Chapter I

MACRO-ECONOMIC THEORIES & POLICY PERSPECTIVES

1. INTRODUCTION

Macroeconomics covers overall aspects of a given economy. Thus, macroeconomics takes into account the population, production, distribution, consumption, contribution of public & private sector, price, trade & employment etc are all referred when macroeconomic discussion takes place.

There is other real macroeconomics which is to be directly related with monetary and fiscal policy. As and when the role of money supply, taxation, subsidy, public revenue & expenditure or other variables are taken into account under such conditions macroeconomic policy of a given country viz. monetary policy and fiscal policy become a part of the study. But when other aspects of any country are concerned as stability and growth one has to take an extra care on financial as well as fiscal aspects.
India has adopted a federal state setup where centre is a main propeller for undertaking the responsibility of development through planning of the Indian economy.

It has to undertake various steps on the discussions for stabilization of the economy as well as its growth in the prevailing conditions of liberalization and openness of the Market. It becomes the duty of economists to direct or advice on the subject and show the ways and means which the developed economies have tried out in their development process, adopted by authorities specifically in the financial matter.

I) The Planning Process for the Development

The countries that are in the process of development have a different setup of natural resources and financial setup. Natural resources are not properly exploited. There is a need of planning & financial management that can deal in utilizing its scarce resources, and exploiting such natural resources to their fullest use.

The approach by the government of developing country, by research and should be such, by their own research and experience of their bureaucrats or the government official of the country that it to adopt the development process for fastening the growth rate, should undertake further research and know the expectations of society. There after such experts who have surveyed and come out with some proper recommendations should provide proper feed back this type of feed back must be used for development process.

India has adopted planning for its overall economic development. To formulate such planning process, the experts and experienced people put down their view in the form of models. Such models are used in forming the plans. These plans
are supported by the macroeconomics policy which is implemented as and when required.

The first plan was finalized on the basis of the past experience of the rulers. In the past, agriculture sector played an important role and no such decision was undertaken on a bigger account on industrial or other sectors before.

Independent India was under a foreign rule, thus the formation, implementation, and the result of the first plan was that there was higher achievement growth of production in the agriculture sector. It was a test and trial, and not the trail and test which the planners had undertaken.

It was the second plan taking the experience of the 1st plan. Mah.\(^1\) Model was followed in the second plan. Thereafter the developmental process undertaken of remedy of regional disparities and new technology were considered necessary for the development in successive plan.

II) Infrastructural Indicators for Development

It was a time when export, import, investment, banking system, inflation, exchange rate, as well as social aspect, as health service, human resource development, building infrastructure became essential for higher growth and overall development of the economy.

These necessities and basic needs had led the economy towards creating a proper infrastructure for financial fiscal objective and formulate policies which move hand in hand.

\(^1\) P.C. Mahalanobis is a pioneer of econometric model for India's second 5 year plan input output model.

4 sector model - Heavy industries, capital intensives, small scale industries and village cottage industries
The aspect discussed above, pertains to the development process of the economy and this is only possible when macroeconomic aspects focus on the planning period and the prevailing environment. It was necessary that in the initial stages for creating a proper infrastructure public sector play an important role by making large investment on heavy industries, where private sector did not even dare to enter, the lag period or low profitability on investment. The public sector has to play an important role.

III) New Economic, Industrial Policy and Other Policies

Along with macroeconomic policy it is necessary for the government to adopt a new phase of economic policies without differentiating the sectors for which they had been adopted. Though, to handle different sectors the government had taken a view to focus more on industries, for which industrial policy according to the time for providing initiative to the market and attracting the private sector to take initiative and come forward for investment. The role of government has changed in terms of regional equitable distribution the role of small scale industries, export oriented policies, change in financial institutional changes.

In short mobilizing recourses for higher economic development government has to make changes in monetary as well as fiscal policies.

IV) Political Aspect

With the political change at the centre where party mixed ruling parties had become a reality. The common minimum or the basic needs of society, reduction of the poverty, increasing employment opportunities, and rural development has become the main objective plank on which government has to move.
1988-89 the socialist country like Russia transition towards market economy gathered the momentum towards democratization, capitalism, privatization, liberalization and globalization.

Indian economy by this time had been fully monetarized and therefore the economy was in the position of take off stage.

Whereas, private sector started playing its role, it was a flare of inflation which rolled the economy and brought it in reorganization of fast growing economy taking longer strides towards over all development. By such steps the economy had become self sufficient in agriculture and has not remain back neither in consume able goods nor in capital goods but to compete in the industries, technological sectors. It is still necessity of higher import, but the greater need is that balance of payment is in balance, foreign exchange rate do not disturb the economy. Inflation remains under control, financial market plays a better role, government investment do not face any problems deficits of the centre as well as state do not disturb the development. Foreign debt does not become a hindrance, gross domestic product (G.D.P.) growth rate moves on continual bases and no such structural constrains hinder the economic position by poverty or higher level of unemployment. In short for the stability of the economy and for continuous growth, it is necessary for this study to undergo some theories on policies in past regarding the subject.

The government to cope up with then existence situation then regional disparity for which small scale industries as well as export oriented policies were found to be necessary for mobilize higher developmental resources.

Government was bent upon providing the basic need of the society and side by side furtherance of the process of economic development it was necessary that the
overall situation with the existing environment of the world. It was the time that initiative and motivation to the private sector for doing so sectoral planning was not only necessary it appears that it was essential to cope up the situation it was necessary the role of monetary policy and fiscal policy should function taking up their responsibility for providing the actual fuel by which the development of the economy with the stability should take economic growth should be on the continues basis.

Thus, to know the overall situation of the discussion the basic aspect therefore are taken into account for which factors likes-Nation income, money, rate of interest, exchange rate, expenditure, are taking in to account and this is done none other than the Keynes' model.

V) Classical Views

The classical dichotomy enables us to examine the determination and behavior of the real variable in economic system (while ignoring nominal variables)\(^2\)

Assuming the long run neutrality of money the dominant macroeconomic theory was the quantity theory of money that is the relationship between money supply and general price level. The version associated with Irving fisher known as transaction equation \((MV=PT)\) and the second version associated with A.C. Pigoo known as Cambridge Cash Balance approach \((M=KPY)\) stated that change in quantity of money has no real effect in long run but will determine only the price level (where \(R\) is pre-determine at its full employment level by the production function and the option of a competitive labor market the reason why prices rise in the classical mode)

\(^2\) Edward Elgar Original development and current state Snowdon and Vane-2005 Publishing Inc U.K/USA Chelton U.K Northampton MA. U.S.A.
to see how the price level is determined in the classical model and how real output, real wages and employment are invariant to the quantity of money. Consider the following

**Figure 1: Keynes vs. the Old Classical Model**

![Diagram showing Keynes vs. the Old Classical Model](image)

The determination of the price level in the classical model

Here a competitive labor market generates equilibrium employment of $L_0$ and an equilibrium real wage of $W_0/P_0$. From the production we can see that full employment in this model leads to an output of $Y_0$. In quadrant a we have the classical aggregate demand (AD) and aggregate supply (AS) function. The A.S. function is perfectly inelastic, indicating that real output is invariant to the general prices level. A higher price must be associated with a lower level of real output. $AD_0 (M_0)$ shows how, for a given money supply, $MV$ can be split up among an infinite number of combinations of $P$ and $Y$. Since we have assumed $V$ is fixed, the nominal value of transaction in the economy is determined by the supply of money. With
higher prices each transaction requires more units of currency and therefore the 
quantity of money. An increase in the money supply will shift the AD curve to the 
right, as shown by $AD_0$ ($M_0$). Finally, in quadrant (c) we show the relationship 
between the real wage and the prices level for a given nominal wage. If the nominal 
wage is $W_0$ then a higher price level will reduce the real wage.

Let us assume that the initial equilibrium value in the model associated with 
the quality of money $M_0$ are $Y_0$, $W_0/P_0$ and $L_0$. Suppose the monetary authorities 
increase the supply of money $M_i$ in an attempt to increase real output and 
employment. We can see that such a policy will be completely ineffective in the 
classical model. The increase in the quantity of money, by creating disequilibrium in 
the money market, will lead to an increase in the demand for goods and services. Since $Y$ is constrained at $Y_0$ by labor market equilibrium employment ($L_0$), prices 
raise to $P_i$. For a given nominal wage of $W_0$, an increase in the price level lowers the 
real wage and creates disequilibrium in the labor market. An excess demand for labor 
of $ZX$ emerges at a real wage of $W_0/P_i$. Competitive bidding by employers will drive 
the nominal wage up until it reaches a value of $W_i$, which restores the real wage to its 
equilibrium value (that is $W_0/P_0=W_i/P_i$).

Irving fisher (1907) also demonstrated how monetary expansion would raise 
the nominal rate of interest through 'Fisher Effects'. In the classical model, the real 
interest rate adjust to equate saving and investment in the loan able funds market. Since the real rate of interest is equal to the nominal interest rate minus the inflation 
and is determined by the real forces of productivity and thrift, the nominal rate of 
interest will adjust to reflect the influence of variations in both the real interest rates 
and the rate of inflation monetary expansion, by the raising the rate of inflation. To 
summarize result of monetary expansion is that the price level, nominal wage and the
nominal interest rate will increase but all the real values in the system remain unaffected (that is, money is neutral). In the language of David Hume (1752), "it's evident that the greater or less plenty of money is of no consequence since the prices of commodities are always proportional to the plenty of money".  

Explanation: Product and labor market together

Production function (product market) money supply leads to price level money market marginal cost = price

VI) Orthodox Keynesian School

According to Modigliani (1944) except for the case of wage rigidity Keynes's system did allow for a restoration of full employment equilibrium. The classical and neoclassical models remain relevant for micro-economics issues and the long run analysis of growth but orthodox Keynesian macroeconomics provide the most useful framework for analyzing short run aggregate phenomena that is macroeconomic stability. This theoretical compromise remained the dominant paradigm in early 1970's.

Introduction to model IS-LM (for closed economy)

The orthodox Keynesian model had an important bearing on the development of macroeconomics. The Hicksian IS-LM model became the established model for macro-economic theorizing and it had a tremendous influence on the direction of macro-economic policy right up to the mid 1960.

Product market equilibrium (derivation of IS curve) Product market is said to be in equilibrium when aggregate demand and supply of goods (commodity) equal
which in turn determine the equilibrium value of price level, output, employment and rate of interest in commodity market.

Aggregate demand function for good is given as

\[ Y = C[Y - t(Y)] + I + G \]

where

\( Y \) stands for aggregate national output (GNP)

\( C \) = consumption expenditure which is a function of disposable income that is

\( Y_d = y - t(y) \),

\( t \) is marginal rate of taxation

\( I \) = real investment demand (investment which is a function of rate of interest)

\( G \) = real govt. purchases of good and services [govt. expenditure which is an exogenous variable] Aggregate supply function for commodity is given

\[ Y - C = S[y + t(y)] + t(y) \] in which \( S \) = real saving, \( t \) = real tax revenue as a function of real GNP.

Product market equilibrium is stated as

\[ AD = AS \]

\[ I(r) + G = S(Y_d) + t(y) \]

All of the relationships discussed above for the product market are summarized in four quadrants in following.

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Figure 2: The IS curve: a shift in saving

Demand-side Equilibrium- Income & interest rate

The south east quadrant in fig. is an "upside" version of a graph similar to that shown in fig. giving saving plus tax revenue as a function of income. To make the drawing easier, we have assumed that both saving and taxes are proportional to income, so the (s+t) schedule goes through the origin. No significant loss of generality is incurred by making use of this convenience. In the northwest quadrant we have plotted government spending, which is fixed by the budget and therefore a vertical line, plus investment, which is a decreasing function of r. The I(r) line is similar to the one shown in figure but rotated 90° The value of g and I(r) are summed horizontally in this quadrant to give the I(r) + g lines, which represent total expenditure. In the southwest quadrant we have drawn a 45° lines from the origin.

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4 Richard T. Froyen Macro-Economics theories and policies
This line is used to equate \( s+t \) from the southeast quadrant to \( I + g \) in the northwest quadrant. Thus, it directly represents the equilibrium condition in the product market, given by equation.

It is the line in the northwest quadrant, the IS curve representing equilibrium pairs of \( r \) and \( y \), that we can now derive from these three other relationships. If we choose a level of income on the \( y \)-axis, we can trace through the three quadrants following the dashed line to locate the equilibrium interest rate for that level of income. For example \( y_0 \) in equilibrium we would have planned \( S+t \) at \( (s+t)_0 \). To generate an equal amount of \( (i+g)_0 \) the interest rate would have to be at \( r_0 \). This can be done for any level of \( y \) to give a corresponding level of \( r \). Or, conversely we can take the level of \( r \) as given and locate the equilibrium income level associated with that interest rate.

In other words the IS curve represent the pairs of \( r \) and \( y \) that will keep the product market in equilibrium, in the sense that planned investment plus govt. purchases equals planned saving plus tax revenue at that level of income.

The relationship between equilibrium of \( r \) and \( y \) (GNP) can be represented by IS curve derived above describe in below
From the above discussion it is revealed that IS curve divides the plain into two zones. Above the IS curve is unemployment below the curve inflation. Accordingly Keynes advocated fiscal policy measure to overcome the problem if economy deviated from the stability.

a) Money Market Equilibrium

The money market has also demand and supply side like product market and money market is said to be equilibrium when demand for money equals supply of money, this also determines equilibrium value of price level, output, rate of interest and unemployment.

b) Demand for Money according to Keynes

For satisfying the transaction, precaution and speculative motives people prefer to keep some cash on hand also known as liquidity preference.

While transactions and precautionary motives are a function of level of income, speculative motive is a function of rate of interest summing all the three motives gives us total demand for money.
DM\textsuperscript{0} = K (y) + L(r) where k(y) is transaction demand for money which is positively related with level of income and L stands for liquidity preference\textsuperscript{6} that is speculative demand for money which is inversely related with rate of interest. Supply of money according to Cambridge economist consists of currency (coins and notes) and demand deposit which is exogenously determined by the monetary authority of a country and hence velocity of circulation of money does not play any role.

c) Supply of Money

Supply of money is stated as M only but real cash balance\textsuperscript{7} approach of the quantity theory of money stated money supply as M divided by P (real money supply) which can be compared with product market equilibrium value of the variables.

Thus, money market equilibrium can be stated as \( ASM = ADM \textsuperscript{8} \) 
\[
\frac{M}{P} = k(Y) + l(r) \text{ that is } \frac{M}{P} = m(r, y) \text{ where } \frac{M}{P} = \text{real money supply function which is exogenously determined}
\]

Separating this speculative transaction balances give convenient way to money market equilibrium below given figure that summarizes the money market relationship.

\textsuperscript{5} DM = Demand for money 
\textsuperscript{6} General theory of Employment, Interest and Money 
\textsuperscript{7} This is the approach of A.C. Pigou 
\textsuperscript{8} ADM = Aggregate Demand of Money 
This is not in the model but central authority decide independently
The LM curve equilibrium $r$ and $y$ in the money market

**Derivation of LM curve**

In the southwest quadrant of fig. the line $K(y)$ gives transaction demand as an increasing function of income, measured downward. The northwest quadrant is the curve representing the speculative demand as a function of the interest rate. This curve has a slope $1<0$, as we have seen in fig. in the southwest quadrant we have used another geometric 'trick' which represents the equilibrium condition, equating total supply of money to total demand. This time we have drawn a line between the transactions demand axis and the speculative demand axis at a $45^\circ$ angle to each axis. The line is drawn at a distance from the origin on each axis equal to the total exogenously give real money supply, $M/P_0$. Because of the geometric nature of the

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45° triangle the transaction demand and the speculative demand always add up to the total money supply at each axis, so that this 45° line directly represents money market equilibrium condition. Any point on this 45° line gives a transactions demand plus a speculative demand that just adds up to the total money supply.

We can now locate in the northwest quadrant of fig. the r, y pairs that maintain the money market in equilibrium at a given level of such as Yo; we can find transactions demand for money from the k(y) function. By following the dashed line, we subtract this from supply M/Po, to be in equilibrium. This level of speculative demand shows us, in turn, the level of interest rate r0 that will maintain the money market in equilibrium with income level Yo. Having located one money market equilibrium pair (ro, yo), we can locate another by beginning with y! in figure. Repeating this process traces out the line that describes the set of r, y pairs that maintain money market equilibrium. This is the LM curve in fig.

Thus, we can see that the LM curve represents the pair of r and y that will keep the money market in equilibrium with a given level of the money supply, M, and a given price level, P.

In short the LM curve represent the pairs of r (rate of interest) and y (national income) that will keep money market equilibrium in the sense that transaction demand for money + speculation demand for money equal the supply of money at the different level of r and y.

From the above discussion relationship between equilibrium pairs of r and y.
LM curve divides a quadrant into two regions 1) the region of excess liquidity (excess supply of money) above and to the left of the LM curve for combination's of level of nation income and rate of interest. In this region, demand for money falls short of supply of money.

2) The region of lack of liquidity located below and to the right of LM curve for combination of level of nation income and rate of interest, in this region the demand for money exceeds supply of money.

Friedman advocated monetary policy measures to overcome the problem of economy deviating from the LM curve that is Money market equilibrium.

d) Stability and Equilibrium in Product and Money Market

By placing IS-LM curve together which give equilibrium pairs of rate of interest & national income in the product & money market. In the same quadrant we can find the singular \((r, y)\) pair.
'I' is revealed from the above given diagram that IS-LM curve intersect at e. e represents internal stability at $Y_0$ national income and $R_0$ rate of interest. Any other pair of rate of interest and national income $(r, y)$ leads to instability in the domestic economy.\textsuperscript{10} 

Such instability leads to creation of 4 types of economic problems because the quadrant is divided into four zones and accordingly a set of policy mix (monetary fiscal) is required to overcome to the problem the four zones (region) such a policy mix is depicted below:

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<td>1</td>
<td>Excess liquidity ($D_m &lt; S_m$)</td>
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<td>2</td>
<td>Liquidity lack of ($D_M &gt; S_M$) unemployment $A_D &lt; A_S$</td>
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<tr>
<td>3</td>
<td>Lack of liquidity ($D_M &gt; S_M$) inflation ($A_D &gt; A_S$)</td>
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<tr>
<td>4</td>
<td>Excess liquidity ($D_m &lt; S_m$) inflation ($A_D &gt; A_S$)</td>
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\textsuperscript{10} For IS-LM Model macro economics by cool-Taylor
e) Monetary - Fiscal Policy Mix

It is to be remembered here that monetary-fiscal policy mix. Policies both effect ISLM curve and hence market. Any economy can be deviated from the stability to any other zones decapitated above in the diagram and required policy mix is suggested the effect of policy mix on the ISLM curve and hence stability

Assume for the sake of simplicity that level of Y₀ has the full employment at current price level in economy but the r₀ level may be too high because of the lower level of investment. In this case the rate of interest can be reduce either by shifting IS curve down or LM curve. This could downward balance by increasing money supply and/or (easy money monetary policy) by reducing govt. expenditure (concretionary F.P.) which will bring the economy back to Y₀ income and lower rate of r (rate of interest).
f) External Stability (foreign exchange stability / balance of payment)

External stability can also be said as F.E. market stability or B.O.P. equilibrium said to be in equilibrium when current account-capital account = 0, current account consist of import-export of visible - invisible item in which import is a function of nation income where as capital account consist of inflow and outflow which is a function of international interest rate B.O.P. equilibrium can be stated as x-M (y) = f(rd) where x = export, m = import, f = O-I (out flow-in flow). This balance of payment equilibrium summarize in the 4 quadrant.

**Figure 8 Derivation of F.E. Curve in The N.E.**

Figure 8 is deriving F.E. curve in The N.E. (north east quadrant). FE curve shows the vitiate combination of interest rate and national income at which nation's balance of payment is in equilibrium.

In east-south quadrant the current account balance (x-m) is plotted as decreasing function of national income the 45° line in south-west quadrant shows balance of payment equilibrium condition that a current account deficit be matched to net capital outflow and north-west quadrant shows net-capital outflow shows the decreasing function of the interest rate difference. Therefore, the F.E. curve represents
the equilibrium pairs of \((y<r)\). That keeps B.O.P. market in equilibrium in the sense; that current account =capital account at the various level of \(Y_r\) the relationship between pairs of \(Y\) & \(r\).

**Figure 9: F.E. Curve B.O.P. Aspects**

Likewise ISLM curve, F.E. curve also divides this quadrant into two zones-above the F.E. curve surplus in the B.O.P. and below the curve deficit accordingly there are three kinds of policies to correct the B.O.P. equilibrium suggested.

1) Expenditure changing policy which consist of M.F policies

2) Expenditure shifting policy which consists of devaluation revaluation in the exchange rate.

3) Direct controls consist of quotas and tariffs etc

**g) Macroeconomics Stability (Internal and External)**

M.E.S can be said as product market, money market and F.E. market equilibrium this stability is given in following diagrams with interest rate \(Y_o\) and

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11 International economics (seventh edition Dominick Salvatore John Wiley & Sons New york-2001
national income (Yo) intersection of ISLM- F.E. curves assuming full employment with internal and external price stability.

Figure 10 & 11: As per the slopes of L.M. and F.E. curve.
Diagram of panel a and b represent macroeconomic stability but in panel a F.E. is steeper than L.M and (B) LM is steeper than F.E. curve which is divided into six zones of economics problems which are given in the following schedules.

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Each zone consists of particular set of problem which required to be overcome through corresponding appropriate policy or policy mix.

There are different exchange rate policy rate which are required to take into account at the outset of the assignment. For the sake of simplification we assume two types of exchange rate policies:

1) Fixed exchange rate policy.

2) Flexible exchange rate policy.

Macroeconomic stability through M.F. policies under F.E. rate system and policy.

**h) Fiscal Policy and Macro-Economics Stability (effect of fiscal policy) on Macro-Economics Stability.**

Let us presume that the economy is having internal and external balance and fiscal policy disturbance caused by increased government expenditure is introduced. This will shift the IS curve immediately to the right from I_o S_o to I, S_i.
Figure 12: Fiscal policy & Macro-Economics Stability (fixed)

![Graph showing IS and LM curves with fixed exchange rates](image)

Figure 13: Fiscal Policy & Macro-Economic Stability (flexible)

![Graph showing IS and LM curves with flexible exchange rates](image)
If however government turned around and applied M.P. for achieving internal balance and F.P. or external balance (retaining the fix exchange rate policy) the consequences of the economy would be disastrous because this kind of inappropriate assignment would exacerbate the problems of inflation and unemployment as well as balance of payments.

Therefore need for government to formulate and apply policy measures to attain B.O.P. equilibrium arises only under system of fix exchange rate but in freely fluctuating exchange rate system external balance is achieved automatically which of course does not guarantee internal balance. In other words, in a system where prices interest rate and income level are flexible external similarly balance can occur without exchange rate flexibility but once again this will be achieved at the expense of internal balance.

The present world including India is largely characterized by capitalist form of society where crucial prices of goods and services, capital, real national income and exchange rate are allowed to vary freely in response to market forces. Hence achieving internal balance and external balances consistent with relatively fluctuating exchange rates. Hence become matter of government policy in which internal balance refer to domestic full employment with price stability, which can be achieved through M.P. and F.P. as discussed earlier diagrammatically and external balance refer to equilibrium in B.O.P. which can be achieved automatically through market mechanism.

In short now there is only one objective of government policy to achieve internal stability through two policy instruments that is M.P. and F.P. which are available to government. Therefore the present study aims at analyzing the internal
stability and related problems arising out of the (theoretically) discussed postulate and problems after implementing new economic reforms that is L.P.G. (liberalization, privatization and globalization) policy in India since 1991.

Before we go on further with the discussion of M.P. and F.P. in relation to internal and external balance let us briefly take a look at an alternative geometrical presentation of the relative impact of the two polices on the B.O.P. equilibrium of a country.

**Figure: 14 Balance of Payment Adjustment Issues**

Originally, we have an IS-LM intersection at point a (in panel I) giving us an equilibrium national income level, $Y_0$ and interest rate, $r_0$. Income level $Y_0$ in panel two = the income level $Y_0$ in panel one. At this income level $Y_0$ the trade deficit, or current account deficit (represented in panel 3) = $O_j$ because in panel 3 the trade balance schedule $T(y)$, is drawn on the basis of the assumption of a given marginal propensity to import, such that at income level $OY_0$ there would result a trade deficit equal to the size $O_j$. This is current account result of $OY_0$ level of national income.
The capital account result stems from interest rate. In panel 4, you will see that interest rate, \( k, r_0 \), and the net capital inflows-capital inflows minus outflows-are of the order of the size \( O_l \). The capital balance schedule, \( K (r) \), is drawn on the basis of an assumption of interest elasticity of capital flows, such that at interest rate \( r_0 \), there would result capital account surplus equal to the size, \( O_l \). You will therefore clearly notice that at income level \( Y_0 \) combine with interest rate \( r_0 \), there is a current account deficit of \( O_j \) which is exactly matched by a capital account surplus of \( O_l \), so as to give us an overall balance in the countries B.O.P. notice that \( O_j = O_l \).

i) Policy Disturbances

Now let us introduce policy disturbances. A fiscal policy disturbances caused by, say increase in government expenditure shift the IS schedule to the right. This will result in increase in income from \( Y_0 \) to \( Y_1 \), and increase in interest rate from \( r_0 \) to \( r^* \). This income and interest increases have the effects on current and capital account deficit and surplus increase such that there is once again the overall B.O.P. equilibrium.

If however there is a monetary policy disturbance caused by an increase in money supply, the result on the B.O.P. situation would cause disequilibrium. In panel 1 the LM schedule would shift to the right from \( LM_0 \) to \( LM_i \) causing national income to increase from \( Y_0 \) to \( Y_1 \) but interest rate decrease from \( R^q \) to \( R^2 \). This income and interest changes resulting from monetary disturbances, cause current account deficit to increase from \( O_j \) to \( O_p \) but capital account surpluses to decrease from \( O_l \) to \( O_d \). These analyses again tell us that B.O.P. changes are relatively sensitive and more definitely predictable with respect to changes in monetary policy rather than fiscal policy. All this is subject to certain underlying assumptions. One can therefore argue that monetary policy is a more appropriate policy instrument for B.O.P. adjustment.
and fiscal policy is a more appropriate instrument for achieving or preserving internal balance. If however, the government turns around and applied monetary policy for achieving internal balance and fiscal policy for external balance (retaining the fixed exchange rate policy) the consequences to the economy would be disastrous, because this kind of inappropriate assignment would exacerbate the problems of inflation and unemployment as well as balance of payment.

With the exercise in macro-economics aspects, this study has certain objectives for which investigation in various studies, undertaken by the researchers, as well as the role of various economists in the subject needs some more thrust to prove, governments intervention, central bank policies is not only important but essential for the stability and development of the economy.

2. OBJECTIVES OF THE STUDY

Objectives of the study are as follows:

1. Central bank of any economy plays a very important role and in India R.B.I. has played an important role in stabilizing an economy to

2. Indian economy has progressed during the plan period, with stability.

3. Monetary policy during planning period was backed by Central Bank as well as the government.

4. Monetary policy has to be supported by other economic policy to achieve the target fixed by the planners.

5. During the pre liberalization and post liberalization period monetary policy played its role. But role of fiscal policy appears to be more positive.
6. During the post liberalization period private sector as well as financial sector
played an important role for testing they are without of the economy in GDP
growth rate.

With the objectives discussed above, the hypothesis is as follows:

1. The hypothesis of the study is that government has adopted planning commission
   as planning plank for over all development of the economy.

2. Upto 1980's government's economic controls were excessive and private sector
   was not given much importance.

3. Globalization liberalization, privatization and expansion and IT revolution has
   played a unique role in high GDP growth rate after 1991-92.

4. With the view, technology IT and private sector and market expansion, financial
   sector has played an important role in the development of the economy.

5. Macro economic policy (Monetary policy specifically has been not only necessary
   but essential in curbing inflation exchange rate.

6. Private Sector in the post liberalize arena has brought Indian economy at the
   forefront as the second best developing nation in the world.

   With the objective and hypotheses of the study most of the data is the
published data by the RBI reports, currency and finance, Planning Commission. Five
year plans expenditure and revenue and central government budgets. To keep up with
the pace of financial fiscal trends, it was also necessary to take the support of various
other publications viz. The Economic Survey, published on yearly basis. Trends of
banking – RBI publication, Centre of Monitoring Indian Economy (CMIOEE).
Statistical data published by Tata Consultancy has also been referred for tally of data.
This secondary data has been mostly used for the purpose of knowing the actual trends of the Indian economy. A few experts on the subject have been consulted to have their views on financial and fiscal views on the Indian economy and their impact. The methodology follows:

3. RESEARCH METHOD

The period of the study is before independence period 1951-1989-90. After 1990-91 (liberalization period) a dual strategy of public sector and private sector, functioning together, the government adopted various monetary and fiscal policies for economic growth with stability.

Money plays an important role and so is the role of financial Institutions. If money plays a role of a servant then it is very useful for the society as well as for the economy as well as whole. And if it plays the role of a master it may unbalance the society as well the economy. Less money leads to depression, excessive money in the economy leads to inflation. (Classical view) Whatever may be the situation often economy in the modern conditions, both ways depression and inflation are not useful to any economy. The monetary policy in any economy plays an important role. It stabilizes the economy and fastens the development process. Similarly distribution of income, reduction in deficit, distribution and redistribution, allocation of resources should be undertaken by fiscal policy.

Keynes has rightly said that combination of both the policies monetary policy, supported by the fiscal policy plays an important role in stability of the economy as well as its growth. In the methodology used in this study inter relationship correction and expectations and significance of variables compared with other aspects, is taken into account.
Again the model used for getting the result is being similar to Ordinary Least Square and Variance Auto Regression which has been run by this communication forms. Variance would explain the degree of change with the above methodology and published data is utilized with the anticipation of getting factual true result.

4. HYPOTHESIS

As discuss above it is necessary for any discussion for that it should format hypotheses.

R.B.I. has played very important role in forming monetary policy of Indian economy for the period 1961-2006 to there is co-relationship with nation income and growth rate of monetary average, inflation rate, foreign exchange rate.

Finding out such relationship monetary policy toes for re-equality those variables for testing two periods pre-liberalize and post-liberalize period.

To test these statistical methods has been used to know the effect of instrument used for monetary policy by R.B.I. and for the effect as it work monetary policy works accordingly.

Monetary policy post-liberalization period 1991-2005, 2006. For testing the macro variables chapterisation is like this the whole study has been divided in different chapter to move up in logical forms following chapters are imbedded.

Second chapter in the form of literature of study of different author and out come to it some study of India is also taken in this chapter.

Third one focusing on changes in monetary as well as fiscal policy which have relationship hypothesis.
Fourth one highlights role of government informing macro economic analysis such variable and what type of effect during the years taken in this study.

Fifth one pertaining to change to place post-liberalizes period beginning from 1990, 1991 to prove that whether it match hypothesis of the study which is tested through actual result traversed by the result shown by government or by government publications

Sixth one focus on various distorts of monetary policy analyzing various problems arising in the economy and policy adopted by the authority.

Last chapter pertain to conclude to the policy implication and limitation of the study and need for further study.

To cope up with the above discussion and make the dissertation more logical and interesting, chapters of the study are as follows:

5. CHAPTER PLAN

In the methodology used in this study inter relationship, correction and expectations and significance of variables compared with other aspects is taken into account.

Again the model used for getting the result lis similar to Ordinary Least Square and Variance Auto Regression which has been run by this communication forms. Variance would explain the degree of change with the above methodology and published data is utilized with the anticipation of getting factual true result. To cop up with the above discussion and make the dissertation more logical and interesting, chapters of the study are as follows:
In the first chapter introductory as well as perception of the macroeconomic policies has been discussed, giving the base of Keynesian and the hypothesis methodology and chapterization.

In Chapter two surveys deals to the summary of literalized in which studies by different authors and their view a discussion.

Chapter four focuses on the Indian economy.

Chapter five discusses monetary and fiscal policies.

Chapter six discusses economical financial fiscal reforms changes, and

The last chapter deals with conclusions of the society, suggestions, limitations and a need for further research in the subject.