Chapter SIX

CONCLUSION AND RECOMMENDATIONS

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In this chapter we have tried to list out our conclusion chapterwise. Based on our observations, policy recommendations are made which may be useful to fiscal and monetary authorities in Jordan which are trying desperately to promote economic growth with stability.

Summary and Observations :

Chapter one is an introductory one wherein an attempt is made to pose the problem of financial development and economic growth of developing countries. It also gives a brief account of growth models which are conventionally used to review economic performance. Since these models are concrete based on real variables, they lack integration of financial variables. Therefore, theoretical and empirical evidences of the important role of financial development is briefly reviewed here. Again in this chapter we have included a statement of the problem and objectives, hypotheses and methodology of the study determined and adopted in this thesis.

Chapter two reviews the existing literature and studies on financial development and economic growth. Standard research works, books and numerous articles devoted to this issue have been studied and surveyed briefly, so as to develop acquaintence with the recent trends and controversies existing in the field. On reviewing the main hypothesis and works related to it, we found that causality issue has not been resolved conclusively. However, literature has been found to be stressing on the array of financial assets so as to promote saving. Again the survey of literature enabled us to probe deep into leading issues and induced us further to investigate empirically the case of

Jordan. This chapter also reviews issues like identification of supply function for financial assets, stability of demand function for assets and proximate determinants of demand and supply functions which are a crucial and hence are examined by number of researchers. Review of literatures thus serves the basic purpose of providing direction to this study.

Chapter three deals with the financial structure of Jordan's economy. This structure has been presented in terms of growth of financial system comprising mainly of the central bank, licensed banks, specialized credit institutions and recently the capital market. We have tried to trace out the growth of these financial bodies in terms of their portfolio component. Again we have investigagted Jordanian financial structure in terms of various ratios which appears to be a sound indicators of healthy structure. Banking density, currency / GDP, deposits / GDP ratio, financial interrelation ratio, finance ratio and intermediation ratio are some of those crucial indicators besides growth in deposits with licensed banks in Jordan. Although the capital market of Jordan is underdeveloped, it is growing and consequently a variety of new instruments of capital market like equity, bonds, treasury bills, etc., recently exhibit upward trend and faster growth. From a detailed analysis carried out in the third chapter we have arrived a conviction rather firmly that these structural changes are highly conclusive for further monetary analysis.

In chapter four we have tried to analyse the supply aspects of financial assets. For detailed investigation, we have examined highly liquid and less liquid financial assets separately so as to find out relevant variables influencing their behaviour. The total financial assets comprising of highly liquid and less liquid ones have been the claims issued by the central bank, licensed banks, & government of Jordan. Highly liquid claims are also included in a broad measure of money supply.

Chapter four identifies two important proximate determinants of supply of highly liquid financial assets. The first is money multiplier and the second is high powered money or monetary base. In case of Jordan, multiplier is found to be stable one and it has not been a major factor operating on the supply side. Whereas high powered money is found to be a major determinent of highly liquid financial assets. High powered money is also found to be strongly and positively influenced by the central bank credit to the foreign sector, credit to public sector and credit to the financial system. For the entire period 1970-1992, fiscal operations and state of balance of payments have been found to be the major factors influencing the monetary base. This in turn is chiefly responsible for changes in supply of currency, demand deposits, time and savings deposits which form a part of highly liquid financial assets.

A supply of less liquid financial assets is mostly dominated by claims issued by the government. These claims include treasury bills and government bonds which form a sizeable part of less liquid financial assets. The supply of these assets is examined in chapter four. It reveals the fact that, fiscal deficit / surplus in Jordan has caused large variations in the less liquid financial assets. Whenever there is a deficit in the budget, the government tries to recover it by heavy borrowings from the Central Bank of Jordan and other banks against bonds and bills issued. These securities are held by banks as their assets.

Our analysis also reveals that about 98 percent variations in the monetary base is caused by changes in balance of payments. It is observed that in the period of 1981-1992, influence of foreign assets on the monetary base is weakened. But during the entire period of 1970-1992, the marginal impact of changes in foreign assets on the monetary base was as high as 52%. It is further observed that during 1981-1992 absolute and marginal impact of foreign assets on monetary base has gone down substantially. Again we have noticed that fiscal expenditure and revenue pattern of the government strongly influenced high powered money during 1981-1992. It may be noted that during this period the impact of balance of payments weakened. Thus the main concluding points of the analysis carried out in chapter four are :

1. High powered money is significantly and positively related to the credit of central bank to the government except for the period 1981 onwards.

2. Credit extended by Central Bank of Jordan to the foreign sector has strong positive influence on the behaviour of the monetary base and hence, supply of highly liquid financial assets except for the period 1981 onwards.

3. Credit extended by the Central Bank of Jordan to financial system, one of the major influences, exerted strong influence on the reserve money during 1981-1987 showing 1.06 interest elasticity.

Thus supply function of the highly liquid financial assets is strongly influenced by sectorial transactions of the Central Bank of Jordan.

4. Fiscal and monetary operations, fiscal deficit has strong and positive impact on supply of less liquid financial assets.

Chapter five deals with the analysis of demand for financial assets. Effects of crucial variables like national income, interest rate, prices, monetization and population on demand for financial assets have been examined. The demand for highly liquid and less liquid financial assets have also been considered for different periods. Effects of sectorial income changes on financial assets have also been assessed. Regression outcome reveals the following facts :

1. Demand for total financial assets is positively and strongly related to GNP variable. About 92 percent changes in financial assets are caused by GNP variable alone. It also reveals that income elasticity of demand for financial assets is greater than unity. Investigation reveals that more than 98 percent variations in financial assets are found not only for the entire period of our study, i.e., 1970-1992, but also during sub-periods of 1970-1981 and 1981-1992. Again, GNP elasticity co-efficient was much greater during 1981-1992, but it was never less than unity in other periods.

2. The behaviour of highly liquid financial assets examined separately indicates that GNP elasticity of demand for highly liquid financial assets for the period was greater than unity. More than 90 percent variations in demand were due to GNP variable.

3. Our study also reveals that demand for less liquid financial assets was also fairly elastic to GNP. About more than 85 percent variations in demand for less liquid assets were due to GNP changes.

4. Our analysis also highlights the effects of sectorial income variations on demand for financial assets. Agricultural income had strong and positive influence on demand variable during 1970-1992. About 95 percent changes in demand for total financial assets were caused by agricultural income alone. Income elasticity of demand for total financial assets was greater than unity. The same was true of highly liquid and less liquid financial assets. Effects of industrial income was very strong and positive on demand variable. Though income elasticity of demand was little less than unity, it was fairly high. Elasticity of demand for financial assets with respect to services sector was greater than unity for total financial assets. It was fairly good for less liquid financial assets also. We have also noted that agricultural income elasticity of demand has been slightly reduced over time as expected in developing economy. But it was never less than unity.

5. Effects of interest rate on demand for financial assets is statistically and strongly positive in all periods under study. It reveals that public preference for interest bearing assets has increased. As we have mentioned before, time deposits which is interest bearing assets has grown relatively faster. Despite high interest elasticity we do not rely much on this evidence because most of rates are institutionally governed rather than market determined.

6. Our analysis also reveals that price elasticity of demand is greater than unity which was about 1.7 during 1970-1981 but showed a slight fall in 1981-1992. It was greater than unity in other relevant period of our study. Thus inflation has strong

positive influence on demand for financial assets which is expected.

7. Effects of per capita GNP was strongly positive and statistically highly significant. Effects of per capita GDP was reduced during 1981-1992 period when economy received a set back from external sources due to capital outflow caused by fall in remittances. The effect of per capita GDP was however stronger than that of GNP during the same period.

8. So far as effects of monetization and urbanization is concerned, we applied population growth as a proxy and found it to have strong and positive influence on the demand for financial assets.

A pertinent question now may be asked as to what is the relevance of all these observed changes to Jordan economy. Our findings infact has greater relevance for policy making bodies in Jordan. This is taken up here onwards.

Policy Implications and Recommendations :

Based on our summary observations we present below policy implications and our recommendations :

(1) The monetary base or the reserve money responds positively to the credit of the central banks to various sectors in Jordan economy. It is also sensitive to credit to foreign sector. Changes in reserve money, in turn, affect the growth of financial assets, mostly of highly liquid assets. In case of excessive growth of highly liquid financial assets, the stability of the economy may be endangered. Hence it is highly imperative that the reserve

money should be allowed to grow within limits set by goals of growth with stability. We, therefore, recommend that the Central Bank of Jordan should excercise firm control on the growth of the reserve money. Which would promote greater economic stability. The growth of the reserve money should be planned, and never be determined passively. So we recommend the budgeting of the reserve money on an annual basis.

(2) Since income elasticity of demand for financial assets is greater than unity, and because of the sectorial income elasticity is fairly high, the authority in Jordan has to ensure that along with the growth of GDP, adequate stock of financial assets are available to holders of these assets. Elasticity is greater than unity which implies that demand for financial assets would grow faster than the growth of economy as observed in our study. Any imbalance in demand and supply would affect the economic growth adversely. The monetary authority should try to maintain the balance of demand and supply of these financial assets in order to keep the growth process on an even keel.

(3) Evidence also shows that with growth of per capita income, demand for highly liquid financial and less liquid financial assets would grow more than proportionately. Hence efforts should be made to maintain the balance with respect to demand and supply of assets keeping in mind the changes in per capita GDP. Monetary and fiscal policy should be used to achieve this end.

(4) Since it is found that sectorial income growth has strong and positve influence on demand for financial assets, it would be highly desirable that financial policy should be so designed that

it would impart greater flexibility in supply of assets. These assets would be held in greater quantity as structural changes in the economy occur over time.

(5) In the past, Jordan followed what is called financial repression policy by keeping rate of interest below the inflation rate. This was responsible for low growth of income and lopsided structural development. So we recommend that monetary authority in Jordan should liberalize financial system. Interest rate need not be pegged, but it should be allowed to be determined by market forces. Such a rate would reflect true opportunity cost of investment. It would promote high degree institutionalization of savings and better allocation of resources.

(6) Since inflation elasticity of highly liquid financial assets is greater than unity, the monetary authorities should try to adjust the monetary base to required rate of inflation consistent with stability and growth.

(7) Our study reveals that growth of population used as proxy for urbanization and monetization has strong and positive effect. Hence we recommend that the Central Bank of Jordan should direct all its efforts to balance the stock of highly liquid financial assets, which would be demanded in a large quantity with the population growth. Monetary and even fiscal policy should be directed to meet the growing need for financial assets in the light of monetization and urbanization which has been taking place in recent years in Jordan.

In brief, we suggest that –

[A] Monetary base influencing supply aspects of financial assets should be planned and not to be passively determined.

[B] Monetary and fiscal tools should be so adjusted that they would satisfy increasing demand for financial assets which is highly sensitive to national income, per-capita income, and sectorial income. Since service sector has emerged as a strong force generating demand for financial assets, the monetary and fiscal authorities should adjust policy tools to this need also.

[C] Interest rate is a powerful tool for directing flow of fund into the market. It needs to be determined by market forces rather than by adhoc policy measures.

[D] Monetization and urbanization would generate more demand for financial resources. Monetary and fiscal authority should fully consider these trends while purusing goals of growth with stability.

Though we have made some recommendations, we are aware of the fact that lack of comparable and consistant statistical informations might have affected our results. We therefore, do not claim that this work should be treated as a final opnion on the working of Jordanian economy. One should not however, lose sight of empirical evidences presented in this study. We hope our modest efforts to examine the relationship between financial development and economic growth would induce many more researchers in the field.

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