

## Analysing Economic Policy and Sourcing Reserve Bank of India

Friends,

I have great pleasure in being with you today to share some thoughts relating to analysis of economic policy, and I am thankful to respected journalist Shri Potturi Venkateswara Rao Garu for giving me this opportunity.

It is a memorable day for me to share the podium with our Chief Minister, Shri Chandrababu Naidu garu. We have known each other closely for about two decades and have subsisting regard and affection for each other. He has changed the mindset of the people towards modernity. We are all proud of you, and your global reputation for professionalism and excellence.

I am particularly honoured by the presence of my guru, Shri B.P.R. Vithal garu, as the moderator.

The significant role of a free press in avoiding famines in post-independent India has been highlighted in the writings of Nobel Laureate Dr. Amartya Sen. It is necessary to extend this logic and appreciate that a free press plays a critical role in the broader economic policy of the country (doubtless a free press now includes electronic media). All our efforts to improve the quality of decision making in public bodies, including its accountability to the society at large, require an enlightened, objective and critical press.

Such a press would also help expand information base for markets and enhance their understanding of socio-economic dynamics. The significance of an objective, knowledgeable and enlightened press is important in a democratic environment irrespective of the relative roles of State or Government and markets in a mixed economy. Furthermore, the rapid improvements in technology often demand not only on-line information but also instant analysis.

I have deliberately chosen the subject of analysing economic policies for several reasons. First, there is a wide spread interest now in the state of the economy and the economic policies, particularly in regard to financial markets and external sector, warranting an overview of how RBI's data and studies help in the process.

Second, such interest, which was earlier confined to Mumbai or New Delhi, is spreading to new cities, one of the foremost of them being Hyderabad.

Third, several economic dailies have recently strengthened their bureaus in Hyderabad and many of them launched Hyderabad editions also. The public interest and coverage of news relating to money, banking and financial markets have increased manifold in regional languages, exemplified by "Eeenadu" and "Vartha", in Andhra Pradesh.

### Communications Policy

The widening and deepening of interest in economic and financial markets with special reference to the role of the central bank, though a somewhat recent phenomenon, is not unique to India. In fact, most central banks in the world especially in developed countries lay emphasis on appropriate communications policies. The current situation can be illustrated with extracts from a recent news item relating to the European Central Bank (ECB) in the *Financial Times* of June 27, 2000 on "ECB Defends Communications Policy" by Tony Barber.

“Otmar Issing, the ECB’s chief economist, acknowledged that financial analysts, market participants, academics, the media and the general public had a ‘rather mixed’ opinion of the ECB despite its success in its main task of keeping down inflation”.

“This indeed indicates a communications problem,” Mr. Issing said, adding that part of the trouble lay in the excessive attention paid by the media and the public to the euro’s external exchange rate”.

“The verdict among most, if not all, of our ‘watchers’ seems to be that, broadly speaking, the ECB has done a good job but has not been very effective in presenting and explaining itself," Mr. Issing told a conference in Frankfurt. “Now to my mind at least, this situation is preferable to a state of affairs where the opposite was true – that is, if clearly mistaken policies had been brilliantly explained”.

It would be productive to draw some useful inferences from Mr. Issing's statement.

First, effective articulation of policy by a Central Bank is important.

Second, obtaining higher marks for transparency from financial markets is noteworthy.

Third, the perceptions of media are critical and concerns such as excessive attention by the media and the public to the exchange rate are not uncommon. Against this backdrop, I would attempt to explain the communications policy of RBI by bringing on record the sources of information available to the media and the public from the RBI.

Available evidence on international comparisons of level of transparency as well as quality and timeliness of information clearly shows that RBI comes out well. Professional standards and credibility are ranked very high. In fact, several of the speeches of Governor and Deputy Governors of RBI are circulated to other central banks as part of the Bank for International Settlements Review, Basel, Switzerland.

The RBI makes efforts to provide quality data to the public at large, which emanates from a robust statistical system established and strengthened over the years. The fundamental attributes of a good statistical system are credibility, timeliness and adequacy. The RBI endeavours to provide credible statistics for the consumption and use of the media through various ways – with updation of data on its website, daily press releases, and its weekly, monthly, quarterly and annual publications.

The RBI also brings out a number of *Ad hoc* publications, which contain a wealth of useful information on national and international issues.

India is also amongst the first few signatories of the Special Data Dissemination Standards (SDDS) as defined by the International Monetary Fund for the purpose of releasing data and the RBI contributes to SDDS in a significant manner.

The RBI releases several periodical publications which contain a comprehensive account of its operations and a vast volume of data together with an account of the trends and developments in the economy as a whole on money, banking, external sector and other financial sectors. These publications contain valuable information useful for researchers as also to the general public.

The RBI also brings out special publications and monographs from time to time dealing with the problems of agricultural finance, company finances, balance of payments, etc. which have a unique place in the economic information system in the country. There has been an ongoing and steady improvement in the collection, compilation, coverage and publications of various economic and monetary statistics.

There are periodical statements on monetary and credit policy by Governor, official press releases of RBI, speeches and interviews given by top management which do add to the articulation of RBI’s assessment of the economy and its policies. In short, today’s presentation

and interaction is part of a fruitful and beneficial partnership between RBI and media in the broader context of creating public awareness, and obtaining continuous feedback.

### **Status and Advisory**

The communications from RBI range from a daily press release on money market data at about 9.00 A.M., details of repos and reverse repos as part of Liquidity Adjustment Facility at about 1.00 P.M., the U.S. dollar-rupee reference rate at about 2.00 P.M., monetary, banking and prices data through a Weekly Statistical Supplement and the Annual Report of RBI, Report on Trend and Progress of Banking in India and the Report on Currency and Finance.

Incidentally, RBI prepares a Weekly Statement of Affairs or a summary balance sheet, and it is available with a one week lag for public use, on the RBI Website. The balance sheet is available alongwith details of monetary and financial conditions in the Weekly Statistical Supplement. Apart from periodical publications and monographs, occasional papers, speeches, research documents and consultation papers on policies are also made available from time to time. For easy reference, a list of all publications and press releases etc. is presented in Annexure-I.

Analysts are well advised to refer to several of these publications depending on the policy area that is focussed. Broadly speaking, the sources of information from RBI would be of considerable help analysis in money, banking, prices, credit, external sector, financial markets and also to a certain extent fiscal and real sectors. The financial markets include not only money markets, government securities markets and forex markets but also to some extent corporate debt and equity markets. The appropriate sources from RBI relevant to each of the policies are provided in Annexure-II.

Some care is needed in interpreting data released by RBI from time to time to ensure meaningful analysis. By way of illustrations, some specific items of wider public interest but with potential for incorrect interpretations are explained here.

### **Balance of Payments**

There are several aspects of trade data that need to be kept in view while assessing the status of balance of payments, but two of them are of special significance. First, much of the software exports are not included in the monthly trade data released by the Director General of Commercial Intelligence, to the extent they do not pass through the Customs. Hence, there is often an exaggeration of the trade deficit figure. Second, import of gold in the recent years has been through official channels because of liberalisation of gold imports. So, any analysis that involves comparison with past data should capture these developments in order to assess the current stability in the balance of payments situation despite increases in oil import bill and gold imports.

### **External Debt**

The extent and nature of external debt is a matter of great interest to many observers. While reporting analytically on external debt, it is useful to refer to the relevant ratios or conventional indicators of creditworthiness also.

Second, in considering the stock of debt, the maturity structure would also be relevant.

Third, the value of the debt itself, which is usually published both in US dollar terms and rupee terms, may fluctuate purely on account of valuation of foreign currencies other than U.S. Dollar with Dollar, and of rupee *vis-à-vis* U.S. Dollar, without any relationship with actual increase or redemption of debt.

Fourth, the debt of a country may increase in a particular year because of extraordinary circumstances, say a supply shock, but this may not necessarily signal an increasing trend.

Fifth, the size of the short-term debt is also an important indicator, alongwith the total debt.

The issue is not merely one of size of external debt, but the cost and terms of debt and the purpose for which such debt is incurred, which may be assessed at macro or aggregate level and not necessarily at micro level. A careful look at the data for our country would show that the decade of nineties' was characterised by a significantly qualitative improvement for the better as far as external sector, especially of external debt is concerned.

### **Foreign Exchange Reserves**

Foreign exchange reserves of the country comprise foreign currency assets, gold and SDRs. The major portion of our total reserves is foreign currency assets, which the markets track closely.

It is no longer sufficient to assess the adequacy of reserves in relation to the quantum of merchandise imports or the size of the current account deficit. In view of the importance of capital flows, and associated volatility of such flows, it has become increasingly important to take into account the composition of capital flows, especially the element of portfolio flows and short-term external liabilities in general, in judging the adequacy of foreign exchange reserves. The manner in which reserves are being built up is also critical. This can be appreciated to some extent by comparing the increase in reserves with increase in debt.

It will be interesting to observe that during the decade of the nineties, while we have added close to \$35 billion to our reserves, the increase in debt has been very negligible implying that reserve build-up has occurred predominantly through non-debt flows.

The figure of foreign currency assets released by RBI reflects the actual position net of all transactions by RBI as well as variations in value of other currencies related to the US Dollar. Thus changes in the level of foreign exchange reserves in any week reflect a host of factors, including changes in valuation, sale and purchase by RBI, income to RBI, etc.

Analysts keenly observe changes in the level of reserves, but in doing so the temptation is to focus on the marginal changes, and that too asymmetrically between increases and decreases. Furthermore, when reserves are built up, especially for evening out temporary mismatches in supply and demand, they are often meant to be prudently utilised. Indeed, equal care and attention are needed, in managing and assessing both accretion to and depletion of forex reserves.

### **Prices**

Currently, a great deal of popular attention is being paid to issues relating to inflation and its measurement in India. As you are aware, there are two common measures of inflation – the Wholesale Price Index (WPI) and the Consumer Price Index (CPI). Of this, the WPI is the headline measure that is most often used and is released weekly. Contemporary inflation data is available in the Weekly Statistical Supplement and monthly RBI Bulletin.

While reading and interpreting inflation data, it should be borne in mind that indices have different baskets with different weights to cover different sets of consumers or locations and are released at different points in time. Data on inflation can be calculated using different time points and methods. It can be measured on the basis of point-to-point or average changes. The changes can be over a week, over the financial year or a year-on-year basis.

Above all, the changes can also be measured between provisional or final data. When differences between provisional and final happen to be large, special effort is needed to interpret the data.

Furthermore, in analysing inflation, which basically refers to the rate of increase in prices, the explanatory factors of the changes are important. The changes might have occurred because

of base effect, lagged effect of administered price changes, temporary supply shocks or simply because the base year over which changes are measured might have changed.

In evaluating policy-response of RBI to the reported headline inflation, it is necessary to assess both the expectations issue and subsisting components of inflation, or what is technically termed as core-inflation, however imprecise, and the transient components.

### **Interest Rates**

A related issue is the cost of credit. Banks announce what is called a prime lending rate (PLR), which is the rate at which the bank concerned lends to top quality borrowers. They add a spread over PLR for other borrowers. Banks also announce different PLRs depending on the maturity of the loan. Further, unlike in the past when corporates depended mainly on advances from banks, corporates can access banks' funds through Commercial Paper (CP) or bonds at market related rates.

RBI influences interest rate environment through a variety of instruments and, emphasis is on flexibility and avoiding volatility. Furthermore, given the growing linkages between domestic and international markets, interest rate policy in India may have to consider giving increasing attention to changes in inflation and interest rates in major international financial centres, while designing policy responses.

### **Credit**

In the past, credit to commercial sector meant virtually bank credit, in particular non-food credit from banks. With progressive reforms in the financial sector, the sources of credit from banks to commercial sector have widened. It is no longer confined to non-food credit from commercial banks. It includes investment by banks in non-SLR securities, which includes Commercial Paper, corporate bonds and debentures, investment in preference shares of corporates, investment in equity and bills discounted by financial institutions. This data is now being made available in the Weekly Statistical Supplement of the RBI.

There is still a wider concept of credit to the corporate sector by the banking system. This would include banks' investments in instruments issued by financial institutions and mutual funds.

Finally, it may be more relevant to see the extent of credit that has been made available by the domestic financial system to the corporate sector on the whole, which would include the disbursements made by financial institutions such as IDBI and ICICI.

Frequently, one finds criticism regarding reduction in the credit-deposit ratios. Before arriving at any conclusions, the coverage of credit as described above, ought to be looked into. At a broader level, resources raised by corporate sector directly from domestic and international capital markets are becoming significant.

### **Government Securities Market**

The basis of much of the happening in this market is the Government Budget, which gives the market borrowing programme figure at the beginning of the year. The number of times the RBI hits the market, the maturities of loans, the timing of issuance, the notified amount, the type of issuance, the amount of underwriting accepted from Primary Dealers, etc. will depend on a number of factors such as the size of total market borrowing programme for the year, the Ways and Means Advances position, the maturities of past loans, prevailing market conditions, etc. The volumes and bidding pattern in auctions are also influenced by factors such as the stance of monetary policy, the prevailing interest rates, the liquidity conditions, etc.

From analysts' point of view, the Government securities market is very critical in our country for several reasons, the most important being that it is a significant determining factor in

providing a benchmark for interest rates in corporate debt market. Secondary market transactions need to be tracked carefully and mature analysts would notice that the prices and implicit yields are influenced by events such as expectations, and not merely on simple demand and supply situation. To illustrate the nature of events that accompanied changes in the implicit yields, one could track the movements, for example, of 11.83% 2014, a benchmark security. There are distinct changes, in both directions coinciding with several events since January 2000 such as, rate cut in Public Provident Fund, comment by Minister, RBI's open market operation stance, Budget Statement, Bank Rate cut, etc.

### **Money Market**

With growing emphasis on indirect instruments of monetary policy, analysts carefully monitor the money market conditions, and then assess RBI's intentions, nuances and signals. Often, RBI is as much led by the market as it tries to lead or influence the market.

Money market data should be collated with respect to turnover in the call and term money markets, rates in the call and term money markets, turnover in the inter-bank repo market, the bids accepted and rates in the repo and reverse repo of the Liquidity Adjustment Facility, the Bank Rate, cut-off in T-Bills auctions, etc. This information is virtually available on real-time basis. The RBI auction results are available immediately after auctions and the daily press releases of RBI give comprehensive data on money markets. Many a time, RBI gives important signals and these signals cannot be interpreted in isolation, but need to be seen in tandem with other developments in the money market or developments in other markets, viz., forex markets or Government Securities markets.

Of particular interest to both RBI and analysts is the recently introduced Liquidity Adjustment Facility (LAF). It appears essential to devote some attention to the features and the complexities involved in the Facility.

### **Liquidity Adjustment Facility**

As announced by Governor Jalan in the last Monetary Policy Statement, the LAF was introduced on June 5, 2000. The scheme is being implemented in phases to ensure smooth transition and keeping pace with technological upgradation. In the first stage of LAF, the Reserve Bank is conducting a set of repo auctions for absorption of liquidity and reverse repo auctions for injection of liquidity in which Banks and Primary Dealers (PDs) participate. The whole process, which is a daily event is completed within a couple of hours.

The LAF serves three objectives. First, the RBI has greater flexibility in determining both quantum of adjustment as well as the rates by responding to the needs of the system on a daily basis. Second, the RBI can attempt to ensure that the funds made available through this system would meet primarily the day-to-day liquidity mismatches. Third, the short-term money market rates should generally move within a corridor set by the repo and reverse repo rates, imparting greater stability in the market.

It may be useful to share with you the processes and the considerations that currently go into determining the amount and the rate in the LAF. *The Financial Markets Committee*, consisting of the operational Departmental Heads, which meets each day in the morning to assess market conditions, is responsible for decisions relating to LAF. The Committee meets again at 12.00 Noon to assess the bids received under the LAF. The exact quantum of liquidity to be absorbed or injected and the accompanying repos/reverse repo rates are determined by the Committee after taking into consideration, the liquidity conditions in the market, the interest rate situation and the stance of policy. This depends on several factors including net inflows and outflows on account of forex operations, current account balances of banks against cash reserve ratio requirements,

open market operations, redemptions of loans and coupon payments, announcement of new issues of Government, undrawn liquidity support on account of export refinance, Collateralised Lending Facility to banks and Level I support to PDs, and the situation in the call money market. The rate of interest will, however, depend on the quotes that are received in the bids.

The LAF has been in operation for over a month now and the experience may be summed up through a few generalisations. First, during this period, we have received bids from market participants both for repos and reverse repos. Secondly, banks and PDs have been bidding more aggressively for reverse repos, both in terms of amount and rates. Thirdly, there has also been a tendency to put in multiple bids, which is normal in any auction. Fourthly, sometimes bids have been received for both repos and reverse repos on the same day and at times from the same participants. Fifthly, for several days the Reserve Bank has not accepted any bids for repos under LAF. Sixthly, there has been an occasion when no bid was received either for repo or reverse repo. Seventhly, on most occasions, taking into consideration the needs of the market, the Reserve Bank of India has been infusing liquidity, varying the rates flexibly. Eighthly, there have been occasions when the Reserve Bank has rejected both repo and reverse repo bids. Ninthly, the closing call money rates on days of tighter liquidity conditions seem to have exceeded the rate at which Reserve Bank infused liquidity through reverse repos.

There have been a variety of reactions on the operations of the scheme. For example, some lending banks claim that the scheme is biased against them while the PDs feel that the LAF has created more volatility rather than ensuring stability in the money market. It has also been held that the LAF has resulted in increase in call money rates since market participants tend to bid higher in order to be assured of funds. Let me highlight some of the concerns expressed in the media and explain our understanding and perceptions in regard to each of them.

First, there is a view among banks that the LAF is heavily loaded against lending banks. This argument is based on an erroneous impression that the Reserve Bank is ready to provide unlimited liquidity through reverse repo auctions. The Reserve Bank's concern while assessing the bids is not with bank-wise requirement of liquidity but a view on the liquidity of the system as a whole. All the bids for liquidity in a particular reverse repo auction may be rejected, if the RBI is of the view that liquidity in the system is adequate. The RBI can monitor bank-wise requirements on a continuous basis through an analysis of bids and thus identify chronic borrowers who are trying to fund more permanent asset positions with LAF rather than use it to fund mismatches.

Second, a view has also been expressed that there are no counterparty limits on borrowings under LAF. There is a limit since the extent of borrowings from the RBI will depend on the holding of eligible securities in excess of SLR by market participants.

Third, it is argued that since the auction for LAF is held on a uniform price basis thereby eliminating the winners curse, there is a tendency among borrowers to submit bids in auctions at higher rates to ensure success and that ultimately, this increases the cut-off rate. A case is, therefore, made for switching over to discriminatory price auction. Since LAF attempts to provide/absorb liquidity, though reflected through individual bids, uniform price auction could be preferred for an efficient post-auction market. Furthermore, the rate fixed by the RBI, in a way, becomes a benchmark for the market, which is sometimes considered to be more transparent through uniform price auction, where the cut-off is a single clearing rate. As against this view, it is argued that a weighted average rate can emerge from a discriminatory price auction, which can serve as benchmark, and yet serve the purpose of fine-tuning the bids. There

is no settled wisdom, even internationally, as to the ideal system of auction. RBI will review the situation from time to time.

Fourth, there is also apprehension that the Reserve Bank disapproves of multiple bidding. Let me clarify that multiple bidding is a common feature of any auction process and the media had, in the recent period, picked up the wrong sensor of the RBI stance.

Fifth, some PDs are of the view that the LAF has resulted in increasing interest rates in the market as call rates tend to follow the LAF reverse repo cut-off rate. It is inevitable that the cut-off rates in LAF have an impact on the call money rates since the market reads from the actions of the Reserve Bank. As stated in the Monetary Policy of April 2000, when the full-fledged LAF is in operation, the Reserve Bank will be in a position to manage the liquidity better and influence the short-term interest rates in line with the overall monetary policy stance. Let me in the interregnum clarify that while the LAF is going through the early Protean stages of development, the ultimate objective is for the RBI to develop an effective and efficient lender of last resort facility.

Sixth, PDs have urged that they should be given assured liquidity at a reasonable rate and that the high cut-off rates for reverse repo in LAF have not only increased the carrying costs but also transmitted to the bond market through increase in yields. Furthermore, there is a concern that availability of funds from the Reserve Bank is not even certain, as there is a risk of all bids being rejected. It must be realised that PDs have assured Level I support from the Reserve Bank at Bank Rate. LAF currently operates only at the margin in replacement of Level II finance. The basic objective of switching over to LAF is for the RBI to have greater influence over the liquidity and interest rate in the system. In viewing the impact of the reverse repo rate in LAF, the weighted average cost of borrowing of PDs would have greater relevance. As far as providing liquidity, the RBI is concerned with the overall liquidity in the market rather than the needs of individual market players.

Seventh, a related proposal has been to introduce a second LAF auction exclusively for PDs. Holding a second auction *exclusively* for PDs well before the close of call money market is a suggestion that is under consideration. In this light, one option being advocated is to hold a second auction for PDs, where the PDs would once again bid for liquidity even if it were at minimum prescribed mark-up, say varying in the range of 1 to 3 per cent over the cut-off rate fixed in the first LAF auction. Responses to the suggestion would be welcome and would help RBI take decisions to meet temporary problems. No doubt, during the next one year, RBI is confident of reaching the full-fledged LAF with multiple auctions, based on electronic dealing.

It is just about a month since the first phase of the LAF has been introduced. We are all on the learning curve. The Reserve Bank is closely monitoring developments. We have already held very useful meetings with Primary Dealers Association and Fixed Income Money Market and Derivatives Association of India (FIMMDAI) to obtain their feedback. A seminar on LAF is being proposed in August 2000 and we are happy to share experiences with reference to theory and practice.

Let me assure you that RBI intends to be flexible on the operating procedures and fine tune the policy as well as the pace of implementation as we go along together with market participants, but, the ultimate objective is to move to an efficient full fledged LAF, involving multiple auction on the same day, replacing traditional assured sources of liquidity from RBI at fixed interest rates.



## **Outlook**

As mentioned at the beginning of the address, a characteristic of our communication policy is transparency. In fact, even policy intentions are shared before taking decisions. For example, in today's address, I have aired the possible changes in the LAF.

Secondly, the communications policy is dynamic, in the sense that RBI constantly seeks improvements to keep pace with technological developments as well as policy-environment in the domestic and international arena.

Thirdly, we in RBI, carefully and assiduously read and examine media-analysis as well as perceptions of market participants, which is a vital feedback that is utilised when undertaking policy changes. So, it is in our mutual and broader public interest that we improve our understanding of each other on the subjects we deal with. In this background, RBI's communications policy may thus be described not only as transparent and timely but also a two-way process. The RBI recognises that sometimes its policies consciously create discomfort for market participants, and naturally resentment of certain policies get voiced in the media. This is healthy in an open democratic framework.

Thank you

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\* Keynote Address by Dr. Y.V. Reddy, Deputy Governor, Reserve Bank of India at the Workshop organised by Andhra Pradesh Press Academy on July 8, 2000 at Hyderabad. Dr. Reddy is thankful to Dr. A.Prasad for assistance in the drafting and to Dr. Charan Singh for his assistance in the preparation of Annexures.

## **Annexure I**

### **Publications and Press Releases**

The Bank's regular publications comprise (1) *Reserve Bank of India Bulletin* and its *Weekly Statistical Supplement*, (2) *Monetary and Credit Policy Statement of the Governor*, *Annual Report*, *Report on Trend and Progress of Banking in India* and *Report on Currency and Finance*, (3) *Banking Statistics*, *Statistical Tables relating to Banks in India*, *Handbook of Statistics on the Indian Economy* and *Quarterly Handout on Banking Statistics*. Special publications have also been issued by the Bank from time to time; and these include (a) reports of *ad hoc* expert committees constituted under the auspices of the Bank, to deal with special economic issues, (b) several monographs/discussion papers containing the Bank's investigation into problems pertaining to rural credit and co-operation, company finance, balance of payments, banking operations, mechanisation in commercial banks, universal banking, etc., (c) results of surveys conducted by the Bank, including *Survey of India's Foreign Liabilities and Assets*, *All India Debt and Investment Survey, 1971-72* and *Survey on Foreign Collaboration in Indian Industry*, (d) *History of the Reserve Bank of India*, in two volumes (1935-51 and 1951-1967), (e) *Functions and Working of the Reserve Bank of India*, (f) *50 years of Central banking – Governors' Speak*, (g) *List of Borrowal Accounts against which Banks and Financial Institutions have filed suits for recovery of funds*, (h) *Compendium of circulars* issued by different Departments, (i) *Regulatory Framework for Non-Banking financial companies 1998*, containing relevant circulars issued by the Bank to Non-Banking Financial Companies in January 1998, (j) *Centenary Commemorative Volume – C. D. Deshmukh Memorial Lecture Series*, and (k) *L.K. Jha Memorial Lectures*. The various departments of the Bank have also been bringing out from time to time publications connected with their areas of work.

A brief summary of the subject matter covered in more important publications is presented in the following paragraphs.

**Monetary and Credit Policy Statement of the Governor:** The Monetary and the Credit Policy Statement of the Governor made bi-annually is the most important policy document released by the Reserve Bank of India. It contains a brief account and assessment of the Indian economy by the Reserve Bank and then delineates the policy for the next six months or one year as considered necessary. The significance of the statement is that the rationale for each initiative/announcement is clearly discussed to dispel any misgivings. In the current year, a supplement to the Statement was also issued. The Supplement gives a detailed and analytical account of the current economic situation and serves to provide an appropriate backdrop to the policy Statement. The statement along with the supplement is a public document and is readily available in printed form, on the website and in the monthly Bulletin.

**Reserve Bank of India Bulletin:** The *Reserve Bank of India Bulletin*, normally released in the first week of every month for which it pertains, presents in summary form statistical and other information with a view to portraying the pattern of current economic trends in the country. It also includes the results of some of the studies and investigations made by the Bank, and in particular, by the Department of Economic Analysis and Policy and the Department of Statistical Analysis and Computer Services. The contents cover articles on current economic issues, notes on current economic developments in India and other developments relating to credit control and exchange control measures adopted by the Bank. The Bulletin publishes analytical articles based on data collected by the Reserve Bank often specifically for the purpose. It carries Speeches of the Governor, Deputy Governors and Executive Directors. These speeches reflect the current thinking of the policy makers in the Reserve Bank. The speeches generally indicate the direction of the policy in the current economic environment. The *Bulletin* has a statistical section, which presents current and up-to-date statistics on monetary, financial, external, banking and other economic sectors. Some of these statistics, which are available on a weekly basis, are also published in the *Weekly Statistical Supplement*.

**Weekly Statistical Supplement to the RBI Bulletin:** The supplement to the RBI Bulletin, which is a weekly publication provides information on important monetary, banking, and price data on a weekly basis. The Supplement also presents the weekly balance sheet of the Reserve Bank and other developments relating to financial and bullion markets. The quantity of data being released in the Supplement has not only been rising but the timeliness of data contained therein has also been improving. Anxiously awaited by the market, the Reserve Bank makes special efforts to release it every Saturday by the afternoon in print and on the website by 1 p.m.

**Daily Press Release:** The daily press releases contain not only policy pronouncements, circulars, instructions etc. but also vital information on financial markets as a regular feature. The daily press releases pertain to money market operations, liquidity adjustment facility, SGL transactions and the reference rates. In the case of money market operations, data released every day in the morning on the RBI website, gives details such as, the volumes and rates prevailing on the previous day in the overnight call and term money market, liquidity support given by RBI, and the RBI's open market operations. The information released in the morning helps the market in formalising their view on liquidity available in the system and the financial journalists can find

out about how much securities the RBI bought or sold after announcing the open market operations. The information on liquidity adjustment facility is released every day at 1 pm on the RBI website giving details of the liquidity support provided by the RBI to the market. The release on SGL data gives a detailed account of the transactions, in the government securities market, including the nomenclature, the contract date and the yield of the security. The information on SGL transactions is available generally on the same day but sometimes on the next day. This information is important to the market and financial/economic journalists can analyse this data, particularly with reference to certain benchmark securities, and also discuss the trends in the bond market. They can also comment upon why a certain security was the flavour of the day and what do the rates at which they were traded imply for the market. The reference rate for the three major currencies other than the US dollar (viz. Euro, Yen and Pound Sterling) *vis-a-vis* the rupee is announced every day at noon and is available on the RBI website by about 2 pm. The rate is often used for research purposes because this is the only exchange rate that is announced at a definite time every day.

**Annual Report:** The *Report of the Central Board of Directors* is primarily a review of the monetary and credit policies of the Bank and its operations during the year ending June, against the background of economic conditions and is submitted to the Central Government in terms of Section 53(2) of the Reserve Bank of India Act. The *Annual Report* of the Reserve Bank is the most important document released every year in early September. It is the statement of the Board of Directors on the state of the economy, and on the balance sheet of the Reserve Bank. It also presents an assessment and prospects of the Indian economy. An important development in the Annual Report in the recent past is the inclusion of Box Items. These are well-researched theoretical and analytical write-ups on the important contemporary economic events and are useful for the journalists and the public.

**Report on Trend and Progress of Banking in India:** The *Report on Trend and Progress of Banking in India*, which is issued in terms of Section 36(2) of the Banking Regulation Act, reviews the progress of banking and major developments in the field of banking policy during the year ending June. It also discusses various measures taken for the strengthening of the banking system in the country as well as the progress made in deployment of credit in conformity with the social priorities determined by the Government. The Box Items in the Report are important write-ups on significant issues pertaining to the development of Banking in India and are useful inputs for the financial journalists in analysing the developments in the banking sector.

**Report on Currency and Finance:** The *Report on Currency and Finance*, an annual publication by the staff of the Bank, provides a description of economic and financial developments in the country and is an invaluable reference work to all those who are engaged in research and policy formulation in regard to matters relating to the Indian economy. It contains time series data on different areas of the economy, in particular on finance and banking. Since the publication is released around December, it also serves the purpose of presenting a mid-year review of the economy.

There is an interesting history in the case of this Report. When the Reserve Bank of India took over the control of Currency from the Government of India in April 1935 the annual Currency

Report which was earlier prepared by the Controller of the Currency was discontinued. The Reserve Bank appreciated the desirability of maintaining statistical continuity and on persistent demand from the Researchers decided to continue to publish an annual review based generally on the frame-work of the previous Currency Reports. The first Report covered the two financial years 1935-36 and 1936-37 but since then has been published annually. Thus, the Report on Currency and Finance till 1997-98 continued in a somewhat extended form of the currency reports published by the Controller of the Currency prior to the establishment of the Reserve Bank. The publication was largely descriptive and was intended to serve as an authentic source of reference for all those with research interest in economic and financial developments in the country. Effective 1974-75, the Report was published in two volumes, viz., Volume I covering the Economic Review and Volume II containing the statistical statements.

The Report on Currency and Finance, in 1998-99 was transformed from the descriptive annual review to a thematic and analytical document. The first such Report published in a single volume in 1999 focussed on the *Structural Transformation of the Indian Economy* whereby the analysis is based on time trend since 1980. The statistical statements are now consolidated in the Handbook of Statistics on the Indian Economy since 1999. The Handbook has been released annually since 1998 with an explicit objective of providing researchers time series data on important economic variables, especially those on monetary, financial and external sector.

**Statistical Tables relating to Banks in India:** The *Statistical Tables relating to Banks in India*, an annual publication, contains comprehensive data relating to the commercial banking sector (including Regional Rural Banks). It covers balance sheet information as well as performance indicators of each commercial bank in India. The data are presented bank group-wise and state-wise. The publication is divided into three parts, viz., summary tables, detailed tables and the appendix. The summary tables give position in respect of select items of liabilities and assets of the different classes of banks and other aspects of their working while the detailed tables give similar particulars for the individuals banks. The appendix furnishes a complete list of commercial banks and the number of offices in all States and Union Territories.

**Banking Statistics:** *Banking Statistics*, an annual publication, contains extensive data on the business of the scheduled commercial banks based on the data on deposits and advances collected under the Basic Statistical Returns System as well as summary tables depicting progress of commercial banking based on sources other than Basic Statistical Returns. The main types of data available in this publication are deposits and advances classified according to population groups, bank groups States, districts and centres, type-wise deposits for individual districts, and sectoral pattern of credit for bank groups, States and districts. The first volume in this series pertains to the position as at the end of December 1972.

**Banking Statistics - Quarterly Handout:** This data-oriented publication gives data on deposits and credit of scheduled commercial banks for each quarter. The data compiled from bank returns are presented for top 100 centres, state-wise, population group-wise and bank group-wise. The quarterly handout is available for the quarters ending March, June, September and December

**Credit Information Review:** The *Credit Information Review* is a monthly four-page periodical useful for operational level bankers. The periodical summarises, in simple language, important

circulars issued by the central bank during the month with an objective to make known to the public and in particular to the branches of banks functioning all over the country the credit and banking policy decisions of the Reserve Bank in simple language and without delay. Another objective of the publication is to disseminate information on the lending policies of banks, which benefit the economically disadvantaged borrowers in the priority sector. It is published in the first week of every month, since 1979.

**Occasional Papers:** This publication carries research papers prepared by the professional staff of the Reserve Bank. The publication reflects the views of the authors and not of the Reserve Bank Of India. The occasional papers were published quarterly till 1998 and tri-annually since 1999.

The Bank also brings out the Hindi editions of its regular publications like the monthly *Bulletin*, *Annual Report*, *Report on Trend and Progress of Banking in India*, *Report on Currency and Finance* and *Credit Information Review*.

## **Annexure II**

### ***Sourcing RBI for Analysing the Economic Policy: Detailed Note***

This note explains the use of data released by the RBI and the publications of RBI in analysing specific components of our economic policy.

#### **Money, Banking and Prices**

##### **Money**

The Reserve Bank of India has a long tradition of compilation and dissemination of quality monetary statistics, dating back to July 1935. To meet the evolving circumstances that determine what constitutes money and the attendant complexities in measurement two working groups in the year 1961 and again in the year 1977 were constituted, and their recommendations acted upon. In continuation of the same tradition, and to further refine and broaden the money stock measures, the third Working Group was set up in December 1997. The Report submitted on June 23, 1998 examines the analytical aspects of monetary survey in the light of the changing dimensions of the financial sector consequent to the implementation of financial sector reforms in India. The Report makes a number of suggestions to strengthen the statistical system in order to enlarge the coverage of financial statistics beyond the traditional confines of the banking sector. Accordingly, the Report proposes compilation of comprehensive analytical surveys of the Reserve Bank of India, commercial and co-operative banks and the organised financial sector at regular intervals. The Report proposes compilation of four monetary aggregates, three liquidity aggregates and comprehensive measures of credit aggregates to effectively capture the dynamics of the monetary and financial system. The conceptual framework of the Report is in consonance with various country practices. The article, *New Monetary Aggregates: An Introduction*, was published in the October 1999 issue of the Bulletin and since then data dissemination for the new monetary aggregates has already been initiated through the monthly Bulletin.

The monetary data on the Reserve Money and the Balance Sheet of the Reserve Bank of India are available, on a weekly basis, in the Weekly Statistical Supplement (WSS). The data on money stock measures are also available on a fortnightly basis in the WSS. In the monthly Bulletin, details of various money stock measures, sources and components of Reserve Money and the Balance Sheet of the Reserve Bank are published. In the annual publications, monetary developments are analytically discussed over the year. The Handbook of Statistics on Indian Economy provides detailed time series data on various components of money supply.

A large number of studies under the aegis of the Development Research Group have been undertaken in the Bank on the monetary and credit policy. Some of the more recent and important studies are – *Monetary Policy, Inflation and Activity in India* (April, 1992), *The Changing Monetary Process in the Indian Economy* (September, 1992), *An Approach to Monetary Targeting in India* (October, 1994), *Money Demand Stability: Myth or Reality – An Econometric Analysis* (July, 1996). Similarly, in the RBI Occasional Papers, a large number of analytical research has focussed on the monetary issues, especially issues relating to money and prices. The important papers published in the recent period are *Estimating Money Demand*

*Function: A co-integration Approach* (March, 1993), *Modeling Buffer Stock Money: An Indian Experience* (March, 1995) and *Residency in Money Supply* (Summer, 1999).

Some of the important speeches on the subject, published in the RBI Bulletin are: *Credibility of Monetary Management: The Next Phase of Reform* (December, 1995); *The Conduct of Monetary Policy: The Indian Experience* (January- February, 1996); *Money Credit and Conduct of Monetary Policy- Some Reflections* (August, 1998); *Monetary Policy in India: Objectives, Instruments, Operating Procedures and Dilemmas* (July, 1999).

### *Liquidity Adjustment Facility*

In pursuance of the recommendations made by the Narasimham Committee Report on Banking Reforms (Narasimham Committee II), it was decided, in principle, to introduce a Liquidity Adjustment Facility (LAF) operated through repos and reverse repos in order to set a corridor for interest rates in the money market. In April 1999, to begin with, an Interim Liquidity Adjustment Facility (ILAF) was introduced to serve as a transitional measure for providing reasonable access to liquid funds at set rates of interest. ILAF provided a mechanism for injection and absorption of liquidity available to banks and Primary Dealers to overcome mismatches in supply and demand from time to time. It has now been decided to implement a full-fledged LAF in stages and the scheme has already been announced in the Monetary and Credit Policy for 2000-2001. In the LAF, the quantum of adjustment and the rates would be flexible, responding immediately to the needs of the system. The funds made available by the RBI through this facility would primarily meet the day-to-day liquidity mismatches in the system and not the normal financing requirements of eligible institutions. The LAF is expected to impart greater stability to the short term interest rates and facilitate the emergence of a short-term rupee yield curve.

### *Banking and Financial Institutions*

The Reserve Bank of India occupies the apex position in the financial system with its supervisory and regulatory power. It collects and collates the data regarding the commercial banking sector. For co-operative banks, the data come partly from the NABARD, and are partly collated by the RBI. For data on Regional Rural Banks, the source of data is the NABARD. Industrial Development Bank of India (IDBI) is the major source of data for the Financial Institutions.

The position of the assets and liabilities of the banking sector, the interest rates, accommodation provided by the scheduled commercial banks to the commercial sector and Certificates of Deposits issued by the commercial banks are published by the Reserve Bank on a weekly basis in the Weekly Statistical Supplement. Data on business of the scheduled banks, and accommodation provided by the scheduled commercial banks to the commercial sector and the accommodation provided by the Reserve Bank to the scheduled commercial banks on a monthly basis are disseminated through the RBI Bulletin. The Annual Report and the Report on Trend and Progress of Banking in India, the statutory publications of the Reserve Bank, are characterised by detailed data and rich analytics on the banking sector of the country. Data and discussions on sectoral and industry-wise deployment of bank-credit, interest rate structure of the scheduled commercial banks and RBI's accommodation to them are useful analytical inputs for

the performance evaluation of the banking sector. The Report on Trend and Progress of Banking in India, as the name suggests, is primarily concerned with providing and analysing data on the banking and financial institutions. Analyses of the contemporary issues of capital adequacy, profitability, risk management, management of NPAs of the banks, as well as amendments in the regulatory and legislative framework of the financial system form the core of this report. The performance of the credit co-operatives, regional rural banks, mutual funds, NBFCs are also covered in this report. It may be mentioned that in view of the rising recognition of the importance of NBFCs, for the first time a Chapter is devoted to this aspect in the Report for 1998-99.

The data on banking is published in *Statistical Tables relating to Banks in India and Banking Statistics* – annual and quarterly. The Reserve Bank has released a special publication, *Banking Statistics 1972-95*, presenting comprehensive information on deposits and credit of Scheduled Commercial Banks according to various characteristics. The time-series data presented in this publication have been culled out from the published volumes of Banking Statistics. It also gives information on employees of Scheduled Commercial Banks according to category. In the *Handbook of Statistics on Indian Economy* a number of statements on banking with time series data are presented. Another special study *Major Banking Aggregates 1950-51 to 1997-98* was published in the RBI Bulletin of November 1998

The results of the biennial sample survey on *Debits to Deposit Accounts with Scheduled Commercial Banks* conducted by the RBI are also regularly published in the Bulletin. The results of the annual survey of investments of Indian commercial banks are regularly published as an article in the Bulletin. The survey covers investments in Indian and foreign securities of all scheduled commercial banks. Another interesting article pertaining to NPA in the commercial banks was published in the July 1999 issue of the Bulletin. Still another article which would interest the financial journalists is *Core Principles for Effective Banking Supervision- An Assessment of the Position in India*, which is published in the December 1999 issue of the monthly Bulletin. In the article, major principles of effective bank supervision are discussed and assessment in the context of the Indian environment is provided. Micro-finance is being practiced as a tool to attack the poverty the world over. In the last two decades substantial work has been done in developing and experimenting with different concepts and approaches to reach financial services to the poor. The summary and recommendations of the ‘Taskforce on supportive policy and regulatory framework for micro-finance in India’ is presented in December 1999 issue of the Bulletin. In the same issue of the Bulletin, a Summary of the ‘Report on Reforms in Deposit Insurance in India’ is also discussed.

The discussion paper on *Harmonising the Role and Operations of Development Financial Institutions and Banking* was released in January 1999. Further, in a speech published in August 1999 issue of the Bulletin, some clarifications in the context of the debate on the harmonisation and rationalisation of relative role of banks and DFI are provided and issue of universal banking and its links with emerging liberalisation of insurance sector are flagged.

In the case of non-banking financial companies a list of the registered ones is maintained on the website which is updated every month. As a caution, any non-banking financial company which is debarred from conducting business is also notified on the website and through press releases



immediately for the benefit of the general public and for the information of the market participants.

The reforms in the banking sector are an important component of the reforms in the financial sector. The two Reports of the Committees chaired by Shri M. Narasimham provide a road map to be followed. In the RBI Bulletin of January 1999, Dr. Bimal Jalan, Governor, Reserve Bank of India, in his speech titled, 'Towards a more vibrant Banking System', discussed about the issues pertaining to the corporate governance system of banks, risk management, banking regulation and supervision, transparency and accountability and public policies relating to moral hazards in banking sector.

In the RBI Occasional Papers, some research articles on banking have been published in the recent past. In December 1995, an article, '*Performance Variability of Public Sector Banks: Need for Strategic Planning*', discussed about the paradigm shift in planning strategies on the part of the banks to improve their performance. In the RBI Occasional Papers (1996), a paper titled, '*Structural Changes and Asset- Liability Mismatch of Scheduled Commercial Banks in India*' empirically verifies that both public and private sector banks showed some systematic changes in the balance sheet proportions during the four years of financial sector reforms beginning with 1991. In respect of asset-liability mismatch, balance sheets of both public and private sector banks are marked with poor matching while foreign banks showed some significant change in hedging pattern. In another article, '*Profitability of Public Sector Banks: A Decomposition Model*' published in 1999 in the same journal, inter-bank variability of profit among public sector banks during 1992-98 is investigated with the use of a sequential decomposition model for profitability analysis. The important findings are preference for investments over advances in bank portfolios and increased competition reflected in convergence in bank-wise performance in the reform period in the reform period.

Several speeches were delivered on the subject, in view of the importance of the subject, and of these notable are: *Indian Banking - Second Phase of Reforms - Agenda and Issues* (November, 1997); *RBI and Banking Sector Reform* (December, 1998); *Towards a More Vibrant Banking System* (January, 1999); *March to the New Millenium by Indian Banks* (October, 1999); *Finance and Development -Which Way Now?* (January, 2000); *Agenda for Banking in the Millenium* (March, 2000).

#### Prices

The emphasis of the monetary policy on stabilising the prices underlines the need for an analysis of the long-term trend of the price level by the monetary authority. For analysing the price situation mainly the Wholesale Price Index (WPI) and the Consumer Price Index (CPI) are taken into account. Although, data on WPI and CPI are compiled by the Ministry of Labour, Ministry of Industry, and the Central Statistical Organisation of the Government of India, the Reserve Bank of India, keeping in view the importance of these data, disseminates them regularly through various publications. Separate analyses are carried out for the primary articles group, manufacturing items, and for the fuel, power, light and lubricants group. The variations in the price indices are presented on a point-to-point and on an average basis.

While the Weekly Statistical Supplement disseminates data on the WPI on a weekly basis, the RBI Bulletin provides comprehensive monthly data on the same for various groups and sub-groups of items. The RBI Bulletin also publishes data on the CPI separately for industrial workers, urban non-manual employees and for agricultural labourers. The Consumer Price Index data are presented for all-India as well as for selected centres. Data on bullion prices on weekly and monthly basis are disseminated through the WSS and the RBI Bulletin, respectively. The data published in the Bulletin and in the WSS can be accessed by the public through the internet on the RBI website in the respective sections. Apart from the routine dissemination of data, deep analytical insights on the price situation in the economy are available from RBI Annual Reports, Report on Currency and Finance and various studies undertaken by the Development Research Group of the RBI. All these efforts have contributed towards a timely, adequate and accurate flow of information on prices to the public.

A number of important studies on this subject have been sponsored by RBI in the recent past – *Dynamics of Inflation in India: A Neural Network Approach* (DRG Study, April, 1998), *Industrial Inflation in India during the Eighties: An Explanation* (Occasional Papers, March 1992), *Core Inflation in India: Measurement and Policy Perspectives* (Occasional Papers, Summer, 1999), *Dynamics of Inflation in India and their Modeling by Time Series Analysis* (Occasional Papers, June, 1994) and *Recent Divergence between Wholesale and Consumer prices in India – A Statistical Exploration* (Occasional papers, December, 1998). On the issue of price stability and inflation, a speech in the RBI Bulletin that deserves special mention is: *Inflation in India- Status and Issues* (October, 1999)

In addition to the research studies, important contemporary issues on money, banking and prices, have been discussed in the Box Items in the annual publications – Annual Report, Report on Trend and Progress of Banking in India and Report on Currency and Finance. The objective of providing the Box Items, as discussed earlier, is to clarify the concepts and provide a theoretical backdrop to the economic developments. It is in this context that the box items on Price Stability, and Core Inflation (Annual Report, 1996-97), Monetary Conditions Index (Annual Report, 1997-98), Transmission of Monetary Policy, Lags in Monetary Policy, and Interest Rate Targeting (Annual Report, 1998-99), Credit Delivery System, and Changing Forms of Bank Credit (Report on Currency and Finance, 1998-99), Factors Affecting Competitiveness and Efficiency in Banking, Virtual Banking, and Asset Liability Management (Report on Trend and Progress of Banking in India, 1998-99), have to be viewed.

### Credit Delivery

Accommodation provided by the scheduled commercial banks to the commercial sector constitutes one of the sources of broad money and has implications for credit delivery or credit off-take. Accommodation is provided by the scheduled commercial banks in various forms such as food credit, non-food credit, investment in commercial paper, bonds/debentures/preference shares and equity shares issued by the public and private corporate sector units, and loans to corporates against shares held by them. The Reserve Bank disseminates the relevant details through the WSS on a fortnightly basis. This information is also published in the RBI monthly Bulletin and the Annual Report.

Mutual funds have been playing a crucial role in resource mobilisation and allocation in India. Various policy measures have been announced to boost the mutual funds industry. Banks and Financial Institutions have also been entrusted with providing credit on reasonable terms to certain sectors, viz., agriculture, micro-credit institutions, small-scale industries and housing. The Report on Trend and Progress of Banking in India focuses on these issues in detail and specific Box items address the subject matter analytically.

ECBs are being permitted by the Government of India as a source of finance for Indian corporates for expansion of existing capacity as well as for fresh investment. The policy governing the ECBs seeks to keep an annual ceiling on access to ECBs. External debt statistics are disseminated semi-annually within five months of the reference period. While the data pertaining to the end-March are released by the RBI in the Annual Report, that relating to September/December are disseminated by the Ministry of Finance, Government of India in the Economic Survey.

### **External Sector**

Information on balance of payments, exchange rate, external debt, and foreign exchange reserve under external sector statistics is disseminated on a regular basis. While the Government of India provides significant information on external sector statistics through its Economic Survey, the Reserve Bank has been entrusted with the primary responsibility of compiling and disseminating data on balance of payments, exchange rate and foreign exchange reserves. This core activity of the Bank has undergone significant changes in the recent past mainly due to the deepening of the liberalisation process, endeavours to adhere to or adopt the international best practice – both in terms of concepts and definitions and the formats for presentations- unprecedented growth in the services sector and renovations in the external debt statistics. This evolution of changes has been facilitated, to a large extent, by the revolution in the field of information technology (IT).

In a world of many currencies with generalised floating, market participants need to exercise caution in interpreting the direction and magnitude of a change in the nominal or real exchange rate of the local currency. In such circumstances, market participants and analysts may seek to study exchange rate movements in terms of *effective exchange rates*, the word ‘effective’ denoting ‘suitable averages’. In practice, two types of indices, viz., the nominal effective exchange rate (NEER) and the real effective exchange rate (REER) are generally being constructed. The NEER is a weighted average of the bilateral nominal exchange rates of the home currency against foreign currencies whereas the NEER adjusted for prices gives REER. The RBI’s reference rate is released daily in the website, while the information on the spot exchange rate, inter-bank forward premia and turnover in the foreign exchange markets are disseminated through the WSS, and 5-country indices are published in the monthly RBI Bulletin with a lag of less than one month. The 36-country indices are disseminated with a lag of two months. Further, while analysing the movements in NEER and REER, market participants need to keep in mind that these are indices and, therefore, need to be interpreted cautiously. The definition, weighting scheme and the procedure underlying the construction of 5-country trade based NEER and REER has been disseminated in the August 1998 issue of the RBI Bulletin.

India's gross foreign exchange reserves comprise foreign currency assets of the Reserve Bank, gold held by the Reserve Bank and Special Drawing Rights (SDRs) of the Government of India. Reserve Position in the Fund is not included as part of foreign exchange reserves, although some countries do include these balances as part of their reserves, as they may not be available on immediate demand. Information on foreign exchange reserves is arrived from the actual book-entry as per the Reserve Bank records. These details, both in rupees and in US dollar, are disseminated on weekly basis in WSS within a week of the reference date and then in the monthly Bulletins and in the annual publications. The Reserve Bank also regularly disseminates through its monthly Bulletin, with a lag of about two months, details of outstanding balances under non-resident Indian deposit schemes, foreign investment inflows and sale/purchase of US dollar by the Reserve Bank. Forward liabilities of the Reserve Bank are identified separately and disseminated in the RBI monthly Bulletin. The RBI website, however, carries this information nearly a week ahead to meet with international standards.

Balance of Payments (BoP) statistics systematically, records for a specific period, the economic transactions of an economy with the rest of the world i.e. transactions between residents and non-residents. Transactions under BoP consist of those involving goods, services and income (i.e. current account transactions) and financial claims on and liabilities to the rest of the world. (i.e. capital account transactions). In an attempt to facilitate inter-country comparison, concepts and definitions and the presentation format underlying the BoP statistics have generally been modified to reflect those recommended by the IMF in its BoP Manual (5<sup>th</sup> edition). To illustrate, earlier presentation of the capital account was in the sector-wise beneficiary specific format and the revised format of the capital account is based on the type of capital inflows, enabling classification of various capital inflows into non-debt and debt creating flows.

In view of the need to reduce lag in the collection and publication of BoP data (both in rupees and US dollars) concerted efforts were made and the lag is now reduced substantially with the data released on quarterly basis within the next quarter. To illustrate, the data for Jan-Mar 2000 was available on the RBI Website before the end of June 2000 and will be available in print in the July issue of the Bulletin. The data on international trade as released by the Directorate General of Commercial Intelligence and Statistics (DGCI & S) are also disseminated through the monthly and annual publications of the RBI.

In the current account, two items that assumed importance in the recent past are - software exports and gold imports. The software exports are classified broadly into two types, viz., on-site services and off-site services. On-site development refers to the work being done at the client's site, while off-site exports could be in physical form (software prepared on magnetic tapes and paper media) as well as in non-physical form. Software exports in non-physical form, in turn, relates to the direct transmission abroad through dedicated earth stations/satellite links which get captured in the 'Softex Forms' prescribed for the purpose by the Reserve Bank. Software exports in the physical form are captured by the trade data compiled by the DGCI&S and are reported under merchandise exports in the BoP data, as per the international practice. Software exports in the non-physical form are recorded as non-factor services under invisibles. For the purposes of BoP, National Association of Software and Service Companies (NASSCOM) also collects data on software exports. And RBI considers the data set released by them. It has been observed that the two sets of data are close to each other.

A few of the DRG studies having a bearing on the external sector are *Portfolio Selection of Management of Foreign Exchange Reserves* (June, 1999) and *EMU, Euro and India* (March, 1998).

Another crucial aspect concerning the BoP is that of Capital Account Convertibility (CAC). The Committee on Capital Account Convertibility, 1997 (Tarapore Committee) has laid down the road map for attaining the convertibility on the capital account. This Report contains, *inter alia*, various indicative limits on various macro-economic variables. The financial journalists and the market participants may use this information as a sort of background research material against which evolution of indicators may be analysed.

Analysis of external debt statistics to study its sustainability needs to be made in the context of other related issues such as levels of reserves, maturity pattern, share of the short-term debt, etc. Various international agencies like Bank for International Settlement (BIS) also disseminate information on external debt statistics and in the light of the conflicting magnitudes of external debt statistics disseminated by them, the Reserve Bank had also set up a Technical Group on External Debt, the Report of which is available with the Bank. Further, in view of the growing significance of external debt, Reserve Bank has been associated with efforts aimed at holding international conferences on external debt with the objective of providing a wider platform to discuss various issues connected with external debt. The first conference was held in 1999 and the Bank has since released a volume containing the papers and proceedings of that conference.

Several of the speeches have tracked the policy-developments in external sector, and the noteworthy among them are *External Debt and Economic Reform* (December, 1997) and *External Debt Policies in Emerging Economies: New Dimensions* (July, 1999).

#### Government Finances

The Reserve Bank regularly, soon after the presentation of the Railway Budget and the Union Budget, carries respective articles which are mainly descriptive and factual on 'Finances of Government of India' and 'Railway Budget' in the monthly Bulletin. Besides, a consolidated study on Finances of State Governments is published annually by the Reserve Bank. The main characteristic of all these articles on Government Finances is to analyse objectively the thrust of the fiscal policy and to highlight the main conclusions. Further, in order to supplement the annual data/information, a summary table on 'Union Government Accounts' is also published in the RBI Bulletin, which gives cumulative monthly financial position of Government of India during the year, based on data released by the Ministry of Finance, Government of India.

The annual publications of the Reserve Bank especially the Annual Report and the Report on Currency and Finance publish analytical reviews of the Government Finances – both Central and State separately and combined. Further, the Handbook also includes detailed data on Government Finances in India. The ownership pattern of market borrowings of both the Central and State Government and the maturity pattern of Central Government to market borrowings are published annually.

As the Government of India regularly borrows from the market throughout the year, the auction results of treasury bills of various maturities and dated securities are released immediately through the press release and the website. These are also published in a consolidated manner in the WSS, monthly Bulletin and the annual publications. The data on small savings, instrument-wise, on annual and monthly basis is published in the Bulletin. The details of the State Government borrowings which are generally mobilised in two/three tranches and are mainly on pre-announced coupon rates are disseminated through the press release, website and the annual publications.

The different concepts of deficit which have gained importance in government finances in India were first introduced in the Annual Report (1989-90). The focus on rising deficit and the need for effective debt management was stressed by the Reserve Bank in its various publications. The article in the November 1996 issue of the Bulletin presents a detailed review of the internal debt management policy and operations wherein the rationale for reforms in government finances and government securities market. The agreement signed by the RBI with the Government of India to delink automatic monetisation from the budget deficit has been discussed in the Box Item of the Report on Currency and Finance 1994-95. Further, since April 1, 1997, issuance of ad hoc Treasury bills was discontinued and a system of Ways and Means Advances was introduced. The Agreement and its details have been discussed in the Box Item of the Annual Report 1996-97.

In addition to all these publications, to supplement the material on Government finances, RBI Occasional Papers and DRG Studies also publish analytical articles on Government Finances. For instance, a DRG study published in 1995 dealt with *Fiscal Efficiency in the Indian Federation* and RBI Occasional Papers carried articles such as *Dynamics of Interaction Between Government Deficit and Domestic Debt in India* (September, 1989) *Resource Gap of State Governments: Measurement and Analysis* (December, 1994) and *Fiscal Markmanship in India* (September, 1990), and *Sustainability of Central Government Debt* (March, 1998). It is significant to note that the first study which cautioned the Central Government on mounting domestic debt and impending domestic debt trap was published in the Occasional Papers in June, 1987.

It may be of interest to note that the various issues relating to the proposed legislation on fiscal responsibility, initiatives of RBI in regard to State Finance etc. are analysed in the speeches published in RBI Bulletins. Among the noteworthy are *State Finances and RBI Initiatives* (April, 1998) and *Legislation on Fiscal Responsibility and Reserve Bank's Role: Some Issues* (March, 2000).

**State Finances-** The Reserve Bank of India publishes an article on State Finances in the monthly Bulletin. This is published once in a year. In 1999-2000, the article was delinked from the Bulletin and was published as a separate study. This study deals with the finances of the State Governments with reference mainly to the budgets and any other available supplementary information along with the stance of respective State fiscal policies, policy initiatives, resource mobilization and the proposed expenditure strategy. Also, the consolidated budgetary position of the State Governments as well as the emerging conclusions and perspectives in State finances are delineated. In the said article, detailed information on finances of each State is presented. The coverage of the article was expanded in 1999-2000 to include issues of debt sustainability,

policy framework, cross-section analysis, etc. The State Finance article is the only one of its kind in the country providing authentic and analytical information on State Finances.

The Reserve Bank of India constituted an informal Advisory Committee on Ways and Means Advances to State Governments in August 1998, which submitted its Report on November 1998. The summary of the Report is presented in April 1999 issue of the Bulletin. The Technical Committee to examine the issue of State Government Guarantees in all its aspects was constituted by the RBI in November 1997, to help formulate a policy on guarantees for each State government within certain national parameter. The summary of the recommendations is published in April 1999 issue of the Bulletin.

In this regard, a study on '*Resource Gap of the State Governments- Measurement and Analysis*' published in RBI Occasional Papers (December, 1994) and a speech on '*State Finances and RBI Initiatives*' (April, 1998) are noteworthy.

### **Financial Markets**

The money market consists of various sub-markets such as, call/notice market, treasury bill market, repo market, Certificates of Deposit (CDs) and Commercial Paper (CPs) market and commercial bill market. Concerted efforts were made for developing and deepening the money market in the wake of financial sector reforms in the early nineties. The Reserve Bank of India disseminates information on call money market on daily basis on its website as well as in the WSS and in the monthly Bulletin. The data on CDs as well as on CPs are disseminated on fortnightly basis through WSS and the Bulletin. Similarly, the data on repurchase agreement (repo) is disseminated on the website on daily basis and also through weekly and monthly publications. The auction results for the treasury bills of varying maturities are also disseminated immediately through the website as and when auction is held as well as through the WSS, Bulletin and annual publications.

In the case of Foreign Exchange Market, notable development has taken place mainly since 1992. The movement from basket linked exchange rate policy followed during 1975-1992 transited through a dual exchange rate policy till February 1993 to unified exchange rates from March 1, 1993. The movement towards current account convertibility made in August 1994 provided an added fillip to the market development. The data on daily Turnover in Foreign Exchange Market is disseminated on a weekly basis through a Press Release and through the WSS and is also published in the monthly Bulletin. These data pertain to sales and purchases of foreign exchange on account of merchant (Spot and Forward) and inter-bank transactions (Spot, Swap and Forward). In the WSS, inter-bank forward premia of US dollar, on daily basis, for one, three and six months are also published.

The Government Securities Market has recorded a rising number of instruments as well as market participants as a result of the financial sector reforms. The data on market loans of the Government are released on the website as and when borrowings are incurred. The summary data on the Central Government borrowings are released on weekly basis in the WSS while the details are released on quarterly basis in the data is published in the Monthly Bulletin. Further, the secondary market transactions in Government securities (including Central and State Government dated securities, treasury bills, Repo (RBI and non-RBI) and RBI's sales and

purchases) are released daily on the website. The security-wise and maturity-wise summary statement on secondary market transactions in Government Securities on weekly basis are released in the WSS and the Bulletin. These are also published and analysed in the annual publications.

In the research article, '*Liquidity Effects on the Term Structure of Government Securities Market in India*', published in the Occasional Papers (1998), the author notes the presence of co-integration in different markets and across various maturities implying that the policy initiatives to develop the market have resulted in a higher degree of reactivity and dependence.

The data on capital market in India are released through the monthly Bulletin. The data pertain to new capital issues by non-government public limited companies, index number of ordinary share prices, volume in corporate debt traded at National Stock Exchange (NSE), and assistance provided by All India Financial Institutions. In the Weekly Statistical Supplement, for policy purposes, BSE Sensitive Index and NSE Nifty Index of ordinary share prices as well as weekly traded volume in corporate debt at NSE are provided. The Annual Report and the Report on Currency and Finance discuss analytically the developments in the Financial Markets. The data series on resources mobilised by mutual funds, liability and assets of major financial institutions, details of bonds issued by public sector undertakings, data on share price index and market capitalisation are provided in the Handbook of Statistics.

The data on private placement market based on information collected from select merchant bankers and FIs for the entire financial year are published in the Reserve Bank's Annual Report. This data are also presented by CMIE and Prime Database. The data on secondary market in terms of BSE Sensex are available on line on NSE Screen, Reuters and other information vendors. Further, these indices are also disseminated by SEBI, Government of India and RBI. The data on mutual funds is collected by RBI, SEBI at Association of Mutual Fund of India (AMFI). The annual data series are published in the Annual Report of the RBI. The data on Foreign Institutional Investors (FIIs) are collected and compiled by RBI and SEBI. SEBI releases data on FIIs investment with one day time lag on its website as well as disseminate through newspapers and information vendors. Further, data on limits to FIIs investment, company-wise, is also available on the RBI website.

In view of the rising importance of the financial markets, a separate Chapter has been devoted to it since 1994-95 in the Report on Currency and Finance and since 1995-96 in the Annual Report. The Chapter on Financial Markets in the Report on Currency and Finance, 1998-99 includes an analytical discussion on the changes in the Financing Pattern of Indian companies based on relevant data collected from the articles on '*Finances of Public Limited Companies*' as published in various issues of the RBI Bulletin while the Box Item provides a theoretical perspective. The inter linkages between various markets have been discussed in the Report on Currency and Finance especially in Box Items in 1997-98, where linkages between primary and secondary market, and linkages between domestic and international capital markets are discussed. The issues pertaining to private placement market have been discussed in Box Item in the Report on Currency and Finance 1996-97. In a research article, '*Integration of Financial Markets in India: An Empirical Evaluation*', published in Occasional Papers (1998), it is concluded that a fair



degree of convergence exists between the money, credit and gilt market while the capital market exhibits fairly isolated behaviour.

The developments in financial market in India are observed and analysed with great interest by analysts and market participants. Considerable efforts are made to disseminate the thinking, progress and issues on these subject in various speeches published in RBI Bulletins. Of particular interest are: *Secondary Market in Government Securities* (April, 1995); *Prerequisites for the Development of a Sound Debt Market in India* (August, 1995); *The Government Securities Market- The Next Stage of Reform* (April, 1996); *Indian Financial Markets: New Initiatives* (December, 1997); *Development of Money Market in India* (March, 1999); *Developing Government Securities Market: Some Issues* (February, 2000).

### **Real Sector**

The data on the real sector of the economy is also presented in the RBI's publications, for the purpose of evaluating and analysing overall economic policy. The data on GDP and index number of Agricultural and industrial production are presented in the monthly Bulletin. In addition, details of index number of industrial production, group-wise and use-based classification are also presented on monthly basis in the Bulletin. The data series on real sector in terms of national income, domestic savings, agricultural production, area under cultivation, industrial production etc. are all provided in detail on annual basis in the Handbook of Statistics. The trends in the real sector are analysed in detail in different chapters on National Income, Agriculture and Industry the annual publications like the Annual Report and the Report on Currency and Finance.

The CSO is the primary source of data on the real sector, especially the national income statistics. The data on a large number of items on agriculture and industry are also released by the respective Ministries, Government of India. A large number of studies on the various aspects of real sector are regularly published in the Bulletin. These pertain to finances of public limited companies, private limited companies and performance of financial and investment companies. The performance of Private Corporate Business Sector during the first half of the year and complete year is also published in the monthly Bulletin. The Box Items on the issue of Mergers and Acquisitions (Report on Currency and Finance, 1996-97 and 1998-99) and on Targeted Public Distribution System (Annual Report, 1996-97), Productivity Growth in Indian Agriculture (Report on Currency and Finance, 1997-98), Investment in Agriculture and Sustainability of Agricultural Growth (Report on Currency and Finance, 1998-99), provide important theoretical inputs in evaluating performance of industrial sector in the economy.

The Bulletin also carries quick estimates of national income and other articles like financial savings of Household sector. The article on Flow of Funds Account of the Indian Economy regularly published in the monthly Bulletin discusses the broad magnitudes of financial flows and their relationship with other macro economic variables such as national income and domestic capital formation, sector-wise and instrument-wise flows and the draft on household financial savings. This article is also published regularly in the monthly Bulletin (January 1998). Further, the survey on Land and Livestock Holdings and All India Debt and Investment Survey (AIDIS) are also published in the monthly Bulletin. The AIDIS, 1991-92 was conducted in forty-eighth round of the NSSO with July 1991 - June 1992 as a reference period. This survey is fifth in the

series of decennial country-wide survey on household indebtedness and related aspects. Salient features of the Survey were published in May 1999 while major findings were published in the February 2000 issue of the Bulletin.