LESSON: Monetary Policy

LESSON DEVELOPER: Ishita Sachdeva

UNIVERSITY: Delhi University

After reading this chapter, the students will get insights into:

1. The basic concept of Active and Passive Monetary Policies.
2. The debate of the choice between active and passive monetary policy.
3. Objectives and Targets of monetary policy.
4. Criterion for choosing Intermediate Targets
5. Criterion for choosing Operating Targets

1. Introduction

In basic economic literature, that the students of Economics have had been introduced in their previous courses is that an economic system is divided into two basic categories of Money and Goods Market. Goods market is identified as the Real sector of the economy in which tangible goods and services are produced that when aggregated narrate the actual production capacity of the economy. However, it would not be right to call it as Production capacity, since nations sometimes under or over produce than their potential output generating capacity. However, it can be understood that when output of goods and services in the whole economy is aggregated, what we get is the Domestic Product of the nation as a whole.

Separate from this real market of goods and services, lays the money market in which entities operate with monetary mechanisms to determine the monetary valuation of the produce generated in the real sector of the economy.

Simultaneous and efficient functioning of the two markets completes the basic economic structure of any given nation. The two markets may be segregated under the basic premise of the functions or the nature of activities that undertake in the two markets, but have been found to be interlinked or interdependent.

In the light of this interdependence, it should be acknowledged that policies to regulate the respective markets also do not have their implication for the single market, but the impacts are rather widespread to cover all functioning aspects of both the markets.

www.memegenerator.net

This interdependence can be understood from the very recent phenomenon of decline in oil prices and its implications for real sector of the economy. The decline in international oil prices has led to the rise in oil imports, thus reducing the demand for oil from domestic manufacturers. This has slowed down or negatively impacted the real sector of the economy.

Thus, we can establish from this instance and the discussion that all markets are interlinked and thus no policy to curtail or boost the slowdown or expansion in any market can leave the other market untouched or unaffected.

In the coming sections, we shall briefly try to understand the basic forms of policies that prevail in the monetary sector of the economy. How these policies influence the functioning of the money market and what are its implications for the real sector.

2. Active Monetary Policy

An active monetary policy can be defined as one in which monetary central monetary authority in any given nation forms the discretionary monetary policy for the nation based on the economic conditions that prevails that future course that these conditions may take. Thus, under active monetary policy, the central bank of the nation may decide the actions to be taken or not to be taken based on its assessments of the economic situation of the country.

However, such assessments are not done overnight but are scrutinized on a regular day to day and year to year basis. Such policies are framed in order to boost or help materialize the maximum economic output with maximum employment and a satisfactory level of inflation.

The central banks not only boost the maximum output, but may also make monetary rules to stabilize the economic boost that may appear which the monetary authorities fear may lead to instability in the long run.

Thus the basic purpose of undertaking such policy is to not let the market take on the entire course over the economic system as total market freedom has also led to the drastic implications for various economic systems. Thus, the central authorities with their regular scrutiny and assessments frame the most suitable policies for the nation that keeps the economic variables of output, employment and inflation within their achievable limits and to avoid any sort of instability that is feared to come with time based on the present economic conditions.

In an active monetary policy, tools are relied upon to undertake decisions that ultimately impact the level of money supply in the economy. For instance, as an outcome of the US recession in 2008, the Federal Reserve bank in the nation undertook the policy of cutting on the interest rates in order to surge the demand for capital goods between banks and private companies so that a push or stimuli can be generated in the real sector to accelerate the pace of production in the real sector of the economic system.

Active monetary policy thus acts to reduce the economic burden or prevalent or feared economic burden that may come from instability of the economic system such as boosting production to reduce unemployment.

3. Passive Monetary Policy

In passive monetary policy, there are no day to day or year to year assessments undertaken by the monetary authorities in order to influence the kind of magnitude of economic activities to prevail in the nation. In a regime of passive monetary policy, the financial and economic conditions that prevail today in the nation very greatly influence the conditions to prevail in the future. However, since this is an era of globalization, the future economic scenario is not only influenced by the domestic mechanisms but also the financial and economic turmoil that may take place in the trading or the neigh-bouring nations.

The passive monetary policy can be identified as a regime in which money supply is determined endogenously within the system. For instance, in an era of boosting economic conditions together with rising interest rates will lead to foreign currency inflow in the nation, thereby increasing the supply of money.

Here the objects of monetary policy such as interest rates are not determined or influenced by the discretionary rules of the monetary authorities but are rather determined by what the worldwide economic scenarios may permit.

Similarly, no inflation targeting exercises are also conducted by the central monetary authorities.

The most immediate implications of a passive monetary policy is that instability may prevail which cannot be corrected by domestic actions since the monetary authorities tie themselves to conduct a passive policy.

The economic burdens of this instability may sometimes be huge which may even lead to crash of the whole economic system. The cost of this burden may involve great unemployment, underemployment or over-employment, excessive inflations or deflations. The peaks and troughs attained under such an endogenous system may prevail for a very long duration of time and the recovery from them may become even difficult with time.

Source: money.cnn.com

However, it should be remembered that not all active monetary policies are good and not all passive ones are bad for the economic system. This is in fact, a very big topic of macroeconomic debate where some proponents argue in favor of active monetary policy based on the notions of the incapacity of the economic systems to recover from shocks unanimously on their own based on automatic stabilizers. As per them the cost of unstable economy can be reduced with active monetary policy.

Whereas, the proponents of passive monetary policy vouch for it based on their belief of automatic self-correcting mechanisms of the economy which operate in the form of natural market forces and automatic stabilizers.

4. Monetary Policy Objectives and Targets

As discussed in the previous sections, that monetary policies do not only affect the monetary sectors in the economy but have their repercussions for the real sector of the economic system as well. Thus, considering these interlink-ages between the two markets, monetary and fiscal policies are undertaken to boost the functioning of any given market. Since the monetary sector also influences the real sector of the economy, various goals of monetary policies is defined which cover the real and monetary dimensions of a given economic system. We shall discuss the various objectives of monetary policy in the following sub-sections.

I. High Employment

One most basic yet significant objective of the monetary policy is to ensure high employment in any given nation. This is a very significant objective and the fulfillment of it is even more important since employment is directly linked with the production capacity of a given nation. With high unemployment, a nation's resources and its manpower remains idle which leads to constraints on the productive capacity of the economic system as reflected in the GDP of the nation. Thus, monetary policies are undertaken from time to time to boost employment in the real sectors of the economic system. One such tool of fulfilling this target is to cut down on interest rates so that investment is accelerated and a positive stimulus is created in the market system as a whole.

However, it should be understood that a nation cannot achieve full employment, since some unemployment always prevail in the form of frictional unemployment. Thus, this objective of the monetary policy is to target full employment at which unemployment is also positive and at which the demand for labor equals the supply for it. It has been termed in the economic literature as "The natural rate of unemployment".

II. Economic Growth

Closely related to the goal of ensuring high employment is the objective of boosting economic growth. Economic growth is the defined as the rise in the national income of the nation. The growth in income comes from better and efficient utilization of the economic factors in the production process. However, if the economic is already going through a phase of underemployment or unemployment then it does not pay a firm to invest hugely in capital equipments and machineries when the already prevailing equipments are lying idle due to unemployment of man force.

Thus, even though the objectives of high employment and economic growth are interlinked, the proponents of the supply side economics propose or suggest measures that can be taken to pursue the target of economic growth separately by measures such as by providing tax-benefits to businesses, by boosting savings that can turn as funds for larger investments.

III. Price Stability

Another well known and preached target of the monetary policies undertaken by Central Monetary Authorities in any nation is to ensure stability of prices or to avoid excessive inflation or deflation. The price instabilities create great economic and social costs for the nation. With rising prices, people form the expectation of even higher prices in the future which creates uncertainty in the market place which may even hamper the prospects of economic growth for the nation.

The case for price stability is also recommended to avoid the most extreme form of price instability that exists in the form of hyperinflation. With high inflation or even hyperinflation, the decision making attributes of the economic agents become problematic or cumbersome. With inflation, there occurs a great amount of uncertainty in the people's everyday decisions and their decisions to efficiently invest for their future needs. Also, with continuous inflation, the struggle to get wage hikes gain momentum which leads to the wage-price spiral. Thus, price stability appears as a major goal of any monetary policy of a nation.

IV. Interest Rate Stability

A basic target variable in the monetary policies has been interest rates for decades a vast majority of economic policies of the nations. Interest rates are directly influenced by altering the levels of money supply in the monetary policy regime. Just like there are prices of economic goods, the price of currency or other monetary assets such as bonds, shares is the interest rate. Thus, maintaining stability in this economic variable is equally important as it is to ensure price stability.

Fluctuating rates of interest also generate a great amount of uncertainty in the economic system. With unstable interest rates, a major chunk of financial good becomes unattractive for the consumers who save to ensure a certain amount of income flow to them in future. This leads to the scarcity of investment funds available in the markets for the production units to invest. This therefore curtails or hampers the process of economic growth.

V. Stability of Financial Markets

The stability of financial markets is also essential in order to built and sustain a conductive investment environment in a given economic system. Financial markets being the sellers of financial assets that mobilize the funds for investments from the consumers to the firms greatly influence the volume of the flow of funds that may take place between these economic units. Thus, a major objective of monetary policy has also been recognized as the stability of these financial markets, one which is free from the risk being crises prone.

The objective of interest rate stability also contributes to the maintenance of stability in the financial markets. With this, the goal of attaining stability in the financial markets becomes even bigger and immediate for the monetary authorities.

VI. Stability in Foreign Exchange Markets

With the basic nature of each economy becoming global in the sense of being an integral part of the global economic system where countries are connected to each other based on the market activities of trade, social and economic assistance etc, the objective of maintaining stability in the foreign exchange markets has become one of the most sought objective for the monetary authorities. Since with excessive fluctuations in the foreign prices of the domestic currencies, destabilization not only occurs in the domestic nation but also in the trading partners economic and financial systems which even spill over to a great number of countries in the world, the goal of maintaining foreign exchange markets has become very crucial to maintain a credible economic environment in the given country.

Conflict among Goals

As discussed in the previous sub-sections many of the objectives are interconnected and are mutually consistent such as ensuring economic growth and high employment go hand in hand. Similarly, interest rate stability also promotes stability in the financial markets. However, there are also conflicts among the cited objectives. For instance, the goal of price stability hampers or does not lay in line with the goals of interest rate stability and high employment in the short run. In a phase of economic expansion, inflation and interest rate both have a tendency to rise. Thus, if central bank commits itself to stabilize the interest rates, this may lead boost further economic output expansion and thus imply a rising price level. On the other hand, any attempt by the central bank to prevent a rise in interest rates to restrain prices from rising, is met by rising unemployment in the short run.

In the next section, how central banks undertake decisions to frame monetary policies with a good range of targets amid such consistencies and conflicts between policy goals.

Central Bank Strategy: Use of Targets

As discussed in previous sections, it is the responsibility of the central bank or any national monetary authority in a nation to maintain or ensure the existence of a sound monetary or financial environment in a nation. It is rather not their responsibility but a duty vested in them. We have discussed various goals that central monetary authorities of a nation usually have in their consideration. These goal are inconsonance with the pre-conditions that ensure a sound monetary environment in a given nation's financial system.

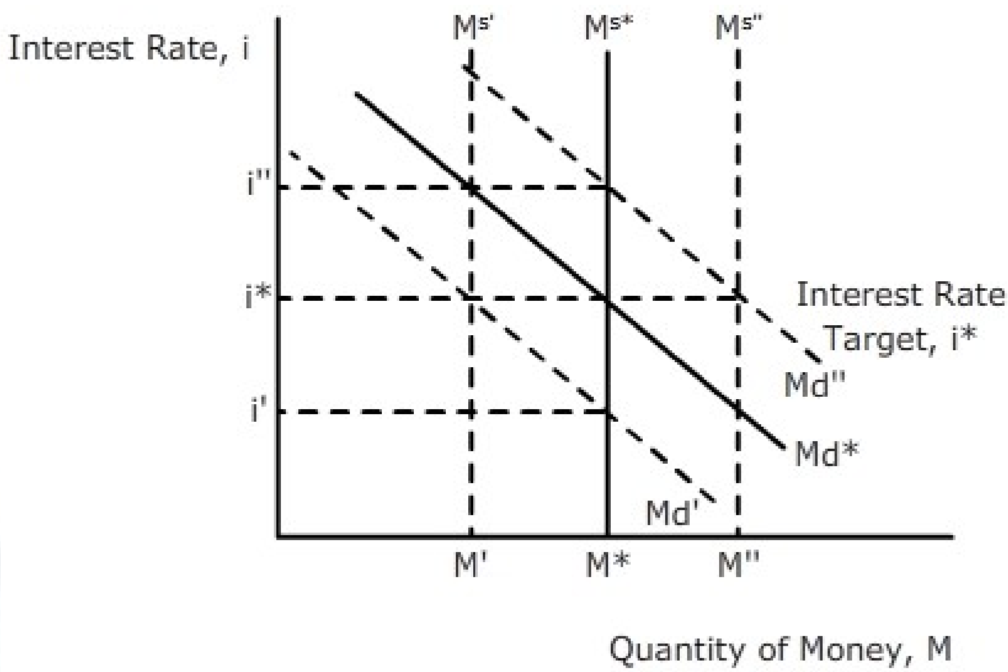
Keeping these goals in sight, the authorities choose various strategies to ensure the fulfillment of these goals. The basic medium with which the monetary authorities indulge in to fulfill these goals is to choose "***Intermediate Targets***". The intermediate targets are the target variables that lie between the tools and the achievement of goals. The central bank or any other monetary authority chooses the medium or short term target variables which act to lead the authorities to the achievement of their final goals. The basic advantage of choosing intermediate targets is that the results of these targets can be observed in a short period of time which enables the central monetary authorities to judge whether the policy formulated to achieve the final target is pursuing on the right track or not.

However, in a large number of cases, the central monetary authorities do not actually go for the intermediate targets but rather it selects another category of variables called as "***Operating Targets***" or instruments. This is because, sometimes the tools at the disposal of monetary authorities even fail to impact the intermediate targets. These operating targets include reserve aggregates such as monetary base, non-borrowed reserves, reserves etc or interest rates.

Thus, the strategy operates in the manner of central bank first deciding on its goals and then choosing operating and intermediate targets which are directly and quickly responsive to the tools of monetary policy. With this strategy, long term damage to the financial system is avoided as the corrections in the tools are made in the short run based on the short term responses.

Choosing the Targets

In the previous sections, we analyzed that Central banks chooses operating targets to achieve their final goals. These operating targets are majorly categorized as monetary aggregate targets or interest rate targets. However, in this section we will try to demonstrate that keeping both the targets simultaneously is incompatible.



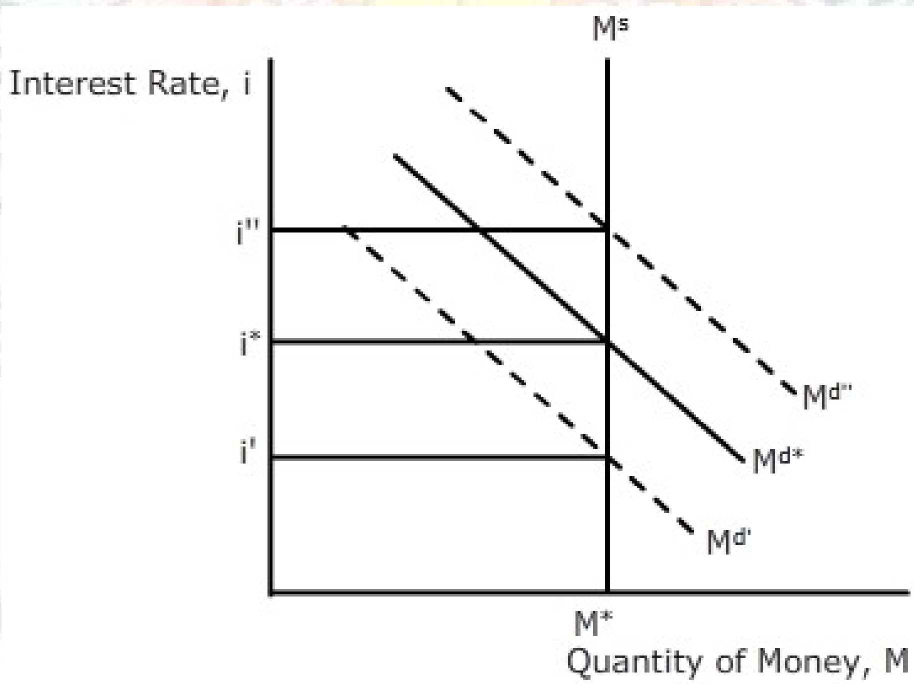
Let us first analyze the following figure keeping in mind that the central bank chooses a 4% growth of the money supply based on the monetary target of M2 to achieve a 5% growth rate in nominal GDP. The other possible way to achieve such an objective or growth is to lower the rate of interest to say 3%. However, the twin targets of monetary base and interest rates cannot be simultaneously employed. This can be understood from the following demand supply analysis of the money market.

In the figure as illustrates, the market demand curve fluctuates between $M^{d'}$ and $M^{d''}$. There can be further fluctuations between Money demand based on the changing economic conditions or other preferences of the public that will alter the portfolio of their monetary assets and money that they desire to hold. The central bank's target of M2=4% leads it to expect to the money supply to be at the level of M*.

With the money supply and money demand targets the central banks desires the interest rate to be at the level of i*. However, as observed, the money demand curve has been assumed to be fluctuating between the levels of $M^{d'}$ and $M^{d''}$. With the fluctuating money demand the interest rate also fluctuates between i' and i''. Thus, this leads to the conclusion that keeping a monetary aggregate target leads to the fluctuations in interest rate.

As indicated in the diagram, With the money supply of M^s, and the desired level of money demand of M^{d*}, the target interest rate lies at the level of i*. However, let us suppose that the real level of money demand exists at the level of $M^{d'}$, which with the monetary target of M2 leads to the interest rate to fall below the desired level of i*. Similarly, when the demand for money exceeds the desired level of M^{d*} to $M^{d''}$, the interest rate exceeds the desired level and settles at i''.

Similarly, let us now observe what happens when the central authorities choose the target of maintaining the interest rate target at the level of i*. Again, the desired level of money demand is M^{d*}, however it fluctuates between $M^{d'}$ and $M^{d''}$ due to changes in economic conditions or people's preferences between holding money and bonds.



If the level of money demand fluctuates and results at the lower level of $M^{d'}$, the interest rate will fall to the level of i'. However, with the interest rate target, the central bank prevents this fall by selling bonds in the marketplace or conducting open market sales or the governmental bonds which leads to a fall in the price level of the bonds and increase in their returns of interest rates. In this way, Money supply declines to the level of Ms' at which the interest rate target of i* is achieved.

Similarly, if the money demand curve turns out to be Md'', the interest rate develops a tendency of rising upward to the level of i''. In order to maintain the interest rate target of i*, the central bank will indulge in open market purchases driving the level of money supply to the higher level of Ms''. With open market purchases, the price of the bonds increases while their return decreases. Thus, the interest rate target of i* is achieved.

Thus, the conclusion follows that Central bank cannot pursue both the targets simultaneously. The twin target is like the blades of scissors, where the two cannot be simultaneously carried out. With a predictable effect to be made on the goal, a choice is made by the authorities between the monetary or interest targets.

Criteria for Choosing Intermediate Targets

The central bank however does not select intermediate targets randomly. These targets though are chosen with the basic objective of achieving the final policy goals, however, there are certain criterias based on which these targets are often selected. The three criterias are the following:

1. **Criterion of Measurability**

   Under this criterion, the central bank's basic objective is to track the movements in their intermediate targets on a more regular basis. The interest rates and monetary aggregates though are more measurable than the final goal of a GDP target, both the intermediate targets suffer from the various drawbacks. The data for monetary aggregates is available for every two-weeks however these aggregates are subject to great amount of revisions.

   Data on interest rates is more frequently available, but the nominal rate of interest is regarded as a poor measure of borrowing. The real interest rate remains hard to measure. With the drawbacks so defined, the authorities are left with little choice and choose a target which better meets their needs of achieving the goal.

2. Criterion of Controlability

Since, the basic objective of choosing the intermediate targets is to achieved the desired policy goals, a good intermediate target must satisfy this criterion, since if the fluctuations or movements in this cannot be controlled or influenced by the monetary authorities, the fulfillment of the policy goal becomes out of reach for monetary policy makers.

The central banks posses a great amount of control over the money supply, however this control is not perfect. In fact, the fluctuations in interest rate are more in control of the monetary authorities which can influence it by conducting open market operations. Thus, nominal interest rates are superior intermediate targets when judged on the basis of controllability criterion.

3. Criterion of Predictable effect on goals

This is the most important criterion based on which any intermediate target is selected. The monetary authorities select the targets of monetary aggregates or interest rates based on their better linkages with the final goals.

Criteria for choosing Operating Targets

The criteria for choosing operating targets remain the similar as those for the intermediate targets. However, these targets are better selected based on the choice of the intermediate targets. That is those targets are usually selected as operating targets which are measurable in a short period of time and which are controllable so that desired effects can be observed on the achievement of intermediate targets. Thus, the operating targets are ones that have the closest linkage with the intermediate targets.

Exercises:

Ques.1: Which of the following is a criterion for choosing an intermediate target?

a) Measurability
b) Controllability
c) Both a and b
d) Neither a or b

Ques.2: Which of the following is not a criterion for choosing an intermediate target?

a) Objectivity
b) Predictable effect on goals
c) Both a and b
d) Neither a or b

Ques.3: Which of the following is a monetary policy objective?

a) High Employment
b) Price Stability
c) Both a and b
d) Neither a or b

Ques.4: Which of the following can be chosen as a target variable for achieving growth in GDP?

a) Monetary Aggregates
b) Interest Rates
c) Both a and b
d) Either a or b

Ques.5: The most immediate target chosen to fulfill a final policy goal is termed as :

a) Intermediate Target
b) Operating Target
c) Both a or b
d) Neither of the above

Ques.6: Briefly discuss the concept active and passive monetary policy.

Ques.7: Write a short note on the various monetary policy objectives.

Ques.8: What are intermediate targets? Define their significance for achieving final policy goals?

Que.9: What are operating targets? Define the criterion for choosing the operating targets.

Ques.10: What conflicts arise in simultaneously choosing two intermediate targets for the fulfillment of final policy goal? Illustrate with an example.

References

Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.

F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education,6th edition, 2009.