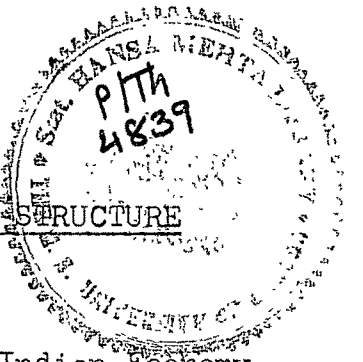
Chapter 3

Framework for the Analysis of Inter-sectoral Structure of Flows



Chapter 3

FRAMEWORK FOR THE ANALYSIS OF INTER-SECTORAL STRUCTURE OF FLOWS

3.0 The level of financial activity in the Indian Economy has increased substantially over the period of study. This is reflected in the phenomenal rise in the financial flows which have grown at the rate of 13 per cent per annum between the years 1956-57 to 1975-76 (see Table 3.1). Various factors account for the rise in the level of financial flows in an economy. In this Chapter, the analysis of the flows is undertaken with a view to delineate the factors which account for the rise in order to bring out the implications of the observed increase in the flows.

3.1 The format in which data of flow of funds is presented by RBI is not conducive for the type of analysis that is attempted here. Therefore, to throw into relief the various elements of financial flows, a set of hypothetical models have been constructed in the form of square matrices. Starting with a simple two sector model,A, a complex six sector model is developed. The six sector model reflects the sectorization and the intersectoral interaction of RBI presentation. The Sectors have been re-arranged in the order of net lenders, i.e., Household Sector and the Rest of the World Sector, Financial intermediaries, i.e., Banking Sector and other Financial Institutions Sector, net borrowers, i.e., Corporate Sector and Government Sector.

Table 3.1

Total Financial Flows and Total Financial Savings in the Indian Economy at Current and Constant prices

(Rs. crores)

Year	Total Financial Flows at current prices (average of sources and uses)	Total Financial Flows at constant prices (1960-61) (average of sources and uses)	Total Net Financial Savings at current prices	Total Net Financial Savings at constant prices (1960-61)
1956-57	947.2	1030.7	795.6	865.7
1957-58	1157.1	1233.6	802.6	855.7
1958-59	1306.9	1473.4	722.3	814.3
1959-60	1702.2	1737.0	695.5	709.7
1960-61	1464.8	1464.8	787.5	787.5
1961-62	1665.2	1634.2	817.2	802.0
1962-63	2006.1	1898.0	930.5	880.3
1963-64	2552.8	2221.1	1251.7	1089.4
1964-65	2512.1	1995.3	1176.4	934.4
1965-66	3449.2	2521.3	1480.5	1082.2
1966-67	3661.6	2342.7	1561.9	999.3
1967-68	3754.4	2203.3	1862.3	1092.9
1968-69	3739.6	2214.1	1465.6	867.7
1969-70	4015.9	2289.6	1233.0	703.0
1970-71	5773.3	3198.5	1907.2	1056.6
1971-72	6248.9	3287.2	2300.0	1209.9
1972-73	8007.7	3768.3	3038.5	1429.9
1973-74	8116.0	3220.6	2775.1	1101.2
1974-75	10738.6	3650.1	4020.2	1366.5
1975-76	15070.6	5460.4	4144.2	1501.5

Source:
1956-57 to 1960-61 RBI Bulletin, March 1967.
1961-62 to 1965-66 RBI Bulletin, July 1969.
1966-67 to 1969-70 RBI Bulletin, August 1975.
1970-71 to 1975-76 RBI Bulletin, March, 1980.

3.2 It may be pointed out that there are two fundamental differences in RBI presentation and the models constructed here. While the models assume that the Uses of a sector in another is the Source* of the latter in the former, as it should logically be, in the actual data presented by RBI there are discrepancies, i.e., the Use of a sector A in sector B is not the same as the Source of sector B from sector A. Further, in the models the Financial intermediaries behave as 'pure' intermediaries, i.e., their Sources are equal to their Uses. In the RBI data their Sources and Uses are not equal.

3.3 Model A: Consider Model A, with two sectors, the Household sector and the Government sector which are net lending and net borrowing sectors, respectively.

MODEL -A

Flows in Single Direction without Intermediation

Borrowers / Lenders	Household Sector	Government Sector	Total
Household Sector	-	500	500
Government Sector	-	-	-
Total	-	500	500

* Note: In the Flow of Capital Funds presentation RBI employs the terminology of Sources and Uses, where Sources mean acquisition of financial liabilities by borrowing funds and Uses refer to the creation of financial assets by lending funds.

3.4 In Model A the Household Sector has created financial assets worth Rs. 500 (Uses) in Government Sector by purchasing its liabilities, and has not incurred any financial liabilities itself. The Government Sector has not created any financial assets (Uses) and has incurred only liabilities (Sources) worth Rs. 500.

3.5 Since total financial flows for the economy is equal to total lending, which is equal to total borrowing, it is equal to Rs.500 in this model. Net financial saving is equal to net lender's Uses minus Sources. In Model A the Household Sector is the net lender, therefore Uses of the Household Sector (lending) minus the Sources of the Household Sector (borrowing) is equal to net financial saving, i.e., $H_u - H_s$ = Net financial saving = Rs. 500. It can be observed that in this model, total Financial Flow = net financial saving, as there are no flows in the cross direction and there is no financial intermediation.

3.6 Model B: Model B differs from Model A to the extent that the Household Sector not only lends to the Government Sector but also borrows from it, i.e., there is cross borrowing. As a result, total Financial Flow is higher than in Model A, while the net financial saving is constant.

Model -B

Flows in Cross Direction without Intermediation

Borrowers / Lenders	Household Sector	Government Sector	Total
Household Sector	-	600	600
Govt. Sector	100	-	100
Total	100	600	700

3.7 Total Financial Flow is equal to Total Lending which is equal to Total Borrowing which is $H_u + G_u = H_s + G_s$ = Rs.700.

Net Financial Saving is $H_u - H_s$ = Rs.500

3.8 Thus, without an increase in Net Financial Saving, the Financial Flows can rise due to cross borrowing.*

3.9 MODEL C: In this Model, one more sector, a financial intermediary - Financial Institutions Sector is introduced. The Uses and Sources of this Sector are depicted equal, as this Sector is a pure financial intermediary. The effect of the introduction of this Sector on the Financial Flows can be seen in Model C.

Model -C

Flows in Single Direction with Intermediation

Borrowers / Lenders	Household Sector	Financial Institutions Sector	Government Sector	Total
Household Sector	-	500	-	500
Financial Institutions Sector	-	-	500	500
Government Sector	-	-	-	-
Total	-	500	500	1000

In this Model total financial flow = $H_u + F_u + G_u = H_s + F_s + G_s$ = Rs. 1000

Net Financial Saving = $H_u - H_s$ = Rs.500

* Note: It may appear that cross borrowing leads to higher flows because Net Financial Saving has been kept constant which implies higher uses of the Household Sector. However, even if the Uses of the Household Sector are kept constant at Rs.500 cross borrowing will lead to higher Financial Flows; in this case, Net Financial Savings will be lower.

3.10 Thus, the introduction of financial intermediary has increased the total Financial Flows, the level of Financial activity in the economy with net Financial Saving constant.

3.11 MODEL D: This model differs from Model C with respect to the fact that the Household Sector though a Net Lender, borrows from the Financial Intermediary.

Model-D

Flow in Cross Direction with Intermediation

Borrowers / Lenders	Household Sector	Financial Institutions Sector	Government Sector	Total
Household Sector	-	700	-	700
Financial Institutions Sector	200	-	500	700
Government Sector	-	-	-	-
Total	200	700	500	1400

$$\text{Total Financial Flows} = H_u + F_u + G_u$$
$$= H_s + F_s + G_s$$
$$= \text{Rs. } 1400$$
$$\text{Net Financial Savings} = H_u - H_s = \text{Rs. } 500$$

3.12 It should be observed that the Household Sector's borrowing implies that the Uses of the Sector which lends it will go up and therefore, the flows will have to be higher than Model C,

where the Household Sector does not borrow. Further, since in Model D, the Net Financial saving is the same as in Model C, the Uses of the Household Sector has to be necessarily higher to the extent of its Sources. This also contributes to the rise in Flow. Thus, the flow is higher by Rs.400 in Model D, compared to Model C.

3.13 MODEL E: In Model E the number of sectors has been increased to six, the sectorization is the same as in RBI data, but in this Model flows are in single direction.

Model -E

Financial Flows, Unidirectional with Six Sectors

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	-	-	300	-	-	-	300
Rest of the World Sector	-	-	-	200	-	-	200
Banking Sector	-	-	-	-	-	300	300
Other Financial Institutions Sector	-	-	-	-	200	-	200
Corporate Sector	-	-	-	-	-	-	Zero
Government Sector	-	-	-	-	-	-	Zero
Total	Zero	Zero	300	200	200	300	1000

In this Model,

Total Financial Flows = $H_u + R_u + B_u + F_u + C_u + G_u$

$= H_s + R_s + B_s + F_s + C_s + G_s$ = Rs.1000.

3.14 Since there are two net lenders in this Model, namely, the Household Sector and the Rest of the World Sector, Net Financial Savings = $H_u - H_s + R_u - R_s$ = Rs500

3.15 Apart from the two net lenders the Model E is extended to include two Financial Intermediaries - Banking Sector, the Other Financial Institutions Sector, and two net borrowers — Corporate Sector, Government Sector.

3.16 It can be observed that in all the Models the diagonal elements are absent. This is because in India in Flow of Funds presentation intrasectoral Flows are netted out. It can be further seen that in the case of unidirectonal flows (in the absence of cross flows) all the elements below the principal diagonal of the Matrix will be zero as net lenders neither borrow from net borrowers nor from Financial Intermediaries or among themselves. However, if the elements below the diagonal are zero it need not necessarily imply that there is no cross borrowing at all, since the Rest of the World Sector, a net lender, may borrow from the Household Sector, this element is above the diagonal.[1]

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1. In the Indian Economy the Rest of the World Sector and the Household Sector do not interact with each other.

3.17 Similarly, if net borrowers do not lend to net lenders or Financial intermediaries, or to one another the elements below the diagonal will be zero, though elements below the diagonal being zero does not rule out cross lending. For instance, if the Corporate Sector lends to the Government Sector, it would be cross lending, but this element will be above the diagonal.

3.18 MODEL F: In Model F, the number of sectors and Net Financial Savings are same as in Model E, but cross flows are introduced. The Household Sector borrows from the Banking Sector and the Rest of the World Sector from Other Financial Institutions Sector. The net lenders in this Model have not only lent to Financial Intermediaries but also have borrowed from them; this has led to cross flow of funds. As the Net Financial Saving is kept constant, the Uses of the lenders has to be increased to the extent of their Sources.

Model -F

Financial Flows - Multidirectional with Six Sectors

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Government Sector	Total
Household Sector	-	-	600	-	-	-	600
Rest of the World Sector	-	-	-	300	-	-	300
Banking Sector	300	-	-	-	-	300	600
Other Financial Institutions Sector	-	100	-	-	200	-	300
Corporate Sector	-	-	-	-	-	-	Zero
Government Sector	-	-	-	-	-	-	Zero
Total	300	100	600	300	200	300	1800

Hence, the financial flows in this Model have increased due to the increase in the Uses of net lenders to the extent of Rs.400, in financial intermediaries sectors. Further, as the Sources of financial intermediaries have increased by Rs.400, their Uses have to increase to the same extent (Rs.400), increasing the financial flow to the extent of Rs.800/-. Thus, while the flow is higher due to cross borrowing

with net financial saving constant at Rs.500, the total increase in flow is Rs.800, the contribution of intermediation being Rs.400.

3.19 The Flows will also depend on the degree of netness. If the borrowing and lending amongst sectors is netted out, the Financial Flow will be less with a constant Net Financial Saving. To demonstrate this Model G is presented.

Model - G

Financial Flows - Multidirectional with Six Sectors Introducing Netness

Borrowers / Lenders	House-hold Sector	Rest of the World Sector	Bank-ing Sector	Other Finan-cial Insti-tutions Sector	Corpo-rate Sector	Govern-ment Sector	Total
Household Sector	-	-	300	-	-	-	300
Rest of the World Sector	-	-	-	200	-	-	200
Banking Sector	-	-	-	-	-	300	300
Other Financial Institu-tions Sector	-	-	-	-	200	-	200
Corporate Sector	-	-	-	-	-	-	Zero
Govern-ment Sector	-	-	-	-	-	-	Zero
Total	-	-	300	200	200	300	1000

3.20 In Model G Financial Flows are Rs.1000. Net Financial Savings are Rs.500. Thus, due to higher degree of netness the total Financial Flows are less for a constant Net Financial Savings, compared to Model F.

3.21 The object of constructing the hypothetical models is to provide an analytical frame for the analysis of the Indian data on Flow of Funds. The models enable us to draw the following inferences:-

1. Financial intermediation results in increasing the quantum of financial flows.

2. Cross borrowing increases the quantum of financial flows.

3. Quantum of Flow will depend on the degree of netness.

4. Flows will depend on the degree of disaggregation.

5. The relationship between Financial Flows and Net Financial Saving is highly complex. As the impact of change in Net Financial Saving on Financial Flows is determined by the mechanics of change in Net Financial Saving. Since the same amount of change in Financial Saving can be generated by various combinations of changes in Uses and Sources of net lenders, a mere change in Net Financial Saving will not enable us to predict the change in the direction and dimension of the total Financial Flow. There are five cases of changes in the Uses and Sources of net lenders which bring about a rise in Net Financial Savings but the impact of each case on Financial Flows is different. Consider the following cases of a rise in Net Financial Saving.*

* Rise in Net Financial Savings have been considered here. In case of a fall in Net Financial Savings the analysis would be on similar lines with changes in the reverse direction.

3.22 Case I: If Uses of net lenders increase with their Sources constant, Financial Flows will rise , i.e., $U_L \uparrow$ S_L constant, Financial Savings $\uparrow$, Flows $\uparrow$

3.23 Case II: If Uses of net lenders are constant and their sources fall, Financial Flows will fall, i.e., U_L constant $S_L \downarrow$ Net Financial Savings $\uparrow$ Flows $\downarrow$

3.24 Case III: If both Uses and Sources of net lenders increase, but the increase in Uses is greater than the increase in Sources, Financial Flows increase substantially, compared to Class I, i.e., $U_L \uparrow$ $S_L \uparrow$, Net Financial Savings $\uparrow$ Total Flows $\uparrow$. As $S_L \uparrow$ means the Uses of other sectors in net lenders have increased.

3.25 Case IV: If the Uses and Sources of net lenders fall and the fall in Sources is greater than its Uses, Financial Flows will fall, i.e., $U_L \downarrow S_L \downarrow$, Net Financial Savings $\uparrow$ Financial Flows $\downarrow$.

3.26 Case V: If the Uses of net lenders rise while their Sources fall, the impact on Flows is not predictable without the knowledge of the rate of increase of Uses and rate of fall in Sources. For, the increase in the Uses of net lenders increase the flow, while the fall in their Sources implies a fall in the Uses of some other Sectors in net lenders, this will have a dampening effect on the Flow. Hence, the net result of the two opposing impacts would be the change in Flow, which may fall, rise or remain constant. $U_L \uparrow$ $S_L \downarrow$, Net Financial Savings $\uparrow$, but Financial Flows may $\uparrow$ remain constant or $\downarrow$.

Note: $\uparrow$ indicates an increase, $\downarrow$ indicates decrease.

3.27 The differences between the Flow of Funds data of the Indian economy and the hypothetical models presented are worth mentioning. An important difference that may be noted is that the financial intermediaries, Banking Sector and Other Financial Institutions Sector, do not behave like 'pure' financial intermediaries — their Uses are not equal to their Sources. The Banking Sector is actually a net lender for the period (1966-67 to 1975-76), while the Other Financial Institutions Sector is a net borrower for four years and a net lender for six years. In the actual data of the Indian Economy Net Financial Saving and Financial Flows have a general rising trend, but in some years there is a fall in Net Financial Savings associated with a rise in Financial Flows, or vice versa (see Table 3.1). Model H is constructed to capture all the features and complexities of the actual Indian data on Flow of Funds. The Model helps to analyse the actual data.

3.28 MODEL H: In Model H the Financial Saving is not kept constant, the Model is presented to show the possibility of a fall in Net Financial Saving being compatible with a rise in Financial Flow. Model H depicts the Flow of Funds in all its complexities -- the net lenders interacting among themselves and with net borrowers, the net borrowers interacting with net lenders and among themselves. In this model, of the two Financial Intermediaries, Banking Sector is a net lender, while the Other Financial Institutions Sector is a net borrower. It can be seen that the rise in Flows compared to Model F is due to the

increase in cross flows which is reflected in the increase in the number of non-zero elements below the diagonal. Further, as the volume of borrowing of net lenders has increased in relation to their lending, resulting in a fall in Net Financial Saving.

Model -H

Financial Flow - Multidirectional

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	-	-	250	100	150	200	700
Rest of the World Sector	-	-	50	-	-	250	300
Banking Sector	100	20	-	-	-	100	220
Other Financial Institutions Sector	50	-	-	-	100	100	250
Corporate Sector	50	-	-	50	-	10	110
Government Sector	150	80	50	200	100	-	580
Total	350	100	350	350	350	660	2160

In this Model total Financial Flows

are $H_u + R_u + B_u + O_u + C_u + G_u$

$= H_s + R_s + B_s + O_s + C_s + G_s$

= Rs. 2160

Net Financial Savings are

$H_u - H_s + R_u - R_s + B_u - B_s$ = Rs. 440

Total flows which is equal to sum of the Uses of all Sectors, can also be written as $U_L + U_B$ where U_L stands for the sum of Uses of net lenders and U_B the sum of Uses of net borrowers, since in Model G the sectors are divided into two categories, net lenders and net borrowers. U_B can be further split into $U_{BL} + U_{IB}$ i.e., Uses of net borrowers in net lenders and Uses of net borrowers among themselves. Thus, Total Flows = $U_L + U_{BL} + U_{IB}$. If as in Model F, the net lenders do not borrow among themselves $U_{BL} = S_L$. The equation then can be written as:

$U_L + S_L + U_{IB}$ = T.F. Thus, changes in U_L and S_L lead to changes in Financial Flow, other things being equal. However, when the Banking Sector is a net lender, the net lenders borrow among themselves, so that S_L includes borrowing from net borrowers and borrowing within the net lending sectors. But borrowing among the net lenders is already reflected in U_L. Thus in this case, adding U_L and S_L leads to double counting. Hence, the equation in this case becomes $U_L + (S_L - S_{IL}) + U_{IB}$ = Total Flows, where S_{IL} is the internal borrowing of net lenders. In this case, it is the changes in U_L and S_L and $(S_L - S_{IL})$ which govern flows, other things being equal.

3.29 For example, in Model H, U_L = Rs.1220, S_L = Rs.800, U_{IB} = 560

$\therefore$ $U_L + S_L + U_{IB}$ = 1220 + 800 + 560 = Rs.2580 > Total Flows, due to double counting. Since S_{IL} = 420 in this Model

$U_L + (S_L - S_{IL}) + U_{IB}$ = 1220 + 800 - 420 + 560 = 2160 = Total Flows.

3.30 To illustrate the relationship between the Net Financial Savings and the Financial Flows, the analysis of the Indian data is taken up for three years (1966-67 to 1968-69). Financial Savings are higher in 1967-68, compared to 1966-67, while the Financial Flow registered a fall in the year 1967-68, compared to the previous year, though the fall is marginal. Comparing the years 1967-68 and 1968-69 we find that Financial Savings decreased, while Financial Flows increased (see Tables 3.4 to 3.5). For the three years under consideration the net lenders are Household Sector, Rest of the World Sector, and the Banking Sector, while the net borrowers are Other Financial Institutions Sector, Corporate Sector and the Government Sector. For the following tables the notations used are Uses of net lenders, $U_L = U_H + U_R + U_{BK}$ where U_H, U_R and U_{BK} stand for the Uses of the Household Sector, Rest of the World Sector and the Banking Sector, respectively. Similarly, S_L represents the Sources of net lenders and $S_L = S_H + S_R + S_{BK}$. S_{IL} stands for borrowing among net lenders, i.e., internal borrowing of net lenders.

$\therefore$ S_{IL} = Household borrowing from Banking Sector
+ Rest of the World's borrowing from Banking Sector
+ Banking Sector's borrowing from Households
+ Banking Sector's borrowing from Rest of the World.

3.31 Thus, $S_L - S_{IL}$ represents borrowing of the net lenders from net borrowers.

U_{IB} = Internal lending among net borrowers

U_{IB} = Other Financial Institutions' lending to Corporate and Government + Corporate Sector's lending to Other Financial

Institutions and Government + Government Sector's lending to other Financial Institutions and Corporate Sector.

3.32 From Table 3.1 it can be seen that comparing the year 1967-68 with 1966-67 Financial Flow has fallen by 14.15 Cr. while Net Financial Saving has increased by 17.3 Cr. This increase in Net Financial Savings has been brought about by an increase in U_L by 23.45 Cr. and an increase in S_L by 6.15 crores. Hence, it is a case where U_L and S_L have increased, but U_L has increased faster. Since U_L has increased by 23.45 Cr. and $S_L - S_{IL}$ by 5.7 Cr. the Flow should have increased by 23.45 + 5.7 = 29.15 Cr. But lending among net borrowers has fallen by 43.3 Cr. This has had a dampening effect on the Flow.

3.33 Hence, 29.15 - 43.3 = - 14.15 Cr. i.e., 14.15 Cr. fall in Flow. Thus, it can be seen that in the absence of changes in U_{1B}, the Flow would have risen by 29.15 Cr. which is the sum of changes of U_L and $S_L - S_{IL}$.

3.34 From Table 3.2 it can be seen that the Financial Flow in 1968-69 is higher by 139.75 Crores compared to 1967-68, while the Net Financial Savings have fallen by 302.7 Crores. This fall in Net Financial Savings has been brought about by a rise in U_L by 26.75 Crores and a rise in S_L by 329.45 Crores. This is a case where U_L and S_L have risen but S_L has risen faster so that Net Financial Savings have registered a fall. U_L has increased by 26.75 Crores and $S_L - S_{IL}$ by 74.3 Crores. Hence, the Flow should

have increased by 26.75 + 74.3 = 101.5 Cr. But U_{IB} has increased by 38.7 Cr. which increases the Flow further. Hence, the actual increase in Flow = 101.05 + 38.7 = 139.75 Crores. Thus, it can be seen that in the absence of changes in U_{IB}, changes in flow would be governed by changes in U_L and $S_L - S_{IL}$.

3.35 As mentioned earlier, for our analytical purposes RBI format of presentation of data on Flow of Capital Funds in the Indian economy is not very useful. The hypothetical models presented in square matrix form helped us to delineate the various elements which influence the level of Flow of Capital Funds and bring out the complex relationship between the Net Financial Savings and total Financial Flows.

3.36 The data of inter-sectoral Flows — available from 1966-67 to 1975-76*, which has been recast in the square matrix form, are presented in this chapter (see Matrices 3.1 to 3.10). The presentation of Indian data for the ten year period is the basis of analysis of the structure of Flow of Capital Funds in the next chapter.

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* RBI Bulletins, August 1975 and March, 1980

Table 3.2

Year	Total Financial Flow	Net Financial Saving	U_L	S_L	$S_L - S_{IL}$	U_{IB}	ΔU_L	$\Delta(S_L - S_{IL})$	ΔU_{IB}	Δ Flow	Δ Net Financial Saving
1966-67	3506.50	1759.05	2878.10	1119.05	246.0	382.4	-	-	-	-	-
1967-68	3492.35	1776.35	2901.55	1125.02	251.7	339.1	23.45	5.7	-43.3	-14.5	17.3

Table 3.3

1967-68	3492.35	1776.35	2901.55	1125.20	251.7	339.1	-	-	-	-	-
1968-69	3632.10	1473.65	2928.30	1454.65	326.0	377.80	26.75	74.3	38.7	139.75	-302.7

3.37 Methodology: In the RBI data there are discrepancies between the Sources of a Sector in another, and the use of the latter in the former. Logically the source of a sector say, the Household Sector's source from the Government sector must be equal to the use of the Government sector in the Household sector. Therefore, for constructing the Flow of Funds matrices the average of source of a sector from another sector and the use of the latter sector in the former was computed. By this simple device it was possible to present the RBI data in the matrix form. In RBI data there is an item under the heading "Items not elsewhere classified". This item is ignored in the computation of the Flow of Funds matrices as it cannot be apportioned amongst the various sectors for obvious reasons.

3.38 The adoption of the method of averaging as mentioned above, and ignoring "items not elsewhere classified" has caused discrepancies in the Total Financial Flows and Net Financial Savings derived from RBI tables and those calculated from the computed Flow of Funds Matrices (see Tables 3.4 and 3.5).

Table 3.4

Total Financial Flows: computed from RBI Data and Flow Matrices

(in Crores of Rs. in current prices)

Year	Financial* Flow (RBI)	Computed Financial Flows	Col.2 - Col.3
1	2	3	4
1966-67	3661.60	3506.50	155.1 (4.2)
1967-68	3754.40	3492.35	262.05 (6.9)
1968-69	3739.60	3692.10	107.5 (12.9)
1969-70	4015.90	3798.35	217.55 (5.4)
1970-71	5773.30	5359.50	413.8 (7.2)
1971-72	6248.90	5570.20	679.70 (10.8)
1972-73	8007.70	7221.90	735.8 (9.2)
1973-74	8116.00	7259.95	856.05 (10.5)
1974-75	10738.60	9424.60	1314.00 (12.2)
1975-76	15070.60	13850.30	1220.3 (8.1)

Source: RBI Bulletins, August 1975 and March 1980. *(As there is discrepancy between total Uses and Sources in RBI data, in this study Total Financial Flows are the average of Total Uses and Sources).

Figures in brackets under Col.4 are percentages with respect to figures in Col.2

Table 3.5

Net Financial Savings: Computed from RBI data and Flow Matrices

Year	Net Financial Savings (RBI)	Net Financial Savings computed	Difference of Cols. 2 & 3
1	2	3	4
1966-67	1601.00	1759.05	- 158.05 (- 9.9)
1967-68	1866.70	1776.35	90.35 (4.8)
1968-69	1435.50	1473.65	- 38.15 (- 2.7)
1969-70	1233.00	1154.60	78.4 (6.4)
1970-71	1907.20	1946.25	- 39.05 (-2.0)
1971-72	2300.00	2478.35	- 178.25 (-7.8)
1972-73	2952.40	2870.60	81.84 (2.8)
1973-74	2774.60	2821.85	- 47.25 (- 1.7)
1974-75	4023.20	4116.60	- 93.4 (- 2.3)
1975-76	4126.50	4686.00	- 559.5 (-14.0)

The Table brings out the fact that, by and large, the differences are not substantial and will not distort the analysis.

Matrix 3.1

FINANCIAL FLOWS MATRIX 1966-67

(Rs. in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	554.50	283.70	107.60	187.90	1133.70
Rest of the World Sector	--	--	85.50	27.55	18.80	832.10	963.95
Banking Sector	231.70	1.35	--	15.35	220.60	311.45	780.45
Other Financial Institutions Sector	21.90	5.30	46.95	--	109.05	186.20	369.40
Corporate Sector	29.00	-1.00	-6.60	.05	--	4.60	26.05
Government Sector	81.80	1.70	66.95	55.95	26.55	--	232.95
Total	364.40	7.35	747.30	382.60	482.60	1522.25	3506.50

Source: RBI Bulletin, August 1975, page 585.

Matrix 3.2

FINANCIAL FLOWS MATRIX 1967-68

(Rs. in crores)

Borrowers / Lenders	House-hold Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	588.40	326.00	- 6.50	237.80	1145.70
Rest of the World Sector	--	--	61.65	1.75	13.80	780.80	858.00
Banking Sector	169.10	54.35	--	7.40	290.10	376.90	897.85
Other Financial Institutions Sector	27.80	- 2.20	70.70	--	87.70	174.65	358.65
Corporate Sector	9.20	- 0.70	3.75	.05	--	8.35	20.65
Government Sector	96.50	15.15	31.50	35.35	33.00	--	211.50
Total	302.60	60.60 6660	756.00	370.55	418.10	1578.50	3292.35 3492.35

Source: RBI Bulletin, August 1975, page 587.

Matrix 3.3

FINANCIAL FLOWS MATRIX 1968-69

(Rs. in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Government Sector	Total
Household Sector	--	--	697.40	374.90	42.60	193.30	1308.20
Rest of the World Sector	--	--	- 11.50	- 1.40	-12.75	515.35	489.70
Banking Sector	469.90	-27.15	--	4.05	198.60	485.00	1130.40
Other Financial Institutions Sector	26.80	1.20	76.30	--	79.05	211.50	394.85
Corporate Sector	16.60	-0.50	48.30	0.05	--	10.00	74.45
Government Sector	7.70	18.20	131.40	54.10	23.10	--	234.50
Total	521.00	-8.25	941.90	431.70	330.60	1415.15	3632.10

Source: RBI Bulletin, August 1975, page 589.

Matrix 3.4

FINANCIAL FLOWS MATRIX 1969-70

(Rs. in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	872.30	417.50	71.20	175.50	1536.50
Rest of the World Sector	--	--	-111.95	0.35	-26.35	504.10	366.15
Banking Sector	608.40	159.20	--	22.60	168.55	158.10	1116.85
Other Financial Institutions Sector	32.60	0.15	70.35	--	81.20	287.70	472.00
Corporate Sector	20.20	- 0.95	34.00	0.10	--	11.60	64.95
Government Sector	40.10	- 1.75	155.50	18.20	29.85	--	241.90
Total	701.30	156.65	1020.20	458.75	324.45	1137.00	3798.35

Source: RBI Bulletin, August 1975, page 501.

Matrix 3.5

FINANCIAL FLOWS MATRIX 1970-71

(Rs. in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	1168.60	494.50	115.40	306.00	2084.50
Rest of the World Sector	--	--	- 29.20	8.90	- 14.65	468.30	432.35
Banking Sector	504.30	-129.85	--	62.90	231.55	967.80	1636.70
Other Financial Institutions Sector	40.10	0.20	112.60	--	82.30	362.50	597.70
Corporate Sector	- 24.60	- .55	36.10	0.10	--	5.50	16.55
Government Sector	77.50	190.40	277.65	16.35	29.80	--	591.70
Total	597.30	60.20	1564.75	582.75	444.40	2110.10	5359.50

Source: RBI Bulletin (reprint), March 1980, page 56.

Matrix 3.6

FINANCIAL FLOWS MATRIX 1971-72

(Rs. in crores)

Borrowers / Lenders	House-hold Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	1335.10	555.60	182.90	215.10	2288.70
Rest of the World Sector	--	--	41.55	12.30	- 21.85	400.10	432.10
Banking Sector	361.90	60.75	--	81.60	238.70	1144.45	1887.40
Other Financial Institutions Sector	40.10	1.10	166.70	--	93.70	418.70	720.30
Corporate Sector	23.90	1.00	82.05	0.20	--	8.15	115.30
Government Sector	135.90	-18.40	-101.80	0.30	110.40	--	126.40
Total	561.80	44.45	1523.60	650.00	603.85	2186.50	5570.20

Source: RBI Bulletin (Reprint), March 1980, page 57,

Matrix 3.7

FINANCIAL FLOWS MATRIX 1972-73

(Rs in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	1932.70	677.40	267.90	313.30	3191.30
Rest of the World Sector	--	--	14.20	12.60	-13.25	301.95	315.50
Banking Sector	600.50	- 35.65	--	97.55	250.05	1553.20	2465.65
Other Financial Institutions Sector	42.60	0.75	129.10	--	113.45	516.70	802.60
Corporate Sector	10.90	1.35	94.20	0.60	--	4.15	111.20
Government Sector	98.00	35.35	177.85	51.25	23.20	--	385.65
Total	752.00	1.80	2348.05	839.40	641.35	2689.30	7271.90

Source: RBI Bulletin, (reprint) March, 1980, page 58

Matrix 3.8

FINANCIAL FLOWS MATRIX 1973-74

(Rs. in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	2114.80	741.30	374.00	377.10	3607.20
Rest of the World Sector	--	--	152.55	16.40	- 38.30	-1120.30	-989.65
Banking Sector	701.60	119.80	--	144.80	562.45	1412.10	2940.75
Other Financial Institutions Sector	44.10	3.50	224.60	--	151.45	602.25	1025.90
Corporate Sector	36.30	0.40	179.00	1.60	--	- 1.90	215.40
Government Sector	107.60	2.60	250.10	37.25	62.80	--	460.35
Total	889.60	126.30	2921.05	941.35	1112.40	1269.25	7259.95

Source: RBI Bulletin (reprint), March 1980, page 59.

Matrix 3.9

FINANCIAL FLOWS MATRIX 1974-75

(Rs. in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt Sector	Total
Household Sector	--	--	1680.40	815.20	587.80	321.80	3405.20
Rest of the World Sector	--	--	509.85	10.50	-29.05	716.60	1207.90
Banking Sector	576.10	69.55	--	217.80	641.60	1604.70	3109.75
Other Financial Institutions Sector	79.40	4.95	171.75	--	151.60	691.50	1099.20
Corporate Sector	26.40	0.50	86.60	0.30	--	5.20	119.00
Government Sector	91.10	96.25	213.40	22.85	50.95	--	474.55
Total	773.00	171.25	2662.00	1066.65	1402.90	3339.80	9415.60

Source: RBI Bulletin (reprint), March 1980, page 60.

Matrix 3.10

FINANCIAL FLOWS MATRIX 1975-76

(Rs. in crores)

Borrowers / Lenders	Household Sector	Rest of the World Sector	Banking Sector	Other Financial Institutions Sector	Corporate Sector	Govt. Sector	Total
Household Sector	--	--	3250.10	1153.40	94.60	496.20	4994.30
Rest of the World Sector	--	--	236.90	23.50	-48.40	1229.55	1441.55
Banking Sector	938.50	860.75	--	211.45	587.75	2186.20	4784.65
Other Financial Institutions Sector	79.90	2.10	323.35	--	191.15	1010.90	1607.40
Corporate Sector	137.30	2.35	115.80	0.90	--	-1.70	254.65
Government Sector	22.50	126.25	438.70	95.20	85.10	--	767.75
Total	1178.20	991.45	4364.85	1484.45	910.20	4921.15	13850.30

Source: RBI Bulletin (reprint), March 1980, page 61.