CHAPTER - VII

CONCLUSION AND POLICY RECOMMENDATIONS

Having examined and analysed the behaviour of some of the crucial macro economic variables in the context of Jordan economy, this chapter presents the concluding observations Based on these observations an attempt would be made to suggest policy guidelines

Chapter one relates to introduction part which presents the main theme of this work, the central hypothesis and methodology used to analysed statistical informations As stated earlier, chapter one highlights some of the crucial hypothesis relating to monetary sector For instance, it was stated that monetary variables have assumed to have stable relationships The money stock and reserves of banking system were expected to be endogeneous and strongly influenced by income and interest rate variables This chapter also presents a brief outline of methodology The study used regression and correlation methods for estimating central equations. The chief merit of this method is that it not only enables one to see the relationships among variables but also enables to predict precisely direction of a change of dependent variables beside allowing for test of the reliability of these coefficients

In chapter two an attempt has been made to present an overall picture of economy of Jordan The history shown that Jordan has been a heaven to refugees from west bank, Palestine and Lebanon From a brief review of some of the key indicators of Jordanian

economy, it is evident that economy of Jordan is relatively more open one Agriculture

has contributed greatly to GDP but its share is continuously declining After 1980

structural changes have taken place and industrial sector along with service sector has

shown more dynamism. External sector of Jordanian economy is represented by capital

and current account activities In terms of components of balance of payment. Jordan has

surplus of balance of payment. Jordan has surplus balance on capital account for most of

the years Other macro variables like money stock, price level and level of foreign

exchange reserves have indicated upward trend but their movement is more or less

consistent with other variables Economy is domestically stable but its dependence on

foreign sector has grown enormously

Chapter three is devoted to the examination of the role played by central monetary

authority in Jordan. Central Bank of Jordan has not only acted as a banker of last resort

but it has remained at the centre of economic activities. Its assets are mostly the claims on

government, claims on foreign sector and claims on private sector Asset management

policy of the central bank has mainly been responsible for growth of high powered money

or monetary base. In fact this chapter examined the role of central bank of Jordan in terms

of monetary base consisting of assets of the banks which generates liability in the form of

high powered money liability as this is used as reserves by commercial banks in Jordan

In terms of regulatory power and autonomy, CBJ has played vital role in regulating

money credit. Public debt management has been conducted in a manner which is mostly

suited to overall macro economic stability

Foreign assets holding of CBJ have affected the monetary base, money supply and through there variables real sector variables like price and output   The examination of its policy instruments reveal that these instruments have frequently been used and adjusted as per the requirement of macro economic stability   Jordanian economy despite its dependence on external sector has experienced power stability and stable economic growth largely due to effective monetary operations conducted by CBJ   A close co-ordination is found between central bank and licensed banks and this has resulted in smooth transformation of economic structure from its aggrarian character to industrial and tertiary sectors

Chapter four is devoted to the empirical examination of demand for money.   It begins with the theoretical literature survey on the demand for money followed by empirical estimation of demand function.   Both narrow money (M1) and broad money (M2) measures are considered and regression estimates were obtained for both   To study the relations between the various determinants of money supply both in simple form and logarithmic form of regression equations are fitted   The analysis reveals a stable demand function for money irrespective of concept (narrow or broad) of money used   Income and interest rate have been used as explanatory variables in the demand function   Income elasticity of money demand is much above unity in case of both broad and narrow measure of money stock   Interest rate variable does not perform well and it comes up with a positive sign which is contrary to the theoretical expectations.   Interest rate is controlled by government and is not determined by market forces   This might indicate the insignificant role of interest rate in the Jordanian economy   This chapter also attempted to

examine demand for real money taking narrow and broad money measures into account. Each constituent of money stock like currency, demand deposit and time deposit have been examined empirically. Regression analysis reveals that each component of money demand are strong statistically and positively related to income and interest rate variables Regression results for money demand function support our contention that real and nominal demand for money is stable statistically in the case of Jordan.

Stability of money demand is one of the necessary conditions for the successful implementation of monetary policy Empirical evidence generated in this chapter suggest that monetary targeting is possible in the case of Jordan for effective implementation of monetary policy and to influence the real sector.

Chapter five has been entirely devoted to the examination of money supply. Regression estimates of money supply reveals a strong statistical connection between high powered money and money supply These regression estimates are reliable in terms of 't' values 'F' statistic and R^2 the coefficient of determination.

Attempt to examine narrow money stock as well as broad money measures has indicated strong positive statistical connection with high powered money which emerges as sole determinant of money stock.

This chapter also analysed the determinants of high powered money in terms of constituents of monetary base or assets of the Central Bank of Jordan Large part of changes in the high powered money are statistically positively influenced by central bank credit to government, credit to foreign sector and credit to private sector. Net non-monetary liability had negative influence but was not statistically significant.

This analysis reveals that fiscal deficit is largely responsible for changes in high powered money and large part of such deficit has been met by foreign assistance Large inflows of foreign exchange has caused enormous change in monetary base and thus cause changes in quantity of money supply Central bank has played vital role in regulating these external flow of funds

In chapter six an attempt has been made to examine the relationships among crucial macro variables like price level, output and money stock. Regression analysis revealed that monetary expansion has influenced both price and output variables, but influence of money on price level is much more pronounced than output These results are confirmed through the causality tests developed by Granger and Sim The Granger's test results indicate bi-directional causality between money prices and unidirectional causality between money and GDP The results of the modified Sim's test indicate unidirectional causality running from money to GDP and money to prices Statistical connection between price and money stock are much stronger than connection between output and money stock. This is very much expected since output responsiveness depend not only on money stock but also on real resources availability and quality of resources This analysis reveals that for the long run price and output stability in Jordan, money stock must be held at a targeted level Money stock is strongly influenced by high powered money which in turn has changed largely in response to external inflow of funds Monetary authority can, therefore play vital role in price-output flow so as to maintain macro economic stability

Stabilisation Policy

Based on our statistical results following policy prescriptions can be suggested for macro economic stabilisation in Jordan

1. Since monetary base or high powered money has strong and positive influence on money stock in Jordan, monetary authority should target high powered money at the appropriate level consistent with the required growth of money stock. Targeting of money supply should be avoided given its response to changes in high powered money

2. The demand for money has been strongly correlated with the income. hence money supply should be adjusted to the demand for money given the growth rate of economy.

    Unplanned growth of money supply has caused inflationary pressures as reflected in the continuous upward movement in the price indices - both Consumer Price Index (CPI) as well as and Wholesale Price Index (WPI).

3   It has been observed that changes in money stock have statistically stronger influence on price level than on output during the period under examination. Also it has been observed that output elasticity of money supply is lower than elasticity of price level with respect to money This suggests that monetary authority should strike to a balance between price rise and output growth. It is very much desirable to have targeting of inflation in Jordan to achieve targeted growth rate of GDP

4. Growing demand for broad money also suggests that financial intermediation has taken place. It also suggests that the commercial banks have efficiently intermediated and probably quality of resource allocation has improved

Despite institutionalisation of savings, growth rate of domestic output is sluggish which suggest problems of efficient use of resources including supply of resource bottlenecks in Jordan

Monetary and Fiscal authority should direct policy instruments to stimulate supply response. It would be desirable therefore that monetary and fiscal authorities should be co-ordinated.

Foreign assets have greater role to play in Jordanian economy which is reflected in various estimates. Changes in high-powered money is a positive function of level and changes in the stock of foreign assets Monetary authority should have autonomy to intervene in the market so as to sterilise the flow of foreign exchange resources.