# Part I Conceptual and Methodological Aspects of Flow of Funds Accounts

# 1. INTRODUCTION

The Reserve Bank of India has been publishing the flow of funds (FOF) accounts for the country since December 1964. The published accounts pertaining to the period 1951-52 to 1993-94, and 1994-95 to 1995-96 are available in several issues of the monthly *Bulletin* of the Bank and the *Report on Currency and Finance, Volume II, 1997-98* respectively. The primary objective of this monograph is to present all such accounts at one place. For better understanding of the accounts, a brief description of the concept of FOF with special reference to its compilation in India is also provided.

The monograph is in two parts. Part I deals with the conceptual and methodological aspects. Section 2 in this part gives a brief resume of the concept of FOF. Section 3 deals extensively with the FOF compilation in India. Annexures to this part provide details of institutions covered in the accounts. In part II, FOF accounts for the Indian economy, both instrument-wise and sector-wise, for the period 1951-52 to 1995-96, are presented.

# 2. THE CONCEPT

The available literature contains extensive description of FOF accounts. Based on the description, FOF accounts in the modern sense represent a systematic record of net transactions involving financial instruments during a given period of time.

In a monetised economy, all economic transactions involve exchange of financial claims among the participants. Keeping in view the similarities of economic activities, participants could be grouped into a few sectors. Similarly, the financial claims are amenable for grouping into a few instruments. Following the system of double entry book-keeping in financial accounting, the transactions between the participants could be treated in quadruple entry form (since the books of both participants are taken into account). This method not only enables the tracing of intersectoral funds flow but also ensures consistency and accuracy of capturing the transactions. The data are in flow form and pertain to a relevant period, usually a year or a quarter.

The FOF accounts are presented in a matrix form. This lends flexibility and facilitates further aggregation/disaggregation. Besides it enables the obtaining of consistency on the lines of an input-output transaction table. Row-wise reading shows the FOF into different sectors while the column-wise data indicate the receipts from various sectors/instruments. A distinctive feature of sector-wise FOF table is the use of sources and uses columns for each sector. The sources column provides data on funds available to the specific sector, raised from other sectors. The uses column represents the sector's investment in financial assets and net increases in financial assets over the period covered in the accounts. Ideally, at the aggregate level, sources and uses should balance. This may not however be obtained partly due to lags in the availability of information and partly due to inadequate quality of data. Hence, a column denoting discrepancy is used as a balancing entry.

The FOF accounts are a branch of social accounting of a country. It is an empirical presentation, which provides valuable insights into the functioning of the economy in general and the financial system in particular. J. R. Hicks had drawn attention to the inadequacy of national income and expenditure accounts to judge the performance of an economy and introduced the concept of national balance sheets.<sup>1</sup> Copeland's pioneering work, on which the modern FOF accounts are based, was essentially an attempt to provide sectoral insights into the trends in macro aggregates.<sup>2</sup>

As an analytical tool, FOF accounts enable the identification of individual sectors having overall financial surplus or deficits. The accounts facilitate the determination of the origin and causes of these surpluses and deficits. Owing to these features, an enquiry into the utilisation of surplus and the financing of deficit in each sector is possible. Besides bringing out such inter sectoral linkages, FOF accounts present a comprehensive picture of the economy in that they provide details of the pattern of financing of even capital stocks. For policy makers, these analytical insights are useful in locating specific sector requiring remedial action especially during a downturn in business cycle. For central bankers, FOF accounts provide an empirically rich method of assessing the effects of their monetary policy actions on different units/groups of the money, banking and credit system and through them the impact on the behaviour of business and consumers. Furthermore, the system facilitates a more meaningful creation of alternative scenarios under financial programming method. Recognising these advantages, the Federal Reserve Board in the USA has included FOF accounts in its macro accounts and has been regularly publishing them on a quarterly basis from 1959 (See Box 1).

#### Box 1 : Flow of Funds Accounts & the System of National Accounts (SNA), 1993

The United Nations System of National Accounts (SNA) is a well established statistical framework for presenting the flow of funds (FOF) accounts. In fact, Dawson (1991) had shown the conceptual relation of FOF accounts to the SNA. FOF accounts can take the form of integrated capital and financial accounts or can cover only transactions in financial instruments. Accordingly, three variants of FOF accounts have emerged depending on the availability of data. They could be conceptualized as follows: (1) Basic FOF Accounts, (2) SNA Integrated Financial Accounts and (3) Detailed FOF Accounts.

The Basic FOF Accounts present a limited number of sectors and financial instruments and are intended to be compiled by countries that have limited statistical resources. The SNA Integrated Financial Accounts represent an improvement over the Basic FOF Accounts, which cover non-financial corporations and households in the residual sector. In contrast, they are treated as separate sectors in the SNA Integrated Financial Accounts. The two-dimensional matrix presentation provides net incurrence of liabilities (resources) by sector and net acquisition of assets (uses) by sector in the format of SNA financial account.

The SNA Integrated Financial Accounts are confined to a two-dimensional level although these provide a richer source for analysis than the Basic FOF Accounts. To address the three-dimensional issue of who finances whom and by which financial instruments, the SNA 1993 has underlined the need for construction of Detailed FOF Accounts. Because of the symmetrical nature of financial assets and liabilities, a single matrix could be constructed, insofar as one transactor's asset is another transactor's liability. Such a matrix, however, would be very cumbersome. The SNA 1993 has, therefore, prescribed separate matrices for financial assets and for financial liabilities. These matrices are referred to as Detailed FOF Accounts.

The methodology for presentation of FOF accounts as envisaged in the SNA 1993 is beset with two main conceptual issues. The first issue relates to capital value changes. The issue could be addressed by making valuation changes and by showing these separately in a reconciliation account. Secondly, it has been suggested that the analysis of saving and financial data should reflect real rather than nominal values (Honohan & Atiyas, 1989). Kennedy (1988)

has succinctly shown that the adjustment for inflation could dramatically change the pattern of intersectoral financial flows for a given economy.

The Detailed FOF Accounts for the Indian economy are prepared by the Reserve Bank of India. The accounts of six sectors are presented for nine categories of financial instruments in two matrices, *viz.*, (i) financial instrument by sector, and (ii) sector by sector. While the accounts are rich in content and prepared in line with the international standards, the widening and deepening of the Indian financial system in the wake of financial sector reforms in the 1990s have thrown up new challenges for the FOF compilers. Capturing the new financial instruments like zero coupon/deep discount bonds, warrants and financial derivatives continues to be a grey area in the absence of any authentic data source.

#### References

Dawson, J.C. (1991) : "The Flow of Funds Accounts, the United Nations System of National Accounts, and the Developing Countries" in V. Galibis (Ed.), *The IMF's Statistical Systems*, Washington, DC: International Monetary Fund.

Kennedy, N.O. (1988) : "Inflation Adjusted Sectoral Savings and Financial Balances", *Bank of England Quarterly Bulletin*, May.

Honohan P. & I. Atiyas (1989) : "Intersectoral Financial Flows in Developing Countries", *Working Papers*, *WPS 164*, The World Bank.

United Nations et al (1993) : System of National Accounts 1993, New York.

# 3. FLOW OF FUNDS ACCOUNTS IN INDIA

<u>3.1 Sectors</u>
<u>3.2 Instruments</u>
<u>3.3 Sources of Data</u>
<u>3.4 Methodology of Compilation</u>
<u>3.5 Sources of Time Series on FOF Accounts</u>
<u>3.6 Compilation Procedures in FOF Accounts: A Chronology of Changes</u>
<u>3.7 Some General Limitations of FOF Accounts in India</u>

#### 3.1 Sectors

For the purpose of FOF accounts, the Indian economy is divided into six sectors, the criteria for the classification being the institutional structure and activity status. The six sectors are Banking, Other Financial Institutions, Private Corporate Business, Government, Rest of the World and Household. This is in line with the recommendations of the Working Group on Flow of Funds, 1963 (Box 2). Broad coverage of each sector is set out below :

#### Box 2 : The Working Group on Flow of Funds, 1963

The flow of funds (FOF) accounts for India owe their origin to a suggestion of Sir C.D. Deshmukh, the then Union Finance Minister, in 1955. In 1956, the Central Statistical Organisation (CSO) initiated preparatory work along with the Reserve Bank of India (RBI). In 1959, Professor H. W. Arndt of the University of Australia carried out a study in consultation with CSO, Ministry of Finance and RBI, on FOF accounts. In his study, the economy was divided into four broad sectors, *viz.*, government, banks, rest of the world and residual. However, his analysis was confined

to lending and borrowing only, since the main object of the accounts was to show as to how and in what forms domestic savings had become available to the Government for financing its expenditure. The memorandum entitled "Financial Flows in the Indian Economy 1951-52 – 1957-58", prepared by Prof. Arndt was discussed by representatives of the CSO and the RBI, etc. They in turn referred the issue to a Working Group on Flow of Funds (Chairman: Shri P. C. Mathew) to formulate proposals for further work in this direction. The Report of the Working Group, published in 1963, presented a consolidated FOF accounts for the year 1957-58. For the purpose of FOF accounts, the Indian economy was divided into six sectors and twenty sub-sectors, the sectors being household, banking, other financial institutions, private corporate business, government and rest of the world. The accounts for other years were also presented for individual sectors, depending on the availability of data. The transactions were presented for two categories, viz., (i) financial and (ii) non-financial, for each of the sectors. The Working Group brought out succinctly the major limitations in constructing the FOF accounts for different sectors in general and household sector in particular. The improvement in FOF accounts for the household sector would hinge critically, the Group felt, on the proper framework for social accounts. Incidentally, the National Income Committee in their first report too, underlined the need for a framework for social accounts of India (a number of researchers have attempted to construct a social accounting matrix (SAM) for India in the past. However, given the data constraint, construction of a proper SAM for India has turned out to be very difficult).

Turning to the private corporate business sector, the Group underscored the need for suitable modifications in company finance studies by the RBI to accommodate the needs of FOF accounts. In its pursuance, the Bank took the necessary steps. The Group also underlined the need for filling up of data gap relating to the local bodies.

The Working Group recommended for construction of annual financial flows accounts of the Indian economy. As regards the non-financial flows accounts, the Group recommended for plugging in the data gaps, particularly, in the case of the household sector so that consolidated accounts of the two kinds of transactions could be prepared for the economy as a whole.

Based mainly on the methodology given in the Report of the Working Group, RBI constructed the first accounts and published an article in December 1964 issue of the RBI *Bulletin*, which was followed by a more structured study in the March 1967 issue of the *Bulletin*. Since then, these accounts are being published periodically in the *Bulletin*.

#### References

Central Statistical Organisation (1963): *Report of the Working Group on Flow of Funds*, Department of Statistics, Cabinet Secretariat, Government of India.

Arndt, H. W. (1959) : Financial Flows of Indian Economy, 1951-52 - 1957-58, Unpublished Memorundum.

Pradhan, B. K., et al (1999) : 'A Social Accounting Matrix for India, 1994-95', *Economic and Political Weekly*, November 27.

- (i) Banking Sector: It covers institutions whose liability consists of currency and deposits. Specifically, the Reserve Bank of India, which is the currency issuing authority, and deposit taking banks comprising commercial banks, co-operative banks and credit societies are included. The commercial bank sub-sector comprises the State Bank of India and its subsidiaries, other nationalised banks, Regional Rural Banks (RRBs), other Indian scheduled and non-scheduled commercial banks, and branches of foreign banks operating in India. The sub-sector 'co-operative banks and credit societies' consists of the following: State Co-operative Banks, Central Co-operative Banks, Primary Cooperative Banks, Agricultural and Non-agricultural Credit Societies, Central and Primary Land Development Banks, and Industrial (State and Central) Cooperative Banks.
- (ii) Other Financial Institutions: Institutions covered under this sector are listed in Annexure 1.1. Broadly, sub-sectors in this segment are financial corporations and companies and

insurance. Financial corporations and companies include development financial institutions at all India and state levels, Unit Trust of India (UTI), mutual funds, non-banking financial and investment companies, and non-government provident funds. The insurance sub-sector comprises insurance corporations and companies.

- (iii) Private Corporate Business Sector: Sub-sectors in this category are the cooperative noncredit societies and non-government non-financial companies. The co-operative non-credit societies comprise marketing societies, co-operative sugar factories, cotton ginning and pressing societies, milk supply unions and societies, fisheries societies, farming societies, irrigation societies, consumers' co-operative stores, housing societies, weavers' societies, spinning mills, etc. as detailed out in Annexure I.2. Non-government non-financial companies comprise operating public and private limited companies (including foreign controlled rupee companies), which are registered in India under the Indian Joint Stock Companies Act, 1956, and branches of foreign companies operating in India. Operating companies are defined as companies, which have commenced regular commercial production and started earning income from their main activity. However, the following companies are excluded: (i) companies under construction, (ii) promotional and developmental organisations/associations not functioning for profit, (iii) companies which do not report any business/activity, (iv) companies which are on the verge of liquidation, (v) companies which have sold out their assets, (vi) companies which are under the process of winding up and (vii) companies which have already applied for voluntary liquidation, as on a particular date.
- (iv) Government: The constituents of this sector are: (a) central government and its departmental commercial undertakings, (b) state governments and union territories including their departmental commercial undertakings, (c) local authorities (covering city corporations, municipalities, panchayats and port trusts) and (d) government non-departmental non-financial commercial undertakings including state electricity boards. The post office savings banks are also included.
- (v) **Rest of the World**: A list of the institutions covered in this sector is furnished in Annexure I.3. All of them are international institutions.
- (vi) Household: This is the residual sector comprising the individuals, non-government noncorporate enterprises of farm/firm business and non-farm/firm business, like sole proprietorships and partnerships, trusts and non-profit institutions.
- (vii) Sector Not Elsewhere Classified: It refers to the items of transactions which cannot be classified under any of the sectors mentioned above, but which appear in the balance sheets of different entities and budgets.

#### **3.2 Instruments**

The available financial instruments are grouped into the following eleven categories in FOF accounts:

- (i) **Currency:** It includes notes issued by the Reserve Bank in circulation and one-rupee notes and coins issued by the Government of India.
- (ii) Deposits: This item consists of bank deposits and other deposits. Under this head, deposits held by RBI, commercial banks, co-operative banks, cooperative credit and non-credit societies as also deposits received by financial corporations, government and Rest of the World are included. Compulsory deposits with RBI, which are shown separately, are excluded.
- (iii) Investment: This category covers the following instruments:

*Government Securities:* This includes market loans, treasury bills, special bonds (including bearer bonds) and compensation bonds issued by the central and state governments and central government's borrowing from RBI against compulsory deposits.

*Other Securities of Government (other than small savings):* This includes bonds, shares and debentures issued by the port trusts, municipal corporations, housing boards, state electricity boards and non-departmental non-financial undertakings.

*Securities of Banks:* This refers to the paid-up capital of RBI and commercial banks; shares and debentures issued by co-operative banks and credit societies.

*Securities of Other Financial Institutions:* Shares, units, bonds and debentures issued by financial corporations and insurance companies are covered here.

*Private Corporate Securities:* Shares and debentures issued by non-government non-financial companies and co-operative non-credit societies are included under this head.

*Foreign Securities:* Securities issued by foreign institutions, foreign exchange assets appearing against investments under sources of funds of the Rest of the World sector are covered here.

*Other Securities:* When the details of securities are not identified against any sector, they are shown under this category.

- (iv) Loans and Advances: Items included under this head are borrowings of all sectors and deposits accepted by non-banking financial and non-financial companies.
- (v) Small Savings: Data are reported under sources of Central Government.
- (vi) **Provident Fund**: Non-government provident funds and government provident funds are covered here.
- (vii) Life Fund: Items covered under this head are life insurance fund of Life Insurance Corporation of India (LIC), postal insurance fund of central government and state governments' insurance fund.

- (viii) Compulsory Deposits: This refers to deposits held with RBI in pursuance of the legislative requirement, *viz.*, *Compulsory Deposits Scheme*, 1974. The Scheme has since been withdrawn.
- (ix) **Trade Credit/Debt**: Under this head, trade credit/debt by non-government non-financial companies, government non-departmental undertakings and port trusts is included.
- (x) Foreign Claims Not Elsewhere Classified: Certain foreign claims, which could not be classified under any of the instruments listed above are shown here. Such items are (i) commercial banks' branch adjustments outside India, (ii) excess of assets over liabilities as per Form X ' ' and (iii) such other items which may appear under sources/uses of funds.
- (xi) Other Items Not Elsewhere Classified: The items, which could not be classified under any of the above listed instruments, are shown here. The items may be different for sources and uses of funds. Generally, bills payable/receivable, branch adjustments in India, other financial liabilities, other financial assets are reported here. For the central government, net purchase of domestic gold and silver (uses of funds) is also shown against this category.

#### 3.3 Sources of Data

In view of the comprehensive coverage and disaggregated presentation, voluminous data are required from different sources to prepare FOF accounts. In India, the required data are culled out from published balance sheets as also statements on sources and uses of funds of the concerned institutions as well as data available in surveys and from special returns designed exclusively for constructing FOF accounts. However, no independent accounts for the household sector are available. Accounts for the household sector are prepared using the benchmark ratios as thrown up by the various surveys of financial instruments. Wherever such surveys are not available, they are derived as residual by netting the accounts of other organized sectors. Table 1 presents the sector-wise details of sources of data.

Table 1 : Sources of Data	for Compilation of FOF Accounts
~	

# SectorSources1. Banking<br/>1.1 Reserve Bank of India1. Statement of affairs of the Reserve Bank of India as<br/>on March 31 (*RBI Bulletin*).2. Data on 'notes in circulation' and 'circulation of rupee<br/>coin and small coin', as on March 31 (*RBI Bulletin*).3. Special returns from regional offices of the RBI and<br/>Department of Government and Bank Accounts, RBI,<br/>rel ating to:<br/>(i) Bills payable;<br/>(ii) Other deposits;

(iii) Other assets;(iv) Other liabilities; and(v) Break-up of investments by the Banking Department of the RBI.

# 1.2 Commercial Banks 1. Data on certain items of assets and liabilities of scheduled commercial banks as on last reporting Friday(*RBI Bulletin*).

- 2. Survey of ownership of deposits with scheduled commercial banks in India as on the last Friday of March (*RBI Bulletin*).
- 3. Survey of investments of scheduled commercial banks as at the end of March (*RBI Bulletin*).
- 4. Survey on outstanding credit of scheduled commercial banks according to organisation and occupation (*Basic Statistical Returns*, RBI).
- 5. Deployment of gross bank credit by major sectors as on the last reporting Friday (*RBI Annual Report*).
- 6. Form X on various items of assets and liabilities of scheduled and non-scheduled commercial banks, as on March 31.

1.3 Co-operative Banks and Credit Societies
 1. Assets and liabilities of the co-operative banks and credit societies (*Statistical Statements relating to Co-operative Movement in India Part I - Credit Societies*, NABARD).

2. Special information on assets and liabilities of state and district central co-operative banks.

# 2. Other Financial Institutions

- **2.1 Development Financial**<br/>Institutions1. Balance sheets of the development financial<br/>institutions(as given in their respective Annual<br/>Reports).
  - 2. Special information relating to assets and liabilities of State Industrial Development Corporations.
- **2.2 Unit Trust of India** 1. Balance sheet of Unit Trust of India (*Annual Report*, UTI).

			2.	Special information giving scheme-wise details of UTI's balance sheet.
	2.3	Insurance		ance sheets of LIC, GIC, DICGC, ECGC and four osidiaries of GIC.
	2.4	Mutual Funds	1.	Balance sheets of various Mutual Funds.
			2.	Special information on various items of assets and liabilities from mutual funds.
	2.5	Non-Government Provident Fund	org sea pla LIC	lance sheets of employees' provident fund (EPF) anisation, coal mines provident fund organisation, men's provident fund organisation, and Assam tea ntations provident fund organisation, provident funds of C, dock labour boards, all port trusts, state financial porations and Industrial Finance Corporation of India.
	2.6	Financial and Investment Companies	1.	Studies on finances of financial and investment companies ( <i>RBI Bulletin</i> ).
			2.	Articles on growth of deposits with non-banking companies ( <i>RBI Bulletin</i> ).
3.	Priv	ate Corporate Business		
	3.1	Non-Government Non- Financial Companies	1.	Published articles relating to assets and liabilities of medium and large public limited companies, medium and large private limited companies ( <i>RBI Bulletin</i> ).
			2.	Data on global paid-up capital from Department of Company Affairs, Government of India.
	3.2	Co-operative Non-Credit Societies	(as ope	sets and liabilities of co-operative non-credit societies published in <i>Statistical Statements relating to Co-</i> erative Movement in India, Part II - Non-credit cieties, NABARD).
4.	Rest	of the World	hea (i) (ii)	ecial information on payments and receipts under the ids of Private capital. Official miscellaneous capital. ) Banking capital.
-	C	<i>,</i>		

5. Government

	5.1 Central Government	1.	<i>Economic and Functional Classification</i> of central government budget.
		2.	Finance Accounts of the union government.
		3.	Budget documents of the central government.
		4.	Ownership pattern of central government securities( <i>Report on Currency and Finance</i> , RBI).
		5.	Special information on ownership of Government of India Treasury Bills as on March 31.
	5.2 State Governments and Union Territories	1.	Consolidated finances of state governments and union territories ( <i>RBI Bulletin</i> ).
		2.	Finance accounts of each state government/combined finance and revenue account of the union and state governments in India.
		3.	Ownership pattern of state governments securities( <i>Report on Currency and Finance</i> , RBI).
	5.3 Local Authorities		sets and liabilities of port trusts (Annual Reports of ious port trusts).
	5.4 Government Non- Departmental Non-Financial Enterprises	1.	Assets and liabilities of public sector enterprises ( <i>Public Enterprises Survey</i> , Bureau of Public Enterprises, Government of India).
		2.	Assets and liabilities of state electricity boards and Damodar Valley Corporation (as published in respective <i>Annual Reports</i> ).
		3.	Articles on growth of deposits with non-banking companies ( <i>RBI Bulletin</i> ).
6.	Household	1.	Data on currency with public as on end-March ( <i>RBI Bulletin</i> ).
		2.	Survey of ownership of deposits with scheduled commercial banks in India as on the last Friday of March ( <i>RBI Bulletin</i> ).
		3.	Survey of ownership of capital of joint stock companies ( <i>RBI Bulletin</i> ).

- 4. Primary market data from RBI *Report on Currency and Finance.*
- 5. Small savings data from Annual Financial Statement of central government budget.
- 6. Survey on ownership of government rupee securities(*RBI Bulletin*).
- 7. Ownership pattern of central/state government securities (*Report on Currency and Finance*, RBI).
- Central Provident Fund Commissioner for contributions under the Employees Provident Fund Act, 1952 and the Employees Family Pension Scheme, 1971.
- 9. Survey on outstanding credit of scheduled commercial banks according to organization and occupation (*Basic Statistical Returns*, RBI).
- 10. Data on foreign currency and/or non-resident deposits.
- 11. Form X on various items of assets and liabilities of scheduled and non-scheduled commercial banks as on March 31.
- 12. Special information on assets and liabilities of state and district central co-operative banks.
- 13. Special information on scheme-wise details of UTI's balance sheet.
- 14. Special information on various items of liabilities from mutual funds.
- 15. Special information on ownership of Government of India Treasury Bills as on March 31.
- 16. Data on other government bonds, national saving scheme and deposit scheme for retired employees.
- 17. Data on RBI and commercial banks' provident fund contributions.

- 18. Data on loan to RBI employees.
- 19. All other data sources used for other sectors.

#### 3.4 Methodology of Compilation

3.4.1 Banking Sector 3.4.2 Other Financial Institutions (OFI) 3.4.3 Private Corporate Business Sector 3.4.4 Government Sector 3.4.5 Rest of the World 3.4.6 Household Sector

The construction of a FOF Account is a complex process and involves several steps. At the outset, transactions in financial instruments should be segregated from transactions in non-financial instruments. However, transactions in non-financial instruments could as well affect the position of financial instruments and vice versa. For example, change in the position of fixed assets of an institution could as well be reflected in its financial instruments such as cash holding under the system of double-entry book-keeping. All transactions involving finance should, therefore, be identified and included in FOF. In the second stage, the transaction in financial instrument should be assigned to different sectors depending upon the coverage. While intrasectoral transactions are netted out, inter-sectoral transactions will be entered in two places - the sector from which the funds have flown and the recipient sector. In the third stage, the transaction in financial instrument should be allocated to either sources or uses depending upon the receipt and payment criteria. In view of these complexities, it is useful to consider the sources of data instrument-wise and its allocation sector-wise. This is attempted in this section.

#### 3.4.1 Banking Sector

The accounts of sub-sectors under this sector are prepared independently on the basis of their balance sheets. The balance sheet data pertain to March 31 for RBI and co-operative banks as also co-operative credit societies and last reporting Friday of March for commercial banks<sup>3</sup>. The choice of last reporting Friday as against March 31 for commercial banks is to avoid the year-end bulge in a number of items of assets and liabilities. The procedure of the compilation of statistics as well as estimation of sectoral particulars in respect of different instruments is presented below for each sub-sector.

#### a) Reserve Bank of India

#### Notes in Circulation

' Notes in circulation ' comprise bank notes (i) held in Banking Department of RBI, and (ii) in circulation (i.e., outside the RBI). Bank notes and rupee coins in circulation are held by different institutions/sub-sectors as part of their saving and also for day to day transactions. As the cash held by different institutions/sub-sectors includes both the bank notes and the government notes, break-up for each sub-sector is made by assuming that their ratio to one another is the same as

indicated in the data on total 'notes in circulation' and total 'circulation of rupee coins and small coins' as on March 31 of the respective year. The sectoral distribution of bank notes worked out on the above basis is shown under this item.

#### Paid-up Capital

The paid-up capital of RBI has remained constant at Rs. 5 crore since 1948. As there is no change in the amount so far, the flow on this account is nil.

#### Deposits

The deposits with RBI are classified as loans from the Rest of the World, Compulsory Deposits, and deposits of a number of financial institutions like commercial banks, co-operative banks, insurance companies/corporations, financial corporations, and provident funds, also government, and others (items like cheques for collection account, uncleared items of the credit account, sundry deposits, etc., which could not be allocated to any sector). In order to segregate 'other' deposits into these institutional/sub-sectoral details, special information as on March 31 is called for from the regional offices of the RBI.<sup>4</sup> 'Other deposits' of the RBI, after excluding the Compulsory Deposits, are proportionately allocated to different sectors based on the sectoral pattern of 'other deposits' indicated in the special information. After estimating the sectoral figures, the deposits held under Account No.1 of the International Monetary Fund (IMF) with the RBI are deducted from the deposits estimated against the Rest of the World sector and shown separately as loans from IMF. This modification is made in the accounts of RBI sub-sector because the above transactions in the Rest of the World sector's accounts are shown as loans to the official sector (RBI).

#### Bills Payable

'Bills payable' include (a) outstanding drafts issued among the offices of RBI (b) outstanding payment orders issued by RBI for local payments and (c) outstanding balance in the remittance clearance account. Since 1975-76, a special return as on March 31, is being received from the regional offices of RBI. The amount of bills payable, as given in the Statement of Affairs, is allocated to different sectors on the basis of the sectoral pattern derived from this special return.

#### Other Liabilities

The extent of transactions in non-financial instruments is excluded from 'other liabilities' by netting similar items on the assets side. For this purpose, a special return is used.

#### Rupee and Small Coins

This item comprises the holdings of the Issue and the Banking Departments of the RBI in the form of rupee notes/coins of all denominations of the Central Government and also any other commemorative coins (even if they are of higher denomination) issued by the Government of India. Rupee notes/coins are shown as the RBI's claim on the Government Sector, because rupee notes/coins are shown as the currency liability of the Government.

#### Gold Coin and Bullion

Stock of gold held by RBI in its vaults is shown against this head. The gold purchased by RBI, as part of its transactions, from the International Monetary Fund (IMF) is also included here. The increase in the value of gold holdings due to revaluation is not shown under the FOF account. This particular amount due to revaluation is shown against revaluation account and, therefore, only the increase in the value of gold due to rise in physical stock of gold is shown under the FOF accounts. It is considered as a foreign asset and shown against the 'Rest of the World' sector for the sectoral classification.

#### Foreign Assets

Foreign assets of RBI comprise 'foreign securities' held in the Issue Department and 'balances held abroad' in the Banking Department. These include short-term securities, cash balances and fixed deposits with foreign central banks and other major international commercial banks. As these relate to transactions of RBI with foreign governments/central banks and international institutions, these are classified against the 'Rest of the World' sector under sectoral presentation and as investments - foreign securities ' in the instrument-wise classification.

#### Investments

The Statement of Affairs of RBI presents data only on aggregate investments. Hence, we take recourse to a special return for details of composition of such investments.

#### Loans and Advances

Data on loans and advances out of the National Agricultural Credit (Long Term Operations) Fund, the National Agricultural Credit (Stabilisation) Fund, the National Industrial Credit (Long Term Operations) Fund and loans from other funds are separately available.<sup>5</sup> Recipients of loans are classified in the Statement of Affairs, as (a) Central Government, (b) State Governments and union territories, (c) commercial banks, (d) co-operative banks and (e) financial corporations. 'Internal bills purchased and discounted' are also included under loans and advances, as these are the bills of commercial banks that are discounted by RBI. Loans to employees for purchase of cars, etc., are shown as loans to the Household sector, whereas housing loans are classified as loans to co-operative non-credit societies as a large part of such loans is given to the co-operative housing societies.

#### Other Assets

Since the details of 'other assets' are not reported in the Statement of Affairs, a special return from the regional offices of RBI is utilised for this purpose. The items of non-financial nature such as dead stock account are excluded from other' assets ' before netting it from 'other liabilities'.

#### b) Commercial Banks

The data on assets and liabilities of all scheduled commercial banks (including RRBs) as on the last reporting Friday of March are drawn from the special return obtained under Section 42(2) of the Reserve Bank of India Act, 1934 (hereafter referred to as Section 42 return). Form X, a monthly return received in RBI under Section 27 of the Banking Regulation Act, 1949, presents data on all items of assets and liabilities including those available in Section 42 return for all commercial banks. The details which are not available from the Section 42 return are supplemented with data available from the Form X return. Different survey results on bank credit, deposits and investments [*viz.*, Basic Statistical Returns (BSR) 1, 4 and 5] are used for estimating sectoral details under various instruments. A brief account of the instrument-wise compilation is presented below:

#### Paid-up Capital

The data on paid-up capital are obtained from the Form X return which is available for five groups of banks, *viz.*, (a) State Bank of India and its subsidiaries, (b) nationalised banks, (c) other Indian scheduled banks (including RRBs), (d) branches of foreign scheduled banks and (e) functioning non-scheduled banks. These banks are regrouped to work out the ownership details of their paid-up capital into: (i) public sector banks, (ii) RRBs and (iii) other Indian scheduled banks (residual).

The RBI and Central Government hold the paid-up capital of public sector banks. However, it is observed that the accounts of the Life Insurance Corporation of India (LIC), still show investment in shares of certain nationalised banks, perhaps, due to non-receipt of compensation. Therefore, to derive the figure for the Central Government's share, the LIC's contribution is subtracted along with that of the RBI's, from the total paid-up capital of the public sector banks. In recent years, public sector banks have been accessing the primary market with public offer of their equity shares. The ownership of paid-up capital of RRBs is divided among the Central Government, State Governments and commercial banks in the ratio 50:15:35. Thus, the paid-up capital of all the commercial banks is allocated among (a) RBI, (b) commercial banks, (c) LIC, (d) Central Government, (e) State Governments and (f) households.

#### Deposits

The data on deposits are obtained from the Section 42 return, which gives aggregate demand and time deposits. The particulars of ownership of these deposits are estimated on the basis of the survey on 'ownership of deposits with scheduled commercial banks' as on the last Friday of March, available through the Basic Statistical Return - 4. The ownership details are available by type of deposits, *viz.*, current, saving, fixed and other deposits. The relationship of current, savings and fixed deposits available in Form X is applied separately to the aggregate deposits into current, saving and fixed (including cash certificates) deposits. The deposits thus estimated are allocated among the various sectors on the basis of the ownership survey, separately for current, savings and fixed deposits. The ownership details of the deposits from banks are shown against commercial banks, which include Indian commercial banks (both public and private sector banks), foreign resident banks (offices of foreign banks operating in India) and co-operative

banks. The deposits from others are classified into financial corporations, insurance companies/corporations, non-government provident funds, co-operative non-credit societies, non-government non-financial companies, government (including government non-departmental undertakings), rest of the world and household sector.

#### Bills Payable

Details of this item are given under bills payable in India and bills payable outside India. The latter part is shown against the Rest of World sector. In the absence of more details on the former category, the total amount is shown as 'sector not elsewhere classified '. In the instrument-wise classification, this is shown as 'item not elsewhere classified'.

#### Branch Adjustments

The data under this head are available for branch adjustments (a) with offices in India and (b) with offices outside India. While the second category represents transactions with the Rest of the World sector, the first category represents intra-commercial bank transactions. An item 'branch adjustments among offices in India' also appears under the asset side.

#### Miscellaneous Liabilities

The data on this item are available in Form X return. It comprises various items of financial and non-financial nature, such as, unclaimed dividends, staff gratuity account, investment fluctuation reserves, provision for tax liability, reserve for bad and doubtful debts, special reserves, secret reserves, and interest accrued on deposits outstanding. A similar item, *viz.*, 'other intangible assets' appears on the assets side. It includes interest accrued on investments; advance tax paid less provision and tax deducted at source, sundries like suspense, temporary advance, security deposits, clearing and other adjusting accounts. Miscellaneous liabilities net of 'other intangible assets (excluding inter-commercial bank transactions)' are assumed to represent the financial part for FOF accounts.

#### Cash in Hand

Cash in hand is taken from the Section 42 return. This item is split into bank notes and government notes, as described in the accounts of RBI. Bank notes are classified against the banking sector while the government notes are shown under the government sector.

#### Balances with RBI and Banks, Money at Call and Short Notice

The data on these items are obtained from the Section 42 return under the sub-heads (a) balances with RBI, (b) balances with other banks - (i) in current account and (ii) other accounts and (c) money at call and short notice. The item, ' balances with other banks in current account ' covers balances with commercial banks and co-operative banks. Its allocation into these two categories of banks is made on the basis of the Form X return. Balances with commercial banks in other accounts are considered as fixed deposits with commercial banks.

#### Investments

The Section 42 return in the case of scheduled banks and Form X return in the case of nonscheduled banks are the main sources of information on investment. The Section 42 return furnishes data on (a) government securities, and (b) other approved securities separately. The break-up of government securities into (i) central government securities, (ii) government treasury bills and (iii) state government securities, is obtained on the basis of the details given in the Form X return. Other approved securities comprise securities approved under Section 5(a) of the Banking Regulation Act, 1949. Their sectoral allocation is worked out for both the scheduled and the non-scheduled banks on the basis of 'survey of investments of scheduled commercial banks as on March 31' (Basic Statistical Return - 5) conducted by RBI.

#### Bank Credit

Total bank credit consists of 'loans, cash-credits and overdrafts', 'inland bills-purchased and discounted' and 'foreign bills-purchased and discounted'. The first category represents all types of credit facilities (other than bills) such as demand loans, term loans, cash-credits, overdrafts, packing credits. Inland bills represent bills drawn and payable in India including demand drafts and cheques purchased and discounted (excluding bills rediscounted with RBI and other financial institutions). Foreign bills include all import and export bills including demand drafts drawn in foreign currencies and payable in India. The data on total bank credit collected from the Section 42 return, are available separately in respect of advances to banks and others. Since 'advances to banks' include advances to co-operative banks, commercial banks in India and banks outside India, these details are worked out on the basis of the Form X return. Advances to 'others' relate to the credit extended to other co-operative societies, other financial institutions, non-government non-financial companies, government (including government companies) and households. The detailed information on bank credit according to organisation and occupation (industrial activity) is available in the survey on outstanding credit of scheduled commercial banks (Basic Statistical Return-1). The occupational groups classified for the purpose are: (i) agriculture, (ii) medium & large industry, (iii) small-scale industry, (iv) wholesale trade-food procurement purpose and others, (v) other priority sectors, namely, retail trade, personal and professional services and transport operators, and (vi) all others (including personal loans). Under these occupational groups, the Household sector covers institutions like partnerships, proprietary concerns, joint families and individuals. Besides, the amount shown under credit limits of Rs. 25,000 and less is also shown as loan to the Household sector. The details of credit for food procurement operations to Central and State Government agencies are as per the sectoral deployment of gross bank credit, as reported in the RBI's Annual Report. The occupational group, 'others' includes loans to commercial banks, co-operative banks, other financial institutions and others. Since bank credit given in Section 42 return excludes inter-bank credit, such credit under 'others' is not considered while working out the organisational pattern of bank credit.

#### c) Co-operative Banks and Credit Societies

As already mentioned, the primary data on assets and liabilities of all these co-operatives are obtained from *Statistical Statements Relating to Co-operative Movement in India - Part - I -*

*Credit Societies*, published by National Bank for Agriculture and Rural Development (hereafter referred to as *Statistical Statements*). Since *Statistical Statements* do not furnish the sectoral details of many items in the assets and liabilities of co-operative banks, a special return is obtained from different state and district central co-operatives. The sectoral proportions, thus obtained, are applied on the different balance sheet items of co-operative banks and societies at the aggregate level.

# **3.4.2 Other Financial Institutions (OFI)**

The detailed coverage of the OFI sector is presented in Annexure I.1. However, in this section, for the convenience of exposition and because of similarities in balance sheets, the development financial institutions, Unit Trust of India and financial and investment companies are clubbed together under financial corporations and companies. Hence, we shall discuss the compilation for the OFI sector under the heads: (a) financial corporations and companies, (b) insurance companies/corporations, (c) mutual funds (other than UTI), and (d) non-government provident funds.

# a) Financial Corporations and Companies

The *Annual Report* and accounts of the corporations form the basic source in respect of most of the financial corporations. However, for the 26 State Industrial Development Corporations (SIDCs), a special return is received from IDBI. On the other hand, RBI survey on finances of 'financial and investment companies' forms the basic source for the financial companies. Since the survey presents data only for a sample of non-government financial companies, the global figures are estimated on the basis of the share of the paid-up capital covered in these studies.

#### Paid-up Capital

The paid-up capital of financial institutions is subscribed by different categories of economic units. Broadly, the categories are classified into (i) RBI, (ii) commercial banks, (iii) co-operative banks, (iv) financial corporations, (v) insurance companies/corporations, (vi) Central Government, (vii) State Governments, (viii) Rest of the World and (ix) households. These details are culled out either from the *Annual Reports* or obtained through special return from the institutions concerned. In the case of financial and investment companies, the total paid-up capital is available. Its ownership break-up is worked out by subtracting the intra-sectoral investment by financial and investment companies and attributing the residual to households.

#### Bonds/Debentures

Most of the financial institutions covered in this sub-sector issue bonds and debentures. In respect of IDBI, IFCI, ICICI, IIBI (the erstwhile IRBI), HUDCO, and NABARD, the details of the subscribers to the bonds are obtained from individual institutions. The particulars of SFCs are received from the IDBI. The sectoral breakup for each of the institutions is worked out on the assumption that the sectoral pattern of redeemed securities is the same as that of the securities issued during the year.

#### Initial Capital & Unit Capital

The initial capital and unit capital are issued only by the Unit Trust of India (UTI). The investor details of initial capital are received from the UTI through a special return.

#### Borrowings

Each financial corporation reports its sources of borrowing which are classified into (a) RBI, (b) commercial banks, (c) financial corporations, (d) insurance, (e) Central Government, (f) State Governments, (g) Rest of the World, and (h) others. The data on households' deposits with non-banking financial (government and non-government) companies are drawn from the RBI survey on ' growth of deposits with non-banking companies '.

#### Deposits

Another source of funds for institutions like SFCs, ICICI, SIDCs and IDBI is acceptance of deposits. The deposits with IDBI are those received under the Companies Deposit (surcharge on income tax) Scheme, 1976.

#### Other Liabilities

Items of miscellaneous transactions, which are included under this head differ from one institution to another. For example, they cover application money for shares/bonds/debentures, sundry creditors, interest accrued and due, interest accrued but not due, unclaimed dividends, miscellaneous liabilities and such other items which are claims of other economic units. The IFCI and SFCs show their employees' provident fund under other liabilities. This item is shown as a claim of the non-government provident fund sub-sector in the form of deposits because all the non-government provident funds are shown under one sub-sector wherein the household sector is the claimant of the fund.

#### Cash and Bank Balances

All the corporations present the data separately on cash in hand and bank balances under current and fixed deposits with commercial banks. Balances with banks outside India are shown as deposits with the Rest of the World.

#### Loans and Advances

Loans and advances, bills of exchange purchased and discounted, and participation certificates are included under this head. The sectoral particulars of loans are obtained from either the *Annual Reports*/special returns, or estimated on the basis of both the sources. Survey on financial and investment companies provides the details of loans against (i) subsidiary companies, (ii) holding companies and companies in the same group, (iii) hire purchase and (iv) others.

#### Investments

The particulars of investments differ from one institution to another. Financial corporations invest in debentures of co-operative banks, central and state government securities, shares/debentures of public and private sector companies, financial corporations (*intra* subsector), bonds of state electricity boards, and others (unclassified).

#### Other Assets

This item covers miscellaneous assets, such as cash in transit, application money on investments, cheques sent for collection and on hand, sundry debtors, deposit money towards purchase of shares, sundry advances, book debts, and interest accrued on investments. Sectoral particulars under these categories are not available except for a few items. These items are shown as 'other items not elsewhere classified' in the instrument-wise classification and 'sector not elsewhere classified' for sectoral presentation.

#### b) Insurance

#### Paid-up Capital

The paid-up capital of the LIC and GIC is held by the Central Government while that of the subsidiaries of GIC is held by the GIC. The capital of DICGC is held by the RBI whereas the Central Government owns the paid-up capital of ECGC.

#### Life Insurance Fund

The LIC receives funds from individuals (Household sector), and nonresidents (Rest of the World Sector), the details of which are published in the *Annual Report* of the LIC.

#### Borrowings

General insurance companies, besides their insurance fund under different schemes, obtain funds from commercial banks in the form of loans and overdrafts.

#### Other Liabilities

Items such as sundry creditors, amount payable to former shareholders, net liability in respect of closed branches abroad, unclaimed dividends, and a few other items classified under 'other liabilities' are treated as financial instruments.

#### Cash and Bank Balances

Bifurcation of the item into 'cash in hand' and 'current account balances' is obtained from the insurance companies with a break-up of the cash balances in India and held outside India. 'Cash held outside India' is shown as deposits with the Rest of the World sector.

Loans and Advances

The sectoral particulars of loans and advances are culled out from their *Annual Reports*. The assets item 'outstanding premium considered good and doubtful' in the case of life insurance business is divided into two components, *viz.*, relating to business in India and outside India. The component 'in India' of this item is shown under the Household sector whereas the other component, 'outside India', is included under the Rest of the World sector.

#### c) Mutual Funds

With the setting up of mutual funds (other than UTI) initially by the public sector banks and financial institutions and later by the private sector, the coverage of the Other Financial Institution sector has increased. Accordingly, the FOF accounts have started presenting the mutual funds separately from 1987–88 onwards. In the earlier articles, due to non-availability of sectoral details, the subscriptions for mutual funds were assumed to be coming entirely from the Household sector. Subsequently, the sector-wise allocation of mutual funds was made on the basis of proportions worked out from the data obtained from the records of RBI, and Securities and Exchange Board of India (SEBI). Presently, the receipt of information from the mutual funds has been regularised by obtaining the data on their sources and uses of funds as per the specially designed format.

# d) Non-Government Provident Funds

Provident fund contribution of employees as also of employers, contributory pension fund and deposit-linked insurance fund are the sources of funds for this sub-sector. The Household sector is not only the claimant for the first two categories of funds but also for the deposit linked insurance fund, which is paid on the death of the employee insured.

#### Provident Fund

The *Annual Reports* of EPF, and provident funds covering employees of coal mines, Assam tea plantations, and seamen provide data on investments, made out of (i) contributions received, (ii) interest credited, (iii) interest income received on previous investment and (iv) reinvestments from redeemed securities. However, the investment details against these categories are not available except the amount of redeemed securities. The investments out of the redeemed securities are netted from the gross investments to arrive at the total net provident fund contributions. The contributions, thus derived, are invested as per the guidelines issued by the Central Government from time to time. In the case of RBI, the employees' provident fund is maintained as deposits with RBI.

#### Family Pension Fund

Employees' Family Pension Scheme came into force in 1971 and it was adopted by organisations of EPF Scheme, coal mines and Assam tea plantations. The fund is contributed equally by the employees, the employers and the Central Government and is treated as the claim of the Household sector. The total amount of this fund is deposited with the Central Government.

#### Deposit Linked Insurance Fund

The Employees' Deposit Linked Insurance Scheme came into force with effect from August 1, 1976. Under this Scheme, contributions are made by the employers and the Central Government. Employees are not required to contribute to the insurance fund. The benefit of the Scheme is given to an employee, who is a member of the Scheme, only on his death during his membership and hence contributions to this fund are not treated as direct claim of the Household sector. The contributions received towards the fund are to be invested generally in (a) central government securities, (b) small savings and (c) special deposits with Central Government.

#### 3.4.3 Private Corporate Business Sector

#### a) Co-operative Non-Credit Societies

The details about these societies pertaining to March 31, are published annually in *Statistical Statements relating to Co-operative Movement in India - Part II: Co-operative Non-Credit Societies* (hereafter referred to as *Statistical Statements*), by NABARD. As the details given in *the Statistical Statements* do not meet all the requirements for FOF accounts, sectoral classification of certain instruments is worked out on some assumptions. Most of the societies function at national, state, central and primary levels. The first three levels of societies are assumed to represent apex societies and will have transactions among themselves to a large extent. The primary societies have their business directly with the households besides their transactions with the apex societies.

#### b) Non-Government Non-Financial Companies

The RBI surveys on finances of public and private limited companies form the basic source for the compilation of FOF accounts of this sub-sector. As the studies include only limited number of companies, the data presented therein are adjusted on the basis of the global paid-up capital of the public and the private limited companies, as released by DCA.

# Paid-up Capital

The studies on company finances present total share capital with its breakup into paid-up capital and forfeited capital. As forfeited shares do not create any liability to the company, they are not included under FOF accounts but are shown along with reserves and surplus. Details of paid-up capital into ordinary, preference and bonus shares are also available. Bonus shares are shares issued by capitalisation of reserves of the company whereas ordinary and preference shares are purchased by various sectors. However, in FOF accounts, ordinary shares and preference shares are clubbed together. The amounts shown against ordinary and preference shares are exclusive of share application money and allotment money in respect of new shares that are included under current liabilities. The total paid-up capital including bonus shares is further segregated according to its ownership on the basis of the sectoral accounts, which report their investments in the shares of non-government non-financial companies.

#### Borrowings

The RBI surveys on company finances provide details of borrowings from (i) banks, (ii) IFCI and SFCs, (iii) other institutional agencies (*i.e.*, Indian financial institutions like IDBI, ICICI, SIDCs, LIC and UTI and international institutions), (iv) government and semi-government agencies and (v) others. The last item 'others' includes the deposits accepted by the companies from the public. All deposits shown by the companies in their accounts under secured/unsecured loans only are covered under the head 'deposits', which exclude the deposits appearing under current liabilities of the companies.

#### Trade Dues and Other Current Liabilities

Under this head, the RBI surveys on company finances publish the details on (i) sundry creditors, (ii) liabilities to subsidiary and holding companies, (iii) interest on loans and unclaimed dividends, (iv) deposits from customers, agents, etc. and (v) others. The first category includes liabilities for goods supplied, liabilities for expenses and other finance. A similar item, 'sundry debtors' appears under assets.

It includes sale of goods on a deferred payments basis to various parties, such as, other nongovernment companies, government undertakings, partnership and proprietary concerns, the details of which are however not available. In the absence of any ownership particulars, it is assumed that the intra-corporate transactions are excluded by obtaining sundry creditors net of sundry debtors and the difference is taken as the amount received from/paid to the Household sector. The remaining components of this sub-head are shown as 'other current liabilities' and classified as items' not elsewhere classified ' under the instruments and 'sector not elsewhere classified' for the sectoral allocation.

#### Cash and Bank Balances

Cash in hand, deposits with commercial banks and deposits with post office savings banks are shown against this sub-head. As mentioned earlier for other sectors, cash in hand is split into bank notes and government notes. Deposits with commercial banks cover the fixed, current and other deposit accounts. Deposits with post office saving banks are shown under 'small savings'.

#### Investments

Investments by the companies in the RBI surveys are classified into investment in foreign securities and in Indian securities. The former includes foreign government securities and other foreign securities inclusive of investments in foreign subsidiaries of Indian companies. Indian securities relate to all quoted securities, such as, government and semi-government securities, industrial securities, shares and debentures of subsidiary companies or companies in the same group or holding companies, and other investments. Industrial securities which include shares and debentures of joint stock companies and subsidiary/holding/same group companies are taken as intra-corporate investments.

#### Loans and Advances and Other Debit Balances

Loans and advances covered under this head include loans to subsidiary companies, companies

under the same group and holding companies, and others. All loans, other than to 'others', are intra-corporate loans and advances whereas loans to others are shown as 'sector not elsewhere classified' as no details are available.

#### 3.4.4 Government Sector

The procedure adopted for the compilation of the accounts of each of the sub-sector is described below:

#### a) Central Government

The document, *Economic and Functional Classification of the Central Government Budget* (hereafter referred to as the *Economic Classification*) published by the Department of Economic Affairs, Ministry of Finance, Government of India, forms the basic source of data to compile the accounts of this sub-sector. Unlike the case of financial institutions and corporate sector, for which the balance sheet data are available, the *Economic Classification* presents a set of six accounts reclassifying data given in the budget of the Central Government. Accounts 4 and 5 provide data on changes in financial liabilities and assets of the Central Government administration and its departmental commercial undertakings, such as, railways, posts and telegraphs, and defence. The *Economic Classification*, however, does not present the sectoral break-up of market loans, treasury bills, small savings, other types of borrowings, disbursement of funds through investments, and loans and advances. For arriving at the sectoral break-up of some of the government's sources and uses of funds, the information from various other sources is used. The sectoral particulars of these various items are given below:

#### Market Loans

Market loans consist of interest bearing loans, non-interest bearing loans, compensation bonds, other bonds and other loans. The amount of market loans published in the *Economic Classification* is exclusive of treasury bills that are funded into long-term securities. As such the amount of net market loans (gross receipts minus repayments) is adjusted to include the funded treasury bills, the data on which are available in the *Explanatory Memorandum to the Central Government Budget*. On the basis of RBI survey on ownership of government debt, categories of ownership of market loans are worked out as follows: (i) RBI (own account), (ii) commercial banks, (iii) co-operative banks, (iv) financial corporations, (v) insurance, (vi) provident funds, (vii) joint stock companies, (viii) Central and State Governments, (ix) local authorities including port trusts, (x) state electricity boards and state road transport corporations, (xi) non-residents, (xii) households comprising individuals, trusts and RBI (on account of others), and (xiii) others.

#### Treasury Bills

The data on treasury bills (net) available in the *Economic Classification* include the amount of Treasury bills funded into long term securities. As explained under market loans, data on funded bills taken from the *Explanatory Memorandum to Central Government Budget*, are deducted from total treasury bills (net) to show the treasury bills excluding the amount of funded bills. Ownership particulars of these bills are available in the return received from the Department of

#### Government and Bank Accounts (DGBA) of RBI.

#### External Debt

The *Economic Classification* presents gross borrowings of the Central Government from the Rest of the World and their repayments. It includes data on government's borrowings from various international financial organisations/agencies, foreign governments as also the special credits from oil exporting countries, and IMF trust fund loans. Gross borrowings *minus* repayments are shown as the net borrowings of the Central Government from the Rest of the World sector.

#### Small Savings

Small savings comprise savings deposits with post offices and savings certificates. These include post office savings bank deposits, cumulative time deposits, time deposits, national saving certificates, national savings annuity certificates, national development bonds etc. Their ownership details are derived on the basis of investing sectors' accounts. It is observed from the accounts that non-government provident funds, local authorities, and non-government non-financial companies invest in small savings. The residual, after deducting the investment of the above sectors in small savings, is assumed to have been invested by the Household sector.

#### Provident Fund

The provident fund of the employees of the Central Government and the amounts collected by the government from the public under the Public Provident Fund Scheme, 1968, are covered under this head. This is treated as a claim of the Household sector.

#### Deposits of Non-Government Provident Funds

The Central Government introduced the special deposit scheme in July 1975 to provide a better return to the non-government provident, superannuation and gratuity funds. These details are given in the *Economic Classification* and are treated as claims of the non-government provident fund sub-sector under the instrument, 'deposits - other deposits'.

#### Special Bearer Bonds

The *Economic Classification* also gives details of bonds issued under the voluntary disclosure scheme and special bearer bonds that are issued by the Central Government to mobilise additional resources. These are treated as claims of the Household sector on the government.

#### Other Debt

Miscellaneous capital receipts presented in the *Economic Classification* include various items, which are shown separately in FOF accounts. For example, ' postal insurance and life annuity fund ' is classified as life insurance fund held by the Household sector. One rupee notes and coins represent the liability of the Central Government in the form of currency. The data on one rupee notes and coins are collected from the tables relating to 'Money Stock Measures' published

in the RBI Bulletin. The holding of one rupee notes and coins by RBI has been added to this amount for deriving the total liability of the Central Government under this head. The one rupee notes and coins are split-up into claims of various sectors using the estimated holdings of rupee coin and small coins as presented in each sector account. The detailed procedure of estimation is described in RBI sub-sector account. The residual of miscellaneous capital receipts after deducting the items separately shown in FOF accounts, is treated as part of other debt.

#### Investments

Account No. 4 of the *Economic Classification* presents data on changes in financial assets of the Central Government. This account provides details of investments into shares of government companies - financial and others - and other companies. Financial companies consist of banking institutions, financial corporations and insurance corporations in the public sector. Other companies of government relate to the non-financial non-departmental undertakings. Particulars of financial companies into the above three categories are obtained from their annual accounts and the publication *Public Enterprises Survey* of the Bureau of Public Enterprises, Ministry of Industry, Government of India. Other companies refer to non-government non-financial companies, which may belong to private, co-operative, and public sectors and those in which the Central Government's holding in the capital is less than 50 per cent. In the absence of details of other companies, these are shown against 'sector not elsewhere classified'.

#### Loans and Advances

Particulars of disbursement of loans and advances are given against (i) loans for capital formation and (ii) other loans. The repayments of loans to the Central Government are, however, shown only against States and union territories, and others. Institutional details of disbursement of loans for capital formation and other loans are available against (I) States and union territories, (ii) local authorities, (iii) non-departmental commercial undertakings - financial and others, (iv) foreign governments and (v) others.

#### Cash Balances

The *Economic Classification* presents the total cash balances of the Central Government in its Account No. 6 as increase/decrease in cash balances. This head includes the cash in treasuries and deposits with RBI. However, cash with departmental offices (including Posts, Telecommunication, Defence and Railways) is not covered under this head. These details are obtained from the *Finance Accounts* of the Central Government. Further, total cash in treasuries and with departmental offices is split-up to show bank notes and government notes and coins.

#### Other Items

The data on subscriptions to international financial organisations and net purchase of domestic gold and silver are given in the *Economic Classification*. The former is shown as a claim on the 'Rest of the World' sector whereas the latter is shown as 'sector/item not elsewhere classified'. Cash with the India Supply Mission, SDRs at the IMF, and suspense account and remittance with the RBI are classified as deposits with the Rest of the World, investment in foreign securities

(foreign exchange assets), and deposits with the RBI, respectively.

#### b) State Governments and Union Territories

The Combined Finance and Revenue Accounts (CFRA) of Union and State Governments in India published by the Comptroller and Auditor General of India, Government of India, provide data in respect of all State Governments. However, this publication is available with a considerable time lag. The primary data source for the CFRA is Finance Accounts of State Governments published by the Auditor General of each State. This publication is also available with a lag. Hence the basic source for this sub-sector's FOF accounts is the RBI study on finances of State Governments, prepared on the basis of State Government budgets. The instrument-wise discussion of this sub-sector is presented below:

#### Market Loans

Market loans and bonds (covering current and expired loans) floated in the market by the State Governments, the various compensation bonds, housing bonds, etc. are covered under this head. The budget documents or the 'Finance Accounts' of the State Governments present only gross receipts and repayments of the market loans and bonds. The particulars of ownership are derived from the Statement on " Ownership of Central and State Government Securities ", published in *the Report on Currency and Finance*, RBI for the period of this study.<sup>6</sup> Investments in State Governments' securities from (i) cash balance investment account, (ii) sinking fund investment account, (iii) zamindari abolition fund account, and (iv) other accounts of the State Governments, are treated as intra-government investments.

#### Borrowings

Borrowings by way of (i) ways and means advances from RBI, (ii) overdrafts from RBI and (iii) loans and advances from banks, other institutions and Central Government are covered under this head.

#### Provident Funds and Others

This instrument known as unfunded debt, includes provident funds of State Government employees (titled as state provident funds), State insurance fund and others. State provident funds and insurance fund are treated as claims of the Household sector and shown separately. The residual amount of unfunded debt is shown under 'sector not elsewhere classified' under sectoral classification and 'items not elsewhere classified' under instrument-wise classification.

#### Cash Balances

The data on cash at treasuries, balances at RBI and other commercial banks are obtained from either CFRA or the Finance Accounts of each State Government. Amounts shown against (i) cash with departmental offices and (ii) permanent cash imprest are also included under cash balances held by the State Governments' administration.

#### Loans & Advances

The RBI studies on 'Finances of State Governments' provide details on total loans and advances of all State Governments; but these are not sufficient for the purpose of FOF accounts. Therefore, details of disbursements and receipts of loans are culled out from the State budget documents for the following sub-sectors: (i) cooperative banks and credit societies, (ii) financial corporations, (iii) co-operative non-credit societies, (iv) non-governments, (v) housing boards, (vi) local authorities, (vii) state electricity boards, (viii) other non-departmental commercial undertakings of government, (ix) households and (x) others (unclassified).

#### c) Local Authorities

This sub-sector in principle should cover port trusts, municipal corporations, municipalities and panchayats. In the absence of data on local self-governments, the accounts of this sub-sector are prepared covering only the major port trusts (11 in number) on the basis of their *Annual Reports*.<sup>7</sup>

#### d) Non-Departmental Non-Financial Undertakings

This sub-sector covers all government non-financial companies owned either singly or jointly by Central, State or local governments, and State electricity boards. In the case of the companies owned by the Central Government, the data on their assets and liabilities are available in the *Public Enterprises Survey*. This publication covers companies under construction and running enterprises, which are promotional, financial and non-financial by their activity. However, the financial companies are not included in this sub-sector as they are covered in another sector *viz.*, 'Other Financial Institutions'. In the case of State electricity boards (including Damodar Valley Corporation), the necessary data are obtained from their *Annual Reports*. The methodology for Central and State Government companies is presented below:

#### **Government** Companies

#### Paid-up Capital

The *Public Enterprises Survey* (PES) provides the balance sheet data for Central Government running enterprises and companies under construction. The ownership details of the paid-up capital are available against the following heads: (i) Central Government, (ii) State Governments, (iii) holding companies, (iv) financial institutions (Indian), (v) foreign parties and (vi) others. Similar break-ups for State Government companies are estimated on the basis of past data.

#### Borrowings

As in the case of paid-up capital, sectoral borrowings in respect of Central Government companies, are drawn from a subsidiary statement on 'details of loans', which gives: (i) working capital loan from the Central Government and (ii) other borrowings from (a) Central Government, (b) State Governments, (c) holding companies, (d) foreign parties including deferred credit, (e) financial institutions and (f) others.

#### Current Liabilities and Provisions

Current liabilities are divided into (i) sundry creditors, (ii) liability to subsidiary and holding companies, (iii) deposits from customers, agents, etc. and (iv) other current liabilities. Sundry creditors are treated as trade credit, whereas the second item is an intra-government companies' transaction. Deposits from customers and other current liabilities are shown as other liabilities without allocating them to any specified sector. Miscellaneous non-current liabilities are also shown under ' unclassified sector ' along with other liabilities.

#### Investments

The *Public Enterprises Survey* provides data on total investments excluding investment in subsidiary companies in the case of Central Government companies. The break-up of investments is worked out on the basis of RBI Study, into (i) government securities, (ii) semi-government securities, (iii) industrial securities, (iv) foreign securities, and (v) others.

#### Loans & Advances and Sundry Debtors

Details of loans and advances extended by Central and State Government companies, except those to their subsidiary and holding companies, are not available. Accordingly, the total amount under this head, other than loans to subsidiary and holding companies, is shown under 'unclassified sector'. The amount under sundry debtors is shown as trade debt and could not be allocated to any identifiable sector for want of details.

#### 3.4.5 Rest of the World

Transactions of domestic sectors with foreign units that are effected through the medium of money and credit are recorded in the accounts of the Rest of the World. The RBI publishes statistics on India's overall balance of payments (BOP) classified into current and capital accounts. The BOP account records transactions in the form of credits or debits. While the former covers increase in liabilities and decrease in assets, the latter covers decrease in liabilities and increase in assets. Secondly, data are recorded on 'cash basis', as distinguished from 'accrual basis', that is, when inflow or outflow of money actually takes place across the boundary. Hence, the accounts do not show the entries on payable or receivables. In contrast to the BOP account, FOF accounts are constructed from the stand-point of the Rest of the World. As such, the credits and debits recorded in the BOP statistics will become debits and credits, respectively, for the Rest of the World. The capital account transactions are divided into three sectors, *viz.*, (i) private, (ii) banking and (iii) official. The details of capital account transactions as obtained from the records of RBI are discussed below :

#### Private Capital

Transactions recorded under this category are presented under 'long-term' and 'short-term' capital. Flows relating to loans, investment in shares, and other assets are categorised as long term whereas the short-term capital covers mainly short-term borrowings and their repatriation.

In FOF accounts, these flows are classified into deposits, loans, investments and other miscellaneous transactions. In the BOP statistics, private capital also includes the transactions of ICICI and insurance companies, which, for the purpose of FOF accounts, are classified under Other' Financial Institutions ' sector. Besides, transactions in non-resident external rupee account and in various foreign currency non-resident accounts are recorded under miscellaneous receipts and payments of private capital. These are classified as deposits with commercial banks. Further, the private capital account includes investments by oil companies directly or through import of capital equipment in India without payment in cash. Since nationalisation of oil companies, transactions of these companies are included in the official sector. Thus, for the purpose of FOF accounts, private capital is classified into (a) banking sector, (b) private corporate sector, (c) other financial institutions, and (d) unidentified, against each type of instruments, *viz.*, deposits, loans, investments, and others.

#### Banking Capital

' Banking capital ' in the BOP accounts excludes RBI's transactions and corresponds to changes in the foreign assets and liabilities of banks/financial institutions, which are authorised to deal in foreign exchange [known as Authorised Dealers (ADs)]. ADs' foreign exchange assets consist of (a) foreign currency holdings, and (b) rupee overdrafts to non-resident banks. Their foreign liabilities comprise (a) foreign currency liabilities, and (b) rupee liabilities to non-resident banks as well as official and semi-official institutions. From the Rest of the World's view point, ADs' foreign assets constitute its liabilities and ADs' foreign liabilities constitute its assets. 'Banking capital' is classified as deposits of the commercial banks in FOF accounts.

#### Official Capital

Capital account transactions of RBI, and Central and State Governments are covered here. These data are available under (i) loans, (ii) amortization, (iii) reserves, and (iv) miscellaneous. The coverage and classification of these items are explained below:

#### Loans

In the BOP statistics, credits reported against 'loans' comprise loans received by the Central and State Governments from foreign governments/international financial institutions, Trust Fund loans from IMF and other purchase (drawings) from IMF. Disbursement of official loans and credits extended to foreign governments and repurchases from the IMF are shown under 'debits'. Thus, the receipt of loans by India appears as an increase in assets for the Rest of the World, and India's disbursement of loans to foreign governments as a rise in liabilities for it. The transactions with IMF, namely, drawings and repurchases, which are shown as official loan receipts and repayments, are maintained under IMF Account No. 1 with RBI indicating liability of RBI. But Fund Account No. 1 is treated as liability of the government and is shown as loan to government in the FOF accounts. Such a problem is not faced with the Trust Fund loan from the IMF availed of in the 1970s, since it is not a purchase and is therefore shown as a loan to the government.

#### Amortization

The repayment of loans by the government is recorded as debits, and recovery of loans from foreign governments as credits under the head 'amortization'. From the Rest of the World sector's viewpoint, credits are shown as decrease in liabilities (loans) and debits as decrease in assets (loans). These transactions are shown against the Central Government for sectoral classification.

#### Reserves

Movements in reserves comprise change in official reserve holdings in foreign currencies, gold and Special Drawing Rights (SDRs). The data on foreign exchange assets held by RBI are recorded in the accounts of RBI; SDRs are held by the government.

#### Miscellaneous

This item covers all other capital transactions on government account whether long or short-term including the movements in rupee balances held with RBI by non-resident governments, semi-government and international institutions.

#### 3.4.6 Household Sector

As already mentioned earlier, all uncovered entities in the other five sectors are placed under this sector. There is no independent balance sheet or asset and liability accounts for the household sector. However, the sources and uses of funds accounts for this sector are prepared using the bench-mark ratios as thrown up by the various surveys of financial instruments. Wherever such surveys are not available, they are derived as residual by netting the accounts of other organized sectors. The net uses of funds of the household sector, in effect, constitute the financial savings of the household sector. The instrument-wise methodology of FOF accounts for the household sector is presented in the following Table 2:

# Table 2 : Methodology of FOF Accounts for the Household Sector

#### **Uses of Funds Accounts**

i)	Currency	On the basis of past trends of currency holding of the household and non-household sectors, 93 per cent of currency with public ' issued in a financial year is treated as household contribution.
ii)	Commercial Bank Deposits	Domestic bank deposits as on the last reporting Friday of March (as per the <i>RBI Bulletin</i> ) are obtained by excluding foreign currency and/or non-resident deposits from total bank deposits. These are classified as current, saving and fixed deposits based on relationship in <i>RBI form X</i> data. Household share in each category is estimated on the basis of RBI annual survey on ownership of deposits.

iii)	Deposits with Co-operative Credit & Non-Credit Societies	i) Deposits with primary societies are treated as household deposits.
		ii) For other credit societies and co-operative banks, household deposits are estimated based on the ownership pattern of deposits, as obtained in additional returns by RBI.
		iii) Pending the availability of NABARD publication, deposits with co-operative banks and credit societies are estimated based on co-operative bank deposits, as available in RBI Section 42 return.
		iv) Household deposits with non-credit societies are estimated similarly.
iv)	Deposits with Non-Banking Companies (NBCs)	i) Household deposits with the NBCs excepting the electricity boards are directly obtained from the articles published in RBI Bulletin.
		ii) Household share in security deposits with state electricity boards is worked out on the basis of household share in electricity consumption.
v)	Trade Debt (Net)	It is estimated as change of trade dues in respect of sundry creditors minus change in loans and advances to sundry debtors.
vi)	Shares & Debentures of Non- Government Companies	<ul> <li>i) Household investment is calculated as a residual from the flow of funds accounts as follows. First, a global estimate of shares and debentures is arrived at by blowing up the sample estimate of shares and debentures of public and private limited companies as per RBI surveys of company finances based on the ratio of sample paid-up capital (PUC) of public and private limited companies to global PUC as supplied by the Department of Company Affairs (DCA) of the Government of India. The estimates so arrived at are revised, if necessary, by cross-checking with the primary market data as published in the RBI <i>Report on Currency and Finance</i>.</li> <li>ii) The household sector investment in shares and debentures of financial companies is also arrived at in a</li> </ul>
		similar manner, using their annual reports and special

returns furnished to RBI.

vii)	Shares & Debentures of Co- operative Institutions	Share capital of co-operative societies contributed by individuals ' and others ' as obtained in NABARD publication is treated as household investment.
viii)	Units of UTI & Other Mutual Funds	i) Household investment in units of Unit Trust of India(UTI) is obtained by applying the proportion of household sector ( <i>i.e.</i> adults/individuals, minors, Hindu-Undivided Family and trust/society) in total sales, net of repurchases, to the increase in unit capital during the year.
		ii) Household investment in other mutual funds is obtained directly by RBI through a special return. In case required, household proportions worked out for the public sector mutual funds and UTI are made use of to arrive at the household investment in private mutual funds.
ix)	Claims on Government	i) Investment in small savings out of provident fund contributions and deposit-linked insurance funds is subtracted from the receipts, net of disbursements, in the form of small savings to obtain household share.
		ii) Household investment in government securities is estimated by applying the proportion of securities purchased by household (as available in RBI survey on ownership of government securities) on total sale of securities as per the budget documents of central and state governments.
x)	Life Insurance Funds	i) Household saving with Life Insurance Corporation of India (LIC) is estimated as an increase in life fund of LIC and bonus to policy holders of India excluding government share in profit, capital gains and old claims.
		ii) Household saving is estimated as the excess of receipts over payments for Postal Insurance and Life Annuity Fund, Central Government Employees Group Insurance Scheme and State Insurance Fund.
xi)	Provident and Pension Funds	Household saving in provident fund (PF) is taken to be the contribution by both employees and employers (under contributory schemes) and by only employees

(under non-contributory schemes) inclusive of interest and recovery of advances net of final withdrawals and advances.

#### **Sources of Funds Accounts**

- The categories of 'partnerships, proprietary concerns, joint families, associations, clubs, societies, trusts & groups', 'individuals' and 'loans with credit limit under Rs. 25,000' are taken to be household as reported in Basic Statistical Return (BSR) 1A on "Organisation- wise Classification of Outstanding Credit of Scheduled Commercial Banks according to Occupation". The household proportion is worked out after excluding the food credit, which is treated as being extended to the government. The proportion gets revised on use of Sectoral 'Deployment of Gross Bank Credit ' figures as compiled by RBI. The revised proportion is applied to the non-food credit as available in RBI Section 42 return to arrive at the bank credit to household
- ii) Data on loans and advances to household by other financial institutions and government are obtained from their respective balance sheets and government sectoral accounts prepared from budgets and balance sheets.
- iii) Information on such credit by co-operatives is available from NABARD.
- iv) Household liabilities to the banking sector include loans and advances by RBI to its staff.

# 3.5 Sources of Time Series on FOF Accounts

This monograph is based mainly on the RBI *Bulletin* articles on FOF for the years 1951-52 to 1993-94, and on the information as available in the RBI *Report on Currency and Finance, Volume II, 1997-98* for the years 1994-95 to 1995-96. Wherever the reporting period of the articles overlaps, the latest of the articles have been taken into account. Part II of this monograph presents the time series for two sets of accounts, *viz.* (i) financial instrument by sector and (ii) sector by sector. The first set of accounts is available in the original articles for the entire period and hence it is reproduced. However, in respect of the second set, data are available in the present form only from 1966-67 onwards. Therefore, the matrix had to be constructed for the period 1951-52 to 1965-66.

# 3.6 Compilation Procedures in FOF Accounts: A Chronology of Changes

Though the basic steps in compiling FOF remain more or less the same over the years, there has been a continuous evolution in the compilation process of FOF so as to reflect the current economic reality. A discussion on the differences of methodology and data sources among the articles from which the time series data are culled out is set out below:

1951-52 to 1960-61

On the basis of model accounts for 1957-58, prepared by the Working Group on Flow of Funds (Chairman: Shri P. C. Mathew), 1963, a systematic attempt was first made in the construction of FOF accounts by RBI in 1967. The article, published in the RBI Bulletin, March 1967, presented the accounts from the year 1951-52 to 1962-63. The sector-wise and instrument-wise framework and the methodology of compilation along with limitations were laid out.

The banking sector comprised RBI, commercial banks and co-operative banks and credit societies. For RBI and commercial banks, the accounts for the period 1951-52 to 1957-58 were based on information as on last Friday of March, while from 1958-59 onwards data were based on balance sheets as on March 31. However, the accounts of the co-operative banks and societies were based on their balance sheets as at end-June. In the case of commercial banks, for sectorwise apportioning of commercial bank deposits, the ratios as obtained from the survey of ownership of deposits were applied to the actual March-end totals submitted in Form XIII (renamed Form XII) to the Reserve Bank under section 27(1) of the Banking Companies Act, 1949. There were two limitations in this. First, the reference period of surveys and the end-March actual totals differed. Secondly, the sector-wise classification of surveys and that required for in the FOF accounts differed. Further, the coverage and reference dates for the surveys were not uniform. Separate data on ownership of deposits of scheduled and non-scheduled banks on a half-yearly basis (end of June and December), were available up to the year 1955. As the financial flows were compiled for the financial year (ending March), the results of December (preceding March) and June (succeeding March) surveys were averaged to compute the sectorwise proportions corresponding to the month of March.

As regards the private corporate business, while the data base from the annual studies of company finances for public limited companies was available from 1951-52 onwards, that for private limited companies was from 1955-56 onwards and from 1957-58 for branches of foreign companies. In order to arrive at the aggregate information, the transactions of each group of companies given in the studies of company finances were blown up on the basis of paid-up capital coverage of the selected companies. An inherent limitation of this procedure was that it implicitly assumed that the relationship of characteristics estimated in the selected companies and the population of all companies was in the same proportion as the paid-up capital of sample companies to the population. However, despite several limitations associated with this approach, this method continues to be followed till date as no measure of other characteristics, such as total assets or income, for the population as a whole is available for all the years. The database of private corporate business sector and that of co-operative non-credit societies were consolidated for the private corporate sector.

The Government Sector covered Central Government (including departmental undertakings), State Governments (including departmental undertakings), local authorities (comprising city corporations, municipalities and port trusts), and non-departmental commercial undertakings of the Central and State Governments. The 'Economic Classification of the Central Government Budget ' for 1966-67 provided the major source of data for the Central Government. In the absence of such 'Economic Classification' for State Governments, provisional data from the Ministry of Finance were used. As regards the non-departmental undertakings, no standard source of information was available for the period 1951-52 to 1957-58, and a research paper formed the basis of accounts, which covered only central government companies. From 1958-59 onwards, Reserve Bank's studies on 'Finances of Government Companies', including both Central and State Government companies provided a better picture of the sub-sector on nondepartmental undertakings. However, no attempt was made to blow up the sample information to cover all government companies. The accounts of the rest of the world sector were prepared on the basis of capital account of the balance of payments.

The construction of FOF accounts in 1967 being the first systematic attempt by RBI, it had several limitations. Some discrepancies occurred for accounts prior to 1954-55, because of data deficiencies. In particular, the transaction discrepancies were large for 'deposits' and 'investments'. The discrepancy with respect to the former item was due to differences in deposit figures, as recorded in Government accounts and Reserve Bank accounts. As regards the second item, the discrepancy was large for investment in 'foreign securities'. Further, the estimates of 'loans and advances' for all the sectors, except the rest of the world sector, were presented on a 'net basis' although it is desirable to record the flows on a 'gross basis'.

#### 1961-62 to 1965-66

The methodology and the limitations for the compilation of FOF accounts for the period, 1961-62 to 1965-66 remained broadly the same as those for the earlier period. Some modifications, however, were made as follows. In respect of the Banking Sector, the 'Survey of Ownership of Deposits' provided estimates of cooperative sector's deposits with commercial banks. For 1964-65 and 1965-66, information on claims of foreign embassies and consulates together with nonresident firms and individuals were included in 'foreign claims', which earlier included only PL480 deposits with the State Bank of India. Special returns were obtained from the State/Central Co-operative Banks on details of balances of central cooperative banks with commercial and co-operative banks, paid-up capital provided by credit/non-credit societies and break-up details of trustee securities into (a) debentures of central mortgage banks and (b) bonds and debentures of financial corporations and semi-government securities, in the accounts of State/Central Cooperative Banks. In the case of compilation of State Governments' sub-sector for the years 1961-62 to 1963-64, economic classification of budgets was worked out from the data available from 'Combined Finance and Revenue Accounts', published by the Comptroller and Auditor General of India. For 1964-65 and 1965-66, comparable statistics from the Reserve Bank's Report on Currency and Finance were also made use of.

#### 1966-67 to 1969-70

The article of FOF accounts for this period, published in August 1975, highlighted for the first time the inter-relationship between lending and borrowing activities on the one hand and saving and investment estimates on the other.<sup>8</sup> Therefore, besides transaction discrepancies, sectoral discrepancies of the FOF accounts from the national accounts data were shown. In the case of the Banking Sector, until 1967-68, there were two estimates for flow of bank finance. In the first one, the sectoral allocation of bank advances was based on a survey called the Purpose-wise Survey of Bank Advances, while the borrowings of all other sectors (except household) were independently estimated based on the liabilities reported by them. However, as this survey was discontinued for 1968-69 to 1969-70, only the latter was used. In the case of private financial and investment companies, their borrowings and deposits from the household sector were estimated

on the basis of data of 'other borrowing' as available in the studies on finances of these companies. For compiling financial flows of non-departmental commercial undertakings, financial data as thrown up by the RBI studies on Government companies were, for the first time, supplemented by the Bureau of Public Enterprises.

#### 1970-71 to 1975-76

In FOF accounts for this period, local authorities could not be included in the Government sector due to discontinuation of the Reserve Bank's survey on 'Finances of Local Authorities' after 1968-69. Some of the major modifications for data base of commercial banks included use of both Form X (earlier called Form XII) and Section 42 returns instead of just the Form X data, and reliance on sectoral pattern details of the Survey on Bank Advances, conducted in June rather than January. The Credit Guarantee Corporation of India was shifted from the classification of non-departmental undertakings of Government to financial corporations and companies under the 'Other Financial Institutions'. The Export Credit and Guarantee Corporation Ltd., which used to be a part of non-departmental undertakings of Government, was shifted to the insurance sub-sector under the 'Other Financial Institutions'. There were also changes in the sources of data for Government non-departmental non-financial undertakings. The data on Central Government non-departmental undertakings were collected from the publication of the Bureau of Public Enterprises. The data on State Government companies were, however, taken from the RBI Studies on Finances of Government companies. In the Reserve Bank accounts, purchase/sale of 'internal bills' were reclassified from 'investment in government securities' to 'loans and advances to commercial banks'.

#### 1976-77 to 1979-80

The FOF accounts for this period were compiled by incorporating many methodological changes, which were presented in the December 1988 issue of the RBI Bulletin. These included extension of the coverage of sub-sectors due to availability of additional information in respect of new institutions such as the State Industrial Development Corporations (SIDCs), and also greater sectoral details of the financial instruments, their improved classification and revisions in estimation procedures.

#### 1980-81 to 1985-86

The coverage of 'Other Financial Institutions' sector was expanded to include the National Bank for Agriculture and Rural Development (NABARD) and Export Import (EXIM) Bank of India. With the establishment of the former, the amount outstanding with the Reserve Bank under National Rural Credit Funds was treated as capital transfers ' to NABARD. Further, the profit surplus, set aside for payment to Central Government, was shown as current income of Government rather than saving of RBI, to avoid double counting. In the compilation of commercial bank advances to the household sector from the Basic Statistical Return (BSR 1A), prior to 1983, advances under Rs. 10,000 were assumed to have been given to the household sector. After 1983, the corresponding reported limit being Rs. 25,000, loans under Rs. 25,000 were deemed to have been advanced to the household sector.

#### 1986-87 to 1993-94

There was a change in the closure of accounting year for the commercial banks from end-December to end-March from the financial year 1988-89 onwards. Consequent to this change, the reported deposit and credit estimates were found to be overestimates. Hence, since 1988-89 banking statistics as on last reporting Friday were considered for compilation of FOF accounts for commercial banks. The FOF accounts covered the activities of a host of new financial institutions and mutual funds under the ' Other Financial Institutions '. However, due to lack of sectoral details for 1986-87, subscription to mutual funds other than UTI was assumed to have come from the household sector. For subsequent years, sector-wise allocation of mutual funds was made on the basis of proportions worked out from the data of the RBI's Department of Banking Operations and Development and from the Securities and Exchange Board of India. This has currently been regularised with special returns from mutual funds on sector-wise details of investment in mutual funds.<sup>9</sup> Due to lack of data, coverage of local authorities remained limited to only port trusts. There had been often revaluation of gold reserves since 1990-91. To maintain the comparability in FOF accounts, changes in value of gold due to price changes were excluded from the value of gold reserves of RBI from 1990-91 onwards.

#### 3.7 Some General Limitations of FOF Accounts in India

Due to the presence of diverse sources of data, the information content of FOF accounts in any country is subject to a number of limitations. In a situation of perfect information, the compiler would have the proper identification in linking the sectors issuing claims with the sectors holding these claims. In this context, the following three accounting identities would hold.

- First, for any financial instrument, the aggregate sources of funds should theoretically be equal to its aggregate uses.
- Secondly, for any particular sector, the excess of saving and net capital transfers over its physical investment should finance the excess of its financial uses over its financial sources.
- Thirdly, the aggregation of all the financial sources across all the sectors should match with the total of all the financial uses.

However, even in developed economies, in practice, in the actual FOF accounts, these accounting identities do not hold and three types of discrepancies arise. First, the mismatch between the total sources and total uses for each instrument appears as *transaction discrepancy*. Secondly, the divergence for a sector between 'financial uses *net of* financial sources' and the 'excess of saving plus net capital transfers received *net of* capital formation' is *sector discrepancy*. Thirdly, the financial deficits across some sectors do not cancel the financial surpluses across the rest of the sectors of the economy.

While the aggregate information may become easily available, the detailed sectoral break-up of overall transactions is often hard to gather. In the absence of detailed sector-wise information of the aggregates, the compiler of FOF accounts has to rely on surveys, which may have been conducted with different objectives on hand. Hence, for FOF compiler, regrouping of data is often done for bringing in conformity and comparability in respect of the definitions and coverage.

Statistics of the same item may differ as the books of accounts of the lender and borrower may report different figures for that item due to the differences in valuation, timing, concept and classification and accounting period.<sup>10</sup>

Deficiencies may arise in the absence of detailed sector-wise information regarding a corresponding asset/liability of an item to a corresponding liability/asset of another sector. As a result, it is often regarded as 'miscellaneous'. Further, certain subjective assumptions about the sector-wise distribution of a particular item may not be backed by sufficient data. For example, in the corporate sector, the blowing of various asset/liability items of selected companies by coverage of paid-up capital is based on an assumption, which may not hold good in reality.

It may also be noted that the household sector's financial accounts as available in the time series of FOF accounts are at variance with the time series on household sector's saving in financial assets, as available from the *National Accounts Statistics*, released by the Central Statistical Organisation (CSO). This is so because, prior to the data sharing arrangement between RBI and CSO, which started in the late 'eighties, both these organisations have been publishing independent estimates.<sup>11</sup> Even after the pursuance of the recommendations of the Report of the Working Group on Savings (Chairman: Prof. K.N. Raj) and the mutual data sharing arrangement between these two organisations, some differences do persist in their estimates. One of the major reasons is the difference in the timing of the release of the estimates for the current year by the two organisations.

#### ANNEXURES

# Annexure I.1: List of Institutions covered under the OFI sector

**1. Central level non-Bank Financial institutions** (*i.e.*, Development Banks, Unit Trust, Term Lending Institutions and Credit Rating Agencies):

- Industrial Development Bank of India
- Industrial Credit and Investment Corporation of India
- National Bank for Agriculture and Rural Development
- Industrial Finance Corporation of India
- Industrial Investment Bank of India
- Unit Trust of India
- Housing Development Finance Corporation
- Export Import Bank of India
- Housing and Urban Development Corporation
- Rural Electrification Corporation
- Risk Capital and Technology Finance Corporation Ltd.
- > Infrastructure Leasing and Financial Services Ltd.
- Small Industries Development Bank of India
- National Housing Bank
- > Technology Development and Information Company of India
- Stock Holding Corporation of India Ltd.
- Credit Rating Information Services of India Ltd.

- > Tourism Finance Corporation of India Ltd.
- Discount and Finance House of India Ltd.
- SBI Capital Markets Ltd.

### 2. State-Level Lending Institutions

- State Financial Corporations
- State Industrial Development Corporations (26 in number)

#### 3. Insurance Sector

- Life Insurance Corporation of India
- General Insurance Corporation and its four subsidiaries
- Export Credit and Guarantee Corporation of India
- > Deposit Insurance and Credit Guarantee Corporation

#### 4. Mutual Funds

- Tata Asset Management Ltd.
- Shriram Asset Management Ltd.
- IDBI Mutual Funds
- Taurus Mutual Funds
- BOB Mutual Funds
- Birla Mutual Funds
- Apple Asset Management Ltd.
- PNB Mutual Funds
- Alliance Capital Asset Management
- Indian Bank Mutual Funds
- BOI Mutual Funds
- ICICI Mutual Funds
- Canara Bank Mutual Funds
- ➢ Kothari Pioneer Mutual Funds
- Morgan Stanley Mutual Funds
- Reliance Capital Asset Management Ltd.
- ➢ HB Asset Management Co. Ltd.
- SBI Mutual Funds
- LIC Mutual Funds

#### **5. Financial and Investment Companies**

#### 6. Non-Government Provident Fund Institutions

- ≻ RBI
- Commercial Banks
- Employees Provident Fund Scheme
- Assam Tea Plantation

- Seamen's Provident Fund
- Life Insurance Corporation of India
- Coal Mines Employees Provident Fund
- Port Trusts
- ➢ IFCI & SFCs
- Dock Labour Boards
- Indian Airlines
- ➤ Air India
- Family Pension Fund
- > Other Statutory Institutions / Corporations

# Annexure I.2: List of Cooperative Non-Credit Societies<sup>12</sup>

- 1. Marketing Societies:
  - 1.1 National
  - 1.2 State
  - 1.3 Central
  - 1.4 Primary
- 2. Cotton Marketing Societies:
  - 2.1 State
  - 2.2 Central
  - 2.3 Primary
- 3. Fruits and Vegetables Marketing Societies:
  - 3.1 State
  - 3.2 Central
  - 3.3 Primary
- 4. Arecanut Marketing Societies
- 5. Tobacco Marketing Societies:
  - 5.1 State
  - 5.2 Central
  - 5.3 Primary
- 6. Coconut Marketing Societies
- 7. Sugarcane Supply Marketing Societies:
  - 7.1 State
  - 7.2 Central
  - 7.3 Primary
- 8. Other Specialised Agricultural Commodities Marketing Societies:
  - 8.1 State
  - 8.2 Central
  - 8.3 Primary
- 9. General Purpose Marketing Societies:
  - 9.1 National
  - 9.2 State
  - 9.3 Central
- 10. Marketing Societies:
  - 10.1 State

- 10.2 Central
- 10.3 Primary
- 11. Sugar Factory Societies
- 12. Cotton Ginning and Pressing Societies (P)
- 13. Other Agricultural Processing Societies:
  - 13.1 State
  - 13.2 Central
  - 13.3 Primary
- 14. Co-operative Cold Storage (P)
- 15. Milk Supply Unions and Societies:
  - 15.1 State
  - 15.2 Unions
  - 15.3 Societies
- 16. Ghee Unions and Societies (P).
  - 16.1 Unions
  - 16.2 Societies
- 17. Poultry Unions and Societies (P):
  - 17.1 Unions
  - 17.2 Societies.
- 18. Other Livestock Unions and Societies (P):
  - 18.1 Unions
  - 18.2 Societies
- 19. Other Livestock Societies (P)
- 20. Fisheries Societies:
  - 20.1 State
  - 20.2 Central
  - 20.3 Primary
- 21. Irrigation Societies
- 22. Farming Societies
- 23. Consumers' Co-operative Stores:
  - 23.1 State Federations
    - 23.2 Wholesale / District Stores
  - 23.3 Primary
- 24. Working of Departmental Stores:
  - 24.1 Run-by State Federations
  - 24.2 Run-by Wholesale/District Stores
  - 24.3 Primary
- 25. Housing Societies:
  - 25.1 State
  - 25.2 Primary
- 26. Weavers' Societies:
  - 26.1 National
  - 26.2 State
  - 26.3 Central
  - 26.4 Primary
- 27. Other Industrial Societies:

- 27.1 National
- 27.2 State
- 27.3 Central
- 27.4 Primary
- 28. Spinning Mills (All types)
- 29. Co-operative Industrial Estates
- 30. Labour Contract and Construction Societies:
  - 30.1 State
  - 30.2 District (Unions)
  - 30.3 Primary (Tribals)
  - 30.4 Primary (non-tribal)
- 31. Forest Labourers' Societies
  - 31.1 State
  - 31.2 Primary
- 32. Transport Societies (P):
  - 32.1 Ex-Servicemen
    - 32.2 Others
- 33. Electricity Co-operatives (P)
- 34. Other Non-Credit Societies (P):
  - 34.1 Agricultural
  - 34.2 Non-Agricultural
- 35. Women's Co-operative Societies
- 36. Student's Co-operative Societies
- 37. Multi-Unit Co-operative Societies (P)

# **Annexure I.3 : List of International Institutions**

- 1. International Monetary Fund
- 2. International Bank for Reconstruction and Development
- 3. International Development Association
- 4. International Financial Corporation
- 5. International Labour Organisation
- 6. International Civil Aviation Organisation
- 7. International Telecommunication Organisation
- 8. International Trade Organisation
- 9. Inter-government Maritime Consulting Organisation
- 10. Food & Agricultural Organisation of the United Nations
- 11. World Health Organisation
- 12. World Meteorological Organisation
- 13. Universal Postal Union
- 14. United Nations Educational, Social and Cultural Organisation
- 15. United Nations Children's Fund
- 16. United Nations Special Fund
- 17. United Nations Relief and Works Agency for Palestine Refugees,
- 18. Asian Clearing Union
- 19. International Fund for Agricultural Development

- 20. African Development Bank
- 21. Asian Development Bank
- 22. Other International Institutions

# Abbreviations

AD	Authorised Dealer
BSR	Basic Statistical Returns
CFRA	Combined Finance and Revenue Accounts of Union and
	and State Governments in India
CSO	Central Statistical Organisation
DCA	Department of Company Affairs, Government of India
DGBA	Department of Government and Bank Accounts, RBI
ECGC	Export Credit and Guarantee Corporation
DICGC	Deposit Insurance and Credit Guarantee Corporation of India
EPF	Employees Provident Fund
EXIM Bank	Export Import Bank of India
FOF	Flow of Funds
GIC	General Insurance Corporation
HUDCO	Housing and Urban Development Corporation
ICICI	Industrial Credit and Investment Corporation of India
IDBI	Industrial Development Bank of India
IFCI	Industrial Finance Corporation of India
IIBI	Industrial Investment Bank of India
IMF	International Monetary Fund
IRBI	Industrial Reconstruction Bank of India
LIC	Life Insurance Corporation of India
NABARD	National Bank for Agriculture and Rural Development
OFI	Other Financial Institutions
PES	Public Enterprises Survey
RBI	Reserve Bank of India
REC	Rural Electrification Corporation
RRB	Regional Rural Bank
SAM	Social Accounting Matrix
SDR	Special Drawing Rights
SFC	State Financial Corporation
SIDC	State Industrial Development Corporation
SNA	System of National Accounts
UTI	Unit Trust of India

<sup>1.</sup> Hicks, J. R. (1942) : *The Social Framework*, Oxford: Clarendon Press.

<sup>2.</sup> Copeland, M. A. (1952): A Study of Moneyflows in the United States, New York: National Bureau of Economic Research.

<sup>3.</sup> Since Section 42 data (on last reporting Friday basis) do not cover all the items necessary for compiling FOF of the commercial banks, they are supplemented by Form X data, which are on March 31 basis. Hence, as far as reference period is concerned, there is a mix-up for commercial banks.

4. However, the consolidated amount from these returns does not tally with the amount in the Statement of Affairs, perhaps, due to leads and lags in accounting entries.

5. With the formation of NABARD, loans are no longer classified under the first two funds.

6 From 1999, the information is being published in the newly introduced publication entitled *Handbook of Statistics on Indian Economy, Reserve Bank of India* 

7 The source of data for the FOF accounts of local authorities used to be RBI Bulletin article on 'Finances of Local Authorities' However, the article has been discontinued; the last such article relates to 1968-69.

8. An integrated picture was presented at the overall and sector levels, by showing the saving-investment gap (adjusted for net capital transfers) *vis-à-vis* the net difference between financial sources and uses.

9. See Annexure I.1 for a list of Mutual Fund institutions covered.

Valuation differences may arise as corporate securities are shown at face value in corporate sector accounts and at market value in holding sectors' accounts; timing differences include lag in recording of a transaction between the two sectors, like for cheques in transit; concept and classification of a particular item are seen differently between the lender and the borrower (e.g. IMF loans to Government shown as loans in the Rest of the World accounts and as deposits in RBI accounts) and accounting periods differ between the sectors, as for instance for commercial banks (April-March) and the Unit Trust of India (July-June).

11. See National Accounts Statistics: Sources and Methods, Central Statistical Organisation, 1989

12. Societies functioning at National, State and Central levels are shown as apex level societies, Societies with letter (P) are taken as primary societies along with other primary societies.