

प्रेस सम्पर्क प्रभाग, केन्द्रीय कार्यालय, पोस्ट बॉक्स 406, मुंबई 400 001 फोन: 2266 0502 फैक्स: 2266 0358, 2270 3279	प्रेस प्रकाशनी PRESS RELEASE
PRESS RELATIONS DIVISION, Central Office, Post Box 406, Mumbai 400001 Phone: 2266 0502 Fax: 2266 0358, 2270 3279	 भारतीय रिज़र्व बैंक RESERVE BANK OF INDIA www.rbi.org.in www.rbi.org.in/hindi e-mail: help@rbi.org.in

June 24,1998

Working Group on Money Supply submits its Report to RBI Governor

The Working Group on 'Money Supply : Analytics and Methodology of Compilation' submitted its report to the Governor, Reserve Bank of India yesterday. The Working Group was set up under the chairmanship of Dr. Y.V. Reddy, Deputy Governor, Reserve Bank of India in December last year to re-examine the analytical aspects of monetary survey in the light of the changing dimensions and depth of financial sector consequential to the implementation of financial sector reforms.

The Working Group also comprised : Dr. A. Vasudevan, Vice Chairman, Prof. Ganti Subrahmanyam, Member, Prof. Romar Correa, Member, Dr. B.K Bhoi, Member and Shri Deepak Mohanty, Member Secretary.

The Working Group examined 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 Working Group has made 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 Working Group has proposed compilation of comprehensive analytical surveys of the Reserve Bank of India, commercial and cooperative banks and the organised financial sector at regular intervals. The Working Group has also proposed 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.

Major highlights of the Report are:

There is no unique definition of 'money', either as a concept in economic theory or as measured in practice. Money is a means of payment and is thus a lubricant that facilitates exchange. Money also acts as a store of value and a unit of account. In the real world, however, money provides monetary services along with tangible remuneration. It is for this reason, money has to have relationship with the activities that economic entities pursue. Money can, therefore, be defined for policy purposes as the set of liquid financial assets, the variation in the stock of which could impact on aggregate economic activity. As a statistical concept, money could include certain liquid liabilities of a particular set of financial intermediaries or other issuers.

On review of the monetary aggregates now being published, the Group has recognised that from among the four measures of money, M1 and M3 are the two measures which are extensively used both for policy purposes and in academic exercises. Use of data on M2 and M4 are conspicuous by their near-absence. As between M1 and M3, the latter captures the balance sheet of the banking sector, the institutional category which has been the focus of the policy.

The Group is of the view that the present set of monetary aggregates is not in conformity with the largely followed norm of progressivity in terms of liquidity. Moreover, the treatment of postal deposits as monetary aggregate may not be in harmony with the notion of 'depository corporation', since the postal department is a part of general government. It was felt that as part of financial innovations, while financial institutions may issue financial assets closely resembling bank deposits, it may not be appropriate to treat them as monetary assets unless the institutions provide services similar to those of the banks. In fact, many countries have dealt with this issue by constructing measures broader than 'broad money' (sometimes called very broad money, or extended money supply, or liquidity and denoted by 'L', M2+, M3 extended or M3E, MCT, ALP, etc.). Liquidity measures generally include instruments that are considered to be good substitutes for broad money, or include a range of instruments that may be empirically related to overall economic activity or prices. Such instruments, which compete with broader monetary aggregates could, therefore, be treated as part of liquidity measures. Thus, the Group has sought to differentiate monetary aggregates from other financial aggregates not so much on the basis of the attributes of the instruments themselves as on the nature and functioning of institutions issuing such instruments.

While the Group was of the opinion that the consolidated account of the banking sector might be considered for compilation of monetary aggregates, it has proposed that the items of liabilities of non-banking financial institutions which are predominantly held with the public and which compete with broad money aggregates might be included in various measures of liquidity. One such item is postal office deposits on which monthly data are available albeit with some time lag. There are, however, other instruments which could be included in the broad measure of liquidity: (i) public deposits and certificates of deposit of financial institutions as these liabilities directly compete with the liabilities of the banking sector and (ii) those liabilities of non-banking financial companies (NBFCs) such as public deposits (a component of regulated deposits) which are competitive to deposits with commercial banks and bypass the process of bank intermediation. Some countries even include commercial papers and treasury bills under the broad liquidity measure. In the Indian context, however, these two instruments are predominantly held by banks and financial institutions and hence should not form a part of liquidity of the non-financial non-government sector, the Group has noted. Accordingly, the Group has recommended compilation of four measures of monetary aggregates, and three measures of liquidity aggregates besides a comprehensive financial sector survey box:

Recommended Measures of Financial Aggregates		
A.	Monetary	Aggregates
Weekly		Compilation
M0 = Currency in Circulation + bankers' deposits with the RBI + `Other' Deposits with the RBI (including Primary dealers' balances)		
Fortnightly		Compilation
M1 = Currency with the Public + Demand Deposits with the Banking System + `Other' Deposits with the RBI = Currency with the Public + Current Deposits with the Banking System + Demand Liabilities Portion of Savings Deposits with the Banking System + `Other' Deposits with the RBI		
M2 = M1 + Time Liabilities Portion of Savings Deposits with the Banking System + Certificates of Deposit issued by Banks + Term Deposits of residents with a contractual maturity of up to and including one year with the Banking System = Currency with the Public + Current Deposits with the Banking System + Savings Deposits with the Banking System + Certificates of Deposits issued by Banks + Term Deposits of residents with a contractual maturity up to and including one year with the Banking System + `Other' Deposits with the RBI.		
M3 = M2 + Term Deposits of residents with a contractual maturity of over one year with the Banking System + Call borrowings from `Non-Depository' financial corporation by the Banking System.		
B.	Liquidity	Aggregates
Monthly		compilation
L1 = M3 + all Deposits with the Post Office Savings Banks (excluding National Savings Certificates)		
L2 = L1 + Fixed Deposits with Development Financial Institutions + Certificates of Deposit issued by Development Financial Institutions		
Quarterly		Compilation
L3 = L2 + Public Deposits of Non-Banking Financial Companies		
C. Financial Sector Survey (FSS) = Aggregate Assets and Liabilities of the Financial Corporations		

M0 is essentially the monetary base, compiled from the balance sheet of the Reserve Bank of India; M1 purely reflects the non-interest bearing monetary liabilities of the banking sector, M2 includes besides currency, and current deposits, saving and short-term deposits reflecting the transactions balances of entities. M3 has been redefined to reflect additionally to M2 the call fundings that the banking system obtains from other financial institutions.

Bank credit is often specifically referred to in several writings in monetary economics, as a critical variable affecting consumption and capital formation in a direct manner. As such it is often regarded as a more useful indicator of real sector activity than money supply. In India, one of the objectives of monetary policy is clearly stated in official documents as one of ensuring adequate flow of credit to the productive sectors of the economy. But as changes in bank credit are treated as impacting wholly on money supply in the absence of a movement in foreign exchange assets, credit aggregates were hitherto not considered as important. This situation, however, may not continue for long in view of growing openness of the economy. Hence there is a clear need for having comprehensive measures of credit. At present while credit to government from the banking system is clearly identified, bank credit to the commercial sector, in the conventional sense, includes only advances in the form of loans, cash credit, overdrafts, bills purchased and discounted and investments in approved securities other than government securities. However, commercial banks have in recent years been investing in securities such as commercial paper, shares and debentures issued by the commercial sector which are not reflected in the conventional credit aggregates. The Group, therefore, proposes to broaden the definition of bank credit to the commercial sector by including all these investments in the conventional credit aggregates. Another major problem in the present reporting system has been that there is no estimate of credit

flow from the entire financial system either to the government or the commercial sector. The Group proposes to address this lacunae by recommending preparation of a comprehensive financial sector survey on a quarterly basis which would throw up estimates of credit from the financial sector to (i) government and (ii) non-financial commercial sector.

In India, an increasing volume of purchases is being made on credit cards. The Group, therefore, debated on the treatment of transactions undertaken through credit/debit cards. Insofar as credit card purchases and the elimination of physical bank cheques merely provide more convenient and efficient means of transferring demand deposits, they do not call for any redefinition of the money stock - although they may lead to a higher velocity of circulation. Contingent instruments, such as lines of credit on credit cards, are not financial assets and are not recorded in monetary and financial data, regardless of whether they are electronic in nature or not. Similarly, debit cards which use remote terminals to debit user's deposit account and immediately credit vendors' accounts does not necessitate a redefinition of monetary aggregates as the transaction serves the same function as cheque, but the transfer is immediate.

Several new technologies are under development to make payments via computer chips, through computer networks, or across the worldwide Internet. It has been suggested that electronic equivalents will be developed for all major payments methods; currency, cheques, debit cards, credit cards, and travelers' cheques. For example, electronic currency issued by commercial banks appears to have characteristics of a private currency that can compete with the official national currency. These may develop rapidly and have a variety of as yet undetermined, but possibly large, effects on monetary and financial system. The Group has stated that if these systems establish themselves, new statistical definitions, classification systems and reporting procedures may be needed.

Derivatives have grown enormously in recent years in many industrial countries and have made a noticeable presence in some of the major emerging economies with increasing participation by banks. In India, as market trading in derivatives is yet to be introduced and transactions in derivatives are privately arranged, these are treated as off-balance sheet items. The Group is of the view that derivatives may not have any immediate significance in the compilation of monetary aggregates. Developments in the area of derivatives should however be periodically monitored as monetary transmission mechanisms may be affected if large volumes of derivatives hedge a variety of market exposures.

Apart from the compilation of monetary survey and broader liquidity aggregates, the Group has proposed the compilation of a comprehensive financial sector survey (FSS) to capture the dynamic interlinkages between the 'depository corporations' and the rest of the organised financial sector.

The Group has also proposed that to begin with, data on selected items of liabilities and assets can be collected from about 150 large non-banking financial companies (NBFCs) having public deposits of Rs.20 crore or above which account for over 90 per cent of the total public deposits of all NBFCs on a quarterly basis. This could be subsequently improved upon.

In view of the proposed changes in the reporting format, monetary data would need to be more detailed, based on the information furnished by banks. Moreover, with the enlargement of the scope and coverage of the Section 42(2) returns, data on such items as certificates of deposit (CDs) issued by banks, external liabilities of banks and banks' investment in 'other securities' would now be available to the public at a higher frequency.

The Group has proposed that the present practice of compiling monetary base on a weekly basis and monetary aggregates on a fortnightly basis should continue. Data on reserve money and monetary aggregates should be published in the Weekly Statistical Supplement and in other publications of the Reserve Bank, as has been the present practice, and should also be placed on the RBI Website.

The Group has recommended that measures of liquidity L1 and L2 should, however, be compiled on a monthly basis and published in the RBI Bulletin. It is proposed to publish data on L3 and financial sector survey report on a quarterly basis in the RBI Bulletin. The financial sector survey may be accompanied by a review of the developments in the financial sector during the quarter under reference, to bring to the fore the dynamic interlinkages in the financial sector which could be useful in providing important policy inputs.

At present, monetary data are available on the Internet in the RBI Website as part of the weekly statistical supplement and other reports. The Group has recommended that monetary data should continue to be disseminated through various publications of the Reserve Bank as well as in electronic form.

In view of the change in the reporting format prescribed particularly for the commercial and co-operative banks, financial institutions and mutual funds, the Group has proposed that a structured calendar for each data category might be set in place for smooth transition to the new system of reporting as given in the following Table:

Schedule for Collection of Statistics

Sl. No.	Sector	Revised Reporting to start from
1.	Reserve Bank of India	October 1998
2.	Scheduled Commercial Banks	First Reporting Friday of October 1998
3.	Co-operative Banks	October 1998/First Reporting Friday of October 1998
4.	Non-Bank Financial Companies	October 1998
5.	All categories of Financial Institutions	Quarter ended October 1998

Based on the data available from July 1998, it should be possible to publish new official series of monetary aggregates from early 1999.

The Group has proposed that both the existing and proposed monetary aggregates may initially be published for at least a year in the relevant Reserve Bank publications in order to facilitate an understanding of the elements underlying the shift to the proposed aggregates.

In order to ascertain whether money as defined is demanded in relation to the overall transactions in the economy, it would be necessary to relate the chosen monetary aggregate to some macroeconomic indicator such as GDP or GNP. The real broad money balances and aggregate income were found to be cointegrated reflecting a long-run equilibrium relationship between real broad money (M3) and real GDP. However, in order for the broad money demand equation to be adequately used for policy purposes, the stability properties are very critical. The tests for predictive stability showed that there has been an unidirectional short-term deviation from the long-run equilibrium path which needs to be captured in terms of other relevant variables to ensure predictive accuracy. This would also mean that monetary policy exclusively based on the demand function for money could lack precision. Therefore, an appropriate framework of examining this issue could be to study the dynamic stability of an error correction model (ECM) rather than the original structural equation. However, availability of only annual data on GDP and the short period for which the data on other related variables are available following the reforms of the financial sector posed serious difficulties for empirical estimation of a robust ECM model.

In order to evaluate the performance of the new monetary aggregates proposed by the Group, an exercise of estimating the three monetary aggregates (M1, M2 and M3) and two liquidity aggregates (L1 and L2) was undertaken on a monthly basis for the period April 1994 to March 1997. The information content of these new aggregates favoured M2 to both M1 and M3 reflecting that M2 has the potential of emerging as an important aggregate which could be useful for policy purposes.

In the light of the incipient empirical evidence, the Group felt that the positive impact of the financial sector reforms notwithstanding, several imperfections still persist in various segments of the financial system as financial sector reforms are incomplete. Financial markets, particularly the long-term segments, are not fully integrated with the rest of the financial sector. Forex market has begun to show some enlargement over years but is yet to acquire sufficient depth as to bear serious consequence for policy formulation. The level of integration between domestic and overseas markets as a result, has been somewhat limited. Unless financial sector reforms are furthered and capital movement liberalisation is improved, complete integration of financial markets will be impaired. It is against this transitional setting that the monetary policy framework needs to be viewed and operating procedures appropriate to the institutional circumstance are put in place.

The Reserve Bank of India has set up an inter-departmental group to coordinate the implementation of the Report of the Working Group.

The Report of the Working Group would be published on the RBI Website (URL <http://www.rbi.org.in>) on July 3, 1998. On the same day, the Report will be published as a supplement to the July 1998 RBI Bulletin.

Alpana Killawala
General Manager