Chapter 1

Introduction

Neither financial flow account nor flow of funds account has generally accepted meaning in economics. Different countries use different concepts and different statistical coverage in their national accounts. The generally accepted view is that the flow of funds accounts cover financial and non-financial transactions, whereas financial flow accounts cover only financial transactions.

1.1 Definition

Flow of funds account is one component of national account system and it shows the financial transactions between broad sectors of the economy, thus linking the saving and investment aggregates in the other components of the national accounts with their associated lending borrowing activities. Like these other components the flow of funds account is designed to provide a framework which gives a systematic, comprehensive and consistent description and analysis of facts. It brings the various financial activities of the economy into explicit statistical relationship with one another and with the data on non-financial activities that generate income and production.1/

The flow of funds accounts in a simple language are the accounts which divide economy into institutionally homogeneous groups called 'sectors', for each sector, the account shows various transactions affected through medium of money and credit in the consistently defined system of classification. Such sectoral accounts identify and measure the main sources and uses of funds.

This indicates that the flow of funds is a branch of the national accounts. Therefore it is useful to see the role of other national accounts along with the flow of funds accounts and their interrelationship.

1.2 National Accounts

There are four major sets of accounts which provide statistical description of the economy from different angles.

1. National Income Accounts
2. Input-Output Accounts
3. Flow of Funds Accounts
4. National Balance Sheet

1.2.1 National Income Accounts

These accounts are designed to measure, in money terms, the main element in nation's income, expenditure, investment and savings. They measure the market value of

the current productive activities and distribution of this value among the factors of production. Here the classification is based on combination of activities and economic unit consideration. The focus of the national income structure is on production and utilization of resources both for current consumption and addition to capital goods. The transaction classification is made at aggregate level like income, consumption, saving and investment. The sectoring is based on economic functioning of the sector i.e. Agriculture, mining, etc.

In a closed economy, the functioning of the three major sectors are important. They are Producer, Consumer and Government. In an open economy, the transactions with the Rest of World are also considered.

The producer makes decisions on the basis of transactions that have occurred in the past and those that he expects to occur in the future. Consumer operates within a budget of income received, making outlay from budgets. The Government makes conscious policy decision with respect to its taxation and expenditure.

The accounts for each sector, reflects its productive activity. The Producing sector reflects the productive activity of the economy together with the manner in which producers allocate the income they receive from the production. The accounts for Consumer and Government will consist of the current income and outlay of the sector.\(^1\)

\(^1\) Ruggle and Ruggle, "National Income Accounts and Income Analysis," MacGraw Hill, 1955, p. 70
The national income accounts can be made more meaningful if the transactions with the foreign countries and the capital transactions that affect current income are shown separately and explicitly. Lastly, the gross saving and gross investment of all sectors are shown in the separate column "Gross Saving and Investment" in national income account.

It is also very interesting and important to know the structure of the gross national product as computed in India.

1.2.1.1 Structure of the main components of National Income Accounts in India

gross national product at factor cost
add indirect taxes
less subsidies
equal gross national product at market price
less consumption of fixed capital
equals net national product at market price
less net factor income from abroad
equals net domestic product at market price
net domestic product at market price
less income from entrepreneurship and property accruing to government
less saving of non-departmental enterprises
equals income from domestic product accruing to private sector
add national debt interest
add net factor income from abroad
add current transfers from rest of world's net
add current transfers from administrative department
equals private income
less saving of Private Corporate sector, net of retained earnings of foreign companies
less corporation tax
equals personal income
less direct taxes paid by Households
less miscellaneous receipts of government administrative departments
equals personal disposal income


Although this is a complete system of GNP, we shall relate some of its components to other systems of accounts.

1.2.1.2 Use of the National Income Accounts

On the analytical front, the national income accounts help us in knowing the general trends, structure and growth of income and production through different components in the economy. The type of expenditure through different components, share of different factors in the production are useful areas for analysis over the time period.

1.2.2 Input-Output Account

The input-output accounts like national income accounts are concerned with the current productive activity and with the performance. The focus of the system is, however quite different. These accounts are designed to deal with the general problem of inter-industry relation at

production level. The orientation is towards technological relation between physical inputs and physical outputs - in the productive process. For each sector, the important question is amount purchased from the other sectors in relation to its own production and allocation of its output to other sectors. The interest is in the total production of each sector rather than final product of the economy as a whole. The distribution of output to final demand areas is necessary for the full accounting of all output and for the completion of the accounts, but it is of special interest only in that aids in establishing bills of goods in terms of which inter-industry analysis are carried on.

In the input-output structure, the main system of classification distinguishing industries, products, or industrial processes. Thus transaction of multiproduct enterprise may be allocated to several industrial classification, by products where feasible, by establishment were necessary. Process and products may be divorced from enterprise if greater stability of technological relationship can thus be obtained.

Each business productive unit requires certain things in order to achieve a specified amount of production. The requirements are usually labour, raw materials, semi-finished

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goods and capital goods. These are inputs. They are bought from household, other business, governmental units and in some instances they are imported. The resulting production is, of course, the output and may be sold to other business or final demand sectors. What emerges is a series of interrelationships for each productive unit or sector of each unit in the focus of 'whom to whom' table.

The input-output table shows greater details than the five sector system of income and product account without sacrificing unity of purpose. In U.S.A. in the 91 sectors (as published) of the 1963 NED study, 85 represented an industrial breakdown - a disaggregation of national business sector and remaining 6 familiar other sectors in the national income accounts; consumption, government, rest of the world and gross private domestic investment which is divided into fixed capital and inventory change. For each sector its inputs - purchase of factors of production, semi-finished goods and raw materials - and its output, are shown in relation to all sectors. The result is a comprehensive display of inter-industry relationships between supply of inputs and the buying of outputs. By contrast, the national income accounts consolidate same basic data, eliminating inter-industrial transactions.

1.2.2.1 Structure of Input-Output Account

The input-output data at the firm level are merely an extension of the firm's production statement. The input
side shows purchases from different industries, payment to
different sectors like Household and Government and other
transactions with Rest of World. Whereas on the output side
it include sales to different industries, receipts from the
Household and Government and other transactions with the
Rest of World.

The input--output table of the economy can be divided
into four parts. The inputs are the purchases and outputs
are the sales. The inputs are divided into two parts i.e.
intermediate inputs and primary inputs. Output is divided
into intermediate use and final use.

In the input--output table, a number of industries can
be included. Eg. U.S. Office of Business Organisation Inter-
industry Transaction table 1963, include 86 aggregated
industries.

The Economic Division of Planning Commission, Govern-
ment of India, constructed input--output table for the period
1959, at producers price. The matrix includes 20 industries.1/
The input--output model can be placed in the form of matrix
as shown below to undertake further exercises.

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1/ W.W. Leontief, P.N. Mathur and others (Ed.), *Economic
Analysis in Input-Output Framework*, Input-Output
From the above table, the coefficient for each entry can be constructed by the inputs of a row with output of the same row with the output of that industry. Thus the coefficient matrix is called matrix \((a_{ij})\); where \(a_{ij} = \frac{x_{ij}}{x_j}\)

This can be written as

\[ AX + F = X. \]

The system can be solved for final demand vector as follows:

\[
(x - A_i)^{-1} X = F
\]

where \(x\) is an identity matrix.

Thus if the coefficient matrix \(A\) and total output vector \(X\) is known, it is possible to derive the final demand vector.
Similarly, when the final demand vector and input-output technical coefficient matrix is given, it is possible to derive the output through following equation:

\[ X = (I - A)^{-1} F \]

1.2.2.2 Limitations

The input-output tables show the inter-industry relationship assuming the constant technological relationship. The necessary planning and projections are made using this technique. If technology coefficients are not stable, projection made on that basis may not be reliable.

1.2.3 Flow of Fund Accounts

In broad terms, the flow of funds system of accounts depicts the transactions among the nation's economic decision makers who are grouped into institutionally homogeneous sectors functioning broadly on similar lines. The accounts as initially developed were intended to show the use of money and credit in the functioning of the economy. Their focus thus, was on the financial relation between financial and non-financial transactions including the role of money and credit mechanism in the productive process, and the pattern of financing the non-financial transactions.¹

The national income accounts deal with the production or the income of the economy; the input-output accounts

¹ Reserve Bank of India Bulletin, March 67, p.246
emphasis on the inter-industry relationship of inputs with outputs, and the flow of funds accounts concentrates on inter-sectoral non-financial and financial flows.

The real and financial assets are shown on the 'Uses of Funds' side whereas financial liabilities and savings are on the 'Sources of Funds' side.

Earlier work in this area was done by Ruth Mack\(^1\) and W.C. Mitchell\(^2\) and later on M.A. Copeland developed it in "A Study of Money Flow in U.S.A."\(^3\) During later years the preparation of the accounts was undertaken by Federal Reserve System of United States,\(^4\) and Central Banks of the different countries\(^5\) also started preparing and publishing "Flow of Funds Accounts" in their bulletin.

The relationship of the flow of funds accounts with the national income accounts and the detailed coverage of the flow of funds account is discussed in detail in the subsequent sections.

1.2.3.1 Limitations

The comments by S. Taylor in this regards are worth noting. "Unlike income and product accounts, flow of funds accounts..."
presents no single total or set of totals that either summarizes the system or indicates its orientation. Flow of funds is presented as a matrix of interlocking sector and transaction accounts that balance in two directions. The form of presentation emphasizes the simultaneous inter-relationship of all forces at work in the economy, without suggestion of cause effect directions or overall measures of performance. That is, none of the individual transaction types or combinations of transactions are presented as having paramount significance for analysis.1/

Commenting on the inter-relationship with the national income accounts, it is also stated that the most suspicious use of flow of funds lie in the integration of financial and non-financial accounts for the business cycle analysis. The obstacle in this task is primitive financial theory. The task of successfully welding quantity theory, liquidity preference, the impact of financial intermediaries and related theories and ideas remain to be accomplished. Until it is done it appears that "In this state of art, the flow of funds accounts represent a volume of organised data that is almost embarrassing.2/ It is also remarked by Goldsmith3/ that "the Keynesness of flow of funds analysis" has not yet revealed himself.

1/ S. Taylor, An Analytic Summary of flow of funds accounts, American Economic Review, May 58, No.2
2/ Ibid, p.159.
1.2.4 National Balance Sheet

The national balance sheet shows the assets and liabilities of the different sectors of the economy. They are closely related to flow of funds statement except that they deal with stocks rather than flows. They are concerned with tangible and intangible assets of the economy and equities arising therefrom. National balance sheet ordinarily deals with the same institutional sectors that hold financial assets and liabilities. In addition they must sometimes also deal with the stocks of the plants and equipment and with the inventories of various processing industries distinguished in input-output tables.1/

In the recent years it has been recognised that information on flows as well as stocks of the assets and liabilities are vital for understanding national income and is a help for devising monetary and fiscal policies in the context of planning for development. The need for preparation of national and sectoral balance sheet has thus been keenly felt. Pioneering efforts were made by Goldsmith (1956)2/ to construct the balance sheet for U.S.A. Subsequent study was also made by Goldsmith and others in 1963.3/ Many developed countries and developing countries have started publishing national balance sheet.4/

1/WBER, A Report by the National Account Review Committee, The National Economic Accounts of United States, 1977
1.2.4.1 The Structure of National Balance Sheet

In the structure of the national balance sheet, it includes assets, liabilities and net worth. In India, the economy is divided into six broad sectors: they are

1. Banking
2. Other Financial Institutions
3. Private Corporate
4. Government
5. Household
6. Rest of World

The financial assets, liabilities and net worth is presented in the following format.

1. Financial assets
   1) Currency
   2) Deposits
   3) Loans and Advances
   4) Government securities
   5) Private Corporate securities
   6) Social securities
   7) Others

b. Net tangible assets

2. Liabilities and Share Capital
   a) Currency
   b) Deposits

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1/ Ibid, p.104
3. Net Worth

The earlier effort to prepare national balance sheet for India was made by M.S. Joshi\(^1\) to workout the national balance sheet of India. The classification of the assets and liabilities was as follow:

A Tangible Assets
B Intangible Assets
C Liabilities
D Net Worth
E Total Assets and Liabilities

Joshi took two years i.e. 1950 and 1960 to show the National Balance Sheet.

The classification of the sectors and subsectors made in the national balance sheet is same as in the flow of funds accounts.

1.2.4.2 Use of the National Balance Sheet

The important use is emphasis on the capital-output ratios. R.F. Harrod\(^2\) stresses on the capital coefficients

\(^1\) M.S. Joshi, *The National Balance Sheet of India*, Bombay University, 1965, p.98

defined as a ratio of capital goods stock to national output. Wealth is also treated as an important concept in criteria for welfare purposes.

Elaborate econometric models incorporate stocks as well as flows. Nonavailability of national balance sheet has prevented the development of greater sophistication in such models. For comparison of rates of return in regulating the public utilities, net worth should be known of as many industries as possible. Most important of all, economics is concerned not only with flows but also with stocks.

1.3 Comparison of flow of funds accounts with other system of accounts

1.3.1 (A) National Income Account

1. National income accounts covers the production and income aspect of the economy whereas flow of funds accounts deals with the role of money and credit in the economy.

2. The classification of the sectors is based on functional basis (what they do) in the national income accounts while in the flow of funds accounts it is based on institutional aspect (what they are) accepting the homogeneity in the decision-making process within the sector.

3. In the national income accounts, the emphasis is made on the generation of income by sectors through factors of production whereas the flow of funds accounts explains the working of the monetary phenomenon in the economy.
4. The coverage of the sectors is rather production oriented in the national income accounts whereas flow of funds accounts provide institutional classification to explain the role of each sector in the economy.

5. National income accounts does not emphasise/ on the financial transactions, but the flow of funds accounts explains in detail the financial transactions in relation to corresponding non-financial transactions of the sectors.

6. Banks and other Financial Institutions are included in the national income accounts to the extent that they contribute to the total value added. However, the lending-borrowing of the financial intermediaries are not explicitly taken into account which is included in great detail in the flow of funds accounts.

7. Most of the financial transactions which are included in the flow of funds account are not explicitly shown in national income account.

1.3.2 Input-Output Accounts

The role of input-output account is to show the intra-industrial relationship. The output of one sector becomes the input of the other sector/s. Here the technological relationship between the input and output is considered.

The purpose of flow of funds account is to explain the financial behaviour of each sector, which is not the case with
the input-output account. In the revised SNA\(^1\), an attempt is made to integrate different national accounts.

However, in general, the orientation of both these accounting structures is to expose different phases of the national accounting.

1.3.3 **National Balance Sheet**

In certain countries like Australia, U.S.A., etc., the sector flow tables are accompanied by the corresponding balance sheet tables for the same period. This gives an opportunity to see the role of different financial and non-financial instruments. The Federal Reserve Board shows the account of outstanding (amount held by creditors, and amount issued by the debtors) for the same items for which flow data are provided, except that corporate securities are limited to bonds. It will thus be seen that among important types of assets and liabilities the flow of funds statement omits corporate stock, tangible assets and net worth.

1.4 **Structure of flow of funds account**

The comparison of the economic accounts show that the flow of funds account is rather very closely related to the national balance sheet, if the latter is carefully designed. When the national income accounts is linked with the flow of

funds account with the consistent sector format, gives a meaningful statistical outline of the economy. However, the sectoral classification is somewhat different in the national income accounts and the flow of funds accounts. In the national income accounts the main sectors are Personal, Government and Business sectors whereas the corresponding sectors in the flow of funds accounts are Household, Government, and Private Corporate. The last two sectors are somewhat close in the two systems of account.

The national income accounts ends at the saving-investments figures as the basic non-financial flow of the sector and show the non-financial balance of the sector. The flow of funds account begins with the sectoral non-financial balance as the basic entry to match with the corresponding sectoral financial behaviour. The financial flow tables emphasises on the financial transaction of the sectors.

The national income accounts presented below, it can be shown, that how the accounts is insufficient to explain the financial behaviour of the sector which play a crucial role in the economy.

1.4.1 National Income Accounts and Flow of Funds Accounts

Table 1 indicated below shows non-financial behaviour of the sectors through national income accounts. The economy is divided into four broad sectors; they are (1) Producing, (2) Government, (3) Rest of World, and (4) Household. Each
sector involves two types of transactions. Receipts and payments. This may be called credit and debit entries respectively. The payment of one sector becomes receipt of the other sector—sectors. So the total receipts always equal total payments. In a similar way, total credit is equal to total debit. In the Table 1 transaction with the Rest of World sector is also included. The Producing sector involves in the production process whereas Government does not. The payment of, for example, ₹650 crores as a payment to the factors of production is made by the Producing sector which is received by the Household sector. Here the payment to the factors becomes the debit entry for the Producing sector and receipts becomes the credit entry for the Household sector. The producing sector also pay ₹30 crores as transfer payment in which ₹22 crores is received by the Government sector and ₹8 crores by the Household sector. The Government sector gets ₹40 crores as non-business transfer receipts which is the debit entry for the Household sector. The consumption expenditure of the Household sector is ₹550 crores which becomes the credit entry for the Producing sector as that is the only sector which produce goods. The Government consumption is ₹75 crores. The transaction with the Rest of World indicates that export is of ₹45 crores and imports is ₹25 crores. Export is a credit entry and import is recorded on debit side.

This indicates that the investment of the Producing sector is ₹115 crores but its saving is ₹80 crores only.
Regarding the Government sector its saving is ₹.13 crores, and the net investment of the Rest of World sector is ₹.20 crores. The saving and investment is shown in the last column as the residual entries. Here the investment is ₹.135 crores and the saving is ₹.135 crores.

The national income account shows non-financial flows in detail but no further information is given about the savings and investments of different sectors. The financing of the investment of different sectors can't be observed through national income accounts. The following questions remain unsolved in the national income accounts.

1) How the Producing sector invests ₹.115 crores when the sector's own saving is ₹.90 crores only? How the additional ₹.35 crores are collected?

2) How Government spends ₹.73 crores when ₹.62 crores are on the credit side? How the additional ₹.11 crores are collected?

3) The net foreign investment is ₹.20 crores. How the ₹.20 crores are invested?

4) The savings of the Household sector is ₹.68 crores. What does the sector do with this funds? How does it invest it?

The above issues are very useful to understand the working of the economy.
### Table 1.1

#### National Product Account

<table>
<thead>
<tr>
<th></th>
<th>Producing</th>
<th>Government</th>
<th>Rest of world</th>
<th>Household</th>
<th>Saving investment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr.</td>
<td>Cro.</td>
<td>Dr.</td>
<td>Cro.</td>
<td>Dr.</td>
</tr>
<tr>
<td>1. Payments to factors of production</td>
<td>690</td>
<td></td>
<td></td>
<td></td>
<td>690</td>
</tr>
<tr>
<td>2. Business transfer payment</td>
<td>50</td>
<td></td>
<td>28</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3. Non-business transfer payment</td>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>4. Personal consumption</td>
<td></td>
<td>75</td>
<td>45</td>
<td></td>
<td>115</td>
</tr>
<tr>
<td>5. Government consumption</td>
<td>120</td>
<td>120</td>
<td>62</td>
<td>62</td>
<td>670</td>
</tr>
<tr>
<td>6. Export</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>7. Import</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>8. Domestic investment</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>9. Net foreign investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>10. Business saving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>11. Government saving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td>12. Household saving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>135</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>760</td>
<td>760</td>
<td>62</td>
<td>62</td>
<td>135</td>
</tr>
</tbody>
</table>

#### Flow of Fund Account

<table>
<thead>
<tr>
<th></th>
<th>Producing</th>
<th>Government</th>
<th>Rest</th>
<th>Household</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U</td>
<td>I</td>
<td>J</td>
<td>I</td>
</tr>
<tr>
<td>Domestic investment</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign saving</td>
<td></td>
<td></td>
<td></td>
<td>-13</td>
</tr>
<tr>
<td>Domestic saving</td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Government saving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household</td>
<td></td>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>Currency deposit</td>
<td>5</td>
<td>-1</td>
<td>-1</td>
<td>-20</td>
</tr>
<tr>
<td>Government securities</td>
<td>-40</td>
<td>12</td>
<td>-20</td>
<td>20</td>
</tr>
<tr>
<td>Corporate securities</td>
<td>20</td>
<td>-1</td>
<td>-20</td>
<td>-20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>120</td>
<td>119</td>
<td>-4</td>
<td>-1</td>
</tr>
</tbody>
</table>

---

The major advantage with the flow of funds accounts is that the financing activity of the sector explicitly shows how the sector invests their funds when their savings exceeds their investment and how the sector collect their additional funds when their investment exceeds savings.

Part B of Table 1 shows the financial behaviour of the different sectors. In the above Table Government and Producing sectors' investment exceeds their savings. The Household sector's savings exceeds their investments. Therefore the important aspect is to see how the Government and Private Corporate sectors finance their investment. Moreover the important aspect is also to see that how Household sector channelised its savings in different alternatives.

In the flow of funds accounts, the savings and financial sources are treated as sources of funds and investment and financial uses are uses of funds. The financial sources shows the increase in liabilities or decrease in assets. In the similar way, the financial uses show the increase in assets or decrease in the liabilities. This means that the negative financial source is treated as financial use and negative financial use as financial source.

Now when we look at the financial flow part of the account it shows that the Producing sector issues ₹.30 crores of the corporate securities and sell of ₹.10 crores of Government securities but keep ₹.5 crores in the form of
currency and deposit. The Government sector issues Rs. 12 crores of Government securities and dissaves one crore in the form of currency and deposit. Rest of World reduces the holdings of currency and deposit worth Rs. 20 crores, whereas Household, being the major surplus sector distributes its portfolio in three alternatives. Rs. 16 crores in the form of currency and deposit, Rs. 22 crores in the Government securities and Rs. 30 crores in the form of Corporate securities.

The flow of funds shown in Table 1 clarifies the importance of the flow of funds accounts in relation to the national income accounts. However the latter does not clarify the relationship between sectors' income, consumption and investment and the corresponding financial surplus or deficit. This is developed in the general framework of flow of funds accounts.

1.4.2 General Framework

Table 1,2 presented below shows the flow of funds framework. The columns represent sectors such as Household, Corporate business, Government and Rest of World. The transactions on the row side includes (a) income (b) current transfers (c) consumption (d) investments, (e) balance of goods and services, (f) financial balances.

Each sector involves in the above transactions which can be written in the following equation

\[ Y + T - C - I + F \]
<table>
<thead>
<tr>
<th>Sector</th>
<th>Transactions</th>
<th>Income</th>
<th>Current transfer net</th>
<th>Consumption</th>
<th>Investment</th>
<th>Balance of goods service</th>
<th>Financial deficit surplus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>$Y_1$</td>
<td>$Y_2$</td>
<td>$c_1$</td>
<td>$I_1$</td>
<td>-</td>
<td>-</td>
<td>$2Y_1$</td>
</tr>
<tr>
<td>Corporate Business</td>
<td>$Y_2$</td>
<td>$Y_2$</td>
<td>$c_2$</td>
<td>$I_2$</td>
<td>-</td>
<td>-</td>
<td>$2Y_2$</td>
</tr>
<tr>
<td>Government</td>
<td>$Y_3$</td>
<td>$Y_3$</td>
<td>$c_3$</td>
<td>$I_3$</td>
<td>-</td>
<td>-</td>
<td>$2Y_3$</td>
</tr>
<tr>
<td>Rest of world</td>
<td>$Y_4$</td>
<td>0</td>
<td>-c</td>
<td>1</td>
<td>-xM</td>
<td>-xM</td>
<td>$2Y_4$</td>
</tr>
<tr>
<td>Total</td>
<td>$Y$</td>
<td>0</td>
<td>-c</td>
<td>1</td>
<td>-xM</td>
<td>-xM</td>
<td>0</td>
</tr>
</tbody>
</table>

This means that income plus transfer payment minus consumption and investments determines the financial surplus or deficit.

Each sector involves the above transactions in a closed economy. When we consider the behaviour of all sectors together in the closed economy, the transfer payment of some sectors are positive but for the other sectors they are negative so the total transfer is zero. In the similar way, some sectors show the financial deficit but other sectors show financial surplus and the result is that the net financial balance is zero and thus the equation becomes

\[ Y - C - I = 0 \]  \hspace{1cm} (2)

Here we have not included the transaction with the Rest of the World sector, but when we include the transaction with them, then the equation would as following:

\[ Y + T - C - I - X + M = F \]  \hspace{1cm} (3)

Here the sector’s income, consumption, transfer payments, receipts, investment and the transaction of the sector with the Rest of World are taken into consideration.

In the case of each sector, the net investment figures are derived after deducting the consumption of the sector from the income. The transfer balance is also taken into consideration. The transactions with the Rest of World sector are shown through net of exports \((X)\) and Imports \((M)\).
In the case of the surplus sector, the net financial balance is positive because the saving of the sector exceeds investment of the sector after considering the transactions with the Rest of World sector. In the case of the deficit sector, investment exceeds saving and the result is that the financial balance is negative.

In the overall economy, the income minus consumption is equal to savings or investments because the total transfer entry is zero. After considering the entries with the Rest of World sector the net financial deficit or surplus is zero.

Thus the equation (4) given below shows the final situation

\[ Y - C - I - X + M = 0 \]  \hspace{1cm} (4)

This indicates that there is no imbalance of the savings and investments at economy level because sectors' deficit matches with the surplus of the other sectors.

The financial surplus or deficit of the sector is determined by the income, consumption, saving and investment after considering the transactions with the Rest of World.

The non-financial and the financial behaviour of a sector as discussed earlier is further explained here. The saving exceeds investment results surplus of funds and investment exceeds saving results deficit of funds. On the financial side the lending and borrowing activities are
important. The surplus results into lending exceeds borrowing on the financial side. The savings and investments are crucial non-financial transactions and lending, borrowing are important financial transactions.

The financial intermediaries which are considered in detail in the financial flow account are neither deficit sector nor surplus sector. The lending and borrowing activities of these sectors are useful to identify for the purpose of analysis and that is why their total behaviour, i.e. their borrowing and lending activities give an idea of the working of the financial intermediaries.

The flow of funds accounts provide the summary of the non-financial flows (depending on the coverage of the account and the availability of the data) and detailed view of financial flows of the different sectors. Certain data which are included in the flow of funds accounts which are not taken into consideration in any other system of accounts.

1.4.3. Structure of flow of funds account in India

Table 1.1 shows briefly the relationship between national income and flow of funds accounts. The national income accounts ends at the saving - investment figures as balancing entry for each sector. In the case of flow of funds accounts saving - investment entries are the starting point. However Table 1.1 fails to explain the link of the national
income account with the flow of funds accounts and the structure of flow of funds accounts.

Table 1.2 very briefly shows how the surplus/deficit of any sector can be derived. In the beginning, the sector's income is adjusted with the transfer entries and then the consumption of the sector is deducted. The entries with the Rest of World are also taken into consideration. The residual is the financial surplus or deficit. This can be represented in the symbolic form as below

$$Y + t - C - X + M = F$$

Where $Y$ is income, $t$ is transfer payment, $C$ is consumption, $X, M$ are exports and imports respectively. $F$ is financial balance. For any sector, $F$ can be surplus or deficit but when we take overall economy the total financial deficit/surplus is zero.

Tables 1.1 and 1.2 clarify the relationship between national income and flow of funds account, when we consider only the saving, investment or surplus and deficit of the sectors. Table 1.3 is divided into two parts. Part I covers the real (saving and investment) and financial (sources and uses) flows. Part II considers net flows only. The financial flows are represented as financial sources and financial uses. Financial uses minus financial sources are presented in part B of the Table 1.3.

National income accounts ends at aggregate and sectoral saving-investment figures. The difference between
saving and investment, when adjusted with the capital transfer receipts and payments is called as real balances. The financial side is represented by the financial sources and financial uses. Here there can be two types of discrepancies i.e., intra-sectoral and inter-sectoral. The discrepancies within the sector is called as intra-sectoral discrepancies and the discrepancies among the sectors are called as inter-sectoral discrepancies. When the sector's net financial balance is adjusted with these discrepancies the net final financial balances tallies with the net real balances shown in the fifth row of Table 1.3 part I.

An attempt here is made to show the link between the national income accounts and flow of funds accounts. Following Table shows national income and related aggregates for the year 1975-76.

<table>
<thead>
<tr>
<th>National Aggregates</th>
<th>Amount in cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross National Product</td>
<td>73829</td>
</tr>
<tr>
<td>Net National Product</td>
<td>69853</td>
</tr>
<tr>
<td>Disposable income</td>
<td>62050</td>
</tr>
<tr>
<td>Net domestic capital formation</td>
<td>10685</td>
</tr>
<tr>
<td>Net domestic savings</td>
<td>10500</td>
</tr>
</tbody>
</table>

The domestic saving-income (NNP) ratio was 15.46% and domestic capital formation income ratio was 15.29%.
The net savings and investment are the balancing entries of the national income account. The purpose of the financial account is to analyse the lending-borrowing activities of the sector. The excess saving or investment on the real transaction side is reflected in the excess lending or borrowing on the financial side. The net or gross lending borrowing activities of the sector explains the financial behaviour of the sector in greater detail. In the case of Household sector, it is important to know that how excess savings of the sector is used and in the case of deficit sector it is important to know that how excess investment of the deficit sector is financed.

The part II of the Table 1.3 indicates the net flows and figures in the brackets show the composition of it. The inter-sectoral and intra-sectoral discrepancies are not taken into consideration. The net financial flows and their compositions provides better idea in the case of deficit and surplus sector because their net flows are negative and positive respectively. It is not the case with the financial intermediaries.

In the case of Household sector its net lending was of Rs.3816.2 crores in which Rs.3212.8 crores was in the form of currency and deposit. This indicates that nearly 84.19% of the net flows was in the form of currency and deposit. Provident Fund’s share was Rs.1079.6 crores (i.e. 28.29%) whereas life funds share was Rs.422.2 crores (i.e. 11.06%).
The net borrowing through loans and advances was ₹ 934,0 crores (i.e., 24.47%). This clearly indicates that currency and deposit constitute very large proportion of the net lending of the sector. In the case of Rest of World, the sector showed deficit instead of surplus in 1975-76. This was due to foreign securities issues and trade debt.

Government and Private Corporates' net borrowing pattern can be examined through net financial flow tables shown in part II of Table 1.3. Government's net borrowing was ₹ 4796.8 crores in 1975-76, which was financed through two main sources (1) security issue and (2) loans. The security issue was ₹ 1826.8 (i.e., 38.03%) whereas the loans share was ₹ 2570.7 crores (i.e., 53.79%). Other financial instruments' constitute less than 10% of the net borrowing of the sector. In the case of Private Corporate sector the net borrowing was ₹ 593.6 crores in 1975-76 in which major proportion, ₹ 591.0 crores (i.e., 99.58%) was in the form of loans and ₹ 67.6 crores (i.e., 11.99%) was financed through corporate securities. The trade debt was ₹ 120.5 crores i.e. 20.30%.

The behaviour of the financial intermediaries can be examined in a better way only through gross flows because these sectors are neither deficit nor surplus sectors and hence their total behaviour provides better idea about their behaviour.
<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Banking</th>
<th>CFIT</th>
<th>PSHE</th>
<th>Corp.</th>
<th>Govt.</th>
<th>Eco.</th>
<th>Net.</th>
<th>Households</th>
<th>Total (Rs. Cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Savings</td>
<td>340</td>
<td>6</td>
<td>22</td>
<td>2756</td>
<td>170</td>
<td>7669</td>
<td></td>
<td></td>
<td>12877</td>
</tr>
<tr>
<td>2</td>
<td>Investment</td>
<td>33</td>
<td>7</td>
<td>22</td>
<td>6776</td>
<td></td>
<td></td>
<td>3033</td>
<td></td>
<td>11555</td>
</tr>
<tr>
<td>3</td>
<td>Capital Receipts</td>
<td>225</td>
<td>-22</td>
<td>-22</td>
<td>65</td>
<td></td>
<td>17</td>
<td>229</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Transfer Payments</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>215</td>
<td>145</td>
<td></td>
<td>465</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Resources Payments</td>
<td>599</td>
<td>-38</td>
<td>-60</td>
<td>-4592</td>
<td>-92</td>
<td>2033</td>
<td></td>
<td>-694</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Financial Sources</td>
<td>5688</td>
<td>1643</td>
<td>69</td>
<td>6965</td>
<td>873</td>
<td>1170</td>
<td>15729</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Financial Uses</td>
<td>5439</td>
<td>1691</td>
<td>259</td>
<td>1264</td>
<td>805</td>
<td>4994</td>
<td>14413</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Financial Balance</td>
<td>5401</td>
<td>144</td>
<td>-73</td>
<td>-401</td>
<td>-92</td>
<td>216</td>
<td>-1316</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Discrepancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intra-sectoral</td>
<td>487</td>
<td>-25</td>
<td>-27</td>
<td>+73</td>
<td></td>
<td></td>
<td>+275</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inter-sectoral</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+330</td>
<td></td>
<td></td>
<td>+17</td>
<td>+347</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.3
Flow of Funds in India 1973-76
Table 1.3
Financial Flows 1973-26

<table>
<thead>
<tr>
<th>Private Corporate</th>
<th>Government</th>
<th>Rest of world</th>
<th>Household</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75.9</td>
<td>1697.5</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>(-11.84)</td>
<td>(-35.57)</td>
<td>(-955.6)</td>
</tr>
<tr>
<td>1. Currency and deposit</td>
<td>-70.3</td>
<td>-1626.8</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>(-11.86)</td>
<td>(-35.57)</td>
<td>(-955.6)</td>
</tr>
<tr>
<td>2. Investment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Loans &amp; Allowances</td>
<td>-591.0</td>
<td>-4570.7</td>
<td>1289.3</td>
</tr>
<tr>
<td></td>
<td>(-99.56)</td>
<td>(-35.57)</td>
<td>(-955.6)</td>
</tr>
<tr>
<td>4. Small savings</td>
<td>-376.7</td>
<td>- (7.92)</td>
<td>191.9</td>
</tr>
<tr>
<td>5. Life fund</td>
<td>-376.7</td>
<td>- (7.92)</td>
<td>191.9</td>
</tr>
<tr>
<td>6. Provident fund</td>
<td>-376.7</td>
<td>- (7.92)</td>
<td>191.9</td>
</tr>
<tr>
<td>7. Trade debt or credit</td>
<td>+112.3</td>
<td>-171.6</td>
<td>-113.4</td>
</tr>
<tr>
<td></td>
<td>(29.95)</td>
<td>(-7.8)</td>
<td>(-113.4)</td>
</tr>
<tr>
<td>8. Foreign claims</td>
<td>371.7</td>
<td>(4.74)</td>
<td>371.7</td>
</tr>
<tr>
<td>9. Others more</td>
<td>-310.0</td>
<td>- (80.30)</td>
<td>-310.0</td>
</tr>
<tr>
<td>10. Total</td>
<td>-353.6</td>
<td>-4796.8</td>
<td>-52.8</td>
</tr>
</tbody>
</table>

Source: RNB March 1980

(Figures in the brackets are percentage to totals)
The financial flow tables part B gives a rough outline of the sectoral behaviour in line of the net sectoral financial sources and uses of funds.

The distinction between flow of funds accounts and financial flows accounts in the different countries and financial flows, non-financial flows and intra-sectoral flows in the Indian context should be made clear before we go ahead.

1.5 Flow of Funds and Financial Flow Accounts

The distinction between the flow of funds or financial flows is not clearly mentioned. The generally accepted view is that what is discussed earlier that the flow of funds accounts include non-financial and financial flows of the economy whereas the financial flow accounts include only the financial transactions of the economy.

In Australia\(^1\) the data are divided into two parts. The first part includes non-financial flows such as gross savings, capital transfers. The second part deals with the acquisition of financial assets and incurrence of liabilities through different financial instruments. However the title of the table is "Financial Flow Accounts". In Japan only financial transactions are shown but the title is "Flow of Funds Accounts"; (for 1963-66 only the sectoral savings and investment data were given). In 1970-76, only financial flows are given under the title "Flow of Funds Accounts of Japan".\(^2\)


\(^2\) Bank of Japan, Flow of Funds in Japan 1970-76.
In India for the period of 1951-52 to 1965-66, only financial transactions are shown under the title "Financial Flow Accounts" but in the subsequent years when sectoral savings and investment figures were given under the title "Flow of Funds Accounts".\(^1\)

This means that the distinction of the financial flows and flow of funds in terms of the data coverage is not very clear.

1.5.1 Financial Flows, Non-financial Flows and Intra-sectoral Flows

In the data format of the flow of funds accounts in India, the savings and capital formation and its transfers entries are treated as non-financial flows. The transactions made through the financial instruments are shown in the aggregated form or in the disaggregated form are financial flows. In India, the non-financial flow data are not available in the disaggregated sectoral flow of funds framework.

The transactions within the sector or within the sub-sector is excluded in the financial flow tables. The Commercial Banks' transactions with the Reserve Bank of India is excluded in the "Bank" sector account. In the similar way, the transactions of the Central Government with the State Government is excluded in the "Government sector" account.

\(^1\) Reserve Bank of India Bulletin, March 67
\(^2\) Reserve Bank of India Bulletin, August 1975.
The increase in paid up capital of the Private Corporate sector as a result of transfer from reserves to paid up capital item is not a financial flow, but subscription to the right shares or new issue by economic entity is a financial flow to the Private Corporate sector. Unilateral transfers like donations, gifts etc. are not the financial flows.1/

1.6 Evolution of the Flow of Funds Account

The development of the flow of funds account is very recent. The first significant contribution in this area was made by M.A. Copeland2/in early fifties. Here he not only did present the money flow accounts for USA, which he conceived as an alternative to national income accounts - but also showed that how these accounts might be employed to interpret the events of the U.S. economy.3/ In 1955, the Federal Reserve System4/published detailed work on flow of funds account. This work was substantially different then that of Copeland (1952). The broad objective of providing statistical discription of financial behaviour remained same, but number of major changes were made, the general draft

1/ Reserve Bank of India, Reserve Bank of India Staff Occasional Papers, Vol. 1 No. 2, December 1976, p.114
2/ M.A. Copeland,
being to link the accounts more closely with the main component of the "National Accounts System" and focus on transactions in particular financial markets irrespective of financing of any associated monetary payments.

The focus of flow of funds accounts on the interplay between financial and non-financial factors in the economy results in a substantially different selection and organization of economic data from those found in these other widely used system of national accounts. The inclusion of transactions in the existing assets and in financial claims, the inclusion in each sector account of all transactions in which the component of the sector engage, and grouping of the economic units so as to distinguish participants in credit as well as goods and service transaction reflect analytic orientation of the system, an orientation towards problems in which economic decisions are influenced by the flows and stocks of financial claims as well as by current production, income and consumption.

Understanding the importance of the flow of funds accounts, many countries started preparing and publishing the flow of funds accounts on regular or occasional basis through their Central Banks.

Bank of Japan\(^1\) published "flow of funds accounts for 1954-63" in August 1964. In the subsequent years, 1965-66

\(^1\) Bank of Japan 1978.
period was covered. In the recent publication (available) of September 1978, 1970-77 period is covered. The analytic summary of their flow of funds tables are given in their occasional papers.

Reserve Bank of Australia1 publishes financial flow accounts since early sixties through financial sources - uses approach. Since December 1977 the deficit and surplus method is adopted. Here the financial table of each sectors is accompanied by the sectoral balance sheets.

Bank of England publishes flow of funds accounts since sixties on regular basis in the June issue of the Bank of England Quarterly Bulletin. In August 1972, Bank of England published a detailed work on flow of funds accounts along with the explanatory text. The recent publication cover the period 1963-76.2 The quarterly and seasonally adjusted series is also presented here along with the yearly estimates.

In India, the groundwork in this area was started in 1959, at the meetings of representatives of RBI, Ministry of Finance and Indian Statistical Institute. The committee under the headship of Prof. Arndt submitted the report "Financial Flows in the Indian Economy" (1951-52 - 1957-58 in 1959.3

1/ Reserve Bank of Australia, June 1981
In the above publication the financial as well as detailed non-financial flows were compiled but in the subsequent years the RBI prepared and published only the financial flow accounts on the occasional basis. Since 1965-67 period (from RBI August 1973 issue) the short summary of the non-financial flows are also presented along with the financial flows.

1.7 Use of the Flow of Funds Accounts

In the detailed analysis of the financial flows the data on non-financial flows are necessary. The role of saving and investment and lending borrowing activity is rightly emphasised in the flow of funds accounts.

The flow of funds accounts can give insight which is not possible within more aggregative national income accounts. In particular, changes in monetary and fiscal policy, the effects of which can be observed in the national accounts very indirectly; can be traced more explicitly through sectoral flows to change in financial positions which affects spending decisions. This is not to say that flow of funds accounting explains the mechanism of monetary and fiscal policy; but rather traces some of the channels through which it works.

The accounts include many items which have no place in the national income accounts though they affect the development of economic activity; purchases and sales of financial assets,
central and local government borrowings, activities of Banks and financial institutions.\footnote{Bank of England, December 1974, p.12}

The more useful aspect is the analysis of the financial activities of the financial intermediaries, which is not presented in any other set of accounts. The financial activities of the Household, Private Corporate and Government are very useful for the understanding of their role and their interrelationship is also worth examining. The flow of funds accounts has specific advantage for financial planning and projection.

A complete matrix in the financial flow accounts shows not only each sector's surplus or deficit in the capital account but also the range and relative magnitude of paper and financial claims and importance of each particular type to each sector of the economy. Moreover the flow of funds accounts provide in theory an opportunity to check, for each sector, saving derived as a grand total of increase in all assets physical and financial, against saving derived as the difference between income and consumption. All this is of special relevance in an under-developed country. In advanced economies, one generally finds an approximation to a "perfect" capital market, since the large and complex pattern of financial institutions is able to accommodate virtually all varieties of lenders and borrowers. One cannot assume such a state of affairs exists in the underdeveloped economies. On
the contrary money and credit flow settle of necessity into limited and often inadequate channels which are available.\(^1\)

A prime need for development planning therefore, is to identify the existing pattern and magnitude of financial flows and this is best done within the vigorous framework of flow of funds matrix.\(^2\)

The general analysis of the subject here is broadly divided into three groups

1. Sector-wise
2. instrument-wise
3. inter-sectoral

The sector wise analysis emphasise on the behaviour of the sectors in the economy. The sectors are divided into three categories. The sectors whose investment exceeds savings are deficit sector. The sectors whose saving exceeds investment are surplus sectors, and the Banks and Financial Institutions are the Financial Intermediaries.

The behaviour of the surplus, deficit and financial intermediaries are separately analysed. The lending and borrowing activities of all sectors are important. The role of each financial instruments in lending - borrowing activities of a sector provide a very useful insight into the financial behaviour of a sector.

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\(^1\) Reserve Bank of India Bulletin, March 1967.
The financial behaviour of a sector is examined through
the composition of financial sources and uses of the sector
and the general trend of the financial instruments. The finan-
cial behaviour of a sector can be related with the other non-
financial variables and the market variables.

The role of each financial instrument is examined
through instrument-wise analysis. The national income and
product account or input output account does not explain the
financial behaviour of different financial instruments. Here
there is a great potential usefulness, in the financial flow
framework.

The inter-sectoral financial behaviour can be analysed
with the financial flow framework. The relationship of surplus
sectors' with the deficit sector and financial intermediaries
and in the similar way the deficit sectors' relationship with
the financial intermediaries clarify the inter-sectoral
relationship. The behaviour of sectors can be examined in two
ways, (a) gross method, (b) net method. In gross method,
financial source and financial use behaviour can be analysed
separately. Whereas in the net method the financial use minus
financial source of the sector is calculated and then the
necessary analysis can be worked out.

The financial flow framework is useful for the financial
planning and projection.

The inter-sectoral financial behaviour can be set out
in the form of input-output type of table showing the same
sectors in the dual role of lender of funds and borrower of funds for investment. Once this transaction matrix is constructed, it is possible to use it for the financial planning and show how given sectoral saving pattern would result in a unique pattern of sectoral investment given the behavioural pattern of inter-sectoral disposition of funds.

This aspect of planning is often ignored in macro-planning, it being assumed that as long as total magnitude of investment is matched by total supply of savings (including external resources), the consistency between physical and financial aspect of a plan will be ipso facto achieved. Its importance to under-developed countries for which conscious planning rather than operation of undisturbed market forces is the basis of development is quite considerable. Not only does it show clearly the need for consistent patterns of sectoral saving and investment given the flow of funds pattern (which is behavioural phenomenon); but it seeks solution to problems as to what should be done to achieve the consistency between given saving-investment sectoral pattern i.e. what changes should be brought about in the flow of funds pattern given certain constraints. 1/

1.8 Objective and Plan of this study

Analysis of financial flows is a very new area of economics. The financial flow account has great potential utility for the analysis of financial behaviour of the economy.

1/ Reserve Bank of India, December 1976.
The purpose of the present study is to throw some light on the new area and to explain the behaviour pattern of each sector in line of the trend of different financial instruments of the sector, their structure and inter-relationship. The relationship of the financial instrument of the sector with the market variables and other variables are also to be examined.

The role of each financial instrument in the economy, their behavioural pattern and relative importance are also to be examined. The inter-sectoral relationship is also taken into consideration.

The emphasis of the present study is on the broad aspect like sectoral behaviour pattern, their structure and relative importance of each instrument and their relations to NNP etc.

An attempt is also made to link the sectors financial behaviour with the market variables like interest rates, yields etc. and non-financial variables, like investment, fixed capital expenditure, consumer durable expenditure, etc. using the regression technique.

The data on financial flows are taken from "Financial Flow Tables" published by Reserve Bank of India from time to time. The emphasis is given to the financial flows and their determinants but certain non-financial flows are also taken into consideration to explain the financial behaviour. The saving-investments of different sectors are assumed to be exogenously determined.
The present chapter had discussed about the definitions, the concept of financial flows and flow of funds and explain the development and structure of flow of funds accounts. The explanation is also given to show the role of different accounting framework and their relationship with the flow of funds accounts. The usefulness of flow of funds accounts and limitation of the present study is given at the end.

Chapter II attempts to survey major theoretical and empirical contribution in the subject. In the theoretical framework, models of Stone,1/ Cohen,2/ Dawson3/ and Divatia4/ are explained in detail. Whereas on the analytical front, a general survey is made stressing the work of Raymond Goldsmith5/ subsequently, a short summary of "Analysis of Financial Flows in India", is also made.

Chapter III provides the macro views of financial and non-financial flows in India.

Chapter IV explains the behaviour of Household and Rest of World sectors as 'Surplus Sectors'. Household sector's saving and investment and their importance in the

overall economy along with the self financing activities of the sector are examined. The role of each financial instrument in financial sources and uses of funds is analysed with the help of non-financial flows and market variables.

The emphasis is made on behavioural pattern of financial surplus, financial uses of the sector and the role of different financial instrument in lending, borrowing activities of the Rest of World sector. Due to the aggregated nature of the financial instrument in the sector format, detailed analysis is not feasible.

Chapter V discusses the role of deficit sectors, viz. Government and Private Corporate sector. The importance of saving-investment and the self financing activities of the sector are explained and causes for an increase in the deficit of the sector are also examined. The borrowing activities of the sectors are analysed in greater detail showing the role of each financial instruments in the financial source (borrowing activities) of the sector by relating it with non-financial and market variables with simple regressions.

The functioning of the Financial Intermediaries - Bank and Other Financial Institutions are included in Chapter VI. Here the dual role of the sector is examined in great detail. On one hand the financial source - (borrowing) activities of the sector show how and through which instruments the financial
intermediaries collect funds. On the other hand to which sector and through which instrument financial intermediaries lend their funds has a special importance in the developing countries where the role of indirect financing is very high. The financial flows are also examined with the regression equations.

Chapter VI emphasises the role of financial instruments in the economy. Here the purpose is to see the financial structure in terms of financial instruments and their development during the period of study. The sectoral composition of each financial instrument shows the role of each sector in connection with the instrument.

Chapter VII discusses the inter-sectoral relationship. It explains the relationship among the three groups, i.e. deficit sector, surplus sector, and financial intermediaries. Here the analysis is divided into two broad ways, (1) gross, (2) net. In the gross analysis, dual role of the sector is lending borrowing or financial sources and financial uses are examined. Whereas in the net analysis the financial uses are netted against the financial sources and net financial lending and borrowing activities are shown and studied.

The gross financial flows of the sector is related with the market variables in the econometric exercises.

Chapter IX discusses the analysis of the financial behaviour of the Indian Economy with the help of Complete System approach.
Chapter X discusses financial planning and projection. Divatis's model explained in the third chapter is further elaborated here. The net financial inter-sectoral financial flow matrix is prepared and tested for stability of the financial coefficients. The necessary projection is made for the fifth and sixth and seventh plan period.

Chapter XI concludes the study and suggests the necessary steps to mobilise the financial resources for economic development.