a developed one. ... system has become

2.5 FLOW OF FUNDS MATRIX

The flow of funds matrix refers to the accounting system which is presented in form of matrix by recording sources and uses of funds and transactions of different sectors side by side. It is an interlocking and self-contained system that reveals financial relationships among all sectors of the economy. For the economy as a whole, total liabilities must equal total financial assets, although for any one sector its liabilities may not equal its financial assets. The consolidated net worth of an economy is consequently identical to the value of its real assets. This implies that saving must equal investment in an economy. Any single sector may save more than it invests or invest more than it saves. But the economy-wise total of saving must equal investment.

The financial flow of funds is the operating system of financial markets. An understanding of that system is crucial to business students, educators and the general public. The efficient flow of funds ensures the maintenance of sound production level and unlocks the liquidity of fixed assets. Markets and flow of funds allow us to have liquid access to the economic value that is stored in fixed assets such as home, farms and equipment. Debt markets in particular provide access to this liquid wealth and improve the standard of living for everyone by transferring funds from surplus units to deficit units. It is the transfer of funds that allows our financial market system to do its job.

According to **Prof. Goldsmith**, they bring "*the various financial activities of an economy into explicit statistical relationships with one another and with date on the non-financial activities that generate income and production.*"

For simplicity, table 2.1 is prepared to know the functioning of flow of funds with two economic units.

Table 2.1: Functioning of Flow of Funds System with two Economic Units

Household A		**Household B**
₹10,000	Income (Y)	₹10,000
₹800	Consumption (C)	₹10,200
₹200	Savings (S)	–₹200
	Flow of Funds	
Y = C+S		Y = C–S
Lender	→	Borrower

To make understand this concept, we have taken the flow of funds accounts matrix of an economy divided into four sectors: Households, Non-Financial Corporations, Financial Institutions, and the Government. These institutional sectors are shown in columns and various types of transactions are given point-wise. The first institutiional column i.e. household sector includes non-profit organizations. Non-financial corporations include savings and loan associations, mutual savings banks, insurance companies, pension funds, mutual funds, etc. The remaining sectors are self-explanatory. The last column showing 'saving and investment' is a measure of domestic saving and investment of all sectors minus the rest of the world.

Table 2.2 : Flow of Funds Matrix

(₹ in crores)

No.	Sectors Transactions Category	Households U	Households S	Non-financial Corporations U	Non-financial Corporations S	Financial Institutions U	Financial Institutions S	Government U	Government S	Savings and Investment
1.	Gross saving	–	27	–	17	–	–	–	–4	40
2.	Gross Investment	12	–	28	–	–	–	–	–	40
3.	Net financial investment (4 - 5)	15	–	–11	–	–	–	–4	–	0
4.	Financial uses (net) (6+7+8+9+10)	25		3		6				34
5.	Financial sources (net) (6+7+8+9+10)		10		14		6		4	34
6.	Demand deposits	7	–	–1	–	–	6	–	–	0
7.	Government securities	4	–	2	–	–2	–	–	–	0
8.	Corporate securities	14	–	–	14	–	–	–	–	0
9.	Mortgages	–	10	–	–	8	–	2	–	0
10.	Net increase in foreign assets	–	–	2	–	+	–	–2	–	0

Note: "U" refers to uses of funds and "S" to sources of funds.

Source: www.yourarticlelibrary.com

The table has been discussed briefly here:

- Point 1 indicates gross saving which is a source of funds for households (₹ 27 crores) and non-financial corporation's (₹17 crores), and the minus figure of ₹ 4 crores for the government indicates a deficit in its budget.
- Point 2 relates to gross investment which is a use of funds by household (₹ 12crores) and non-financial corporations (₹ 28 crores). The last column of the table shows that saving and investment are equal to ₹ 40 crores each. The figures of saving and investment are supposed to have been taken from the national income accounts of the economy.
- Point 3 shows net financial investment which is the excess of saving over investment or uses over sources of each sector. For instance, the household sector makes positive net investment of

₹ 15 crores (27-12), while the non-financial corporate sector incurs negative net investment of ₹ 11 crores because it makes-investment in excess of saving (17-28). The same is the case with the government which is shown as minus ₹ 4 crores. (It can also be arrived at by deducting the figure of S of row 5 from the U figure of row 4 of each sector).

- Point 4 shows financial uses (net) of funds. They hesitate lending of money. It is equal to the sum of the change in each sector's holding of financial assets which include demand deposits, government & corporate securities, mortgages and net increase in foreign assets. Thus, the net financial uses of the household sector are ₹ 25 crores which include ₹ 7 crores of demand deposits plus ₹ 4 crores of government securities plus ₹ 14 crores of corporate securities. Similarly, for the remaining sectors financial uses of funds are calculated.
- Point 5 indicates the Financial sources (net) of funds shows the liability of each sector. They refer to borrowing. For example, the government sector shows the acquisition of financial assets of ₹ 4 crores by selling securities to the household sector.

Two important points should be noted as (1) Financial uses (net) and financial sources (net) of the economy must equal. They are ₹ 34 crores in our table (2) Changes in assets (uses) and liabilities (sources) of each type of funds must total up to zero. This was shown in the last column of the table in the relation to points, 6,7,8,9 and 10. In the case of point 10, net foreign assets have been taken as zero for the convenience. If figure is positive, it means surplus in the international current account of the national income accounts and a negative figure will show a deficit.

2.5.1 Importance of Funds Flow Matrix

The Funds Flow Matrix presents a comprehensive and systematic analysis of the financial transactions of the economy. The funds flow matrix is useful in number of ways which are as follows:

1. The funds flow matrix is superior to the national income accounts. In fact, the national income accounts do not take into consideration the financial dimensions of economic activity and they describe product accounts as if they are operated through barter. The flow of funds accounts are meant to supplement national income and product accounts. The funds flow accounts were developed by Prof. Morris Copeland' in 1952 to overcome the weaknesses of national income accounting.
2. It provides useful structure for analysis of the behavior of individual financial institutions of the economy.
3. It traces the financial flows that interact with and influence the real saving-investment process. They record the various financial transactions underlying saving and investment.
4. It provides a base for any comprehensive analysis of capital market behavior. It helps in identifying the role of financial institutions in the generation of income, saving and expenditure and the influence of economic activity on financial markets.
5. The funds flow accounts sow the way how government finances its deficit ad surplus budget and acquisition of financial assets.
6. It represents the results of transactions in government and corporate securities, net increase in deposits and foreign assets in the economy.

7. It helps in analyzing the impact of monetary policies on the economy as to whether they bring stability or economic fluctuations.

2.5.2 Limitations

The flow of funds matrix can be affected with a number of problems which are discussed as follows:

1. The flow of funds accounts is more complex in comparison to the national income accounts because they involve the aggregation of large number of sectors with their very detailed financial transactions.
2. The problem of inclusion of non-reproducible real assets arises in the flow of funds accounts. Economists have not been able to decide as to the type of reproducible assets which may be included in flow of funds accounts.
3. There is the problem of valuation of assets. Many assets, claims and obligations have no fixed value. Therefore, it becomes difficult to have their correct valuation.
4. Even economists have failed to decide about the inclusion of human wealth in flow of funds accounts.

Regardless of these limitations, the flow of funds accounts supplements the national income accounts and help in understanding social accounts of an economy.

Questions

1. Discuss the structure of the Indian Financial System.
2. Explain the defects of Indian Financial System.
3. Discuss the growth and development of Indian Financial System.
4. What do you mean by funds flow matrix? Explain the importance of funds flow matrix.
5. Discuss the limitations of funds flow matrix.