Chapter 7

Summary and Conclusions

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## SUMMARY AND CONCLUSIONS

- 7.0 The origin of Flow of Funds analysis can be traced to the fourth decade of the 20th century. Morris Copeland's pioneering work "Tracing Money Flows in Capital Markets in U.S.A." (1947), laid the foundation for the development of Flow of Funds analysis. Flow of Funds data has been made available for a large number of countries in recent decades. The theory explaining the relationship between financial and non-financial variables remains weak. The various concepts, Quantity Theory, Liquidity Preference, Financial Intermediation, Portfolio Choice Theories are by and large loosely linked. A synthesis of financial variables and real variables which the Flow of Funds was expected to provide eludes to this day. Thus, a core theoretical base for the Flow of Funds Analysis is yet to evolve. However, it does not detract from the analytical value of the Flow of Funds analysis, as it represents a significant development in the field of national income accounting and attempts to fill the gap in the national income accounts by incorporating the financial dimension of economic activity.
- 7.1 The Flow of Funds accounts supply financial data and the analyst adapts and uses it for the purpose of understanding the problem taken up for study. The data of Flow of Funds has been applied for the analysis of a variety of problems, for instance, it has been used for the study of the implications

of monetary policy, for the identification of inflation generating sectors of the economy and the analysis of the liquidity structure of the economy. The other important uses of the analysis are, preparation of input-output type of financial models, short term Flow of Funds projections and construction of financial econometric models.

- 7.2 It is also suggested that Financial Flows could integrate the real and financial variables, in a more meaningful manner, than the rate of interest which provides a weak link between real and financial activity.
- 7.3 It is observed that Flow of Capital Funds in the Indian economy increased at the rate of 13 per cent during the period 1956-57 to 1975-76. Total Flow of Capital Funds in India has increased from Rs. 947.2 crores in the year 1956-57 to Rs.15070.6 crores in 1975-76, at current prices. It reflects the growth in the level of financial activity in the Indian Economy.
- 7.4 An attempt is made to delineate the various factors that account for the rise in the Flow of Capital Funds; for this purpose, a set of theoretical models are built. These models provide insight in the interrelationships in the structures of borrowing and lending of different sectors and their impact on the Flows. From the models the role of financial intermediation, cross borrowing, the degree of netness and the level of disaggregation of the economy in influencing the Flow of Capital Funds can be seen.

- 7.5 Further, the models highlight the relationship of Net Financial Saving and the Flows. The relationship between the Flow of Capital Funds and Net Financial Saving is found to be highly complex, as the impact of Net Financial Saving on the total Flow of Capital Funds depends on the mechanics of change in Net Financial Saving. It is observed that a mere change in Net Financial Saving will not enable us to predict the change in the direction and dimension of total Flows of Capital Funds.
- 7.6 The theoretical models differ from RBI form of presentation of data on Flow of Funds. RBI presents the data on Flow of Capital Funds in tabular form, whereas the theoretical models are constructed in square matrix form. This form of presentation is found to be appropriate for the analysis of structure of Flow of Capital Funds. Hence, the data has been recast in square matrix form for a period of ten years, 1966-67 to 1975-76, for which inter-sectoral Flow of Funds data is available. This form of presentation enables us to work out the coefficients of borrowing (Sources) and lending (Uses) for the Aggregate Economy as well as for the individual Sectors. The coefficients are found to fluctuate from year to year; hence, it is difficult to identify the extent and nature of structural change. In order to overcome this problem, two tools of analysis, namely, the technique of measurement of distance between vectors of coefficients of borrowing/lending and cluster analysis are used. With the help of these tools

it is possible to identify the years in which the structure of Flow of Capital Funds changed, and the extent of oscillation in the vectors of coefficients of borrowing and lending of Sectors, as well as the economy.

- 7.7 The analysis brings out the role of different Sectors in the changes in the structure of Capital Flows. It is found that the structure of the Aggregate Economy's Sources and Uses has changed from the year 1968-69. However, the change in the structure of Sources is not as marked as the changes in the Uses. A significant factor that accounts for the change of structure of Sources is the relative increase in the share of Banking Sector in the Sources of the economy. It accounts for 21 per cent in the year 1966-67 and 32 per cent in the year 1975-76. The change in the structure of Uses can be attributed to the changes in the relative shares of three sectors, namely, the Banking Sector, the Household Sector and the Rest of the World Sector. While the shares of the first two Sectors registered an increase, the share of the Rest of the World Sector is found to decline from the year 1968-69.
  - 7.8 The analysis at the Sectoral level brings out that structural changes have occurred in the Uses of the Banking Sector (after 1968-69) and in the Sources of the Other Financial Institutions Sector and in the Sources and Uses of the Government Sector from 1968-69. The degree of oscillation is found to be very high in the structure of the Sources and Uses of the

Rest of the World Sector. The structure of the Sources of the Household Sector, the Sources and Uses of the Corporate Sector are also found to oscillate.

- 7.9 The Banking Sector's Sources show stability. It is found that this is due to the dominance of the Household Sector's share in its Sources. The Uses of the Household Sector are also structurally stable which is due to its preference for Deposit creation in Banking Sector and the committed nature of its savings. Thus, the structural stability of the Sources of the Banking Sector and the Uses of the Household Sector are related.
- 7.10 The Rest of the World Sector's interaction is mainly with the Government Sector and its share has declined from 55 per cent to 25 per cent in the Sources of the Government Sector, over the period of study.
- 7.11 The structure of the Sources of the Government Sector exhibits a change in the year 1968-69 coinciding with the year in which structural change has occurred in the Aggregate Economy (both in Sources and Uses). The change has occurred in the Government Sector's Sources due to a relatively higher share of the Banking Sector and a lower share of the Rest of the World Sector. This change is reflected in the Uses of the Aggregate Economy, as it implies a higher share of Banking and a lower share of Rest of the World Sector in the Uses of the Aggregate Economy.

- 7.12 The analysis of the Uses of the Government Sector also shows structural change in the year 1968-69, the nature of change being a relatively higher share of Banking Sector and a lower share of the Household Sector in the Uses of the Government Sector. Since the Uses of the Government Sector has increased in the Banking Sector, the Sources of Banking from Government Sector must also register an increase; this, in turn, is reflected in the Sources of the Aggregate Economy in the form of higher share of Banking in total Sources.
- 7.13 Thus, the analysis reveals that the importance of Banking Sector has increased considerably in the Indian Economy after 1968-69 which has been the main cause of structural change at the level of the Aggregate Economy.
- 7.14 Another important insight that the analysis provides is the trade off relationship between Banking and Rest of the World Sectors in the Sources of the Government Sector. There has been a decline in the importance of the Rest of the World Sector in the Sources of the Government Sector, which can be interpreted as an indicator of growing self-reliance of the economy, as the Government's borrowing from the Banking Sector has increased. This is one of the reasons for the increase in the relative importance of Banking in the Aggregate Economy.
- 7.15 Further, it is observed that there is no trade off in India unlike in U.S.A. in the growth of the Banking Sector

and the Other Financial Institutions Sector, as both developed at the rates 18 per cent and 14 per cent, respectively, over the twenty-year period 1956-57 to 1975-76.

- 7.16 The instrument-wise structure has been also studied for a period of twenty years(1956-57 to 1975-76), with a view to find out the change of preference pattern of individual sectors for different financial instruments, as well as the change in the importance of different instruments in the Aggregate Economy. The conclusion that emerges from this analysis is that the importance of Currency and Deposits has increased in the Indian Economy though marginally from 22 per cent to 27 per cent in the first five year period to the fourth five year period. The most significant rise is in Bank Deposits in the Uses of the Household Sector, where the share of Bank Deposits in its total Uses has increased from 20.9 per cent in the first five-year period to 45.2 per cent in the last five-year period. This is being reflected in the Aggregate Economy's Preference Pattern.
- 7.17 An attempt is made to ascertain the influence of macro variables on the Flow of Capital Funds. For this purpose, ordinary least squares method is used and the Flow of Capital Funds are regressed on seven independent variables in different combinations.
- 7.18 The elasticities,  $\overline{R}^2$  and t values are compared; it is found the coefficient of Money Supply is highly significant.

Money Supply has been tried as an independent variable in combination with other independent variables. It is observed that in all cases the coefficient of Money Supply turns out to be significant at 1 per cent level. The equation which is the best fit is when Money Supply, Rate of Interest and Net Financial Saving are taken as the independent variables. It can be seen from the equation that the elasticity of Money Supply is 1.3774. The logical link in these two variables is found to be in deficit financing and the increase in Demand Deposits. Demand Deposits are an important component of Money Supply and these also form an important Source of the Banking Sector. Hence, an increase in Demand Deposits has the twin effect of increasing the Flows as well as the Money Supply.

7.19 The study of the structure of Flow of Capital Funds brings out that the structure of Flows of the Aggregate Economy is relatively more stable than the structure of Flows at the sectoral level. At the Sectoral level it is found that in some sectors there has been structural change while in some others the structure oscillates. In both cases, the coefficients of lending and borrowing are not stable. Hence, Financial Planning Models based on fixed coefficients of lending/borrowing have limited value.