inter-bank applications are being implemented on this network. Banks have to take necessary steps to further strengthen their infrastructure base in respect of standardisation, high levels of security and communication and networking to make full use of these resources.
- If the benefits of the common inter-bank applications have to be fully realised, it is essential that connectivity of computers located at different branches of banks is achieved early. To begin with, it should be the endeavour of banks to achieve the goal of connectivity of commercially important centres. This will facilitate connectivity to the INFINET for achieving inter-city, inter-bank message transfer in a network environment on a real time basis.
- One of the systems provided by the Reserve Bank for quick, safe and secure movement of funds in an electronic mode is the Electronic Funds Transfer (EFT). At present, the scheme is available for transfer of funds across about 8,500 branches of banks located at major commercial centres. It is essential that concerted efforts are taken by banks to popularise the usage of this scheme which would result in quick funds transfer for clients, lesser reconciliation problems at banks and improve systemic efficiency.

Rationalisation of Current Account Facility by the Reserve Bank

95. Since banks having large network of branches are the eventual payment service providers to the rest of the non-banking community and also the essential conduits, apart from PDs, through which RBI effects its LAF and in the context of the recommendations of the Technical Group on phasing out of non-banks from call/ notice money market, a need was felt to rationalise/review the present policy of current account facility provided by RBI. Further, the operationalisation of the CCIL and the proposed implementation of NDS would also obviate the need for having current account with RBI by some of the non-bank entities. To look into all the above aspects, an internal Group was set up which has since submitted its Report. The Report has been placed on RBI's website and a copy of the Report has also been sent to all the current account holders for their comments. These recommendations are also being examined by the Reserve Bank.

Legal Reforms

96. It may be recalled that in the annual policy Statement of April 2001, major legal reforms initiated in the banking sector covering areas such as security laws, Negotiable Instruments Act, fraud on banks, regulatory framework of banking, etc., were indicated. Further progress in regard to various initiatives for legal reforms is given below:

- The Working Group constituted by the Government for suggesting changes in the provisions of Negotiable Instruments Act, 1881, to bring it in conformity with the Information Technology Act, 2000 and also to examine the incorporation of electronic cheque, securitised certificates and other evolving products within the ambit of Negotiable Instruments Act has since submitted its recommendations to the Government in June 2001. The Group, *inter alia*, recommended the introduction of truncation of cheques and electronic cheques and suggested appropriate legal amendments.
- The Working Group on Asset Securitisation has drafted a Bill on Asset Securitisation which is under consideration of the Government.
- The draft legislation prepared by another Working Group constituted by the Government to examine the vesting of powers with banks and FIs for taking possession and sale of securities without intervention of the courts has been put on the RBI Website in August 2001 seeking comments from the public. The draft Bill is under the consideration of the Government.
- Proposals regarding amendments to the Reserve Bank of India Act, 1934, Banking Regulation Act, 1949, Government Securities Bill in replacement of the Public Debt Act, 1944, are currently under consideration of the Government.

- In order to improve the legal system relating to payments in India, the Legal Task Force of the National Payments Council submitted a set of recommendations for preparing a new legislation for regulating the payment systems in India. For drafting a legislation on Payment Systems in India, an international consultant and an eminent Indian draftsman have been appointed by RBI in consultation with the National Payments Council.
- An Expert Committee on Bank Frauds (Chairman: Dr.N.L. Mitra) submitted its Report to RBI in September 2001 which has been put on the RBI website. The Committee examined and suggested both the preventive and curative aspects of bank frauds. The important recommendations of the Committee include: a need for including financial fraud as a criminal offence and amendments to the Indian Penal Code by including a new chapter on financial fraud; amendments to the Indian Evidence Act to shift the burden of proof on the accused person and special provision in the Code of Criminal Procedure for transferring the properties involved in the financial fraud and confiscating unlawful gains; and preventive measures including the development of Best Code Procedures by banks and FIs. The Report is being examined by the Reserve Bank.
- Proposal to repeal the existing DICGC Act and replace it with a new Act is under consideration.
- Financial Companies Regulation Bill providing for a separate enactment in place of Chapter III B and Chapter III C of the Reserve Bank of India Act and amendments to Banking Companies (Acquisition and Transfer of Undertaking) Acts, 1970 and 1980 bringing down the equity holding of the Government in the nationalised banks and also for enabling financial restructuring of weak banks have been introduced in the Lok Sabha.

International Financial Standards and Codes

97. The annual policy Statement of April 2001 mentioned about the significant progress made by the Advisory Groups on International Financial Standards and Codes. All the Advisory Groups constituted by the Standing Committee on International Financial Standards and Codes have submitted their Reports to the Chairman of the Standing Committee and these reports are placed on RBI Website **www.rbi.org.in** for wider dissemination. Copies of the Reports are being sent to various experts, economists, professionals, academicians, banks and institutions for their comments. The Chairmen of individual Advisory Groups have been requested to explore the possibility of organising seminars on the themes. The Standing Committee will also prepare its own report indicating, *inter alia,* the course of follow-up/reforms required and the regulatory agencies involved in such follow-up actions.

MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES*

Considering the importance of study of seasonal pattern of various macroeconomic variables, monthly seasonal factors for selected economic and financial time series are being regularly published in the Reserve Bank of India Bulletin from 1980¶ onwards. This article presents the estimated@ seasonal factors of 62 economic time series classified into five major groups, namely,

(A) Monetary and Banking Indicators (22 series);

(B) *Wholesale Price Index (WPI*) with base 1993-94=100 (17 series);

(C) *Consumer Price Index for Industrial Workers (CPI-IW)* with base 1982=100 (1 series);

(D) *Index of Industrial Production (IIP)* with base 1993-94=100 (18 series); and

(E) External Trade (4 series).

The present article considers a uniform data length of 10 years ranging from April 1991 to March 2001 with respect to each series for estimation of seasonal factors.

For *WPI* and *IIP* series and their respective subgroup series, the seasonal factors are calculated based on the new base (base 1993-94=100). The data prior to April 1994 (i.e., 1991-92 to1993-94) have been obtained by adopting the usual linking factor mechanism.

Monthly seasonal factors for the year 2000-01, the average monthly seasonal factors for the period 1991-92 to 2000-01 (10 years) and forecasts of monthly seasonal factors for the year 2001-02 are presented in Table 1. The peak and trough values of the seasonal factors, which contain information regarding the cyclical behaviour of these series, are also presented in Table 1 along with their respective months. Based on the seasonal factors for last 10 years, ranges of seasonal factors, averages of these ranges along with their standard deviation are presented in Table 2. Figures 1 to 7 present the comparison of seasonal factors of various important variables for the period 2000-01. The monthly seasonal factors for selected 11 series for the last 10 years are presented in Statement I. The salient features of variation in seasonal factors of some selected series during the last ten years in general, and 2000-01 in particular, are briefly discussed in the subsequent paragraphs.

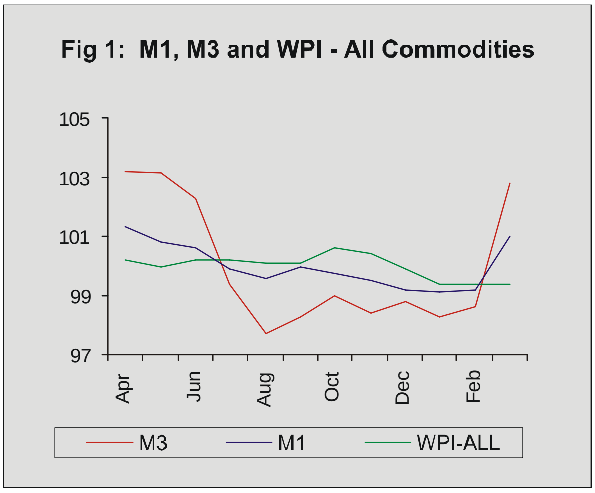
*** Prepared in the Forecasting Division of the Department of Statistical Analysis and Computer Services.**

¶ The previous study in this series was published in October 2000 issue of the Reserve Bank of India Bulletin.

@ The estimation of seasonal factors had been carried out by using the X-12-ARIMA method developed by the US Bureau of Census, a technical note on which appeared in the December 1999 issue of the Reserve Bank of India Bulletin.

A. Monetary and Banking Indicators

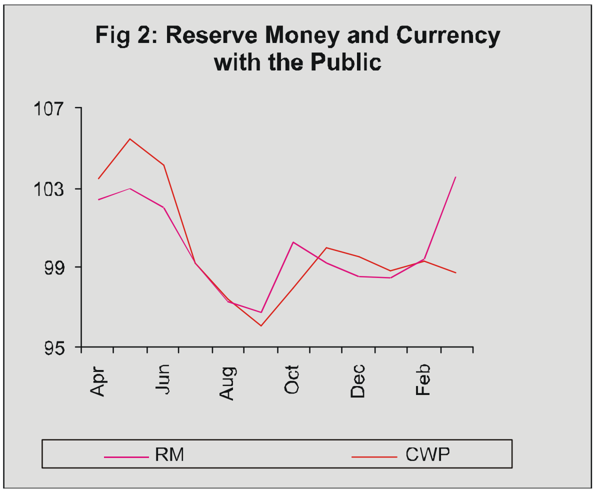
Over the last ten years, the seasonal pattern for the *Broad Money (M_3)* is very stable with an average range of 2.3 with standard deviation 0.1. Here range is the difference between maximum seasonal factor and minimum seasonal factor. There was almost no change in the seasonal variation of M_3 during 2000-01 as compared to 1999-00, as its monthly seasonal factors during these two years essentially remain the same. The peak period for the *Broad Money* supply had occurred in April whereas trough is in December-January.



It can be observed that M_3 is more stable than the *Narrow Money (M_1)* as it is evidenced from the comparison of the range of variation of these two series. This behaviour is attributable to lesser seasonal fluctuations in *Time Deposits* - the additional component, forming almost two-third of *M3*. The average and standard deviation of the range of seasonal factors for the period 1991-92 to 2000-01 for M_1 were 6.2 and 0.9, respectively.

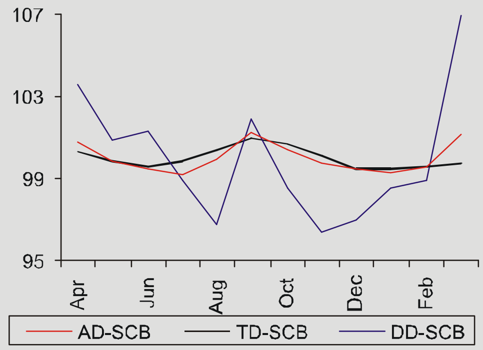
Peak for *Currency with the Public (CWP)* occurred in May in resonance with the seasonal trough for *WPI- Foodgrains*, which also occurred in May, corresponding to harvesting season.

As it is expected, *Reserve Money* and the *Currency with the Public* witnessed the same peak and trough period for the year 2000-01.



Over the last ten years *Aggregate Deposits (AD)* of Scheduled Commercial Banks (SCBs) and its major constituent, *Time Deposits (TD)* have been having very low level of seasonality as evidenced from the average range of 1.9 and 1.5, respectively.

Fig 3: Components of Deposits-SCBs



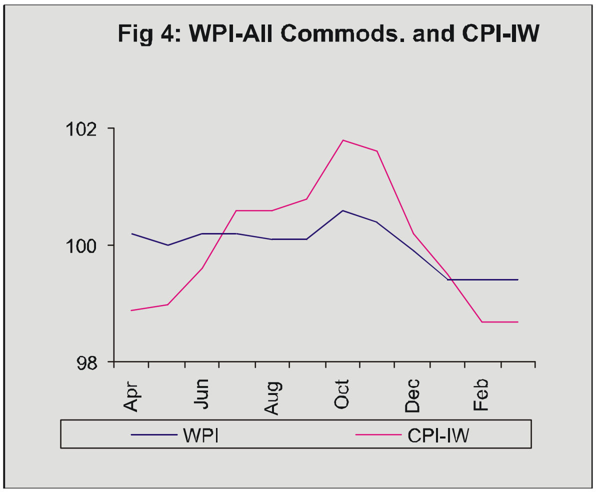
However the other component of *AD*, i.e., *Demand Deposits (DD)* exhibited relatively higher level of seasonality as compared to *AD* or *TD*, the 10 years average range for *DD* being 9.7 with a standard deviation of 1.5. *AD* had seasonal peak in September, whereas seasonal trough occurred in July. Two components of *AD*, *viz.*, *DD* and *TD* had different seasonal behaviour. Peak and trough for *DD* were in March and November respectively, while those for *TD* were in September and December, respectively.

There had been a close link between the seasonal behaviour of the *Bank Credit* (SCBs) and the *Demand Deposits* and the two series had same ten years average peak and trough months -- March and August, respectively. The average range and the standard deviation of these two series were 5.7 and 0.4, and 9.7 and 1.5, respectively. The seasonal peak and trough for *Investments* by SCBs occurred in August and March, respectively. *Food Credit* (SCBs), a component of the *Bank Credit* (SCBs), had its peak seasonal factor in June and trough in March for 2000-01. Though the seasonal variations of *Food Credit* declined steadily over the 10 years, it still remained high at 22.0 in 2000-01 due to seasonal nature of agricultural operations.

B. Wholesale Price Index

The seasonal factors for the *Wholesale Price Index (WPI)* series are based on the new series (base 1993-94=100). The data prior to 1993-94 (i.e., 1991-92 to 1993-94) have been obtained by using linking factor between the old and new series. One of the important findings of the analysis is that over the period (from 1991-92 to 2000-01) there had been a general moderation in the seasonal price variation of many of the price series since ranges of many of them narrowed down.

During 2000-01, *WPI-All Commodities* registered its peak seasonal factors in October and trough in January. The average range and standard deviation of the range of variation for this series had been observed as 1.6 and 0.3, respectively. The *WPI-Manufacturing*, the major component of *WPI-All Commodities* had relatively low level of seasonality as compared to other subgroups. The average ranges for the major three subgroups, viz, *WPI-Primary articles*, *WPI-Manufactured*



Products and *WPI-Fuel, Light, Petroleum and Lubricant* are 4.8, 1.0 and 2.7 respectively. For *WPI-Manufactured Products* and *IIP-Manufacturing*, the range of variation in seasonal factors was decreasing over time; decrease being more pronounced in case of *IIP-Manufacturing*. From its economic behaviour, seasonal peak of *WPI-Manufactured Products* should coincide with the seasonal trough of *IIP - Manufacturing*. However, data do not reflect this as evidenced from the Fig 5. During 2000-01, the seasonal peak for *WPI-Primary Articles* occured in October and seasonal trough occurred in February.

Seasonal factors of *WPI-Food Articles* have been stable for the last ten years with an average range of 6.0 and with standard deviation of 0.1. During 2000-01, *WPI-Food Articles* have witnessed the seasonal peak in October and seasonal trough in February whereas seasonal peak of *WPI-Cereals*, a sub-subgroup of *WPI-Food Articles*, occurred in August with a seasonal trough in October. The two items under *WPI-Cereals*, viz., *WPI-Rice* & *WPI - Wheat* had distinctly different seasonal patterns. This was largely because Rice is mainly a *Kharif* crop and Wheat is a *Rabi* crop and their prices had seasonal peaks in August and February, respectively, month before their harvesting seasons. Among the *WPI* series, *WPI-Fruits* and *Vegetables* revealed the maximum range of seasonal price variation. This feature may be indicative of problems in preservation of this perishable commodity group.

C. Consumer Price Index for Industrial Workers

Seasonal variation in *CPI-IW* had remained stable over the years with average range 2.8 and standard deviation 0.2. During 2000-01, the C*PI-IW* series attained its seasonal peak in October and trough in February.

A comparative analysis (Fig 4) between the seasonal price variability in case of *WPI-All Commodities* and *CPI-Industrial Workers* reflected that price variability in case of CPI-IW continued to be higher than *WPI-All Commodities*.

D. Index of Industrial Production

The seasonal variation in *IIP - General Index* though declined significantly over the period (Table 2), continued to be on the higher side. The range between peak and trough values of the seasonal factors declined from 16.4 in 1991-92 to 13.1 in 2000-01. These reflect the structural shifts in the seasonal factors.

The existing high level of seasonality in *IIP-General Index* was also reflected in most of the *IIP* subgroups considered here and these strong seasonal patterns were closely related to busy and slack seasons of the economy. The seasonal peaks for all the *IIP* series generally occurred in March, but the troughs occurred in different months for different series. The seasonality in *IIP-Food Products* could be seen in contrast to the seasonal behaviour in *WPI-Food Articles* (Fig 5) and the seasonality in *IIP-Food Products* could be seen in contrast to the seasonal behaviour in *WPI-Food Products* (Fig 6).

Fig 5: IIP-Manf. and WPI-Manf.

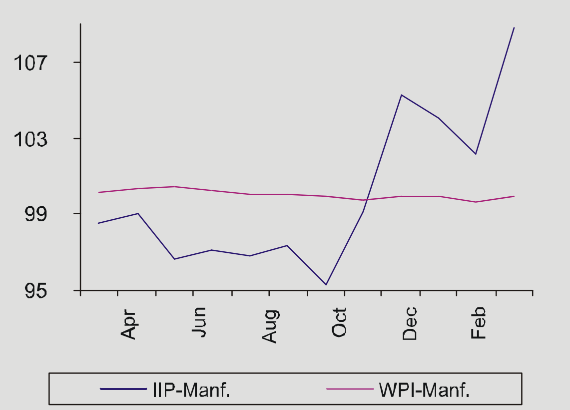
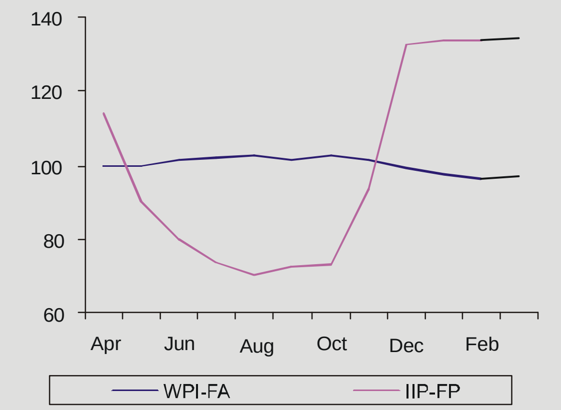


Fig 6: IIP-FP and WPI-FA



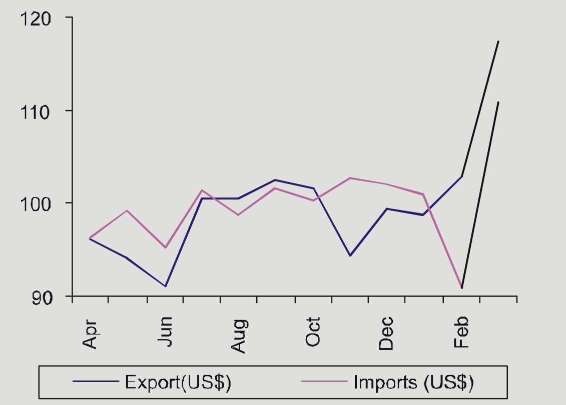
Among the Use-based classified groups, *IIP-Capital Goods Industries* showed the maximum range of seasonal variation although it had been consistently decreasing over time. During 2000-01, *IIP-Consumer Durables* had the peak in March but troughs occurred in April whereas, *IIP-Consumer Non-Durables* had the peak in January but troughs occurred in October, respectively. The range of variation for both these Consumer Goods groups remained high; however, the range of seasonal variation for both the series had been decreasing over the years.

On the line of expectations, the seasonal pattern of *IIP-Manufacturing* was similar to that of *IIP-General* and both were decreasing over the years. Interestingly, the seasonal variations for all other sub-groups had been decreasing over the years.

E. External Trade (Based on data from DGCI & S)

Seasonal factors in respect of external trade series including Exports, Imports, Oil Imports and Non-oil Imports (all in US $ terms) exhibited a mixed pattern.

Fig 7: Exports and Imports

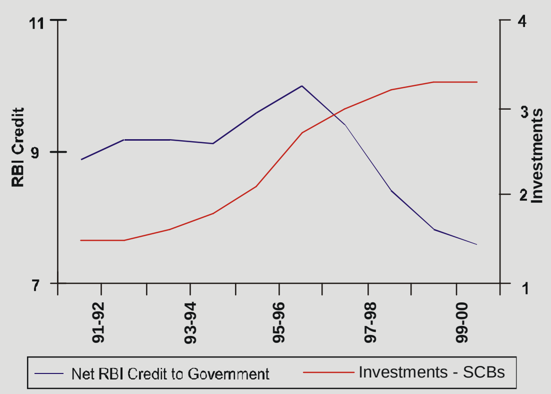


At the overall level, exports were more pronounced to seasonal variations as compared to Imports. The average range of seasonal factors for *Exports* was very high at 27.5 with a standard deviation of 1.6 while the corresponding figures for Imports were 18.0 and 1.2, respectively. The peak month for both *Exports* (US Dollar terms) and *Imports* (US Dollar terms) occurred in March during 2000-01. The seasonal trough for *Exports* occurred in June while that for Imports is in February. *Non-Oil Imports*, the *largest share in Total Imports* exhibited same peak and trough period with that of *Imports*.

Trends in seasonality from 1991-92 to 2000-01

The seasonal behaviour in the series *Net RBI Credit to Government* is showing a downward trend from 1996-97. The range of seasonal factors was 10.0 in 1996-97, which declined to 7.6 in 2000-01. In contrast, the seasonality in the case of *Investment of Scheduled Commercial Banks (Investment (SCBs))*, whose major component is investment in government securities, is showing an increasing trend. The range between the seasonal factors was 2.7 in 1996-97, which increased to 3.3 in 2000-01.

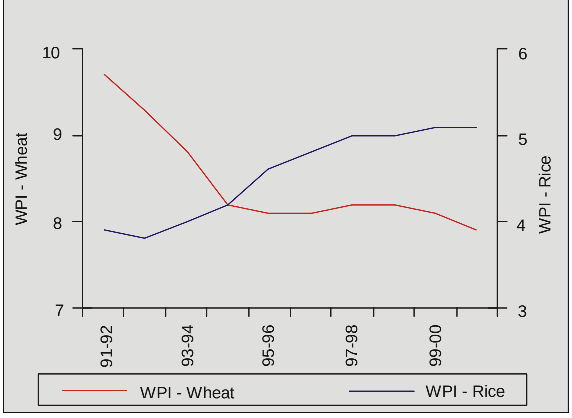
Fig 1: Net RBI Credit vs Investments - SCBs



Among various groups in WPI basket, it is being observed that, the seasonality in *WPI - Rice* is showing an increasing trend from 1992-93 while the seasonality of *WPI - Wheat* has been declining. In the case of *WPI – Rice*, the range of the seasonal factors was 3.8 in 1992-93 which increased steadily to 5.1 in 2000-01 whereas the range of the seasonal factors in the case of *WPI - Wheat* has declined to 7.9 in 2000-01 from 9.7 in 1991-92. Besides, ranges of seasonal factors of various sub-groups such as *Primary Articles, Oil Seeds, Food Products* and *Sugar* have also been declining over the years. *WPI – Fruits and Vegetables* has exhibited an increasing seasonal behaviour over the years with range increasing from 18.8 in 1991-92 to 26.0 in 2000-01.

During the last ten years, the seasonality pattern of *IIP - Capital Goods Industries* has declined drastically. The range of the seasonal factors of *IIP - Capital Goods Industries* was 69.8 in 1991-92, which declined to 21.8 in 2000-01. However, in the case of *IIP - Consumer*

Fig 2: WPI - Wheat vs WPI - Rice



Goods Industries, the seasonality pattern is showing an increasing trend from 1992-93. The range between the seasonal factors of the series was 19.1 in 1992-93, which increased to 23.4 in 2000-01. Among major IIP groups, *Mining* as well as *Manufacturing* sectors have also shown declining trend for the last ten years.

The seasonal behaviour of some of the series remained stable during the last ten years. The range of the seasonal factors of *Narrow Money* (M_1) remained around 5.5 from 1996-97 onwards, while that of *Time Deposits of SCBs* remained near 1.5 during the last ten years.

Fig 3: IIP - Capital Goods vs Consumer Goods Industries

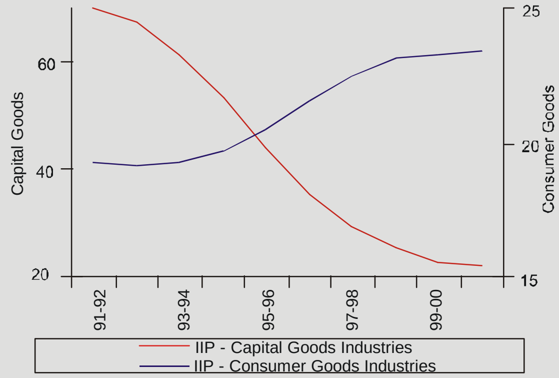


Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH)

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
A. MONETARY & BANKING INDICATORS																
1. MONEY STOCK MEASURES & BANK CREDIT TO GOVERNMENT																
A. 1.1 Broad Money (M_3)																
2000-01:	101.3	100.8	100.6	99.9	99.6	100.0	99.8	99.5	99.2	99.1	99.2	101.0	APR	101.3	JAN	99.1
Average:	101.4	101.1	100.5	99.9	99.4	99.9	99.9	99.6	99.1	99.2	99.2	100.8	APR	101.4	DEC	99.1
2001-02:	101.3	100.8	100.6	99.9	99.6	100.0	99.8	99.5	99.2	99.1	99.2	101.0	APR	101.3	JAN	99.1
A. 1.1.1 Net Bank Credit to Government																
2000-01:	100.8	100.9	101.6	102.4	100.2	99.0	100.2	100.3	99.5	98.5	98.2	98.2	JUL	102.4	FEB	98.2
Average:	101.1	101.5	101.4	102.6	100.4	98.9	99.9	100.0	98.7	99.0	98.2	98.3	JUL	102.6	FEB	98.2
2001-02:	100.8	100.9	101.6	102.4	100.3	99.0	100.2	100.3	99.5	98.5	98.2	98.2	JUL	102.4	MAR	98.2
A. 1.1.1.1 Net RBI Credit to Government																
2000-01:	101.4	102.1	103.4	103.3	96.6	95.8	100.4	100.7	99.5	99.5	99.4	97.8	JUN	103.4	SEP	95.8
Average:	100.9	103.0	103.3	104.6	98.8	96.6	99.9	100.2	97.7	99.3	98.6	97.0	JUL	104.6	SEP	96.6
2001-02:	101.4	101.9	103.3	103.2	96.6	95.8	100.5	100.8	99.5	99.5	99.6	97.7	JUN	103.3	SEP	95.8
A. 1.1.2 Bank Credit to Commercial Sector																
2000-01:	102.0	100.8	100.1	99.3	98.6	98.4	99.2	98.1	99.1	100.4	100.7	103.4	MAR	103.4	NOV	98.1
Average:	102.1	101.1	100.9	99.4	98.1	98.4	99.2	98.5	99.1	100.5	100.6	103.0	MAR	103.0	AUG	98.1
2001-02:	102.0	100.8	100.1	99.3	98.6	98.4	99.2	98.1	99.1	100.4	100.7	103.4	MAR	103.4	NOV	98.1
A. 1.2 Narrow Money (M_1)																
2000-01:	103.2	103.1	102.3	99.4	97.7	98.3	99.0	98.4	98.8	98.3	98.6	102.8	APR	103.2	AUG	97.7
Average:	103.4	103.8	102.4	100.1	97.8	97.9	98.9	98.9	98.1	98.3	98.5	102.1	MAY	103.8	AUG	97.8
2001-02:	103.2	103.1	102.3	99.4	97.7	98.3	99.0	98.4	98.8	98.3	98.6	102.8	APR	103.2	AUG	97.7
A. 1.2.1 Currency with Public																
2000-01:	103.4	105.5	104.1	99.2	97.4	96.1	98.0	100.0	99.5	98.8	99.3	98.7	MAY	105.5	SEP	96.1
Average:	103.6	105.6	103.7	99.8	97.6	95.8	97.9	99.6	99.0	98.9	99.6	98.9	MAY	105.6	SEP	95.8
2001-02:	103.4	105.5	104.1	99.1	97.4	96.1	98.0	100.0	99.5	98.8	99.3	98.7	MAY	105.5	SEP	96.1
A. 1.3 Reserve Money																
2000-01:	102.4	103.0	102.0	99.2	97.3	96.7	100.3	99.2	98.6	98.5	99.4	103.5	MAR	103.5	SEP	96.7
Average:	103.7	102.7	102.1	100.6	98.8	97.0	99.5	99.0	97.3	97.9	99.4	102.4	APR	103.7	SEP	97.0
2001-02:	102.4	103.0	102.0	99.2	97.3	96.7	100.4	99.2	98.6	98.5	99.4	103.5	MAR	103.5	SEP	96.7

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).
(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH) *(Contd.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
2. MAJOR LIABILITIES OF THE RESERVE BANK OF INDIA & SCHEDULED COMMERCIAL BANKS																
A. 2.1 Deposits (Banking Department)																
2000-01:	99.4	99.0	99.9	107.2	97.0	99.6	100.9	101.2	98.1	96.9	98.2	102.5	JUL	107.2	JAN	96.9
Average:	99.9	95.9	98.3	106.9	100.3	100.5	99.7	98.6	98.0	99.5	100.4	101.5	JUL	106.9	MAY	95.9
2001-02:	99.3	99.1	100.0	107.2	97.0	99.5	101.0	101.3	98.0	96.9	98.2	102.5	JUL	107.2	JAN	96.9
A. 2.2 Liabilities to the Banking System (SCBs)																
2000-01:	104.3	99.3	98.4	97.5	97.5	101.9	100.6	100.2	100.9	98.3	97.9	103.3	APR	104.3	JUL	97.5
Average:	102.5	97.7	99.9	99.6	100.5	103.5	100.9	99.7	100.3	98.2	96.5	101.2	SEP	103.5	FEB	96.5
2001-02:	104.4	99.3	98.5	97.5	97.4	101.8	100.6	100.3	100.9	98.2	98.1	103.3	APR	104.4	AUG	97.4
A. 2.3 Aggregate Deposits (SCBs)																
2000-01:	100.8	99.8	99.5	99.2	99.9	101.2	100.4	99.7	99.5	99.3	99.6	101.1	SEP	101.2	JUL	99.2
Average:	100.9	100.0	99.6	99.4	99.6	100.8	100.4	99.9	99.5	99.4	99.5	101.2	MAR	101.2	JUL	99.4
2001-02:	100.8	99.8	99.5	99.2	99.9	101.2	100.4	99.7	99.5	99.3	99.6	101.1	SEP	101.2	JUL	99.2
A. 2.3.1 Demand Deposits (SCBs)																
2000-01:	103.6	100.9	101.3	98.9	96.8	101.9	98.5	96.4	97.0	98.5	98.9	106.9	MAR	106.9	NOV	96.4
Average:	103.5	101.6	100.5	98.6	97.0	100.5	98.8	98.0	97.5	99.0	98.7	106.3	MAR	106.3	AUG	97.0
2001-02:	103.6	101.0	101.4	99.0	96.8	101.8	98.5	96.5	97.0	98.5	98.9	106.8	MAR	106.8	NOV	96.5
A. 2.3.2 Time Deposits (SCBs)																
2000-01:	100.3	99.8	99.6	99.8	100.4	101.0	100.7	100.1	99.5	99.5	99.6	99.7	SEP	101.0	DEC	99.5
Average:	100.4	99.8	99.6	99.7	100.1	100.9	100.7	100.2	99.8	99.6	99.4	99.8	SEP	100.9	FEB	99.4
2001-02:	100.3	99.8	99.6	99.8	100.4	101.0	100.7	100.1	99.5	99.5	99.6	99.7	SEP	101.0	DEC	99.5
3. MAJOR ASSETS OF THE RESERVE BANK OF INDIA & SCHEDULED COMMERCIAL BANKS																
(i) The Reserve Bank of India																
A. 3.1 Government of India Rupee Securities																
2000-01:	104.5	104.8	101.3	96.1	94.7	93.2	97.8	98.3	99.9	101.0	103.5	105.2	MAR	105.2	SEP	93.2
Average:	104.5	106.1	103.1	97.6	95.5	93.8	98.5	99.3	98.7	99.9	101.1	102.6	MAY	106.1	SEP	93.8
2001-02:	104.5	104.7	101.2	95.9	94.7	93.3	97.8	98.3	100.0	101.0	103.7	105.3	MAR	105.3	SEP	93.3
A. 3.2 Balances held Abroad																
2000-01:	96.0	96.2	95.4	99.7	96.8	99.3	96.2	100.9	102.3	102.2	105.4	110.0	MAR	110.0	JUN	95.4
Average:	103.8	99.4	98.0	102.2	96.6	99.6	97.1	97.8	100.6	98.2	98.9	109.9	MAR	109.9	AUG	96.6
2001-02:	95.6	96.1	95.2	99.6	96.9	99.5	96.1	100.8	102.3	102.2	105.8	110.0	MAR	110.0	JUN	95.2

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).
(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH) *(Contd.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
A. 3.3 Loans and Advances (RBI)																
2000-01:	111.3	117.1	107.5	90.4	88.2	89.5	107.3	96.3	98.2	95.1	100.9	97.5	MAY	117.1	AUG	88.2
Average:	109.6	98.5	97.7	88.2	88.6	96.5	99.3	90.0	106.7	107.9	108.7	104.9	APR	109.6	JUL	88.2
2001-02:	112.0	118.1	108.2	90.8	87.9	89.0	107.6	96.5	97.8	94.8	100.8	97.4	MAY	118.1	AUG	87.9
A. 3.4 Investments (RBI)																
2000-01:	95.9	98.7	110.7	117.2	105.7	101.5	102.1	98.3	92.9	97.5	90.3	89.1	JUL	117.2	MAR	89.1
Average:	94.9	97.3	106.1	115.3	107.5	100.3	97.2	100.1	94.8	99.9	94.6	90.5	JUL	115.3	MAR	90.5
2001-02:	96.0	98.7	110.5	117.3	105.9	101.5	102.3	98.1	92.8	97.5	90.2	89.3	JUL	117.3	MAR	89.3
(ii) Scheduled Commercial Banks																
A. 3.5 Cash in Hand and Balances with RBI																
2000-01:	103.4	100.2	97.2	98.6	97.9	101.0	102.9	101.1	98.3	100.5	104.0	94.6	FEB	104.0	MAR	94.6
Average:	104.3	98.3	97.3	98.8	100.7	100.4	102.2	99.8	97.2	98.8	104.1	98.0	APR	104.3	DEC	97.2
2001-02:	103.3	100.3	97.1	98.7	97.8	100.9	102.9	101.2	98.3	100.8	104.1	94.2	FEB	104.1	MAR	94.2
A. 3.6 Asset with Banking System (SCBs)																
2000-01:	104.1	92.6	94.4	96.1	97.9	101.3	99.0	102.1	103.9	99.8	101.5	107.5	MAR	107.5	MAY	92.6
Average:	101.6	96.8	98.4	98.3	100.2	101.8	97.7	98.8	101.0	99.5	98.8	108.2	MAR	108.2	MAY	96.8
2001-02:	104.3	92.4	94.4	95.9	97.6	101.3	99.0	102.4	104.3	99.6	101.5	107.5	MAR	107.5	MAY	92.4
A. 3.7 Bank Credit (SCBs)																
2000-01:	102.1	100.7	99.2	99.0	98.3	98.6	99.6	98.4	99.1	100.7	101.0	103.3	MAR	103.3	AUG	98.3
Average:	102.3	101.1	99.5	99.3	97.8	98.4	99.3	98.6	99.0	100.6	100.7	103.5	MAR	103.5	AUG	97.8
2001-02:	102.1	100.7	99.2	99.0	98.3	98.6	99.6	98.4	99.1	100.7	101.0	103.3	MAR	103.3	AUG	98.3
A. 3.7.1 Loans, Cash Credits and Overdrafts (SCBs)																
2000-01:	101.7	100.4	99.5	99.1	98.2	98.8	99.7	98.6	99.8	100.6	100.9	102.6	MAR	102.6	AUG	98.2
Average:	101.9	101.0	100.0	99.0	97.8	98.7	99.5	98.5	99.8	100.9	100.8	102.4	MAR	102.4	AUG	97.8
2001-02:	101.8	100.4	99.5	99.1	98.2	98.8	99.7	98.5	99.8	100.5	100.9	102.5	MAR	102.5	AUG	98.2
A. 3.7.2 Food Credit (SCBs)																
2000-01:	92.7	108.3	111.4	107.9	101.1	93.6	97.4	99.8	99.7	99.6	96.7	91.8	JUN	111.4	MAR	91.8
Average:	93.2	111.4	110.9	106.9	99.5	90.9	98.3	100.5	99.4	99.6	97.6	91.9	MAY	111.4	SEP	90.9
2001-02:	92.7	108.2	111.3	107.9	101.1	93.8	97.5	99.7	99.7	99.7	96.7	91.8	JUN	111.3	MAR	91.8
A. 3.8 Investments (SCBs)																
2000-01:	100.6	99.9	100.1	101.0	101.5	100.7	99.7	101.1	100.0	98.8	98.3	98.2	AUG	101.5	MAR	98.2
Average:	100.3	100.0	100.2	100.5	101.1	100.7	99.9	100.2	100.2	99.3	98.8	98.7	AUG	101.1	MAR	98.7
2001-02:	100.6	100.0	100.1	101.0	101.5	100.7	99.7	101.1	100.0	98.8	98.3	98.2	AUG	101.5	MAR	98.2

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).

(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH) *(Contd.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
B. INDEX NUMBERS OF WHOLESALE PRICES (Base: 1993-94 = 100) WPI - ALL COMMODITIES																
2000-01:	100.2	100.0	100.2	100.2	100.1	100.1	100.6	100.4	99.9	99.4	99.4	99.4	OCT	100.6	JAN	99.4
Average:	100.2	100.0	100.3	100.5	100.5	100.5	100.5	100.2	99.7	99.3	99.3	99.1	AUG	100.5	MAR	99.1
2001-02:	100.2	100.0	100.2	100.2	100.1	100.1	100.6	100.4	99.9	99.4	99.4	99.4	OCT	100.6	JAN	99.4
B. 1 WPI - Primary Articles																
2000-01:	99.7	99.6	100.8	101.2	101.8	101.1	101.9	101.1	99.5	98.2	97.5	97.5	OCT	101.9	FEB	97.5
Average:	99.2	99.3	100.5	101.4	102.2	101.4	101.2	100.7	99.6	98.6	98.2	97.5	AUG	102.2	MAR	97.5
2001-02:	99.7	99.6	100.8	101.2	101.8	101.1	102.0	101.1	99.5	98.2	97.5	97.5	OCT	102.0	FEB	97.5
B. 1.1 WPI - Food Articles																
2000-01:	99.8	99.8	101.5	101.9	102.3	101.2	102.6	101.4	99.2	97.2	96.5	96.7	OCT	102.6	FEB	96.5
Average:	98.9	99.4	101.3	102.0	102.8	101.6	101.7	101.2	99.3	97.7	97.3	96.9	AUG	102.8	MAR	96.9
2001-02:	99.8	99.8	101.5	101.9	102.3	101.2	102.7	101.5	99.2	97.2	96.5	96.7	OCT	102.7	FEB	96.5
B. 1.1.1 WPI - Foodgrains (Cereals + Pulses)																
2000-01:	99.6	99.3	99.8	100.2	100.8	100.4	99.9	100.2	99.9	100.1	100.1	99.6	AUG	100.8	MAY	99.3
Average:	99.5	98.9	99.3	100.2	100.9	100.5	99.6	100.3	100.0	100.3	100.5	99.8	AUG	100.9	MAY	98.9
2001-02:	99.6	99.3	99.8	100.2	100.8	100.4	99.9	100.2	99.9	100.1	100.0	99.6	AUG	100.8	MAY	99.3
B. 1.1.1.1 WPI - Cereals																
2000-01:	99.9	99.5	100.0	100.6	100.8	100.3	99.4	99.7	99.5	99.8	100.3	100.1	AUG	100.8	OCT	99.4
Average:	99.7	98.9	99.4	100.4	101.0	100.5	99.3	99.9	99.8	100.1	100.7	100.2	AUG	101.0	MAY	98.9
2001-02:	99.9	99.6	100.0	100.6	100.8	100.3	99.4	99.7	99.5	99.8	100.3	100.1	AUG	100.8	OCT	99.4
B. 1.1.1.1.1 WPI - Wheat																
2000-01:	99.3	96.4	97.2	98.6	99.3	99.0	98.8	101.1	101.1	102.4	104.3	102.3	FEB	104.3	MAY	96.4
Average:	99.6	96.2	96.9	98.2	99.4	99.1	98.4	100.5	101.2	103.0	104.7	102.9	FEB	104.7	MAY	96.2
2001-02:	99.3	96.5	97.3	98.7	99.3	99.0	98.8	101.0	101.0	102.4	104.3	102.3	FEB	104.3	MAY	96.5
B. 1.1.1.1.2 WPI - Rice																
2000-01:	100.0	100.6	101.2	101.6	102.4	102.1	101.4	100.1	97.8	97.4	97.3	98.0	AUG	102.4	FEB	97.3
Average:	99.4	100.1	100.8	101.5	102.2	101.9	101.2	100.6	98.6	97.7	97.8	98.1	AUG	102.2	JAN	97.7
2001-02:	100.0	100.6	101.2	101.6	102.4	102.1	101.4	100.1	97.8	97.4	97.3	98.0	AUG	102.4	FEB	97.3
B. 1.1.1.2 WPI - Pulses																
2000-01:	97.4	99.5	99.2	100.5	99.9	100.1	100.8	104.3	102.2	101.1	97.4	97.6	NOV	104.3	APR	97.4
Average:	97.6	98.7	98.8	99.0	100.6	100.7	101.0	103.0	101.9	101.4	99.1	98.0	NOV	103.0	APR	97.6
2001-02:	97.3	99.4	99.2	100.7	99.9	100.1	100.9	104.4	102.2	101.1	97.4	97.5	NOV	104.4	APR	97.3

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).
(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH) *(Contd.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
B. 1.1.2 WPI - Fruits & Vegetables																
2000-01:	99.3	97.2	101.4	102.4	105.5	104.4	114.4	108.7	98.9	91.1	88.5	88.4	OCT	114.4	MAR	88.4
Average:	98.3	98.1	103.4	104.8	107.5	105.4	109.8	106.3	98.0	91.3	88.4	88.8	OCT	109.8	FEB	88.4
2001-02:	99.2	97.1	101.3	102.3	105.3	104.3	114.7	109.0	98.9	91.0	88.5	88.5	OCT	114.7	MAR	88.5
B. 1.2 WPI - Fibres																
2000-01:	99.3	99.7	101.2	101.0	100.7	99.9	99.3	100.4	99.4	100.6	99.5	99.0	JUN	101.2	MAR	99.0
Average:	100.2	100.7	100.2	100.3	100.4	100.1	98.2	99.1	99.4	100.7	100.5	100.2	MAY	100.7	OCT	98.2
2001-02:	99.3	99.6	101.3	101.1	100.8	99.8	99.3	100.5	99.4	100.6	99.5	99.0	JUN	101.3	MAR	99.0
B. 1.3 WPI - Oil Seeds																
2000-01:	98.0	99.4	100.2	103.1	104.1	102.9	100.1	99.1	98.6	100.1	97.9	96.6	AUG	104.1	MAR	96.6
Average:	97.3	98.8	100.2	102.7	104.8	104.5	101.7	99.9	99.0	98.9	97.0	95.4	AUG	104.8	MAR	95.4
2001-02:	98.0	99.4	100.1	103.1	104.0	102.9	100.0	99.1	98.6	100.1	97.9	96.6	AUG	104.0	MAR	96.6
B. 1.4 WPI - Minerals																
2000-01:	99.4	98.0	97.9	101.6	103.0	101.5	100.6	100.2	100.0	99.6	99.0	99.0	AUG	103.0	JUN	97.9
Average:	99.6	98.9	98.7	101.5	101.7	100.7	100.1	100.0	100.1	99.9	99.4	99.2	AUG	101.7	JUN	98.7
2001-02:	99.4	98.0	98.0	101.6	103.1	101.6	100.6	100.2	100.0	99.5	99.0	98.9	AUG	103.1	MAY	98.0
B. 2 WPI - Fuel, Power, Light & Lubricants																
2000-01:	101.5	101.0	100.3	99.2	99.1	99.5	101.3	100.4	99.2	98.3	99.5	100.9	APR	101.5	JAN	98.3
Average:	101.4	100.8	100.3	99.6	99.6	100.1	100.7	100.1	99.3	98.7	99.4	100.2	APR	101.4	JAN	98.7
2001-02:	101.5	101.0	100.3	99.2	99.1	99.5	101.3	100.4	99.2	98.3	99.5	101.0	APR	101.5	JAN	98.3
B. 3 WPI – Manufactured Products																
2000-01:	100.1	100.3	100.4	100.2	100.0	100.0	99.9	99.7	99.9	99.9	99.6	99.9	JUN	100.4	FEB	99.6
Average:	100.2	100.4	100.4	100.3	100.2	100.3	100.0	99.8	99.7	99.6	99.5	99.7	JUN	100.4	FEB	99.5
2001-02:	100.1	100.3	100.4	100.2	100.0	100.0	99.9	99.7	99.9	99.9	99.6	99.9	JUN	100.4	FEB	99.6
B. 3.1 WPI - Food Products																
2000-01:	100.0	99.7	100.3	100.2	100.0	100.4	100.4	100.3	100.2	100.0	99.1	99.5	SEP	100.4	FEB	99.1
Average:	99.1	99.7	100.7	100.9	101.3	101.2	101.0	100.2	99.6	99.4	98.5	98.4	AUG	101.3	MAR	98.4
2001-02:	100.0	99.7	100.3	100.2	100.0	100.4	100.4	100.3	100.2	100.0	99.1	99.5	SEP	100.4	FEB	99.1
B. 3.1.1 WPI - Sugar																
2000-01:	100.4	100.9	100.6	100.1	99.9	100.0	100.1	100.2	99.8	99.4	98.9	99.6	MAY	100.9	FEB	98.9
Average:	100.8	101.9	101.3	100.6	100.3	100.1	99.5	99.1	98.5	98.8	99.4	100.0	MAY	101.9	DEC	98.5
2001-02:	100.4	100.9	100.5	100.1	99.9	100.0	100.1	100.3	99.8	99.4	98.9	99.5	MAY	100.9	FEB	98.9

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).
(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH) *(Contd.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
B. 3.1.2 WPI - Edible Oils																
2000-01:	99.3	99.1	98.6	99.8	99.4	101.0	101.9	101.1	101.1	100.9	99.0	99.0	OCT	101.9	JUN	98.6
Average:	98.4	98.7	98.9	99.9	101.1	101.8	102.1	101.0	101.0	100.4	98.6	98.1	OCT	102.1	MAR	98.1
2001-02:	99.3	99.0	98.5	99.8	99.3	101.0	102.0	101.2	101.1	100.9	99.0	99.0	OCT	102.0	JUN	98.5
C. Consumer Price Index for Industrial Workers (1982=100)																
2000-01:	98.9	99.0	99.6	100.6	100.6	100.8	101.8	101.6	100.2	99.5	98.7	98.7	OCT	101.8	FEB	98.7
Average:	98.9	99.0	99.8	100.7	100.9	101.1	101.5	101.3	100.1	99.3	98.8	98.7	OCT	101.5	MAR	98.7
2001-02:	98.9	99.0	99.5	100.6	100.6	100.8	101.8	101.6	100.2	99.5	98.7	98.7	OCT	101.8	FEB	98.7
D. INDEX OF INDUSTRIAL PRODUCTION (Base: 1993-94 = 100) **IIP - General Index**																
2000-01:	98.2	99.2	96.2	97.3	97.1	97.0	95.9	99.0	105.1	104.4	101.4	109.0	MAR	109.0	OCT	95.9
Average:	96.9	97.0	95.6	97.1	96.6	97.4	96.5	99.1	105.5	105.7	101.9	109.9	MAR	109.9	JUN	95.6
2001-02:	98.2	99.3	96.3	97.3	97.1	97.0	95.9	99.0	105.1	104.4	101.4	109.0	MAR	109.0	OCT	95.9
D. 1.1 IIP - Basic Industries																
2000-01:	95.8	100.2	97.6	99.4	99.0	96.8	98.9	98.3	103.3	103.9	98.5	108.3	MAR	108.3	APR	95.8
Average:	95.5	98.4	95.6	98.5	98.7	96.3	99.6	98.7	103.6	105.4	99.5	109.7	MAR	109.7	APR	95.5
2001-02:	95.8	100.3	97.8	99.5	99.0	96.8	98.9	98.3	103.4	103.9	98.5	108.3	MAR	108.3	APR	95.8
D. 1.2 IIP - Capital Goods Industries																
2000-01:	95.9	94.9	97.3	95.1	97.3	99.7	95.4	97.9	103.8	100.8	104.6	116.7	MAR	116.7	MAY	94.9
Average:	88.5	88.8	94.3	92.1	93.2	101.5	93.8	98.6	108.1	102.8	104.0	131.1	MAR	131.1	APR	88.5
2001-02:	96.1	95.2	97.5	95.3	97.7	99.7	95.3	97.8	103.7	100.8	104.5	116.5	MAR	116.5	MAY	95.2
D. 1.3 IIP - Intermediate Goods Industries																
2000-01:	98.3	100.6	99.4	100.8	100.7	100.1	98.2	99.6	103.8	98.7	96.5	103.3	DEC	103.8	FEB	96.5
Average:	98.3	100.0	99.3	101.1	100.7	99.3	98.3	99.2	103.0	99.9	97.6	103.2	MAR	103.2	FEB	97.6
2001-02:	98.3	100.6	99.4	100.8	100.7	100.1	98.2	99.5	103.8	98.7	96.5	103.3	DEC	103.8	FEB	96.5
D. 1.4 IIP - Consumer Goods Industries																
2000-01:	101.6	96.9	92.5	92.5	91.9	93.6	90.1	97.8	108.9	111.1	109.7	113.5	MAR	113.5	OCT	90.1
Average:	102.7	96.4	93.2	93.2	92.0	93.1	91.0	98.2	109.7	110.7	108.0	112.1	MAR	112.1	OCT	91.0
2001-02:	101.5	96.9	92.5	92.5	91.8	93.6	90.0	97.8	108.9	111.1	109.8	113.5	MAR	113.5	OCT	90.0
D. 1.4.1 IIP - Consumer Durables																
2000-01:	94.4	97.1	95.3	98.4	96.5	99.4	96.1	100.5	103.6	101.4	101.6	115.8	MAR	115.8	APR	94.4
Average:	93.0	97.4	97.1	97.9	96.6	99.1	96.4	97.8	103.9	102.6	102.7	115.4	MAR	115.4	APR	93.0
2001-02:	94.5	97.2	95.2	98.3	96.3	99.5	96.1	100.7	103.6	101.2	101.5	116.0	MAR	116.0	APR	94.5

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).
(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH) *(Contd.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
D. 1.4.2 IIP - Consumer Non-Durables																
2000-01:	103.6	96.7	91.6	91.6	90.4	91.6	88.3	96.8	110.8	113.9	112.3	112.4	JAN	113.9	OCT	88.3
Average:	105.5	96.2	91.8	91.5	90.3	90.9	89.9	98.1	111.4	112.9	109.9	111.8	JAN	112.9	OCT	89.9
2001-02:	103.4	96.7	91.5	91.5	90.4	91.6	88.2	96.8	110.8	114.0	112.5	112.3	JAN	114.0	OCT	88.2
D. 2.1 IIP - Mining																
2000-01:	93.8	99.1	95.5	97.1	96.0	93.9	98.7	99.6	105.8	107.6	100.2	112.2	MAR	112.2	APR	93.8
Average:	92.7	96.9	93.2	94.5	94.0	92.7	98.5	100.2	107.3	110.1	103.8	114.8	MAR	114.8	SEP	92.7
2001-02:	93.8	99.1	95.7	97.2	96.2	93.9	98.6	99.5	105.9	107.5	100.1	112.1	MAR	112.1	APR	93.8
D. 2.2 IIP - Manufacturing																
2000-01:	98.5	99.0	96.6	97.1	96.8	97.3	95.3	99.1	105.3	104.1	102.2	108.8	MAR	108.8	OCT	95.3
Average:	96.8	96.5	95.9	96.8	96.5	97.8	95.5	99.0	105.5	105.4	102.4	110.9	MAR	110.9	OCT	95.5
2001-02:	98.5	99.0	96.6	97.1	96.8	97.3	95.3	99.1	105.3	104.1	102.2	108.8	MAR	108.8	OCT	95.3
D. 2.3 IIP - Electricity																
2000-01:	100.0	101.7	96.5	98.5	100.3	97.0	99.7	96.6	102.2	104.3	96.5	106.8	MAR	106.8	JUN	96.5
Average:	99.8	101.9	95.9	98.0	99.2	97.1	100.2	97.3	102.9	104.5	96.8	106.1	MAR	106.1	JUN	95.9
2001-02:	100.0	101.7	96.5	98.5	100.4	97.0	99.7	96.6	102.2	104.3	96.5	106.8	MAR	106.8	JUN	96.5
D. 2.2.1 IIP - Food Products																
2000-01:	113.7	89.8	79.7	73.4	70.2	72.3	73.3	93.6	132.7	133.5	134.0	134.1	MAR	134.1	AUG	70.2
Average:	116.2	90.5	77.9	72.2	68.2	72.0	71.1	95.7	133.2	135.3	133.6	133.3	JAN	135.3	AUG	68.2
2001-02:	113.4	89.6	79.5	73.5	70.1	72.2	73.3	93.6	132.9	133.7	134.1	134.0	FEB	134.1	AUG	70.1
D. 2.2.2 IIP - Rubber, Plastic, Petroleum and Coal Products																
2000-01:	96.6	106.2	100.1	101.8	99.7	99.1	97.4	97.1	98.5	97.9	96.8	108.8	MAR	108.8	APR	96.6
Average:	96.7	102.5	101.2	101.7	100.6	98.5	98.9	96.4	100.8	97.5	97.4	107.3	MAR	107.3	NOV	96.4
2001-02:	96.6	106.3	100.0	101.8	99.7	99.1	97.3	97.0	98.3	98.0	96.8	108.9	MAR	108.9	APR	96.6
D. 2.2.3 IIP - Chemicals and Chemical Products (except Petroleum & Coal Products)																
2000-01:	95.6	99.9	100.1	102.7	103.6	100.9	99.5	98.7	102.7	101.1	94.2	100.9	AUG	103.6	FEB	94.2
Average:	95.8	98.5	98.0	100.5	102.6	101.4	100.5	99.5	102.0	102.0	96.3	102.3	AUG	102.6	APR	95.8
2001-02:	95.6	100.0	100.3	102.8	103.6	100.9	99.3	98.7	102.8	101.0	94.2	100.9	AUG	103.6	FEB	94.2
D. 2.2.4 IIP - Non-metallic Mineral Products																
2000-01:	98.9	105.1	99.1	95.9	95.9	93.2	98.4	98.9	104.1	100.4	99.7	110.6	MAR	110.6	SEP	93.2
Average:	99.9	102.0	99.9	99.7	98.0	94.8	97.3	95.9	99.6	101.6	100.9	110.6	MAR	110.6	SEP	94.8
2001-02:	98.9	105.3	98.9	95.6	95.9	93.1	98.4	99.2	104.4	100.3	99.7	110.6	MAR	110.6	SEP	93.1

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).
(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 1: MONTHLY SEASONAL FACTORS OF SELECTED ECONOMIC TIME SERIES (APRIL - MARCH) *(Cocld.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	PEAK MONTH	PEAK VALUE	TROUGH MONTH	TROUGH VALUE
D. 2.2.5 IIP - Basic Metal and Alloy Industries																
2000-01:	94.8	98.8	96.9	101.3	101.2	99.3	100.2	97.3	102.5	101.9	98.1	107.7	MAR	107.7	APR	94.8
Average:	95.0	97.6	96.2	100.3	100.9	98.6	100.0	98.5	102.3	103.8	98.0	108.4	MAR	108.4	APR	95.0
2001-02:	94.8	98.9	97.0	101.3	101.2	99.3	100.2	97.3	102.5	101.9	98.1	107.7	MAR	107.7	APR	94.8
D. 2.2.6 IIP - Metal Products & Parts (except Machinery & Transport Equipments)																
2000-01:	102.9	96.6	100.4	95.1	96.8	100.0	94.8	99.2	102.8	101.1	103.5	106.8	MAR	106.8	OCT	94.8
Average:	100.8	97.6	100.1	96.8	97.2	99.8	96.7	99.2	102.9	100.6	101.5	106.9	MAR	106.9	OCT	96.7
2001-02:	103.1	96.5	100.2	95.2	96.9	100.1	94.6	99.2	102.7	101.1	103.5	106.8	MAR	106.8	OCT	94.6
D. 2.2.7 IIP - Machinery, Machine Tools & Parts																
2000-01:	94.6	93.7	96.2	96.4	97.1	100.5	97.7	101.6	106.3	102.0	101.6	112.2	MAR	112.2	MAY	93.7
Average:	90.7	92.1	95.4	95.7	96.4	101.3	96.8	100.7	108.3	102.0	101.8	117.9	MAR	117.9	APR	90.7
2001-02:	94.8	94.0	96.3	96.5	97.1	100.5	97.7	101.6	106.2	102.0	101.4	112.1	MAR	112.1	MAY	94.0
D. 2.2.8 IIP - Transport Equipment & Parts																
2000-01:	96.0	98.5	99.7	99.6	97.8	102.1	91.3	97.5	97.8	100.1	103.0	116.4	MAR	116.4	OCT	91.3
Average:	89.8	96.4	97.8	98.0	96.6	101.4	94.3	96.8	102.5	102.5	104.1	118.3	MAR	118.3	APR	89.8
2001-02:	96.5	98.6	99.7	99.5	98.0	102.0	91.2	97.7	97.6	100.0	102.9	116.5	MAR	116.5	OCT	91.2
E. 1 Exports (in US $ million)																
2000-01:	96.2	94.2	91.1	100.6	100.6	102.4	101.7	94.3	99.4	98.7	102.9	117.4	MAR	117.4	JUN	91.1
Average:	99.7	94.0	92.6	97.8	100.0	97.7	100.5	92.9	101.8	102.2	101.2	119.6	MAR	119.6	JUN	92.6
2001-02:	96.2	94.2	90.8	100.8	100.8	102.7	101.7	94.5	99.2	98.4	103.0	117.2	MAR	117.2	JUN	90.8
E. 2 Imports (in US $ million)																
2000-01:	96.4	99.2	95.2	101.4	98.8	101.7	100.2	102.6	102.0	101.0	90.8	110.9	MAR	110.9	FEB	90.8
Average:	95.8	98.9	99.6	102.3	99.1	99.7	98.8	98.5	103.6	99.2	94.0	111.0	MAR	111.0	FEB	94.0
2001-02:	96.7	99.1	95.2	101.7	98.4	101.8	100.2	103.0	102.2	100.5	90.7	111.2	MAR	111.2	FEB	90.7
E. 2.1 Oil Imports (in US $ million)																
2000-01:	98.8	99.4	98.5	101.9	101.7	101.9	104.8	113.3	91.9	95.9	88.8	102.5	NOV	113.3	FEB	88.8
Average:	102.3	99.8	102.6	97.9	97.6	96.0	100.0	102.3	102.1	97.8	93.6	107.5	MAR	107.5	FEB	93.6
2001-02:	98.8	99.4	98.5	102.4	102.2	102.3	104.9	114.0	91.2	95.7	88.4	102.3	NOV	114.0	FEB	88.4
E. 2.2 Non-Oil Imports (in US $ million)																
2000-01:	95.5	98.5	95.5	101.2	96.7	104.8	99.1	97.4	104.5	99.4	95.3	111.7	MAR	111.7	FEB	95.3
Average:	93.4	98.7	98.0	105.8	96.6	101.7	97.6	94.3	104.3	99.3	95.3	115.3	MAR	115.3	APR	93.4
2001-02:	95.8	98.3	95.5	101.1	96.5	105.2	99.2	97.7	104.6	98.7	95.3	111.7	MAR	111.7	FEB	95.3

Note: (1) Average figures relate for a sample period of 10 years (1991-92 to 2000-01).
(2) Figures for 2001-02 are the forecasts of seasonal factors.

Table 2: RANGE (DIFFERENCE BETWEEN MAXIMUM AND MINIMUM) OF SEASONAL FACTORS

Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	Average Range	Standard Deviation
Broad Money (M_3)	2.4	2.4	2.3	2.4	2.5	2.4	2.4	2.2	2.2	2.2	2.3	0.1
Net Bank Credit to Government	4.5	4.6	4.5	4.6	4.8	4.7	4.6	4.3	4.2	4.2	4.5	0.2
Net RBI Credit to Government	8.9	9.2	9.2	9.1	9.6	10.0	9.4	8.4	7.8	7.6	8.9	0.8
Bank Credit to Commercial Sector	4.5	4.7	4.8	5.0	5.1	5.2	5.1	5.2	5.3	5.3	5.0	0.3
Narrow Money (M_1)	7.8	7.5	7.1	6.4	5.9	5.6	5.5	5.5	5.5	5.5	6.2	0.9
Currency with Public	9.9	9.9	9.9	9.9	10.0	9.9	9.8	9.6	9.5	9.4	9.8	0.2
Reserve Money	9.1	8.8	8.5	7.6	6.7	6.3	6.7	6.8	6.8	6.8	7.4	1.0
Deposits (Banking Department)	13.4	13.4	12.8	12.3	11.7	11.0	9.9	9.9	10.2	10.3	11.5	1.4
Liabilities to the Banking System (SCBs)	9.3	8.9	8.4	8.0	7.6	7.1	6.5	6.4	6.6	6.8	7.6	1.0
Aggregate Deposits (SCBs)	1.6	1.6	1.6	1.9	2.1	2.3	2.2	2.0	2.0	2.0	1.9	0.3
Demand Deposits (SCBs)	7.7	7.6	8.2	9.0	10.0	11.0	11.2	11.1	10.9	10.5	9.7	1.5
Time Deposits (SCBs)	1.7	1.6	1.6	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	0.1
Government of India Rupee Securities	12.1	12.3	12.4	12.6	12.8	12.6	12.5	12.1	12.0	12.0	12.3	0.3
Balances held Abroad	19.3	17.8	16.1	13.8	13.2	13.1	13.5	13.4	14.1	14.6	14.9	2.1

Table 2: RANGE (DIFFERENCE BETWEEN MAXIMUM AND MINIMUM) OF SEASONAL FACTORS *(Contd.)*

Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	Average Range	Standard Deviation
Loans and Advances (RBI)	32.1	31.7	32.4	29.7	25.0	22.5	18.7	21.9	26.3	28.9	26.9	4.8
Investments (RBI)	17.1	18.4	20.6	23.0	26.1	28.1	29.0	28.8	28.3	28.1	24.8	4.6
Cash in Hand and Balances with RBI	10.3	9.4	8.4	7.6	7.1	7.0	6.4	7.1	8.4	9.4	8.1	1.3
Asset with Banking System (SCBs)	11.9	12.4	12.2	12.2	12.3	13.3	13.8	14.5	14.7	14.9	13.2	1.2
Bank Credit (SCBs)	5.7	5.9	6.0	6.1	6.2	6.0	5.7	5.4	5.2	5.0	5.7	0.4
Loans, Cash Credits and Overdrafts (SCBs)	4.7	4.8	4.7	4.9	5.3	5.5	5.2	4.9	4.5	4.4	4.9	0.4
Food Credit (SCBs)	26.2	25.5	24.2	23.1	21.3	20.0	20.3	20.1	19.9	19.6	22.0	2.5
Investments (SCBs)	1.5	1.5	1.6	1.8	2.1	2.7	3.0	3.2	3.3	3.3	2.4	0.8
WPI (BASE 1993-94=100) ALL COMMODITIES	1.9	2.0	1.9	1.9	1.7	1.5	1.2	1.3	1.2	1.2	1.6	0.3
WPI - PRIMARY ARTICLE	5.2	5.2	5.2	5.0	4.9	4.7	4.5	4.4	4.3	4.4	4.8	0.4
WPI - Food Articles	6.0	6.0	6.0	6.1	6.1	6.1	5.9	5.7	5.8	6.1	6.0	0.1
WPI - Food Grains (Cereals+Pulses)	2.6	2.5	2.3	2.1	2.0	1.9	1.8	1.8	1.6	1.5	2.0	0.4
WPI - Cereals	2.8	2.7	2.4	2.2	2.1	2.0	1.9	1.7	1.5	1.4	2.1	0.5
WPI - Wheat	9.7	9.3	8.8	8.2	8.1	8.1	8.2	8.2	8.1	7.9	8.5	0.6

Table 2: RANGE (DIFFERENCE BETWEEN MAXIMUM AND MINIMUM) OF SEASONAL FACTORS *(Contd.)*

Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	Average Range	Standard Deviation
WPI - Rice	3.9	3.8	4.0	4.2	4.6	4.8	5.0	5.0	5.1	5.1	4.6	0.5
WPI - Pulses	5.6	5.3	4.9	4.6	4.4	4.8	5.2	5.8	6.5	6.9	5.4	0.8
WPI - Fruits & Vegetables	18.8	19.1	19.3	19.9	21.2	23.0	23.8	24.8	25.5	26.0	22.1	2.8
WPI - Fibres	4.7	4.5	4.2	4.0	3.8	2.9	2.2	1.7	2.1	2.2	3.2	1.1
WPI - Oil Seeds	13.1	12.5	11.5	10.3	9.3	8.5	8.0	7.8	7.7	7.5	9.6	2.1
WPI - Minerals	2.8	2.7	2.5	2.2	2.7	3.1	3.9	4.6	5.0	5.1	3.5	1.1
WPI - Fuel, Power, Light & Lubricants	2.0	2.1	2.2	2.4	2.6	2.9	3.0	3.1	3.1	3.2	2.7	0.5
WPI - Manufactured Products	1.6	1.5	1.3	1.1	0.9	0.9	0.7	0.8	0.8	0.8	1.0	0.3
WPI - Food Products	5.6	5.4	4.9	4.2	3.3	2.4	1.8	1.5	1.3	1.3	3.2	1.7
WPI - Sugar	6.4	6.1	5.5	4.6	3.6	2.6	2.1	2.1	2.1	2.0	3.7	1.8
WPI - Edible Oils	5.6	5.5	5.1	4.7	4.2	3.7	3.2	2.9	3.1	3.3	4.1	1.0
Consumer Price Index for Industrial Workers (1982=100)	2.6	2.6	2.6	2.6	2.7	2.8	3.0	3.1	3.1	3.1	2.8	0.2
IIP - General Index	16.4	16.0	15.3	15.0	14.7	14.3	13.8	13.5	13.1	13.1	14.5	1.2
IIP - Basic Industries	16.8	16.5	16.2	15.7	14.9	13.8	13.3	12.9	12.6	12.5	14.5	1.7

Table 2: RANGE (DIFFERENCE BETWEEN MAXIMUM AND MINIMUM) OF SEASONAL FACTORS *(Contd.)*

Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	Average Range	Standard Deviation
IIP - Capital Goods Industries	69.8	67.1	61.3	53.1	43.7	35.2	29.2	25.1	22.9	21.8	42.9	18.7
IIP - Intermediate Goods Industries	5.4	5.3	4.9	4.8	5.0	5.6	6.1	6.9	7.2	7.3	5.9	1.0
IIP - Consumer Goods Industries	19.3	19.1	19.3	19.7	20.5	21.5	22.5	23.1	23.3	23.4	21.2	1.8
IIP - Consumer Durables	25.4	24.8	23.8	22.7	21.8	21.2	21.0	21.0	21.1	21.4	22.4	1.7
IIP - Consumer Non-Durables	23.4	22.9	22.5	22.4	22.2	22.7	23.6	24.5	25.3	25.6	23.5	1.2
IIP - Mining	25.2	25.0	24.6	24.1	23.2	22.0	20.7	19.6	18.7	18.4	22.2	2.6
IIP - Manufacturing	20.2	19.5	18.3	16.7	15.6	14.7	14.1	13.7	13.6	13.5	16.0	2.5
IIP - Food Products	78.3	76.6	73.2	68.8	64.5	62.7	62.8	63.2	63.8	63.9	67.8	6.1
IIP - Rubber, Plastic, Petroleum and Coal Products	12.7	12.0	11.6	10.5	9.9	9.4	10.4	11.2	12.1	12.2	11.2	1.1
IIP - Chemicals and Chemical Prods. (Except Petroleum & Coal Prods.)	8.5	8.0	7.4	6.9	6.7	7.3	7.9	8.8	9.3	9.4	8.0	1.0
IIP - Non-metallic Mineral Products	17.3	17.2	16.9	16.3	15.5	14.7	15.4	16.1	17.0	17.4	16.4	0.9
IIP - Basic Metal and Alloy Industries	13.7	13.7	13.9	13.9	13.7	13.4	13.1	13.1	12.9	12.9	13.4	0.4
IIP - Metal Products & Parts except Machinery & Transport Equipments	8.9	9.0	9.5	10.3	10.6	10.8	11.3	11.7	11.8	12.0	10.6	1.1

Table 2: RANGE (DIFFERENCE BETWEEN MAXIMUM AND MINIMUM) OF SEASONAL FACTORS *(Concld.)*

Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	Average Range	Standard Deviation
IIP - Machinery & Equipment other than Transport Equipment	37.0	36.4	35.0	32.5	29.1	25.3	22.1	20.2	19.2	18.5	27.5	7.4
IIP - Transport Equipment & Parts	33.8	33.6	33.2	32.7	31.3	29.1	26.0	24.1	24.7	25.1	29.4	4.0
IIP - Electricity	10.7	10.5	10.4	10.2	9.9	9.8	10.0	10.2	10.3	10.3	10.2	0.3
Exports (in US $ million)	25.7	26.4	27.2	28.8	30.0	29.8	27.9	26.6	26.2	26.3	27.5	1.6
Imports (in US $ million)	18.3	18.5	16.9	16.6	16.6	17.5	17.4	18.8	19.2	20.1	18.0	1.2
Oil Imports (in US $ million)	15.7	14.5	16.9	18.6	18.5	16.5	15.2	18.1	22.3	24.5	18.1	3.2
Non-Oil Imports (in US $ million)	27.5	27.0	25.9	26.2	26.4	25.1	21.9	19.1	17.0	16.4	23.3	4.3

Statement 1: SEASONAL FACTORS OF SELECTED SERIES FOR THE LAST TEN YEARS

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1. Broad Money (M_3)												
1991-92	101.3	101.5	100.5	100.0	99.4	99.5	100.0	99.8	99.1	99.2	99.3	100.4
1992-93	101.3	101.5	100.4	100.0	99.4	99.5	100.0	99.8	99.1	99.2	99.2	100.5
1993-94	101.4	101.3	100.4	100.0	99.3	99.7	100.0	99.7	99.1	99.2	99.2	100.6
1994-95	101.4	101.2	100.5	100.0	99.3	99.9	100.0	99.6	99.0	99.2	99.1	100.8
1995-96	101.5	101.1	100.5	99.9	99.3	100.0	100.0	99.6	99.0	99.2	99.1	100.9
1996-97	101.4	101.0	100.5	99.9	99.3	100.1	100.0	99.5	99.0	99.2	99.1	101.0
1997-98	101.4	100.9	100.6	99.9	99.4	100.1	99.9	99.5	99.0	99.2	99.1	101.0
1998-99	101.3	100.8	100.6	99.9	99.5	100.1	99.9	99.5	99.1	99.1	99.2	101.0
1999-00	101.3	100.8	100.6	99.9	99.5	100.1	99.8	99.5	99.2	99.1	99.2	101.0
2000-01	101.3	100.8	100.6	99.9	99.6	100.0	99.8	99.5	99.2	99.1	99.2	101.0
2. Reserve Money												
1991-92	105.2	102.2	101.4	101.7	100.1	97.2	98.8	99.1	96.1	98.2	99.8	100.3
1992-93	105.0	102.2	101.6	101.7	100.1	97.2	98.9	99.0	96.2	98.0	99.7	100.6
1993-94	104.7	102.3	101.7	101.6	100.0	97.2	99.1	98.9	96.2	97.8	99.5	101.1
1994-95	104.2	102.5	102.1	101.4	99.8	97.3	99.1	98.8	96.6	97.5	99.3	101.9
1995-96	103.7	102.7	102.4	101.0	99.3	97.1	99.3	98.9	97.0	97.5	99.2	102.6
1996-97	103.2	102.8	102.5	100.5	98.6	97.1	99.5	98.9	97.5	97.5	99.2	103.4
1997-98	102.9	102.9	102.5	100.0	97.9	96.9	99.8	99.1	97.9	97.8	99.2	103.6
1998-99	102.7	103.0	102.3	99.6	97.5	96.9	99.9	99.2	98.4	98.1	99.3	103.7
1999-00	102.5	103.0	102.1	99.3	97.3	96.7	100.1	99.2	98.5	98.4	99.4	103.5
2000-01	102.4	103.0	102.0	99.2	97.3	96.7	100.3	99.2	98.6	98.5	99.4	103.5
3. Aggregate Deposits (SCBs)												
1991-92	100.9	100.4	99.7	99.6	99.3	99.9	100.4	100.2	100.0	99.5	99.5	100.7
1992-93	100.9	100.3	99.6	99.5	99.3	100.1	100.4	100.2	99.9	99.5	99.5	100.8
1993-94	100.9	100.2	99.6	99.5	99.4	100.4	100.4	100.0	99.8	99.4	99.4	101.0
1994-95	100.9	100.1	99.6	99.4	99.5	100.6	100.4	99.9	99.6	99.4	99.4	101.3
1995-96	100.9	100.0	99.5	99.3	99.6	100.9	100.4	99.8	99.4	99.4	99.4	101.4
1996-97	100.9	99.9	99.5	99.3	99.8	101.1	100.4	99.7	99.2	99.3	99.4	101.5
1997-98	100.8	99.8	99.5	99.3	99.9	101.2	100.4	99.7	99.2	99.3	99.5	101.4
1998-99	100.8	99.8	99.6	99.2	99.9	101.2	100.3	99.7	99.3	99.3	99.6	101.2
1999-00	100.8	99.8	99.6	99.2	99.9	101.2	100.4	99.7	99.5	99.3	99.6	101.1
2000-01	100.8	99.8	99.5	99.2	99.9	101.2	100.4	99.7	99.5	99.3	99.6	101.1
4. Bank Credit (SCBs)												
1991-92	102.6	101.9	100.0	99.6	97.6	97.8	99.3	98.6	98.9	100.2	100.2	103.3
1992-93	102.6	101.8	100.0	99.6	97.5	97.9	99.2	98.6	98.9	100.3	100.3	103.4
1993-94	102.6	101.6	99.8	99.5	97.5	98.1	99.2	98.7	98.9	100.5	100.5	103.5
1994-95	102.5	101.3	99.7	99.4	97.5	98.3	99.2	98.7	99.0	100.7	100.7	103.6
1995-96	102.3	101.1	99.5	99.2	97.5	98.5	99.2	98.8	99.0	100.8	100.8	103.7
1996-97	102.2	100.9	99.3	99.1	97.7	98.6	99.3	98.7	99.0	100.9	100.8	103.7
1997-98	102.1	100.7	99.2	99.1	97.9	98.6	99.4	98.7	99.1	100.8	100.9	103.6
1998-99	102.0	100.7	99.2	99.0	98.1	98.6	99.5	98.5	99.1	100.8	100.9	103.5
1999-00	102.1	100.7	99.2	99.0	98.2	98.6	99.5	98.4	99.1	100.7	101.0	103.4
2000-01	102.1	100.7	99.2	99.0	98.3	98.6	99.6	98.4	99.1	100.7	101.0	103.3

Statement 1: SEASONAL FACTORS OF SELECTED SERIES FOR THE LAST TEN YEARS *(Contd.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
5. WPI - All Commodities												
1991-92	100.1	99.8	100.3	100.5	100.8	100.9	100.6	100.1	99.5	99.3	99.1	99.0
1992-93	100.1	99.8	100.3	100.5	100.8	100.9	100.5	100.1	99.5	99.3	99.2	98.9
1993-94	100.1	99.9	100.3	100.6	100.8	100.8	100.5	100.1	99.5	99.3	99.2	98.9
1994-95	100.1	100.0	100.3	100.6	100.8	100.6	100.5	100.0	99.5	99.3	99.2	98.9
1995-96	100.2	100.1	100.3	100.7	100.7	100.5	100.4	100.0	99.6	99.3	99.3	99.0
1996-97	100.2	100.1	100.3	100.6	100.5	100.4	100.4	100.1	99.7	99.4	99.3	99.1
1997-98	100.2	100.1	100.2	100.5	100.4	100.3	100.5	100.2	99.8	99.4	99.4	99.3
1998-99	100.2	100.1	100.2	100.4	100.2	100.2	100.6	100.3	99.9	99.4	99.4	99.3
1999-00	100.2	100.0	100.2	100.3	100.1	100.1	100.6	100.4	99.9	99.4	99.4	99.4
2000-01	100.2	100.0	100.2	100.2	100.1	100.1	100.6	100.4	99.9	99.4	99.4	99.4
6. WPI - Food Articles												
1991-92	97.9	98.9	101.1	102.0	103.2	102.1	101.0	100.9	99.2	98.2	98.2	97.2
1992-93	98.0	98.9	101.1	102.0	103.2	102.1	101.0	101.0	99.2	98.1	98.1	97.2
1993-94	98.2	99.0	101.1	102.1	103.1	101.9	101.1	101.0	99.2	98.0	98.0	97.1
1994-95	98.5	99.2	101.1	102.0	103.0	101.8	101.2	101.1	99.3	97.8	97.7	96.9
1995-96	98.8	99.4	101.3	102.0	102.9	101.5	101.4	101.1	99.4	97.7	97.5	96.8
1996-97	99.1	99.5	101.3	102.0	102.8	101.4	101.7	101.2	99.3	97.6	97.1	96.7
1997-98	99.4	99.7	101.4	102.0	102.6	101.2	101.9	101.2	99.4	97.5	96.9	96.7
1998-99	99.7	99.7	101.4	101.9	102.4	101.2	102.2	101.3	99.3	97.3	96.7	96.7
1999-00	99.8	99.8	101.5	101.9	102.3	101.2	102.4	101.3	99.2	97.3	96.6	96.7
2000-01	99.8	99.8	101.5	101.9	102.3	101.2	102.6	101.4	99.2	97.2	96.5	96.7
7. Consumer Price Index for Industrial Workers (1982=100)												
1991-92	98.9	99.0	100.0	100.8	101.0	101.3	101.3	101.1	100.1	99.0	98.9	98.7
1992-93	98.9	99.0	100.0	100.8	101.0	101.3	101.3	101.2	100.0	99.0	98.9	98.7
1993-94	98.9	99.0	100.0	100.8	101.0	101.2	101.3	101.2	100.1	99.1	98.9	98.7
1994-95	98.9	99.0	100.0	100.8	101.0	101.2	101.3	101.2	100.1	99.2	98.9	98.7
1995-96	98.9	98.9	99.9	100.8	101.0	101.1	101.3	101.3	100.1	99.3	98.9	98.6
1996-97	98.9	98.9	99.8	100.7	100.9	101.0	101.4	101.3	100.1	99.4	98.8	98.6
1997-98	98.9	98.9	99.7	100.7	100.8	101.0	101.6	101.4	100.2	99.5	98.8	98.6
1998-99	98.9	99.0	99.7	100.6	100.7	100.9	101.7	101.5	100.2	99.5	98.8	98.6
1999-00	98.9	99.0	99.7	100.6	100.6	100.8	101.8	101.6	100.2	99.6	98.8	98.7
2000-01	98.9	99.0	99.6	100.6	100.6	100.8	101.8	101.6	100.2	99.5	98.7	98.7
8. IIP - General Index												
1991-92	95.0	94.3	95.3	97.1	95.9	98.1	97.4	99.2	106.2	107.5	102.9	110.7
1992-93	95.2	94.6	95.3	97.1	96.0	98.1	97.2	99.2	106.1	107.4	102.7	110.6
1993-94	95.5	95.2	95.3	97.0	96.2	97.9	97.0	99.2	106.0	106.9	102.3	110.5
1994-95	96.1	95.9	95.4	96.9	96.4	97.7	96.8	99.2	105.7	106.3	102.0	110.4
1995-96	96.9	96.8	95.5	96.9	96.6	97.4	96.6	99.1	105.5	105.8	101.7	110.2
1996-97	97.5	97.7	95.6	97.0	96.8	97.1	96.3	98.9	105.2	105.3	101.6	109.9
1997-98	98.0	98.4	95.8	97.1	96.9	96.9	96.2	98.9	105.1	104.9	101.5	109.6
1998-99	98.2	98.8	95.9	97.2	97.0	96.9	96.1	98.9	105.1	104.5	101.4	109.4
1999-00	98.3	99.1	96.1	97.2	97.1	96.9	96.0	99.0	105.1	104.4	101.4	109.1
2000-01	98.2	99.2	96.2	97.3	97.1	97.0	95.9	99.0	105.1	104.4	101.4	109.0

Statement 1: SEASONAL FACTORS OF SELECTED SERIES FOR THE LAST TEN YEARS *(Concld.)*

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
9. IIP - Manufacturing												
1991-92	94.3	93.3	95.6	96.9	96.2	98.8	95.8	99.3	105.9	107.0	103.0	113.5
1992-93	94.5	93.7	95.5	96.9	96.2	98.7	95.8	99.2	105.8	106.9	102.9	113.2
1993-94	95.0	94.4	95.5	96.8	96.3	98.5	95.6	99.2	105.7	106.5	102.6	112.7
1994-95	95.8	95.4	95.4	96.7	96.5	98.2	95.6	99.0	105.6	106.0	102.4	112.1
1995-96	96.8	96.4	95.6	96.6	96.5	97.8	95.6	98.9	105.5	105.5	102.2	111.2
1996-97	97.6	97.4	95.8	96.7	96.6	97.5	95.5	98.8	105.3	105.1	102.2	110.2
1997-98	98.2	98.2	96.0	96.8	96.7	97.2	95.4	98.9	105.3	104.7	102.2	109.5
1998-99	98.5	98.7	96.3	96.9	96.7	97.2	95.4	99.0	105.3	104.2	102.3	109.1
1999-00	98.5	98.9	96.5	97.0	96.8	97.2	95.3	99.0	105.3	104.1	102.2	108.9
2000-01	98.5	99.0	96.6	97.1	96.8	97.3	95.3	99.1	105.3	104.1	102.2	108.8
10. Exports (US $)												
1991-92	103.7	93.7	92.5	95.2	100.2	95.7	98.4	93.3	102.3	104.7	102.1	118.2
1992-93	103.4	93.7	92.6	95.5	100.3	95.4	98.7	93.1	102.5	104.3	101.6	119.0
1993-94	102.6	93.7	93.0	95.9	100.3	95.2	99.4	92.8	102.7	103.9	100.9	120.0
1994-95	101.4	93.9	93.5	96.7	99.7	95.0	100.1	92.2	103.0	103.6	100.4	121.0
1995-96	100.1	94.0	93.6	97.3	99.5	95.8	100.8	91.8	102.9	103.0	99.9	121.8
1996-97	98.8	94.0	93.2	98.3	99.4	96.8	101.2	91.8	102.6	102.5	99.8	121.6
1997-98	97.6	94.1	92.6	99.0	99.7	98.7	101.5	92.5	101.8	101.4	100.4	120.4
1998-99	96.6	94.2	92.2	99.8	99.8	100.4	101.7	93.2	100.7	100.4	101.6	118.8
1999-00	96.3	94.2	91.6	100.2	100.2	101.9	101.7	93.9	99.9	99.3	102.7	117.8
2000-01	96.2	94.2	91.1	100.6	100.6	102.4	101.7	94.3	99.4	98.7	102.9	117.4
11. Imports (US $)												
1991-92	97.6	97.5	106.6	103.9	96.6	100.1	97.3	95.1	107.4	91.8	96.4	110.1
1992-93	97.4	97.6	105.7	104.1	97.0	99.5	97.3	95.7	106.9	92.7	96.5	111.2
1993-94	96.9	98.1	103.7	103.5	97.6	99.0	97.5	96.5	105.7	94.8	96.4	111.7
1994-95	95.8	98.6	101.7	103.0	99.1	98.2	97.8	97.1	104.6	97.9	95.6	112.2
1995-96	95.0	99.2	98.8	102.3	100.1	98.4	98.6	97.7	103.1	100.9	95.1	111.6
1996-97	94.1	99.6	97.3	102.0	101.0	98.6	99.0	98.2	102.1	103.1	93.8	111.3
1997-98	94.4	100.1	95.8	101.3	100.5	99.8	99.7	99.4	101.3	104.0	92.9	110.3
1998-99	94.7	99.8	95.8	100.9	100.4	100.5	99.8	100.5	101.5	103.5	91.5	110.3
1999-00	95.9	99.5	95.3	100.8	99.5	101.4	100.3	101.7	101.7	102.1	91.1	110.3
2000-01	96.4	99.2	95.2	101.4	98.8	101.7	100.2	102.6	102.0	101.0	90.8	110.9

CORPORATE INVESTMENT IN 2001-02: AN ATTEMPT AT PROJECTION*

Introduction

Capital investment is essential for modernisation of productive capacity and adding new capacity for current and future industrial growth. Projections of capital investment in the private corporate sector provide important insights into the business expectations about performance of economy in general and the infrastructure and manufacturing sectors in particular.

An attempt has been made in this study to capture the likely growth of corporate investment based on data on phasing details of projects sanctioned assistance by the major all-India financial institutions and the public sector banks. The approach is essentially based on the methodology developed by Dr. C. Rangarajan in an article captioned "Forecasting Capital Expenditure in the Corporate Sector" published in the December 13, 1970 issue of the 'Economic and Political Weekly'.

The study is organized into three sections. Section I elaborates on the methodology of projection. Limitations and challenges being faced in making the projections are dealt with in Section II. Salient features of the corporate projects sanctioned assistance by the major financial institutions and public sector banks during 2000-01, according to industry, size of investment, location of project as also the projected corporate investment in 2001-02 are presented in Section III.

SECTION I

Methodology of projection

The method of estimating corporate investment should ideally be based on the available means of financing an investment project. The bulk of the major projects in the Indian private corporate sector have been financed by the leading all-India term lending institutions namely the Industrial Development Bank of India (IDBI), the Industrial Credit and Investment Corporation of India (ICICI), the Industrial Finance Corporation of India (IFCI), the Industrial Investment Bank of India (IIBI), and the Infrastructure Development Finance Company (IDFC). The financial sector reforms in the 1990's have, in effect, enlarged the sources of financing corporate projects; in particular, major commercial banks have, in recent years, started providing financial support to corporate projects. Since a majority of the private corporate entities in India undertaking large projects, approach the term lending institutions and also banks for financing

* Prepared in the Corporate Studies Division of the Department of Statistical Analysis and Computer Services. The study for 2000-01 was published in the June 2001 issue of the RBI Bulletin.

the project cost, at least partially, the phasing details of capital expenditure available in the relevant project reports would provide a base for estimation of likely capital expenditure one year ahead in the private corporate sector.

SECTION II

Assumptions and Limitations

The estimation of capital investment in this study is based on the assumption that most of the companies in the private corporate sector approach the term lending institutions and major commercial banks for financing their projects. The fixed capital cost of the projects assisted by term lending institutions and public sector banks, by and large reflect the trends in investment pattern of the private corporate sector.

Some companies may raise resources exclusively from capital markets to undertake large projects without seeking any assistance from the term lending institutions. It is difficult to get the phasing details of capital expenditures from the prospectus issued by such companies. At the same time, there is no reliable information on the end-use of funds raised from the markets. In view of these limitations, such projects are excluded from the purview of the study.

Aggregate capital expenditure on assisted projects in any given year comprises i) expenditure on all projects sanctioned in the previous years, and ii) expenditure on projects sanctioned in that year and over subsequent years. At the time of projection of the aggregate capital expenditure for the reference year, the data relating to the first component are available from the phasing details of the projects, whereas for the second component the estimate is essentially in the nature of a projection as the details of the data on the projects taken up in the reference year are not available. Major operating factors such as availability of necessary inputs, the performance of the infrastructure sectors like power, transport, etc., form the back drop in arriving at the estimate of likely corporate investment an year ahead, which is essentially judgmental in nature and depends on the investment climate, as it unfolds, in that year.

SECTION III

Corporate Investment in 2001-02

As already mentioned, this study attempts to estimate the likely growth of corporate investment in the reference year 2001-02, solely based on the envisaged phasing of capital projects assisted by term lending institutions and major commercial banks. The basic premise for arriving at the broad idea of corporate investment is that, by suitably aggregating the data on the phasing of capital expenditures over the individual years for the duration of projects, it should, at the beginning of any year, be possible to indicate the investment that is likely to be made in the course of that year on all the projects for which assistance has been sanctioned by the respective financial institutions/ banks, up to the end of the previous year.

Accordingly, for the current study, data on the phasing of capital expenditures on projects sanctioned by the all-India financial institutions and the commercial banks during 2000-01 were collected and suitably aggregated. Where a company approached more than one institution for project assistance, care was taken to avoid duplication in the compilation. Efforts are made to incorporate the revisions in the phasing of projects sanctioned earlier, to the extent feasible. The data consolidated on these lines, are presented in Table 1. When horizontally read, it shows the capital expenditures that are expected to be incurred in various years on projects for which assistance was sanctioned in a given year. Vertically read, it shows the capital expenditures that are expected to be incurred in a year on projects to which assistance had been sanctioned in that year and in previous years.

Apart from the project expenditures, the companies also report the normal capital expenditures likely to be incurred in subsequent years. These expenditures are added to the project expenditures so as to obtain total capital expenditure planned by the private corporate sector.

Project expenditure during 2000-01

The details of phasing of capital expenditure in each of the years 1990-91 to 2001-2002 in respect of projects sanctioned by the financial institutions and the commercial banks are presented in Table 1.

TABLE 1: PHASING OF CAPITAL EXPENDITURE OF PROJECTS SANCTIONED ASSISTANCE BY TERM LENDING INSTITUTIONS

(Rs. crore)

Year of sanction	Capital Expenditure in										
	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Upto March 1990	6,804	3,395	2,723	1,583	1,620	1,399	1,205	309			
1990-91	3,969	2,207	912	704	711	717	662	439	90		
1991-92	8,276	8,103	4,746	1,387	720	648	600	540	454		
1992-93	527	11,492	10,041	3,074	2,677	762	787	661	527		
1993-94		1,121	13,319	13,714	6,943	1,885	708	564	752	762	591
1994-95			837	18,261	21,531	13,515	6,629	1,366	441	456	400
1995-96			10	2,519	26,531	24,442	12,590	3,971	892	770	782
1996-97				69	2,326	21,917	20,044	8,592	2,800	588	618
1997-98				8	1,165	4,437	21,359	19,980	11,074	5,195	2,455
1998-99			313	414	657	1,408	6,415	23,923	18,856	10,439	3,340
1999-2000					2	13	256	8,291	12,032	13,458	8,443
2000-01						22	32	36	5,711	18,264	19,214
Total upto 2000-01	19,576	26,318	32,901	41,732	64,883	71,166	71,287	68,672	53,629	49,932	35,843
2001-02										5,000*	18,500*
Grand Total #	19,884	26,777	33,362	41,948	65,074	71,446	71,479	68,780	53,709	55,032	54,343
Per cent change	4.2	34.7	24.6	25.7	55.1	9.8	0.0	-3.8	-21.9	2.5	-1.3

* : Estimated capital expenditures incurred in 2000-01 and likely to be incurred in 2001-02 on the projects to be sanctioned in 2001-02 and 2002-03.

\# : a) Includes assistance provided by the IDBI under Bills Rediscounting Scheme and Technical Development Fund Scheme

b) The estimates of Corporate Investment are *ex ante* and differ in scope and methodology from the *ex post* estimates of corporate fixed investment as available in National Accounts Statistics (NAS). See also the technical note attached to 'Growth of Corporate Investment: An attempt at projection for 1999-2000' published in the Monsoon 1999 issue of the Reserve Bank of India Occasional Papers for details.

Capital expenditure of Rs. 31,668 crore was expected to have been incurred during 2000-01 in respect of the projects sanctioned up to 1999-2000. The project proposals sanctioned assistance during 2000-01 envisaged capital expenditure of Rs. 18,264 crore in the same year. A few large projects usually incur capital expenditure, which is not insignificant, before seeking assistance from lending institutions and such expenditure in 2000-01 in respect of projects likely to be sanctioned in 2001-02 is expected to be of the order of Rs. 5,000 crore. The total capital expenditure including assistance under Bill Rediscounting Scheme, that might have been incurred during 2000-01 works out to Rs. 55,032 crore, showing a rise of 2.5 per cent as compared with Rs. 53,709 crore estimated for 1999-2000 .

Projects sanctioned during 2000-01

An important development relating to the power projects, which were assisted in the recent years, was that some of the major projects have not commenced implementation so far while some others plan to implement with substantially revised phasing. In fact, the financial institutions cancelled assistance to twelve major power projects sanctioned in 1994-95 and later years, as these projects are not likely to be taken up in the near future. Companies implementing five other power projects, approached the financial institutions again, with substantial revisions in the phasing of capital expenditure. These two developments resulted in considerable changes in phasing pattern of capital expenditure and the data, are accordingly, modified taking into an account (i) cancellation of twelve power projects; and (ii) revised phasing of five power projects. The five power projects with revised phasing of capital expenditure are considered as new projects and the twelve power projects for which assistance was cancelled in 2000-01 were deleted from the scope of this study. The number of projects sanctioned during 1999-2000 consequent upon revisions and cancellations now stands revised to 369 with the revised project cost of Rs. 47,009 crore as against 373 projects with aggregate cost of projects at Rs. 53,581 crore considered in the earlier study.

This study covers 332 projects sanctioned assistance by term lending institutions and major commercial banks during 2000-01 with an aggregate cost of projects at Rs. 69,400 crore, spread over a ten year period spanning 1996-97 to 2005-06. The number of projects covered for 1999-2000 was a little higher at 369, but their aggregate cost of projects was much lower at Rs. 47,009 crore. The normal capital expenditure of the 332 projects amounted to Rs. 1,588 crore phased out over the ten year period 1997-98 to 2006-07. The total fixed capital expenditure of these projects amounted to Rs. 70,989 crore (Table 2). The phasing details of the projects sanctioned during 2000-01, showed that about one-fourth of aggregate cost of projects amounting to Rs. 18,264 crore (25.7 per cent) is planned to be incurred in the

TABLE 2: PHASED PROJECT AND NORMAL CAPITAL EXPENDITURE OF PROJECTS SANCTIONED IN 1999-2000 AND 2000-2001

(Rs. crore)

Project expenditure	1995-96 to 1997-98	1998-1999	1999-2000	2000 - 2001	2001-2002	2002-2003	2003 - 2004	2004-05 to 2006-07	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
I : 1999-2000					**Number of projects: 369**				
i) Phased capital exp.	271	8,208	11,832	13,064	8,023	5,414	197	–	47,009
	(0.6)	(17.5)	(25.2)	(27.8)	(17.1)	(11.5)	(0.4)	–	(100.0)
ii) Normal capital exp.	–	83	200	394	420	484	498	746	2,825
Total	**271**	**8,291**	**12,032**	**13,458**	**8,443**	**5,898**	**695**	**746**	**49,834**
	(0.5)	**(16.6)**	**(24.1)**	**(27.0)**	**(16.9)**	**(11.8)**	**(1.4)**	**(1.5)**	**(100.0)**
II : 2000-01					**Number of projects: 332**				
i) Phased capital exp.	45	31	5,549	18,024	19,019	15,980	6,890	3,862	69,400
	(0.1)	(–)	(8.0)	(26.0)	(27.4)	(23.0)	(9.9)	(5.6)	(100.0)
ii) Normal capital exp.	10	5	162	240	194	211	227	539	1,588
Total	**54**	**36**	**5,711**	**18,264**	**19,214**	**16,192**	**7,117**	**4,401**	**70,989**
	(0.1)	**(0.1)**	**(8.0)**	**(25.7)**	**(27.1)**	**(22.8)**	**(10.0)**	**(6.2)**	**(100.0)**

Note : Figures in brackets denote percentage share in the total.

(–) : Nil/Negligible.

year of sanction and a higher quantum of investment of Rs.19,214 crore (27.1 per cent) in the following year 2001-02 and in the third year also, the share of capital expenditure was substantial at 22.8 per cent; the phasing pattern of these projects is some what different from that of the projects sanctioned assistance in 1999-2000. In respect of projects sanctioned assistance in 1999-2000, about one fourth (24.1 per cent) of the total expenditure was planned to be spent in the initial year of sanction i.e., 1999-2000, and another 27.0 per cent in the following year, while in the third year the share was lower at 16.9 per cent. It may be mentioned that in respect of projects sanctioned assistance in 2000-01, expenditure in the year preceding the year of sanction, i.e.1999-2000 amounted to Rs.5,711 crore accounting for 8.0 per cent of total expenditure.

A discernable feature of phasing of projects in the recent years is that, some of the corporates have been investing considerably large amounts in capital expenditure even before approaching institutions for assistance. It is possible that these funds were from their own and other resources, or were obtained as short-term funds from banks/ financial institutions on a roll over basis. In fact, the share of expenditure incurred on projects in the year prior to the year of sanction has been on the rise from 3.9 per cent in 1996-97 to 8.0 per cent in 2000-01; the share was considerably high at 16.6 per cent in 1999-2000 (Table 3). This aspect has also to be factored in while arriving at the one-year ahead projection of corporate investment.

TABLE 3: CAPITAL EXPENDITURE IN THE YEAR OF SANCTION AND THE PRECEDING YEAR

Year of sanction	Number of projects	Capital expenditure				
		Amount (Rs. crore)			Per cent share in total project cost	
		Aggregate project cost	Year prior to the year of sanction	Year of sanction	Year prior to the year of sanction	Year of sanction
1	2	3	4	5	6	7
1996-97	1117	58,940	2,326	21,917	3.9	37.2
1997-98	899	81,533	4,444	23,621	5.5	29.0
1998-99	620	83,268	6,561	25,731	7.9	30.9
1999-2000	369	49,834	8,291	12,032	16.6	24.1
2000-01	332	70,989	5,711	18,264	8.0	25.7

Industrial pattern of projects

The industrial classification of projects adopted for this study is based on the industrial activity as indicated in the project reports. Reflecting the national priority accorded to the investment in infrastructure projects, share of such projects in the aggregate cost of projects moved up from 42.9 per cent in 1999-2000 to as high as 62.5 per cent in 2000-01(Table 4). Power projects numbering 20 accounted for 30.6 per cent in 2000-01, followed by projects of roads, ports and storage sector (22.1 per cent) and telecom projects (9.8 per cent). The shares of power, roads, ports & storage as also telecom projects were considerably higher in 2000-01, than the corresponding shares in the previous year.

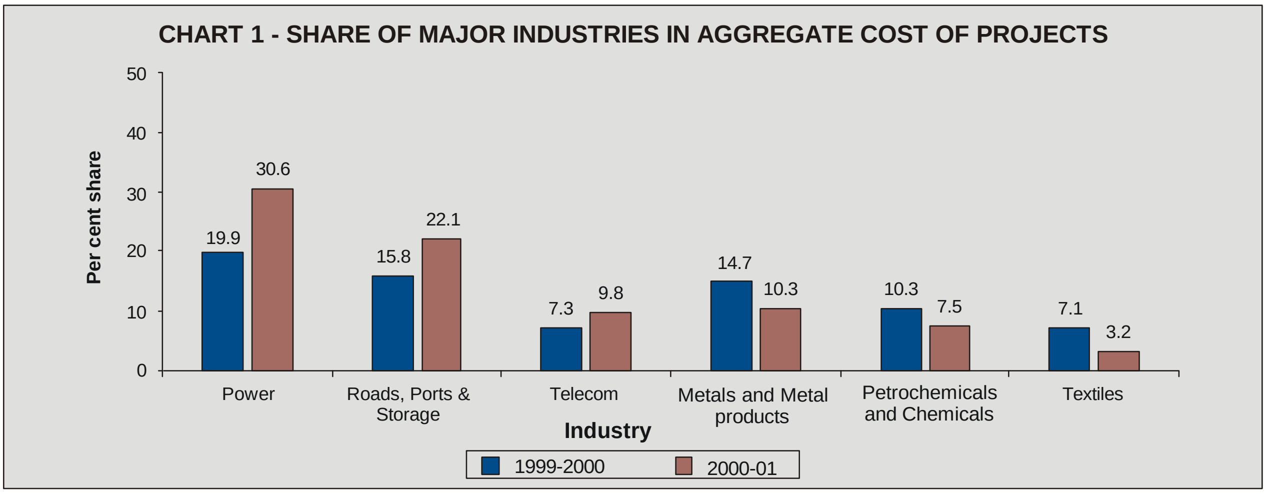
While the share of engineering industry in the aggregate cost of projects came down from 18.1 per cent in 1999-2000 to 10.9 per cent in 2000-01, that of chemical industry declined from 10.5 per cent to 9.8 per cent over the same period. Metals and metal products (10.3 per cent) of the engineering industry and petrochemicals and chemicals (7.5 per cent) of the chemical industry predominated the respective industry groups in 2000-01. The three major industry groups viz., infrastructure, engineering and chemicals together claimed 83.2 per cent of the total cost of projects in 2000-01 as compared to 71.5 per cent in 1999-2000. The shares of industries such as textiles, fertilizers and pesticides, cement, electronics, hotels & restaurants and construction varied between 1 per cent and 3 per cent.

TABLE 4: INDUSTRY-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

Industry	1999-2000			2000-01		
	Number of Projects	Project cost		Number of Projects	Project cost	
		Amount (Rs. crore)	Per cent share		Amount (Rs. crore)	Per cent share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Infrastructure (i + ii + iii)	**37**	**20,178**	**42.9**	**43**	**43,373**	**62.5**
i) Power	17	9,353	19.9	20	21,207	30.6
ii) Telecom	4	3,409	7.3	8	6,814	9.8
iii) Roads, ports and storage	16	7,416	15.8	15	15,352	22.1
2. Engineering (i + ii + iii + iv)	**69**	**8,508**	**18.1**	**51**	**7,579**	**10.9**
i) Metals and metal products	23	6,917	14.7	28	7,161	10.3
ii) Automobiles and auto-ancilliaries	22	567	1.2	14	274	0.4
iii) Electrical equipments	14	380	0.8	7	121	0.2
iv) Non-electrical machinery	10	644	1.4	2	24	–
3. Chemicals (i + ii + iii)	**35**	**4,940**	**10.5**	**36**	**6,770**	**9.8**
i) Petrochemicals and chemicals	27	4,823	10.3	17	5,220	7.5
ii) Pharmaceuticals and drugs	8	117	0.2	12	424	0.6
iii) Fertilizers and pesticides	–	–	–	7	1,126	1.6
4. Mining and quarrying	5	794	1.7	–	–	–
5. Cement	8	1,627	3.5	6	1,883	2.7
6. Textiles (other than jute)	82	3,335	7.1	70	2,252	3.2
7. Sugar	22	998	2.1	10	339	0.5
8. Paper and paper products	12	457	1.0	9	638	0.9
9. Electronics	9	490	1.0	13	1,312	1.9
10 Hotels and restaurants	13	1,603	3.4	14	1,619	2.3
11. Construction	3	1,461	3.1	4	710	1.0
12. Others *	74	2,617	5.6	76	2,926	4.2
Total	**369**	**47,009**	**100.0**	**332**	**69,400**	**100.0**

* : Comprise industries, each with a share of less than 1 per cent in total cost of projects in 1999-2000 and 2000-01.

– : Nil/Negligible.



Size-wise pattern of projects

Very large projects each costing Rs.100 crore and above, numbering 69, dominated with an aggregate cost of projects Rs.62,381 crore accounting for 89.9 per cent of the total cost of projects in 2000-01 (Table 5).

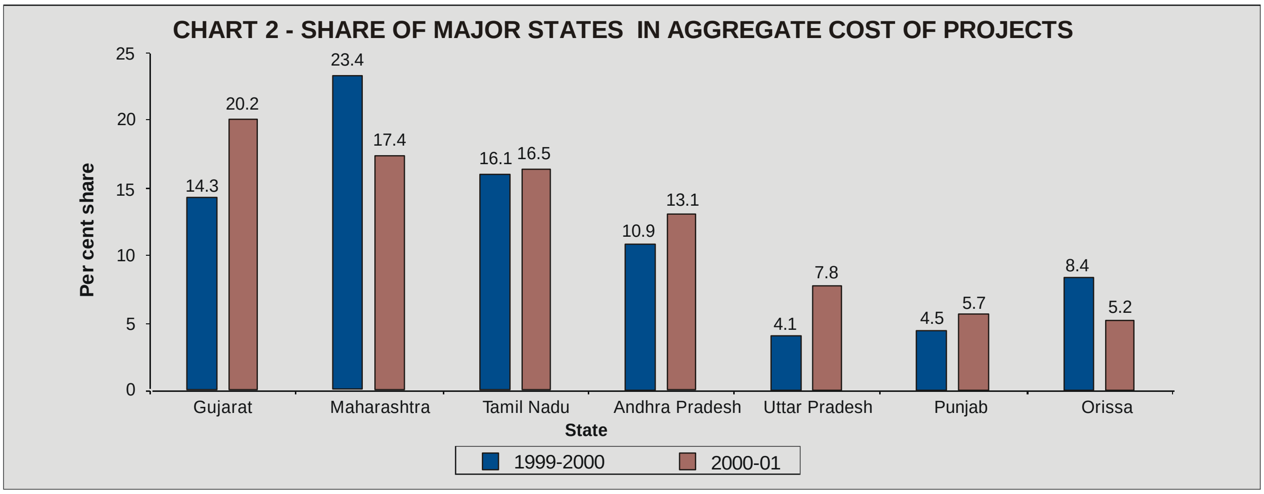
In the preceding year, such very large projects, numbering 72, formed 84.4 per cent of the aggregate cost of projects.

State-wise pattern of projects

The state-wise classification of projects is based

TABLE 5: SIZE-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

Size of Projects (Rs. Crore)	1999-2000			2000-01		
	Number of Projects	Project cost		Number of Projects	Project cost	
		Amount (Rs. crore)	Per cent share		Amount (Rs. crore)	Per cent share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Less than 5.0	38	114	0.2	19	62	0.1
2. 5.0 - 7.5	29	181	0.4	23	140	0.2
3. 7.5 - 10.0	22	191	0.4	17	145	0.2
4. 10.0 - 15.0	38	462	1.0	43	531	0.8
5. 15.0 - 20.0	38	645	1.4	35	614	0.9
6. 20.0 - 50.0	90	2,849	6.1	86	2,781	4.0
7. 50.0 - 100.0	42	2,898	6.2	40	2,747	4.0
8. 100.0 & above	72	39,668	84.4	69	62,381	89.9
Total	**369**	**47,009**	**100.0**	**332**	**69,400**	**100.0**



on the location of the projects as stated in the project reports. Gujarat occupied the top position with an aggregate cost of projects at Rs. 14,052 crore accounting for one-fifth of the total cost of projects in 2000-01 followed by Maharashtra (17.4 per cent), Tamil Nadu (16.5 per cent), Andhra Pradesh (13.1 per cent), Uttar Pradesh (7.8 per cent). Punjab (5.7 per cent) and Orissa (5.2 per cent) (Table 6).

TABLE 6: STATE-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

State/ Union Territory	1999-2000			2000-01		
	Number of Projects	Project cost		Number of Projects	Project cost	
		Amount (Rs. crore)	Per cent share		Amount (Rs. crore)	Per cent share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra Pradesh	29	5,147	10.9	26	9,088	13.1
2. Delhi	7	971	2.1	12	1,374	2.0
3. Gujarat	35	6,707	14.3	30	14,052	20.2
4. Haryana	20	466	1.0	14	887	1.3
5. Karnataka	17	2,021	4.3	24	2647	3.8
6. Kerala	5	581	1.2	6	177	0.3
7. Madhya Pradesh	11	1,289	2.7	10	988	1.4
8. Maharashtra	66	10,987	23.4	64	12,061	17.4
9. Orissa	3	3,926	8.4	5	3,591	5.2
10. Punjab	16	2,123	4.5	22	3,955	5.7
11. Tamil Nadu	80	7,571	16.1	61	11,419	16.5
12. Uttar Pradesh	26	1,946	4.1	18	5,401	7.8
13. West Bengal	16	2,146	4.6	10	651	0.9
14. Others*	38	1,127	2.4	30	3,110	4.5
Total	**369**	**47,009**	**100.0**	**332**	**69400**	**100.0**

* Comprise states/ union territories, each with share of less than 1 per cent in aggregate cost of projects in 1999-2000 and 2000-01and those reporting single project in 1999-2000 and/or 2000-01.

TABLE 7: PURPOSE-WISE DISTRIBUTION OF PROJECTS AND THEIR COST, 1999-2000 AND 2000-01

Purpose	1999-2000			2000-01		
	Number of Projects	Project cost		Number of Projects	Project cost	
		Amount (Rs. crore)	Per cent share		Amount (Rs. crore)	Per cent share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. New Projects	113	24,719	52.6	120	53,533	77.1
2. Expansion	135	12,443	26.5	124	7,630	11.0
3. Overrun	38	6,245	13.3	19	6,818	9.8
4. Diversification	16	2,124	4.5	8	124	0.2
5. Modernisation	52	1,277	2.7	45	1,093	1.6
6. Others	15	202	0.4	16	203	0.3
Total	**369**	**47,009**	**100.0**	**332**	**69,400**	**100.0**

Purpose-wise pattern of projects

New projects, numbering 120 with aggregate cost of projects of Rs.53,533 crore, accounted for more than three-fourths of aggregate cost of projects (77.1 per cent) in 2000-01, which was much higher than the share of such projects at 52.6 per cent in the previous year (Table 7).

The share of aggregate cost of 124 projects for expansion (Rs.7,630 crore), was much lower at 11.0 per cent in 2000-01 as compared with 26.5 per cent observed for the previous year.

CHART 3: PURPOSE-WISE DISTRIBUTION OF AGGREGATE COST OF PROJECTS

Corporate Investment in 2001-02

The projection of growth of private corporate investment for 2001-02, as already explained, is based on i) planned capital expenditure on projects sanctioned assistance up to 2000-01 and ii) capital expenditure on projects sanctioned /to be sanctioned assistance in 2001-02. The total envisaged project expenditure in 2001-02 for which sanctions were accorded up to 2000-01, amounted to Rs.35,843 crore. Developments in current economic situation will to a large extent be dependent on twin aspects viz., i) the monsoon conditions which so far have not been unfavourable and ii) the industrial outlook which continues to be uncertain and of considerable concern. Development of favourable climate for investment will then be dependent upon the revival of industry in the second half of the current fiscal year. Also some favourable developments relating to the power and telecom sectors would need to be considered in this context. A Bill captioned "Electricity Bill 2001" was introduced in the parliament which would enable the power generating companies to sell power directly to bulk consumers like corporate entities and residential complexes. In regard to the telecom sector, the Government is planning to issue licenses to Fourth Cell Operators, which is likely to encourage investment in the telecom sector. Conscious efforts are also being made to encourage investment with a view to supporting the activity of building roads, ports and storage facilities. These developments may have a positive impact on the flow of investment into the infrastructure industry. Against this backdrop, the capital expenditure in 2001-02 on the projects likely to be sanctioned during 2001-02 could be placed at around Rs. 18,500 crore. The aggregate capital expenditure in 2001-02 would be Rs.54,343 crore, which will be nearly of the same quantum of investment as in the preceding year. By way of caution, it may be mentioned that the realisation of the projected investment in 2001-02 will, *inter alia*, be contingent upon the strict adherence to the implementation of power projects as scheduled, their share in aggregate investment being substantial.

AUTONOMY OF THE CENTRAL BANK: CHANGING CONTOURS IN INDIA*

Y.V. REDDY

I am grateful to the organisers for giving me this opportunity to be here with you today to deliver the Second Foundation Day Lecture. The IIM, Indore has acquired a great standing and high stature within a short span of four years and the entire credit should go to the support rendered by all, and in particular, the devotion and dedication displayed by the faculty and students to academic excellence.

It is not easy to select a topic for today's lecture; a topic that would interest the best and brightest of young persons, that would be of contemporary relevance and one on which something forward looking can be explored. After some deliberation, the subject "*Autonomy of the Central Bank: Changing Contours in India"* has been chosen.

During the ten years of economic reform, Reserve Bank of India (RBI) has emerged as a respected and significant institution in public policy and its changing role as a central bank deserves to be appreciated. In fact, a historic agreement in 1997 between Government of India and the RBI on the termination of the system of automatic monetisation and introduction of a system of Ways and Means Advances constitutes a watershed in public policy governing their mutual relationship. Amendments to the legislation relating to the RBI and banking announced by Finance Minister in the budget speech for 2000-2001 and subsequent submission of draft legislations by the RBI are indicative of the evolving institutional changes. The issues of transparency and accountability governing their operations with each other have been addressed by Advisory Groups on *Transparency in Monetary and Financial Policies* headed by the former RBI Governor, Mr. M. Narasimham (September 2000) and on *Fiscal Transparency* by the former Finance Secretary, Mr. M.S. Ahluwalia (June 2001). There have also been some deliberations on the issue of appropriate provisions relating to the RBI, in the context of ongoing review of Constitution of India by the Commission appointed for the purpose a year ago. Hence, there is merit in taking a view on the broader issue of independence of the central bank in India, so that the process of change is negotiated smoothly and in a consistent form, thus avoiding the danger of what may be termed as "disjointed incrementalism" in reform through ill-defined goals.

The lecture will be in three parts. The

*** The Second Foundation Day Lecture by Dr. Y.V. Reddy, Deputy Governor, Reserve Bank of India, at Indian Institute of Management at Indore on October 3, 2001.**

Dr. Reddy is grateful to Shri Indranil Bhattacharyya, Shri Kaushik Bhattacharya and Dr. A. Prasad for their valuable assistance.

first one defines central banking, and its independence, while providing theoretical and empirical evidence for and against independence or autonomy (both words are used interchangeably in this lecture though autonomy and independence could have slightly different connotations) and explaining difficulties in its measurement. The second part reviews the Indian experience through recourse to periodisation and makes an assessment of the current situation. The third section focuses on the emerging issues in India and concludes with some random thoughts on the autonomy of central banks.

What is Central Banking?

The central banking functions typically include not only creation of money or more broadly monetary management, but, also often, management of public debt of Government, regulation and supervision of banking entities, financing of developmental activities and other associated functions.

While discussing the issue of autonomy, it is necessary to recognise that the function of debt management is essentially performed by a central bank as an agent of Government and the issue of autonomy does not arise. In fact, this function could be in conflict with autonomy in the conduct of monetary policy.

As regards the function of regulation and supervision, the argument for involvement of a central bank emerges from the role of lender of last resort and the obligation to smoothly operate the payments system. In this regard, the autonomy that the central bank exercises is no different from autonomy of any regulator in the financial system.

As far as the developmental role is concerned, close coordination with Government necessarily arises, which in some ways impinges on autonomy as it is in a way linked to money creation.

What is uniquely relevant for a central bank's independence is its exercise of the power to modulate the creation of money and the price of money, which impacts on the value of money, both domestic and external. In this context, the critical issue relates to the degrees of freedom the central bank has in deciding whether or not to fund the Government's expenditure out of created money.

The view that central banks should be largely independent of political power and that the central bank credit to government should be formally limited is generally believed to have emerged only in 20th century. It would, however, be inappropriate to conclude that the importance of central bank's independence was recognised only as recently as 20th century since Napoleon Bonaparte is reported to have commented in 1806, on Bank of France; "I want the bank to be in the hands of the Government, but not too much".

As a result of monetary consequences of deficit financing that had afflicted many countries during the First World War, the international financial community, in a series of Conferences organised by League of

Nations recognised such independence as contributing to price stability. The recent revival of interest in the subject is attributable to several factors *viz.,* the reforms in centrally planned economies, the establishment of new European Central Banking arrangements and importance of price stability in a world characterised by large cross border financial flows.

What is Central Bank Independence?

Central bank independence generally relates to three areas *viz.,* personnel matters; financial aspects; and conduct of policy. Personnel independence refers to the extent to which the Government distances itself from appointment, term of office and dismissal procedures of top central bank officials and the governing board. It also includes the extent and nature of representation of the Government in the governing body of the central bank. Financial independence relates to the freedom of the central bank to decide the extent to which Government expenditure is either directly or indirectly financed *via* central bank credits. Direct or automatic access of Government to central bank credits would naturally imply that monetary policy is subordinated to fiscal policy. Finally, policy independence is related to the flexibility given to the central bank in the formulation and execution of monetary policy.

Recent literature has stressed the difference between *goal* independence and *instrument* independence. Goal independence refers to a situation where the central bank itself can choose the policy priorities of stabilising output or prices at any given point of time, thus setting the goal of monetary policy. Instrument independence implies that the central bank is only free to choose the means to achieve the objective set by the Government. In a recent survey (Fry. M, *et al* 1999) of central banks, 40 of the total 56 central banks across a broad range of economies defined independence predominantly in terms of instrument independence. Of the remaining 16 responses, many highlighted factors that had implications for the relationship between the Government and the central bank.

Pros and Cons in Theory

Three different theories, which are by no way mutually exclusive, have been advanced in support of autonomy of central banks, *viz.,* dynamic or time inconsistency theory, theory of political business cycle and the theory of public choice.

First, the most prominent argument for central bank independence is based on the time inconsistency problem. Time inconsistency arises when the best plan currently made for some future period is no longer optimal when that period actually starts. In the context of monetary policy, the time inconsistency problem arises because there are incentives for a politically motivated policymaker to try to exploit the short-run trade-off between employment and inflation. Expansionary monetary policy may produce higher growth and employment in the short run, and, therefore, policymakers may be tempted to pursue this policy, even in the short run although there is no guarantee that there would be a favourable output impact. In the long run, however, such an expansionary monetary policy will necessarily lead to higher inflation with deleterious consequences for the economy. In order to solve the time inconsistency problem, two distinct approaches have been advanced. The 'conservative central banker approach' postulates the appointment of a conservative central banker whose aversion to inflation is well known which would result in low inflation because of the economic agents' belief in the reputation of the central banker. The 'optimal contract approach' postulates the existence of an optimal contract between the central banker and the Government. The central banker's tenure in office is conditional upon his performance of achieving low inflation, failure of which would lead to the repudiation of the contract of tenure. Historically, there are successful examples of both types of models of central bank independence – while US is often seen as an example of conservative Central Bank, New Zealand is characterised as a follower of optimal contract approach.

Second, the political business cycle theory studies the interaction between economic policy decisions and political considerations. The best known prediction of the theory is that the business cycle mirrors the timetable of the election cycle. Incumbent governments, in general, will use restrictive policies early in their elected tenure raising unemployment to reduce inflation, as the election approaches. The theory highlights the tendencies of incumbent governments to generate pre-election booms through expansionary fiscal policies. Once the incumbents get re-elected, the policy priorities could change towards inflation control rather than employment generation. In this respect, the theory in a way highlights the time inconsistency behaviour of governments. As monetary policy affects the economy with long and variable lags, even if the central bank nullifies the fiscal stimulus through monetary tightening, its impact would typically be felt during the post-election period when the incumbents may happen to be back in power.

Finally, the fusion of politics and economics over the last thirty years has resulted in the theory of public choice, establishing itself as an important proponent of central bank independence. In the context of reducing budget deficit, the primary solution offered in public choice theory is a constitutional amendment for a pre-specified stipulation on central bank credit to government. Nevertheless, in recent years, as a secondary solution to the deficit problem, some public choice theorists put forward the case of an independent central bank. The basic contentions of these economists are: unless there are constitutional or institutional constraints to the contrary, a democracy contains a bias towards deficit finance; thus they operate within the premise that politicians do not necessarily pursue public interest but are more concerned with their personal or political agenda. In this context, some economists explicitly talk about central bank independence by providing a solution which will ensure not only low inflation but also act as an effective institutional constraint.

While the above arguments build up a strong case for central bank independence, the issue has not been decisively settled and there are powerful forces aligned against according such independence to central banks.

First, detractors of autonomy argue that an independent central bank lacks democratic legitimacy. Curiously, such detractors derive strength from Milton Friedman's statement that money is too important an issue to be left to the whims of central bankers.

Secondly, independence may lead to frictions between the fiscal and the monetary authorities and the resulting costs of these frictions between monetary and fiscal policy may be somewhat costly for society, thus inhibiting the development process.

Thirdly, there may be significant divergence in the preference pattern of independent central banks and the society at large. A strong central bank may impose its outlook on society resulting in a sub-optimal state in terms of economic welfare. Adequate sources of accountability can, however, counteract and circumvent these problems. In fact, the opinions in this context differ widely on the relative importance between growth *vis-à-vis* inflation as objectives of monetary policy.

At a pragmatic level, the basic issue is one of reconciling adequate independence with appropriate accountability to ensure that central banks are responsive to societal concerns.

Measures of Central Bank Independence

It is difficult to measure the degree of independence of various central banks. It has been pointed out that actual, as opposed to formal independence, hinges not only on legislation but also on several factors such as informal arrangements with governments, the quality of the personnel in the bank as well as Government and the personal characteristics of key individuals. Obviously, some other factors are virtually impossible to quantify. Existing research has, therefore, generally focused primarily on legal independence, mostly in the industrialised countries. Legal independence measures may be a better proxy for actual independence in some countries where informal relations are not dominant. Thus, various proxies may be useful to get a complete picture, since they capture different aspects of independence.

In quantifying the degree of independence, economists typically assign scorecards on different aspects of central banking. The final degree of independence is measured as the weighted sum of 'marks' obtained under different heads such as indices of political and economic independence; index aggregated from a number of basic legal characteristics of central bank charters; index based on issues relating to composition of board members, frequency of transfers of central bank governors, etc. Recent attempts made to construct measures of central bank independence using different criteria and examine correlations among them reveal that the factors that affect central bank independence are highly diverse and the importance of each of these factors may have weights that vary markedly across countries, time and circumstances.

The existing indices of central bank independence are clearly incomplete and at best noisy indicators of actual independence, though this does not mean that they are uninformative. In brief, it is possible to differentiate between legal independence, informal independence and contextual independence of central banks.

Central Bank Independence and Economic Performance

An inverse relationship between central bank independence and the level of inflation is supported by most empirical studies during the post Bretton-Woods period. The proponents for central bank independence generally cite empirical evidences of negative cross-country correlation between average inflation and the degree of central bank independence. It is, however, possible to question the veracity of this relationship. As already mentioned, there are significant measurement problems relating to central bank independence. Furthermore, researchers argue that the causal relationship observed between central bank independence and low and stable inflation might be influenced by some other common factors such as the extent of inflation averseness and the credibility that the central bank enjoys. While many Latin American countries changed the legal and operational framework, the change was prompted by people's aversion to high and chronic inflation. The causality between the rate of inflation and the degree of independence of the central bank may be viewed as bi-directional, since it would be argued that persistent high inflation led to changes in the operational framework in many countries.

It needs to be emphasised that central bank, independence by itself cannot ensure monetary policy credibility, which, to an extent, depends on the overall credibility of Government policy as a whole. Central bank independence is a means, the end being an appropriate division of responsibility between the monetary and the fiscal authority and policy coordination. There is a need to articulate the division of responsibility and policy priorities to the economic agents. Such articulation reduces uncertainties often inherent in economic decisions. If an institutional structure is not in place, there is a chance that policy coordination would depend entirely upon the personal equations among policymakers and the risk of it breaking down subsequently with changes in the persons at top can not be ruled out.

Indian Situation : A Review

The evolving relationship between the Government and the RBI can be broadly divided into four distinct phases.

The legislation to set up the RBI was first introduced in January 1927. The enactment, however, was made after seven years in March 1934. The RBI was set up as a privately owned and managed entity. The preamble of the Act focused on monetary stability and operations on currency and credit system in India. During this phase, which may be called infancy and uncertainty, the RBI was virtually subservient to the dictates of the Government and measures were taken to curb its capacity for independent actions. In fact, threats were issued to supersede the Bank's Board should it recommend monetary and exchange rate policies incompatible with the Government's scheme of actions. No doubt, the outbreak of war also added to the uncertainties.

Shortly after India's independence in 1947, the RBI was nationalised in 1948. The early years were characterised by a good degree of fiscal rectitude and harmony in monetary and fiscal policy with areas of potential conflict being minimal. The fact that the rate of inflation was modest compared to other developing countries during this period is indicative of the success of macro-policy management and facilitated the task of the RBI in pursuing other developmental activities. During this period, the RBI was vigorously involved in promoting the institutionalisation of credit to agriculture and industry in pursuant to the overall objectives of the respective Five-Year Plans. Apart from helping to channelise credit to agriculture and industry, an important objective of the RBI was the promotion and mobilisation of savings by reinforcing the foundations of the banking system. This, however, does not mean that differences between the RBI and the Government over economic policies were totally absent. For example, the RBI did not approve of the substitution of financial planning by a kind of 'physical planning'. Once it awoke to the consequences of physical targeting during the course of the Second Plan, the RBI strove to trim the size of the subsequent Plans to match visible resources. Another illustration of differences between the Government and RBI culminating in the resignation of Governor Rama Rau in 1957 is well documented (Balachandran G, 1998).

Another major area of discord between the RBI and the Government in the late 1950s related to the financing of the cooperatives and the pattern of organisation of the lending agencies. Interestingly, during the early 1960s, Governor Iengar identified four areas of potential conflict between the Bank and the Central Government. These were interest rate policy, deficit financing, cooperative credit policies and management of sub-standard banks. It may be of interest to note that currently, in the year 2001, these four areas are still on the top of the RBI's concerns.

This phase, from nationalisation of the RBI in 1948 till nationalisation of major commercial banks in 1969, may be considered as maturing of the RBI into a full-fledged professionally managed central bank, perhaps one of the foremost in developing countries. The mid-fifties, however, did see the beginnings of serious erosion of autonomy in the monetary policy function due to the emergence of the system of *ad hoc* Treasury Bills and automatic monetisation. It was agreed that the RBI would replenish Government's cash balances by creation of *ad hoc* Treasury Bills in favour of the RBI. The *ad hoc* Treasury Bills, which were meant to be temporary, gained a permanent as well as a cumulative character. Indeed, it became an attractive source of financing Government expenditures since it was available at an interest rate pegged at 4.6 per cent per annum since 1974, *i.e.,* actually at a negative real interest rate.

The third phase that changed the contour of this relationship started with the nationalisation of major banks in 1969. While the problems experienced earlier by the RBI persisted to some extent, the change brought about a curious situation where the Government became owner of a number of banks, but the supervision of these banks was, in turn, conducted by the RBI which was also owned by the Government. The situation, however, was not unique to India and was somewhat similar to that of France. The fundamental factor affecting the relationship was the combined effect of Government's ownership of major commercial banks and the persistence of high fiscal deficits, which posed serious problems for prudent monetary management. For easy access of market borrowing, the interest rates were administered and the Statutory Liquidity Ratio (SLR) requirements of the banking sector were periodically hiked. In this regard, the nationalisation of banks and transfer of ownership to Government provided a captive market for the Government. Simultaneously, recourse to the RBI credit was also high, leading to high levels of monetisation. To neutralise the effect of monetisation on the price level, the RBI, in turn, had to intermittently increase the Cash Reserve Ratio (CRR) requirements of the banking sector. This phase was charaterised by several features to indicate considerable influence or dominance of Government over the RBI.

On the basis of one of the criteria (Cukierman, 1992) to measure the degree of independence of various central banks during the 'eighties, the RBI was ranked marginally below the median level of a list of about seventy countries (including twenty-one industrialised countries). This represented a limited degree of statutory autonomy because in general, central banks in developing countries enjoyed little independence from the Government at this time. As such, the measurements seem to reflect the intent of the 1948 nationalisation of the RBI, which was to ensure a greater coordination of monetary, economic and financial policies.

The fourth phase or the reforming phase in the changing contour of this relationship approximately starts from 1990-91. Major changes in the monetary policy framework took place in many countries around this time. While people in many developed countries were tired of persistent and high inflation during the earlier years, the journey of the centrally planned economies towards a market determined system also began around this time. As a result, the relationship between the central bank and the Government took a new turn in many countries, resulting in the genesis of inflation targeting framework in a number of economies.

While radical changes were taking place worldwide, the Indian economy during 1990-91 experienced a severe balance of payments crisis. The crisis was clearly a fallout of the fiscal profligacy during the eighties. During the post-reform period, the relationship between the central bank and the Government took a new turn through a welcome development in the supplemental agreement between the Government and the RBI in September 1994 on the abolition of the *ad hoc* treasury bills to be made effective from April 1997. The measure eliminated the automatic monetisation of Government deficits and resulted in considerable moderation of the monetised deficit in the latter half of the nineties. At the same time, with gradual opening up of the economy and development of domestic financial markets, the operational framework of the RBI also changed considerably with clearer articulation of policy goals and more and more public dissemination of vast amount of data relating to its operations.

Partly as a result of such institutional changes in recent years, inflation in India has been moderate relative to other developing countries despite high fiscal deficit, and most inflationary episodes have been caused by exogenous supply-side factors. As far as public finances are concerned, the Government generally relied on domestic sources to finance the deficit. It has been pointed out by some experts that the RBI, though not formally independent, has enjoyed a high degree of operational autonomy during the post-reform period. In fact, during the recent period, the RBI enjoys considerable instrument independence for attaining monetary policy objectives. Significant achievements in financial reforms including strengthening of the banking supervision capabilities of the RBI have enhanced its credibility and instrument independence.

Current Status

In terms of redefining the functions of the RBI, enabling a movement towards meaningful autonomy, Governor Jalan’s statement on Monetary and Credit Policy on April 19, 2001 is a landmark event. First, it was decided to divest the RBI of all the ownership functions in commercial banking, development finance and securities trading entities. Secondly, a beginning was made in recommending divestiture of the RBI’s supervisory functions in regard to cooperative banks, which would presumably be extended to non-banking financial companies and later to all commercial banks. Thirdly, the RBI signalled initiation of steps for separation of Government debt management function from monetary policy. These measures would enable the RBI to primarily focus on its role as monetary authority and enhance the possibility of a move towards greater autonomy.

Three other developments in recent years are expected to have far reaching ramifications in the operational framework of monetary policy in India. The first was the tabling of the Fiscal Responsibility and Budget Management Legislation, which aims at the medium-term management of the fiscal deficit. The objective of the legislation is to impose fiscal discipline on Government spending and ensure a transparent and accountable fiscal system.

The second development was the coordinated endeavour of the Government of India and the RBI to consider the implementation of International Financial Standards and Codes. Among the ten Advisory Groups constituted for this purpose, the Advisory Group on Fiscal Transparency (Chairman: Mr. M.S. Ahluwalia) and the Advisory Group on Transparency in Monetary and Financial Policies (Chairman: Shri M. Narasimham) have suggested some important changes in the operational conduct of monetary and fiscal policies and highlighted the need for better coordination between them.

The third relates to the budget speech in February 2000, wherein the Finance Minister had noted that in the fast changing world of modern finance, it has become necessary to accord greater operational flexibility to the RBI for the conduct of monetary policy and regulation of the financial system and that accordingly, he intends to bring to Parliament proposals for amending the relevant legislation.

In this regard, the RBI constituted an Internal Committee to review the existing legal provisions in both the Reserve Bank of India Act and the Banking Regulation Act, so as to bring about suitable amendments in them to provide sufficient operational flexibility to the RBI for conducting monetary policy, guiding the development of the financial sector and securing the stability of the financial system as a whole. The Committee made a host of recommendations that include providing the RBI the flexibility in respect of monetary policy instruments, supervisory effectiveness, prudential deregulation and governance of financial markets. It has also recommended further strengthening of institutions in the light of structural changes due to ongoing reforms and encourage transparency and integrity of operations. Furthermore, in a liberalised environment, maintaining financial stability is an important additional objective of policy and the RBI should have the operational maneuverability to manage and limit the damage on account of volatility/contagion transmitted *via* the international economy.

Emerging Issues

The emerging issues relating to autonomy of the RBI can be addressed at several levels.

First, at the level of the Constitution, the RBI finds a place in Entry 38 of List 1 of Schedule VII of the Constitution of India "subjecting the Bank's policies to the wisdom of the executive and legislative wings of the Union" (Prasad. R, 2001). There are only a few instances of references to autonomy of central bank in the Constitution and obviously such a reference is neither a necessary nor a sufficient condition for ensuring appropriate level of autonomy. Yet there is an influential view such as that expressed by Dr. N.L. Mitra, formerly Director, National Institute of Law in favour of an appropriate provision in the Indian Constitution.

Second, at the level of legislative framework, several suggestions have been made to ensure appropriate autonomy and many of them are under consideration. In particular, proposed Fiscal Responsibility and

Budget Management Bill and other amendments to the Reserve Bank of India Act would cover significant ground. Several other suggestions relating to legal framework, particularly those relating to defining the objectives of and imparting transparency in monetary policy as recommended by the Advisory Groups are yet to be taken up.

Third, at the policy level, there are three important constraints on the operational autonomy even within the existing legal framework. One, the continued fiscal dominance, including large temporary mismatches between receipts and expenditures of Government warranting large involuntary financing of credit needs of Government by the RBI. Two, the predominance of publicly owned financial intermediaries and non-financial public enterprises, which has created a blurring of the demarcation between funding of and by Government *vis-à-vis* public sector as a whole. Three, the relatively underdeveloped state of financial markets partly due to legal and institutional constraints, which blunts the effectiveness of instruments of monetary policy. These issues need to be resolved to enhance genuine autonomy.

Fourth, at the operational and procedural level, there is a problem of "old habits die hard". In a deregulated environment, there is considerable scope to reduce micro-management issues in the relations between the Government and the RBI.

Fifth, at the level of degree of transparency, there is a temptation to continue, what has been termed as the "joint-family approach". The approach ignores basic tenets of accounting principles in regard to transactions between RBI and Government. It gives satisfaction to all participants that all of them are working together for growth and stability. In the process, however, the integrity of the respective balance sheets of Government and the RBI gets eroded making both autonomy and accountability difficult to assess.

Random Thoughts

In the light of theory, practice and the Indian experience I would like to share with you some of my thoughts on the subject. These are structured around emerging new realities, issues of coordination, transparency, accountability and credibility.

Generally, independence of central bank is discussed in terms of independence, or in a broader sense, from political, executive and legislative power. With emergence of powerful economic interests in the form of multinationals or dominant domestic corporates and their large stakes in capital markets, in the larger context of powerful influences outside of the executive wing of Government, it may be necessary to also ensure independence of central bank operations.

While price stability and availability of credit to meet the needs of the growing economy continue to be the twin objectives on a year to year basis, as a longer term and primary responsibility, the RBI concerns itself with price stability. There is, however, need to recognise the criticality of financial sector stability, especially of financial markets for which the RBI is assuming increasing responsibility and should exercise its independence from governmental priorities in that direction, whenever warranted. In other words, while the issue of the central bank's independence and accountability were debated in the past in the context of price stability and money creation, the emerging issues warrant a broader view of exercise of independence from several sources to meet emerging challenges like financial sector and markets stability while enlarging the concept of accountability through greater recourse to transparency.

With the possible emergence of digital money, significant questions would arise in regard to the power that central banks would continue to exercise in future and hence the whole issue of its role in creation of money and consequently its independence may need to be revisited.

In view of the trends towards globalisation of capital flows and consequent emphasis on internal financial stability, standards, codes, etc., the central banks may gain independence from their respective Governments but in practice may tend to be circumscribed by the compulsions of international financial community.

The traditional argument, at a philosophical level, in favour of an independent central bank is that the power to spend money should be separated from the power to create money. Given the complexities in separating the two too rigidly and given the advantages of coordination, a minimum requirement should be that their relationships and transactions be reported as transparently as possible, and the integrity of the two separate balance sheets be maintained.

At an operational level, it is possible to ensure coordination between fiscal and monetary policies while maintaining operational autonomy if interaction and consultation is ensured in three important areas namely (i) evolving macroeconomic objectives; (ii) likely consequences of various options available for fiscal and monetary actions to realise the evolving objectives; and (iii) sharing and use of the respective forecasts of the likely state of the economy in the absence of policy interventions under consideration. Indeed, this interaction calls for a reasonable degree of intellectual integrity, professional competence and mutual respect in both the central bank and the Government.

Accountability can be narrowly defined or approached in a broader as well as longer term perspective. In a narrow sense, it can be argued that a central bank is accountable to the Ministry or to the Parliament through the Ministry. In a broader sense, it can be argued that central bank, as a significant public institution should be accountable to the public at large, unless there is a constitutional or legal hurdle. In this sense of broader accountability, in a way transcending political cycles, a central bank has to be not only transparent but should also effectively articulate its policy. It must be recognised that such a broader approach to accountability will depend on the public awareness of economic issues and the priority that political leadership accords to public articulation of issues as compared to closed door consideration of such issues.

Liberalised and developed financial markets, certainly, contribute to greater public-awareness and in this regard efforts to promote financial markets also contribute to greater accountability. In the final analysis, accountability is a basic principle of democracy.

At a pragmatic level there are two important arguments in favour of autonomy in addition to transparency. First, if superior technical competence is demonstrable, there is merit in according operational autonomy to the central bank. Furthermore, to the extent a central bank is likely to carry greater credibility with the public opinion when it makes a commitment, there is merit in entrusting it with autonomy. In the years to come, the sheer need to improve the efficiency of operations will thrust upon the RBI a greater degree of autonomy and, therefore, a greater degree of accountability. In such a milieu it is essential that the setting of goals and the policy processes will need to evolve in a transparent manner. For the central bank, these will be difficult times but also exhilarating times.

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CASH MANAGEMENT SERVICES AND INFORMATION TECHNOLOGY - ISSUES AND PERSPECTIVES*

VEPA KAMESAM

I am indeed very happy to be in your midst this evening to deliver the inaugural address in the 'Workshop on Marketing Cash Management Services' organised by the Administrative Staff College of India. The organisation of this Workshop is important and timely on two counts. Corporations, the world over are jettisoning antiquated cash management practices and opting to put in place sophisticated cash management structures to garner the associated economic benefits and due to reasons of expediency. Conversely, banks have taken note of the enormous revenue potential in the fee-based services segment to prop up their sagging bottom lines. While appreciating the initiatives taken by the Administrative Staff College of India in organising the Workshop, I intend to take this opportunity to flag some of the relevant issues, which the banks need to address in this context.

As you are all well aware, the fundamental objective of cash management is 'optimisation of liquidity through an improved flow of funds'. In today's highly competitive environment, where time is considered as money, deployment of staff to render basic routine tasks does not make economic sense. As a sequel, cash management today is not what it used to be. Electronic banking, which began as a passive desktop access to bank balances, is emerging into complex processes of liquidity management through numerous techniques.

Almost all of the corporations in advanced countries are now planning to use the services of banks to help them collect payments on monthly bills they issue to consumers and other types of cash management services. According to the findings of a Study conducted by Killen and Associates the top 400 Canadian enterprises can save $23 billion annually by applying emerging electronic cash management strategies. The Killen Study, states that in 2005, $300 billion worth of electronic payments will be collected over e-billing networks, which is a mammoth extension of cash management services. Commercial banks in the Western countries realised the tremendous potential in providing cash management services to vastly improve their profitability. In a report titled 'The Future of Wholesale E-Banking : The Portal' which was published by Celent Communications it was projected that by 2003, 40 per cent of the top 100 US banks will be offering advanced

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*** Inaugural Address delivered by Shri Vepa Kamesam, Deputy Governor, Reserve Bank of India at a Workshop on "Marketing Cash Management Services" organised by the Administrative Staff College of India, Hyderabad on September 26, 2001.**

Internet portals to their business customers. In an urge to consolidate and expand customer relationships and to stay ahead of the competition, wholesale banks have turned to the next generation of personalised and uniform online cash management services. The ultimate cash management solution as seen by many corporates is a fully centralised management of financial and commercial payments where intra-group companies have no external bank accounts, except a local account for petty cash.

Importance of Cash Management for a Corporate Entity

Let me briefly touch upon the need to put in place a specialised cash management system by corporates. Good cash management is a conscious process of knowing when, where, and how a company's cash needs will occur; knowing what the best sources for meeting additional cash needs; and being prepared to meet these needs when they occur by keeping good relationships with bankers and other creditors. Scientific cash management results in significant savings in time, decrease in interest costs, less paper work and greater accounting accuracy. Proper cash management creates more control over time and funds; provides timely access to information; enables easy employee related payments; supports electronic payments; produces faster electronic reconciliation; allows for detection of book-keeping errors; reduces the number of cheques issued and earns interest income or reduces interest expense. Corporations with subsidiaries worldwide, can pool everything internationally so that the company can offset the debts with the surplus monies from various subsidiaries. The end result will transform treasury function as a profit-centre by optimising cash and put it to good use. Creative and pro-active cash management solutions can contribute dramatically to a company's profitability and to its competitive edge. The ultimate purpose of proper management of liquidity, needless to emphasise, is to improve the overall productivity of funds.

Importance of Fee-based Services Segment to Banks

The next logical question is why should the banks be so excited about the subject. Deregulation and new technology have eroded banks' comparative advantages and made it easier for non-bank competitors to enter into hitherto exclusive banks' domains. In response, banks have shifted their sales mix toward non-interest income by selling 'non-bank' fee-based financial services by charging explicit fees for services. According to another study titled 'Fee-Based Financial Services Markets: New Opportunities and Threats In the Internet Age' by Killen Associates again, the market for retail and commercial fee-based financial services will exceed that for interest-based services by 2005, reaching nearly a staggering $500 billion by 2004 globally. Banks want such services to be their primary profit source for certain reasons. This revenue is more stable over time, assures a steady income and more importantly, leads to a strong relationship with the corporate client.

Types of Cash Management Services

The menu of cash management services offered by banks abroad is indeed diverse and tempting. The services broadly fall under collection services, disbursement services, information and control services, services related to electronic data interchange (EDI), commercial web banking services, sweep services, fraud detection solutions, global trade solutions and investment solutions. Collection Services accelerate receipt of payments from sales and quickly turn them into usable cash in accounts. Disbursement Services make efficient payments by reducing or eliminating idle balances in company's accounts. Information and Control Services receive the data and provide the management capability needed to monitor company cash picture, control costs, reconcile and audit bank accounts, and reduce exposure to fraud. Financial Electronic Data Interchange (EDI) is a computerised exchange of payments between a company's business and its customers and vendors. Commercial Web Banking Services give a wide range of services from any Internet connection, which can help streamline banking process quickly and efficiently. Sweep Services maintain liquidity and increase earnings without having to actively monitor accounts and move money in and out of them. Information reporting solutions assist companies, which need to receive account data that is timely, precise, and easy to access and interested in initiating online transactions. Investment solutions help to minimise excess balances and maximise return on available funds.

Cash Management Services - Indian Scenario

It is apposite to review the Indian scenario in this regard. As you are well aware, banks' desire for funds has lost under the onslaught of the current slowdown. Despite the offer of very soft terms corporates are refusing to borrow, while bank deposits have been ballooning. Compelled to service the burgeoning liabilities, but unable to lend hastily and allow their non-performing assets (NPAs) to grow, bankers are forced to compete for the handful of safe bets among their borrowers. Banks chose to use the opportunity to refocus their activities, seeking clearly defined identities in terms of services and customer segments. Most of them concentrated on cleaning up their books by peeling down their NPAs. All of them attempted freezing of costs, improving operational efficiencies, and boosting productivity. The strategy of the banks, which performed well, is to use fee-based services to maintain earnings growth. With interest rates falling, non-interest income was, unsurprisingly, the fastest-growing component of the banks' total income. Fee-based activities will complement though not substitute the core business of lending.

It is gratifying to note that a number of banks in India are offering wide-ranging cash management services to their corporate clients. All the three categories of banks *viz.,* nationalised banks, private banks, and foreign banks operating in India are active in the cash management segment. SBI, PNB, ICICI Bank, GTB, HDFC Bank, Centurion Bank and Vysya

Bank, are some of the active Indian banks in this segment. Citi Bank, Standard Chartered Bank, ABN Amro Bank, BNP, ANZ Grindlays and HSBC are the foreign banks operating in India, which are prominent among the cash management services providers. Currently, the turnover of cash management services in Indian market is estimated over Rs.25,000 crore per month. State Bank of India alone is estimated to handle over Rs.12, 000 crore per month through its product called SBI-FAST. Indian banks are offering services like electronic funds transfer services, provision of cash related MIS reports, cash pooling services, collection services, debit transfer services, guaranteed credit arrangements, sweep products, tax payment services, receivables and payables management. Foreign banks operating in India are offering regional and global treasury management services, liquidity management services, card services, electronic banking services, e-commerce solutions, account management services, collection management services, cash delivery management services and investment solutions. Going by the gamut of these services, the cash management services offered to Indian corporates are comparable to what their counterparts are getting in advanced countries. Banks realised that if they do not offer the services required by corporate customers it would result in a net loss of clientele, returns and goodwill. Banks in India need to continuously monitor international trends in innovations taking place in providing cash management services and swiftly offer similar services to their corporate clients.

The Reserve Bank of India has been taking a number of initiatives, which will facilitate the active involvement of commercial banks in the sophisticated cash management segment. One of the pre-requisites to ensure faster and reliable mobility of funds in a country is to have an efficient payment system. Considering the importance of a robust payment system to the economy, the RBI has taken numerous measures since mid Eighties to strengthen the payments mechanism in the country. Introduction of computerised settlement of clearing transactions, use of Magnetic Ink Character Recognition (MICR) technology, provision of inter-city clearing facilities and high value clearing facilities, Electronic Clearing Service Scheme (ECSS), Electronic Funds Transfer (EFT) scheme, Delivery vs. Payment (DvP) for Government securities transactions, setting up of INdian FInancial NETwork (INFINET) are some of the significant initiatives which highlight the seriousness with which the Reserve Bank has taken up the reforms in Payment systems. Introduction of a Centralised Funds Management System (CFMS), Securities Services System (SSS), Real Time Gross Settlement System (RTGS) and Structured Financial Messaging System (SFMS) are the top priority items on the agenda to transform the existing systems into a state-of-the-art payment infrastructure in India by the Reserve Bank. The current vision envisaged for the payment systems reforms is one, which contemplates linking up of at least all important bank branches with the domestic payment systems network thereby facilitates cross boarder connectivity. With the help of the systems already put in place in India and which are coming into being, both banks and corporates can exercise effective control over the cash management.

Changing Cash Management Processes and 'E-banking'

The enlightened participants in this Workshop are aware that the cash management techniques have been undergoing a metamorphosis as a result of the extensive technological advancements. Positioning finance as a valuable part of a business organisation means re-engineering of business processes. Electronic Bill Presentment and Payment (EBPP) is now widely accepted in Western countries. It replaces the slow and costly process of preparing and mailing paper bills and receiving cheques as payment. Corporations look to electronic bill presentment and payment as an opportunity to expand marketing and sales efforts, enhance customer care and increase efficiency, while reducing costs.

As technologies evolve with amazing speed, the IT choices facing treasurers are becoming more intricate simultaneously increasing their expectations too. You will agree that today, a multinational company has tall demands from its banker. When the treasurer sits at his desk, he expects that his computer has to automatically update his files with real-time information on the company's account balances. Without moving, he wants to manoeuvre funds between accounts to capture more interest from pooled accounts, he demands to lag his payments to make his cash work to the fullest and he desires to get an up-to-date report on the progress of his collections. If relieved of numerous manual errands, his treasury can effectively plan for the future. As the Internet explodes into life, companies want to be among the first to use the Internet to market their products, receive orders, deal with suppliers and settle transactions. Corporates visualise technology as a tool to cut their costs and improve efficiency.

Internet and Corporate Banking Strategy

As a result of the advent of the Internet, banks and other Financial Institutions are rethinking their corporate banking strategy. The Internet opens a new channel for delivering services to corporate clients and helps these institutions remove cumbersome and expensive paper processes. It is significantly cheaper and much more flexible. With the Internet, large multinational companies that always used EDI can save more money by eliminating the old system's expensive private networks and expand reach to include more businesses on the supply chain. Small-to-medium size companies, too, can conduct business-to-business transactions. The Internet simply provides a two-way electronic linkage that never existed before.

So, banks can now offer a trusted solution to their corporate customers via the low-cost delivery channel *i.e.,* the Internet. And corporations will enjoy the ability to manage cash held by their strategic banking partners in real time via a secure, efficient, Web-enabled communication system. The expected shift in volume from paper-based transactions to electronic ones would determine the path of future technology investments in banks and orient it towards electronic payment delivery systems. This shift is also driven by banks' perception that electronic transactions contribute higher margins than paper-based transactions.

How Corporates Select a Bank for Sourcing Cash Management Services ?

Probably, it is apposite to consider what the companies expect from their bankers in this regard. It is normally the client-bank relationship, which is a main consideration in choosing a bank for cash management. Pricing, obviously, is a very dominant factor. Making a choice between the local banks and the more highly priced foreign banks usually depends on how cost savings are presented by the banks. Multinational corporates with complex treasury operations admire their respective banks' expertise and ability to offer creative solutions. There are some common requirements related to basic cash management systems. Flexibility, reliability, security and stability have been cited as vital parameters for any electronic banking system. The systems should be tailored to provide pertinent reports and the ability to upgrade easily in future. The technology should allow real-time cash management with strategic banking partners. It should integrate easily with legal framework in place. It should lower operating costs and resolve disputes quickly by providing secure and legally enforceable audit trails. It should be capable of reducing risk of fraud in electronic funds transfers and other treasury activities. It should also be able to use a low-cost public network infrastructure like Internet, which eliminates the need for dedicated leased lines.

A Framework to Provide Effective Cash Management Services

Companies seek to achieve synergies by implementing a simplified account structure and through rationalising the number of banks used. In advising companies on the optimal account structure, it is important to bear in mind the nature of company's funds flows. The aim is to maximise control, efficiency and return. Banks need to work with its clients to ensure that arrangements are in place to assist them in maximising returns from an otherwise idle funds. Experience of local banking regulations and market practices can ensure client's preferred structure will not contravene local regulations. Greater challenges lie in tying together multiple accounts into a cohesive structure to manage liquidity efficiently, often across numerous time zones and currencies. To meet the needs of international corporate and institutional clients, banks should have a wide range of customised products and services. Corporate treasurers cannot afford to spend time worrying about routine payments and collections. So banks have to help clients to successfully handle the large volumes of corporate client payments.

Challenges to Companies in Availing Technology-oriented Cash Management Services from Banks

Corporates do face some challenges in putting in place new cash management structures. Analysts believe that companies will increasingly demand online real-time cash-management services. The commercial need for Internet delivery of cash management will be driven by the increasing number of businesses using the Internet and other networks.

Electronic Communication with a Bank

The first challenge facing a treasury is how to communicate electronically with a bank, although this is often dictated by cost limitations, security concerns and the infrastructure peculiarities of different countries. It is likely that the company itself may be lacking the necessary expertise to choose an appropriate form of communication where the company needs banker's advice.

Economic Considerations

Costs associated with the new services do pose a challenge to small and medium companies. A host-to-host connection is a sophisticated, direct, two-way link between the bank's and the customer's computers, which is expensive to set-up and maintain. However, it is highly automated and allows the corporate to use more of the banks' services. Small companies, unfortunately, may not be able to afford host-to-host connection. Concerns associated with high costs may be effectively addressed once the Internet's security apprehensions have been resolved.

Limitations of the Services

All said and done, the Internet as it operates today has its limitations as a medium for banking and finance. For this reason, the conventional means of delivering electronic banking services will be maintained in parallel with on-line systems at least in the medium term. We all agree that the technology is only as good as its underlying services. There is no such thing as one-size-fits-all when it comes to electronic banking products. No one product can provide an absolute solution to all the customers. An electronic banking product is a means of delivering banking services to the customer and is only as good as all the operations and processes that underpin those services.

Provision of CMS by Banks - Challenges and Issues

The conventional formal line between treasury and control and between cash and accounting strategies is fading. Now, bankers and controllers are working together closely in seeking solutions in the complex cash management function. In today's world, the key differentiator between a successful bank and other bank is the stress each lays on technology. As such, let me turn your attention to the numerous challenges bankers need to address squarely, while gearing up to provide cash management services in a technology dominated environment.

Provision of Customised Services

One important ingredient of a treasury system is 'customisation'. Bank's ability to customise a treasury system is critical. The 'user interface' is very personal and users want to be comfortable with the look and feel of the system. Deployment, configuration and database options need to be flexible. New system should be capable of easily getting synchronised with enterprise resource planning (ERP) and other corporate systems.

Need to Comprehend the Client's Line of Activity

Bankers need to really understand the accounting and control side of its client business. The bankers should see themselves as strategic partners in company's growth and need to spend a lot of time learning about the concerned industry. They have to use that knowledge to propose solutions that never would have occurred to the client. Banks can't go out and propose good ways to re-engineer a company's business processes until they have developed a really sophisticated understanding of the cash and accounting practices. Bankers, no doubt, are sharp but the technology and services are getting so complex that an officer often will need to call in a specialist from a key area.

Provision of Other Advisory Services to Clients

Companies would like to see banks solve certain other related problems. For instance, a company may like someone to tell it exactly what is wrong with their MIS department. Changing systems is a major initiative with far-reaching implications to the companies so banker cannot afford to make a mistake. As the technology changes almost monthly, companies do expect bankers to tell them what to do and where to spend their money. Bankers cannot build a standard solution always, because the customers do not pose standard problems. Bankers have to customise the solution that will resemble what the customer is wishing for.

Shift to Web-enabled Services

Web-enablement may be fashionable, but what treasurers really want is the functionality in products that help them perform optimally. After all, the web is only a delivery channel. Most corporate electronic banking systems currently used are based on old technology architecture. Banks, now, have to gradually turn to open systems architecture, wherein a Web-server accesses the bank's back-end systems with adequate security features in place.

Decisions Regarding Sourcing of Software

The three sources of software applications for on-line banking and on-line cash management in particular, are 1) built in-house, 2) bought from independent software vendors and 3) outsourced to a trusted third party. Large banks prefer to build applications in-house owing to their belief that it provides them with competitive advantage. Building Web-enabled cash management solutions requires a thorough understanding of both technology as well as business issues. Smaller banks who do not wish to make significant investment in back-office systems prefer to outsource on-line banking services.

Understanding and Adapting to the Technology Dominated Environment

Banks can derive a clear competitive advantage only by reducing the time to market services to clients by customising cash management products to cater to clients' specific needs; providing clients the flexibility to design their own reports and specify how they want it delivered; having flexibility to interface with the existing systems at clients' end; getting the dual advantage of leveraging localised cash management practices and at the same time being integrated globally; and providing straight through routing of cash management transactions between various internal and external systems. The strategy for banks is to figure out how to create the right alliances to ensure that they remain an integral part of the information flow even when they don't control the entire process. Large corporations would like to pay handsomely for technological solutions that allow them to avoid these paper disputes. Banks must find ways of getting involved in the emerging segment of electronic invoicing, preferably through partnerships with technology firms. A clear opportunity exists for banks and financial institutions to play a pivotal role in providing cash management services through the Internet. The challenge for financial institutions is to respond to this requirement or risk losing their corporate customers to existing competitors, or to new entrants who develop products for the electronic marketplace.

Special Consideration to Small and Medium Companies

When the corporate scene in India is dominated by a multitude of small and medium companies, a legitimate question that arises is, are the high-tech banking cash management services just for the large companies or do they have any immediate practical value for smaller companies also? Although technology and size may not go together banks have to cost-justify the cash management services companies use. No doubt, banks did invest a lot in the technology-based services. But with the advent of the Internet and other tools, banks should strive to make accessible cash management services to middle and small companies without totally phasing out their existing hardware.

Need to Work as a Team

When banks develop cash management solutions, they have to necessarily work directly with corporate financial controllers and their staff. When outsourcing is involved, with something as complex as payables or receivables the corporate teams get bigger and more varied. Besides financial controllers, banks have to work with systems people and sometimes marketing people.

Need to Work with Technology Vendors

A growing number of non-bank vendors

also offer payment-related services to corporate clients in Western countries. Banks bring the strong relationships with customers that they have built over time. No single player can do it alone in the future because there are so many dimensions to technology and different industries need different solutions. Alliances will have to be forged, so that vendors with different technological pieces will work together to provide integrated solutions. There is no question that banks and other third-party processors are going to compete, but there may be even greater opportunities for them to work together.

Threats Posed by Third Parties

As both banks and corporations move toward outsourcing arrangements, there is a danger that a company could be hurt when a bank puts an insensitive third party in between the company and its most important customers or suppliers. Concern about vendor relations and customer relations may make companies reluctant to give up control over making and accepting payments. Bankers need to be cautious in selecting the vendor.

Concerns About Security and Risk Management

Corporate treasury information is quite sensitive. Corporations lose large amounts due to internal and external fraud. Security and trust are critical issues when it comes to electronic transmission and retrieval of important and sensitive information such as corporate treasury data. Commercial cash management is one of the most risky forms of Internet banking, therefore, it requires strong security and trust elements. These trust elements may include the authentication and authorization, preventing others from eavesdropping on confidential communications, ensuring that the information is not altered in transit and providing integrity and authentication that is legal-grade, so it can stand in a court of law. So, corporate clients do have questions about the security of information and transactions. Companies want to know what are the likely security implications. Banks are handling corporate funds and their vital information. Bankers' priority must be to build systems that reduce the risk of fraud, the risk of error, the risk of systems failure to very low levels, provide a secure environment for the processing of transactions and sharing of information. As a matter of fact, when the value delivered is very high and the risk is very low, you have a viable and secure system.

Operational Reliability

Security is important, but there is also the whole issue of operational reliability. One of the biggest challenges in this context is taking a flexible tool like the Internet and making it a reliable business system so things that are sent arrive not only secure but on time. Internet, probably, is still a long way from being a reliable way to deliver time-critical transactions and reports. However, natural evolution really dictates moving to the Net. How to be sure that the back-up server is working? How to be confident that the system would not choke due to heavy message traffic?

Those are legitimate questions, but there have to be answers, even if we can't see them all today. The good news is that the technology exists, and we use it every day.

Evolving Role of Cash Management

Cash management is constantly changing to meet the needs of the corporate treasurer. The challenge for both corporation and provider is to keep up with developments, technology, changing regulations and fitting these in with normal business. A changing regulatory environment, new technology and mergers that expand the scope of traditional banking are redefining the traditional treasury management paradigm for both banks and corporations. Electronic commerce is evolving far beyond simply ordering goods online or buyer-to-supplier commerce.

A vast country like India presents a challenge to the Cash Manager. Considering the present Indian scenario, where Cheques are the basic form of payment and cheque clearing takes a long time, cash management services need to devise innovative methods and means to expedite the clearing to benefit the corporate customer. With the Indian economy becoming an open market economy, residents may maintain accounts in other countries and non-residents may hold accounts in India. As a result, Indian treasurers may often find themselves managing cash across geographies and time zones. In India the transaction types run from the classic paper cheque to the latest Internet initiated electronic payment. Corporations initiate and receive paper-based transactions, as well as high value and low value electronic transactions on a daily basis. Expectations from new services may not eliminate or fully replace the older traditional services. Change will be gradual but, probably, it will be firm. Fee structures for cash management services in India vary from bank to bank and also from customer to customer. Many banks price the services based upon the overall relationship, especially for multiple product solutions. As Indian banks become more consultative and total solution-oriented rather than product-driven, pricing will become even more customised. Corporate treasurers will consider the amount they can save on banking fees and the level of efficiency in their departments as a sequel to the new cash management services. After they have negotiated the best possible price, treasurers then focus on the return on excess balances. They are no longer content to leave large balances in return for no fees charged. Treasurers will look for true partnership with banks to build systems that will take them into future.

I do concede that, in our collective endeavours to propagate cash management services in India, there are other wider external issues like availability of necessary critical infrastructure. For instance, availability of requisite bandwidth for Internet connection is still a problem faced by various financial institutions. No doubt, these issues will be addressed by all concerned in the days to come. With a highly technology savvy talent in the country, India can outshine others without much difficulty. Notwithstanding the issues raised by me, looking forward, there are several exciting new opportunities for both user and provider in the cash management arena. Cash management worldwide is constantly evolving to meet the needs of the corporate treasurer, take advantage of new technology and support customers as they move into new markets. The challenge for both company and service provider is to keep up with developments in technology and changing regulations and espouse them to their normal business. The key to success will be active partnerships between corporations and their providers as no one will be able to keep up with all developments on their own.

Because of the mounting importance of fee-based financial services, all banks need to fine-tune their strategies, if they want to harness the potential in this area. They need to appreciate the dynamics of the new fee-based market, which is driven by the growth of the Internet and inter-connect applications. There is positively a need to give up old beliefs. But it won't be easy for all banks to capture their share and profit of the swiftly expanding fee-based market. Taking advantage of the opportunities and avoiding the threats of unprofitable products, insufficient customer service, and diverse IT applications entails an understanding of the market place, the needs and expectations of the customer and of course the competition. You all will agree that offering fee-based services is no longer a choice today to the beleaguered banker. It is a desirable compulsion to thrive. Managing cash in the emerging milieu will require a new mind-set of banker and his client. With the participation of senior bankers, I do hope that this Workshop will find some time to ponder over some of the issues I flagged in this address. I am sure all of you will have very productive time in the next couple of days and I will be happy to be appraised of the outcome of your discussions.

INFORMATION TECHNOLOGY CHALLENGES TO BANKS*

VEPA KAMESAM

It is always a pleasure to be amongst senior representatives of the banks to share some thoughts on the challenges faced by them. As a person who strongly believes that technology holds the key to the future success of Indian banking, I thought that I would focus the attention of my address to this area which although has been gaining attention has yet to be addressed with renewed vigour by most of the Indian banks.

The impact of Information Technology has been felt mostly in the financial sector in view of the competitive advantage for banks resulting in efficient customer service. The challenges facing the banking and financial community emanate from high growth in volumes of financial transactions, the effects of globalisation and the integration of many hitherto distinct markets. There is thus the need for not mere technology upgradation but also integration of technology with the general way of functioning of banks.

Computerisation is the tool that would give banks an edge is respect of service providing to their constituents, better housekeeping optimising the use of funds – and building up of MIS for empirical decision making which has a relationship with the critical aspect of asset-liability management which in turn has a direct impact on the balance sheet of banks as a whole. In order for computerisation to take care of the emerging needs, the recommendations of the Committee on Technology Upgradation in the Banking Sector (1999), have a direct bearing. These are:

- Need for standardisation of hardware, operating systems, system software, application software to facilitate inter-connectivity of systems across branches
- Need for high levels of security
- Communication and networking – use of networks which would facilitate centralised databases and distributed processing
- Need for a technology plan with periodical upgradation
- Need for business process re-engineering
- Need to address the issue of human relations in a computerised environment
- Sharing of technology experiences

* Keynote Address by Shri Vepa Kamesam, Deputy Governor, Reserve Bank of India at the National Seminar on Information Technology Challanges to Banks held at the Mahratta Chamber of Commerce, Industries and Agriculture, Pune on September 28, 2001.

The latest direction of the RBI is the implementation of the Generic Architecture for networking of banks – consisting of the 'tree topology' for the older banks (as the Bank of Maharashtra) which have branches reporting to controlling offices and then to the head office and the 'star topology' for the newer banks which have connectivity between the branches directly by the head office - to enable banks to plan their computerisation of newer activities. The INdian FINancial NETwork (INFINET) established by the Institute for Development and Research in Banking Technology, provides the networked environment as a Closed User Group network, now open to banks and financial institutions and is available for the transfer of funds related and other messages. It is essential that banks exploit the facilities made available by this network by wide usage of the network.

Payment systems using information technology tools is another area of focus - the Reserve Bank of India has played a lead role in this sphere of activity - with the introduction of cheque clearing using the MICR (Magnetic Ink Character Recognition) technology in the late eighties. The thrust has been on reducing the time taken for settlement of the clearing process. The latest in this series is the impending introduction of the Real Time Gross Settlement System (RTGS) which aims at interbank settlement of large value funds in a real time environment, for which work is on at an advanced stage by the Reserve Bank.

To facilitate growth in the government securities market and for smoother trading, the Reserve Bank is putting in place a Negotiated Dealing System (NDS) which provides for screen based trading of government securities; this facility would be integrated with the Securities Settlement System (SSS) which would take care of the accounting requirements of government securities to be performed in a centralised Public Debt Office (PDO) environment at the RBI.

To help banks in efficient funds management, and to provide for movement of funds using the accounts maintained by the banks at the various RBI locations, the Centralised Funds Management System (CFMS) is being implemented.

One of the benefits that technology has ushered in is the capacity for centralised data storage with decentralised processing, resulting in initiatives such as 'Anywhere Banking', 'Anytime Banking', 'Shared Networks' etc., which need to be popularised by more banks. For banks, one of the prime thrust areas is the reduction of the non-performing a ssets (NPAs); and for quick information flow on assets and for timely action for the reduction of NPAs, technology could provide a pivotal role, by means of sound management information systems based on data warehousing which helps in data mining for obtaining results in any manner so as to facilitate better decision making using empirical data.

Internet banking is emerging as a buzz word – but then it requires a great deal of security when online banking and funds related activities based on Internet are implemented. Suitable firewalls, proxy servers, authentication of messages, and other security features would have to be developed.

Yet another development gaining importance is the usage of cards – especially smart cards which can be used for access, security purposes by staff / authorised people and as multi-purpose cards by constituents of banks for operating on their accounts and for facilitating movements of funds in a secure and electronic manner.

The increasing dependence of banks on computer technology are receiving attention from banking regulators the world over from the perspective of addressing the risks of computer frauds. The Basle Committee of Banking Supervisors has addressed some of the operational risks arising out of security breach of banks computer systems and misuse of computer products in its document “ Risk Management for Electronic Banking and Electronic Money Activities” (March 1998). In a manner similar to the movements the world over, migration from paper based payment systems to electronic (and other) systems is taking place at a fast pace. The primary challenges arising from this trend are the need to match the speed at which the changes are taking place - in the areas of regulation, control and supervision over these systems - some of which may be offered by non-bank entities.

The risk of failure of any system is the most important risk to be contended with, and the participants in any system would have to be insulated against this risk - which constitutes the systemic risk which is prime concern to central banks. Banks have to take the best possible risk control measures and ensure that adequate risk reduction mechanisms are in place before any new system is in place.

Large scale adoption of technology also has many challenges to be overcome. There would be a wide degree of variation in the levels of computerisation of operations of the banks and the induction of technology - as in computer hardware, operating systems and system software within a bank and across banks. Inter-operability is the key-word in this context apart from making software interfaces and maintenance of these.

As part of efforts towards facilitating inter-bank communication, the Structured Financial Messaging Solution (SFMS) of the Reserve Bank would provide for standardised message formats for all applications of banks where inter-bank message transmission or inter-bank funds movement is involved. I am sure that all banks would be using these message formats which would also aid them in ‘Straight Through Processing’.

Some of the opportunities for the New Age Banking are :

Broadening the base of computerisation to cover the activities at all branches and controlling office and ensure that these computers are networked is a first set of activities which banks have to make. Connectivity of computers could be achieved through the INFINET. The benefits of all these would be in better funds management, asset - liability management and risk management for banks and for the central bank in risk based supervision of banks including payment systems.

Emergence of services such as e-commerce and Electronic Data Interchange (EDI) for interconnectivity of banks and their customers accompanied by changes in the delivery channels of the products offered by banks to their customers - all resulting out of the high level of technology absorption at banks and the whole-hearted commitment of the senior functionaries of the banks.

Greater level of computer awareness among staff by means of training - through their own training establishments and from professional technical organisations.

An effective security policy offering a shared vision of how the controls in the workplace should be implemented with the objective of protecting data, information and eventually, the economic value of the organisation is also essential. These controls have to be supplemented by surveillance, monitoring and auditing to detect unusual usage patterns and deficiencies.

The next imperative is to conduct computer security audit. This is an activity that is gaining importance of late and is perhaps one of the best tools available for combatting computer crime. Audit of computer security – especially by professional organisations – is a vital requisite to ensure that complacency within the organisation does not result.

The challenges detailed above all stare at our face and I am sure that the inputs gained by all of you would have put you in better stead to face them with more vigour and confidence at your respective institutions. I wish you luck in all your future endeavours and that you all continue the process of sharing of experiences. All these would result in technology offering itself as a good tool for improved customer service, better house-keeping and increased systemic efficiency and thus in increased productivity.

RBI PRESS RELEASE

FII Investments in Indian Companies to go by sectoral caps

(September 20, 2001)

It has been decided in consultation with the Government of India that Foreign Institutional Investors (FII) investments in Indian companies can now be increased beyond 24 per cent upto the sectoral cap/statutory ceiling, as applicable, provided this has the approval of the Indian company's board of directors as also its general body.

Full notification No.FEMA 45/2001-RB dated September 20, 2001 issued by the Reserve Bank of India is available on RBI site at **www.rbi.org.in** or at **www.fema.rbi.org.in** .

Reserve Bank reduces Interest Rates on Export Credit Across the Board

(September 24, 2001)

The Reserve Bank of India has announced reduction in interest rates for export credit by 1.0 percentage point across the board. This reduction will apply to both, pre-shipment and post-shipment credits.

As per instructions issued by the Reserve Bank today, the maximum rate that the bank should charge to exporters will be 2.5 percentage points below its prime lending rate for pre-shipment credit up to 180 days and for post-shipment credit up to 90 days. Earlier, the ceiling rate was 1.5 percentage point below the prime lending rate. This further concession will apply in respect of all export credit granted by banks effective September 26, 2001 and up to March 31, 2002.

The Reserve Bank spokesperson added that in addition to the above facility for rupee credit, exporters would continue to have the facility of foreign currency loans in the currency of their choice at highly internationally competitive rates. The rate for foreign currency loans to exporters will continue to be LIBOR plus a maximum of 1.0 percentage point. Thus, currently dollar-denominated foreign currency loans can be availed by exporters at no higher than 3.0 per cent (LIBOR rate) + 1.0 per cent, i.e., 4.0 per cent.

The spokesperson also added that even in regard to rupee loans, the exporter, while availing the concessional credit, can sell the export proceeds in the forward market. Assuming a PLR of 10.5 per cent, the ceiling for interest rate on export credit would be 8.0 per cent; and adjusting for forward premia which are currently over 5 per cent, the effective interest rates to exporters on rupee loans can also come down to as low as three per cent.

CREDIT CONTROL AND OTHER MEASURES

AUGUST 2001

Selected circulars issued by the Reserve Bank of India during August 2001 are reproduced below.

Ref.No.UBD.BR. 6/16.26.00/2000-2001 dated August 9, 2001

The Chief Executive Officers of All Primary (Urban) Co-operative Banks

Banking Regulation Act, 1949 (AACS) Section 24 - Investment in Government and Other approved securities by Urban Co-operative Banks (UCBs)

Please refer to para 4 of our circular UBD. No. BR.42/16.26.00/2000-01 dated April 19, 2001 on the captioned subject in terms of which all scheduled and non-scheduled urban co-operative banks with NDTL of Rs. 25 crore and above are required to maintain investments in government securities only in SGL accounts with Reserve Bank of India or in constituent SGL accounts of public sector banks and Primary Dealers (PDs). On a review, it has now been decided that besides public sector banks and PDs, UCBs may also hold securities in constituent SGL accounts maintained by other scheduled commercial banks, State Co-operative Banks, Depositories and Stock Holding Corporation of India Ltd.

All other terms and conditions contained in our above circular will remain unchanged.

Ref.No.UBD.BSD.12.05.00/2001-2002 dated August 31, 2001

All Primary (Urban) Co-operative Banks

Issue of Banker's Cheques/Pay Orders/ Demand Drafts by Primary (Urban) Co-operative Banks

Please refer to our circular No. UBD. I &L 2145-J.20/83-84 dated February 17, 1984 advising urban co-operative banks to adopt adequate safeguards for effective regulation and prevention of misuse of the facility of drawals against cheques sent for clearing. The instructions contained in the aforesaid circular do not allow issue of Banker's Cheques/ Pay Orders/Demand Drafts against instruments presented for clearing. Further, issue of Banker's Cheques/Pay Orders/Demand Drafts against instruments presented for clearing amounts to grant of unsecured advances till the proceeds are collected, and, therefore, attracts the provisions of the RBI directives on maximum limit on unsecured advances.

2. Recently, it has come to the notice of the Reserve Bank that some banks had issued Banker's Cheques/Pay Orders for large sums against instruments presented for clearing without realising

the proceeds there against. Primary (urban) co-operative banks are cautioned that they **should not** issue Banker's Cheques/Pay Orders/Demand Drafts against instruments presented for clearing unless the proceeds there of are collected and credited to the accounts of the parties concerned. Further, Banker's Cheques/Pay Orders/Demand Drafts should not be issued by debit to cash credit / over draft accounts which are already overdrawn beyond the limit sanctioned or likely to be overdrawn with the issue of such instruments as applied for by the parties.

EXCHANGE CONTROL

AUGUST 2001

1. Counter-Trade Arrangements with Romania

Prior approval of the Reserve Bank is required for any arrangement involving adjustment of value of goods imported into India against value of goods exported from India.

It has been decided to allow counter-trade arrangement between Indian and Romanian parties in which exports from India to Romania may precede imports into India and the U.S. Dollar Escrow Accounts may be opened and maintained by the Indian parties with banks in Romania, subject to the condition, among others, that the Indian exporter should utilise the funds for import of goods from Romania into India within six months from the date of credit to such Escrow Accounts. Authorised dealers have been advised to forward such proposals to the concerned Regional Office of the Reserve Bank under whose jurisdiction the exporter is situated. The concerned authorised dealer shall monitor the transactions in the U.S. Dollar Escrow Accounts with banks in Romania through a mirror account.

2. Export of Goods and Services to Latin American Countries

The Reserve Bank as a temporary measure, has allowed a period of 360 days (in place of existing six months), from the date of shipment, for realisation and repatriation of full value of goods/software exported to the 43 Latin American countries.

The relaxation in the period of realisation is available for **one year with effect from September 1, 2001**, that is, to the exports to be made on or after September 1, 2001. Accordingly, from September 1, 2002 the exporters are under obligation to realise full export proceeds within the prescribed period of six months from the date of export.

CURRENT STATISTICS

Notes :

(1) The coverage of data will be expanded from time to time to include new statistical information as and when it becomes available.

(2) Some of the figures included in the tables are provisional and may be revised in later issues. Each issue contains all the revisions made upto the date of publication of the Bulletin.

(3) The following symbols have been used throughout this Section :

.. = Figure is not available

– = Figure is nil or negligible

P = Provisional

(4) Where necessary, each figure has been rounded off to the nearest final digit. For this reason, there may be, in some tables, a slight discrepancy between the sum of the constituent items and the total.

(5) A line drawn across a column between two consecutive figures indicates that the figures above and below the line have been compiled on different basis and are not strictly comparable. In each case, a suitable footnote is added.

(6) For definitions of important items, sources of data, coverage, scope, method of compilation, etc. a reference may be made to the Explanatory Notes, issued as a supplement to the October 1978 issue of the Bulletin.

(7) 1 Lakh = 1,00,000, 1 Million = 10 lakh, 1 Crore = 10 Million.

No. 1 : SELECTED ECONOMIC INDICATORS

Item	Unit / Base	1990-91	1998-99	1999-00	2000-01	2001		
						Jul.	Aug.	Sep.
1	2	3	4	5	6	7	8	9
Output								
1. Gross Domestic Product at Factor Cost (at 1993-94 prices)	Rs. crore	6,92,871	10,83,047	11,51,991 (Q.E.)	12,11,747 (R.E.)			
2. Index number of Agricultural Production (All crops)	Triennium ended 1981-82=100	148.4	179.2	177.5 (P)	166.0 (E)			
a. Foodgrains Production	Million tonnes	176.4	203.5	208.9	196.1 (P)			
3. General Index of Industrial Production (1)	1993-94=100	212.6*	145.2	154.9	162.7 (P)	160.6 (P)	..	..
Money and Banking								
Reserve Bank of India (2)								
4. Notes in circulation	Rs. crore	53,784	1,72,541	1,92,483	2,12,858	2,22,349	2,20,248	2,18,757
5. Rupees Securities (3)	"	86,035	1,45,583	1,40,967	1,50,569	1,53,705	1,34,047	1,46,917
6. Loans and discount	"	19,900	19,876	37,890	28,143	30,253	26,439	30,536
(a) Scheduled Commercial Banks (4)	"	8,169	2,894	9,513	5,980	6,441	748	3,653
(b) Scheduled State Co-operative Banks (4)	"	38	13	15	27	47	4	26
(c) Bills purchased and discounted (internal)	"	–	–	–	–	–	–	–
Scheduled Commercial Banks								
7. Aggregate deposits (5)	Rs. crore	1,92,541	7,14,025	8,13,345	9,62,618	10,21,779 (P)	10,35,822 (P)	10,52,472 (P)
8. Bank credit (5)	"	1,16,301	3,68,837	4,35,958	5,11,434	5,24,184 (P)	5,28,823 (P)	5,36,881 (P)
9. Investment in Govt. Securities (5)	"	49,998	2,23,217	2,78,456	3,40,035	3,76,023 (P)	3,87,176 (P)	3,82,842 (P)
10. Cheque clearances (6)	Rs. thousand crore	1,703	5,668	7,183	8,362	860 (P)	790 (P)	778 (P)
11. Money Stock measures (7)								
(a) M_1	Rs. crore	92,892	3,09,068 (P)	3,41,796 (P)	3,79,791 (P)	3,87,408 (P)	3,89,749 (P)	3,84,826 (P)
(b) M_3	"	2,65,828	9,80,960 (P)	11,24,174 (P)	13,11,583 (P)	13,83,256 (P)	13,92,952 (P)	14,05,378 (P)
Cash Reserve Ratio and Interest Rates								
12. Cash Reserve Ratio (2), (16)	Per cent	15.00	10.50	9.00	8.00	7.50	7.50	7.50
13. Bank Rate	Per cent Per annum	10.00	8.00	8.00	7.00	7.00	7.00	7.00
14. Inter-bank call money rate (Mumbai) (8)	"	4.00/70.00	0.50/35.00	4.50/25.00	4.00/19.00	4.90/11.00	5.21/8.30	5.06/15.00
15. Deposit Rate (9)								
(a) 30 days and 1 year	"	8.0 (11)	Free (12)	5.0-7.5	5.25-7.25	5.00-7.25	5.00-7.25	5.00-7.25
(b) 1 year and above	"	9.0-11.0		8.50-10.00	8.50-10.00	8.00-9.50	8.00-9.50	8.00-9.50
16. Prime Lending Rate (10)	"	–	12.00-13.00	12.00-12.50	11.00-12.00	11.00-12.00	11.00-12.00	11.00-12.00
17. Yield on 12.50% Loan 2004	"	–	11.85	10.77	10.15	7.74	7.38	7.60
18. Yield on 11.5% Loan 2008	"	–	12.03	11.30	10.57	9.24	8.76	8.61
Government Securities Market (2)								
19. Govt. of India 91-day Treasury Bills (Total outstandings)	Rs. crore		1,500	1,520	1,830	5,100	5,575	5,575

See Notes on Tables'.

* : Base : 1980-81 = 100.

\+ : Base : 1981-82 = 100.

E : Estimated

QE : Quick Estimate; RE : Revised Estimate.

No. 1 : SELECTED ECONOMIC INDICATORS *(Concld.)*

Item	Unit / Base	1990-91	1998-99	1999-00	2000-01	2001		
						Jul.	Aug.	Sep.
1	2	3	4	5	6	7	8	9
Price Indices								
20. Wholesale prices (13)	1993-94=100							
(a) All commodities	"	182.7 +	140.7	145.3	155.7	161.1	..	..
(b) Primary articles	"	184.9 +	156.2	158.0	162.5	168.6	..	..
(c) Fuel, power, light and lubricants	"	175.8 +	148.5	162.0	208.1	222.3	..	..
(d) Manufactured products	"	182.8 +	133.6	137.2	141.7	144.9	..	..
(e) Foodgrains	"	179.2 +	152.0	176.4	173.8	175.6	..	..
(f) Edible oils	"	223.3 +	139.1	122.1	103.3	114.1	..	..
(g) Sugar, khandsari & gur	"	152.3 +	153.5	156.0	153.2	146.9	..	..
(h) Raw cotton	"	145.5 +	166.9	147.3	157.3	162.9	..	..
21. Consumer prices (All-India) (1)								
(a) Industrial Workers	1982=100	193	414	428	444	463	466	..
(b) Urban Non-Manual Employees	1984-85=100	161	337	352	371	391	393	..
(c) Agricultural Labourers	July 1986- June 1987=100	..	294	309	304	309	312	..
Foreign Trade								
22. Value of imports	U.S. $ Million	24,073	42,389	49,671	50,537	4,387 (P)	4,370 (P)	..
23. Value of exports	"	18,145	33,219	36,822	44,560	3,464 (P)	3,631 (P)	..
24. Balance of trade	"	-5,927	-9,170	-12,848	-5,976	-923 (P)	-740 (P)	..
25. Foreign exchange reserves (14)								
(a) Foreign currency assets	U.S. $ Million	2,236	29,522	35,058	39,554	40,950	42,537	41,948
(b) Gold	"	3,496	2,960	2,974	2,725	2,771	2,817	2,925
(c) SDRs	"	102	8	4	2	9	4	4
Employment Exchange Statistics (15)								
26. Number of registrations	Thousand	6,541	5,852	5,967	6,042	..	..	..
27. Number of applicants								
(a) Placed in employment	"	265	233	222	176	..	..	..
(b) On live register (14)	"	34,632	40,090	40,371	41,344	..	..	..

No. 2 : RESERVE BANK

Last Friday / Friday	1990-91	1999-00	2000-01	2000		2001
				Sep.	Oct.	Jun.
1	2	3	4	5	6	7
Issue Department						
Liabilities						
Notes in circulation	53,784	1,92,483	2,12,858	1,96,300	2,06,270	2,26,375
Notes held in Banking Department	23	51	79	51	67	16
Total liabilities (total notes issued) or assets	**53,807**	**1,92,535**	**2,12,937**	**1,96,351**	**2,06,337**	**2,26,391**
Assets						
Gold coin and bullion	6,654	10,598	10,324	10,589	10,667	10,810
Foreign securities	200	72,700	91,700	86,700	86,700	1,06,700
Rupee coin (1)	29	102	78	160	106	115
Government of India rupee securities	46,924	1,09,134	1,10,835	98,901	1,08,865	1,08,765
Banking Department						
Liabilities						
Deposits	**38,542**	**86,551**	**87,828**	**83,046**	**76,324**	**84,990**
Central Government	61	500	100	101	109	101
State Governments	33	41	41	41	217	41
Scheduled Commercial Banks	33,484	77,781	76,939	72,915	66,857	74,326
Scheduled State Co-operative Banks	244	816	978	1,072	821	926
Non-Scheduled State Co-operative Banks	13	45	61	29	31	48
Other banks	88	246	918	610	649	1,029
Others	4,619	7,122	8,791	8,278	7,640	8,519
Other liabiliitie (2)	28,342	74,102	84,199	75,483	76,501	91,359
Total liabilities or assets	**66,884**	**1,60,654**	**1,72,028**	**1,58,529**	**1,52,823**	**1,76,349**

See Notes on Tables'.

OF INDIA

(Rs. crore)

2001							
Jul.	Aug.	Sep. 7	Sep. 14	Sep. 21	Sep. 28	Oct. 5	Oct. 12 (P)
8	9	10	11	12	13	14	15
2,22,349	2,20,248	2,23,834	2,22,988	2,20,984	2,18,757	2,22,503	2,24,965
37	40	26	26	41	53	56	36
2,22,385	**2,20,287**	**2,23,860**	**2,23,014**	**2,21,024**	**2,18,810**	**2,22,559**	**2,25,001**
10,753	10,851	10,851	10,851	10,851	10,851	11,435	11,435
1,06,700	1,06,700	1,06,700	1,06,700	1,06,700	1,06,700	1,06,700	1,06,700
64	193	180	166	154	137	126	111
1,04,869	1,02,544	1,06,129	1,05,298	1,03,320	1,01,122	1,04,298	1,06,755
90,775	**73,649**	**88,412**	**80,336**	**78,401**	**87,598**	**77,630**	**81,075**
101	101	101	101	101	100	100	100
41	41	41	41	41	41	41	41
71,220	63,121	78,008	69,926	68,279	76,908	67,330	70,850
830	860	862	913	805	1,205	781	935
60	35	51	32	53	46	55	43
935	971	932	938	950	942	981	975
17,588	8,520	8,417	8,385	8,172	8,356	8,342	8,131
86,515	88,782	88,993	92,087	92,896	92,070	94,256	93,721
1,77,290	**1,62,431**	**1,77,405**	**1,72,423**	**1,71,296**	**1,79,668**	**1,71,886**	**1,74,796**

No. 2 : RESERVE BANK

Last Friday / Friday	1990-91	1999-00	2000-01	2000		2001
				Sep.	Oct.	Jun.
1	2	3	4	5	6	7
Assets						
Notes and coins	23	52	80	51	68	17
Balances held abroad (3)	4,008	52,313	92,600	63,365	62,911	84,313
Loans and Advances						
Central Government	–	982	–	2,285	3,822	9,014
State Governments (4)	916	7,519	4,395	840	5,113	3,603
Scheduled Commercial Banks	8,169	9,513	5,980	6,719	6,269	3,616
Scheduled State Co-operative Banks	38	15	27	25	21	2
Industrial Development Bank of India	3,705	1,740	1,440	1,440	1,440	1,440
NABARD	3,328	5,884	6,580	5,636	5,692	5,826
EXIM Bank	745	697	617	617	617	617
Others	1,615	11,541	9,104	9,416	9,181	6,384
Bills Purchased and Discounted						
Internal	–	–	–	–	–	–
Government Treasury Bills	1,384	–	–	–	–	–
Investments	40,286	62,660	43,127	59,853	50,001	51,662
Other Assets (5)	2,666	7,739	8,078	8,283	7,689	9,855
	(–)	(2,375)	(2,314)	(2,313)	(2,390)	(2,422)

OF INDIA *(Concld.)*

(Rs. crore)

2001							
Jul.	Aug.	Sep. 7	Sep. 14	Sep. 21	Sep. 28	Oct. 5	Oct. 12 (P)
8	9	10	11	12	13	14	15
37	40	26	26	41	54	57	36
85,935	93,725	94,058	95,725	94,231	93,915	94,951	95,882
4,715	9,453	14,099	8,789	1,223	4,143	7,250	7,110
3,213	4,190	5,167	4,108	6,154	9,184	6,544	4,713
6,441	748	5,282	4,256	4,152	3,653	2,488	5,040
47	4	4	4	26	26	29	26
1,440	1,440	1,440	1,110	1,110	1,110	1,110	1,110
5,951	5,682	5,619	5,644	5,655	5,835	5,867	5,942
617	617	617	532	532	532	532	532
7,829	4,305	6,065	6,440	7,134	6,053	4,273	5,493
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
53,435	36,106	39,373	40,169	45,935	50,408	43,907	43,819
7,632	6,121	5,654	5,621	5,102	4,755	4,879	5,092
(2,410)	(2,432)	(2,432)	(2,432)	(2,432)	(2,432)	(2,563)	(2,563)

No. 3 : ALL SCHEDULED BANKS –

Last Reporting Friday (in case of March) / Last Friday	1990-91	1999-00	2000-01	2000 Sep.
1	2	3	4	5
Number of reporting banks	299	364	363	364
Liabilities to the banking system (1)	**6,673**	**56,233**	**82,550**	**61,978**
Demand and time deposits from banks (2)	5,598	38,699	55,041	44,513
Borrowings from banks (3)	998	16,655	25,179	15,940
Other demand and time liabilities (4)	77	880	2,329	1,525
Liabilities to others (1)	**2,13,125**	**9,44,813**	**11,12,370**	**10,37,733**
Aggregate deposits (5)	**1,99,643**	**8,62,098**	**10,16,440**	**9,46,020**
Demand	34,823	1,33,000	1,48,669	1,41,697
Time (5)	1,64,820	7,29,098	8,67,771	8,04,323
Borrowings (6)	645	2,801	2,634	7,854
Other demand and time liabilities (4)	12,838	79,914	93,296	83,860
Borrowings from Reserve Bank (7)	**3,483**	**6,523**	**3,966**	**6,832**
Against usance bills / promissory notes	–	–	–	–
Others (8)	3,483	6,523	3,966	6,832
Cash in hand and balances with Reserve Bank	**25,995**	**65,178**	**68,242**	**81,464**
Cash in hand	1,847	5,728	6,085	5,767
Balances with Reserve Bank (9)	24,147	59,450	62,157	75,696

See `Notes on Tables'.

BUSINESS IN INDIA

(Rs. crore)

2001						
Mar.	Apr.	May	Jun.	Jul. (P)	Aug. (P)	Sep. (P)
6	7	8	9	10	11	12
363	362	362	362	362	362	362
82,550	**87,232**	**80,182**	**79,987**	**73,658**	**62,632**	**60,780**
55,041	56,255	52,176	52,351	48,458	40,388	38,830
25,179	28,908	26,487	26,107	23,760	20,808	20,485
2,329	2,069	1,519	1,530	1,439	1,436	1,464
11,12,370	**11,51,975**	**11,54,089**	**11,70,380**	**11,77,399**	**11,94,958**	**12,14,366**
10,16,440	**10,46,818**	**10,54,682**	**10,72,330**	**10,78,197**	**10,92,358**	**11,09,566**
1,48,669	1,50,900	1,47,343	154,391	1,48,797	1,48,001	1,52,456
8,67,771	8,95,918	9,07,338	917,939	9,29,400	9,44,357	9,57,109
2,634	5,842	4,262	2,267	2,243	4,246	5,282
93,296	99,315	95,145	95,783	96,959	98,353	99,518
3,966	**6,352**	**4,142**	**3,677**	**6,551**	**753**	**3,747**
–	–	–	–	–	–	–
3,966	6,352	4,142	3,677	6,551	753	3,747
68,242	**85,768**	**77,608**	**84,377**	**80,706**	**72,761**	**86,537**
6,085	6,509	6,880	7,366	6,933	6,986	6,569
62,157	79,260	70,728	77,011	73,773	65,775	79,968

No. 3 : ALL SCHEDULED BANKS –

Last Reporting Friday (in case of March) / Last Friday	1990-91	1999-00	2000-01	2000
				Sep.
1	2	3	4	5
Assets with the Banking System	**6,848**	**52,702**	**71,484**	**49,729**
Balances with other banks	3,347	19,525	23,510	19,607
In current account	1,926	5,031	5,356	4,939
In other accounts	1,421	14,495	18,154	14,668
Money at call and short notice	2,201	26,670	39,916	24,121
Advances to banks (10)	902	4,204	5,003	3,220
Other assets	398	2,303	3,055	2,780
Investment	**76,831**	**3,22,836**	**3,86,223**	**3,52,997**
Government securities (11)	51,086	2,90,002	3,53,498	3,19,701
Other approved securities	25,746	32,834	32,724	33,296
Bank credit	**1,25,575**	**4,76,025**	**5,59,856**	**5,19,332**
Loans, cash-credits and overdrafts	1,14,982	4,40,056	5,17,250	4,79,121
Inland bills-purchased	3,532	5,032	5,225	5,390
Inland bills-discounted	2,409	13,186	19,174	17,003
Foreign bills-purchased	2,788	8,939	9,404	9,094
Foreign bills-discounted	1,864	8,812	8,803	8,724
Cash-Deposit Ratio	13.0	7.6	6.7	8.6
Investment-Deposit Ratio	38.5	37.4	38.0	37.3
Credit-Deposit Ratio	62.9	55.2	55.1	54.9

BUSINESS IN INDIA *(Concld.)*

(Rs. crore)

2001						
Mar.	Apr.	May	Jun.	Jul. (P)	Aug. (P)	Sep. (P)
6	7	8	9	10	11	12
71,484	**77,822**	**72,195**	**71,894**	**65,315**	**62,613**	**59,626**
23,510	24,986	22,057	22,756	21,809	21,160	20,413
5,356	6,042	5,747	5,605	5,486	5,125	5,001
18,154	18,945	16,310	17,151	16,323	16,035	15,412
39,916	45,190	42,202	41,233	36,002	36,707	34,153
5,003	4,514	5,105	4,848	4,566	1,823	2,060
3,055	3,132	2,831	3,057	2,937	2,923	3,001
3,86,223	**3,94,677**	**4,07,348**	**4,09,619**	**4,24,233**	**4,35,419**	**4,32,037**
3,53,498	3,61,736	3,74,508	3,77,982	3,91,055	4,02,230	3,98,444
32,724	32,941	32,840	31,637	33,178	33,189	33,593
5,59,856	**5,65,912**	**5,63,015**	**5,68,069**	**5,72,862**	**5,77,002**	**5,85,212**
5,17,250	5,21,611	5,20,753	5,27,133	5,32,316	5,37,094	5,45,727
5,225	5,508	5,242	5,205	4,999	4,884	5,139
19,174	20,370	19,286	18,372	18,224	18,236	17,635
9,404	9,823	9,093	9,273	9,054	8,614	8,556
8,803	8,600	8,641	8,086	8,268	8,173	8,156
6.7	8.2	7.4	7.9	7.5	6.7	7.8
38.0	37.7	38.6	38.2	39.3	39.9	38.9
55.1	54.1	53.4	53.0	53.1	52.8	52.7

No. 4 : ALL SCHEDULED COMMERCIAL BANKS –

Last Reporting Friday(in case of March) / Last Friday	1990-91	1999-00	2000-01	2000 Sep.
1	2	3	4	5
Number of Reporting banks	271	297	296	297
Liabilities to the banking system (1)	**6,486**	**53,838**	**77,088**	**56,649**
Demand and time deposits from banks (2), (12)	5,443	36,711	50,750	40,040
Borrowings from banks (3)	967	16,266	24,047	15,142
Other demand and time liabilities (4)	76	861	2,291	1,467
Liabilities to others (1)	**2,05,600**	**8,94,520**	**10,56,392**	**9,84,108**
Aggregate deposits (5)	**1,92,541**	**8,13,345**	**9,62,618**	**8,95,031**
Demand	33,192	1,27,366	1,42,552	1,35,827
Time (5)	1,59,349	6,85,978	8,20,066	7,59,204
Borrowings (6)	470	2,734	2,566	7,183
Other demand and time liabilities (4), (13)	12,589	78,442	91,208	81,894
Borrowings from Reserve Bank (7)	**3,468**	**6,491**	**3,896**	**6,719**
Against usance bills/promissory notes	–	–	–	–
Others	3,468	6,491	3,896	6,719
Cash in hand and balances with Reserve Bank	**25,665**	**62,750**	**65,202**	**78,289**
Cash in hand	1,804	5,330	5,658	5,374
Balances with Reserve Bank (9)	23,861	57,419	59,544	72,915

See Notes on Tables'.

BUSINESS IN INDIA

(Rs. crore)

2001						
Mar.	Apr.	May	Jun.	Jul. (P)	Aug. (P)	Sep. (P)
6	7	8	9	10	11	12
296	295	295	295	295	295	295
77,088	**82,175**	**75,424**	**75,622**	**69,210**	**58,505**	**56,753**
50,750	52,085	48,272	48,579	44,798	36,875	35,369
24,047	28,057	25,667	25,559	23,001	20,211	19,935
2,291	2,033	1,485	1,484	1,412	1,419	1,450
10,56,392	**10,95,506**	**10,97,268**	**11,12,427**	**11,18,577**	**11,36,123**	**11,54,596**
9,62,618	**9,92,805**	**10,00,278**	**10,16,789**	**10,21,779**	**10,35,822**	**10,52,472**
1,42,552	1,44,567	1,41,070	1,47,944	1,42,438	1,41,710	1,46,131
8,20,066	8,48,238	8,59,208	8,68,846	8,79,341	8,94,112	9,06,341
2,566	5,814	4,185	2,225	2,191	4,194	5,234
91,208	96,887	92,804	93,413	94,607	96,107	96,891
3,896	**6,235**	**4,056**	**3,616**	**6,441**	**748**	**3,653**
–	–	–	–	–	–	–
3,896	6,235	4,056	3,616	6,441	748	3,653
65,202	**82,626**	**74,478**	**81,226**	**77,685**	**69,638**	**83,085**
5,658	6,094	6,423	6,900	6,465	6,517	6,177
59,544	76,532	68,055	74,326	71,220	63,121	76,908

No. 4 : ALL SCHEDULED COMMERCIAL BANKS –

Last Reporting Friday (in case of March) / Last Friday	1990-91	1999-00	2000-01	2000
				Sep.
1	2	3	4	5
Assets with the Banking System	**5,582**	**43,448**	**62,355**	**40,662**
Balances with other banks	2,846	16,307	19,856	15,967
In current account	1,793	4,301	4,460	4,157
In other accounts	1,053	12,006	15,397	11,811
Money at call and short notice	1,445	21,680	35,628	19,865
Advances to banks (10)	902	3,542	4,933	3,209
Other assets	388	1,919	1,937	1,620
Investment	**75,065**	**3,08,944**	**3,70,159**	**3,36,445**
Government securities (11)	49,998	2,78,456	3,40,035	3,05,742
Other approved securities	25,067	30,488	30,125	30,703
Bank credit (14)	**1,16,301** **(4,506)**	**4,35,958** **(25,691)**	**5,11,434** **(39,991)**	**4,76,504** **(32,131)**
Loans,cash-credits and overdrafts	1,05,982	4,00,907	4,70,215	4,37,389
Inland bills-purchased	3,375	4,788	4,908	5,130
Inland bills-discounted	2,336	12,758	18,574	16,485
Foreign bills-purchased	2,758	8,886	9,351	9,038
Foreign bills-discounted	1,851	8,619	8,386	8,462
Cash-Deposit Ratio	13.3	7.7	6.8	8.7
Investment- Deposit Ratio	39.0	38.0	38.5	37.6
Credit-Deposit Ratio	60.4	53.6	53.1	53.2

BUSINESS IN INDIA *(Concld.)*

(Rs. crore)

2001						
Mar.	Apr.	May	Jun.	Jul. (P)	Aug. (P)	Sep. (P)
6	7	8	9	10	11	12
62,355	**68,567**	**63,231**	**62,722**	**56,126**	**54,197**	**51,064**
19,856	20,744	18,594	18,929	18,389	17,850	17,148
4,460	5,139	4,888	4,626	4,603	4,284	4,153
15,397	15,605	13,706	14,303	13,785	13,566	12,995
35,628	41,326	37,846	37,018	31,301	32,608	29,881
4,933	4,440	5,053	4,821	4,562	1,795	2,041
1,937	2,056	1,738	1,954	1,875	1,943	1,993
3,70,159	**3,79,003**	**3,91,383**	**3,93,375**	**4,06,732**	**4,17,895**	**4,13,988**
3,40,035	3,48,657	3,61,080	3,64,247	3,76,023	3,87,176	3,82,842
30,125	30,346	30,303	29,128	30,709	30,719	31,146
5,11,434 (39,991)	**5,16,876 (39,309)**	**5,14,921 (47,572)**	**5,19,416 (50,340)**	**5,24,184 (51,027)**	**5,28,823 (50,338)**	**5,36,881 (47,924)**
4,70,215	4,73,728	4,73,777	4,79,561	4,84,748	4,90,006	4,98,508
4,908	5,183	4,896	4,857	4,643	4,531	4,800
18,574	19,808	18,777	17,909	17,758	17,785	17,266
9,351	9,759	9,036	9,222	8,996	8,559	8,390
8,386	8,398	8,436	7,865	8,039	7,943	7,916
6.8	8.3	7.4	8.0	7.6	6.7	7.9
38.5	38.2	39.1	38.7	39.8	40.3	39.3
53.1	52.1	51.5	51.1	51.3	51.1	51.0

No. 5 : SCHEDULED COMMERCIAL BANKS' INVESTMENTS IN COMMERCIAL PAPER, BONDS, DEBENTURES, SHARES ETC.

(Rs. crore)

Outstanding as on	Commercial Paper	Bonds / Debentures / Preference Shares issued by		Equity Shares issued by PSUs and Private Corporate Sector +
		Public Sector Undertakings (PSUs)	Private Corporate Sector	
1	2	3	4	5
Mar. 27, 1998	2,443	18,767	9,778	1,472 (44)
Mar. 26, 1999	4,006	24,169	17,857	2,343 (64)
Mar. 24, 2000	5,037	30,620	22,988	2,834 (20)
Mar. 23, 2001	6,984	38,453	27,006	3,171 (15)
Jun. 2, 2000	6,676	32,700	23,020	2,975 (15)
Jun. 1, 2001	6,719	38,643	27,473	3,162 (15)
Jun. 16, 2000	6,765	32,705	22,856	2,927 (15)
Jun. 15, 2001	6,734	38,795	27,716	3,141 (15)
Jun. 30, 2000	6,769	32,583	22,682	2,916 (–)
Jun. 29, 2001	7,459	39,171	27,330	3,174 (15)
Jul. 14, 2000	6,918	32,992	22,848	2,952 (15)
Jul. 13, 2001	6,479	39,135	27,318	3,178 (15)
Jul. 28, 2000	6,544	33,210	23,189	3,003 (15)
Jul. 27, 2001	5,652	39,381	26,952	3,188 (15)

+ : Figures in brackets are loans to corporates against shares held by them to meet the promoters' contribution to the equity of new companies in anticipation of raising resources.

Note : Data are provisional and tentative and as such subject to revision.

Source : Special Fortnightly Returns.

(Rs. crore)

Outstanding as on	Commercial Paper	Shares issued by		Bonds / Debentures issued by	
		Public Sector Undertakings (PSUs)	Private Corporate Sector	Public Sector Undertakings (PSUs)	Private Corporate Sector
1	2	3	4	5	6
Mar. 27, 1998	2,443	562	1,735	18,702	9,018
Mar. 26, 1999	4,006	867	3,033	24,072	16,398
Mar. 24, 2000	5,037	876	3,909	30,446	21,210
Mar. 23, 2001	8,049	1,342	4,348	36,568	25,537
Aug. 11, 2000	5,723	898	3,699	32,747	22,183
Aug. 10, 2001	6,831	1,494	4,159	38,439	25,164
Aug. 25, 2000	5,235	903	3,730	32,798	21,952
Aug. 24, 2001	7,057	1,653	4,139	38,588	25,538

Note : For the financial year 2001-2002, data on investments are based on Statutory Section 42 (2) Returns. Such data for the earlier period which are based on Special Fortnightly Return has since been discontinued.

No. 6 : STATE CO-OPERATIVE BANKS – MAINTAINING ACCOUNTS WITH THE RESERVE BANK OF INDIA

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday/ Reporting Friday	1990-91	1999-00	2000-01	2000		2001						
				Apr.	May	Jan.	Feb.	Mar.	Apr.	May 4	May 18	May 25
1	2	3	4	5	6	7	8	9	10	11	12	13
Number of reporting banks	28	28	28	28	28	28	28	28	28	28	28	28
Demand and Time Liabilities												
Aggregate Deposits (1)	**2,152**	**9,060**	**9,265**	**9,099**	**9,256**	**9,611**	**9,692**	**9,265**	**10,220**	**10,280**	**10,192**	**10,238**
Demand Liabilities	**1,831**	**3,861**	**3,872**	**3,443**	**3,565**	**3,817**	**3,756**	**3,872**	**4,258**	**4,315**	**4,180**	**4,252**
Deposits												
Inter-bank	718	1,181	1,341	1,118	1,077	1,326	1,265	1,341	1,415	1,399	1,354	1,333
Others	794	1,730	1,749	1,699	1,832	1,725	1,757	1,749	1,993	2,045	1,908	1,957
Borrowings from banks	181	140	204	124	136	211	197	204	193	202	230	275
Others	139	811	578	503	520	555	536	578	656	669	688	687
Time Liabilities	**3,963**	**25,640**	**27,296**	**25,900**	**26,099**	**26,962**	**27,244**	**27,296**	**27,620**	**27,682**	**27,850**	**27,813**
Deposits												
Inter-bank	2,545	18,146	19,598	18,346	18,511	18,893	19,126	19,598	19,198	19,254	19,372	19,341
Others	1,359	7,330	7,516	7,400	7,424	7,886	7,935	7,516	8,227	8,236	8,284	8,281
Borrowings from banks	–	18	25	17	19	25	23	25	25	25	25	23
Others	59	146	157	138	145	158	159	157	171	167	170	169
Borrowings from Reserve Bank	**15**	**–**	**4**	**–**	**–**	**5**	**1**	**4**	**2**	**2**	**2**	**2**
Borrowings from the State Bank and / or a notified bank (2) and State Government	**1,861**	**6,304**	**7,162**	**6,329**	**5,731**	**6,718**	**6,855**	**7,162**	**6,803**	**6,963**	**6,262**	**6,298**
Demand	116	972	2,145	988	950	2,239	2,269	2,145	2,019	1,826	1,439	1,572
Time	1,745	5,332	5,017	5,341	4,780	4,479	4,586	5,017	4,785	5,137	4,823	4,726

See 'Notes on Tables'.

No. 6 : STATE CO-OPERATIVE BANKS – MAINTAINING ACCOUNTS WITH THE RESERVE BANK OF INDIA *(Concld.)*

(Rs. crore)

Last Reporting Friday (in case of March)/ Last Friday/ Reporting Friday	1990-91	1999-00	2000-01	2000		2001						
				Apr.	May	Jan.	Feb.	Mar.	Apr.	May 4	May 18	May 25
1	2	3	4	5	6	7	8	9	10	11	12	13
Assets												
Cash in hand and balances with Reserve Bank	**334**	**927**	**924**	**909**	**1,023**	**909**	**670**	**924**	**972**	**811**	**959**	**1,097**
Cash in hand	24	93	88	92	119	101	96	88	99	95	105	124
Balances with Reserve Bank	310	834	836	817	904	807	573	836	872	716	854	972
Balances with other banks in current account	93	212	250	191	180	212	246	250	256	260	266	233
Investments in Government securities (3)	1,058	6,736	7,469	7,003	7,242	7,693	7,809	7,469	7,521	7,555	7,651	7,660
Money at call and short notice	498	5,087	4,080	4,625	4,697	4,346	4,279	4,080	4,221	4,253	4,068	4,068
Bank credit (4)	**2,553**	**10,721**	**12,460**	**11,504**	**10,574**	**11,469**	**11,989**	**12,460**	**12,801**	**12,922**	**13,054**	**13,072**
Advances												
Loans, cash-credits and overdrafts	2,528	10,702	12,436	11,486	10,555	11,448	11,967	12,436	12,776	12,896	13,030	13,048
Due from banks (5)	5,560	13,998	15,943	12,959	13,209	15,447	15,308	15,943	15,880	15,754	15,076	15,017
Bills purchased and discounted	25	20	24	19	19	21	22	24	25	26	24	24
Cash - Deposit Ratio	15.5	10.2	10.0	10.0	11.1	9.5	6.9	10.0	9.5	7.9	9.4	10.7
Investment - Deposit Ratio	49.2	74.3	80.6	77.0	78.2	80.0	80.6	80.6	73.6	73.5	75.1	74.8
Credit - Deposit Ratio	118.6	118.3	134.5	126.4	114.2	119.3	123.7	134.5	125.3	125.7	128.1	127.7

No. 7 : RESERVE BANK'S ACCOMMODATION TO SCHEDULED COMMERCIAL BANKS (5)

(Rs. crore)

As on last reporting Friday of	Export Credit Refinance (1)		General Refinance (2)		Special Liquidity Support (3)		Total Refinance (4)	
	Limit	Outstanding	Limit	Outstanding	Limit	Outstanding	Limit	Outstanding
1	2	3	4	5	6	7	8	9
1996-97	6,654.40	559.97	–	–			6,654.40	559.97
1997-98	2,402.96	394.52	1,115.02	0.11			3,517.98	394.63
1998-99	7,269.27	2,616.57	1,115.02	19.23	3,235.02	258.00	11,619.31	2,893.80
Mar. 1999	7,269.27	2,616.57	1,115.02	19.23	3,235.02	258.00	11,619.31	2,893.80
Apr. 1999	8,638.29	5,164.76	1,115.02	56.31	–	–	9,753.31	5,221.07

As on last reporting Friday of	Export Credit Refinance (1)		Others @		Total Refinance (4)	
	Limit	Outstanding	Limit	Outstanding	Limit	Outstanding
1	2	3	4	5	6	7
1999-00	10,579.06	6,291.49	3,027.72	199.47	13,606.78	6,490.96
2000-01	7,192.11	3,252.24	1,056.68	639.58	8,248.79	3,891.82
May 1999	8,563.56	4,521.79	3,027.72	437.91	11,591.28	4,959.70
Jun. 1999	8,151.40	3,863.21	3,027.72	–	11,179.12	3,863.21
Jul. 1999	7,536.76	2,760.57	3,027.72	0.41	10,564.48	2,760.98
Aug. 1999	7,230.93	2,740.56	3,027.72	7.01	10,258.65	2,747.57
Sep. 1999	7,099.97	4,109.11	3,027.72	95.23	10,127.69	4,204.34
Oct. 1999	7,760.85	6,156.46	3,027.72	1,185.14	10,788.57	7,341.60
Nov. 1999	8,464.82	3,603.38	3,027.72	192.00	11,492.54	3,795.38
Dec. 1999	8,577.94	2,470.84	3,027.72	82.50	11,605.66	2,553.34
Jan. 2000	9,298.91	4,155.56	3,027.72	292.31	12,326.63	4,447.87
Feb. 2000	9,576.50	7,213.69	3,027.72	237.60	12,604.22	7,451.29
Mar. 2000	10,579.06	6,291.49	3,027.72	199.47	13,606.78	6,490.96
Apr. 2000	11,277.89	4,609.33	3,027.72	458.95	14,305.61	5,068.28
May 2000	12,162.70	9,734.24	3,027.72	607.22	15,190.42	10,341.46
Jun. 2000	11,273.12	8,489.59	1,713.69	223.02	12,986.81	8,712.61
Jul. 2000	12,468.07	5,776.29	1,713.69	70.54	14,181.76	5,846.83
Aug. 2000	6,431.70	5,529.27	1,056.68	721.70	7,488.38	6,250.97
Sep. 2000	6,215.24	4,647.52	1,056.68	644.86	7,271.92	5,292.38
Oct. 2000	6,527.01	5,619.97	1,056.68	604.90	7,583.69	6,224.87
Nov. 2000	6,470.04	5,515.26	1,056.68	108.90	7,526.72	5,624.16
Dec. 2000	6,722.34	5,987.92	1,056.68	716.89	7,779.02	6,704.83
Jan. 2001	7,180.69	5,877.74	1,056.68	139.70	8,237.37	6,017.44
Feb. 2001	7,050.49	4,994.05	1,056.68	136.43	8,107.17	5,130.48
Mar. 2001	7,192.11	3,252.24	1,056.68	639.58	8,248.79	3,891.82
Apr. 2001	7,350.13	4,710.86	1,520.18	1,132.14	8,870.31	5,843.40
May 2001	9,324.90	4,624.89	1,519.77	147.16	10,844.67	4,772.05
Jun. 2001	9,221.07	3,553.02	1,519.77	63.01	10,740.84	3,616.03
Jul. 2001	9,256.04	5,734.56	1,056.27	703.15	10,312.31	6,437.71
Aug. 2001	9,187.10	3,359.12	1,056.27	89.30	10,243.37	3,448.42
Sep. 2001	9,144.62	4,042.33	1,056.27	109.99	10,200.89	4,152.32

@ : 'Others' include Collateralised Lending Facility (CLF) / Additional CLF (withdrawn effective June 5, 2000), Special Liquidity Support (SLS) Facility, etc.
Also see 'Notes on Tables'.

No. 8 : CHEQUE CLEARANCES – CENTRES MANAGED BY RESERVE BANK OF INDIA
(Revised Series)

(Number in lakh)

Year / Month	Total	Centres Managed by Reserve Bank of India					
		Mumbai	Kolkata	New Delhi	Chennai	Bangalore	Hyderabad
1	2	3	4	5	6	7	8
1990-91	**3,518**	1,253	328	552	357	224	203
1998-99	**4,891**	1,791	497	904	556	219	231
1999-00	**5,167**	1,800	512	967	505	378	266
2000-01	**5,274**	1,735	519	1,006	520	419	283
Feb. 1999	**370**	133	37	70	42	26	19
Mar. 1999	**442**	159	48	85	52	33	23
Apr. 1999	**395**	154	39	72	45	28	20
May 1999	**368**	135	36	76	40	28	22
Jun. 1999	**395**	135	38	70	46	31	19
Jul. 1999	**469**	172	48	84	45	32	22
Aug. 1999	**465**	165	48	83	42	32	22
Sep. 1999	**416**	143	40	79	39	30	20
Oct. 1999	**457**	171	45	84	33	32	22
Nov. 1999	**416**	138	43	79	42	30	24
Dec. 1999	**441**	146	43	83	43	34	24
Jan. 2000	**426**	145	42	81	40	32	22
Feb. 2000	**439**	142	42	85	42	33	24
Mar. 2000	**480**	154	48	91	48	36	25
Apr. 2000	**419**	139	41	80	40	36	20
May 2000	**464**	154	43	90	45	36	25
Jun. 2000	**483**	163	48	88	47	36	25
Jul. 2000	**439**	143	44	86	45	33	24
Aug. 2000	**447**	151	45	85	44	34	22
Sep. 2000	**393**	130	43	64	41	31	22
Oct. 2000	**436**	149	37	83	43	36	23
Nov. 2000	**440**	142	44	84	43	36	26
Dec. 2000	**395**	127	39	77	39	32	22
Jan. 2001	**462**	155	44	90	44	37	25
Feb. 2001	**414**	130	43	82	42	34	23
Mar. 2001	**482**	152	48	97	47	38	26
Apr. 2001 (P)	**416**	138	40	81	41	32	22
May 2001 (P)	**432**	134	40	89	41	37	24
Jun. 2001 (P)	**426**	138	41	80	42	36	24
Jul. 2001 (P)	**462**	132	50	95	46	39	26
Aug. 2001 (P)	**446**	127	48	92	45	38	25
Sep. 2001 (P)	**338**	122	41	85	..	..	24

See 'Notes on Tables'.

No. 8 : CHEQUE CLEARANCES – CENTRES MANAGED BY RESERVE BANK OF INDIA *(Contd.)*
(Revised Series)

(Number in lakh)

Year / Month	Centres Managed by Reserve Bank of India							
	Ahmedabad	Kanpur	Nagpur	Patna	Bhuba-neshwar	Thiruvan-anthapuram	Jaipur	Guwahati
1	9	10	11	12	13	14	15	16
1990-91	365	50	53	19	7	20	72	15
1998-99	341	62	83	37	20	33	93	24
1999-00	372	64	93	28	21	33	103	25
2000-01	422	65	97	16	24	33	107	28
Feb. 1999	16	5	7	3	1	2	7	2
Mar. 1999	10	5	8	3	2	3	9	2
Apr. 1999	7	5	7	3	2	3	8	2
May 1999	3	5	7	3	1	2	8	2
Jun. 1999	28	5	7	3	1	3	7	2
Jul. 1999	34	5	8	3	2	3	9	2
Aug. 1999	39	6	8	4	2	3	9	2
Sep. 1999	34	5	8	3	2	3	8	2
Oct. 1999	38	6	8	2	2	3	9	2
Nov. 1999	33	5	7	1	1	3	8	2
Dec. 1999	37	5	8	1	2	3	10	2
Jan. 2000	35	5	8	1	2	2	9	2
Feb. 2000	39	6	8	2	2	3	9	2
Mar. 2000	45	6	9	2	2	2	9	3
Apr. 2000	36	5	7	1	2	2	8	2
May 2000	40	6	8	1	2	3	9	2
Jun. 2000	42	6	8	2	2	3	10	3
Jul. 2000	35	5	8	1	2	2	9	2
Aug. 2000	34	6	8	2	2	3	9	2
Sep. 2000	33	5	8	2	2	2	8	2
Oct. 2000	36	5	8	1	2	3	8	2
Nov. 2000	35	5	8	1	2	3	9	2
Dec. 2000	31	5	8	1	2	2	8	2
Jan. 2001	32	6	9	1	2	4	9	4
Feb. 2001	29	5	8	1	2	3	10	2
Mar. 2001	39	6	9	2	2	3	10	3
Apr. 2001 (P)	32	5	8	1	2	2	10	2
May 2001 (P)	34	6	8	1	2	3	10	3
Jun. 2001 (P)	35	5	8	1	2	2	10	2
Jul. 2001 (P)	40	6	9	1	2	3	11	2
Aug. 2001 (P)	36	6	9	1	2	3	11	3
Sep. 2001 (P)	33	5	8	3	2	3	10	2

No. 8 : CHEQUE CLEARANCES – CENTRES MANAGED BY RESERVE BANK OF INDIA *(Contd.)*
(Revised Series)

(Rs. crore)

Year / Month	Total	Centres Managed by Reserve Bank of India					
		Mumbai	Kolkata	New Delhi	Chennai	Bangalore	Hyderabad
1	2	3	4	5	6	7	8
1990-91	**18,39,460**	11,82,587	1,04,051	2,39,979	1,76,123	29,267	25,183
1998-99	**62,09,523**	42,52,073	2,68,759	7,50,660	3,96,110	93,098	1,19,097
1999-00	**78,95,492**	55,87,215	3,18,420	8,47,094	4,30,104	2,10,536	1,51,310
2000-01	**91,89,683**	66,67,989	3,65,280	8,18,999	5,09,292	2,49,065	1,68,553
Feb. 1999	**4,81,575**	3,28,011	20,750	58,289	29,638	12,794	10,103
Mar. 1999	**6,68,225**	4,56,989	30,999	81,136	43,023	16,312	14,079
Apr. 1999	**5,97,369**	4,23,356	24,808	60,653	36,147	16,007	13,057
May 1999	**5,97,199**	4,27,274	22,541	62,945	32,582	14,541	10,633
Jun. 1999	**5,68,400**	3,90,132	23,103	64,723	36,254	16,521	11,604
Jul. 1999	**6,36,213**	4,,52,061	24,808	69,420	34,915	15,593	12,063
Aug. 1999	**6,74,996**	4,97,257	24,631	62,667	36,732	14,709	11,349
Sep. 1999	**6,26,129**	4,45,886	23,888	69,188	32,830	15,437	11,353
Oct. 1999	**6,67,013**	4,91,359	25,158	70,152	25,830	15,308	12,419
Nov. 1999	**6,09,967**	4,25,279	25,369	68,787	35,898	15,206	11,706
Dec. 1999	**6,53,479**	4,43,943	29,381	75,921	37,740	19,519	13,735
Jan. 2000	**6,23,877**	4,28,370	27,438	67,863	34,171	22,925	12,890
Feb. 2000	**7,64,037**	5,55,234	28,752	76,077	39,733	18,594	13,200
Mar. 2000	**8,76,813**	6,07,064	38,543	98,698	47,272	26,176	17,301
Apr. 2000	**6,66,263**	4,57,674	30,036	68,713	38,097	25,333	12,493
May 2000	**7,45,924**	5,37,793	28,524	69,382	42,850	18,981	13,910
Jun. 2000	**7,20,846**	5,17,119	29,191	67,287	41,861	18,728	13,968
Jul. 2000	**7,12,865**	5,14,811	28,270	66,026	41,572	18,455	11,592
Aug. 2000	**7,05,605**	5,00,703	28,959	69,842	41,990	19,082	13,182
Sep. 2000	**7,03,863**	5,11,491	32,156	51,902	42,655	18,661	13,832
Oct. 2000	**7,63,317**	5,60,030	25,851	66,126	42,826	20,990	13,587
Nov. 2000	**7,73,169**	5,63,401	29,902	70,273	41,311	19,790	13,965
Dec. 2000	**6,97,882**	4,93,960	30,154	65,929	39,522	20,622	13,807
Jan. 2001	**8,97,365**	6,96,657	30,835	53,667	43,900	21,628	15,320
Feb. 2001	**8,00,106**	5,96,016	32,076	67,074	42,085	16,657	14,462
Mar. 2001	**10,02,480**	7,18,334	39,326	1,02,778	50,623	30,138	18,435
Apr. 2001 (P)	**8,41,627**	6,22,403	29,001	74,612	43,058	22,167	15,138
May 2001 (P)	**9,32,190**	7,17,105	28,596	72,842	41,167	21,450	14,736
Jun. 2001 (P)	**8,86,762**	6,75,868	29,482	71,481	38,380	22,303	14,279
Jul. 2001 (P)	**9,31,854**	7,12,636	31,857	73,709	41,888	23,362	14,701
Aug. 2001 (P)	**8,57,305**	6,45,838	30,233	72,951	41,049	21,851	14,350
Sep. 2001 (P)	**8,23,099**	6,76,998	28,642	71,963	..	..	13,847

No. 8 : CHEQUE CLEARANCES – CENTRES MANAGED BY RESERVE BANK OF INDIA *(Concld.)*
(Revised Series)

(Rs. crore)

Year / Month	Centres Managed by Reserve Bank of India							
	Ahmedabad	Kanpur	Nagpur	Patna	Bhuba-neshwar	Thiruvan-anthapuram	Jaipur	Guwahati
1	9	10	11	12	13	14	15	16
1990-91	42,089	9,614	7,712	4,559	2,408	2,908	8,738	4,242
1998-99	1,87,002	23,717	29,617	12,949	11,902	12,571	38,733	13,235
1999-00	1,89,286	24,996	31,722	15,806	15,867	14,332	44,073	14,731
2000-01	2,31,010	26,456	36,926	16,924	18,113	18,354	44,670	18,052
Feb. 1999	11,954	1,800	2,088	960	812	912	2,399	1,065
Mar. 1999	11,043	2,461	2,686	1,429	1,531	1,627	3,381	1,529
Apr. 1999	9,229	2,160	2,665	1,484	1,389	1,180	4,066	1,168
May 1999	9,234	2,128	2,507	1,268	1,178	1,058	8,266	1,044
Jun. 1999	14,660	1,831	2,472	1,052	999	1,071	2,852	1,126
Jul. 1999	14,542	2,000	2,448	1,627	1,170	1,255	3,198	1,113
Aug. 1999	15,901	1,917	2,480	1,225	1,026	1,095	2,877	1,130
Sep. 1999	15,334	1,814	2,413	1,106	1,237	1,461	3,040	1,142
Oct. 1999	13,977	1,991	2,910	1,167	1,317	1,099	3,166	1,160
Nov. 1999	15,696	2,118	2,375	1,195	1,283	1,023	2,877	1,155
Dec. 1999	19,186	2,258	2,739	1,490	1,478	1,152	3,521	1,416
Jan. 2000	17,240	2,091	2,702	1,267	1,447	1,176	3,122	1,175
Feb. 2000	18,979	2,154	2,810	1,254	1,407	1,183	3,278	1,382
Mar. 2000	25,308	2,534	3,201	1,671	1,936	1,579	3,810	1,720
Apr. 2000	19,097	2,042	2,866	1,489	1,891	1,575	3,478	1,479
May 2000	19,633	2,320	2,932	1,511	1,463	1,325	3,814	1,486
Jun. 2000	18,478	1,945	2,791	1,348	1,564	1,523	3,488	1,555
Jul. 2000	17,747	2,042	3,220	1,362	1,536	1,356	3,418	1,458
Aug. 2000	18,001	2,030	3,026	1,460	1,228	1,477	3,360	1,265
Sep. 2000	18,729	2,082	2,941	1,397	1,396	1,622	3,494	1,504
Oct. 2000	19,317	2,095	3,058	1,317	1,475	1,573	3,678	1,394
Nov. 2000	19,942	2,163	3,043	1,289	1,382	1,415	3,760	1,533
Dec. 2000	19,492	2,181	2,928	1,354	1,412	1,421	3,675	1,425
Jan. 2001	19,914	2,379	3,263	1,305	1,517	1,563	3,867	1,551
Feb. 2001	16,664	2,438	2,982	1,337	1,403	1,656	3,720	1,536
Mar. 2001	23,996	2,739	3,877	1,755	1,846	1,847	4,921	1,866
Apr. 2001 (P)	18,051	2,471	3,960	1,581	1,760	1,401	4,413	1,610
May 2001 (P)	19,458	2,625	3,534	1,394	1,672	1,373	4,696	1,543
Jun. 2001 (P)	18,966	2,500	3,222	1,380	1,436	1,189	4,847	1,430
Jul. 2001 (P)	16,853	2,700	3,240	1,384	1,955	1,255	4,806	1,508
Aug. 2001 (P)	14,787	2,487	3,131	1,420	1,850	1,362	4,389	1,606
Sep. 2001 (P)	14,834	3,542	3,188	1,358	1,782	1,403	4,195	1,347

No. 9 : CHEQUE CLEARANCES – CENTRES MANAGED BY AGENCIES OTHER THAN RESERVE BANK OF INDIA

(Number in lakh)

Year / Month	Total	Amritsar	Baroda	Kochi	Coim-batore	New Delhi	Luck-now	Ludh-iana	Madurai	Man-galore	Pune	Surat	Other Centres
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1990-91	**4,123**	30	114	9	53	173	38	117	40	21	67	1,861	1,600
1998-99	**3,773**	35	160	12	75	322	79	119	53	34	158	585	2,141
1999-00	**3,740**	57	155	12	91	352	134	112	65	36	92	419	2,215
2000-01 (P)	**4,133**	47	155	12	109	350	78	121	85	36	61	300	2,779
Jan. 1999	**306**	1	13	1	5	27	7	7	4	3	12	44	182
Feb. 1999	**275**	1	12	1	6	24	6	8	4	2	11	41	159
Mar. 1999	**332**	1	14	1	7	29	6	8	4	3	10	45	204
Apr. 1999	**292**	1	13	1	6	25	5	8	5	3	8	43	174
May 1999	**291**	1	12	1	3	27	6	9	6	3	8	39	176
Jun. 1999	**308**	6	13	1	5	25	5	9	5	3	7	36	193
Jul. 1999	**386**	6	13	1	7	40	69	9	5	3	8	37	188
Aug. 1999	**292**	6	13	1	6	32	6	9	6	3	8	37	165
Sep. 1999	**306**	6	13	1	7	29	6	9	5	3	8	35	184
Oct. 1999	**321**	6	14	1	9	30	6	9	7	3	8	33	195
Nov. 1999	**292**	6	13	1	9	27	6	9	7	3	8	32	171
Dec. 1999	**305**	6	12	1	9	30	6	11	5	3	8	35	179
Jan. 2000	**308**	1	13	1	9	27	6	9	5	3	8	31	195
Feb. 2000	**310**	6	13	1	11	29	6	10	4	3	9	29	189
Mar. 2000	**329**	6	13	1	10	31	7	11	5	3	4	32	206
Apr. 2000 (P)	**359**	6	11	1	8	34	6	9	5	3	4	29	243
May 2000 (P)	**374**	6	10	1	10	28	6	10	5	3	7	27	261
Jun. 2000 (P)	**373**	6	12	1	10	29	6	9	5	3	6	25	261
Jul. 2000 (P)	**370**	6	10	1	10	29	6	9	9	3	6	27	254
Aug. 2000 (P)	**383**	6	10	1	9	30	7	10	9	3	5	27	266
Sep. 2000 (P)	**363**	6	11	1	9	29	6	10	9	3	5	25	249
Oct. 2000 (P)	**316**	6	12	1	8	27	6	10	9	3	6	25	203
Nov. 2000 (P)	**323**	1	13	1	9	28	7	11	8	3	5	23	214
Dec. 2000 (P)	**293**	1	13	1	9	26	6	10	8	3	5	23	188
Jan. 2001 (P)	**323**	1	14	1	9	30	7	11	8	3	4	24	211
Feb. 2001 (P)	**309**	1	14	1	9	27	7	10	8	3	4	22	203
Mar. 2001 (P)	**347**	1	25	1	9	33	8	12	2	3	4	23	226
Apr. 2001 (P)	**278**	1	11	1	8	27	8	9	2	2	4	21	184
May 2001 (P)	**295**	1	12	1	9	29	7	9	4	3	3	22	195
Jun. 2001 (P)	**295**	1	13	1	9	28	6	8	8	2	3	21	195
Jul. 2001 (P)	**311**	1	15	1	9	31	7	8	4	3	3	23	206
Aug. 2001 (P)	**279**	1	1	1	9	31	8	8	4	2	4	22	188

No. 9 : CHEQUE CLEARANCES – CENTRES MANAGED BY AGENCIES OTHER THAN RESERVE BANK OF INDIA *(Concld.)*

(Rs. crore)

Year / Month	Total	Amritsar	Baroda	Kochi	Coim-batore	New Delhi	Luck-now	Ludh-iana	Madurai	Man-galore	Pune	Surat	Other Centres
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1990-91	**4,47,893**	4,136	10,904	2,551	7,534	57,288	9,053	11,642	3,793	2,252	14,449	18,065	3,06,226
1998-99	**13,67,031**	4,808	40,277	6,884	28,581	2,09,814	52,382	28,996	11,318	9,294	63,921	56,852	8,53,904
1999-00	**13,36,526**	14,793	39,601	5,787	40,664	1,76,936	32,332	33,950	13,948	11,996	32,570	63,325	8,70,624
2000-01 (P)	**15,57,436**	31,685	52,350	7,389	69,697	1,95,853	45,716	35,976	18,021	12,481	6,841	74,656	10,06,771
Jan. 1999	**96,826**	184	3,493	509	2,228	11,926	2,605	2,474	973	862	4,521	4,800	62,251
Feb. 1999	**95,979**	134	3,119	506	2,164	11,577	2,218	2,254	947	763	4,101	4,558	63,638
Mar. 1999	**1,14,143**	129	3,642	612	2,981	14,942	3,121	2,981	604	1,049	5,104	5,598	73,380
Apr. 1999	**1,08,478**	136	3,149	519	2,461	14,145	3,261	2,523	1,244	837	4,373	5,211	70,619
May 1999	**1,04,619**	1,227	2,941	517	711	12,120	2,579	2,602	1,069	899	4,353	4,868	70,733
Jun. 1999	**1,07,155**	1,364	3,094	514	2,041	14,685	2,656	2,456	1,176	909	3,609	4,413	70,238
Jul. 1999	**99,866**	1,390	3,604	611	2,551	13,909	2,126	2,464	1,010	928	3,640	4,689	62,944
Aug. 1999	**94,331**	1,362	3,151	497	3,424	11,404	1,652	2,516	1,226	961	3,275	4,905	59,958
Sep. 1999	**1,01,458**	1,353	3,356	503	3,309	14,942	1,745	2,676	1,237	961	3,212	4,797	63,367
Oct. 1999	**1,13,812**	1,370	3,615	517	3,843	14,571	2,517	3,105	1,279	988	3,835	5,842	72,330
Nov. 1999	**1,11,907**	1,348	3,459	647	3,984	12,447	2,602	2,907	1,313	954	1,585	4,737	75,924
Dec. 1999	**1,21,306**	1,340	3,250	540	4,705	16,916	3,166	3,230	1,176	1,184	1,480	5,863	78,456
Jan. 2000	**1,25,946**	1,289	3,150	296	4,574	18,827	3,081	2,848	1,244	1,107	1,220	5,286	83,024
Feb. 2000	**1,14,569**	1,284	3,312	317	4,638	14,568	2,845	3,165	946	1,089	1,121	6,062	75,222
Mar. 2000	**1,33,079**	1,330	3,520	309	4,423	18,402	4,102	3,458	1,028	1,179	867	6,652	87,809
Apr. 2000 (P)	**1,20,186**	1,326	2,713	333	5,200	19,191	3,708	2,926	947	1,009	1,060	5,627	76,146
May 2000 (P)	**1,28,701**	1,351	3,485	413	5,758	15,276	3,214	3,353	1,084	1,098	672	5,720	87,277
Jun. 2000 (P)	**1,30,177**	1,356	3,297	643	5,659	15,723	8,115	3,019	1,084	1,002	549	5,569	84,161
Jul. 2000 (P)	**1,15,887**	130	4,813	734	5,243	16,393	3,202	2,877	1,522	1,058	577	5,419	73,919
Aug. 2000 (P)	**1,30,243**	1,277	4,851	748	5,409	14,994	3,342	3,307	1,848	275	514	5,741	87,937
Sep. 2000 (P)	**1,31,271**	1,277	4,132	554	5,362	15,468	2,546	3,173	2,117	1,023	480	6,687	88,452
Oct. 2000 (P)	**1,28,978**	1,277	4,747	783	5,734	14,466	3,262	3,291	2,245	1,089	604	6,698	84,782
Nov. 2000 (P)	**1,33,139**	207	4,942	699	5,942	15,436	3,191	3,453	1,522	1,099	494	6,553	89,601
Dec. 2000 (P)	**1,16,006**	166	4,947	508	5,905	13,369	3,128	3,313	1,476	1,048	453	6,553	75,140
Jan. 2001 (P)	**1,30,449**	1,071	4,947	699	6,236	14,845	3,980	3,386	1,558	1,204	514	6,404	85,605
Feb. 2001 (P)	**1,21,921**	2,058	5,534	636	5,988	15,616	3,577	31	1,443	1,137	482	6,212	79,207
Mar. 2001 (P)	**1,70,478**	20,189	3,942	639	7,261	25,076	4,451	3,847	1,175	1,439	442	7,473	94,544
Apr. 2001 (P)	**1,43,144**	232	4,482	646	6,179	18,469	4,367	2,985	996	10,743	462	6,072	87,511
May 2001 (P)	**1,39,567**	550	4,601	542	6,103	14,462	3,473	3,541	1,059	1,163	520	7,325	96,228
Jun. 2001 (P)	**1,32,995**	302	5,532	600	1,093	14,382	3,369	3,328	6,566	1,020	446	6,410	89,947
Jul. 2001 (P)	**1,27,844**	235	5,033	630	6,314	13,993	3,670	2,990	1,180	1,214	497	5,887	86,201
Aug. 2001 (P)	**1,26,332**	234	5,283	619	6,382	14,584	4,117	3,365	1,020	1,020	508	4,841	84,359

No. 10 : MONEY STOCK MEASURES

(Rs. crore)

March 31/Reporting Fridays of the month/ Last reporting Friday of the month	Currency with the public					Deposit money of the public			**M_1 (6+9)**
	Notes in circula-tion (1)	Circulation of		Cash on hand with banks	Total (2+3+4-5)	Demand deposits with banks	'Other' deposits with Reserve Bank (3)	Total (7+8)	
		Rupee coins (2)	Small coins (2)						
1	2	3	4	5	6	7	8	9	**10**
1990-91	53,661	936	685	2,234	53,048	39,170	674	39,844	**92,892**
1998-99	1,72,000	2,730	1,116	6,902	1,68,944	1,36,388	3,736	1,40,124	**3,09,068**
1999-00	1,92,483	3,390	1,188	7,979	1,89,082	1,49,681	3,033	1,52,714	**3,41,796**
2000-01	2,12,851	4,053	1,300	8,642	2,09,562	1,66,599	3,630	1,70,229	**3,79,791**
September 8, 2000	2,01,141	3,662	1,231	7,129	1,98,905	1,43,286	3,762	1,47,048	**3,45,953**
September 22, 2000	1,97,391	3,723	1,243	7,553	1,94,804	1,48,049	3,585	1,51,634	**3,46,438**
May 2001	2,31,923	4,168	1,320	8,854	2,28,557	1,63,883	2,958	1,66,841	**3,95,398**
June 2001	2,26,375	4,234	1,331	9,858	2,22,082	1,68,556	3,988	1,72,544	**3,94,626**
July 2001	2,22,349	4,300	1,331	9,055	2,18,925	1,64,740	3,743	1,68,483	**3,87,408**
August 2001	2,22,717	4,370	1,331	8,640	2,19,778	1,66,072	3,899	1,69,971	**3,89,749**
September 7, 2001	2,23,833	4,370	1,331	8,640	2,20,894	1,62,543	3,906	1,66,449	**3,87,343**
September 21, 2001	2,20,983	4,370	1,331	8,421	2,18,263	1,62,987	3,576	1,66,563	**3,84,826**

No. 10 : MONEY STOCK MEASURES *(Concld.)*

(Rs. crore)

March 31/ Reporting Friday of the month/ Last reporting Friday of the Month	Post Office savings bank deposits	**M_2 (10+11)**	Time deposits with banks	**M_3 (10+13)**	Total post office deposits	**M_4 (14+15)**
1	11	**12**	13	**14**	15	**16**
1990-91	4,205	**97,097**	1,72,936	**2,65,828**	14,681	**2,80,509**
1998-99	5,041	**3,14,109**	6,71,892	**9,80,960**	25,969	**10,06,929**
1999-2000	5,041	**3,46,837**	7,82,378	**11,24,174**	25,969	**11,50,143**
2000-2001	5,041	**3,84,832**	9,31,792	**13,11,583**	25,969	**13,37,552**
September 8, 2000	5,041	**3,50,994**	8,44,314	**11,90,267**	25,969	**12,16,236**
September 22, 2000	5,041	**3,51,479**	8,56,816	**12,03,254**	25,969	**12,29,223**
May 2001	5,041	**4,00,439**	9,70,675	**13,66,073**	25,969	**13,92,042**
June 2001	5,041	**3,99,667**	9,81,317	**13,75,943**	25,969	**14,01,912**
July 2001	5,041	**3,92,449**	9,95,848	**13,83,256**	25,969	**14,09,225**
August 2001	5,041	**3,94,790**	10,03,203	**13,92,952**	25,969	**14,18,921**
September 7, 2001	5,041	**3,92,384**	10,11,956	**13,99,299**	25,969	**14,25,268**
September 21, 2001	5,041	**3,89,867**	10,20,552	**14,05,378**	25,969	**14,31,347**

No. 11 : SOURCES OF MONEY STOCK (M_3)

(Rs. crore)

Source	Outstanding as on March 31/Reporting Fridays of the month/Last Reporting Friday of the month					
	1990-91	1998-99	1999-00	2000-01	Sep. 8, 2000	Sep. 22, 2000
1	2	3	4	5	6	7
1. Net Bank Credit to Government (A+B)	**1,40,193**	**3,86,677**	**4,41,378**	**5,12,380**	**4,76,517**	**4,73,639**
A. RBI's net credit to Government (i-ii)	88,848	1,52,539	1,48,263	1,53,877	1,57,717	1,51,950
(i) Claims on Government (a+b)	90,534	1,55,466	1,50,486	1,56,696	1,57,858	1,52,091
(a) Central Government (1)	88,444	1,48,343	1,42,051	1,49,353	1,55,130	1,48,097
(b) State Governments	2,090	7,123	8,435	7,343	2,728	3,994
(ii) Government deposits with RBI (a+b)	1,686	2,927	2,223	2,819	141	141
(a) Central Government	1,686	2,927	2,223	2,819	100	100
(b) State Governments	–	–	–	–	41	41
B. Other Banks' Credit to Government	51,345	2,34,138	2,93,115	3,58,503	3,18,800	3,21,689
2. Bank Credit to Commercial Sector (A+B)	**1,71,769**	**4,95,989**	**5,86,564**	**6,73,215**	**6,13,196**	**6,19,887**
A. RBI's credit to commercial sector (2)	6,342	12,226	15,270	13,286	13,123	11,361
B. Other banks' credit to commercial sector (i+ii+iii)	1,65,427	4,83,763	5,71,294	6,59,929	600,073	6,08,526
(i) Bank credit by commercial banks	1,16,350	3,68,837	4,35,958	5,11,434	4,63,464	4,67,451
(ii) Bank credit by co-operative banks	22,927	80,028	1,00,423	1,13,426	1,00,682	1,05,279
(iii) Investments by commercial and co-operative banks in other securities	26,150	34,898	34,913	35,069	35,927	35,796
3. Net Foreign Exchange Assets of Banking Sector (A+B)	**10,581**	**1,77,853**	**2,05,648**	**2,49,820**	**2,03,897**	**2,09,988**
A. RBI's net foreign exchange assets (i-ii) (3)	7,983	1,37,954	1,65,880	1,97,175	1,61,379	1,62,843
(i) Gross foreign assets	11,217	1,37,971	1,65,897	1,97,192	1,61,396	1,62,860
(ii) Foreign liabilities	3,234	17	17	17	17	17
B. Other banks' net foreign exchange assets	2,598	39,899	39,768	52,645	42,518	47,145
4. Government's Currency Liabilities to the Public	**1,621**	**3,846**	**4,578**	**5,354**	**4,893**	**4,966**
5. Banking Sector's net Non-monetary Liabilities Other than Time Deposits (A+B)	**58,336**	**83,405**	**1,13,994**	**1,29,186**	**1,08,236**	**1,05,225**
A. Net non-monetary liabilities of RBI (3)	27,022	60,540	70,222	79,345	69,033	71,314
B. Net non-monetary liabilities of other banks(residual)	31,314	22,865	43,772	49,841	39,203	33,911
M_3 (1+2+3+4-5)	**2,65,828**	**9,80,960**	**11,24,174**	**13,11,583**	**11,90,267**	**12,03,254**

See 'Notes on Tables'.

No. 11 : SOURCES OF MONEY STOCK (M_3) *(Concld.)*

(Rs. crore)

Source	Outstanding as on March 31/Reporting Fridays of the month/Last Reporting Friday of the month					
	May 2001	Jun. 2001	Jul. 2001	Aug. 2001	Sep. 7, 2001	Sep. 21, 2001
1	8	9	10	11	12	13
1. Net Bank Credit to Government (A+B)	**5,44,337**	**5,52,305**	**5,58,179**	**5,53,631**	**5,59,999**	**5,59,348**
A. RBI's net credit to Government (i-ii)	1,70,490	1,69,619	1,61,555	1,56,133	1,60,204	1,52,030
(i) Claims on Government (a+b)	1,70,632	1,69,760	1,61,697	1,56,274	1,60,346	1,52,172
(a) Central Government (1)	1,67,408	1,66,157	1,58,484	1,52,462	1,55,179	1,46,018
(b) State Governments	3,224	3,603	3,213	3,812	5,167	6,154
(ii) Government deposits with RBI (a+b)	142	141	142	141	142	142
(a) Central Government	101	100	101	100	101	101
(b) State Governments	41	41	41	41	41	41
B. Other Banks' Credit to Government	3,73,847	3,82,686	3,96,624	3,97,498	3,99,795	4,07,318
2. Bank Credit to Commercial Sector (A+B)	**6,79,642**	**6,78,021**	**6,86,393**	**6,87,924**	**6,88,288**	**6,92,997**
A. RBI's credit to commercial sector (2)	11,307	10,175	11,616	9,256	9,851	10,502
B. Other banks' credit to commercial sector (i+ii+iii)	6,68,335	6,67,846	6,74,777	6,78,668	6,78,437	6,82,495
(i) Bank credit by commercial banks	5,18,799	5,18,657	5,24,184	5,27,818	5,27,634	5,29,355
(ii) Bank credit by co-operative banks	1,14,196	1,13,424	1,14,781	1,14,945	1,14,727	1,16,795
(iii) Investments by commercial and co-operative banks in other securities	35,340	35,765	35,812	35,905	36,076	36,345
3. Net Foreign Exchange Assets of Banking Sector (A+B)	**2,53,625**	**2,57,007**	**2,58,558**	**2,64,432**	**2,66,804**	**2,66,989**
A. RBI's net foreign exchange assets (i-ii) (3)	2,00,980	2,04,362	2,05,913	2,11,788	2,14,160	2,14,345
(i) Gross foreign assets	2,00,997	2,04,379	2,05,931	2,11,805	2,14,177	2,14,362
(ii) Foreign liabilities	17	17	17	17	17	17
B. Other banks' net foreign exchange assets	52,645	52,645	52,645	52,645	52,645	52,645
4. Government's Currency Liabilities to the Public	**5,488**	**5,565**	**5,631**	**5,700**	**5,700**	**5,700**
5. Banking Sector's net Non-monetary Liabilities Other than Time Deposits (A+B)	**1,17,019**	**1,16,955**	**1,25,504**	**1,18,735**	**1,21,492**	**1,19,656**
A. Net non-monetary liabilities of RBI (3)	85,210	86,431	91,948	85,011	87,076	91,530
B. Net non-monetary liabilities of other banks(residual)	31,809	30,524	33,556	33,724	34,416	28,126
M_3 (1+2+3+4-5)	**13,66,073**	**13,75,943**	**13,83,256**	**13,92,952**	**13,99,299**	**14,05,378**

No. 11A : COMMERCIAL BANK SURVEY

(Rs. crore)

Variable		Outstanding as on Mar. 26, 1999	Mar. 24, 2000	Aug. 11, 2000	Aug. 25, 2000	Mar. 23, 2001	Aug. 10, 2001	Aug. 24, 2001
1		2	3	4	5	6	7	8
Components								
C.I	**Aggregate Deposits of Residents** (C.I.1+C.I.2)	**6,62,859**	**7,59,712**	**8,03,082**	**8,06,559**	**8,76,521**	**9,37,244**	**9,42,168**
C.I.1	Demand Deposits	1,17,423	1,27,366	1,21,007	1,22,876	1,42,552	1,40,561	1,43,877
C.I.2	Time Deposits of Residents (C.I.2.1+C.I.2.2)	5,45,436	6,32,345	6,82,075	6,83,683	7,33,969	7,96,683	7,98,291
C.I.2.1	Short-term Time Deposits	2,45,446	2,84,555	3,06,934	3,07,657	3,30,286	3,58,507	3,59,231
C.I.2.1.1	Certificates of Deposits (CDs)	5,255	1,483	1,244	1,275	1,012	779	762
C.I.2.2	Long-term Time Deposits	2,99,990	3,47,790	3,75,141	3,76,026	4,03,683	4,38,176	4,39,060
C.II	**Call/Term Funding from Financial Institutions**	**1,140**	**2,734**	**2,548**	**2,694**	**2,566**	**3,498**	**2,068**
Sources								
S.I	**Domestic Credit (S.I.1+S.I.2)**	**6,95,189**	**8,40,351**	**8,85,632**	**8,90,320**	**9,90,458**	**10,42,037**	**10,46,063**
S.I.1	Credit to the Government	2,23,217	2,78,456	3,02,331	3,01,900	3,40,035	3,75,474	3,76,714
S.I.2	Credit to the Commercial Sector (S.I.2.1+S.I.2.2+S.I.2.3+S.I.2.4)	4,71,972	5,61,896	5,83,301	5,88,420	6,50,424	6,66,563	6,69,349
S.I.2.1	Bank Credit	3,68,837	4,35,958	4,57,784	4,62,266	5,11,434	5,26,703	5,27,818
S.I.2.1.1	Non-food Credit	3,52,021	4,10,267	4,26,087	4,29,630	4,71,443	4,75,519	4,77,180
S.I.2.2	Net Credit to Primary Dealers	754	2,129	-1,965	-1,073	-133	136	517
S.I.2.3	Investments in Other Approved Securities	31,377	30,488	30,480	30,582	30,125	30,602	30,705
S.I.2.4	Other Investments (in non-SLR Securities)	71,004	93,320	97,002	96,645	1,08,998	1,09,122	1,10,309
S.II	**Net Foreign Currency Assets of Commercial Banks (S.II.1-S.II.2-S.II.3)**	**-13,143**	**-23,484**	**-21,056**	**-19,860**	**-35,929**	**-29,619**	**-32,256**
S.II.1	Foreign Currency Assets	39,514	31,996	36,589	38,434	51,646	59,033	56,783
S.II.2	Non-resident Foreign Currency Repatriable Fixed Deposits	51,167	53,633	56,120	56,697	86,097	87,584	87,971
S.II.3	Overseas Foreign Currency Borrowings	1,490	1,847	1,525	1,597	1,478	1,068	1,068
S.III	**Net Bank Reserves (S.III.1+S.III.2-S.III.3)**	**65,016**	**56,259**	**61,163**	**61,775**	**61,306**	**69,576**	**75,022**
S.III.1	Balances with the RBI	63,548	57,419	62,896	62,568	59,544	65,159	72,297
S.III.2	Cash in Hand	4,362	5,330	4,933	5,458	5,658	6,312	6,173
S.III.3	Loans and Advances from the RBI	2,894	6,491	6,666	6,251	3,896	1,896	3,448
S.IV	**Capital Account**	**53,892**	**56,635**	**62,736**	**62,672**	**63,513**	**70,257**	**70,138**
S.V.	**Other items (net) (S.I+S.II+S.III-S.IV-C.I-C.II)**	**29,171**	**54,046**	**57,373**	**60,310**	**73,235**	**70,995**	**74,457**
S.V.1	Other Demand & Time Liabilities (net of S.II.3)	58,583	76,595	75,055	76,381	89,730	93,300	92,002
S.V.2	Net Inter-Bank Liabilities (other than to PDs)	11,171	12,519	14,513	14,689	14,601	7,822	8,354

Note : Data are provisional.

No. 11B: MONETARY SURVEY

(Rs. crore)

Item		Outstanding as on						
		Mar. 31, 1999	Mar. 31, 2000	Aug. 11, 2000	Aug. 25, 2000	Mar. 31, 2001	Aug. 10, 2001	Aug. 24, 2001
1		2	3	4	5	6	7	8
Monetary Aggregates								
M_1 (C.I+C.II.1+C.III)		3,09,067	3,41,796	3,45,275	3,42,824	3,78,431	3,89,175	3,89,655
NM_2 (M_1+C.II.2.1)		5,88,394	6,69,732	6,97,538	6,96,740	7,58,914	8,01,569	8,02,811
NM_3 (NM_2+C.II.2.2+C.IV = S.I+S.II+S.III-S.IV-S.V)		**9,30,933**	**10,73,275**	**11,30,630**	**11,31,997**	**12,26,514**	**13,09,105**	**13,09,848**
Components								
C.I	**Currency with the Public**	**1,68,945**	**1,89,082**	**1,99,687**	**1,95,245**	**2,09,445**	**2,22,600**	**2,19,618**
C.II	**Aggregate Deposits of Residents** (C.II.1+C.II.2)	**7,57,112**	**8,78,426**	**9,24,313**	**9,29,887**	**10,10,873**	**10,79,334**	**10,84,264**
C.II.1	Demand Deposits	1,36,386	1,49,681	1,41,506	1,43,408	1,65,357	1,62,902	1,66,137
C.II.2	Time Deposits of Residents (C.II.2.1+C.II.2.2)	6,20,726	7,28,745	7,82,806	7,86,478	8,45,516	9,16,432	9,18,126
C.II.2.1	Short-term Time Deposits	2,79,327	3,27,935	3,52,263	3,53,915	3,80,482	4,12,394	4,13,157
C.II.2.1.1	Certificates of Deposits (CDs)	5,255	1,483	1,244	1,275	1,012	779	762
C.II.2.2	Long-term Time Deposits	3,41,399	4,00,810	4,30,544	4,32,563	4,65,034	5,04,037	5,04,969
C.III	**'Other' Deposits with RBI**	**3,736**	**3,034**	**4,082**	**4,171**	**3,630**	**3,672**	**3,899**
C.IV	**Call/Term Funding from Financial Institutions**	**1,140**	**2,734**	**2,548**	**2,694**	**2,566**	**3,498**	**2,068**
Sources								
S.I	**Domestic Credit (S.I.1+S.I.2)**	**9,68,589**	**11,38,585**	**12,01,318**	**11,95,215**	**13,11,156**	**13,76,741**	**13,72,332**
S.I.1	Net Bank Credit to the Government (S.I.1.1+S.I.1.2)	3,86,677	4,41,378	4,83,942	4,70,501	5,12,509	5,62,876	5,54,160
S.I.1.1	Net RBI credit to the Government	1,52,539	1,48,264	1,64,494	1,50,784	1,53,877	1,66,058	1,56,133
S.I.1.2	Credit to the Government by the Banking System	2,34,138	2,93,115	3,19,448	3,19,716	3,58,632	3,96,818	3,98,027
S.I.2	Bank Credit to the Commercial Sector (S.I.2.1+S.I.2.2)	5,81,912	6,97,207	7,17,375	7,24,714	7,98,647	8,13,866	8,18,172
S.I.2.1	RBI Credit to the Commercial Sector	17,875	21,154	17,816	18,278	19,887	13,848	14,922
S.I.2.2	Credit to the Commercial Sector by the Banking System	5,64,037	6,76,053	6,99,559	7,06,436	7,78,760	8,00,018	8,03,250
S.I.2.2.1	Other Investments (Non-SLR Securities)	79,783	1,03,052	1,06,765	1,06,493	1,19,046	1,18,819	1,20,006
S.II	**Government's Currency Liabilities to the Public**	**3,846**	**4,578**	**4,826**	**4,893**	**5,354**	**5,631**	**5,700**
S.III	**Net Foreign Exchange Assets of the Banking Sector (S.III.1+S.III.2)**	**1,24,811**	**1,42,396**	**1,42,456**	**1,43,227**	**1,61,246**	**1,78,300**	**1,79,532**
S.III.1	Net Foreign Exchange Assets of the RBI	1,37,954	1,65,880	1,63,512	1,63,087	1,97,175	2,07,918	2,11,788
S.III.2	Net Foreign Currency Assets of the Banking System	-13,143	-23,484	-21,056	-19,860	-35,929	-29,619	-32,256
S.IV	**Capital Account**	**1,22,620**	**1,35,417**	**1,53,959**	**1,53,563**	**1,54,240**	**1,72,113**	**1,73,216**
S.V	**Other items (net)**	**43,693**	**76,867**	**64,011**	**57,776**	**97,002**	**79,454**	**74,499**

Notes : 1. Data are provisional.

2. Monetary aggregates as at end-March incorporate data on i) scheduled commercial banks as on the last reporting Friday and ii) the Reserve Bank of India pertaining to the last working day of the fiscal year.

No. 11C : RESERVE BANK OF INDIA SURVEY

(Rs. crore)

Variable		Outstanding as on						
		Mar. 31, 1999	Mar. 31, 2000	Aug. 11, 2000	Aug. 25, 2000	Mar. 31, 2001	Aug. 10, 2001	Aug. 24, 2001
1		2	3	4	5	6	7	8
Components								
C.I	Currency in Circulation	1,75,846	1,97,061	2,06,960	2,02,954	2,18,205	2,31,695	2,28,418
C.II	Bankers' Deposits with the RBI	79,703	80,460	66,192	65,560	81,477	68,572	75,941
C.II.1	Scheduled Commercial Banks	77,706	77,781	62,896	62,568	77,796	65,159	72,297
C.III	'Other' Deposits with the RBI	3,736	3,034	4,082	4,171	3,630	3,672	3,899
C.IV	**Reserve Money (C.I+C.II+C.III = S.I + S.II + S.III - S.IV - S.V)**	**2,59,286**	**2,80,555**	**2,77,233**	**2,72,685**	**3,03,311**	**3,03,939**	**3,08,257**
Sources								
S.I	**RBI's Domestic Credit (S.I.1+S.I.2+S.I.3)**	**1,78,027**	**1,80,319**	**1,90,359**	**1,76,638**	**1,80,128**	**1,83,095**	**1,75,780**
S.I.1	Net RBI credit to the Government (S.I.1.1+S.I.1.2)	1,52,539	1,48,264	1,64,494	1,50,784	1,53,877	1,66,058	1,56,133
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)	1,45,416	1,39,829	1,61,763	1,48,310	1,46,534	1,61,031	1,52,362
S.I.1.1.1	Loans and Advances to the Central Government	3,042	982	8,870	2,056	5,395	8,822	–
S.I.1.1.2	Investments in Treasury Bills	763	1,870	1,433	1,084	482	412	376
S.I.1.1.3	Investments in dated Government Securities	1,44,473	1,39,097	1,51,515	1,45,247	1,43,398	1,51,863	1.51,877
S.I.1.1.3.1	Central Government Securities	41,591	36,233	48,415	42,147	40,298	48,762	48,777
S.I.1.1.4	Rupee Coins	65	102	46	23	77	34	210
S.I.1.1.5	Deposits of the Central Government	2,927	2,223	101	100	2,819	100	101
S.I.1.2	Net RBI credit to State Governments	7,123	8,435	2,731	2,474	7,343	5,027	3,771
S.I.2	RBI's Claims on Banks	7,613	10,901	8,048	7,575	6,365	3,190	4,725
S.I.2.1	Loans and Advances to Scheduled Commercial Banks	6,257	9,513	6,666	6,251	5,042	1,896	3,448
S.I.3	RBI's Credit to Commercial Sector	17,875	21,154	17,816	18,278	19,887	13,848	14,922
S.I.3.1	Loans and Advances to Primary Dealers	3,767	6,972	4,214	5,033	5,010	182	1,159
S.I.3.2	Loans and Advances to NABARD	5,649	5,884	5,371	5,398	6,600	5,575	5,666
S.II	**Government's Currency Liabilities to the Public**	**3,846**	**4,578**	**4,826**	**4,893**	**5,354**	**5,631**	**5,700**
S.III	**Net Foreign Exchange Assets of the RBI**	**1,37,954**	**1,65,880**	**1,63,512**	**1,63,087**	**1,97,175**	**2,07,918**	**2,11,788**
S.III.1	Gold	12,559	12,973	13,153	13,153	12,711	13,070	13,070
S.III.2	Foreign Currency Assets	1,25,412	1,52,924	1,50,376	1,49,951	1,84,482	1,94,866	1,98,736
S.IV	**Capital Account**	**52,961**	**63,301**	**75,292**	**74,960**	**73,764**	**83,843**	**85,065**
S.V	**Other Items (net)**	**7,580**	**6,921**	**6,172**	**-3,027**	**5,582**	**8,862**	**-54**

Note : Data are provisional.

No. 11D: LIQUIDITY AGGREGATES (OUTSTANDING AMOUNTS)

(Rs. crore)

Month	NM_3	Postal Deposits	L_1	Liabilities of Financial Institutions: Term Money Borrowings	CDs	Term Deposits	Total	L_2	Public Deposits with NBFCs	L_3
1	2	3	**4=(2+3)**	5	6	7	8=(5+6+7)	**9=(4+8)**	10	**11=(9+10)**
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	10,00,942	24,397	**10,25,339**	372	1,579	6,680	8,631	**10,33,970**	18,683	**10,52,654**
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	10,43,628	25,785	**10,69,413**	481	1,646	6,996	9,123	**10,78,536**	18,951	**10,97,487**
January	10,43,710	25,938	**10,69,648**	287	1,718	7,025	9,030	**10,78,678**		
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	11,07,123	28,001	**11,35,124**	802	3,109	7,430	11,341	**11,46,465**		
June	11,22,146	28,843	**11,50,989**	981	3,154	7,790	11,925	**11,62,914**	17,866	**11,80,780**
July	11,22,203	29,469	**11,51,672**	1,218	2,967	8,217	12,402	**11,64,074**		
August	11,31,997	30,123	**11,62,120**	937	2,769	7,994	11,700	**11,73,820**		
September	11,43,965	30,684	**11,74,649**	1,063	2,490	8,751	12,304	**11,86,953**	19,971	**12,06,924**
October	11,65,207	31,271	**11,96,478**	479	2,575	8,278	11,332	**12,07,810**		
November	11,71,666	31,813	**12,03,479**	597	2,657	8,363	11,617	**12,15,096**		
December	11,90,553	32,478	**12,23,031**	667	2,663	8,227	11,557	**12,34,588**	20,134	**12,54,722**
January	11,95,650	32,702	**12,28,352**	740	2,556	8,388	11,684	**12,40,036**		
February	12,06,948	33,165	**12,40,113**	1,147	2,547	8,564	12,258	**12,52,371**		
March	12,26,514	34,413	**12,60,927**	1,877	2,498	8,536	12,911	**12,73,838**	20,134	**12,93,972**
2001-02										
April	12,64,569	34,765	**12,99,334**	1,464	1,384	8,584	11,432	**13,10,766**		
May	12,83,282	35,435	**13,18,717**	1,775	1,040	8,289	11,104	**13,29,821**		
June	12,93,345	35,435	**13,28,780**	1,775	1,040	8,289	11,104	**13,39,884**	20,134	**13,60,019**
July	13,01,196	35,435	**13,36,631**	1,775	1,040	8,289	11,104	**13,47,735**		
August	13,09,848	35,435	**13,45,283**	1,775	1,040	8,289	11,104	**13,56,387**		

CDs: Certificates of Deposit; L_1, L_2 and L_3: Liquidity Aggregates; NBFCs: Non-Banking Financial Companies

Notes:
1. Figures are provisional.
2. The methodology of the compilation of the liquidity aggregates is available in the "New Monetary and Liquidity Aggregates", *RBI Bulletin*, November 2000, which also presented the Liquidity Series from April 1993 onwards. The acronym NM_3 is used to distinguish the new monetary aggregate as proposed by the Working Group from the existing monetary aggregates.
3. While L_1 and L_2 are compiled on a monthly basis, L_3 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.
7. Wherever data are not available, the estimates for the last available month have been repeated.

No. 12 : RESERVE MONEY AND ITS COMPONENTS

(Rs. crore)

Outstanding as on March 31/ each Friday/Last Reporting Friday of the month	Currency in circulation		'Other' deposits with RBI	Bankers' deposits with RBI	**Reserve Money (2+4+5)**
	Total	o / w cash with banks			
1	2	3	4	5	**6**
1990-91	55,282	2,234	674	31,823	**87,779**
1998-99	1,75,846	6,902	3,736	79,703	**2,59,285**
1999-00	1,97,061	7,979	3,034	80,460	**2,80,555**
2000-01	2,18,205	8,643	3,629	81,477	**3,03,311**
September 1, 2000	2,01,286	–	4,066	77,154	**2,82,506**
September 8, 2000	2,06,035	7,130	3,762	71,991	**2,81,788**
September 15, 2000	2,05,118	–	3,536	77,987	**2,86,641**
September 22, 2000	2,02,357	7,553	3,585	66,141	**2,72,083**
September 29, 2000	2,01,266	–	3,583	76,336	**2,81,185**
May 2001	2,37,411	8,854	2,958	74,494	**3,14,863**
June 2001	2,31,939	9,858	3,988	78,089	**3,14,016**
July 2001	2,27,980	9,055	3,743	74,768	**3,06,491**
August 2001	2,28,418	8,640	3,899	75,940	**3,08,257**
September 7, 2001	2,29,534	8,640	3,906	81,591	**3,15,031**
September 14, 2001	2,28,689	–	3,704	73,718	**3,06,111**
September 21, 2001	2,26,684	8,421	3,577	71,909	**3,02,170**
September 28, 2001	2,24,457	–	3,729	80,955	**3,09,141**

See 'Notes on Tables'.

No. 13 : SOURCES OF RESERVE MONEY

(Rs. crore)

Outstanding as on March 31/each Friday/ Last Reporting Friday of the month	Government (net) (1)	Reserve Bank's claims on			Net foreign exchange assets of RBI (3)	Government's currency liabilities to the public	Net non-monetary liabilities of RBI (3)	**Reserve Money (2+3+4 +5+6 +7–8)**
		Commercial & co-operative banks	National Bank for Agriculture and Rural Development	Commercial sector (2)				
1	2	3	4	5	6	7	8	**9**
1990-91	88,848	6,895	3,112	6,342	7,983	1,621	27,022	**87,779**
1998-99	1,52,539	7,613	5,648	12,226	1,37,953	3,846	60,540	**2,59,285**
1999-00	1,48,264	10,901	5,884	15,270	1,65,880	4,578	70,222	**2,80,555**
2000-01	1,53,877	6,365	6,600	13,286	1,97,175	5,353	79,345	**3,03,311**
September 1, 2000	1,58,870	8,065	5,482	13,195	1,63,108	4,893	71,107	**2,82,506**
September 8, 2000	1,57,716	8,092	5,618	13,123	1,61,379	4,893	69,033	**2,81,788**
September 15, 2000	1,63,144	8,213	5,580	12,730	1,61,341	4,893	69,260	**2,86,641**
September 22, 2000	1,51,950	6,620	5,657	11,361	1,62,843	4,966	71,314	**2,72,083**
September 29, 2000	1,58,851	8,054	5,636	12,828	1,63,081	4,966	72,231	**2,81,185**
May 2001	1,70,490	6,081	5,727	11,307	2,00,980	5,488	85,210	**3,14,863**
June 2001	1,69,619	4,900	5,826	10,175	2,04,362	5,565	86,431	**3,14,016**
July 2001	1,61,555	7,774	5,951	11,616	2,05,913	5,631	91,948	**3,06,491**
August 2001	1,56,133	4,725	5,666	9,256	2,11,787	5,700	85,010	**3,08,257**
September 7, 2001	1,60,204	6,573	5,619	9,851	2,14,160	5,700	87,076	**3,15,031**
September 14, 2001	1,53,778	5,523	5,643	9,836	2,15,833	5,700	90,202	**3,06,111**
September 21, 2001	1,52,030	5,469	5,655	10,502	2,14,344	5,700	91,530	**3,02,170**
September 28, 2001	1,60,240	4,969	5,835	9,420	2,14,028	5,700	91,051	**3,09,141**

See 'Notes on Tables'.

No. 14 : DAILY CALL MONEY RATES $

(per cent per annum)

As on	Range of Rates		Weighted Average Rate	
	Borrowings	Lendings	Borrowings	Lendings
1	2	3	4	5
Sep. 1, 2001	5.92 - 7.10	6.10 - 7.15	6.91	6.92
Sep. 3, 2001	5.45 - 7.45	4.90 - 7.50	6.89	6.91
Sep. 4, 2001	5.85 - 7.00	6.00 - 7.15	6.85	6.86
Sep. 5, 2001	5.43 - 7.25	4.89 - 7.25	6.98	6.90
Sep. 7, 2001	6.00 - 7.95	5.89 - 7.95	7.14	7.17
Sep. 8, 2001	6.08 - 7.40	6.60 - 7.40	7.08	7.08
Sep. 10, 2001	6.05 - 7.75	5.05 - 7.75	7.02	7.15
Sep. 11, 2001	6.10 - 7.80	5.10 - 7.50	7.06	7.06
Sep. 12, 2001	5.17 - 7.40	5.17 - 7.40	7.15	7.15
Sep. 13, 2001	5.41 - 8.20	5.41 - 8.30	7.38	7.45
Sep. 14, 2001	5.63 - 8.50	5.63 - 8.50	7.54	7.53
Sep. 15, 2001	6.10 - 7.50	6.38 - 7.50	7.11	7.12
Sep. 17, 2001	6.29 - 8.35	6.60 - 8.35	7.36	7.59
Sep. 18, 2001	5.18 - 8.00	5.18 - 8.00	7.16	7.51
Sep. 19, 2001	5.06 - 7.40	5.06 - 7.30	7.04	7.04
Sep. 20, 2001	5.80 - 10.25	5.80 - 10.25	7.77	7.80
Sep. 21, 2001	6.10 - 15.00	6.10 - 15.00	9.40	9.23
Sep. 22, 2001	6.15 - 7.75	6.50 - 7.50	7.11	7.15
Sep. 24, 2001	5.14 - 7.60	5.14 - 7.50	7.10	7.19
Sep. 25, 2001	5.19 - 7.50	5.19 - 7.50	7.58	7.17
Sep. 26, 2001	5.08 - 9.00	5.08 - 9.00	7.07	7.09
Sep. 27, 2001	6.08 - 7.50	6.11 - 7.50	7.06	7.07
Sep. 28, 2001	5.71 - 10.15	5.71 - 10.15	8.02	8.02
Oct. 1, 2001	5.07 - 7.75	5.07 - 7.75	7.08	7.10
Oct. 3, 2001	4.49 - 7.75	4.94 - 8.00	6.94	7.08
Oct. 4, 2001	4.68 - 7.50	4.68 - 7.50	6.66	6.67
Oct. 5, 2001	5.00 - 7.10	5.00 - 7.75	6.55	6.60
Oct. 6, 2001	5.92 - 7.10	6.00 - 7.10	6.83	6.86
Oct. 8, 2001	5.11 - 7.50	5.11 - 7.50	7.05	7.06
Oct. 9, 2001	5.06 - 7.50	5.06 - 7.50	7.04	7.04
Oct. 10, 2001	5.09 - 7.50	5.09 - 7.30	7.05	7.05
Oct. 11, 2001	5.14 - 7.50	5.14 - 7.50	7.06	7.07

$: Data covers 75 - 80 per cent of total transactions reported by major participants.

No. 15 : AVERAGE DAILY TURNOVER IN CALL MONEY MARKET

(Rs. crore)

Fortnight ended	Average Daily Call Money Turnover					
	Banks		Primary Dealers		Non-Bank Institutions	Total
	Borrowings	Lendings	Borrowings	Lendings	Lendings	
1	2	3	4	5	6	7
May 5, 2000 *	12,729	13,501	10,719	2,435	8,672	48,056
May 19, 2000 *	11,585	10,472	8,096	2,034	7,027	39,214
Jun. 2, 2000 *	11,670	10,516	8,688	2,381	6,801	40,056
Jun. 16, 2000 *	12,972	9,337	6,476	1,982	7,533	38,300
Jun. 30, 2000 *	13,141	9,107	5,644	1,934	8,531	38,357
Jul. 14, 2000 *	14,659	8,480	7,460	2,449	9,417	42,465
Jul. 28, 2000 *	13,540	8,217	6,565	1,907	9,568	39,797
Aug. 11, 2000 *	13,985	6,769	6,227	2,116	10,178	39,275
Aug. 25, 2000 *	13,041	5,632	5,320	2,169	9,811	35,973
Sep. 8, 2000 *	14,111	6,007	6,859	2,232	12,588	41,797
Sep. 22, 2000 *	15,175	6,018	6,321	2,240	13,179	42,933
Oct. 6, 2000 *	16,248	7,998	6,397	2,317	11,675	44,635
Oct. 20, 2000 *	17,809	8,450	5,917	2,049	11,551	45,776
Nov. 3, 2000 *	16,575	10,525	7,102	3,107	10,012	47,321
Nov. 17, 2000 *	16,685	10,692	7,005	3,081	9,342	46,805
Dec. 1, 2000 *	15,406	10,064	9,277	3,690	8,873	47,310
Dec. 15, 2000 *	14,610	10,789	9,154	3,178	8,743	46,747
Dec. 29, 2000 *	15,489	10,655	7,451	2,867	7,106	43,568
Jan. 12, 2001 *	17,603	12,812	8,584	3,096	8,301	50,396
Jan. 26, 2001 *	17,006	11,916	8,699	3,188	8,320	49,039
Feb. 9, 2001 *	17,646	11,825	8,713	2,859	9,632	50,675
Feb. 23, 2001 *	17,283	10,206	7,982	2,383	8,133	45,987
Mar. 9, 2001 *	18,666	13,313	8,977	2,772	7,822	51,550
Mar. 23, 2001*	18,153	11,942	8,421	3,075	8,723	50,314
Apr. 6, 2001 *	16,853	11,853	6,571	2,400	6,953	44,630
Apr. 20, 2001 *	18,117	13,908	8,379	2,357	8,196	50,957
May 4, 2001 *	17,732	11,541	9,064	2,164	7,507	48,008
May 18, 2001 *	17,473	9,921	6,789	2,082	5,130	41,395
Jun. 1, 2001 *	16,094	14,645	8,695	1,836	4,886	46,156
Jun. 15, 2001 *	15,504	14,475	7,748	2,013	5,050	44,790
Jun. 29, 2001 *	16,562	13,734	9,444	2,714	4,598	47,052
Jul. 13, 2001 *	14,394	15,522	9,111	2,534	5,510	47,071
Jul. 27, 2001 *	14,631	13,768	8,352	2,491	5,355	44,597

* : Effective fortnight ended May 5, 2000, data received from 99 banks, 15 Primary Dealers and 50 non-bank institutions. Effective fortnight ended June 16, 2000, data received from 99 banks, 15 Primary Dealers and 51 non-bank institutions. Effective fortnight ended July 14, 2000, data received from 100 banks, 15 Primary Dealers and 51 non-bank institutions. Effective fortnight ended August 11, 2000, data recieved from 100 banks, 15 Primary Dealers, and 52 non-bank institutions. Effective fortnight ended October 6, 2000, data received from 100 banks, 15 Primary Dealers and 51 non-bank institution. Effective fortnight ended December 29, 2000, data received from 100 banks, 15 Primary Dealers and 52 non-bank institutions. Effective fortnight ended March 23, 2001, data received from 100 banks, 15 Primary Dealers and 56 non-bank institutions. Effective fortnight ended June 1, 2001, data received from 100 banks, 16 Primary Dealers and 56 non-bank institutions.

Note : Data are provisional.

No. 16 : ISSUE OF CERTIFICATES OF DEPOSIT BY SCHEDULED COMMERCIAL BANKS

(Amount in Rs. crore)

Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @
1		2	3	4		5	6	7		8	9
1999-00				**2000-01**				**2001-02**			
Apr.	9	3,494	7.00-12.50	Apr.	7	1,264	6.50-14.00	Apr.	6	1,061	6.50-11.00
	23	3,421	7.00-11.75		21	1,273	6.75-11.00		20	905	7.00-11.00
May	7	3,364	8.00-13.00	May	5	872	8.00-12.82	May	4	1,011	5.00-10.80
	21	2,744	8.00-12.00		19	945	8.00-11.70		18	935	6.30-11.50
Jun.	4	2,346	8.50-13.07	Jun.	2	933	8.00-11.16	Jun.	1	960	6.80-10.50
	18	2,268	7.50-11.00		16	974	5.50-13.35		15	979	5.00-10.00
Jul.	2	2,111	6.25-11.50		30	1,041	8.00-15.70		29	921	6.80-10.25
	16	2,217	6.25-10.90	Jul.	14	1,129	5.50-14.00	Jul.	13	782	5.00-10.50
	30	2,091	7.50-11.00		28	1,211	5.50-12.75		27	751	6.00-10.00
Aug.	13	2,002	6.50-11.00	Aug.	11	1,094	8.00-14.60	Aug.	10	786	6.00-10.50
	27	1,921	8.00-11.50		25	1,149	6.50-11.25		24	757	5.00-10.00
Sep.	10	1,932	8.50-14.20	Sep.	8	1,120	8.50-11.75				
	24	1,933	6.25-11.75		22	1,153	8.00-13.50				
Oct.	8	1,868	6.75-11.00	Oct.	6	1,364	5.00-12.80				
	22	1,754	6.75-13.40		20	1,695	6.30-14.06				
Nov.	5	1,705	8.25-11.93	Nov.	3	1,660	7.50-11.35				
	19	1,453	7.50-11.25		17	1,626	8.50-12.28				
Dec.	3	1,498	8.00-11.00	Dec.	1	1,344	8.00-11.00				
	17	1,467	8.50-11.00		15	1,303	7.75-11.00				
	31	1,418	8.50-11.00		29	1,135	7.78-10.50				
Jan.	14	1,401	8.50-11.00	Jan.	12	1,180	7.25-11.00				
	28	1,385	8.00-11.00		26	1,197	7.25-10.75				
Feb.	11	1,374	8.00-11.00	Feb.	9	1,153	7.25-11.00				
	25	1,280	7.75-13.24		23	1,187	6.75-12.00				
Mar.	10	1,243	7.85-12.78	Mar.	9	1,060	7.25-11.00				
	24	1,227	7.50-12.00		23	771	5.50-11.00				

@ : Effective interest rate range per annum.

No. 17 : ISSUE OF COMMERCIAL PAPER* BY COMPANIES

(Amount in Rs. crore)

Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @	Fortnight ended		Total Amount Outstanding	Rate of Interest (per cent) @
1		2	3	4		5	6	7		8	9
1999 - 00				**2000 - 01**				**2001 - 02**			
Apr.	15	5,028.55	9.15 - 12.00	Apr.	15	5,633.50	9.58 - 12.25	Apr.	15	6,294.75	9.30 - 12.00
	30	5,833.05	9.10 - 12.75		30	5,606.20	9.35 - 11.00		30	7,033.75	9.10 - 11.50
May	15	6,589.84	9.33 - 12.50	May	15	6,598.70	9.00 - 11.50	May	15	6,981.50	9.10 - 10.75
	31	6,898.84	9.00 - 12.50		31	7,232.20	8.20 - 12.50		31	7,313.50	8.80 - 11.03
Jun.	15	7,363.34	9.00 - 12.50	Jun.	15	7,484.70	8.90 - 11.50	Jun.	15	7,984.50	8.65 - 10.25
	30	7,679.34	9.00 - 12.38		30	7,626.70	9.25 - 11.75		30	8,566.00	8.49 - 10.40
Jul.	15	6,311.34	9.00 - 12.00	Jul.	15	7,126.70	9.35 - 11.85	Jul.	15	8,019.30	8.19 - 9.80
	31	7,239.09	9.00 - 12.10		31	7,324.70	9.50 - 12.25		31	7,274.85	8.01 - 11.50
Aug.	15	7,418.54	9.05 - 12.25	Aug.	15	6,405.70	9.25 - 12.00	Aug.	15	7,270.85	7.90 - 10.35
	31	7,677.54	9.10 - 12.50		31	5,671.70	9.71 - 12.80		31	6,982.40	7.75 - 13.00
Sep.	15	7,292.54	9.61 - 12.70	Sep.	15	5,577.20	10.05 - 12.75	Sep.	15	7,012.90	7.55 - 9.85
	30	7,658.04	10.00 - 13.00		30	5,931.20	11.24 - 12.75		30	7,805.40	7.40 - 10.00
Oct.	15	6,688.84	9.91 - 11.75	Oct.	15	5,573.50	10.30 - 12.50				
	31	6,160.70	10.20 - 12.50		31	5,633.20	10.14 - 13.50				
Nov.	15	6,153.20	9.40 - 12.50	Nov.	15	6,317.20	10.45 - 12.00				
	30	6,523.70	10.00 - 12.80		30	7,364.00	10.00 - 12.07				
Dec.	15	7,564.70	10.00 - 12.40	Dec.	15	8,040.40	9.93 - 13.00				
	31	7,803.20	9.90 - 12.27		31	8,342.90	9.75 - 12.25				
Jan.	15	7,747.00	9.05 - 11.65	Jan.	15	7,796.10	10.00 - 11.98				
	31	7,814.00	9.00 - 13.00		31	7,188.10	10.04 - 11.50				
Feb.	15	7,693.20	9.25 - 12.05	Feb.	15	7,295.60	10.05 - 11.40				
	29	7,216.00	9.20 - 11.00		28	7,246.35	9.15 - 11.15				
Mar.	15	6,436.20	9.85 - 12.25	Mar.	15	6,990.45	9.25 - 11.50				
	31	5,662.70	10.00 - 12.00		31	5,846.45	8.75 - 11.25				

* : Issued at face value by companies.

@ : Typical effective discount rate range per annum on issues during the fortnight.

No. 18 : UNION GOVERNMENT ACCOUNTS AT A GLANCE

(April - August 2001)

(Rs. crore)

Item		Financial Year 2001-02 (Budget)	April-August		Percentage to Budget Estimates	
			2001-02 (Actuals)	2000-01 (Actuals)	upto August 2001	upto August 2000
1		2	3	4	5	6
1.	**Revenue Receipts**	**2,31,745**	**56,209**	**64,523**	**24.3**	**31.7**
2.	Tax Revenue (Net)	1,63,031	31,015	39,226	19.0	26.8
3.	Non-Tax Revenue	68,714	25,194	25,297	36.7	44.0
4.	**Capital Receipts**	**1,43,478**	**61,888**	**39,973**	**43.1**	**29.7**
5.	Recovery of Loans	15,164	5,809	3,293	38.3	24.3
6.	Other Receipts	12,000	–	233	–	2.3
7.	Borrowings and other liabilities	1,16,314	56,079	36,447	48.2	32.5
8.	**Total Receipts (1+4)**	**3,75,223**	**1,18,097**	**1,04,496**	**31.5**	**30.9**
9.	**Non-Plan Expenditure**	**2,75,123**	**87,481**	**74,172**	**31.8**	**29.6**
10.	On Revenue Account	2,50,341	80,828	69,255	32.3	30.3
	of which :					
11.	Interest Payments	1,12,300	36,795	30,097	32.8	29.7
12.	On Capital Account	24,782	6,653	4,917	26.8	22.7
13.	**Plan Expenditure**	**95,100**	**30,616**	**30,324**	**32.2**	**34.4**
14.	On Revenue Account	60,225	19,021	17,220	31.6	32.9
15.	On Capital Account	34,875	11,595	13,104	33.2	36.6
16.	Plan expenditure linked to disinvestment	5,000	–	–	–	–
17.	**Total Expenditure (9+13+16)**	**3,75,223** *	**1,18,097**	**1,04,496**	**31.5**	**30.9**
18.	Revenue Expenditure (10+14)	3,10,566	99,849	86,475	32.2	30.8
19.	Capital Expenditure (12+15+16)	64,657 *	18,248	18,021	28.2	31.4
20.	**Revenue Deficit (18-1)**	**78,821**	**43,640**	**21,952**	**55.4**	**28.4**
21.	**Fiscal Deficit {17-(1+5+6)}**	**1,16,314**	**56,079**	**36,447**	**48.2**	**32.8**
22.	**Gross Primary Deficit (21-11)**	**4,014**	**19,284**	**6,350**	–	–

* : Includes a sum of Rs. 5,000 crore as lumpsum provision for additional plan allocation linked to disinvestment receipts.

Notes : 1. Financial year runs from "April to March".
2. Actuals are unaudited figures.

Source : Controller General of Accounts, Ministry of Finance, Government of India.

No. 19 : GOVERNMENT OF INDIA : 91-DAY TREASURY BILLS

(Outstanding at Face Value)

(Rs. crore)

March 31/ Last Friday/ Friday	Reserve Bank of India			Banks		State Governments		Others		Foreign Central Banks	
	Tap*		Auction	Tap*	Auction	Tap*	Auction	Tap*	Auction	Tap*	Auction
	Rediscounted	Ad hocs									
1	2	3	4	5	6	7	8	9	10	11	12
Mar. 31, 1997	9,544	34,130	1,468	–	2,365	6,539	1,262	604	605	–	–
Mar. 31, 1998	–	–	627	–	29	–	530	–	95	–	319
Mar. 31, 1999	–	–	224	–	827	–	–	–	249	–	200
Mar. 31, 2000	–	–	288	–	557	–	–	–	455	–	220
Mar. 31, 2001	–	–	67	–	868	–	–	–	153	–	630
Jul. 1999	–	–	356	–	575	–	2,075	–	370	–	100
Aug. 1999	–	–	291	–	645	–	1,500	–	365	–	60
Sep. 1999	–	–	460	–	539	–	400	–	302	–	60
Oct. 1999	–	–	801	–	253	–	400	–	246	–	35
Nov. 1999	–	–	731	–	215	–	400	–	354	–	–
Dec. 1999	–	–	473	–	421	–	–	–	406	–	75
Jan. 2000	–	–	78	–	743	–	–	–	479	–	75
Feb. 2000	–	–	107	–	705	–	–	–	488	–	150
Mar. 2000	–	–	288	–	557	–	–	–	455	–	220
Apr. 2000	–	–	371	–	732	–	–	–	197	–	270
May 2000	–	–	322	–	498	–	–	–	480	–	330
Jun. 2000	–	–	449	–	464	–	–	–	388	–	380
Jul. 2000	–	–	411	–	557	–	–	–	333	–	330
Aug. 2000	–	–	602	–	415	–	–	–	283	–	345
Sep. 2000	–	–	402	–	557	–	–	–	341	–	400
Oct. 2000	–	–	357	–	342	–	–	–	601	–	540
Nov. 2000	–	–	113	–	546	–	–	–	642	–	540
Dec. 2000	–	–	5	–	781	–	–	–	515	–	645
Jan. 2001	–	–	7	–	541	–	–	–	624	–	645
Feb. 2001	–	–	10	–	736	–	–	–	432	–	645
Mar. 2001	–	–	5	–	928	–	–	–	253	–	630
Apr. 2001	–	–	–	–	1,059	–	350	–	146	–	705
May 2001	–	–	20	–	838	–	350	–	723	–	680
Jun. 2001	–	–	40	–	1,289	–	1,100	–	1,021	–	565
Jul. 2001	–	–	103	–	2,125	–	1,200	–	735	–	850
Aug. 2001	–	–	–	–	2,447	–	1,300	–	608	–	1,025
Week Ended											
Sep. 7, 2001	–	–	–	–	2,516	–	1,450	–	516	–	1,025
Sep. 14, 2001	–	–	–	–	2,670	–	1,050	–	449	–	1,025
Sep. 21, 2001	–	–	24	–	2,587	–	1,600	–	489	–	950
Sep. 28, 2001	–	–	48	–	2,525	–	1,350	–	440	–	975

* : The rate of discount is 4.60 per cent per annum.

No. 20 : AUCTIONS OF 14-DAY GOVERNMENT OF INDIA TREASURY BILLS @

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on		Total Issue (8+9+10+11)	Cut-off price (per cent)	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value		PDs/SDs*	RBI				
				Competitive	Non-Competitive		Competitive	Non-Competitive						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2000-01														
Jun. 30	Jul. 3	100	17	265.50	–	7	100.00	–	–	–	100.00	99.69	8.0851	350.00
Jul. 7	Jul. 10	100	22	463.50	150.00	3	100.00	150.00	–	–	250.00	99.74	6.7776	350.00
Jul. 14	Jul. 17	100	21	314.50	50.00	4	100.00	50.00	–	–	150.00	99.75	6.5163	400.00
Jul. 21	Jul. 24	100	16	161.00	150.00	14	100.00	150.00	–	–	250.00	99.66	8.8702	400.00
Jul. 28	Jul. 31	100	19	259.00	–	7	100.00	–	–	–	100.00	99.69	8.0851	350.00
Aug. 4	Aug. 7	100	17	161.00	150.00	2	2.00	150.00	–	98.00	250.00	99.69	8.0851	350.00
Aug. 11	Aug. 14	100	16	161.00	–	4	26.00	–	–	74.00	100.00	99.58	10.9661	350.00
Aug. 18	Aug. 22	100	18	178.50	270.00	6	32.00	270.00	–	68.00	370.00	99.58	10.9661	470.00
Aug. 25	Aug. 28	100	17	162.00	–	3	37.00	–	–	63.00	100.00	99.58	10.9661	470.00
Aug. 31	Sep. 4	100	17	169.50	130.00	11	100.00	130.00	–	–	230.00	99.58	10.9661	330.00
Sep. 8	Sep. 11	100	22	324.50	150.00	6	100.00	150.00	–	–	250.00	99.62	9.9177	480.00
Sep. 15	Sep. 18	100	17	308.00	280.00	5	100.00	280.00	–	–	380.00	99.67	8.6084	630.00
Sep. 22	Sep. 25	100	20	279.50	–	3	100.00	–	–	–	100.00	99.70	7.8235	480.00
Sep. 29	Oct. 3	100	19	246.50	225.00	3	100.00	225.00	–	–	325.00	99.71	7.5619	425.00
Oct. 6	Oct. 9	100	15	162.00	–	15	100.00	–	–	–	100.00	99.66	8.8702	425.00
Oct. 13	Oct. 16	100	18	162.00	165.00	13	100.00	165.00	–	–	265.00	99.61	10.1797	365.00
Oct. 20	Oct. 23	100	22	239.00	225.00	11	100.00	225.00	–	–	325.00	99.67	8.6084	590.00
Oct. 27	Oct. 30	100	17	187.00	–	13	100.00	–	–	–	100.00	99.68	8.3467	425.00
Nov. 3	Nov. 6	100	20	274.50	225.00	4	100.00	225.00	–	–	325.00	99.70	7.8235	425.00
Nov. 10	Nov. 13	100	16	162.00	130.00	6	82.50	130.00	–	17.50	230.00	99.65	9.1320	555.00
Nov. 17	Nov. 20	100	16	165.50	180.00	11	100.00	180.00	–	–	280.00	99.68	8.3467	510.00
Nov. 24	Nov. 27	100	17	389.50	–	1	100.00	–	–	–	100.00	99.73	7.0390	380.00
Dec. 1	Dec. 4	100	18	162.00	150.00	16	100.00	150.00	–	–	250.00	99.69	8.0851	350.00
Dec. 8	Dec. 11	100	23	364.00	150.00	8	100.00	150.00	–	–	250.00	99.75	6.5163	500.00
Dec. 15	Dec. 18	100	20	164.50	160.00	15	100.00	160.00	–	–	260.00	99.68	8.3467	510.00
Dec. 22	Dec. 26	100	18	169.50	–	5	30.00	–	–	70.00	100.00	99.68	8.3467	360.00
Dec. 29	Jan. 1	100	19	179.50	230.00	7	65.50	230.00	–	34.50	330.00	99.68	8.3467	430.00
Jan. 5	Jan. 8	100	19	227.00	–	6	100.00	–	–	–	100.00	99.69	8.0851	430.00
Jan. 12	Jan. 15	100	18	162.00	170.00	10	100.00	170.00	–	–	270.00	99.66	8.8702	370.00
Jan. 19	Jan. 22	100	19	162.00	250.00	13	100.00	250.00	–	–	350.00	99.64	9.3938	620.00
Jan. 25	Jan. 29	100	22	182.00	60.00	12	100.00	60.00	–	–	160.00	99.66	8.8702	510.00
Feb. 2	Feb. 5	100	19	224.50	280.00	6	100.00	280.00	–	–	380.00	99.69	8.0851	540.00
Feb. 9	Feb. 12	100	18	162.00	–	13	100.00	–	–	–	100.00	99.69	8.0851	480.00
Feb. 16	Feb. 20	100	20	204.50	250.00	11	100.00	250.00	–	–	350.00	99.68	8.3467	450.00
Feb. 23	Feb. 26	100	19	189.50	–	10	100.00	–	–	–	100.00	99.71	7.5619	450.00
Mar. 2	Mar. 5	100	18	162.00	200.00	14	100.00	200.00	–	–	300.00	99.72	7.3004	400.00
Mar. 9	Mar. 12	100	18	207.00	–	5	100.00	–	–	–	100.00	99.74	6.7776	400.00
Mar. 16	Mar. 19	100	16	162.00	100.00	9	100.00	100.00	–	–	200.00	99.70	7.8235	300.00
Mar. 23	Mar. 27	100	15	162.00	–	10	100.00	–	–	–	100.00	99.68	8.3467	300.00
2001-02														
Mar. 30	Apr. 3	100	20	174.00	200.30	16	100.00	200.30	–	–	300.30	99.65	9.1320	400.30
Apr. 4	Apr. 9	100	19	268.00	–	4	100.00	–	–	–	100.00	99.73	7.0390	400.00
Apr. 12	Apr. 16	100	17	248.50	–	12	100.00	–	–	–	100.00	99.72	7.3004	200.00
Apr. 20	Apr. 23	100	20	310.50	100.00	11	100.00	100.00	–	–	200.00	99.73	7.0390	300.00
Apr. 27	Apr. 30	100	15	293.50	–	3	100.00	–	–	–	100.00	99.74	6.7776	300.00
May 4	May 8	100	19	263.50	100.00	11	100.00	100.00	–	–	200.00	99.73	7.0390	300.00
May 11	May 14	100	21	303.50	–	5	100.00	–	–	–	100.00	99.71	7.5619	300.00

* : Effective from auction dated May 14,1999 devolvement amount would be on RBI only.

@ : Auction discontinued from May 14, 2001.

No. 21 : AUCTIONS OF 91-DAY GOVERNMENT OF INDIA TREASURY BILLS @

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on		Total Issue (8+9+10+11)	Cut-off Price (per cent)	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value		PDs/SDs*	RBI				
				Com-petitive	Non-Com-petitive		Com-petitive	Non-Competitive						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2000-01														
Oct. 6	Oct. 9	100.00	20	227.50	50.00	9	100.00	50.00	–	–	150.00	97.66	9.5843	1,750.00
Oct. 13	Oct. 16	100.00	21	212.50	–	6	100.00	–	–	–	100.00	97.58	9.9201	1,750.00
Oct. 20	Oct. 23	100.00	21	230.00	90.00	9	100.00	90.00	–	–	190.00	97.64	9.6682	1,840.00
Oct. 27	Oct. 30	100.00	19	211.50	–	9	100.00	–	–	–	100.00	97.68	9.5004	1,840.00
Nov. 3	Nov. 6	100.00	21	227.00	125.00	9	100.00	125.00	–	–	225.00	97.75	9.2072	1,875.00
Nov. 10	Nov. 13	100.00	16	262.00	–	5	100.00	–	–	–	100.00	97.78	9.0816	1,875.00
Nov. 17	Nov. 20	100.00	16	209.50	25.00	8	95.50	25.00	–	4.50	125.00	97.81	8.9561	1,840.00
Nov. 24	Nov. 27	100.00	17	191.50	75.00	10	100.00	75.00	–	–	175.00	97.78	9.0816	1,840.00
Dec. 1	Dec. 4	100.00	20	217.00	25.00	11	100.00	25.00	–	–	125.00	97.81	8.9561	1,865.00
Dec. 8	Dec. 11	100.00	21	187.00	–	14	100.00	–	–	–	100.00	97.83	8.8725	1,805.00
Dec. 15	Dec. 18	100.00	19	184.00	80.00	11	100.00	80.00	–	–	180.00	97.81	8.9561	1,805.00
Dec. 22	Dec. 26	100.00	21	195.00	175.00	11	100.00	175.00	–	–	275.00	97.81	8.9561	1,945.00
Dec. 29	Jan. 1	100.00	22	257.50	–	7	100.00	–	–	–	100.00	97.86	8.7472	1,945.00
Jan. 5	Jan. 8	100.00	18	169.50	50.00	10	100.00	50.00	–	–	150.00	97.86	8.7472	1,945.00
Jan. 12	Jan. 15	100.00	16	164.50	–	8	100.00	–	–	–	100.00	97.82	8.9143	1,945.00
Jan. 19	Jan. 22	100.00	17	207.00	90.00	6	100.00	90.00	–	–	190.00	97.83	8.8725	1,945.00
Jan. 25	Jan. 29	100.00	15	206.50	–	8	100.00	–	–	–	100.00	97.83	8.8725	1,945.00
Feb. 2	Feb. 5	100.00	16	205.00	75.00	8	100.00	75.00	–	–	175.00	97.87	8.7054	1,895.00
Feb. 9	Feb. 12	100.00	16	165.00	–	10	100.00	–	–	–	100.00	97.90	8.5802	1,895.00
Feb. 16	Feb. 20	100.00	21	222.00	75.00	11	100.00	75.00	–	–	175.00	97.92	8.4967	1,945.00
Feb. 23	Feb. 26	100.00	18	172.00	–	8	100.00	–	–	–	100.00	97.96	8.3299	1,870.00

No. 21 : AUCTIONS OF 91-DAY GOVERNMENT OF INDIA TREASURY BILLS @ *(Concld.)*

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on		Total Issue (8+9+10+11)	Cut-off Price (per cent)	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value		Number	Total Face Value		PDs/SDs*	RBI				
				Com-petitive	Non-Com-petitive		Com-petitive	Non-Competitive						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2000-01														
Mar. 2	Mar. 5	100.00	18	222.00	90.00	10	100.00	90.00	–	–	190.00	98.05	7.9551	1,935.00
Mar. 9	Mar. 12	100.00	19	172.00	–	9	100.00	–	–	–	100.00	98.05	7.9551	1,935.00
Mar. 16	Mar. 19	100.00	18	172.00	50.00	13	100.00	50.00	–	–	150.00	97.92	8.4967	1,905.00
Mar. 23	Mar. 27	100.00	19	172.00	200.00	11	100.00	200.00	–	–	300.00	97.92	8.4967	1,930.00
2001-02														
Mar. 30	Apr. 3	100.00	17	174.00	350.00	10	100.00	350.00	–	–	450.00	97.86	8.7472	2,280.00
Apr. 4	Apr. 9	100.00	18	205.50	40.00	12	100.00	40.00	–	–	140.00	97.92	8.4967	2,270.00
Apr. 12	Apr. 16	100.00	20	273.00	–	7	100.00	–	–	–	100.00	98.00	8.1633	2,270.00
Apr. 20	Apr. 23	100.00	28	400.00	175.00	7	100.00	175.00	–	–	275.00	98.07	7.8719	2,355.00
Apr. 27	Apr. 30	100.00	17	411.00	–	6	100.00	–	–	–	100.00	98.11	7.7056	2,355.00
May 4	May 8	100.00	23	348.00	–	5	100.00	–	–	–	100.00	98.19	7.3735	2,280.00
May 11	May 14	100.00	18	210.50	–	5	100.00	–	–	–	100.00	98.11	7.7056	2,280.00
May 16	May 18	250.00	25	495.00	–	11	250.00	–	–	–	250.00	98.10	7.7472	2,530.00
May 23	May 25	250.00	29	423.75	125.00	21	250.00	125.00	–	–	375.00	98.10	7.7472	2,730.00
May 30	Jun. 1	250.00	32	583.75	100.00	13	250.00	100.00	–	–	350.00	98.19	7.3735	2,980.00
Jun. 6	Jun. 8	250.00	24	461.25	–	16	250.00	–	–	–	250.00	98.16	7.4980	3,040.00
Jun. 13	Jun. 15	250.00	27	623.00	400.00	13	250.00	400.00	–	–	650.00	98.22	7.2490	3,590.00
Jun. 20	Jun. 22	250.00	28	570.00	75.00	14	250.00	75.00	–	–	325.00	98.25	7.1247	3,765.00
Jun. 27	Jun. 29	250.00	26	512.50	400.00	17	250.00	400.00	–	–	650.00	98.26	7.0832	4,115.00
Jul. 4	Jul. 6	250.00	22	505.00	350.00	14	250.00	350.00	–	–	600.00	98.27	7.0418	4,265.00
Jul. 11	Jul. 13	250.00	23	481.25	400.00	16	250.00	400.00	–	–	650.00	98.27	7.0418	4,775.00
Jul. 18	Jul. 20	250.00	24	452.50	–	11	250.00	–	–	–	250.00	98.25	7.1247	4,925.00
Jul. 25	Jul. 27	250.00	24	467.50	200.00	13	250.00	200.00	–	–	450.00	98.26	7.0832	5,100.00
Aug. 1	Aug. 3	250.00	21	717.50	–	9	250.00	–	–	–	250.00	98.28	7.0004	5,250.00
Aug. 8	Aug. 10	250.00	22	615.00	100.00	8	250.00	100.00	–	–	350.00	98.29	6.9590	5,500.00
Aug. 14	Aug. 17	250.00	26	612.50	–	12	250.00	–	–	–	250.00	98.31	6.8762	5,400.00
Aug. 20	Aug. 24	250.00	23	515.00	50.00	16	250.00	50.00	–	–	300.00	98.31	6.8762	5,325.00
Aug. 29	Aug. 31	250.00	25	470.00	350.00	14	250.00	350.00	–	–	600.00	98.32	6.8348	5,575.00
Sep. 5	Sep. 7	250.00	24	755.00	150.00	13	250.00	150.00	–	–	400.00	98.32	6.8348	5,725.00
Sep. 12	Sep. 14	250.00	20	479.00	–	16	250.00	–	–	–	250.00	98.28	7.0004	5,325.00
Sep. 19	Sep. 21	250.00	23	423.75	550.00	16	250.00	550.00	–	–	800.00	98.23	7.2076	5,800.00
Sep. 26	Sep. 28	250.00	27	522.00	175.00	14	250.00	175.00	–	–	425.00	98.28	7.0004	5,575.00

* : Effective from auction dated May 14,1999, devolvement would be on RBI only.

@ : Notified amount increased to Rs.250 crore from May 16, 2001.

No. 22 : AUCTIONS OF 182-DAY GOVERNMENT OF INDIA TREASURY BILLS @

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on RBI	Total Issue (8+9+10)	Cut-off Price (per cent)	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value Competitive	Total Face Value Non-Competitive	Number	Total Face Value Competitive	Total Face Value Non-Competitive					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999-00													
Oct. 13	Oct. 14	100.00	15	114.00	–	–	–	–	100.00	100.00	95.29	9.8856	1,700.00
Oct. 27	Oct. 28	100.00	19	146.00	–	3	46.00	–	54.00	100.00	95.29	9.8856	1,800.00
Nov. 8	Nov. 11	100.00	16	205.50	–	6	100.00	–	–	100.00	95.34	9.7755	1,900.00
Nov. 24	Nov. 25	100.00	13	123.50	–	10	100.00	–	–	100.00	95.29	9.8856	1,900.00
Dec. 8	Dec. 9	100.00	38	306.50	–	9	100.00	–	–	100.00	95.50	9.4241	1,900.00
Dec. 22	Dec. 23	100.00	22	140.50	–	17	100.00	–	–	100.00	95.30	9.8636	1,900.00
Jan. 5	Jan. 6	100.00	27	337.00	–	9	100.00	–	–	100.00	95.32	9.8196	1,900.00
Jan. 19	Jan. 20	100.00	21	186.50	–	8	100.00	–	–	100.00	95.40	9.6436	1,900.00
Feb. 2	Feb. 3	100.00	29	280.00	–	9	100.00	–	–	100.00	95.52	9.3802	1,900.00
Feb. 16	Feb. 17	100.00	16	115.50	–	1	11.50	–	88.50	100.00	95.71	8.9646	1,900.00
Mar. 1	Mar. 2	100.00	19	194.00	–	6	100.00	–	–	100.00	95.62	9.1613	1,600.00
Mar. 15	Mar. 16	100.00	19	129.00	–	4	25.00	–	75.00	100.00	95.57	9.2707	1,300.00
Mar. 29	Mar. 30	100.00	19	160.50	–	4	63.00	–	37.00	100.00	95.48	9.4680	1,300.00
2000-01													
Apr. 11	Apr. 13	100.00	21	206.50	–	9	100.00	–	–	100.00	95.91	8.5288	1,300.00
Apr. 26	Apr. 27	100.00	22	243.00	–	8	100.00	–	–	100.00	95.91	8.5288	1,300.00
May 10	May 12	100.00	21	158.00	–	13	100.00	–	–	100.00	95.91	8.5288	1,300.00
May 24	May 25	100.00	20	214.00	–	5	100.00	–	–	100.00	95.78	8.8119	1,300.00
Jun. 7	Jun. 8	100.00	21	175.50	–	3	30.00	–	70.00	100.00	95.59	9.2269	1,300.00
Jun. 21	Jun. 22	100.00	18	183.50	–	1	20.00	–	80.00	100.00	95.59	9.2269	1,300.00
Jul. 5	Jul. 6	100.00	26	228.50	–	14	100.00	–	–	100.00	95.61	9.1831	1,300.00
Jul. 19	Jul. 20	100.00	21	212.50	–	11	100.00	–	–	100.00	95.62	9.1613	1,300.00
Aug. 2	Aug. 3	100.00	21	174.50	–	12	100.00	–	–	100.00	95.25	9.9738	1,300.00
Aug. 16	Aug. 17	100.00	21	186.00	–	12	99.50	–	0.50	100.00	95.05	10.4156	1,300.00
Aug. 30	Aug. 31	100.00	15	161.00	–	–	–	–	100.00	100.00	95.05	10.4156	1,300.00
Sep. 13	Sep. 14	100.00	23	237.50	–	16	100.00	–	–	100.00	95.05	10.4156	1,300.00
Sep. 27	Sep. 28	100.00	19	194.50	–	12	100.00	–	–	100.00	95.05	10.4156	1,300.00
Oct. 11	Oct. 12	100.00	20	252.50	–	3	100.00	–	–	100.00	95.13	10.2386	1,300.00
Oct. 25	Oct. 27	100.00	17	243.50	–	4	100.00	–	–	100.00	95.25	9.9738	1,300.00
Nov. 8	Nov. 9	100.00	16	262.00	–	2	100.00	–	–	100.00	95.34	9.7755	1,300.00
Nov. 22	Nov. 23	100.00	19	320.50	–	4	100.00	–	–	100.00	95.37	9.7096	1,300.00
Dec. 6	Dec. 7	100.00	24	239.50	–	10	100.00	–	–	100.00	95.43	9.5777	1,300.00
Dec. 20	Dec. 21	100.00	27	239.50	–	10	100.00	–	–	100.00	95.47	9.4899	1,300.00
Jan. 3	Jan. 4	100.00	21	232.00	–	5	100.00	–	–	100.00	95.53	9.3583	1,300.00
Jan. 17	Jan. 18	100.00	18	172.00	–	12	100.00	–	–	100.00	95.46	9.5118	1,300.00
Jan. 31	Feb. 1	100.00	20	242.00	–	11	100.00	–	–	100.00	95.55	9.3145	1,300.00
Feb. 14	Feb. 15	100.00	24	222.00	–	12	100.00	–	–	100.00	95.60	9.2050	1,300.00
Feb. 28	Mar. 1	100.00	21	229.50	–	10	100.00	–	–	100.00	95.96	8.4202	1,300.00
Mar. 14	Mar. 15	100.00	20	192.00	–	16	100.00	–	–	100.00	95.82	8.7247	1,300.00
Mar. 28	Mar. 29	100.00	21	254.00	–	6	100.00	–	–	100.00	95.73	8.9209	1,300.00
2001-02													
Apr. 11	Apr. 12	100.00	28	296.00	–	13	100.00	–	–	100.00	95.89	8.5723	1,300.00
Apr. 25	Apr. 26	100.00	26	190.00	–	13	100.00	–	–	100.00	95.96	8.4202	1,300.00
May 9	May 10	100.00	34	245.50	–	16	100.00	–	–	100.00	96.00	8.3333	1,300.00

@ : Auction discontinued from May 14, 2001.

No. 23 : AUCTIONS OF 364-DAY GOVERNMENT OF INDIA TREASURY BILLS

(Amount in Rs. crore)

Date of Auction	Date of Issue	Notified Amount	Bids Received			Bids Accepted			Devolvement on		Total Issue (8+9 +10+11)	Cut-off Price (per cent)	Implicit Yield at Cut-off Price (per cent)	Amount Outstanding as on the Date of Issue (Face Value)
			Number	Total Face Value Com-petitive	Total Face Value Non-Com-petitive $	Number	Total Face Value Com-petitive	Total Face Value Non-Com-petitive $	PDs/SDs*	RBI				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2000-01														
Apr. 4	Apr. 6	500.00	72	1,012.50	–	43	500.00	–	–	–	500.00	91.50	9.2896	13,000.00
Apr. 19	Apr. 20	500.00	48	1,117.65	–	21	500.00	–	–	–	500.00	91.54	9.2419	13,000.00
May 5	May 6	500.00	51	1,660.00	–	16	500.00	–	–	–	500.00	91.65	9.1107	13,000.00
May 17	May 19	500.00	48	1,340.00	–	11	500.00	–	–	–	500.00	91.66	9.0988	13,000.00
May 31	Jun. 1	500.00	47	971.38	–	33	500.00	–	–	–	500.00	91.54	9.2419	13,000.00
Jun. 14	Jun. 16	500.00	40	950.00	–	–	–	–	–	500.00	500.00	91.54	9.2419	13,000.00
Jun. 28	Jun. 29	500.00	48	870.00	–	–	–	–	–	500.00	500.00	91.54	9.2419	13,000.00
Jul. 12	Jul. 13	500.00	28	807.50	–	6	205.00	–	–	295.00	500.00	91.54	9.2419	13,000.00
Jul. 26	Jul. 27	500.00	44	1,127.61	–	17	500.00	–	–	–	500.00	90.67	10.2901	13,000.00
Aug. 9	Aug. 10	500.00	28	880.00	–	10	425.00	–	–	75.00	500.00	90.32	10.7174	13,000.00
Aug. 23	Aug. 24	500.00	41	825.00	–	30	460.00	–	–	40.00	500.00	90.16	10.9139	13,000.00
Sep. 6	Sep. 7	500.00	48	1,537.72	–	6	500.00	–	–	–	500.00	90.26	10.7910	13,000.00
Sep. 20	Sep. 21	500.00	45	1,237.72	–	6	83.22	–	–	416.78	500.00	90.16	10.9139	13,000.00
Oct. 4	Oct. 5	500.00	54	1,237.50	–	15	500.00	–	–	–	500.00	90.48	10.5217	13,000.00
Oct. 18	Oct. 19	500.00	52	1,207.50	–	21	500.00	–	–	–	500.00	90.59	10.3875	13,000.00
Nov. 1	Nov. 2	500.00	59	1,325.00	–	15	500.00	–	–	–	500.00	90.72	10.2293	13,000.00
Nov. 15	Nov. 16	500.00	49	1,307.00	–	17	500.00	–	–	–	500.00	90.81	10.1200	13,000.00
Nov. 29	Nov. 30	500.00	44	977.50	–	22	500.00	–	–	–	500.00	90.82	10.1079	13,000.00
Dec. 13	Dec. 14	750.00	76	1,477.22	–	39	750.00	–	–	–	750.00	90.87	10.0473	13,250.00
Dec. 27	Dec. 29	750.00	57	1,547.00	–	29	750.00	–	–	–	750.00	90.92	9.9868	13,500.00
Jan. 10	Jan. 11	750.00	78	1,988.38	–	25	750.00	–	–	–	750.00	91.18	9.6732	13,750.00
Jan. 24	Jan. 25	750.00	53	1,743.95	–	12	750.00	–	–	–	750.00	91.39	9.4212	14,000.00
Feb. 7	Feb. 8	750.00	62	1,389.50	–	31	750.00	–	–	–	750.00	91.52	9.2657	14,250.00
Feb. 20	Feb. 22	750.00	58	1,272.75	–	30	750.00	–	–	–	750.00	91.74	9.0037	14,500.00
Mar. 7	Mar. 8	750.00	55	1,415.75	–	32	750.00	–	–	–	750.00	92.03	8.6602	14,750.00
Mar. 21	Mar. 22	750.00	56	1,280.75	–	35	750.00	–	–	–	750.00	91.78	8.9562	15,000.00
2001-02														
Apr. 4	Apr. 9	750.00	54	1,682.50	–	26	750.00	–	–	–	750.00	91.87	8.8495	15,250.00
Apr. 18	Apr. 19	750.00	51	1,710.00	–	16	750.00	–	–	–	750.00	91.91	8.8021	15,500.00
May 2	May 3	750.00	68	1,942.83	–	16	750.00	–	–	–	750.00	92.14	8.5305	15,750.00
May 16	May 18	750.00	59	1,711.60	–	17	750.00	–	–	–	750.00	92.24	8.4128	16,000.00
May 30	Jun. 1	750.00	66	2,149.57	–	22	750.00	–	–	–	750.00	92.55	8.0497	16,250.00
Jun. 13	Jun. 15	750.00	57	1,731.96	–	28	750.00	–	–	–	750.00	92.61	7.9797	16,500.00
Jun. 27	Jun. 29	750.00	63	1,996.25	–	22	750.00	–	–	–	750.00	92.86	7.6890	16,750.00
Jul. 11	Jul. 13	750.00	67	2,440.00	–	12	750.00	–	–	–	750.00	93.15	7.3537	17,000.00
Jul. 25	Jul. 27	750.00	54	2,000.00	–	22	750.00	–	–	–	750.00	93.13	7.3768	17,250.00
Aug. 8	Aug. 10	750.00	43	1,646.55	–	14	750.00	–	–	–	750.00	93.22	7.2731	17,500.00
Aug. 20	Aug. 24	750.00	53	1,963.75	–	23	750.00	–	–	–	750.00	93.31	7.1696	17,750.00
Sep. 5	Sep. 7	750.00	47	2,207.50	–	22	750.00	–	–	–	750.00	93.37	7.1008	18,000.00
Sep. 19	Sep. 21	750.00	48	2,241.25	0.42	5	750.00	0.42	–	–	750.42	93.18	7.3192	18,250.42

* : Effective from auction dated May 19,1999, devolvement would be on RBI only.

$: Effective from auction dated June 2,1999, the non-competitive bidders were allowed to participate.

No. 24 : TURNOVER IN GOVERNMENT SECURITIES MARKET (FACE VALUE) AT MUMBAI @

(Rs. crore)

Week / Month+	Govt. of India Dated Securities	State Govt. Securities	Treasury Bills				RBI*
			14 Day	91 Day	182 Day $	364 Day	
1	2	3	4	5	6	7	8
1999-00							
April	62,451.22	149.76	578.64	1,100.26	–	6,632.62	7,221.16
May	61,439.59	2,172.12	914.00	782.14	–	2,757.80	7,787.78
June	50,230.25	473.14	1,074.68	1,080.98	123.00	3,679.24	3,828.12
July	64,095.08	354.40	978.96	1,506.76	674.02	3,337.72	280.15
August	76,443.62	895.38	640.34	1,079.84	234.60	7,144.58	5,773.18
September	36,264.86	539.20	72.00	994.94	434.18	3,052.82	1,160.31
October	58,373.93	225.23	515.70	776.16	352.96	6,609.52	2,226.35
November	73,951.27	456.77	777.91	766.87	585.15	2,706.67	3,510.00
December	81,801.06	715.70	1,079.28	1,822.32	1,076.70	6,087.14	0.35
January	77,556.29	318.86	1,273.18	1,997.71	1,045.43	3,687.82	69.71
February	1,18,222.41	619.81	629.86	1,612.18	451.08	6,575.97	8,609.02
March	54,329.23	436.01	585.18	2,007.23	640.53	14,296.59	4,474.69
2000-01							
April	76,261.35	253.09	580.29	1,737.93	988.52	5,003.25	45.55
May	69,519.10	364.90	816.33	954.12	830.70	4,485.83	302.38
June	49,071.33	69.84	748.95	1,147.75	1,219.25	2,804.81	1,686.66
July	78,385.93	310.38	874.57	1,090.00	511.80	5,842.60	8,821.94
August	38,347.16	1,073.62	508.84	1,148.74	795.44	5,657.32	4,641.98
September	51,882.36	333.89	1,086.87	1,389.62	1,201.51	8,720.10	1,684.93
October	46,727.44	357.23	807.93	1,504.14	864.52	6,389.69	66.16
November	1,01,186.12	632.74	554.02	1,262.40	1,193.72	5,721.86	11,540.03
December	97,822.26	822.90	727.46	1,962.05	848.74	7,592.07	1,696.75
January	1,34,842.76	659.21	535.82	762.78	434.00	6,965.60	86.51
February	1,35,778.10	478.54	1,065.76	2,062.08	901.46	8,309.82	1.08
March	1,33,625.53	541.33	1,123.04	2,430.51	1,666.39	13,343.85	39.66
2001-02							
April	1,05,583.09	952.66	1,127.97	1,955.90	976.70	8,765.41	5,059.81
May	1,51,826.33	711.53	530.07	1,060.54	465.25	7,135.00	27.37
June	2,51,024.36	486.72	– #	3,880.90	344.76	11,512.63	5,841.56
July	2,03,040.26	543.22	– #	3,569.30	122.30	8,212.40	5,091.52
August	2,13,827.82	939.08	– #	4,176.39	104.84	9,245.78	10,263.04
Week-Ended							
September 7, 2001	38,489.18	374.00	– #	845.86	37.92	998.40	1,003.92
September 14, 2001	44,383.69	36.25	– #	1,068.51	20.00	783.40	28.54
September 21, 2001	35,773.36	38.34	– #	581.66	–	2,257.76	2,440.73
September 28, 2001	39,164.22	151.48	– #	1,615.56	–	3,127.53	2,557.91

@ : Based on SGL outright transactions in government securities in secondary market at Mumbai. It excludes repo transactions.

+ : Turnover upto the last Friday of the month over the last Friday of preceding month.

$: Auction reintroduced from May 26, 1999.

* : RBI's Sales and Purchases include transactions in other offices also. It excludes transactions relating to the Government of India and the Welfare Commissioner, Bhopal.

: On account of discontinuation of 14 day Treasury Bill auction since May 8, 2001, outstanding amount is nil.

No. 25 : REPO / REVERSE REPO AUCTIONS UNDER LIQUIDITY ADJUSTMENT FACILITY

(Amount in Rs. crore)

LAF Date	Repo/ Reverse Repo Period (Day(s))	REPO					REVERSE REPO					Net Injection (+) / Absorption (–) of liquidity [(11) – (6)]	Outstanding Amount @
		Bids Received		Bids Accepted		Cut - off	Bids Received		Bids Accepted		Cut - off		
		Number	Amount	Number	Amount	Rate (%)	Number	Amount	Number	Amount	Rate (%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sep. 3, 2001	1	1	6,500	1	6,500	6.50	–	–	–	–	–	-6,500	6,500
Sep. 4, 2001	1	1	9,500	1	9,500	6.50	–	–	–	–	–	-9,500	9,500
Sep. 10, 2001	1	2	7,075	2	7,075	6.50	–	–	–	–	–	-7,075	7,075
Sep. 11, 2001	1	1	7,000	1	7,000	6.50	–	–	–	–	–	-7,000	7,000
Sep. 12, 2001	1	1	4,000	1	4,000	6.50	–	–	–	–	–	-4,000	4,000
Sep. 14, 2001	–	–	–	–	–	–	1	10	–	–	–	–	–
Sep. 17, 2001	–	–	–	–	–	–	1	30	–	–	–	–	–
Sep. 18, 2001	1	1	100	1	100	6.50	–	–	–	–	–	-100	100
Sep. 21, 2001	3	–	–	–	–	–	16	1,410	16	1,410	8.50	1,410	-1,410
Sep. 28, 2001	3	–	–	–	–	–	11	950	8	920	8.50	920	-920

@ : Net of reverse repo.

No. 26 : OPEN MARKET OPERATIONS OF RESERVE BANK OF INDIA *

(Rs. crore)

Month End		Government of India Dated Securities – Face Value			Treasury Bills		
		Purchase	Sale	Net Purchases (+) / Net Sales (–)	Purchase	Sale	Net Purchases (+) / Net Sales (–)
1		2	3	4	5	6	7
1999-00							
April	1999	–	7,020.89	-7,020.89	–	–	–
May	1999	–	7,832.03	-7,832.03	–	–	–
June	1999	–	3,709.52	-3,709.52	–	75.00	-75.00
July	1999	50.00	57.80	-7.80	–	971.91	-971.91
August	1999	–	4,840.49	-4,840.49	–	135.00	-135.00
September	1999	–	1,187.44	-1,187.44	–	–	–
October	1999	–	56.22	-56.22	2,140.50	–	2,140.50
November	1999	–	3,500.35	-3,500.35	–	10.00	-10.00
December	1999	–	–	–	–	–	–
January	2000	–	69.71	-69.71	–	–	–
February	2000	1,194.00	8,330.11	-7,136.11	866.00	–	866.00
March	2000	–	8.95	-8.95	2,694.00	–	2,694.00
2000-01							
April	2000	–	40.55	-40.55	5.00	–	5.00
May	2000	–	1,176.69	-1,176.69	–	302.00	-302.00
June	2000	–	310.36	-310.36	–	200.00	-200.00
July	2000	1,648.00	7,262.14	-5,614.14	–	685.00	-685.00
August	2000	2,823.05	239.53	2,583.52	–	1,492.00	-1,492.00
September	2000	–	1,334.93	-1,334.93	–	–	–
October	2000	–	66.15	-66.15	–	–	–
November	2000	–	11,565.40	-11,565.40	–	–	–
December	2000	–	1,671.38	-1,671.38	–	–	–
January	2001	–	86.51	-86.51	–	–	–
February	2001	–	1.80	-1.80	–	–	–
March	2001	–	39.66	-39.66	–	–	–
2001-02							
April	2001	–	5,064.35	-5,064.35	–	–	–
May	2001	–	27.27	-27.27	–	–	–
June	2001	–	5,837.11	-5,837.11	–	–	–
July	2001	–	5,091.52	-5,091.52	–	–	–
August	2001	–	10,263.03	-10,263.03	–	–	–
September	2001	4,968.00	1,063.10	3,904.90	–	–	–

* : Excluding transactions of RBI with the Government of India and the Welfare Commissioner, Bhopal.

No. 27 A : SECONDARY MARKET OUTRIGHT TRANSACTIONS IN GOVERNMENT DATED SECURITIES (FACE VALUE) @

(Amount in Rs. crore, YTM in per cent per annum)

Week ended	Government of India Dated Securities – Maturing in the year										State Govt. Securities
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-10	2010-11	2011-12	Beyond 2012	
1	2	3	4	5	6	7	8	9	10	11	12
I. September 7, 2001											
a. Amount	107.65	610.00	947.29	40.00	533.57	1,237.00	2,508.56	533.84	2,336.05	10,390.63	187.00
b. YTM*											
Min.	6.8874	7.0336	7.1203	7.3267	7.3578	7.3953	7.9038	8.8990	8.7762	8.5029	9.3599
Max.	6.9726	7.1934	7.3570	7.4304	7.9765	8.3409	8.8645	9.1477	9.1888	10.0051	9.6497
II. September 14, 2001											
a. Amount	–	1,121.50	903.65	35.00	382.39	562.00	3,531.05	661.25	3,327.05	11,667.96	18.12
b. YTM*											
Min.	–	7.1986	7.3387	7.5555	7.4554	7.5527	7.9166	8.9316	8.9194	9.1190	–
Max.	–	7.8205	7.5889	7.7434	8.2454	8.3347	9.5074	9.6805	9.4782	10.1700	–
III. September 21, 2001											
a. Amount	100.00	480.40	1,097.06	114.00	775.42	460.13	3,454.26	833.34	3,762.32	6,809.76	19.17
b. YTM*											
Min.	7.3907	7.3364	7.5019	7.7013	7.6357	7.8854	8.3062	8.3623	9.2175	9.3109	9.5747
Max.	7.8903	8.6830	9.0967	8.6122	8.9574	9.1524	9.9318	10.1342	10.0621	10.4633	9.6697
IV. September 28, 2001											
a. Amount	0.01	621.40	1,303.22	195.04	397.91	1,168.00	3,477.71	693.53	4,106.96	7,618.33	75.74
b. YTM*											
Min.	–	7.2797	7.3572	7.6450	7.4958	7.5820	8.0742	9.0820	9.1157	9.2706	9.5399
Max.	–	8.1654	8.4392	8.4324	8.3947	8.6652	9.9565	10.0314	9.6923	10.3058	9.8273

@ : As reported in Subsidiary General Ledger (SGL) Accounts at RBI, Mumbai which presently accounts for nearly 98 per cent of total transactions in the country.

YTM : Yield to Maturity.

* : Minimum and Maximum YTMs (% PA) indicative have been given excluding transactions of non-standard lot size (less than Rs.5 crore).

No. 27 B : SECONDARY MARKET OUTRIGHT TRANSACTIONS IN TREASURY BILLS (FACE VALUE) @

(Amount in Rs. crore, YTM in per cent per annum)

Week ended	Treasury Bills (14 / 91 / 182 / 364 day) Residual Maturity in Days			
	up to 14 days	15-91 days	92-182 days	183-364 days
1	2	3	4	5
I. September 7, 2001				
a. Amount	71.80	427.12	41.50	400.67
b. YTM*				
Min.	6.0880	6.5814	6.8811	7.0029
Max.	6.8276	6.8809	7.0108	7.1404
II. September 14, 2001				
a. Amount	61.50	642.15	7.08	225.23
b. YTM*				
Min.	6.2825	6.5846	–	7.0564
Max.	7.0279	7.4289	–	7.2351
III. September 21, 2001				
a. Amount	149.90	457.51	531.53	280.77
b. YTM*				
Min.	6.6551	6.7134	7.1169	7.1304
Max.	7.4791	8.3770	8.4767	8.7260
IV. September 28, 2001				
a. Amount	169.70	790.58	527.41	883.85
b. YTM*				
Min.	5.8149	6.7286	6.9305	7.1304
Max.	7.2305	7.8623	7.8135	7.7288

@ : As reported in Subsidiary General Ledger (SGL) Accounts at RBI, Mumbai which presently accounts for nearly 98 per cent of total transactions in the country.

YTM : Yield to Maturity.

* : Minimum and Maximum YTMs (% PA) indicative have been given excluding transactions of non-standard lot size (less than Rs.5 crore).

No. 28 : REDEMPTION YIELD ON GOVERNMENT OF INDIA SECURITIES BASED ON SGL TRANSACTIONS*

(per cent per annum)

Sr. No.	Nomenclature of the loan	1998-99	1999-00	2000-01	2000		2001			
					Jun.	Jul.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11
A)	**Terminable Under 5 years**									
1	10.75% 2001	10.77	9.41	10.23	..	..	..	8.53	8.30	..
2	11.00% 2001	9.79	11.07	10.10	..	..	8.73	8.54	..	..
3	11.47% 2001	11.40	10.39	9.79	..	10.73	9.16	8.68	8.06	..
4	11.75% 2001	11.38	10.20	9.87	9.72	9.84	8.90	..	8.26	7.56
5	13.31% 2001	11.64	10.07	9.73	..	..	..	8.78	8.21	7.44
6	13.55% 2001	11.79	10.20	9.49	..	9.38	8.42	..	7.77	7.49
7	5.75% 2002	9.98	13.56	11.27	..	10.87	..	..	..	..
8	6.50% 2002	10.52	9.73	10.24	..	10.57	..	..	..	..
9	7.75% 2002	..	..	11.16	..	..	8.98	..	..	..
10	11.00% 2002	11.50	10.56	10.15	9.82	9.95	8.93	..	8.05	7.37
11	11.15% 2002	11.49	10.57	9.97	9.82	9.96	9.72	8.69	8.24	7.48
12	11.55% 2002	11.52	10.51	9.85	9.67	..	8.94	8.76	8.35	7.89
13	11.68% 2002	11.62	10.48	9.71	9.82	9.69	8.96	8.76	8.26	7.45
14	12.69% 2002	11.56	10.32	9.88	9.79	9.78	8.99	8.52	8.15	7.60
15	12.75% 2002	11.51	10.37	9.38	..	..	..	..	8.89	7.94
16	13.40% 2002	10.74	10.08	10.04	..	..	..	8.89	8.26	..
17	13.80% 2002	11.57	10.27	9.82	9.94	..	8.98	..	8.10	7.43
18	13.82% 2002	12.01	10.41	9.79	9.68	..	9.03	8.86	8.33	7.53
19	5.75% 2003	8.12	12.83	11.18	..	10.64	8.48	8.54	..	8.52
20	6.50% 2003	8.59	12.19	10.58	..	10.53	..	..	10.57	..
21	11.00% 2003	11.06	11.08	..	..	..	..	..	..	8.30
22	11.10% 2003	10.92	10.65	10.05	9.91	10.09	8.97	8.77	8.36	7.62
23	11.75% 2003	11.72	10.66	10.20	10.03	10.70	8.97	8.88	..	..
24	11.78% 2003	11.85	10.73	10.44	10.14	10.03	9.00	8.91	..	8.30
25	11.83% 2003	11.33	10.61	10.04	9.99	10.19	9.07	8.73	8.38	7.53
26	6.50% 2004	8.62	9.91	10.30	..	10.42	..	..	..	..
27	9.50% 2004	11.56	11.72	10.07	10.11	10.03	..	..	..	..
28	11.30% 2004	11.93	12.09	10.08	..	..	..	..	..	..
29	11.50% 2004	11.21	10.84	10.08	9.99	10.29	9.24	9.12	8.74	7.77
30	11.57% 2004	11.82	11.26	9.47	..	..	..	..	..	..
31	11.75% 2004	11.83	10.84	10.14	10.10	10.62	9.22	8.84	8.79	7.77
32	11.95% 2004	11.92	10.81	10.23	10.14	10.49	9.30	9.09	8.69	7.87
33	11.98% 2004	11.93	10.83	10.22	10.10	10.35	9.23	9.03	8.62	7.84
34	12.35% 2004	11.39	11.37	9.77	..	..	..	..	..	..
35	12.50% 2004	11.85	10.77	10.15	10.05	10.28	9.07	8.91	8.55	7.74
36	12.59% 2004	11.84	10.77	10.11	10.10	10.14	9.35	9.14	8.79	7.83
37	6.50% 2005	9.76	8.95	11.27	..	10.44	..	..	..	..
38	8.25% 2005	12.48	11.83	10.53	..	10.39	..	9.16	..	..
39	9.90% 2005	–	–	10.21	10.08	10.38	9.31	9.05	8.65	7.96
40	10.20% 2005	–	–	10.15	..	10.37	9.32	9.07	8.66	7.92
41	10.50% 2005	12.11	11.05	10.45	..	10.23	9.52	9.66	8.86	9.43
42	11.19% 2005	11.87	10.99	10.25	10.20	10.44	9.26	9.04	8.66	7.90
43	11.25% 2005	11.84	11.00	10.34	..	10.39	9.30	9.10	8.75	7.85
44	13.75% 2005	12.59	11.05	10.95	..	..	..	..	..	..
45	14.00% 2005	11.96	11.18	10.72	10.80	10.27	..	9.46	9.29	8.60
46	14.00% 2005 (Inst)	12.02	10.85	10.47	10.30	..	9.81	9.67	9.13	8.53
B)	**Between 5 and 10 years**									
47	6.75% 2006	7.43	12.95	11.58	..	..	..	..	..	9.79
48	11.00% 2006	–	–	10.55	..	11.00	9.46	9.15	8.80	8.07
49	11.25% 2006	10.50	10.37	..	..	..	..	..	..	..
50	11.50% 2006	11.93	11.14	10.27	10.59	10.46	9.82	9.06	8.92	10.15
51	11.68% 2006	–	11.04	10.42	10.43	10.60	9.47	9.18	8.82	8.07
52	11.75% 2006	12.03	11.07	10.41	10.44	10.64	9.49	9.20	8.79	8.12
53	13.85% 2006	12.13	11.50	10.90	..	11.09	9.99	..	..	..
54	13.85% 2006 (Inst)	12.09	11.79	10.56	10.36	10.77	10.51	9.94	..	8.59
55	14.00% 2006	11.97	11.43	10.72	..	..	..	..	..	8.59

No. 28 : REDEMPTION YIELD ON GOVERNMENT OF INDIA SECURITIES BASED ON SGL TRANSACTIONS* *(Concld.)*

(per cent per annum)

Sr. No.	Nomenclature of the loan	1998-99	1999-00	2000-01	2000		2001			
					Jun.	Jul.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11
56	6.75% 2007	9.45	8.38	11.41	..	11.10	..	..	..	..
57	11.50% 2007	12.05	11.22	10.42	..	11.02	..	9.68	9.33	8.77
58	11.90% 2007	13.43	11.20	10.41	10.70	10.73	9.70	9.40	9.07	8.38
59	12.50% 2007	12.13	11.42	10.84	..	..	..	..	9.56	8.92
60	13.05% 2007	12.10	11.25	10.62	10.15	..	10.16	9.73	9.49	8.83
61	13.65% 2007	12.17	11.86	10.72	..	..	..	9.77	..	..
62	9.50% 2008	12.09	11.38	10.26	10.11	10.63	9.90	9.64	9.44	8.90
63	10.80% 2008	11.82	11.52	10.71	10.77	..	..	..	9.25	8.89
64	11.40% 2008	–	– -	10.74	..	..	9.79	9.57	9.31	8.65
65	11.50% 2008	12.03	11.30	10.57	10.75	10.74	10.02	9.78	9.62	9.24
66	12.00% 2008	10.76	11.29	10.60	10.80	10.88	10.12	9.87	9.52	9.11
67	12.10% 2008	13.12	11.42	10.84	..	..	10.12	..	9.72	9.27
68	12.15% 2008	12.10	12.20	10.55	..	..	10.25	9.99	9.63	..
69	12.22% 2008	12.19	11.56	10.67	..	11.00	10.39	9.87	9.60	..
70	12.25% 2008	12.20	11.32	10.59	10.89	10.96	10.21	9.96	9.58	9.62
71	7.00% 2009	7.61	10.53	10.57	..	10.51	..	10.02	9.45	9.21
72	11.50% 2009	12.10	11.45	10.93	10.94	10.86	10.18	9.84	9.75	9.89
73	11.99% 2009	–	11.39	10.76	10.91	10.96	10.16	9.95	9.64	9.19
74	7.50% 2010	11.16	11.68	10.56	10.94	..	10.15	9.82	9.57	9.26
75	8.75% 2010	11.20	11.64	10.68	..	..	..	9.71	9.55	9.03
76	11.30% 2010	–	–	10.85	..	11.30	10.08	9.83	9.58	9.22
77	11.50% 2010	12.04	11.43	10.93	11.05	11.09	10.31	10.10	9.74	9.45
78	12.25% 2010	12.26	12.11	10.76	10.96	10.98	10.48	10.22	9.96	9.67
79	12.29% 2010	12.15	11.47	10.80	11.02	11.03	10.47	10.20	9.90	9.67
C)	**Between 10 and 15 years**									
80	8.00% 2011	8.00	10.92	10.59	10.12	10.24	..	10.04	9.40	..
81	9.39% 2011	–	–	–	..	..	..	..	..	9.27
82	10.95% 2011	–	–	10.90	10.96	11.04	10.19	9.95	9.65	9.37
83	11.50% 2011	12.16	11.53	11.00	..	11.31	10.27	9.95	9.68	9.36
84	12.00% 2011	12.23	11.57	10.98	11.02	11.28	10.48	10.22	9.92	9.69
85	12.32% 2011	–	11.51	10.96	11.11	11.13	10.52	10.31	9.99	9.82
86	10.25% 2012	11.93	11.71	10.50	10.76	10.75	10.34	10.17	9.86	9.63
87	11.03% 2012	–	–	10.98	..	11.17	10.34	10.02	9.77	9.54
88	9.00% 2013	8.95	11.94	10.73	10.75	10.59	10.17	9.98	9.50	9.19
89	9.81% 2013	–	–	–	–	–	..	9.77	9.72	9.46
90	12.40% 2013	12.30	11.70	11.08	11.19	11.16	10.68	10.48	10.11	10.00
91	10.00% 2014	11.29	10.66	10.52	10.71	..	10.36	10.08	9.86	9.65
92	10.50% 2014	10.53	12.03	10.77	10.86	10.97	10.53	10.25	9.97	9.79
93	11.83% 2014	–	11.23	11.04	11.20	11.16	10.73	10.43	10.15	9.93
94	10.47% 2015	–	–	10.38	–	–	10.51	10.22	9.96	9.78
95	10.79% 2015	–	–	10.77	–	10.92	10.65	10.34	10.07	9.91
96	11.43% 2015	–	–	11.06	–	–	10.71	10.27	10.03	9.89
97	11.50% 2015	11.75	11.87	11.07	11.18	11.22	10.77	10.43	10.17	10.08
D)	**Over 15 years**									
98	10.71% 2016	–	–	–	–	–	10.54	10.28	10.03	9.84
99	12.30% 2016	–	11.64	10.96	11.24	11.16	10.79	10.57	10.25	10.10
100	10.45% 2018	–	–	–	–	–	10.43	10.33	10.03	9.81
101	12.60% 2018	12.54	11.88	11.22	11.25	11.30	10.86	10.62	10.38	10.20
102	10.70% 2020	–	–	11.02	11.14	11.16	10.70	10.52	10.20	9.99
103	11.60% 2020	–	–	–	–	–	10.83	10.54	10.23	9.51
104	10.25% 2021	–	–	–	–	–	..	10.17	10.10	9.95

* : Monthly redemption yield is computed from April 2000 as the mean of the daily weighted average yields of the transactions in each traded security. The weight is calculated as the share of the transaction in a given security in the aggregated value of transactions in the said security. Prior to April 2000, the redemption yield was not weighted and was computed as an average of daily prices of each security.

— : indicates that the relevant security was not available for trading.

.. : indicates that the relevant security was not traded during the month.

Inst : Security issued on instalment basis.

No. 29 : GROUP - WISE INDEX NUMBERS

(Base : 1993-94 =

Industry Group	Industry	Weight	1996-97	1997-98	1998-99	1999-00	2000-01
1	2	3	4	5	6	7	8
	General Index	**100.00**	**130.8**	**139.5**	**145.2**	**154.9**	**162.7**
Division 1	Mining and quarrying	10.47	118.2	126.4	125.4	126.7	131.4
Division 2-3	Manufacturing	79.36	133.6	142.5	148.8	159.4	167.9
Division 4	Electricity	10.17	122.0	130.0	138.4	148.5	154.4
20-21	Food products	9.08	134.3	133.8	134.7	140.3	154.5
22	Beverages, tobacco and related products	2.38	132.4	158.1	178.5	192.1	200.4
23	Cotton textiles	5.52	122.7	125.6	115.9	123.7	127.3
24	Wool, silk and man-made fibre textiles	2.26	145.1	172.0	176.8	197.8	209.3
25	Jute and other vegetable fibre textiles (except cotton)	0.59	97.8	114.3	106.0	105.0	105.8
26	Textile products (including wearing apparel)	2.54	146.3	158.7	153.1	156.1	162.4
27	Wood and wood products, furniture and fixtures	2.70	131.9	128.5	121.0	101.4	104.3
28	Paper and paper products and printing, publishing and allied industries	2.65	136.9	146.4	169.8	180.5	164.0
29	Leather and leather & fur products	1.14	107.8	110.2	119.1	135.5	150.0
30	Basic chemicals and chemical products (except products of petroleum and coal)	14.00	122.7	140.4	149.7	164.6	176.6
31	Rubber, plastic, petroleum and coal products	5.73	118.4	124.6	138.7	137.2	153.4
32	Non- metallic mineral products	4.40	144.5	163.9	177.5	220.8	218.2
33	Basic metal and alloy industries	7.45	139.8	143.5	139.9	146.9	149.6
34	Metal products and parts, except machinery and equipment	2.81	110.5	119.2	139.5	137.8	158.5
35-36	Machinery and equipment other than transport equipment	9.57	144.3	152.7	155.0	182.5	195.8
37	Transport equipment and parts	3.98	149.1	152.9	183.6	194.1	190.3
38	Other manufacturing industries	2.56	170.2	168.0	169.7	142.5	159.1

OF INDUSTRIAL PRODUCTION
100)

1999-00	2000-01					2001-02 (P)			
March	April	May	June	July	March	April	May	June	July
9	10	11	12	13	14	15	16	17	18
174.5	**156.5**	**160.0**	**154.9**	**156.5**	**178.6**	**160.6**	**162.3**	**159.0**	**160.6**
143.2	121.2	128.3	125.6	127.1	145.0	125.3	128.3	121.1	123.7
180.3	161.9	164.7	159.7	161.3	184.9	166.2	167.0	165.1	166.1
161.7	151.1	155.6	147.7	149.5	164.5	153.3	160.3	150.8	155.8
198.6	164.9	127.7	108.8	104.1	201.8	156.4	123.3	120.9	109.4
192.4	194.1	201.4	191.0	196.9	193.1	212.0	213.4	211.5	211.9
130.2	125.1	130.1	128.0	131.8	127.6	125.0	128.2	126.4	132.7
208.8	183.6	195.2	215.7	198.8	221.3	209.3	205.4	244.4	219.1
89.5	74.9	95.3	108.9	113.5	108.6	106.2	85.6	83.2	89.8
160.5	163.2	169.3	163.9	156.6	164.2	168.2	170.5	151.5	171.1
116.7	98.0	106.8	109.2	109.6	103.9	89.9	91.8	94.5	101.1
165.8	157.6	164.0	162.6	166.3	169.0	167.3	164.4	162.7	158.2
128.7	144.7	140.1	162.8	154.5	152.2	153.8	160.3	170.5	184.0
166.8	162.2	172.2	172.5	179.7	184.0	170.3	177.8	180.6	186.7
153.4	138.6	156.3	147.2	151.4	180.8	159.0	166.0	172.0	171.2
253.3	223.4	234.0	205.9	201.7	256.0	225.5	237.5	223.3	201.6
165.9	145.9	150.5	146.2	152.1	156.7	151.0	150.8	149.9	152.6
175.8	183.7	169.9	169.0	168.9	157.4	146.3	155.5	149.6	153.8
212.3	180.6	189.7	189.2	191.1	215.0	181.9	193.4	182.3	194.2
245.2	184.7	194.8	180.8	183.9	220.4	190.0	194.8	190.2	192.6
166.1	141.0	146.8	152.6	152.6	199.7	167.0	169.2	157.9	154.3

See Notes on Tables'.

Source : Central Statistical Organisation, Government of India.

No. 30 : INDEX NUMBER OF INDUSTRIAL PRODUCTION (USE - BASED CLASSIFICATION)

(Base : 1993-94 = 100)

Year / Month		Basic Goods	Capital Goods	Intermediate Goods	Consumer Goods	Consumer Durables	Consumer Non-durables
1		2	3	4	5	6	7
WEIGHT		**35.57**	**9.26**	**26.51**	**28.66**	**5.36**	**23.30**
1996-97		125.0	128.2	135.9	134.3	152.9	130.2
1997-98		133.6	135.6	146.8	141.7	164.9	136.5
1998-99		135.8	152.7	155.8	144.8	174.1	138.1
1999-00		143.3	163.3	169.5	153.0	198.7	142.5
2000-01		148.9	166.2	177.4	165.2	227.6	150.8
1999-00							
March	2000	159.6	194.4	178.6	182.8	257.8	165.5
2000-01							
April	2000	140.7	164.2	170.0	161.2	211.4	149.6
May	2000	148.5	161.6	179.2	155.8	229.4	138.9
June	2000	145.5	161.5	173.2	147.6	219.5	131.1
July	2000	147.8	161.7	176.3	147.3	226.4	129.1
March	2001	159.1	192.2	190.6	187.5	257.2	171.4
2001-02 (P)							
April	2001	146.0	157.0	176.4	165.2	224.9	151.5
May	2001	150.2	158.6	182.7	159.5	245.0	139.8
June	2001	145.9	146.5	180.2	160.0	239.8	141.6
July	2001	147.7	147.3	182.1	161.2	262.7	137.8

See 'Notes on Tables'.

Source : Central Statistical Organisation, Government of India.

No. 31 : NEW CAPITAL ISSUES BY NON-GOVERNMENT PUBLIC LIMITED COMPANIES

(Amount in Rs. crore)

Security & Type of Issue	1999-00 (April - March)		2000-01 (April - March)		2000-01 (April - July)		2001-02 (April - July)	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5	6	7	8	9
1) Equity Shares (a+b)	69 (48)	2,752.5 (2,169.3)	134 (57)	2,666.5 (1,267.3)	61 (22)	738.8 (491.6)	1 (1)	10.0 (5.0)
a) Prospectus	46 (32)	1,657.3 (1,405.9)	116 (52)	2,365.5 (1,219.9)	57 (21)	681.7 (483.2)	1 (1)	10.0 (5.0)
b) Rights	23 (16)	1,095.2 (763.4)	18 (5)	301.0 (47.4)	4 (1)	57.1 (8.4)	– (–)	– (–)
2) Preference Shares (a+b)	–	–	2	142.2	1	51.2	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	–	–	2	142.2	1	51.2	–	–
3) Debentures (a+b)	1	30.0	2	90.2	1	54.0	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	1	30.0	2	90.2	1	54.0	–	–
of which: I) Convertible (a+b)	1	30.0	1	36.2	–	–	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	1	30.0	1	36.2	–	–	–	–
II) Non-Convertible (a+b)	–	–	1	54.0	1	54.0	–	–
a) Prospectus	–	–	–	–	–	–	–	–
b) Rights	–	–	1	54.0	1	54.0	–	–
4) Bonds (a+b)	9	2,370.8	7	2,050.0	1	200.0	2	800.0
a) Prospectus	9	2,370.8	7	2,050.0	1	200.0	2	800.0
b) Rights	–	–	–	–	–	–	–	–
5) Total (1+2+3+4)	79	5,153.3	145	4,948.9	64	1,044.0	3	810.0
a) Prospectus	55	4,028.1	123	4,415.5	58	881.7	3	810.0
b) Rights	24	1,125.2	22	533.4	6	162.3	–	–

Note : Figures in brackets indicate data in respect of premium on capital issues which are included in respective totals.

Also see 'Notes on Tables'.

Source : 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.

No. 32 : INDEX NUMBERS OF ORDINARY SHARE PRICES

Year / Month	BSE Sensitive Index (Base : 1978 - 79 = 100)			BSE - 100 (Base : 1983 - 84 = 100)			S & P CNX Nifty.* (Base : Nov. 3,1995 = 1000)		
	Average	High	Low	Average	High	Low	Average	High	Low
1	2	3	4	5	6	7	8	9	10
1998-99	3294.78	4280.96	2764.16	1457.07	1889.93	1234.61	954.43	1247.15	800.10
1999-00	4658.63	5933.56	3245.27	2278.16	3839.09	1408.80	1368.62	1756.00	931.35
2000-01	4269.69	5541.54	3540.65	2170.51	3044.77	1678.02	1334.76	1624.65	1124.70
September 2000	4416.61	4763.63	4032.37	2249.43	2421.95	2037.32	1371.27	1467.65	1310.75
October 2000	3819.69	4160.41	3593.63	1931.61	2096.37	1802.37	1201.60	1297.80	1266.40
November 2000	3928.10	4028.71	3788.53	2017.59	2085.60	1940.38	1240.59	1272.75	1136.00
December 2000	4081.42	4284.98	3826.82	2113.84	2259.46	1933.40	1291.43	1354.30	1200.80
January 2001	4152.39	4372.04	3955.08	2130.88	2231.67	2023.82	1316.96	1379.70	1212.00
February 2001	4310.13	4437.99	4069.68	2203.99	2290.24	2047.25	1371.91	1416.70	1254.30
March 2001	3807.64	4271.65	3540.65	1829.32	2138.89	1678.02	1214.47	1358.05	1295.55
April 2001	3487.44	3605.01	3183.77	1641.89	1729.09	1472.93	1116.41	1155.35	1124.70
May 2001	3613.84	3742.07	3494.48	1753.43	1826.09	1693.81	1159.44	1198.45	1024.90
June 2001	3439.01	3557.64	3318.67	1661.26	1734.90	1568.21	1107.15	1148.05	1122.05
July 2001	3346.88	3453.99	3251.53	1572.67	1618.80	1528.21	1077.98	1110.45	1051.70
August 2001	3304.99	3337.91	3244.95	1559.95	1581.95	1534.73	1069.01	1078.95	1053.73
September 2001	2918.28	3231.60	2600.12	1373.77	1527.66	1216.37	949.43	1048.20	854.20

* : NSE- 50, *i.e.,* Nifty has been rechristened as 'S & P CNX Nifty' with effect from July 28, 1998.

Sources : 1. The Stock Exchange, Mumbai.
2. National Stock Exchange of India Ltd.

No. 33 : VOLUME IN CORPORATE DEBT TRADED AT NSE*

(Rs. crore)

Week / Month / Year (April-March)			Volume
1			2
1998-99			**878.42**
1999-00			**559.37**
2000-01			**708.88**
April		2000	4.60
May		2000	60.27
June		2000	10.85
July		2000	30.16
August		2000	27.91
September		2000	74.09
October		2000	46.77
November		2000	168.68
December		2000	112.70
January		2001	58.62
February		2001	35.09
March		2001	79.14
2001-2002			
April		2001	10.73
May		2001	101.46
June		2001	118.33
July		2001	111.33
August		2001	97.26
September		2001	56.16
Week ended			
August	4,	2001	–
August	11,	2001	37.09
August	18,	2001	24.76
August	25,	2001	20.27
September	1,	2001	15.14
September	8,	2001	24.68
September	15,	2001	5.45
September	22,	2001	26.04
September	29,	2001	–

* : Excluding trade in commercial papers.

Source: National Stock Exchange of India Ltd.

No. 34 : ASSISTANCE SANCTIONED AND DISBURSED BY ALL-INDIA FINANCIAL INSTITUTIONS

(Rs. crore)

Institutions	April-August		April-March	
	2000	2001	1999-00	2000-01
1	2	3	4	5
<u>**Sanctions**</u>				
All-India Development Banks	**36,353.5**	**31,868.8**	**81,815.8**	**97,032.2**
1. IDBI	11,057.1	9,965.2	25,786.5	28,163.1
2. IFCI	481.1	166.6	2,080.0	1,858.5
3. ICICI	21,307.1	19,685.2	43,522.8	56,092.0
4. SIDBI	2,529.2	1,362.9	8,088.4	8,972.7
5. IIBI	979.0	688.9	2,338.1	1,945.9
Specialised Financial Institutions	**88.7**	**38.3**	**246.4**	**339.3**
6. IVCF *	1.3	1.0	8.1	3.8
7. ICICI VENTURE * *	78.3	18.6	155.9	229.9
8. TFCI	9.1	18.7	82.4	105.6
Investment Institutions	**6,689.4**	**3,563.7**	**15,812.2**	**17,899.9**
9. LIC	2,892.2	2,283.7	6,825.5	10,867.2
10. UTI	3,389.0	582.8	6,845.0	5,972.3
11. GIC @	408.2	697.2	2,141.7	1,060.4
Total	**43,131.6**	**35,470.8**	**97,874.4**	**1,15,271.4**
<u>**Disbursements**</u>				
All-India Development Banks	**20,173.2**	**19,639.1**	**51,986.6**	**57,768.4**
1. IDBI	5,146.1	5,618.7	16,036.5	16,936.6
2. IFCI	765.8	346.9	3,272.1	2,120.9
3. ICICI	11,999.6	12,014.2	25,835.7	31,964.6
4. SIDBI	1,773.3	1,186.7	5,402.7	5,190.4
5. IIBI	488.4	472.6	1,439.6	1,555.9
Specialised Financial Institutions	**96.8**	**40.9**	**259.8**	**253.6**
6. IVCF *	1.7	0.8	11.9	3.3
7. ICICI VENTURE * *	72.0	26.6	136.2	189.6
8. TFCI	23.1	13.5	111.7	60.7
Investment Institutions	**5,078.4**	**4,985.8**	**12,764.0**	**12,693.5**
9. LIC	2,692.2	3,609.6	5,634.3	7,095.0
10. UTI	1,887.8	693.7	5,162.1	4,599.9
11. GIC @	498.4	682.5	1,967.6	998.6
Total	**25,348.4**	**24,665.7**	**65,010.4**	**70,715.5**

* : IVCF (erstwhile RCTC).
** : TDICI Ltd. has been renamed as 'ICICI Venture Funds Management Company Limited' with effect from October 8, 1998.
@ : GIC and its subsidiaries.
Note : Data are provisional. Monthly data are not adjusted for inter-institutional flows.

Source : IDBI for column 2 & 3 and respective Financial Institutions for column 4 & 5.

No. 35 : BULLION PRICES (SPOT) – MUMBAI

As on the last Friday / Friday (1)	Standard Gold (Rs. per 10 grams)		Silver (Rs. per kilogram)	
	Opening	Closing	Opening	Closing
1	2	3	4	5
1990 - 91	3,470	3,440	6,668	6,663
1998 - 99	4,270	4,250	7,675	7,670
1999 - 00	4,400	4,380	7,900	7,900
2000 - 01	4,230	4,225	7,270	7,270
April 1999	4,440	4,430	8,185	8,215
May 1999	4,250	4,250	7,780	7,755
June 1999	4,120	4,120	7,965	7,940
July 1999	4,060	4,060	8,225	8,250
August 1999	4,040	4,050	8,005	8,040
September 1999	4,150	4,150	8,125	8,125
October 1999	4,650	4,640	8,205	8,190
November 1999	4,660	4,665	8,125	8,130
December 1999	4,530	4,530	8,260	8,225
January 2000	4,525	4,540	8,230	8,245
February 2000	4,700	4,700	8,185	8,130
March 2000	4,400	4,380	7,900	7,900
April 2000	4,370	4,370	7,850	7,870
May 2000	4,350	4,345	7,790	7,830
June 2000	4,580	4,570	7,985	7,980
July 2000	4,500	4,480	7,975	7,970
August 2000	4,515	4,520	7,990	7,990
September 2000	4,540	4,535	8,125	8,125
October 2000	4,530	4,530	7,975	7,970
November 2000	4,485	4,480	7,815	7,815
December 2000	4,560	4,550	7,715	7,720
January 2001	4,430	4,430	7,850	7,830
February 2001	4,325	4,325	7,420	7,440
March 2001	4,230	4,225	7,270	7,270
April 2001	4,305	4,320	7,410	7,435
May 2001	4,540	4,560	7,620	7,640
Week Ended				
June 1, 2001	4,350	4,350	7,495	7,500
June 8, 2001	4,360	4,350	7,400	7,400
June 15, 2001	4,445	4,430	7,515	7,490

Note : Information on bullion prices for the period subsequent to June 15, 2001 is not reported in this Table as the Bombay Bullion Association Ltd., has discontinued the release of this data.

Also see 'Notes on Tables'.

Source : Bombay Bullion Association Ltd.

No. 36 : CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS – ALL-INDIA AND SELECTED CENTRES (Base : 1982 = 100)

Centre	Linking Factor (1)	1990-91	1999-00	2000-01	2000		2001				
					Jul.	Aug.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
All India (2)	**4.93**	**193**	**428**	**444**	**445**	**443**	**448**	**451**	**457**	**463**	**466**
Ahmedabad	4.78	196	428	444	446	444	452	457	464	471	473
Alwaye	5.19	176	428	446	447	442	449	456	462	466	457
Asansol	4.77	189	403	412	415	418	413	418	421	429	453
Bangalore	5.66	183	410	429	423	427	433	432	436	442	441
Bhavnagar	4.99	198	453	469	472	467	473	486	488	498	503
Bhopal	5.46	196	444	457	455	452	470	475	482	502	506
Chandigarh	..	189	451	465	463	462	481	484	485	492	497
Chennai	5.05	189	452	478	476	475	472	479	488	492	496
Coimbatore	5.35	178	410	435	437	432	436	437	443	440	445
Delhi	4.97	201	486	518	524	520	526	527	533	536	536
Faridabad	..	187	437	446	452	447	463	468	471	483	483
Guwahati	..	195	443	461	463	461	468	470	475	477	479

See 'Notes on Tables'.

No. 36 : CONSUMER PRICE INDEX NUMBERS FOR INDUSTRIAL WORKERS – ALL-INDIA AND SELECTED CENTRES (Base : 1982 = 100) *(Concld.)*

Centre	Linking Factor (1)	1990-91	1999-00	2000-01	2000		2001				
					Jul.	Aug.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
Howrah	4.12	212	485	504	501	505	509	507	514	517	533
Hyderabad	5.23	182	399	424	422	422	427	437	441	441	442
Jaipur	5.17	190	392	407	407	404	415	414	420	431	432
Jamshedpur	4.68	187	398	408	408	408	415	416	419	423	425
Kolkata	4.74	203	439	461	501	456	465	465	472	502	516
Ludhiana	..	193	382	401	402	399	405	405	405	419	423
Madurai	5.27	192	428	443	440	441	443	449	448	440	442
Monghyr-Jamalpur	5.29	189	417	413	409	411	415	403	404	407	416
Mumbai	5.12	201	474	512	512	507	521	524	530	535	534
Mundakayam	4.67	184	448	452	455	449	445	449	456	453	453
Nagpur	4.99	201	439	469	475	474	476	478	483	490	496
Pondicherry	..	204	468	481	479	474	464	468	480	484	478
Rourkela	3.59	179	399	408	406	410	402	405	401	402	407
Saharanpur	5.06	195	391	405	401	411	410	416	422	426	432
Solapur	5.03	197	452	466	483	481	458	461	470	483	487
Srinagar	5.47	184	471	485	477	472	495	497	502	503	553

Source : Labour Bureau, Ministry of Labour, Government of India.

No. 37 : CONSUMER PRICE INDEX NUMBERS FOR URBAN NON-MANUAL EMPLOYEES – ALL-INDIA AND SELECTED CENTRES (Base : 1984 – 85 = 100)

Centre	1990-91	1999-00	2000-01	2000		2001					
				Jul.	Aug.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
All India (1)	**161**	**352**	**371**	**370**	**370**	**377**	**379**	**382**	**386**	**391**	**393**
Mumbai	154	353	375	371	371	385	384	387	392	396	396
Delhi	156	359	381	382	381	386	388	388	394	399	402
Kolkata	164	328	344	344	345	346	349	352	359	360	357
Chennai	168	386	420	413	419	431	432	436	440	453	454
Hyderabad	164	357	383	380	382	390	396	404	405	412	413
Bangalore	161	365	389	386	385	397	399	403	409	413	414
Lucknow	158	326	342	343	346	346	351	357	360	368	368
Ahmedabad	153	316	337	332	334	341	342	346	351	355	356
Jaipur	165	357	371	368	368	382	381	382	385	386	391
Patna	167	340	344	344	344	344	347	347	351	354	362
Srinagar	150	364	393	384	383	410	415	414	413	413	405
Thiruvananthapuram	152	338	362	362	360	369	370	374	377	382	384
Cuttack	154	357	365	366	364	366	369	370	372	383	385
Bhopal	166	343	361	359	358	367	366	372	373	375	374
Chandigarh	176	429	445	442	444	454	455	454	459	463	467
Shillong	179	359	382	378	380	394	396	399	399	406	406
Shimla	163	356	377	377	378	383	385	385	387	395	398
Jammu	161	354	373	369	371	380	385	388	392	398	403
Amritsar	152	301	317	311	315	324	323	322	324	329	334
Kozhikode	150	348	367	368	367	369	369	371	374	375	371
Kanpur	165	327	338	340	337	342	345	347	353	358	360
Indore	170	346	363	360	360	370	373	374	375	383	383
Pune	162	355	384	380	380	394	397	400	404	406	406
Jabalpur	164	330	342	342	342	344	346	347	352	361	362
Jodhpur	168	345	361	357	360	366	372	372	373	381	389

See 'Notes on Tables'.

Source : Central Statistical Organisation, Government of India.

No. 38 : CONSUMER PRICE INDEX NUMBERS FOR AGRICULTURAL / RURAL LABOURERS
A: CONSUMER PRICE INDEX NUMBERS FOR AGRICULTURAL LABOURERS

(Base : July 1986 – June 1987 = 100)

State	1990-91 (1)	Linking Factor (2)	1999-00	2000-01	2000	2001					
					Aug.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
All India	**830**	**5.89**	**309**	**304**	**308**	**300**	**301**	**303**	**306**	**309**	**312**
Andhra Pradesh	657	4.84	318	317	324	311	309	312	318	320	326
Assam	854	(3)	323	323	326	318	321	323	325	321	318
Bihar	858	6.22	300	282	289	277	278	278	281	283	285
Gujarat	742	5.34	310	314	312	312	315	320	325	328	329
Haryana		(5)	312	313	316	312	316	318	319	320	322
Himachal Pradesh		(5)	294	292	300	290	292	289	289	295	303
Jammu & Kashmir	843	5.98	323	326	329	325	326	330	331	333	332
Karnataka	807	5.81	316	302	313	293	294	299	302	304	307
Kerala	939	6.56	312	321	317	319	320	323	326	325	323
Madhya Pradesh	862	6.04	313	310	315	307	308	309	313	313	316
Maharashtra	801	5.85	304	303	309	298	295	298	302	304	309
Manipur		(5)	312	317	320	316	312	312	313	311	312
Meghalaya		(5)	338	346	346	343	345	344	345	346	348
Orissa	830	6.05	316	305	312	299	299	298	300	308	313
Punjab	930	(4)	314	316	319	311	314	318	319	325	331
Rajasthan	885	6.15	310	311	313	309	310	312	311	311	311
Tamil Nadu	784	5.67	302	299	298	295	295	300	302	304	304
Tripura		(5)	331	324	346	307	309	315	315	317	323
Uttar Pradesh	960	6.60	307	301	303	302	303	303	307	312	313
West Bengal	842	5.73	303	292	292	288	295	296	295	302	305

See 'Notes on Tables'.

No. 38 : CONSUMER PRICE INDEX NUMBERS FOR AGRICULTURAL / RURAL LABOURERS
B : CONSUMER PRICE INDEX NUMBERS FOR RURAL LABOURERS (6)
(Base : July 1986 – June 1987 = 100)

State	1995-96 (7)	1999-00	2000-01	2000	2001						
				Aug.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
1	2	3	4	5	6	7	8	9	10	11	12
All India	**240**	**310**	**306**	**309**	**301**	**302**	**303**	**306**	**309**	**311**	**314**
Andhra Pradesh	244	318	318	325	312	312	310	314	319	321	327
Assam	243	321	321	325	314	317	320	322	325	321	318
Bihar	223	302	284	291	276	280	280	280	283	285	287
Gujarat	241	311	315	313	315	314	317	321	326	330	330
Haryana	237	312	314	316	312	313	316	318	320	321	323
Himachal Pradesh	221	295	295	300	292	293	295	292	295	301	309
Jammu & Kashmir	225	316	319	321	316	318	319	323	325	326	326
Karnataka	250	317	304	314	297	295	296	301	304	306	309
Kerala	260	314	324	320	323	322	323	326	329	329	326
Madhya Pradesh	239	314	313	317	309	310	311	312	316	316	319
Maharashtra	247	303	303	309	300	299	296	299	303	305	310
Manipur	245	312	317	321	314	317	313	313	314	312	312
Meghalaya	250	336	343	344	339	341	342	342	343	344	346
Orissa	236	315	305	312	300	299	299	298	301	308	313
Punjab	247	317	320	321	316	316	319	322	323	329	334
Rajasthan	239	310	312	313	310	311	312	315	312	312	311
Tamil Nadu	244	301	299	298	295	295	295	300	303	305	305
Tripura	219	328	318	343	307	299	302	308	308	311	319
Uttar Pradesh	231	307	303	305	300	304	306	306	310	315	316
West Bengal	232	304	293	293	285	289	296	297	296	303	307

Source : Labour Bureau, Ministry of Labour, Government of India.

No. 39 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (AVERAGES)
(Base : 1993-94 = 100)

Average of months/ Average of weeks ended Saturday	Weight	1994-95	1999-00	2000-01	2000		2001				
		(April-March)			Jun.	Jul.	Mar.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11	12
ALL COMMODITIES	**100.000**	**112.6**	**145.3**	**155.7**	**152.7**	**153.1**	**159.1**	**159.9**	**160.3**	**160.8**	**161.1**
I. PRIMARY ARTICLES	**22.025**	**115.8**	**158.0**	**162.5**	**164.6**	**163.9**	**161.4**	**165.1**	**167.1**	**169.7**	**168.6**
(A) Food Articles	**15.402**	**112.8**	**165.5**	**170.5**	**174.1**	**171.8**	**168.0**	**172.8**	**174.5**	**176.3**	**174.5**
a. Foodgrains (Cereals+Pulses)	5.009	114.7	176.4	173.8	178.4	179.0	169.8	171.1	173.0	175.7	175.6
a1. Cereals	4.406	113.6	177.8	173.0	178.4	178.3	168.2	169.6	171.3	173.3	173.2
a2. Pulses	0.603	122.2	166.1	179.6	178.3	183.7	181.1	182.4	185.8	193.1	192.6
b. Fruits & Vegetables	2.917	108.0	154.5	160.0	157.3	152.0	160.4	172.9	179.9	185.3	180.3
b1. Vegetables	1.459	110.4	142.1	139.4	141.6	142.8	112.3	140.8	158.0	178.3	203.7
b2. Fruits	1.458	105.7	166.8	180.7	173.1	161.4	208.6	205.0	201.9	192.2	156.8
c. Milk	4.367	110.3	147.6	163.2	167.3	162.9	162.7	167.7	166.1	164.1	163.5
d. Eggs,meat & fish	2.208	116.1	174.0	186.0	193.6	193.7	183.6	189.4	190.4	190.2	186.9
e. Condiments & spices	0.662	126.2	226.4	202.5	211.3	204.0	187.0	180.5	182.4	190.8	190.5
f. Other food articles	0.239	111.6	150.1	127.9	131.4	133.6	122.2	126.2	128.0	131.9	125.3
(B) Non-Food Articles	**6.138**	**124.2**	**143.0**	**146.5**	**145.1**	**147.9**	**148.3**	**149.5**	**152.4**	**157.4**	**157.6**
a. Fibres	1.523	150.0	144.9	156.7	156.9	157.0	155.9	159.9	161.6	168.5	164.5
b. Oil seeds	2.666	118.5	133.4	129.3	130.1	137.0	128.6	129.3	134.1	141.3	143.5
c. Other non-food articles	1.949	112.0	154.6	162.1	156.4	155.7	169.1	169.2	170.3	170.7	171.5
(C) Minerals	**0.485**	**104.9**	**110.4**	**113.5**	**110.5**	**115.8**	**118.0**	**117.6**	**117.4**	**117.5**	**117.6**
a. Metallic minerals	0.297	103.8	115.0	118.1	113.6	122.2	122.7	122.6	122.6	122.6	122.6
b. Other minerals	0.188	106.7	103.1	106.3	105.7	105.8	110.6	109.5	109.3	109.4	109.8

See 'Notes on Tables'.

No. 39 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (AVERAGES) *(Contd.)*
(Base : 1993-94 = 100)

Average of months/ Average of weeks ended Saturday	Weight	1994-95	1999-00	2000-01	2000		2001				
		(April-March)			Jun.	Jul.	Mar.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11	12
II. FUEL, POWER, LIGHT & LUBRICANTS	**14.226**	**108.9**	**162.0**	**208.1**	**194.3**	**194.5**	**222.8**	**222.7**	**222.6**	**222.5**	**222.3**
a. Coal mining	1.753	105.1	149.1	161.1	156.3	156.3	184.6	184.6	183.7	182.5	181.1
b. Minerals oils	6.990	106.1	159.9	226.2	206.1	206.6	239.7	239.6	239.6	239.6	239.6
c. Electricity	5.484	113.6	168.9	200.0	191.4	191.4	213.4	213.4	213.4	213.4	213.4
III. MANUFACTURED PRODUCTS	**63.749**	**112.3**	**137.2**	**141.7**	**139.2**	**140.1**	**144.2**	**144.2**	**144.1**	**144.0**	**144.9**
(A) Food Products	**11.538**	**114.1**	**151.3**	**145.7**	**144.8**	**146.3**	**144.3**	**144.1**	**143.5**	**144.0**	**146.5**
a. Dairy products	0.687	117.0	184.7	181.9	179.9	179.9	186.4	186.3	186.7	186.9	187.2
b. Canning, preserving & processing of fish	0.047	100.0	153.3	153.7	153.3	153.7	153.8	153.8	153.8	153.8	153.8
c. Grain mill products	1.033	103.7	159.8	152.6	152.2	153.7	152.8	150.6	143.1	142.6	144.8
d. Bakery products	0.441	107.7	173.2	171.5	171.1	171.3	169.7	169.7	169.3	170.5	172.1
e. Sugar, khandsari & gur	3.929	119.1	156.0	153.2	151.8	153.0	147.7	148.6	147.7	147.3	146.9
f. Manufacture of common salts	0.021	104.8	230.8	187.5	184.9	187.1	192.3	187.4	187.3	174.8	171.5
g. Cocoa, chocolate, sugar & confectionery	0.087	118.3	149.0	154.7	147.0	150.3	159.1	159.1	164.7	163.6	164.7
h. Edible oils	2.775	110.9	122.1	103.3	102.3	105.7	103.7	102.9	104.5	106.4	114.1
i. Oil cakes	1.416	121.6	138.6	141.2	142.1	142.4	140.4	140.3	140.4	142.2	147.3
j. Tea & coffee proccessing	0.967	104.4	185.5	189.1	188.6	189.8	191.2	191.0	189.6	189.8	189.4
k. Other food products n.e.c.	0.154	111.6	176.8	185.6	184.1	183.9	187.1	187.1	187.1	185.9	183.7
(B) Beverages, Tobacco & Tobacco Products	**1.339**	**118.3**	**174.1**	**179.8**	**174.9**	**178.6**	**191.8**	**192.2**	**192.3**	**192.5**	**192.8**
a. Wine Industries	0.269	150.2	177.8	165.5	166.6	166.6	169.4	170.2	170.2	170.2	170.2
b. Malt liquor	0.043	109.1	180.2	182.8	184.1	187.0	182.7	183.2	184.6	184.3	184.6
c. Soft drinks & carbonated water	0.053	109.1	171.6	177.9	177.9	177.9	177.9	177.9	178.9	181.6	183.5
d. Manufacture of bidi, cigarettes, tobacco & zarda	0.975	110.4	173.0	183.8	176.7	181.6	199.1	199.4	199.6	199.6	199.9

No. 39 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (AVERAGES) *(Contd.)*
(Base : 1993-94 = 100)

Average of months/ Average of weeks ended Saturday	Weight	1994-95	1999-00	2000-01	2000		2001				
		(April-March)			Jun.	Jul.	Mar.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11	12
(C) Textiles	**9.800**	**118.2**	**115.0**	**119.9**	**117.9**	**118.5**	**121.7**	**121.4**	**121.1**	**121.0**	**121.7**
a. Cotton textiles	4.215	132.7	144.2	151.0	149.1	150.6	152.9	152.9	153.1	153.4	155.0
a1. Cotton yarn	3.312	136.2	141.4	149.5	147.4	149.3	151.7	151.8	152.0	152.2	154.0
a2. Cotton cloth (Mills)	0.903	119.9	154.7	156.4	155.1	155.5	157.3	157.4	157.4	157.6	158.6
b. Man made textiles	4.719	105.9	82.7	86.6	84.4	85.2	87.6	87.1	86.5	85.6	85.7
b1. Man made fibre	4.406	105.6	79.6	83.7	81.5	82.3	84.4	83.9	83.3	82.4	82.5
b2. Man made cloth	0.313	109.9	126.3	128.4	126.3	126.8	132.4	132.4	131.7	130.8	131.3
c. Woollen textiles	0.190	132.6	147.3	141.6	141.8	136.6	147.9	149.6	149.7	148.6	147.8
d. Jute, hemp & mesta textiles	0.376	110.3	160.7	162.6	159.9	153.3	172.2	170.6	170.9	175.5	173.2
e. Other misc. textiles	0.300	109.0	134.6	138.4	137.6	137.2	137.8	137.6	137.8	137.7	137.3
(D) Wood & Wood Products	**0.173**	**110.9**	**193.9**	**180.0**	**190.8**	**191.9**	**170.3**	**170.3**	**170.3**	**170.3**	**170.3**
(E) Paper & Paper Products	**2.044**	**106.1**	**149.3**	**165.4**	**156.3**	**161.8**	**177.1**	**178.4**	**177.6**	**174.9**	**174.0**
a. Paper & pulp	1.229	108.7	136.8	155.3	147.0	155.9	163.2	165.3	165.3	165.5	164.0
b. Manufacture of board	0.237	110.9	127.3	137.1	134.2	134.2	139.0	139.0	139.0	139.7	140.1
c. Printing & publishing of newspapers, periodicals etc.	0.578	98.5	184.8	198.5	185.0	185.0	222.3	222.5	219.4	209.4	209.3
(F) Leather & Leather Products	**1.019**	**109.7**	**154.6**	**149.6**	**152.7**	**152.7**	**143.1**	**143.1**	**143.1**	**143.1**	**143.1**

No. 39 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (AVERAGES) *(Contd.)*
(Base : 1993-94 = 100)

Average of months/ Average of weeks ended Saturday	Weight	1994-95	1999-00	2000-01	2000		2001				
		(April-March)			Jun.	Jul.	Mar.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11	12
(G) Rubber & Plastic Products	**2.388**	**106.4**	**123.6**	**125.5**	**125.6**	**125.6**	**124.6**	**124.5**	**125.8**	**126.7**	**126.8**
a. Tyres & tubes	1.286	104.1	131.7	130.7	131.2	131.3	128.5	128.6	128.6	128.6	127.8
a1. Tyres	1.144	103.4	127.5	126.5	127.0	127.1	124.0	124.1	124.1	124.1	123.2
a2. Tubes	0.142	110.0	166.1	165.5	165.7	165.3	164.5	164.5	164.5	164.5	164.5
b. Plastic products	0.937	106.8	110.9	112.1	111.4	111.3	112.4	112.2	115.3	117.7	119.3
c. Other rubber & plastic products	0.165	121.0	132.8	161.0	162.5	162.5	162.5	162.5	162.5	162.5	162.5
(H) Chemicals & Chemical Products	**11.931**	**116.6**	**155.2**	**164.4**	**162.7**	**162.1**	**167.0**	**167.3**	**168.1**	**167.9**	**169.2**
a. Basic heavy inorganic chemicals	1.446	112.2	130.4	131.2	133.2	131.6	128.7	129.8	135.6	133.9	135.5
b. Basic heavy organic chemicals	0.455	118.7	93.8	119.0	98.8	102.6	139.3	136.9	136.9	137.3	136.8
c. Fertilisers & pesticides	4.164	117.7	140.3	153.8	152.8	153.1	155.7	156.6	156.8	156.8	156.8
c1. Fertilisers	3.689	115.8	142.8	157.9	156.8	157.0	160.1	160.2	160.2	160.2	160.2
c2. Pesticides	0.475	132.5	121.0	121.7	121.7	122.3	121.6	128.3	130.5	130.5	130.5
d. Paints, varnishes & lacquers	0.496	101.3	114.1	114.0	113.8	113.2	114.1	114.1	114.2	114.2	116.0
e. Dyestuffs & indigo	0.175	108.4	108.1	108.0	108.0	108.0	108.1	108.1	106.3	106.0	105.7
f. Drugs & medicines	2.532	129.4	230.7	144.2	239.4	238.6	248.8	248.7	248.7	248.5	253.8
g. Perfumes, cosmetics, toiletries etc.	0.978	118.0	183.3	186.9	185.6	185.6	190.0	190.0	190.0	190.0	190.0
h. Turpentine, synthetic resins, plastic materials	0.746	107.6	109.5	114.3	116.6	115.3	112.6	111.9	111.9	112.7	112.7
i. Matches, explosives & other chemicals n.e.c.	0.940	98.3	123.0	123.1	124.1	120.9	127.1	127.1	127.2	127.3	127.5

No. 39 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (AVERAGES) *(Contd.)*
(Base : 1993-94 = 100)

Average of months/ Average of weeks ended Saturday	Weight	1994-95	1999-00	2000-01	2000		2001				
		(April-March)			Jun.	Jul.	Mar.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11	12
(I) Non-Metallic Mineral Products	**2.516**	**110.9**	**127.4**	**133.9**	**125.8**	**126.9**	**146.5**	**146.5**	**145.6**	**144.7**	**145.9**
a. Structural clay products	0.230	100.0	134.9	141.3	136.5	136.5	155.3	155.2	154.9	154.9	154.9
b. Glass, earthernware, chinaware & their products	0.237	113.3	136.9	133.0	132.2	132.2	134.4	134.4	134.4	134.4	134.4
c. Cement	1.731	112.4	128.4	136.6	125.6	127.1	153.0	153.0	151.8	150.3	151.8
d. Cement, slate & graphite products	0.319	108.8	109.2	114.1	114.0	115.0	113.8	113.8	113.8	114.1	115.3
(J) Basic Metals Alloys & Metals Products	**8.342**	**108.4**	**135.0**	**140.3**	**138.3**	**139.0**	**141.7**	**141.6**	**140.9**	**140.8**	**141.1**
a. Basic Metals & Alloys	6.206	107.0	133.7	138.0	136.4	136.8	139.1	139.0	138.1	138.1	138.2
a1. Iron & Steel	3.637	106.0	134.5	136.8	135.8	135.7	137.5	137.0	135.7	135.8	135.9
a2. Foundries for Casting, Forging & Structurals	0.896	106.7	142.2	148.1	146.4	147.6	149.6	149.7	149.8	149.9	149.9
a3. Pipes, Wires Drawing & Others	1.589	109.5	127.0	135.4	132.4	133.4	137.1	137.9	137.1	136.8	137.1
a4. Ferro Alloys	0.085	104.5	133.7	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8
b. Non-Ferrous Metals	1.466	115.9	147.5	157.0	152.6	154.7	160.2	159.9	159.9	159.7	160.4
b1. Aluminium	0.853	114.7	160.2	173.7	166.1	169.7	180.5	180.5	180.5	180.5	180.5
b2. Other Non-Ferrous Metals	0.613	117.7	129.9	133.8	133.7	133.8	131.9	131.3	131.2	130.8	132.5
c. Metal Products	0.669	105.0	120.5	124.3	124.3	124.8	125.6	125.6	125.6	125.2	125.5

No. 39 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (AVERAGES) *(Concld.)*
(Base : 1993-94 = 100)

Average of months/ Average of weeks ended Saturday	Weight	1994-95	1999-00	2000-01	2000		2001				
		(April-March)			Jun.	Jul.	Mar.	Apr.	May	Jun.	Jul.
1	2	3	4	5	6	7	8	9	10	11	12
(K) Machinery & Machine Tools	**8.363**	**106.0**	**116.1**	**123.0**	**119.1**	**120.3**	**127.8**	**127.7**	**128.6**	**128.0**	**128.3**
a. Non-electrical machinery & parts	3.379	108.6	136.5	142.3	138.4	140.3	146.6	147.2	149.8	149.3	149.9
a1. Heavy machinery & parts	1.822	111.0	142.9	151.0	145.2	148.8	156.7	158.4	158.7	158.6	158.7
a2. Industrial machinery for textiles, etc.	0.568	108.5	145.2	154.4	152.6	152.6	158.3	158.2	172.6	169.7	172.6
a3. Refrigeration & other non-electrical machinery	0.989	104.3	119.8	119.2	117.7	117.7	121.3	120.3	120.3	120.6	120.6
b. Electrical machinery	4.985	104.2	102.2	109.9	106.0	106.7	115.1	114.4	114.3	113.5	113.6
b1. Electrical industrial machinery	1.811	105.2	118.0	126.6	125.6	125.4	131.8	131.8	131.7	132.0	133.4
b2. Wires & cables	1.076	109.0	96.6	114.9	105.1	108.6	123.7	121.7	121.0	120.5	120.3
b3. Dry & wet batteries	0.275	105.8	137.5	139.0	137.4	137.4	142.1	142.1	142.1	141.8	141.6
b4. Electrical apparatus, appliances & parts	1.823	100.1	84.7	86.0	82.3	82.3	89.4	88.6	88.8	86.6	85.8
(L) Transport Equipment & Parts	**4.295**	**107.4**	**135.4**	**143.4**	**139.6**	**140.9**	**146.3**	**146.6**	**145.3**	**145.6**	**145.4**
a. Locomotives, railway wagons & parts	0.318	105.3	108.5	109.4	108.8	108.8	114.8	114.6	114.5	114.5	114.5
b. Motor vehicles, motorcycles, scooters, bicycles	3.977	107.6	137.6	146.1	142.1	143.5	148.8	149.1	147.8	148.1	147.9

Source: Office of the Economic Adviser, Ministry of Commerce & Industry, Government of India.

No. 40 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (Month-end / Year-end)
(Base : 1993-94 = 100)

Last week of month / year ended Saturday	Weight	1994-95	1999-00	2000-01	2000	2001					
		(April-March)			Sep.	Apr.	May	Jun.	Jul.	Aug. (P)	Sep. (P)
1	2	3	4	5	6	7	8	9	10	11	12
ALL COMMODITIES	**100.000**	**117.1**	**150.9**	**159.2**	**156.8**	**160.0**	**160.6**	**161.0**	**161.2**	**161.8**	**162.0**
I. PRIMARY ARTICLES	**22.025**	**120.8**	**159.2**	**161.6**	**160.6**	**165.8**	**168.3**	**169.9**	**168.4**	**170.0**	**170.8**
(A) Food Articles	**15.402**	**114.9**	**168.2**	**167.9**	**169.0**	**173.8**	**175.4**	**176.6**	**174.4**	**176.5**	**178.1**
a. Foodgrains											
(Cereals + Pulses)	5.009	118.9	175.5	169.8	170.9	171.8	174.2	175.9	174.3	176.9	175.2
a1. Cereals	4.406	118.2	176.5	168.1	169.9	170.3	172.2	173.5	171.8	173.7	172.0
b1. Pulses	0.603	123.9	168.6	182.2	178.4	183.0	188.4	193.4	192.9	200.0	198.6
b. Fruits & Vegetables	2.917	103.1	143.6	161.0	159.1	177.3	182.3	191.9	178.6	184.9	200.4
b1. Vegetables	1.459	95.0	125.1	112.4	146.8	144.5	164.7	195.1	201.5	207.2	183.2
b2. Fruits	1.458	111.2	162.2	209.7	171.5	210.1	200.0	188.7	155.6	162.6	217.6
c. Milk	4.367	111.3	162.8	163.5	166.3	166.5	165.0	162.0	163.5	166.5	163.5
d. Eggs, meat & fish	2.208	122.1	186.0	181.5	177.6	191.2	191.2	188.3	190.8	186.1	187.3
e. Condiments & Spices	0.662	131.6	218.0	186.1	202.3	177.3	188.5	189.7	193.5	192.5	190.2
f. Other food articles	0.239	127.4	113.0	118.2	126.9	137.0	125.1	128.8	122.8	115.5	113.0
(B) Non-Food Articles	**6.138**	**136.9**	**141.0**	**149.1**	**143.3**	**149.4**	**154.5**	**157.3**	**157.2**	**158.0**	**156.8**
a. Fibres	1.523	168.7	145.8	156.6	153.2	157.8	164.4	166.7	162.9	162.2	161.8
b. Oil seeds	2.666	127.8	127.3	130.3	128.7	129.6	136.9	141.8	143.3	145.6	143.6
c. Other non-food articles	1.949	124.4	156.0	168.9	155.6	169.9	170.7	171.2	171.8	171.6	171.0
(C) Minerals	**0.485**	**104.2**	**104.0**	**118.0**	**114.7**	**117.1**	**117.7**	**117.6**	**117.6**	**117.6**	**117.6**
a. Metallic Minerals	0.297	102.5	103.8	122.7	121.2	122.5	122.6	122.6	122.6	122.6	122.6
b. Other minerals	0.188	107.0	104.4	110.6	104.5	108.5	110.0	109.8	109.8	109.8	109.8

See 'Notes on Tables'.

No. 40 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (Month-end / Year-end) *(Contd.)*

(Base : 1993-94 = 100)

Last week of month / year ended Saturday	Weight	1994-95	1999-00	2000-01	2000	2001					
		(April-March)			Sep.	Apr.	May	Jun.	Jul.	Aug. (P)	Sep. (P)
1	2	3	4	5	6	7	8	9	10	11	12
II. FUEL, POWER, LIGHT & LUBRICANTS	**14.226**	**109.1**	**193.4**	**222.7**	**218.3**	**222.7**	**222.3**	**222.3**	**222.3**	**226.1**	**226.5**
a. Coal mining	1.753	106.2	156.3	184.6	156.5	184.6	181.1	181.1	181.1	181.1	181.1
b. Mineral oils	6.990	106.2	204.2	239.6	245.8	239.6	239.6	239.6	239.6	239.6	240.5
c. Electricity	5.484	113.6	191.4	213.4	203.1	213.4	213.4	213.4	213.4	223.2	223.2
III. MANUFACTURED PRODUCTES	**63.749**	**117.6**	**138.6**	**144.2**	**141.8**	**144.0**	**144.1**	**144.3**	**145.0**	**144.6**	**144.5**
A . Food Products	**11.538**	**113.2**	**149.6**	**145.0**	**145.9**	**143.8**	**143.5**	**144.7**	**146.9**	**146.4**	**146.7**
a. Dairy products	0.687	129.0	180.9	183.7	181.1	185.7	187.1	187.0	187.3	187.6	189.4
b. Canning, preserving & processing of fish	0.047	100.0	153.3	153.8	153.8	153.8	153.8	153.8	153.8	153.8	153.8
c. Grain mill products	1.033	109.0	159.6	152.4	151.3	150.1	142.7	142.5	145.0	145.8	149.8
d. Bakery products	0.441	111.0	176.8	169.7	173.7	169.7	169.0	171.3	172.1	172.1	172.1
e. Sugar, khandsari & gur	3.929	109.5	158.3	149.3	155.1	148.2	147.5	147.0	146.2	146.3	147.4
f. Manufacture of common salts	0.021	114.1	189.3	192.3	187.6	188.0	187.3	172.9	171.1	172.5	167.0
g. Cocoa, chocolate & sugar confectionery	0.087	124.1	147.0	159.1	158.9	159.1	164.7	164.7	164.7	164.7	164.7
h. Edible oils	2.775	118.4	111.2	105.3	101.6	102.6	105.0	107.3	116.5	118.5	116.4
i. Oil cakes	1.416	118.3	139.1	140.3	141.8	140.5	140.5	147.2	147.3	147.3	147.3
j. Tea & coffee processing	0.967	99.5	188.1	191.2	187.9	190.3	189.7	189.4	189.4	175.3	175.3
k. Other food products n.e.c.	0.154	117.3	183.1	187.1	185.6	187.1	187.1	186.0	182.9	186.0	183.5
(B) Beverages, Tobacco & Tobacco Products	**1.339**	**124.3**	**174.7**	**192.2**	**179.4**	**192.2**	**192.4**	**192.8**	**192.8**	**192.8**	**192.7**
a. Wine Industries	0.269	163.5	166.6	173.1	162.6	170.2	170.2	170.2	170.2	170.2	170.2
b. Malt liquor	0.043	125.5	183.7	180.5	176.1	183.2	184.6	184.6	184.6	184.6	184.6
c. Soft drinks & carbonated water	0.053	109.1	177.9	177.9	177.9	177.9	180.0	182.5	183.8	183.8	180.3
d. Manufacture of bidi, cigarettes, tobacco & zarda	0.975	114.2	176.4	198.7	184.2	199.4	199.6	199.9	199.9	199.9	199.9

No. 40 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (Month-end / Year-end) *(Contd.)*
(Base : 1993-94 = 100)

Last week of month / year ended Saturday	Weight	1994-95	1999-00	2000-01	2000	2001					
		(April-March)			Sep.	Apr.	May	Jun.	Jul.	Aug. (P)	Sep. (P)
1	2	3	4	5	6	7	8	9	10	11	12
(C) Textiles	**9.800**	**128.1**	**116.2**	**121.7**	**121.4**	**121.0**	**121.3**	**121.9**	**121.5**	**120.6**	**120.6**
a. Cotton textiles	4.215	148.3	143.0	153.7	152.9	153.0	153.5	155.1	154.9	153.0	151.5
a1. Cotton yarn	3.312	152.1	139.7	152.7	151.7	151.8	152.4	154.1	153.9	151.5	149.6
a2. Cotton cloth (Mills)	0.903	134.4	155.2	157.4	157.2	157.4	157.4	158.6	158.6	158.6	158.6
b. Man made textiles	4.719	110.9	85.2	87.3	89.1	86.2	86.2	85.9	85.6	85.3	86.7
b1. Man made fibre	4.406	110.6	82.3	84.1	86.3	82.9	83.1	82.7	82.4	82.2	83.6
b2. Man made cloth	0.313	114.7	126.3	132.4	129.0	132.4	129.6	131.3	131.3	129.6	129.6
c. Woollen textiles	0.190	139.9	148.2	149.2	136.5	149.7	149.7	148.7	147.8	147.6	147.4
d. Jute, hemp & mesta textiles	0.376	120.5	170.2	169.0	152.8	170.4	174.1	175.5	172.4	172.7	175.2
e. Other Misc. Textiles	0.300	117.9	138.2	137.8	139.2	137.6	137.7	137.7	137.0	137.0	134.0
(D) Wood & Wood Products	**0.173**	**113.3**	**190.9**	**170.3**	**168.7**	**170.3**	**170.3**	**170.3**	**170.3**	**170.3**	**170.3**
(E) Paper & Paper Products	**2.044**	**117.0**	**153.3**	**177.2**	**164.1**	**178.9**	**174.7**	**174.8**	**173.7**	**174.4**	**172.8**
a. Paper & pulp	1.229	122.9	143.5	163.4	157.8	166.0	165.3	165.3	163.1	164.6	161.7
b. Manufacture of board	0.237	113.0	126.7	139.0	140.3	139.0	139.0	140.1	141.6	139.5	141.7
c. Printing & publishing of newspapers, periodicals, etc.	0.578	106.2	184.9	222.3	187.1	222.7	209.4	209.4	209.3	209.4	209.3
(F) Leather & Leather Products	**1.019**	**117.8**	**152.7**	**143.1**	**145.6**	**143.1**	**143.1**	**143.1**	**143.1**	**143.1**	**143.1**

No. 40 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (Month-end / Year-end) *(Contd.)*
(Base : 1993-94 = 100)

Last week of month / year ended Saturday	Weight	1994-95	1999-00	2000-01	2000	2001					
		(April-March)			Sep.	Apr.	May	Jun.	Jul.	Aug. (P)	Sep. (P)
1	2	3	4	5	6	7	8	9	10	11	12
(G) Rubber & Plastic Products	**2.388**	**117.0**	**123.4**	**124.6**	**126.1**	**124.3**	**127.2**	**127.3**	**126.8**	**127.3**	**126.8**
a. Tyres & tubes	1.286	119.6	131.6	128.6	132.0	128.6	128.6	128.6	127.6	128.6	127.7
a1. Tyres	1.144	120.3	127.3	124.1	127.9	124.1	124.1	124.1	123.0	124.1	123.1
a2. Tubes	0.142	114.1	166.7	164.5	165.3	164.5	164.5	164.5	164.5	164.5	164.5
b. Plastic products	0.937	108.8	110.6	112.4	111.7	111.7	119.0	119.3	119.3	119.3	119.3
c. Other rubber & plastic products	0.165	143.9	132.8	162.5	162.5	162.5	162.5	162.5	162.5	162.5	162.5
(H) Chemicals & Chemical Products	**11.931**	**121.6**	**160.2**	**166.9**	**164.6**	**167.3**	**168.1**	**167.8**	**169.5**	**169.2**	**169.5**
a. Basic heavy inorganic chemical	1.446	125.6	130.9	128.1	130.1	129.5	136.0	134.2	136.8	133.6	136.1
b. Basic heavy organic chemical	0.455	131.4	93.8	138.8	105.3	136.9	136.9	137.3	136.8	136.8	133.4
c. Fertilizers & pesticides	4.164	123.0	150.8	155.7	153.4	156.8	156.8	156.8	156.8	157.1	157.1
c1. Fertilizers	3.689	121.8	154.6	160.1	157.5	160.2	160.2	160.2	160.2	160.5	160.5
c2. Pesticides	0.475	132.5	121.7	121.6	121.7	130.5	130.5	130.5	130.5	130.6	130.6
d. Paints, varnishes & lacquer	0.496	101.4	115.6	114.1	113.2	114.1	114.2	114.2	116.0	116.0	116.0
e. Dyestuffs & indigo	0.175	115.0	108.0	108.1	108.0	108.1	105.7	105.7	105.7	105.7	105.7
f. Drugs & medicines	2.532	132.9	234.8	248.7	250.2	248.7	248.7	248.2	254.4	254.4	254.4
g. Perfumes, cosmetics & toiletries, etc.	0.978	119.0	184.8	190.0	185.6	190.0	190.0	190.0	190.0	190.0	190.8
h. Turpentine, synthetic resins and plastic materials	0.746	111.9	112.5	112.6	115.3	111.9	111.9	113.0	112.7	112.4	112.4
i. Matches, explosives and other chemicals n.e.c.	0.940	96.3	123.6	127.1	120.8	127.1	127.5	126.7	127.5	127.5	127.5

No. 40 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (Month-end / Year-end) *(Contd.)*
(Base : 1993-94 = 100)

Last week of month / year ended Saturday	Weight	1994-95	1999-00	2000-01	2000	2001					
		(April-March)			Sep.	Apr.	May	Jun.	Jul.	Aug. (P)	Sep. (P)
1	2	3	4	5	6	7	8	9	10	11	12
(I) Non-Metallic Mineral Products	**2.516**	**122.4**	**126.5**	**146.2**	**129.3**	**146.0**	**145.8**	**144.5**	**146.2**	**143.4**	**141.4**
a. Structural clay products	0.230	101.4	135.1	155.3	136.5	154.9	154.9	154.9	154.9	154.9	154.9
b. Glass, earthenware, chinaware & their products	0.237	126.3	136.9	134.4	132.2	134.4	134.4	134.4	134.4	134.4	135.1
c. Cement	1.731	126.9	126.8	152.6	130.5	152.4	152.0	149.9	152.5	148.2	145.4
d. Cement, Slate & graphite products	0.319	110.3	111.0	113.8	115.3	113.8	113.8	115.4	114.8	115.4	114.4
(J) Basic Metals, Alloys & Metal Products	**8.342**	**115.6**	**137.3**	**141.7**	**141.4**	**141.0**	**141.0**	**140.8**	**141.1**	**140.6**	**140.3**
a. Basic metals & alloys	6.206	112.7	135.3	139.1	139.0	138.2	138.1	138.0	138.2	137.7	137.4
a1. Iron & steel	3.637	112.6	135.6	137.5	137.5	135.6	135.8	135.8	135.9	135.8	135.9
a2. Foundries for casting, forging & structurals	0.896	113.5	145.4	149.7	149.0	149.7	149.9	149.9	149.9	149.9	149.9
a3. Pipes, wire drawings & others	1.589	112.9	129.0	137.0	136.9	137.9	137.1	136.5	137.1	135.2	133.9
a4. Ferro alloys	0.085	102.9	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8
b. Non-ferrous metals	1.466	130.8	152.2	160.2	159.7	159.9	160.2	159.8	160.4	159.5	159.3
b1. Aluminium	0.853	132.4	166.1	180.5	176.3	180.5	180.5	180.5	180.5	180.5	180.5
b2. Other non-ferrous metals	0.613	128.6	132.9	131.9	136.7	131.3	131.9	131.0	132.5	130.3	129.8
c. Metal products	0.669	108.7	123.0	125.6	123.7	125.6	125.6	125.5	125.5	125.5	125.5

No. 40 : INDEX NUMBERS OF WHOLESALE PRICES IN INDIA – BY GROUPS AND SUB-GROUPS (Month-end / Year-end) *(Concld.)*
(Base : 1993-94 = 100)

Last week of month / year ended Saturday	Weight	1994-95	1999-00	2000-01	2000	2001					
		(April-March)			Sep.	Apr.	May	Jun.	Jul.	Aug. (P)	Sep. (P)
1	2	3	4	5	6	7	8	9	10	11	12
(K) Machinery & Machine Tools	**8.363**	**109.0**	**115.6**	**127.2**	**122.8**	**127.8**	**128.3**	**128.3**	**128.3**	**128.3**	**128.4**
a. Non-electrical machinery & parts	3.379	111.1	137.2	147.0	142.6	147.2	149.9	149.9	149.9	149.9	150.0
a1. Heavy machinery & parts	1.822	114.8	144.5	157.5	153.0	158.4	158. 9	158.7	158.7	158.7	159.0
a2. Industrial machinery for textiles, etc.	0.568	108.4	145.2	158.2	152.6	158.2	172.6	172.6	172.6	172.6	172.6
a3. Refrigeration & other non-electrical machinery	0.989	106.0	119.1	121.3	117.8	120.3	120.3	120.6	120.6	120.6	120.6
b. Electrical machinery	4.985	107.5	101.0	113.8	109.3	114.6	113.6	113.6	113.6	113.6	113.7
b1. Electrical industrial machinery	1.811	108.8	117.7	131.8	126.5	131.7	131.7	133.2	133.6	133.6	133.3
b2. Wires & cables	1.076	119.0	96.5	121.7	109.5	121.7	120.1	120.3	120.3	120.3	120.3
b3. Dry & wet batteries	0.275	109.7	137.4	142.1	137.4	142.1	142.1	141.6	141.6	141.6	143.2
b4. Electrical apparatus, appliances & parts	1.823	99.2	81.6	87.0	88.0	89.2	87.4	86.0	85.6	85.6	85.9
(L) Transport Equipment & Parts	**4.295**	**110.6**	**138.6**	**146.7**	**144.1**	**146.3**	**145.4**	**145.5**	**145.4**	**145.4**	**145.4**
a. Locomotives, railways wagons & parts	0.318	105.4	108.8	114.8	108.8	114.5	114.5	114.5	114.5	114.5	114.5
b. Motor vehicles, motorcycles, scooters, bicycles & parts	3.977	111.0	141.0	149.3	146.9	148.8	147.9	148.0	147.9	147.9	147.9

Source: Office of the Economic Adviser, Ministry of Commerce & Industry, Government of India.

No. 41 : FOREIGN TRADE (ANNUAL AND MONTHLY)

Year/ Month	Rupees crore			US dollar million			SDR million		
	Export	Import	Balance	Export	Import	Balance	Export	Import	Balance
1	2	3	4	5	6	7	8	9	10
1990-91	32,558	43,193	-10,635	18,145	24,073	-5,927	13,102	17,382	-4,280
1991-92	44,042	47,851	-3,809	17,865	19,411	-1,545	13,173	14,313	-1,139
1992-93	53,688	63,375	-9,686	18,537	21,882	-3,344	14,455	17,063	-2,608
1993-94	69,751	73,101	-3,350	22,238	23,306	-1,068	15,894	16,657	-763
1994-95	82,674	89,971	-7,297	26,331	28,654	-2,324	18,055	19,648	-1,593
1995-96	1,06,353	1,22,678	-16,325	31,795	36,675	-4,880	21,070	24,304	-3,234
1996-97	1,18,817	1,38,920	-20,103	33,470	39,132	-5,663	23,350	27,300	-3,951
1997-98	1,30,101	1,54,176	-24,076	35,006	41,484	-6,478	25,674	30,425	-4,751
1998-99	1,39,753	1,78,332	-38,579	33,219	42,389	-9,170	24,299	31,007	-6,708
1999-00	1,59,561	2,15,236	-55,675	36,822	49,671	-12,848	27,072	36,518	-9,446
2000-01	2,03,571	2,30,873	-27,302	44,560	50,537	-5,976	34,187	38,772	-4,585
2000-01									
April *	14,444	19,204	-4,760	3,310	4,401	-1,091	2,472	3,286	-815
May *	15,732	19,176	-3,444	3,577	4,360	-783	2,728	3,326	-597
June *	15,440	17,844	-2,404	3,455	3,993	-538	2,597	3,001	-404
July *	15,790	20,065	-4,275	3,526	4,481	-955	2,664	3,386	-721
August *	16,762	18,212	-1,449	3,669	3,987	-317	2,804	3,046	-242
September	17,658	19,499	-1,841	3,848	4,249	-401	2,974	3,285	-310
October	17,235	19,761	-2,526	3,719	4,264	-545	2,891	3,315	-424
November	16,857	21,975	-5,118	3,604	4,698	-1,094	2,809	3,662	-853
December	17,098	18,587	-1,489	3,657	3,976	-319	2,826	3,073	-246
January	17,064	18,648	-1,584	3,666	4,006	-340	2,815	3,077	-261
February	17,186	16,081	1,105	3,695	3,457	238	2,856	2,672	184
March	20,089	21,563	-1,474	4,309	4,625	-316	3,367	3,614	-247
2001-02 (P)									
April	16,381	18,553	-2,173	3,501	3,966	-464	2,761	3,127	-366
May	17,533	20,958	-3,426	3,737	4,467	-730	2,962	3,540	-579
June	15,488	18,873	-3,385	3,295	4,015	-720	2,635	3,211	-576
July	16,330	20,682	-4,352	3,464	4,387	-923	2,768	3,506	-738
August	17,109	20,596	-3,486	3,631	4,370	-740	2,849	3,429	-581

* : Revised data as per the monthly press notes of the DGCI & S for the period April through August 2001.

Source : DGCI & S.

Notes : 1. Data conversion has been done using period average exchange rates.

2. Monthly data do not add up to the annual data for 2000-01 on account of revision in monthly figures.

Also see 'Notes on Tables'.

No. 42 : INDIA'S OVERALL BALANCE OF PAYMENTS IN RUPEES

(Rs. crore)

Items	1997 - 98 PR			1998 - 99 PR			1999-00 PR			2000-01 PR		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Current Account												
I. Merchandise	**132703**	**190508**	**-57805**	**144436**	**199914**	**-55478**	**162753**	**240112**	**-77359**	**205287**	**270663**	**-65376**
II. Invisibles (a+b+c)	**86245**	**49323**	**36922**	**108459**	**69770**	**38689**	**131449**	**74421**	**57028**	**157748**	**103803**	**53945**
a) Services	35102	30159	4943	55527	46413	9114	68137	50467	17670	86613	75212	11401
i) Travel	10880	5339	5541	12603	7326	5277	13166	9268	3898	14505	13136	1369
ii) Transportation	6805	9353	-2548	8109	11266	-3157	7400	10450	-3050	8750	14461	-5711
iii) Insurance	890	680	210	945	472	473	1004	525	479	1176	562	614
iv) G.n.i.e.	1038	594	444	2520	1360	1160	2523	1167	1356	3012	1557	1455
v) Miscellaneous	15489	14193	1296	31350	25989	5361	44044	29057	14987	59170	45496	13674
b) Transfers	45348	165	45183	44799	257	44542	54939	150	54789	60312	354	59958
i) Official	1418	–	1418	1305	5	1300	1659	2	1657	1556	10	1546
ii) Private	43930	165	43765	43494	252	43242	53280	148	53132	58756	344	58412
c) Income	5795	18999	-13204	8133	23100	-14967	8373	23804	-15431	10823	28237	-17414
i) Investment Income	5795	18764	-12969	7953	23032	-15079	7727	23747	-16020	10336	28192	-17856
ii) Compensation to Employees	–	235	-235	180	68	112	646	57	589	487	45	442
Total Current Account (I+II)	**218948**	**239831**	**-20883**	**252895**	**269684**	**-16789**	**294202**	**314533**	**-20331**	**363035**	**374466**	**-11431**
B. Capital Account												
1. Foreign Investment (a+b)	**34444**	**14612**	**19832**	**24825**	**15088**	**9737**	**53125**	**30941**	**22184**	**65032**	**44142**	**20890**
a) In India	34075	14114	19961	24210	14041	10169	52607	30106	22501	64713	41446	23267
i) Direct	13317	124	13193	10550	162	10388	9409	13	9396	10771	99	10672
ii) Portfolio	20758	13990	6768	13660	13879	-219	43198	30093	13105	53942	41347	12595
b) Abroad	369	498	-129	615	1047	-432	518	835	-317	319	2696	-2377
2. Loans(a+b+c)	**64144**	**46687**	**17457**	**61872**	**43008**	**18864**	**56646**	**49695**	**6951**	**106003**	**84825**	**21178**
a) External Assistance	10827	7441	3386	11508	8107	3401	13342	9471	3871	13528	11527	2001
i) By India	–	77	-77	2	85	-83	3	47	-44	1	79	-78
ii) To India	10827	7364	3463	11506	8022	3484	13339	9424	3915	13527	11448	2079
b) Commercial Borrowings (MT & LT)	27254	12653	14601	30646	12067	18579	13910	12463	1447	43124	24268	18856
i) By India	43	–	43	22	–	22	87	–	87	33	9	24
ii) To India	27211	12653	14558	30624	12067	18557	13823	12463	1360	43091	24259	18832
c) Short Term To India	26063	26593	-530	19718	22834	-3116	29394	27761	1633	49351	49030	321
3. Banking Capital (a+b)	**33056**	**36243**	**-3187**	**37525**	**34396**	**3129**	**46212**	**36995**	**9217**	**58288**	**54771**	**3517**
a) Commercial Banks	30328	34838	-4510	31507	33194	-1687	44496	34486	10010	56864	52962	3902
i) Assets	2093	10214	-8121	5713	11421	-5708	11486	8079	3407	13730	20602	-6872
ii) Liabilities	194	908	-714	527	566	-39	877	983	-106	2108	1901	207
iii) Non-Resident Deposits	28041	23716	4325	25267	21207	4060	32133	25424	6709	41026	30459	10567
b) Others	2728	1405	1323	6018	1202	4816	1716	2509	-793	1424	1809	-385
4. Rupee Debt Service	**–**	**2784**	**-2784**	–	**3308**	**-3308**	–	**3059**	**-3059**	**–**	**2763**	**-2763**
5. Other Capital	**14458**	**9171**	**5287**	**19339**	**11879**	**7460**	**19839**	**9804**	**10035**	**18229**	**19452**	**-1223**
Total Capital Account (1 to 5)	**146102**	**109497**	**36605**	**143561**	**107679**	**35882**	**175822**	**130494**	**45328**	**247552**	**205953**	**41599**
C. Errors & Omissions	**931**	–	**931**	**–**	**848**	**-848**	**2773**	**–**	**2773**	**–**	**2506**	**-2506**
D. Overall Balance (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**365981**	**349328**	**16653**	**396456**	**378211**	**18245**	**472797**	**445027**	**27770**	**610587**	**582925**	**27662**
E. Monetary Movements (i+ii)	**–**	**16653**	**-16653**	**–**	**18245**	**-18245**	**–**	**27770**	**-27770**	–	**27662**	**-27662**
i) I.M.F.	–	2286	-2286	–	1652	-1652	–	1122	-1122	–	115	-115
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	14367	-14367	–	16593	-16593	–	26648	-26648	–	27547	-27547

PR : Partially Revised.

See 'Notes on Tables'.

No. 42 : INDIA'S OVERALL BALANCE OF PAYMENTS IN RUPEES (Concld.)

(Rs. crore)

Items	Jul. - Sep. 2000 PR			Oct. - Dec. 2000 PR			Jan. - Mar. 2001 PR			Apr. - Jun. 2001		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
1	14	15	16	17	18	19	20	21	22	23	24	25
A. Current Account												
I. Merchandise	**51562**	**69020**	**-17458**	**52122**	**68958**	**-16836**	**55749**	**66572**	**-10823**	**50346**	**67849**	**-17503**
II. Invisibles (a+b+c)	**37766**	**24376**	**13390**	**43694**	**28355**	**15339**	**44476**	**30831**	**13645**	**43337**	**27386**	**15951**
a) Services	19576	17480	2096	25707	21313	4394	26907	23693	3214	22475	20839	1636
i) Travel	3204	2896	308	4008	3122	886	4164	3913	251	3366	3397	-31
ii) Transportation	2225	3453	-1228	2372	3496	-1124	2351	3599	-1248	1773	2837	-1064
iii) Insurance	284	115	169	318	136	182	301	183	118	288	172	116
iv) G.n.i.e.	859	485	374	901	325	576	736	452	284	711	341	370
v) Miscellaneous	13004	10531	2473	18108	14234	3874	19355	15546	3809	16337	14092	2245
b) Transfers	15365	56	15309	15064	69	14995	14718	160	14558	17634	76	17558
i) Official	286	5	281	444	–	444	560	5	555	187	3	184
ii) Private	15079	51	15028	14620	69	14551	14158	155	14003	17447	73	17374
c) Income	2825	6840	-4015	2923	6973	-4050	2851	6978	-4127	3228	6471	-3243
i) Investment Income	2697	6833	-4136	2805	6963	-4158	2745	6959	-4214	3063	6460	-3397
ii) Compensation to Employees	128	7	121	118	10	108	106	19	87	165	11	154
Total Current Account (I+II)	**89328**	**93396**	**-4068**	**95816**	**97313**	**-1497**	**100225**	**97403**	**2822**	**93683**	**95235**	**-1552**
B. Capital Account												
1. Foreign Investment (a+b)	**16462**	**12409**	**4053**	**8713**	**7685**	**1028**	**20432**	**10674**	**9758**	**12376**	**5856**	**6520**
a) In India	16452	12270	4182	8594	6563	2031	20285	9583	10702	12208	4895	7313
i) Direct	2351	10	2341	2194	–	2194	3212	–	3212	2860	5	2855
ii) Portfolio	14101	12260	1841	6400	6563	-163	17073	9583	7490	9348	4890	4458
b) Abroad	10	139	-129	119	1122	-1003	147	1091	-944	168	961	-793
2. Loans (a+b+c)	**24851**	**23358**	**1493**	**46162**	**23013**	**23149**	**18921**	**20828**	**-1907**	**12398**	**16406**	**-4008**
a) External Assistance	2019	2187	-168	3983	2621	1362	5218	2867	2351	2918	3123	-205
i) By India	–	14	-14	1	32	-31	–	1	-1	–	339	-339
ii) To India	2019	2173	-154	3982	2589	1393	5218	2866	2352	2918	2784	134
b) Commercial Borrowings (MT & LT)	6520	7382	-862	29241	5244	23997	3713	6188	-2475	2807	5025	-2218
i) By India	5	1	4	19	5	14	4	3	1	5	–	5
ii) To India	6515	7381	-866	29222	5239	23983	3709	6185	-2476	2802	5025	-2223
c) Short Term To India	16312	13789	2523	12938	15148	-2210	9990	11773	-1783	6673	8258	-1585
3. Banking Capital (a+b)	**13101**	**14374**	**-1273**	**14192**	**17677**	**-3485**	**15246**	**12188**	**3058**	**25464**	**14647**	**10817**
a) Commercial Banks	13100	13403	-303	14175	16856	-2681	15024	12188	2836	23443	14647	8796
i) Assets	4498	6640	-2142	2694	7903	-5209	3419	4416	-997	8377	2354	6023
ii) Liabilities	133	683	-550	583	245	338	1340	480	860	677	343	334
iii) Non-Resident Deposits	8469	6080	2389	10898	8708	2190	10265	7292	2973	14389	11950	2439
b) Others	1	971	-970	17	821	-804	222	–	222	2021	–	2021
4. Rupee Debt Service	**–**	**6**	**-6**	–	**2**	**-2**	**–**	**725**	**-725**	**–**	**1820**	**-1820**
5. Other Capital	**5535**	**5325**	**210**	**3807**	**4099**	**-292**	**4878**	**3699**	**1179**	**3918**	**3945**	**-27**
Total Capital Account (1 to 5)	**59949**	**55472**	**4477**	**72874**	**52476**	**20398**	**59477**	**48114**	**11363**	**54156**	**42674**	**11482**
C. Errors & Omissions	**–**	**2287**	**-2287**	**609**	**–**	**609**	**348**	**–**	**348**	**–**	**3073**	**-3073**
D. Overall Balance (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**149277**	**151155**	**-1878**	**169299**	**149789**	**19510**	**160050**	**145517**	**14533**	**147839**	**140982**	**6857**
E. Monetary Movements (i+ii)	**1878**	–	**1878**	–	**19510**	**-19510**	**–**	**14533**	**-14533**	**–**	**6857**	**-6857**
i) I.M.F.	–	–	–	–	–	–	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	1878	–	1878	–	19510	-19510	–	14533	-14533	–	6857	-6857

PR : Partially Revised

No. 43 : INDIA'S OVERALL BALANCE OF PAYMENTS IN DOLLARS

(US $ million)

Items	1997-98 PR			1998-99 PR			1999-00 PR			2000-01 PR		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Current Account												
I. Merchandise	**35680**	**51187**	**-15507**	**34298**	**47544**	**-13246**	**37542**	**55383**	**-17841**	**44894**	**59264**	**-14370**
II. Invisibles (a+b+c)	**23244**	**13237**	**10007**	**25770**	**16562**	**9208**	**30312**	**17169**	**13143**	**34447**	**22656**	**11791**
a) Services	9429	8110	1319	13186	11021	2165	15709	11645	4064	18870	16392	2478
i) Travel	2914	1437	1477	2993	1743	1250	3036	2139	897	3168	2874	294
ii) Transportation	1836	2522	-686	1925	2680	-755	1707	2410	-703	1913	3170	-1257
iii) Insurance	240	183	57	224	112	112	231	122	109	257	122	135
iv) G.n.i.e.	276	160	116	597	325	272	582	270	312	657	341	316
v) Miscellaneous	4163	3808	355	7447	6161	1286	10153	6704	3449	12875	9885	2990
b) Transfers	12254	45	12209	10649	62	10587	12672	34	12638	13211	77	13134
i) Official	379	–	379	308	1	307	382	–	382	338	2	336
ii) Private	11875	45	11830	10341	61	10280	12290	34	12256	12873	75	12798
c) Income	1561	5082	-3521	1935	5479	-3544	1931	5490	-3559	2366	6187	-3821
i) Investment Income	1561	5020	-3459	1893	5462	-3569	1783	5478	-3695	2259	6177	-3918
ii) Compensation to Employees	–	62	-62	42	17	25	148	12	136	107	10	97
Total Current Account (I+II)	**58924**	**64424**	**-5500**	**60068**	**64106**	**-4038**	**67854**	**72552**	**-4698**	**79341**	**81920**	**-2579**
B. Capital Account												
1. Foreign Investment (a+b)	**9266**	**3913**	**5353**	**5892**	**3580**	**2312**	**12240**	**7123**	**5117**	**14294**	**9706**	**4588**
a) In India	9169	3779	5390	5743	3331	2412	12121	6930	5191	14224	9122	5102
i) Direct	3596	34	3562	2518	38	2480	2170	3	2167	2364	22	2342
ii) Portfolio	5573	3745	1828	3225	3293	-68	9951	6927	3024	11860	9100	2760
b) Abroad	97	134	-37	149	249	-100	119	193	-74	70	584	-514
2. Loans (a+b+c)	**17301**	**12502**	**4799**	**14771**	**10353**	**4418**	**13060**	**11459**	**1601**	**23076**	**18545**	**4531**
a) External Assistance	2885	2000	885	2726	1927	799	3074	2183	891	2942	2532	410
i) By India	–	22	-22	–	21	-21	–	10	-10	–	17	-17
ii) To India	2885	1978	907	2726	1906	820	3074	2173	901	2942	2515	427
b) Commercial Borrowings (MT & LT)	7382	3372	4010	7231	2864	4367	3207	2874	333	9331	5315	4016
i) By India	11	–	11	5	–	5	20	–	20	7	2	5
ii) To India	7371	3372	3999	7226	2864	4362	3187	2874	313	9324	5313	4011
c) Short Term To India	7034	7130	-96	4814	5562	-748	6779	6402	377	10803	10698	105
3. Banking Capital (a+b)	**8910**	**9803**	**-893**	**8897**	**8199**	**698**	**10659**	**8532**	**2127**	**12772**	**11961**	**811**
a) Commercial Banks	8164	9424	-1260	7468	7916	-448	10259	7955	2304	12452	11567	885
i) Assets	580	2775	-2195	1344	2741	-1397	2653	1863	790	3009	4477	-1468
ii) Liabilities	52	242	-190	124	135	-11	201	227	-26	454	418	36
iii) Non-Resident Deposits	7532	6407	1125	6000	5040	960	7405	5865	1540	8989	6672	2317
b) Others	746	379	367	1429	283	1146	400	577	-177	320	394	-74
4. Rupee Debt Service	**–**	**767**	**-767**	**–**	**802**	**-802**	**–**	**711**	**-711**	**–**	**617**	**-617**
5. Other Capital	**3815**	**2463**	**1352**	**4610**	**2801**	**1809**	**4572**	**2262**	**2310**	**3992**	**4282**	**-290**
Total Capital Account (1 to 5)	**39292**	**29448**	**9844**	**34170**	**25735**	**8435**	**40531**	**30087**	**10444**	**54134**	**45111**	**9023**
C. Errors & Omissions	**167**	**–**	**167**	**–**	**175**	**-175**	**656**	**–**	**656**	**–**	**588**	**-588**
D. Overall Balance (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**98383**	**93872**	**4511**	**94238**	**90016**	**4222**	**109041**	**102639**	**6402**	**133475**	**127619**	**5856**
E. Monetary Movements (i+ii)	**–**	**4511**	**-4511**	**–**	**4222**	**-4222**	**–**	**6402**	**-6402**	**–**	**5856**	**-5856**
i) I.M.F.	–	618	-618	–	393	-393	–	260	-260	–	26	-26
ii) Foreign Exchange Reserves (Increase - / Decrease +)	–	3893	-3893	–	3829	-3829	–	6142	-6142	–	5830	-5830

PR : Partially Revised.

See 'Notes on Tables'.

No. 43 : INDIA'S OVERALL BALANCE OF PAYMENTS IN DOLLARS (Concld.)

(US $ million)

Items	Jul. - Sep. 2000 PR			Oct. - Dec. 2000 PR			Jan. - Mar. 2001 PR			Apr. - Jun. 2001		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
1	14	15	16	17	18	19	20	21	22	23	24	25
A. Current Account												
I. Merchandise	**11345**	**15186**	**-3841**	**11179**	**14790**	**-3611**	**11973**	**14298**	**-2325**	**10734**	**14466**	**-3732**
II. Invisibles (a+b+c)	**8309**	**5363**	**2946**	**9372**	**6082**	**3290**	**9553**	**6621**	**2932**	**9240**	**5840**	**3400**
a) Services	4307	3846	461	5514	4572	942	5779	5088	691	4792	4444	348
i) Travel	705	637	68	860	670	190	894	840	54	718	724	-6
ii) Transportation	490	760	-270	509	750	-241	505	773	-268	378	605	-227
iii) Insurance	62	25	37	68	29	39	65	39	26	61	37	24
iv) G.n.i.e.	189	107	82	193	70	123	158	97	61	152	73	79
v) Miscellaneous	2861	2317	544	3884	3053	831	4157	3339	818	3483	3005	478
b) Transfers	3381	12	3369	3231	15	3216	3161	34	3127	3760	17	3743
i) Official	63	1	62	95	–	95	120	1	119	40	1	39
ii) Private	3318	11	3307	3136	15	3121	3041	33	3008	3720	16	3704
c) Income	621	1505	-884	627	1495	-868	613	1499	-886	688	1379	-691
i) Investment Income	593	1503	-910	602	1493	-891	590	1495	-905	653	1377	-724
ii) Compensation to Employees	28	2	26	25	2	23	23	4	19	35	2	33
Total Current Account (I+II)	**19654**	**20549**	**-895**	**20551**	**20872**	**-321**	**21526**	**20919**	**607**	**19974**	**20306**	**-332**
B. Capital Account												
1. Foreign Investment (a+b)	**3620**	**2731**	**889**	**1872**	**1652**	**220**	**4389**	**2292**	**2097**	**2639**	**1249**	**1390**
a) In India	3618	2700	918	1846	1411	435	4357	2058	2299	2603	1044	1559
i) Direct	519	2	517	473	–	473	690	–	690	610	1	609
ii) Portfolio	3099	2698	401	1373	1411	-38	3667	2058	1609	1993	1043	950
b) Abroad	2	31	-29	26	241	-215	32	234	-202	36	205	-169
2. Loans (a+b+c)	**5467**	**5139**	**328**	**9901**	**4936**	**4965**	**4065**	**4474**	**-409**	**2643**	**3498**	**-855**
a) External Assistance	444	481	-37	854	562	292	1121	616	505	622	666	-44
i) By India	–	3	-3	–	7	-7	–	–	–	–	72	-72
ii) To India	444	478	-34	854	555	299	1121	616	505	622	594	28
b) Commercial Borrowings (MT & LT)	1434	1624	-190	6272	1125	5147	798	1329	-531	598	1071	-473
i) By India	1	–	1	4	1	3	1	1	–	1	–	1
ii) To India	1433	1624	-191	6268	1124	5144	797	1328	-531	597	1071	-474
c) Short Term To India	3589	3034	555	2775	3249	-474	2146	2529	-383	1423	1761	-338
3. Banking Capital (a+b)	**2882**	**3163**	**-281**	**3044**	**3792**	**-748**	**3275**	**2617**	**658**	**5429**	**3123**	**2306**
a) Commercial Banks	2882	2949	-67	3040	3616	-576	3227	2617	610	4998	3123	1875
i) Assets	990	1461	-471	578	1695	-1117	734	948	-214	1786	502	1284
ii) Liabilities	29	150	-121	125	53	72	288	103	185	144	73	71
iii) Non-Resident Deposits	1863	1338	525	2337	1868	469	2205	1566	639	3068	2548	520
b) Others	–	214	-214	4	176	-172	48	–	48	431	–	431
4. Rupee Debt Service	–	**1**	**-1**	–	–	–	–	**156**	**-156**	–	**388**	**-388**
5. Other Capital	**1218**	**1172**	**46**	**817**	**880**	**-63**	**1048**	**795**	**253**	**835**	**841**	**-6**
Total Capital Account (1 to 5)	**13187**	**12206**	**981**	**15634**	**11260**	**4374**	**12777**	**10334**	**2443**	**11546**	**9099**	**2447**
C. Errors & Omissions	–	**499**	**-499**	**116**	–	**116**	**71**	–	**71**	–	**653**	**-653**
D. Overall Balance (Total Capital Account, Current Account and Errors & Omissions (A+B+C))	**32841**	**33254**	**-413**	**36301**	**32132**	**4169**	**34374**	**31253**	**3121**	**31520**	**30058**	**1462**
E. Monetary Movements (i+ii)	**413**	–	**413**	–	**4169**	**-4169**	–	**3121**	**-3121**	–	**1462**	**-1462**
i) I.M.F.	–	–	–	–	–	–	–	–	–	–	–	–
ii) Foreign Exchange Reserves (Increase - / Decrease +)	413	–	413	–	4169	-4169	–	3121	-3121	–	1462	-1462

PR : Partially Revised.

No. 44 : FOREIGN EXCHANGE RESERVES

End of		SDRs			Gold		Foreign Currency Assets		Total	
		In millions of SDRs	Rupees crore	In millions of US $	Rupees crore	In millions of US $	Rupees crore	In millions of US $	Rupees crore	In millions of US $
1		2	3	4	5	6	7	8	9=(3+5+7)	10=(4+6+8)
1990-91		76	200	102	6,828	3,496	4,388	2,236	11,416	5,834
1991-92		66	233	90	9,039	3,499	14,578	5,631	23,850	9,220
1992-93		13	55	18	10,549	3,380	20,140	6,434	30,744	9,832
1993-94		76	339	108	12,794	4,078	47,287	15,068	60,420	19,254
1994-95		5	23	7	13,752	4,370	66,006	20,809	79,781	25,186
1995-96		56	280	82	15,658	4,561	58,446	17,044	74,384	21,687
1996-97		1	7	2	14,557	4,054	80,368	22,367	94,932	26,423
1997-98		1	4	1	13,394	3,391	1,02,507	25,975	1,15,905	29,367
1998-99		6	34	8	12,559	2,960	1,25,412	29,522	1,38,005	32,490
1999-00		3	16	4	12,973	2,974	1,52,924	35,058	1,65,913	38,036
2000-01		2	11	2	12,711	2,725	1,84,482	39,554	1,97,204	42,281
July	2000	6	37	8	13,153	2,924	1,49,811	33,299	1,63,001	36,231
August	2000	1	8	2	12,963	2,830	1,50,163	32,787	1,63,134	35,619
September	2000	1	8	2	13,057	2,834	1,50,195	32,602	1,63,260	35,438
October	2000	6	38	8	13,104	2,800	1,50,184	32,091	1,63,326	34,899
November	2000	1	7	2	12,889	2,752	1,69,962	36,286	1,82,858	39,040
December	2000	1	7	2	13,143	2,811	1,74,207	37,264	1,87,357	40,077
January	2001	6	37	8	12,766	2,751	1,78,032	38,361	1,90,835	41,120
February	2001	1	7	1	12,637	2,711	1,81,294	38,896	1,93,938	41,608
March	2001	2	11	2	12,711	2,725	1,84,482	39,554	1,97,204	42,281
April	2001	8	46	10	12,629	2,695	1,86,601	39,821	1,99,276	42,526
May	2001	3	20	4	13,233	2,816	1,88,762	40,171	2,02,015	42,991
June	2001	3	20	4	13,163	2,798	1,91,226	40,652	2,04,409	43,454
July	2001	7	44	9	13,070	2,771	1,93,122	40,950	2,06,236	43,730
August	2001	3	21	4	13,283	2,817	2,00,561	42,537	2,13,865	45,358
September	2001	3	21	4	13,998	2,925	2,00,762	41,948	2,14,781	44,877
September 7,	2001	3	21	4	13,283	2,817	2,00,895	42,544	2,14,199	45,365
September 14,	2001	3	21	4	13,283	2,817	2,02,568	42,467	2,15,872	45,288
September 21,	2001	3	22	4	13,283	2,817	2,01,079	41,883	2,14,384	44,704
September 28,	2001	3	21	4	13,283	2,817	2,00,763	41,948	2,14,067	44,769

See 'Notes on Tables'.

No. 45 : NRI DEPOSITS - OUTSTANDINGS @

(As at the end of March) (US $ million)

SCHEME	1991	1992	1993	1994	1995	1996	1997	1998	1999 (R)	2000 (R)	2001 (R)
1	2	3	4	5	6	7	8	9	10	11	12
1. FCNR(A)	10103	9792	10617	9300	7051	4255	2306	1	*	*	*
2. FCNR(B)	**	**	**	1108	3063	5720	7496	8467	7835	8172	9076
3. NR(E)RA	3618	3025	2740	3523	4556	3916	4983	5637	6045	6758	7147
4. NR(NR)RD	***	***	621	1754	2486	3542	5604	6262	6618	6754	6849
Total	**13721**	**12817**	**13978**	**15685**	**17156**	**17433**	**20389**	**20367**	**20498**	**21684**	**23072**

(US $ million)

SCHEME	2000-01 (R) (End-Month)											
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13
1. FCNR(B)	8245	8206	8331	8429	8439	8566	8338	8713	8781	8921	8941	9076
2. NR(E)RA	6910	6889	6976	6970	6848	6901	6854	6888	6947	7050	7053	7147
3. NR(NR)RD	6851	6749	6725	6731	6612	6676	6685	6621	6685	6758	6779	6849
Total	**22006**	**21844**	**22032**	**22130**	**21899**	**22143**	**21877**	**22222**	**22413**	**22729**	**22773**	**23072**

(US $ million)

SCHEME	2001-02 (End-Month)				
	Apr. (R)	May (R)	Jun. (R)	Jul. (P)	Aug. (P)
1	2	3	4	5	6
1. FCNR(B)	9139	9157	9186	9252	9389
2. NR(E)RA	7235	7251	7352	7438	7548
3. NR(NR)RD	6960	6902	7013	6974	7001
Total	**23334**	**23310**	**23551**	**23664**	**23938**

R : Revised

@ : All figures are inclusive of accrued interest.

* : Withdrawn effective August 1994.

** : Introduced in May 1993.

*** : Introduced in June 1992.

Notes : 1. FCNR(A) : Foreign Currency Non-Resident (Accounts).

2. FCNR(B) : Foreign Currency Non-Resident (Banks).

3. NR(E)RA : Non-Resident (External) Rupee Accounts.

4. NR(NR)RD : Non-Resident (Non-Repatriable) Rupee Deposits.

No. 46 : FOREIGN INVESTMENT INFLOWS

(US $ million)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01 (P)
1	2	3	4	5	6	7	8	9	10	11	12
A. Direct Investment	**97**	**129**	**315**	**586**	**1314**	**2144**	**2821**	**3557**	**2462**	**2155**	**2339**
a. Government (SIA/FIPB)	–	66	222	280	701	1249	1922	2754	1821	1410	1456
b. RBI	–	–	42	89	171	169	135	202	179	171	454
c. NRI	–	63	51	217	442	715	639	241	62	84	67
d. Acquisition of shares *	–	–	–	–	–	11	125	360	400	490	362
B. Portfolio Investment	**6**	**4**	**244**	**3567**	**3824**	**2748**	**3312**	**1828**	**-61**	**3026**	**2760**
a. GDRs/ADRs #	–	–	240	1520	2082	683	1366	645	270	768	831
b. FIIs **	–	–	1	1665	1503	2009	1926	979	-390	2135	1847
c. Offshore funds and others	6	4	3	382	239	56	20	204	59	123	82
Total (A+B)	**103**	**133**	**559**	**4153**	**5138**	**4892**	**6133**	**5385**	**2401**	**5181**	**5099**

(US $ million)

	2000-01 (P)											
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	2	3	4	5	6	7	8	9	10	11	12	13
A. Direct Investment	**83**	**349**	**230**	**254**	**172**	**91**	**176**	**113**	**181**	**335**	**193**	**162**
a. Government (SIA/FIPB)	57	195	136	181	97	33	146	70	80	242	103	116
b. RBI	4	106	13	59	4	30	5	14	95	52	40	32
c. NRI	6	5	13	3	4	9	6	3	2	5	8	3
d. Acquisition of shares *	16	43	68	11	67	19	19	26	4	36	42	11
B. Portfolio Investment	**624**	**324**	**-159**	**-16**	**171**	**246**	**-231**	**78**	**116**	**451**	**670**	**486**
a. GDRs/ADRs #	275	146	–	172	75	11	17	–	–	3	–	132
b. FIIs **	349	155	-160	-194	75	235	-271	78	114	444	668	354
c. Offshore funds and others	–	23	1	6	21	–	23	–	2	4	2	–
Total (A+B)	**707**	**673**	**71**	**238**	**343**	**337**	**-55**	**191**	**297**	**786**	**863**	**648**

(US $ million)

	2001-02 (P)					
	Apr.	May	Jun.	Jul.	Aug.	Apr.-Aug.
1	2	3	4	5	6	7
A. Direct Investment	**191**	**258**	**159**	**228**	**633**	**1469**
a. Government (SIA/FIPB)	90	119	103	92	485	889
b. RBI	68	112	37	101	90	408
c. NRI	11	2	5	12	–	30
d. Acquisition of shares *	22	25	14	23	58	142
B. Portfolio Investment	**247**	**280**	**423**	**131**	**289**	**1370**
a. GDRs/ADRs #	–	–	285	–	173	458
b. FIIs **	229	265	138	125	116	873
c. Offshore funds and others	18	15	–	6	–	39
Total (A+B)	**438**	**538**	**582**	**359**	**922**	**2839**

* : Relates to acquisition of shares of Indian companies by non-residents under Section 5 of FEMA, 1999. Data on such acquisitions have been included as part of FDI since January 1996.

\# : Represents the amount raised by Indian corporates through Global Depository Receipts (GDRs) and American Depository Receipts (ADRs).

** : Represents fresh inflow of funds by Foreign Institutional Investors (FIIs).

No. 47 : DAILY FOREIGN EXCHANGE SPOT RATES

(Rupees per Unit of Foreign Currency)

Date	RBI Re-US Dollar Reference Rate	FEDAI Indicative Rates							
		US Dollar		Pound Sterling		Euro		One Hundred Japanese Yen	
		Buying	Selling	Buying	Selling	Buying	Selling	Buying	Selling
1	2	3	4	5	6	7	8	9	10
September 3, 2001	47.1300	47.1250	47.1350	68.4500	68.5025	42.8450	42.8775	39.6650	39.6900
September 4, 2001	47.1600	47.1550	47.1650	68.2575	68.3000	42.4450	42.4675	39.6550	39.6750
September 5, 2001	47.1600	47.1500	47.1600	68.0750	68.1375	41.8700	41.9025	39.3775	39.4025
September 6, 2001	47.1600	47.1600	47.1700	68.6325	68.6750	41.8450	41.8575	38.8700	38.8800
September 7, 2001	47.2200	47.2100	47.2200	68.7375	68.7850	42.2200	42.2375	38.9750	38.9925
September 10, 2001	47.2800	47.2600	47.2700	69.0900	69.1275	42.7125	42.7425	39.3725	39.3975
September 11, 2001	47.4500	47.4400	47.4500	69.0575	69.0825	42.5825	42.6000	38.9875	39.0125
September 12, 2001	47.4300	47.4250	47.4350	69.8725	69.9150	43.2575	43.2850	39.8800	39.9150
September 13, 2001	47.5400	47.5250	47.5350	69.7200	69.7825	43.1000	43.1325	39.8200	39.8550
September 14, 2001	47.7000	47.6800	47.7000	70.1125	70.1575	43.3850	43.4175	40.0300	40.0650
September 17, 2001	48.1800	48.1600	48.2000	71.0350	71.1200	44.6300	44.6900	40.9200	40.9900
September 18, 2001	48.0200	48.0000	48.0200	70.3250	70.3725	44.2600	44.3025	40.7225	40.7500
September 19, 2001	47.9600	47.9500	47.9700	70.1900	70.2425	44.3050	44.3475	40.6875	40.7225
September 20, 2001	48.0600	48.0700	48.0900	70.5950	70.6550	44.6525	44.6900	40.9325	40.9700
September 21, 2001	48.0100	48.0000	48.0200	70.2050	70.2575	44.2475	44.2800	40.9725	41.0075
September 24, 2001	47.9300	47.9000	47.9200	69.7100	69.7475	43.8000	43.8225	41.1400	41.1825
September 25, 2001	47.9000	47.8800	47.9000	70.0350	70.0975	43.8625	43.8725	40.7775	40.8100
September 26, 2001	47.8800	47.8700	47.8800	70.4350	70.4750	44.1900	44.2125	40.8400	40.8600
September 27, 2001	47.8900	47.8850	47.8950	70.4925	70.5350	43.9825	44.0150	40.3250	40.3525
September 28, 2001	47.8600	47.8450	47.8550	70.3125	70.3325	43.7600	43.7925	40.1550	40.1800

FEDAI : Foreign Exchange Dealers' Association of India.

Source : FEDAI for FEDAI rates.

No. 48 : SALE / PURCHASE OF US DOLLAR BY RESERVE BANK OF INDIA

Month		Foreign Currency (US $ Million)			Rs. equivalent at contract rate (Rs. crore)	Cumulative (over end - March 2000)		Outstanding Net Forward Sales (–)/ Purchase (+) at the end of month (US $ Million)
		Purchase (+)	Sale (–)	Net @ (+/–)		(US $ Million)	(Rs. crore)	
1		2	3	4	5	6	7	8
2000-01								
April	2000	2272.00	1904.00	(+) 368.00	(+) 1,597.18	(+) 368.00	(+) 1,597.65	(-) 670.00
May	2000	3183.00	4080.15	(-) 897.15	(-) 3,922.35	(-) 529.15	(-) 2,324.69	(-) 1380.00
June	2000	2780.00	3831.20	(-) 1051.20	(-) 4,690.39	(-) 1580.35	(-) 7,015.08	(-) 1693.00
July	2000	2426.00	2834.75	(-) 408.25	(-) 1,815.49	(-) 1988.60	(-) 8,830.57	(-) 1903.00
August	2000	1183.50	1650.25	(-) 466.75	(-) 2,073.02	(-) 2455.35	(-) 10,903.59	(-) 2225.00
September	2000	728.00	1015.09	(-) 287.09	(-) 1,293.94	(-) 2742.44	(-) 12,197.52	(-) 2225.00
October	2000	510.50	1004.50	(-) 494.00	(-) 2,248.31	(-) 3236.44	(-) 14,445.83	(-) 2225.00
November	2000	8078.61	4392.50	(+) 3686.11	(+) 17,295.42	(+) 449.68	(+) 2,849.59	(-) 2025.00
December	2000	2049.36	2204.50	(-) 155.14	(-) 664.45	(+) 294.53	(+) 2,185.14	(-) 1643.00
January	2001	2166.25	1334.70	(+) 831.55	(+) 3,891.43	(+) 1126.08	(+) 6,076.57	(-) 1638.00
February	2001	1080.44	456.50	(+) 623.94	(+) 2,913.39	(+) 1750.02	(+) 8,989.96	(-) 1438.00
March	2001	1745.00	1138.68	(+) 606.32	(+) 2,834.52	(+) 2356.34	(+) 11,824.48	(-) 1259.00

Month		Foreign Currency (US $ Million)			Rs. equivalent at contract rate (Rs. crore)	Cumulative (over end - March 2001)		Outstanding Net Forward Sales (–)/ Purchase (+) at the end of month (US $ Million)
		Purchase (+)	Sale (–)	Net @ (+/–)		(US $ Million)	(Rs. crore)	
1		2	3	4	5	6	7	8
2001-02								
April	2001	1608.50	1626.75	(–) 18.25	(–) 84.50	(–) 18.25	(–) 84.50	(–) 1160.00
May	2001	1082.25	613.50	(+) 468.75	(+) 2,187.49	(+) 450.50	(+) 2,102.98	(–) 980.00
June	2001	1205.50	1169.23	(+) 36.27	(+) 154.75	(+) 486.77	(+) 2,257.73	(–) 800.00
July	2001	859.00	1130.66	(–) 271.66	(–) 1,299.94	(+) 215.11	(+) 957.78	(–) 620.00
August	2001	1733.75	1052.00	(+) 681.75	(+) 3,206.23	(+) 896.86	(+) 4,164.01	(–) 475.00
September	2001	1432.00	2326.11	(–) 894.11	(–) 4,260.94	(+) 2.75	(–) 96.93	(–) 800.00

(+) : Implies Purchase including purchase leg under swaps and outright forwards.

(–) : Implies Sales including sale leg under swaps and outright forwards.

@ : Includes transactions under Resurgent India Bonds (RIBs) and India Millenium Bonds (IMDs).

Note : This table is based on value dates.

No. 49 : TURNOVER IN FOREIGN EXCHANGE MARKET

(US $ Million)

Position Date	Merchant						Inter-bank					
	FCY / INR			FCY / FCY			FCY / INR			FCY / FCY		
	Spot	Forward	Forward Cancellation	Spot	Forward	Forward Cancellation	Spot	Swap	Forward	Spot	Swap	Forward
1	2	3	4	5	6	7	8	9	10	11	12	13
Purchases												
Sep. 3, 2001	214	46	1	11	9	4	289	741	45	233	84	4
Sep. 4, 2001	212	120	50	25	27	18	658	1461	39	457	87	10
Sep. 5, 2001	308	56	13	11	24	18	359	719	36	445	63	12
Sep. 6, 2001	253	120	18	9	14	12	419	1046	44	455	74	4
Sep. 7, 2001	251	106	14	5	10	6	960	1305	34	383	93	4
Sep. 10, 2001	314	98	44	20	14	16	940	1198	76	439	66	5
Sep. 11, 2001	312	159	17	16	13	16	1222	1272	61	440	95	8
Sep. 12, 2001	190	63	28	7	22	16	1052	927	77	193	79	5
Sep. 13, 2001	217	70	46	5	34	10	1084	1860	98	115	98	2
Sep. 14, 2001	350	93	125	22	16	14	1225	2174	126	174	103	2
Sep. 17, 2001	302	93	79	36	45	16	1605	1659	135	265	108	13
Sep. 18, 2001	234	88	79	14	15	8	1093	1739	96	359	92	3
Sep. 19, 2001	270	85	43	3	13	9	924	1796	58	252	81	5
Sep. 20, 2001	233	60	37	9	15	17	660	1587	47	232	89	10
Sep. 21, 2001	235	93	47	5	45	11	668	1367	54	337	87	25
Sep. 24, 2001	333	76	33	7	30	14	603	1645	97	292	90	19
Sep. 25, 2001	359	200	299	14	11	17	642	1359	101	287	103	9
Sep. 26, 2001	405	94	247	23	26	15	576	1629	70	309	282	14
Sep. 27, 2001	382	173	123	18	37	19	611	1437	60	302	170	11
Sep. 28, 2001	526	129	160	18	23	16	557	1516	73	296	157	5
Sales												
Sep. 3, 2001	205	65	14	11	10	9	254	527	15	240	77	5
Sep. 4, 2001	402	85	42	25	24	19	562	1251	59	458	99	9
Sep. 5, 2001	239	102	30	11	26	15	366	760	27	444	68	3
Sep. 6, 2001	276	112	29	9	16	13	380	1173	30	460	69	4
Sep. 7, 2001	279	139	31	5	10	5	891	1358	36	383	65	3
Sep. 10, 2001	323	130	37	15	14	13	946	1094	52	429	70	4
Sep. 11, 2001	332	237	64	18	13	16	1069	1366	36	441	84	8
Sep. 12, 2001	224	344	31	7	23	16	744	876	47	190	91	5
Sep. 13, 2001	266	220	23	5	31	11	974	1814	68	152	96	2
Sep. 14, 2001	446	402	42	21	19	7	1011	2236	97	181	103	2
Sep. 17, 2001	398	426	46	35	43	15	1325	1692	93	273	114	13
Sep. 18, 2001	321	212	49	12	17	10	960	1714	97	362	90	3
Sep. 19, 2001	299	212	42	3	9	9	770	2016	52	253	71	4
Sep. 20, 2001	205	183	31	10	14	16	573	1741	67	226	92	12
Sep. 21, 2001	240	135	45	5	53	12	564	1377	59	332	83	26
Sep. 24, 2001	267	231	38	5	31	16	709	1442	72	288	92	19
Sep. 25, 2001	252	535	108	15	11	17	869	1287	114	295	101	9
Sep. 26, 2001	306	433	59	21	23	19	638	1600	77	319	284	16
Sep. 27, 2001	343	266	68	18	38	18	619	1344	51	339	158	11
Sep. 28, 2001	474	246	89	17	28	23	665	1690	75	301	163	5

FCY : Foreign Currency. INR : Indian Rupees.

Note : Data relate to sales and purchases of foreign exchange on account of merchant and inter-bank transactions. Data are provisional.

No. 50 : INDICES OF REAL EFFECTIVE EXCHANGE RATE (REER) AND NOMINAL EFFECTIVE EXCHANGE RATE (NEER) OF THE INDIAN RUPEE

(36 – country bilateral weights)

(Base : 1985 = 100)

Year-Month			Export Based Weights				Trade Based Weights			
			REER	Percentage Variation	NEER	Percentage Variation	REER	Percentage Variation	NEER	Percentage Variation
1			2	3	4	5	6	7	8	9
1990-91			73.33	-5.2	66.19	-7.6	75.58	-3.6	67.20	-6.9
1991-92			61.36	-16.3	51.12	-22.8	64.20	-15.1	52.51	-21.9
1992-93			54.42	-11.3	42.30	-17.3	57.08	-11.1	43.46	-17.2
1993-94			59.09	8.6	43.48	2.8	61.59	7.9	44.69	2.8
1994-95			63.29	7.1	42.20	-2.9	66.04	7.2	43.37	-2.9
1995-96			60.94	-3.7	38.74	-8.2	63.62	-3.7	39.73	-8.4
1996-97			61.14	0.3	38.09	-1.7	63.81	0.3	38.97	-1.9
1997-98			63.76	4.3	39.93	2.2	67.02	5.0	40.01	2.7
1998-99			60.13	-5.7	35.32	-9.3	63.44	-5.3	36.34	-9.2
1999-00			59.70	-0.7	34.30	-2.9	63.29	-0.2	35.46	-2.4
2000-01 (P)			62.47	4.6	34.24	-0.2	66.53	5.1	35.52	0.2
1998	January		63.27	2.3	38.39	1.9	66.87	2.5	39.60	2.0
	February		62.91	-0.6	38.41	–	66.38	-0.7	39.55	-0.1
	March		62.15	-1.2	37.90	-1.3	65.51	-1.3	38.97	-1.5
	April		62.83	1.1	37.72	-0.5	66.19	1.0	38.79	-0.5
	May		62.39	-0.7	37.25	-1.3	65.68	-0.8	38.25	-1.4
	June		61.08	-2.1	36.13	-3.0	65.29	-2.1	37.07	-3.1
	July		61.20	0.2	35.96	-0.5	64.49	0.3	36.92	-0.4
	August		60.99	-0.3	35.94	-0.1	64.32	-0.3	36.92	–
	September		59.67	-2.2	35.09	-2.4	62.92	-2.2	36.06	-2.3
	October		58.61	-1.8	34.12	-2.8	61.89	-1.6	35.14	-2.5
	November		59.21	1.0	34.28	0.5	62.51	1.0	35.32	0.5
	December		58.50	-1.2	33.93	-1.0	61.80	-1.1	34.96	-1.0
1999	January		57.91	-1.0	33.97	0.1	61.23	-0.9	35.02	0.2
	February		59.18	2.2	34.50	1.6	62.56	2.2	35.56	1.6
	March		59.96	1.3	34.98	1.4	63.40	1.3	36.07	1.4
	April		59.81	-0.3	34.88	-0.3	63.25	-0.2	35.95	-0.3
	May		60.06	0.4	34.96	0.2	63.45	0.3	36.01	0.2
	June		60.04	0.0	34.81	-0.4	63.51	0.1	35.89	-0.3
	July		60.12	0.1	34.80	0.0	63.64	0.2	35.92	0.1
	August		59.23	-1.5	34.07	-2.1	62.73	-1.4	35.18	-2.0
	September		59.06	-0.3	33.84	-0.7	62.59	-0.2	34.99	-0.5
	October		59.01	-0.1	33.51	-1.0	62.58	0.0	34.66	-0.9
	November		59.69	1.2	33.91	1.2	63.40	1.3	35.12	1.3
	December		59.19	-0.8	33.91	0.0	62.91	-0.8	35.16	0.1
2000	January		59.09	-0.2	33.91	0.0	62.74	-0.3	35.13	-0.1
	February		59.94	1.4	34.45	1.6	63.66	1.5	35.67	1.5
	March		61.18	2.1	34.56	0.3	65.07	2.2	35.83	0.5
	April		62.23	1.7	34.69	0.4	66.29	1.9	36.01	0.5
	May		63.07	1.3	35.18	1.4	67.21	1.4	36.53	1.4
	June		61.34	-2.7	34.15	-2.9	65.30	-2.8	35.40	-3.1
	July		61.68	0.5	34.31	0.5	65.65	0.5	35.57	0.5
	August		61.15	-0.9	33.95	-1.0	65.15	-0.8	35.23	-1.0
	September	(P)	61.98	1.3	34.24	0.8	66.08	1.4	35.56	0.9
	October	(P)	63.26	2.1	34.27	0.1	67.53	2.2	35.64	0.2
	November	(P)	63.09	-0.3	34.11	-0.5	67.30	-0.3	35.46	-0.5
	December	(P)	62.52	-0.9	33.73	-1.1	66.57	-1.1	34.97	-1.4
2001	January	(P)	62.60	0.1	33.79	0.2	66.51	-0.1	34.95	-0.1
	February	(P)	62.89	0.5	34.05	0.8	66.89	0.6	35.23	0.8
	March	(P)	63.81	1.5	34.46	1.2	67.86	1.5	35.66	1.2
	April	(P)	64.38	0.9	34.71	0.7	68.41	0.8	35.91	0.7
	May	(P)	64.41	0.0	34.77	0.2	68.42	0.0	35.95	0.1
	June	(P)	65.00	0.9	35.02	0.7	69.11	1.0	36.25	0.8
	July	(P)	65.06	0.1	34.93	-0.3	69.17	0.1	36.15	-0.3
	August	(P)	64.06	-1.5	34.30	-1.8	68.03	-1.7	35.44	-1.9

Note: The indices on REER have been recalculated from April 1994 onwards using the new Wholesale Price Index (WPI) series with base year 1993-94 = 100.

No. 51 : INDICES OF REAL EFFECTIVE EXCHANGE RATE (REER) AND NOMINAL EFFECTIVE EXCHANGE RATE (NEER) OF THE INDIAN RUPEE (5-country trade based weights)

Year / Month / Day		Base: 1991-92 (April-March) = 100		Base: 1993-94 (April-March) = 100		Base: 1999-00 (April-March) =100	
		NEER	REER	NEER	REER	NEER	REER
1		2	3	4	5	6	7
1990-91		133.07	121.64	175.04	141.69	235.85	146.19
1991-92		100.00	100.00	131.54	116.48	177.23	121.22
1992-93		89.57	96.42	117.81	112.31	158.74	115.70
1993-94		76.02	85.85	100.00	100.00	134.74	103.37
1993-94		76.02	85.27	100.00	100.00	134.74	103.37
1994-95		73.06	90.23	96.09	105.81	129.48	109.38
1995-96		66.67	87.23	87.69	102.29	118.17	105.74
1996-97		65.67	88.20	86.38	103.43	116.50	106.92
1997-98		65.71	90.25	86.43	105.84	116.52	109.40
1998-99		58.12	83.38	76.45	97.79	103.01	101.08
1999-00		56.42	82.49	74.22	96.74	100.00	100.00
2000-01 (P)		56.08	85.92	73.77	100.76	99.39	104.16
1993-94	April	75.39	81.43	99.16	94.84	133.61	103.32
	May	75.17	81.54	98.88	94.98	133.23	102.81
	June	75.46	82.67	99.26	96.29	133.74	103.14
	July	76.49	84.45	100.61	98.37	135.57	104.50
	August	75.90	84.95	99.84	98.95	134.52	103.48
	September	74.98	85.19	98.63	99.22	132.90	101.99
	October	75.57	87.24	99.40	101.62	133.94	102.61
	November	76.57	88.23	100.72	102.76	135.71	103.99
	December	76.78	88.40	100.99	102.97	136.08	104.20
	January	77.34	89.22	101.73	103.92	137.08	104.72
	February	76.70	88.92	100.88	103.58	135.93	103.50
	March	75.94	88.01	99.89	102.51	134.59	102.16
1994-95	April	75.88	90.00	99.81	104.83	134.49	109.41
	May	75.27	90.49	99.01	105.40	133.41	109.14
	June	74.60	90.19	98.13	105.06	132.22	109.77
	July	73.18	89.56	96.25	104.32	129.69	108.83
	August	73.31	89.73	96.42	104.51	129.92	109.32
	September	72.82	88.87	95.78	103.51	129.06	108.47
	October	72.05	88.24	94.78	102.78	127.70	107.91
	November	72.33	89.04	95.14	103.72	128.20	108.74
	December	73.28	91.37	96.39	106.43	129.88	111.34
	January	72.67	91.43	95.59	106.50	128.80	111.73
	February	72.14	91.00	94.89	105.99	127.85	111.33
	March	69.14	87.20	90.94	101.57	122.54	106.55
1995-96	April	68.18	86.61	89.68	100.88	120.84	106.76
	May	68.92	88.38	90.66	102.95	122.16	108.53
	June	68.69	88.22	90.35	102.76	121.74	108.45
	July	68.96	89.21	90.71	103.91	122.22	110.16
	August	70.37	91.42	92.56	106.49	124.71	112.02
	September	68.04	88.51	89.50	103.09	120.59	108.12
	October	64.80	84.49	85.23	98.41	114.85	103.26
	November	64.63	84.72	85.01	98.68	114.54	103.30
	December	64.64	84.29	85.03	98.18	114.57	102.82
	January	63.75	82.72	83.85	96.35	112.98	101.15
	February	62.39	80.89	82.06	94.22	110.65	98.95
	March	66.62	86.51	87.63	100.76	118.22	105.34

No. 51 : INDICES OF REAL EFFECTIVE EXCHANGE RATE (REER) AND NOMINAL EFFECTIVE EXCHANGE RATE (NEER) OF THE INDIAN RUPEE *(Concld.)*
(5-country trade based weights)

Year / Month / Day	Base: 1991-92 (April-March) =100		Base: 1993-94 (April-March) =100		Base: 1999-00 (April-March) =100	
	NEER	REER	NEER	REER	NEER	REER
1	2	3	4	5	6	7
1996-97 April	67.47	88.05	88.75	102.56	119.70	107.54
May	66.19	86.94	87.07	101.27	117.46	106.08
June	66.26	87.36	87.16	101.75	117.59	106.65
July	65.03	87.12	85.54	101.47	115.37	106.18
August	64.28	86.99	84.56	101.33	114.08	105.55
September	64.63	87.85	85.01	102.33	114.69	106.06
October	65.13	88.64	85.67	103.24	115.55	106.41
November	64.28	87.95	84.56	102.45	114.04	105.21
December	64.67	88.53	85.07	103.11	114.73	106.12
January	65.49	89.50	86.14	104.24	116.17	107.08
February	67.11	91.94	88.27	107.09	119.03	109.87
March	67.44	92.10	88.71	107.27	119.62	110.27
1997-98 April	67.84	92.62	89.24	107.88	120.26	112.21
May	67.03	91.40	88.16	106.46	118.89	110.56
June	66.71	91.03	87.74	106.03	118.36	110.44
July	67.40	92.31	88.66	107.52	119.52	111.59
August	68.45	93.95	90.04	109.44	121.34	113.37
September	67.19	92.55	88.38	107.80	119.17	111.90
October	67.05	93.21	88.20	108.57	118.94	111.81
November	65.03	90.46	85.54	105.36	115.30	108.31
December	62.71	87.93	82.48	102.42	111.21	104.95
January	63.04	89.50	82.92	104.24	111.77	106.35
February	63.39	89.72	83.38	104.50	112.43	106.32
March	62.65	88.24	82.40	102.79	111.10	105.01
1998-99 April	62.55	89.18	82.27	103.88	110.86	106.33
May	61.45	88.19	80.82	102.72	108.91	105.21
June	59.35	86.10	78.08	100.29	105.20	102.82
July	59.07	86.81	77.70	101.11	104.71	103.30
August	59.04	87.05	77.66	101.40	104.65	102.81
September	57.56	85.55	75.71	99.64	102.02	100.19
October	56.01	83.60	73.68	97.37	99.27	98.15
November	56.50	84.31	74.31	98.20	100.14	99.44
December	55.84	82.63	73.45	96.25	98.97	98.00
January	55.75	82.31	73.33	95.87	98.80	96.81
February	56.78	84.03	74.69	97.88	100.65	99.31
March	57.54	84.61	75.69	98.55	101.98	100.58
1999-00 April	57.47	82.77	75.59	97.07	101.85	100.34
May	57.70	83.22	75.90	97.71	102.27	101.00
June	57.55	83.41	75.69	97.82	101.99	101.12
July	57.45	83.47	75.57	97.89	101.82	101.18
August	56.09	81.85	73.78	95.99	99.41	99.22
September	55.48	81.11	72.97	95.12	98.33	98.33
October	54.99	81.15	72.33	95.16	97.47	98.37
November	55.60	82.18	73.14	96.38	98.55	99.63
December	55.67	81.70	73.22	95.82	98.66	99.04
January	55.60	81.45	73.13	95.52	98.55	98.74
February	56.64	82.93	74.50	97.25	100.39	100.54
March	56.82	84.55	74.74	99.16	100.70	102.49
2000-01 April	56.97	85.80	74.94	100.62	100.98	104.01
May	57.78	87.04	76.00	102.08	102.39	105.51
June	56.05	84.62	73.73	99.24	99.35	102.58
July	56.24	85.04	73.97	99.73	99.67	103.08
August	55.78	84.54	73.38	99.14	98.87	102.48
September	56.38	85.74	74.17	100.55	99.94	103.94
October	56.08	87.04	73.77	102.07	99.40	105.51
November	55.79	86.65	73.39	101.62	98.89	105.05
December	55.25	85.99	72.65	100.85	97.90	104.25
January	55.09	85.64	72.46	100.44	97.64	103.82
February	55.49	85.97	72.99	100.82	98.35	104.22
March	56.06	87.01	73.74	102.04	99.35	105.48
2001-02 April	56.41	87.73	74.20	102.89	99.97	106.35
May	56.45	87.64	74.26	102.78	100.05	106.24
June	56.92	88.55	74.87	103.85	100.88	107.35
July (P)	56.77	88.79	74.68	104.13	100.62	107.64
August (P)	55.74	87.32	73.32	102.41	98.79	105.86
September (P)	54.53	85.58	71.73	100.37	96.65	103.75
As on						
September 21 (P)	53.82	84.04	70.80	98.56	95.39	101.88
September 28 (P)	54.23	84.74	71.33	99.38	96.12	102.73
October 5 (P)	54.09	84.49	71.14	99.09	95.86	102.42
October 12 (P)	54.56	85.23	71.77	99.96	96.70	103.33

Notes : 1. Rise in indices indicates appreciation of rupee and vice versa.
2. For "Note on Methodology" on the indices presented here, please see Page S 653 of July 1998 issue of this Bulletin.
3. It may be recalled that in the aforesaid Note on Methodology, it was indicated that the base year 1996-97 would be a moving one. Accordingly, with effect from April 1999, the base year 1996-97 has been shifted forward to 1997-98. Again, with effect from April 2000, the base year 1997-98 has been shifted forward to 1998-99 and with effect from April 2001, the base year has been shifted forward to 1999-00.
4. The indices on REER have been recalculated from April 1993 onwards using the new Wholesale Price Index (WPI) series with base year 1993-94=100.