Economics of Banking and Finance Markets
Prof. Sukumar Vellakkal
Department of Economic Sciences
Indian Institute of Technology, Kanpur

Lecture - 59
Monetary Policy: Tactics and Strategies - II

Hi everyone. Welcome to this session. In this session we will discuss the evolution of Fed strategy of monetary policy.

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Evolution of Fed's strategy

- In the years since 1970, the Federal Reserve's emphasis has varied between controlling the interest rate and targeting monetary aggregates.
- **1970–79: TARGETING THE FEDERAL FUNDS RATE (interest rate targeting)**
- **1979–82: TARGETING MONETARY AGGREGATES**
- The first dramatic switch in Federal Reserve policy came on Oct 6, 1979, when the FED abandoned targeting the FFR.
- Due to accelerating inflation rate in 1979s

So, in the previous session we had discussed that there are mainly two intermediate targets, that is the strategy of monetary policy of using intermediate targets, one is targeting monetary aggregates and the other one is interest rate targeting.

In this session let us discuss the evolution of Fed strategy over time by the Fed. In the years since 1970, the Federal Reserve's emphasis has varied between controlling the interest rate and targeting monetary aggregates.

That means, they have been interchangeably using either the interest rate targeting or the monetary aggregate targeting. So, twice during this period the Federal Reserve dramatically shifted from one strategy to another. So, then in 2008 as you know because of the 2007-08 financial crisis, a further shift was necessitated by the severity of the financial crisis. So, the

Federal Reserve's strategy as well as the reason for this shift, let us see review this by looking at several sub periods.

So, from the period 1970 to 79, for this period federal resource strategy in the 1970s was one of interest rate targeting. So, as is the case today the rate targeted was the Fed fund rate; that is the interest rate federal targeted at that time. Now, they have been using the same for the interest rate targeting, they have been using Fed fund rate as the instrument for that.

The strategy was not to peck the rate at any one value for a long period of time. You know that Fed fund rate over period they have been changing it. If you see that the FOMC meeting; that means, 8 times in a year they meet and every time either they retain or change. Most time they change the Fed fund rate; that means, the target rate was reconsidered at each FOMC meeting and adjusted as deemed necessary considering the state of the economy.

So, it does not mean that monetary aggregates were not neglected in the 1970s although a month-to-month basis interest rate target was given precedence. Another period, from 1979 to 82 there is the first dramatic switch in the Federal Reserve policy by targeting monetary aggregates; a dramatic switch of Federal Reserve policy came on October 6th, 1979, when the Fed abandoned targeting the Fed fund rate.

The main reason was due to the accelerating inflation rate in the 1979. So, abandoning the Fed fund rate, it adopted a strategy of directly controlling bank reserves to increase its ability to hit target ranges for growth in monetary aggregates especially m1 and m2. In the 1970s, as I mentioned, there was ever accelerating inflation was there.

So, the recession that many had expected during the year had not materialized. So, there was a great deal of uncertainty about the strength of the private sector demand as well because all these reasons Fed focussed more on the monetary aggregates because of the expectation is that, by directly targeting our monetary aggregates, it can control the ever-accelerating inflation.

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Evolution of Fed reserve strategy

- 1982–2008: A GRADUAL RETURN TO FFR TARGETING
- Due to the breakdown of the money-income relationship in the 1980s
- 1994–2012: A MOVE TOWARD GREATER TRANSPARENCY
- (forward looking MP announcements)
- Announcing the forecast on FFR by FOMC members (without name identification): future values of FFR
- 2008–2012: CONFRONTING THE ZERO-BOUND PROBLEM
- Financial crisis 2007-09.
- In 2008: Target FFR: 0.00 to 0.25 (i.e. literally, Banks won't pay other banks to take their funds)

Then, the further evolution, we can see that between 1982 and 2008, there was a gradual return to Fed fund targeting. Not only that, during this period, the Fed was following a kind of implicit targeting as well implicit anchoring, not really highlighting though, they have been using Fed fund rate targeting, that is, the interest rate targeting. But overall, they also followed an implicit anchoring, that non-using of an explicit nominal anchor for example, not highlighting FFR as the nominal anchor.

So, whenever new information comes, and depending on the situation in the economy, the Fed had been following some nominal implicit anchor to achieve the outcome. However, overall, we can say that they have been continuing with the FFR targeting, that is the interest rate targeting, by abandoning the monetary aggregate targeting.

So, the main reason for that, the reason for abandoning the monetary aggregates targeting was that the relationship between money and income. It was due to the breakdown of the money-income relationship that was observed in the 1980s, it forced the Fed to abandon the money supply (monetary aggregate) targeting and then again switch back to Fed fund targeting.

So, the instability of money demand, a phenomenon happened in the 1980s, and as a result overall there was a breakdown of the money-income relationship in the 1980s. Then during 1994-2012, though they have been following FFR targeting, there was a move toward a greater transparency. That means, forward looking monetary policy announcement, not

giving any surprise, giving a clear-cut idea what are the monetary policy going to happen in the coming days.

The objective was to give more transparency in the monetary policy. So, announcing the forecast on the FFR by FOMC members and without name identification and they also give the future values of Fed fund rate; that means, giving more hint to the economic agents about what is going to happen, what is the monetary policy look like.

Then in 2008-2012 we can see that there was the confronting the zero-bound problem. So, at the beginning of 2007-08-09 financial crisis the Federal reserve was conducting policy under a Fed fund rate strategy; that means, they have been following the Fed fund rate strategy, that is, the interest rate targeting.

So, by the summer of 2008, to reverse economic downturn the Central Bank had reduced the Fed fund rate essentially to 0; that means, between 0 to 0.025; that means, literally it means that the short-term interest rate is very low at the bottom; literally banks would not pay other banks to take their funds.

So, this is a zero-bound problem. So, that means, zero is the effective lower bound for the federal fund rate or any other nominal interest rate. So, this development led the Federal Reserve to adopt several unconventional monetary policy instruments. Though they have been using FFR, but especially during 2007-08-09 period because the deposit and credit creation process endangered by the open market purchases, the Fed has adopted many unconventional monetary policy instruments.

Also, you know that during that crisis time, the liquidity with the banking system and overall, in the economy was at a very bottom level. There was a liquidity crisis, many financial institutions failed, severe liquidity crisis, so Fed followed several unconventional monetary policy instruments.

So, these policy initiatives include large purchases of mortgage-backed securities and commercial paper. So, as a part of the bailout package, not only in US government, but also the Fed fund also engaged in a large purchase of mortgage-backed securities and commercial paper with the aim to inject liquidity in the economy.

So, other actions were launched to hedge funds and other investment firms that were used to finance the purchase of securities backed by student loans, car loans, credit card receivables and etcetera. So, taken together, these initiatives have been called quantitative easing; that means, increasing the liquidity in the economy; a huge increase in money supply in the economy is called a quantitative easing.

So, the Fed was seeking to provide credit to several sectors of the economy that would otherwise slow down due to the shortage of fund from the banks. So, to prevent the recession, to prevent the economic depression, Fed used this unconventional monetary policy strategy during 2007-08 period.

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Implicit anchoring

- The Fed's "Just Do It" Monetary Policy Strategy From the 1980s up until the time Ben Bernanke became chair of the Federal Reserve in 2006, the Federal Reserve was able to achieve excellent macroeconomic performance (including low and stable inflation), and it did so without using an explicit nominal anchor such as an inflation target.
- Although the Federal Reserve did not articulate an explicit strategy, a coherent strategy for the conduct of monetary policy existed nonetheless. This strategy involved an implicit, but not an explicit, nominal anchor in the form of an overriding concern on the part of the Federal Reserve to control inflation in the long run.
- In addition, it involved forward-looking behavior that included careful monitoring for signs of future inflation, using a wide range of information coupled with periodic "preemptive strikes" by monetary policy against the threat of inflation.

Moving further, one of the points I did not explain in the previous class was the implicit anchoring. In addition to monetary aggregate targeting and Fed fund rate target, from 1980s up until the time Ben Bernanke became the chair of the Fed reserve in 2006, the Fed reserve was able to achieve excellent macroeconomic performance and it did so without using an explicit nominal anchor such as inflation target or industry targeting etcetera.

So, they have been using interest rate targeting, but they did not use very explicitly these tools and they have been following some implicit anchoring. Although Fed reserve did not articulate an explicit strategy, a coherent strategy for the conduct of monetary policy existent, nonetheless. So, this strategy involved an implicit, but not an explicit nominal anchor in the

form of overriding concern on the part of the Federal Reserve to control inflation in the long run, having discussed these strategies and tactics of monetary policy.

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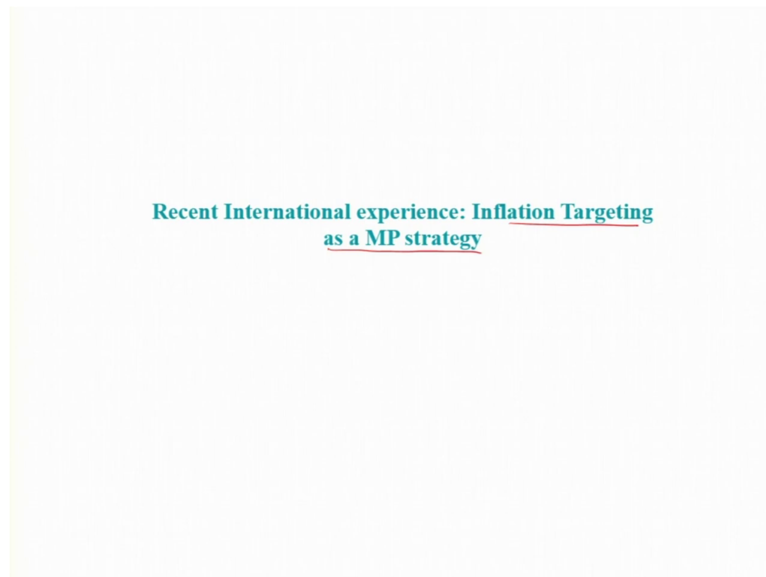

Let us now look at the recent international experience in conducting monetary policies. So, one of the strategies that is gaining momentum these days is the inflation targeting, inflation targeting as a monetary policy strategy.

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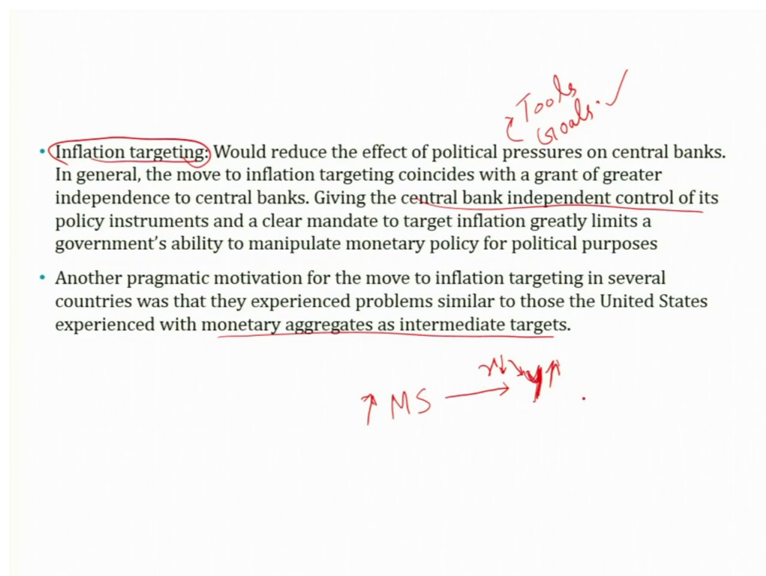

So, inflation targeting, it also can be read along with the independence of the Central Banks that giving an inflation targeting and giving a target that this is the rate of inflation that should be achieved by the Central Bank using its tools. The goal is an inflation targeting, this would reduce the effect of political pressures on Central Banks.

So, in general the move to inflation targeting coincides with a grant of greater independence to Central Banks. So, because in the previous class, just recall when we discussed two key dimensions of Central Bank independence. One is the choosing of tools that is whether they can use conventional tools within those the open market operations, discount window, reserve requirement etcetera or choosing the tools and other one is choosing the goals.

So, mostly the political pressure comes in the choosing of the goals. So, accordingly when they then choose the goal, they must select the appropriate tool as well. So, to reduce this pressure, the inflation target has been come up as a potential solution giving the Central Bank independent control of its policy instruments and a clear mandate to target inflation greatly limits government's ability to manipulate monetary policy for political purposes.

So, another pragmatic motivation for the move to inflation targeting in several countries was that they experience problems like those in the United States experienced with the monetary aggregates as intermediate targets. So, monetary targets aggregate as the intermediate targets, the issue here is the time inconsistency problem because when they target money supply.

So, how long it takes the money supply to make an impact on the economy, that the impact on GDP? So, how long it takes? So, that means there is a time inconsistency problem is there, how long an increase in the money supply would take to make an impact on rate of interest and then on GDP.

And because over period so many other factors will come into play. Suppose increase in money supply is not necessary that it will because increase in money supply we expect that rate of interest will decline, cost of borrowing will decline, the investment will increase, and GDP will increase.

But, how long this will take, there is a time inconsistency problem because there are so many other factors also influence this pathway. So, because of the monetary policies have directly been started targeting inflation as the one of the nominal variables.

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Inflation Targeting

- Involves several elements:
- (1) public announcement of medium-term numerical objectives (targets) for inflation;
- (2) an institutional commitment to price stability as the primary, long-run goal of monetary policy and a commitment to achieving the inflation goal;
- (3) an information-inclusive approach in which many variables (not just monetary aggregates) are used in making decisions about monetary policy;
- (4) increased Inflation targeting transparency of the monetary policy strategy through communication with the public and the markets about the plans and objectives of monetary policymakers; and
- (5) increased accountability of the central bank for attaining its inflation objectives.

4% ±2%

So, about inflation targeting, it involves several elements: one is public announcement of medium-term numerical objectives for inflation. For example, in India's inflation targeting is 4 percentage with upper and lower bound tolerance level of 2 percentage. So, that means, a public announcement of medium-term numerical objective, that is the target and second is an institutional commitment to price stability as the primary long-run goal of monetary policy and a commitment to achieving the inflation goal.

Thirdly, an information inclusive approach in which many variables, not just monetary aggregates are used in making decisions about monetary policy. And fourth one increased inflation targeting transparency of the monetary policy strategy through communication with the public and the markets about the plans and objectives of monetary policy makes; that means, it will increase the transparency. So, that the increase inflation targeting transparency.

So, the suppose they announce that this is the target, and accordingly the public and the market can anticipate that the monetary policy will be coming to ensure that the target is secure and finally, increase accountability of the Central Bank. So, that the Central Bank is now accountable, they are accountable to achieve the stated inflation target.

So, that accordingly the policy tools should be selected and implemented because they are accountable making them more accountable to attaining its inflation objectives.

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Advantages of Inflation Targeting

1: **Reduction of the Time-Inconsistency Problem**

- Time inconsistency problems arise when a future policy plan is no longer optimal at a later date even when no new information has arrived in the meantime. A policy announcement will be time inconsistent if economic agents know that the policymaker will want to renege on the decision when it comes time to act.
- Because an explicit numerical inflation target increases the accountability of the central bank, inflation targeting can reduce the likelihood that the central bank will fall into the time-inconsistency trap of trying to expand output and employment in the short run by pursuing overly expansionary monetary policy.
- **2: Increased Transparency:** Inflation targeting has the advantage that it is readily understood by the public and is thus highly transparent
- **3: Increased Accountability:** the tendency toward increased accountability of the central bank. Indeed, transparency and communication go hand in hand with increased accountability.

There are several advantages of inflation targeting, the first one is the reduction of the time inconsistency problem. So, the time inconsistency problem arises when a future policy plan is no longer optimal later even when no new information has arrived in the meantime. So, a policy announcement will be time inconsistent if economic agents know that the policy maker will want to on the decision when it comes time to act.

Because an explicit numerical inflation target increases the accountability of the Central Bank, inflation targeting can reduce the likelihood that Central Bank will fall into the time-inconsistency trap of trying to expand output and employment in the short run by pursuing an overly expansionary monetary policy.

Second advantage, the proponents of inflation targeting argue that this would increase transparency; that means, inflation targeting has the advantage that is readily understood by the public and is thus highly transparent. And the third point in favour of inflation targeting is that it increases accountability.

So, the tendency toward increased accountability of the Central Bank, it increases the tendency toward increase accountability of the Central Bank to achieve the target indeed a transparency we can see that both transparency and communication go hand in hand with the increased accountability.

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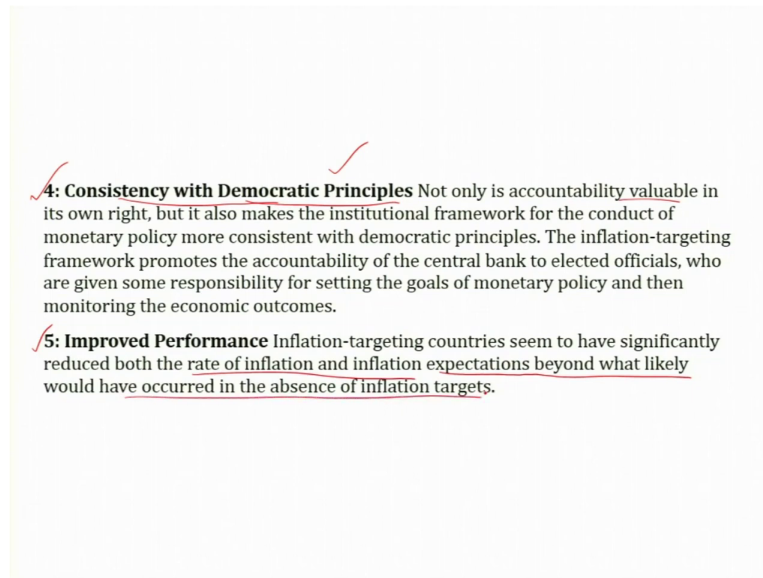

Other arguments are that this is consistent with the democratic principles especially when we talk about independence of Central Bank. We have seen in previous discussion that most of the time the critics of Central Bank independence argue that the monetary authorities they are elite groups are not elected through democratic channel, not elected directly by the public. However, giving a mandate that the inflation targeting, the proponents argue that this is consistent with the democratic principles.

So, not only is accountability valuable in its own, but it also makes institutional framework for the conduct of monetary policy more consistent with the democratic principles. So, shortly the inflation targeting framework promotes the accountability of the Central Bank to elected officials who are given some responsibility for setting the goals of monetary policy and then monitoring the economic outcomes.

And in addition, it also increases the improved performance inflation targeting in countries to significantly reduce both the rate of inflation and inflation expectations beyond what likely would have occurred in the absence of inflation targets.

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Disadvantages of Inflation Targeting

- **1: Delayed Signaling** Inflation is not easily controlled by the monetary authorities. Furthermore, because of the long lags in the effects of monetary policy, inflation outcomes are revealed only after a substantial lag. Thus an inflation target does not send immediate signals to the public and the markets about the stance of monetary policy.
- **2: Too Much Rigidity** Some economists criticize inflation targeting because they believe it imposes a rigid rule on monetary policymakers and limits their ability to respond to unforeseen circumstances.
- **3: Potential for Increased Output Fluctuations** An important criticism of inflation targeting is that a sole focus on inflation may lead to monetary policy that is too tight when inflation is above target and thus may result in larger output fluctuations.
- **4: Low Economic Growth**

The disadvantages there is delayed signalling because this is the critics argue. The critics point out that inflation is not easily controlled by the monetary authorities because there are other factors also there. Furthermore because of long lags in the effects of monetary policy, the inflation outcomes are revealed only after a substantial lag.

So, another argument against is that the inflation targeting involves too much rigidity; that means, some economists criticize inflation targeting because they believe it imposes a rigid rule or monetary policy makers and limits their ability to respond to unforeseen circumstances because they have given the mandate of inflation targeting, that is to achieve the target and to ensure inflation, the price stability.

Further, there is a potential for increase in output fluctuations and giving too much importance on the inflation stability, they sometimes ignore the economic growth. It has been found that to ensure sound economic growth it is better to follow an expansionary monetary policy by increasing money supply or reducing rate of interest, so that the GDP can be increased.

But, sometimes since the mandate for the monetary policy is mainly the inflation targeting. So, most often they increase money supply and as a result instead of reduced rate of interest, the rate of interest increases, and GDP growth is hampered. The pace at which GDP growth is often hampered because of inflation targeting.

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Recent International experience

- Inflation targeting: **The New Zealand Experiment,**
- The NZ Reserve Bank Act of 1989: the prime function of the Reserve Bank of New Zealand is to "maintain stability in the general level of prices."
- The act mandates that the Minister of Finance and the Governor of the Reserve Bank agree on monetary policy targets to achieve price stability.
- For much of the 1990s, price stability was defined as an inflation rate within a range of 0–2 percent. In 1997, this definition was loosened a bit to a range of 0–3 percent. The Reserve Bank is then free to choose the strategy that it believes will best achieve the policy target.

So, let us now review some recent international experience. The New Zealand government the champion in introducing in the inflation targeting through the New Zealand Reserve Bank Act of 1989. The prime function of the Reserve Bank of New Zealand is to maintain the stability in the general level of prices.

So, the act mandates that the minister of finance and the governor of the Reserve Bank agree on monetary policy targets to achieve price stability. So, much of the 1990s price stability was defined as an inflation rate within a range of 0 to 2 percent. So, in 1997 this definition was loosened a bit to a range of 0.3 percent.

So, the Reserve Bank is then free to choose the strategy that it believes will best achieve the policy target. New Zealand was the champion here that they followed it and started it in 1989.

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Inflation Targeting

- New Zealand (effective in 1990)
  - Inflation was brought down and remained within the target most of the time.
  - Growth has generally been high and unemployment has come down significantly.
- Canada (1991)
  - Inflation decreased since 1991; some costs in term of unemployment
- United Kingdom (1992)
  - Inflation has been close to its target.
  - Growth has been strong, and unemployment has been decreasing.

1970s 80s

Then other countries, Canada, with the announcement by the minister of finance and the governor of the bank of Canada, they established a formal inflation target in 1991. Since they announced this policy, empirical evidence suggests that inflation decreased since 1991. Then the United Kingdom adopted an inflation target as its nominal anchor in 1992, and as a result, initially they set up the target of 1 percentage to 4 percentage.

Then in subsequent period in 1997, the inflation target was set at 2.5 percentage and again the empirical evidence suggest that they were able to achieve the target. Inflation has been close to its target and growth has been strong and unemployment has been decreasing. All these mainly because of a response of 1970s 80s period you can see that the stagflation, that is hyper inflation, then these countries followed inflation targeting.

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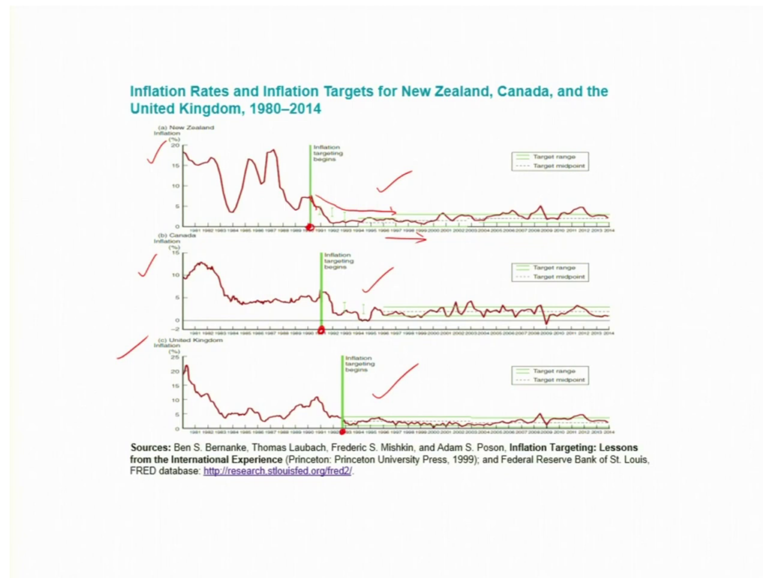

Then the empirical evidence also suggests that the New Zealand and Canada and United Kingdom experiment with inflation targeting is resulted in achieving the price stability. These are the years when they implemented started inflation targeting then you can see the inflation rate on the y axis of this figure and period is given on the x axis then you can see that the inflation has been declining.

The inflation rate has been declining over a period. So, you can also see the green line, that is the target range, and the red line shows the actual inflation rate. You can see that for New Zealand and Canada and UK you can see that the inflation rate has been declining; they were having a stable inflation after adopting the strategy of inflation targeting.

So, in this session we have discussed various monetary policy strategies used, and then subsequently we discussed the new strategy of inflation targeting. And I want to again highlight that, in parallel to that, to achieve the inflation targeting still the other intermediate targets, that is, the monetary aggregates and interest rate targeting was being used. And in the next session let us continue this discussion and see what the further developments in the monetary policy strategy and tactics are.

Thank you for watching this video and see you in the next session.

Thank you.

Keywords: Monetary policy, strategy, tactics, inflation targeting, monetary aggregates, time inconsistency problem, zero-bound problem, explicit anchoring, implicit anchoring, transparency, New Zealand, accountability