Economics of Banking and Finance Markets
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Lecture - 58
Monetary Policy: Tactics and Strategies - I

Hi everyone. Welcome to this session. The main objective of this session is to discuss various Strategies and Tactics in the conduct of Monetary Policy. In the previous sessions we have discussed various tools that are being used in the conduct of monetary policy.

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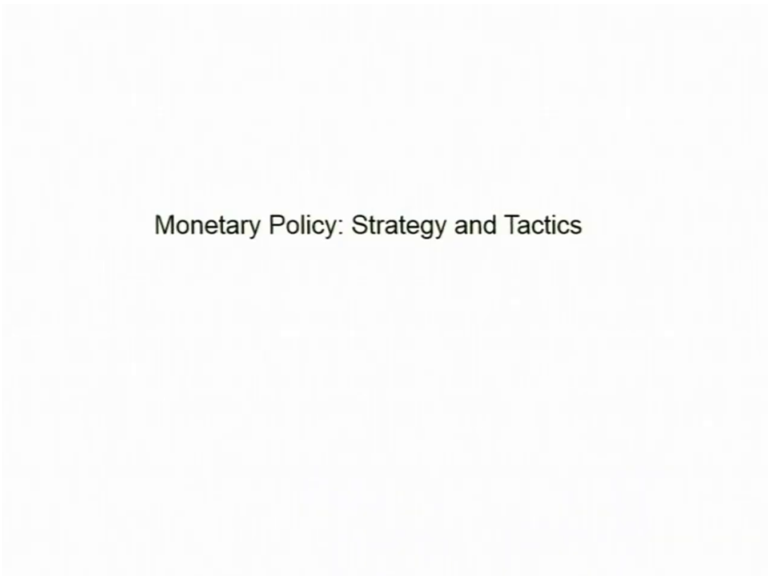

Our focus here will be: what are the further developments in the conduct of monetary policy across the globe?

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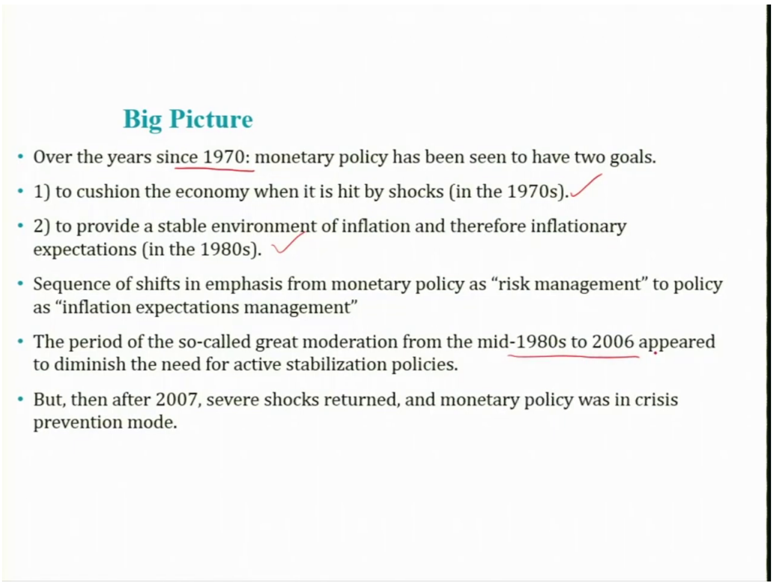

So, visualizing a big picture, how monetary policy have been used in the management of macro economy. So, over the years since 1970, monetary policy has been seen to how two goals. One is to cushion the economy when it is hit by shocks, especially in the 1970s.

And the other one is to provide a stable environment of inflation and therefore, inflationary expectation. So, this was in 1980s. So, the sequence of shifts in emphasis from monetary policy as "risk management" to policy as "inflation expectation management" has happened over time. So, you can recall from our previous discussions that is since 1930s to 1970s, the discussion was mainly between a choice between fiscal policy and monetary policy.

The early Keynesian economics till 1930s to 1960s argued that fiscal policy is more important than monetary policy; however, in the 1970s, the monetarism argued that monetary policy can make impact on the economy, especially in the short run.

Then, people began to appreciate the importance of monetary policy as well in the economic policy. So, especially in the 1970s, when stagflation hit across the world; that means, high inflation with the low economic growth and many economies began to aggressively use monetary policy as a tool to counter the stagflation problem.

Since 1970s, the debate between whether monetary policy or fiscal policy that question that debate was over; even new Keynesian also began to agree that monetary policy is also important. So, finally, an agreement came, a consensus came that both fiscal policy and monetary policies are important.

Then the further interest was on monetary policy. So, monetary policy then it has been used to cushion against if it is hit by shocks, a demand management or to ensure that the economy is on track; another, to ensure a stable environment of inflation and to reduce the inflationary expectations. So, the period of the so-called great moderation, from the mid-1980s to 2000 appear to diminish the need for active stabilization policies.

It was mainly for not as a part of macroeconomic stabilization, but to ensure a stable environment of inflation. So, that was the period from 1980s to 2006. But then after 2007, as you know because of the 2007-09 crisis, because of the severe shocks returned, the monetary policy was again in its crisis prevention mode.

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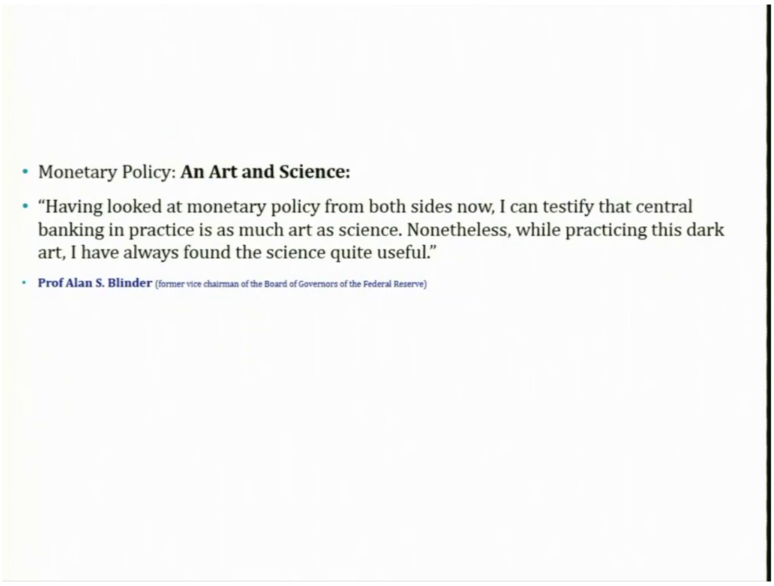

Thus, the further interest was mostly on how to conduct monetary policy instead of a choice between fiscal policy and monetary policy.

So, let me quote one statement from Alan Blinder; to him a monetary policy is an art as well as a science. So, I am just reproducing his statement "having looked at the monetary policy from both sides now, I can testify that central banking in practice is as much art as science. So, nonetheless, while practicing this dark art, I have always found the science quite useful".

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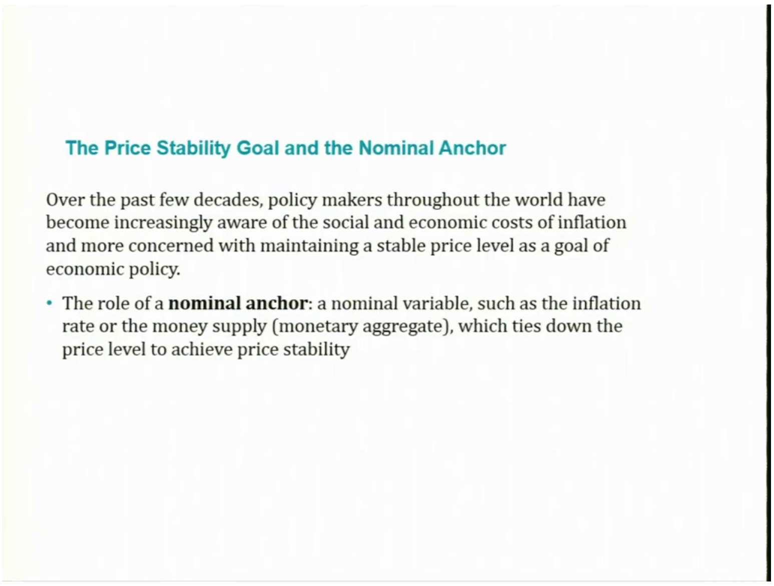

So, over the past few decades, policy makers throughout the world have become increasingly aware of the social and economic cost of inflation and more concerned with maintaining a stable price level as a goal of economic policy. So, coming to the social cost of inflation, we have several empirical studies showed that the inflation hits the poor most.

And similarly, the economic cost is, if there is hyperinflation, it has been found that a rise price level creates uncertainty in the economy and that uncertainty might hamper economic growth as well. So, in that way it affects both socially as well as economically.

So, as a result, the policy makers have been looking for a nominal anchor; that means, because price stability is so crucial in the long-term health of an economy, a central element in successful monetary policy is the use of a nominal anchor; that is a nominal variable such as inflation rate or the money supply which ties down the price level to achieve price stability.

So, adherence to a nominal anchor that keeps the nominal variable within a narrow range promotes price stability. It promotes price stability by directly promoting low and stable inflation expectation.

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However, there are other goals as well; other goals of monetary policy include, five other goals continuously mentioned by the central bank officials across the globe; this includes high employment and output stability, economic growth, stability in financial markets and interest-rates stability and stability in foreign exchange markets.

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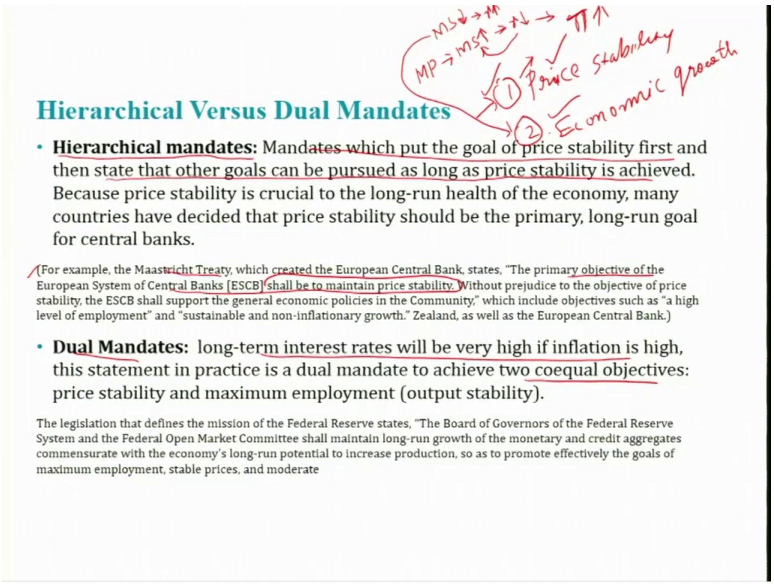

So, to achieve all these goals, mainly the discussion was centered around mainly two aspects: one is on the price stability and the other one is economic growth. Economic growth includes growth in GDP as well as stable employment level.

So, in the long run, no inconsistency exists between the price stability goal and other goals that we discussed. So, there is a discussion, because of the price stability is crucial to the long run growth of the economy, many countries have decided that the price stability should be the primary long-run goal for Central Bank.

So, in this way, because of that, countries began to follow a hierarchical mandate; that means, a hierarchical mandate of prioritizing price stability over the economic growth.

And the objective here is, suppose if the central bank increases the money supply, then you know the rate of interest will decline; then as a result, what is happening here is that there is the adverse impact of increase in price is going to happen, because, if there is too much liquidity in the economy; that means, too much money chasing few good scenario may come up. So, as a result, we can say that inflation may happen.

So, if the countries follow expansionary monetary policy, then you know that inflation will be an adverse outcome of that. Suppose if they prioritize inflation is their main challenge then, instead of increasing money supply, they should be reducing money supply; that means, reducing money supply by increasing rate of interest or in both way it works, increasing rate of interest also will reduce money supply.

So, increasing rate of interest is a contractionary monetary policy. Then the cost here is that, if they follow a contractionary monetary policy; obviously, they can reduce liquidity in the economy and the same route they can control inflation.

But the cost here is that, when money supply is reduced and rate of interest is increased, then you know that it will hamper economic growth. You know, why? Because high rate of interest means the cost of borrowing for productive units, that the firms, increase then as a result production of goods and services will fall.

So, that means, they cannot focus on both, an expansionary monetary policy is good for economic growth, but it will increase inflation. So, in this case, they must choose either of these. So, in this case many countries followed hierarchical mandates.

That means, mandates which put the goal of price stability, first then state that other goals can be pursued if price stability is achieved. Because, price stability is crucial to the long run health of the economy, many countries have decided that price stability should be the primary long-run goal for the central bank.

I am just taking a quote from Maastricht Treaty, which created by the European Central Bank is states that "the primary objective of the European system of Central Bank shall be to maintain price stability". So, that means, they are following the hierarchical mandate; that means, giving more importance to the price stability, then secondary importance is for economic growth, employment, exchange rate stability etcetera.

However, in contrast to this, there is another mandate called dual mandate; that means, giving equal importance to both; because long-term interest rates will be very high if inflation is high, this statement in practice is a dual mandate to achieve two coequal objectives; that means, both price stability and maximum employment, that is, both should be achieved.

So, for example, they give the dual mandate; that means, giving importance to both price stability, as well as economic stability or output stability.

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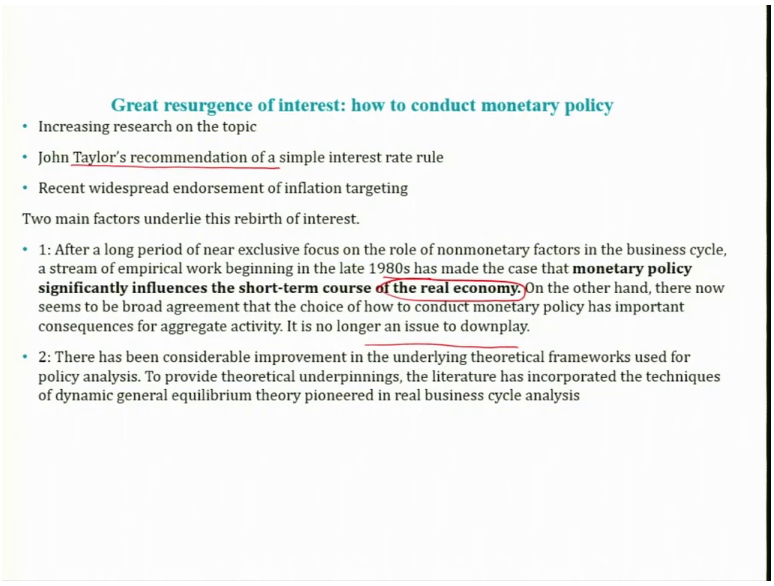

So, we can again see that, as I mentioned in the beginning of this session, there was great resurgence of interest on how to conduct monetary policy and you can see that there is increasing research on the topic, several research articles have been published on this topic, and one of the tactics that we had discussed in the previous session is the John Taylor's recommendation of a simple interest rate rule, that is the Fed fund rate should be equal to the Taylor rule, that is one of the tactics.

And, recently there are widespread endorsement of inflation targeting as well. So, 2 main factors underlie this rebirth of interest. The 1st one, after a long period of near exclusive focus on the role of non-monetary factors in the business cycle, a stream of empirical work beginning in the late 1980s has made the case for monetary policy significantly influences the short-term courses of the real economy.

So, both Keynesians and monetarism believe that monetary policy can significantly influence at least the short-term variables, at least in the short run it can help to influence the output of the economy; that means, the GDP can be influenced by monetary policy in the short run.

So, on the other hand, there now seems to be a broad agreement that, the choice of how to conduct monetary policy has important consequence of aggregate activity. How to conduct this monetary policy had gained more momentum.

So, it is not just that just a monetary policy is going to influence the short-term course of the real economy. It also depends, how do we conduct monetary policy? What are the tools that we use? And what are the tactics that we use? So, it is no longer an issue to downplay.

The 2nd one is there has been considerable improvement in the underlying theoretical framework used for policy analysis. So, to provide theoretical underpinnings, the literature has incorporated the techniques of dynamic general equilibrium theory pioneered in real business cycle analysis. So, because of the lots of theoretical developments, we are now much well informed than earlier.

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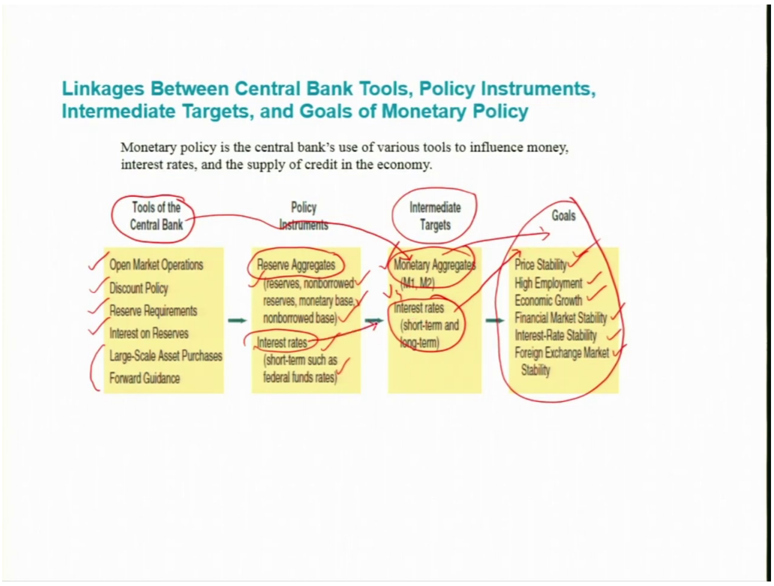

So, let me now show you the linkages between Central Bank tools, policy instruments and intermediate targets and goals of monetary policy. So, here I say monetary policy is the Central Bank's use of various tools to influence money, interest rates and supply of credit in the economy, as we had discussed in the previous session.

So, the about the tools of Central Bank, we have discussed open market operations, discount policy, reserve requirement as well as interest on reserves; these are all the quantitative tools. In addition to that, some non-conventional monetary policy tools like large scale asset purchase of the financial institutions and firms who are in distress especially during crisis time.

And giving forward guidance, that is giving information to the economic agents about the future course of monetary policy matters. This is the ultimate goals that we already discussed: price stability, high employment, economic growth, financial market stability, interstate stability, foreign exchange rate stability.

To achieve these ultimate goals, over a period, central banks have been using different policy instruments; however, there are some common agreements, the tools the instrument used by one is reserve aggregate, influencing the reserves including non-borrowed reserves, as well as monetary base and non-borrowed base of the monetary base. And, also, influencing the interest rates, that is short-term such as Fed fund rates.

So, using this one, they further target some intermediate targets or intermediate goals also we can say, but not the final goal that we mentioned here. Some intermediate targets that include, one is targeting on monetary aggregates that is M1, M2 money supply aggregates; in India for example, M3.

So, either influencing on monetary aggregates or versus targeting on the intermediate goals of interest rates through which then we can make impact on the final goals. So, what I am going to show here is that there are two intermediate targets.

One is called monetary aggregates, that is money supply targeting and the other one is interest rate targets that the influencing the short-term and long-term interest rates.

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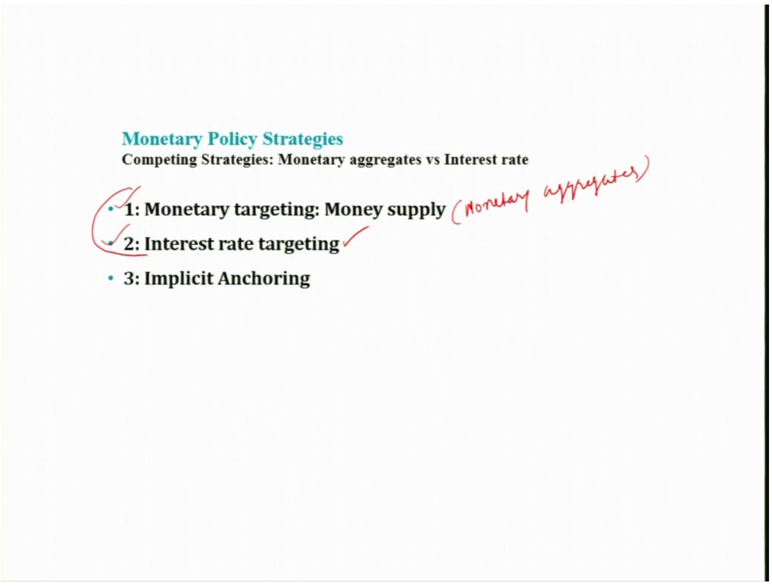

Based on this, over across the globe many central banks have been using various monetary policy strategies. So, just to say that to influence attain these goals, they can use either monetary aggregates or interest rate as the intermediate targets. So, we are going to discuss here, what are the tools, what are the targets, the strategy that central banks have been following to achieve the final goals that we mentioned here.

So, there are various monetary policy strategies, and most of these are competing strategies 1 is called monetary aggregates and the other one is interest rate targeting. The monetary targeting, that is money supply target or monetary aggregates targeting that is one policy. Other one is called interest rate targeting.

And 3rd one is called implicit anchoring; that means, without highlighting any nominal anchor; be it monetary targeting, money supply or interest rate targeting. Instead of mentioning any of these, making some implicit anchoring that also we will discuss in appropriate context. These are the 3 broad strategies, of these 2, the monetary targeting and interest rate targeting are considered as the 2 key strategies of monetary policies.

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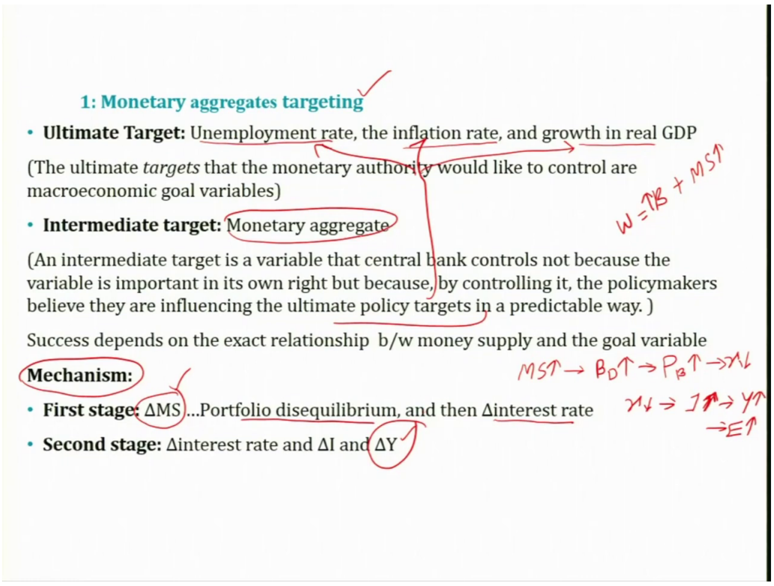

So, coming to the 1st one, monetary aggregate targeting, because the ultimate target of any monetary policy is to influence the unemployment rate, reduce the inflation rate and achieve growth in real GDP. So, here the ultimate targets, that the monetary authority would like to control are macroeconomic variables, right. So, to achieve it they must use some intermediate targets.

So, if they target on monetary aggregate then we can say that the monetary policy strategy is targeting the monetary aggregates. So, about intermediate target: an intermediate target is a variable that central bank controls not because the variable itself is important, but because by controlling it the policy makers believe they are influencing the ultimate policy targets in a predictable way.

The ultimate policy targets mean the unemployment rate, growth in GDP etcetera. So, here again the success depends on the exact relationship between money supply and goal variable. So, to explain this, how changes in monetary aggregates, targeting the money supply that is targeting the money supply or monetary aggregate, how does it affect the final variable, that is output as you know that, when the output increase employment also increase.

So, that is highly correlated. So, our point here is that, how does changes in money supply affects the outcome, that is, the final target. So, here the intermediate target is money supply. Let us discuss the mechanism, the theoretical mechanism, or the economic pathway through which the intermediate target of money supply affects the final output final target ultimate target.

So, let us recall what we had discussed in the previous sessions. So, we have seen that if the money supply has been increased. So, the central bank is following an expansionary monetary policy by increasing money supply; that means, targeting the monetary aggregate.

Then you know that, when money supply has been increased and assuming other things remaining constant in the economy, making this assumption that you know that when money supply has been increased and then liquidity increases in the economy. And as a result, you know the people are content with more money so, it creates a portfolio disequilibrium.

So, take the simple framework that we discussed in the previous sessions; that means, the total wealth is equal to the bond plus money with the people, right. These are the two assets for sake of simplicity that we have taken that the total wealth or total asset is equal to bond as well as money that they are holding.

So, when money supply has been increased, then you know that there is a portfolio disequilibrium because, people demand money to meet their transaction and precautionary motive plus some amount they will be keeping for speculative motive.

So, what we can see here is that the money supply increased, the public are having more money with them. So, they will make a portfolio reallocation of their wealth and as a result their demand for bond increases. So, that means, bond demand increases; when the bond demand increases, we can say that the price of bond increases, when the price of bond increases you know that rate of interest decreases.

So, that means, an increase in money supply leads to a decline in the rate of interest; that means, change in money supply due to the portfolio reallocation by people, then there is a change in interest rate, that is in the first stage, first phase. And then, in the second phase we can see that a decline in rate of interest would lead to increase in investment.

Because investment means investment by the firm on the purchase of capital equipment, machines and tools and setting up of new factory, expanding their capital equipment's etcetera so; that means, when the rate of interest declines, the cost of borrowing capital or cost of borrowing loanable fund decline for them. So, as a result, there will be increase in investment.

So, that means, firms are expanding their production, that means, they are hiring more laborer, buying more raw materials, then as a result you know that the GDP increases. So, GDP increases means again the employment also increases, right. So, these are in the second phase.

So, based on this theoretical pathway, policy makers follow the target of monetary aggregates targeting through its a intermediate target based on which they aim to achieve the final goal, the ultimate goal of increasing GDP, increase in employment etcetera. This is one.

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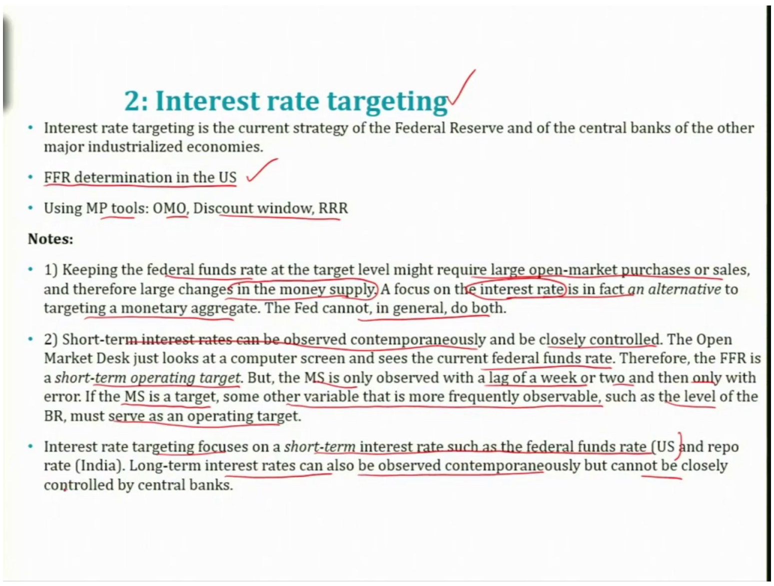

Then the alternative strategy is interest rate targeting. The interest rate targeting is the current strategy of Federal Reserve and the Central Banks of other major industrialized economies. And, as you know that the Fed fund rate determination in the US, the Fed fund rate determination in the US is nothing but interest rate targeting.

So, they are targeting the intermediate goal of interest rate to make a final influence on the ultimate goals of output employment etcetera. So, we have seen that using monetary policy tools such as open market operation, discount window, reserve requirements, as well as interest rate on reserve, the FED are using all these tools to set a federal fund rate, that is the interest rate.

And accordingly, the FED attempt to influence the final variables. A few things that you need to remember here, because keeping the Federal fund rate at the target level might require large open market purchases or sales.

So, that means, they are changing the money supply. In that way, we can say that they are focusing also on the monetary aggregate. But only they are changing, but they are not putting any target on that, but to achieve an interest rate target, they are changing money supply in the economy.

Another thing, the expectation here is that short-term interest rates can be observed contemporaneously and be closely controlled by the Fed. So, open market desk just looks at the computer screen and see the current Fed fund rate that is the short-term rate. So, the FFR is a short-term operating target. But, money supply, suppose if they target on the monetary aggregates, it is only observed with a lag of a week or two, then also with some error.

So, if money supply is a target, then some other variable that is more frequently observable such as the level of the borrowed reserves must serve as an operating target. So, because of the lag in observing in money supply we can see that the interest rate target, especially the short-term interest rate target, can be a more feasible intermediate target for the Central Bank.

So, just to summarize here that interest rate targeting focuses on the short-term interest rates such as Fed fund rate that is in the US and repo rate in India. In India too, since 2016, we have been using the interest rate targeting strategy. So, you also studied in the previous sessions; that means, the long-term interest rates are highly correlated with the short-term interest rates. So, here long-term interest rate can also be observed contemporaneously, but cannot be closely controlled by the central bank because there are some lags.

So, in this session we have discussed the monetary policy strategies that have been used across the globe. And we discussed monetary aggregate targeting and interest rate targeting.

And, in the next session, we will continue this discussion. We will also review the experience of some countries in using various strategies and tactics.

Thank you see you in the next session.

Keywords: Monetary policy, strategy and tactics, monetary aggregate, interest rate targeting, inflation targeting, hierarchical mandate, dual mandate, implicit anchoring, policy instruments, intermediate targets