[Academic Script]
[Inflation Targeting]

Subject:	Business Economics
Course:	B.A., 4th Semester, Undergraduate
Paper No. & Title:	Paper – 401 Macroeconomics – II
Unit No. & Title:	Unit - 5 Monetary and Fiscal Policy
Lecture No. & Title:	1: Inflation Targeting

Inflation Targeting

Introduction:

Hello friends, in this session I will discuss about the Inflation Targeting. But first of all let us understand what inflation is?

Inflation means a continuous and irreversible rise in the general level of prices. For any country, this situation is not good for growth and development because it discourages savings and investment. It also increases inequalities between the rich and poor.

To tackle inflation, government adopts monetary and fiscal policies. Now-a-days, in almost all the countries, the primary goal of the Central Bank is to achieve the short run and the medium run low rate of inflation. This is done through adopting the policy of inflation targeting. Under this setup, the central bank estimates and projects 'target inflation' rate and then make efforts to take the actual inflation to the target inflation. And this is done by the use of tools such as interest rate because an interest rate and inflation rate moves in opposite directions. According to some advocates of inflation targeting, it will lead to increased economic stability.

There are 28 countries that have adopted inflation targeting. They have fixed the consumer price index as their monetary policy goal.

Country	Inflation targeting adoption date	Inflation rate at adoption date (%)	2010 end-of-year inflation (%)	Target inflation rate (%)
New Zealand	1990	3.30	4.03	1 – 3
Canada	1991	6.90	2.23	2 +/- 1
United Kingdom	1992	4.00	3.39	2
Australia	1993	2.00	2.65	2 – 3

New Zealand was the first country to adopt inflation targeting in 1990. While making transition from the centrally planned economy to market economy, countries like Armenia, the Czech Republic, Hungary, and Poland adopted inflation targeting. Countries like Finland, Spain and Slovak Republic have stopped inflation targeting after they adopted the euro as their domestic currency.

Requirements of Inflation Targeting:

It requires two things:

1. Freedom in choosing the instruments-

   This is the first requirement of inflation targeting because central banks are not entirely independent of government influence but it doesn't mean that fiscal policy will dictate monetary policy. Central bank should be able to conduct monetary policy with some freedom.

Central bank must be free in choosing the monetary instruments to achieve the target inflation rate.

2. The second requirement is that, the monetary authorities should be willing as well as able to target only inflation rate and no other indicators like wages, level of employment, exchange rate etc.

   After meeting these two requirements, there are several other preliminary requirements to be fulfilled.

- Set quantitative targets for inflation specifically for a particular number of periods ahead.
- The primary target of the monetary authority is to hit the inflation target and all the other objectives are secondary.
- Build up a model or methodology for predicting inflation which would help in tracing indicators that contain information about future inflation.

Elements of Inflation Targeting:

Inflation targeting is a recent monetary policy strategy that encompasses five main elements:

1) The public announcement of medium-term numerical targets for inflation

2) An institutional commitment to price stability as the primary goal of monetary policy, to which other goals are subordinated

3) An information inclusive strategy in which many variables, and not just monetary aggregates or the exchange rate, are used for deciding the setting of policy instruments

4) Increased transparency of the monetary policy strategy through communication with the public and the markets about the plans, objectives, and decisions of the monetary authorities; and

5) Increased accountability of the central bank for attaining its inflation objectives.

Inflation Targeting works in following way:

After understanding the meaning of inflation and inflation targeting, now we will understand how it works.

In theoretical concept, inflation targeting is very straightforward. First, the central bank predicts the future path of inflation and then compares it with the rate which the government believes is in sync with the economy that is the target inflation rate. The difference between these two gives the government the correct idea of the adjustments in the monetary policy. Different countries have different methods to adopt the target like some countries have chosen the targets with symmetrical ranges around the midpoint, while others have identified only a target rate or an upper limit to inflation. It is seen that all countries have set their target in the low single digit; no country targeted zero inflation rate because nominal inflation stimulates the demand which will boost the economy.

Now we will discuss about how the inflation target can be achieved with the help of Taylor's rule.

John Taylor argued in 1990s that to achieve the inflation target, central bank should choose interest rate rather than nominal money growth rate because the central bank affects spending through the interest rate. John Taylor has also given a rule to the central bank to set the interest rate. This rule is known as Taylor rule.

$i_t = i^* + a\,(\boldsymbol{\pi}_t - \boldsymbol{\pi}^*) - b(u_t - u_n)$

$\boldsymbol{\pi}_t$ is the rate of inflation

$\boldsymbol{\pi}^*$ is the target rate of inflation

i_t is the nominal interest rate

i^* is the target interest rate

u_t is the unemployment rate

u_n is the natural unemployment rate

and a and b are the positive coefficients

Now according to Taylor's rule:

Case I: if inflation and target inflation rate is equal i.e. ($\boldsymbol{\pi}_t = \boldsymbol{\pi}^*$) and the unemployment rate and natural rate of the unemployment are equal i.e. ($u_t = u_n$), then the central bank should set the nominal interest rate i_t equal to its target value i^*. By doing this, the economy can stay on the same path i.e. inflation equal to the target inflation rate and unemployment equal to the natural rate of unemployment. This is known as full employment equilibrium if at this point actual GDP equals potential GDP.

Case II: if inflation is higher than the target i.e. ($\boldsymbol{\pi_t > \pi^*}$), the central bank should increase the nominal interest rate i.e. i_t above i*, because higher interest will increase the unemployment and consequently decrease inflation.

Coefficient *a* should reflect how much the central bank cares about inflation.

Taylor pointed out that *a* should be larger than one because for spending, real interest rate is more important rather than nominal interest rate.

Case III: if unemployment is higher than the natural rate of unemployment i.e. $u_t > u_n$, the central bank should decrease the nominal interest rate. When the nominal interest rate is lower it will increase output which leads to decrease in unemployment.

Coefficient *b* should reflect how much the central bank cares about unemployment. Higher *b* means central bank is ready to deviate from target inflation and give importance to unemployment. It will try to keep unemployment close to the natural rate of unemployment.

Taylor concluded that these rules should not be followed blindly. The policies should be a mix between monetary policy and fiscal policy and when the central bank finalizes the target rate of inflation and it should try to achieve it by adjusting nominal interest rate.

The rule also says that not only current inflation but also current unemployment should be taken into consideration.

Relationship between Philips curve, Inflation and Unemployment:

It is said that inflation target would be controversial if it is used in short run. Because focussing only on inflation would seem to remove role of monetary policy in reducing output fluctuations, but this is not necessary and it can be proved by the help of Philips curve which shows the relation among inflation and unemployment.

$$\pi_t = \pi_{t-1} - a(u_t - u_n)$$

in the above equation-

π_t is the inflation

π_{t-1} is the lagged inflation

$(u_t - u_n)$ is the deviation of the unemployment rate from the natural rate.

u_n is the natural rate of unemployment

Suppose that, the target inflation rate be π^*. Now if the central bank achieves its inflation target exactly in every period, then the relation would be-

$$\pi^* = \pi^* - \alpha(u_t - u_n)$$

The equation shows that the unemployment rate u_t will be equal to natural rate of unemployment u_n.

Implication is, output would always be equal to the natural rate of output and hence, inflation targeting helps central bank to eliminate all deviations of output from its natural level.

Inflation Targeting in India:

Finance minister announced the inflation targeting in India in 2016. Under this, the government and RBI got a memorandum of understanding for adopting the co-operative policies to meet the inflation target.

The main features of inflation targeting are-

- There is single target, which is to meet the target inflation.
- There is single instrument used by RBI to meet the target of short term interest rate i.e., repo rate.
- There is single objective i.e., price stability.

Inflation targeting was introduced in India several years after the suggestion of its adoption by the Urjit Patel Committee. Following are the main attributes of the inflation targeting regime introduced in India.

- **The Monetary Policy Committee:**

  The MPC would be entrusted with the task of fixing the benchmark policy rate (repo rate) required to contain inflation within the specified target level. Under the RBI Act, the Central Government, in consultation with the RBI, determines the inflation target in terms of the Consumer Price Index (CPI), once in every five years. This target would be notified in the Official Gazette.

- **Determination and notification of Inflation Target** :

  In exercise of the powers conferred under the Reserve Bank of India Act, 1934, the Central Government, in consultation with RBI, has fixed the inflation target for the period beginning from August 5, 2016 and ending on the March 31, 2021, as under:

  - Inflation Target: Four per cent.
  - Upper tolerance level: Six per cent.
  - Lower tolerance level: Two per cent.

While setting the above target, the government elaborated that inflation targeting in India will consider the growth dimensions also. "The key advantage of a range around a target is that it allows MPC to recognise the short run trade-offs between inflation and growth but enables it to pursue the inflation target in long run over the course of business cycle."

- **Circumstances for the recovery of the failed monetary policy:**

The fresh element in the government notification is the interpretation of monetary policy failure and the launch time for correction measures. As per the policy, if inflation goes above 6% or goes below 2% for three consecutive quarters, then it will be treated as the failure of the RBI's monetary policy. Counteractive measures should be initiated in such a scenario.

- **What will RBI do if the inflation target is not met?**

The new notification also prescribes the procedure to be followed by the RBI if the target is missed. "Where RBI fails to meet the inflation target, it shall set out a report to the Central Government stating the reasons for failure to achieve the inflation target; remedial actions proposed to be taken by RBI; and an estimate of the time-period within which the inflation target shall be achieved pursuant to timely implementation of proposed remedial actions."

- **What is the time period for a set target?**

The Central Government, in consultation with the RBI, determines the inflation target in terms of the Consumer Price Index (CPI), ***once in every five years***. This target would be notified in the Official Gazette. The current target will end on March 31, 2021

Controversy regarding Inflation Targeting (IT):

- Dilemma regarding price stability-

  Inflation targeting is such a unique and controversial attribute that the central bank should give priority to price stability. This strategy makes the inflation targeting framework generally unacceptable in the developing world. This is because there are two issues when inflation targeting is to be adopted by the developing country's central bank.

- Firstly, price stability is a crucial objective of the general macroeconomic objective in fast growing developing economies. The achievement of faster economic growth is equally important.
- Secondly usually there is a conflict between the objective of price stability and economic growth.

- Another limitation of inflation targeting in countries like India is that it neglects the real cause of inflation – supply side factors like agricultural supply shocks which can't be solved by any monetary policy action.
- There is intense debate about the suitability of inflation targeting in developing economies on the one hand while on the other hand several economists refute the previous argument by saying that after the global financial crisis, inflation targeting has lost much of its relevance.
- A negative side of inflation targeting as an ideology is that it openly accepts reduction of economic growth as a way to achieve price stability. Nonetheless, growth is as important as price stability.

Achievement of Target:

Till now we have understood what is inflation targeting? How it works? And now we will discuss whether this inflation targeting is on target or not.

- If we want to compare the effects of inflation targeting and the concurrent economic reforms, it is difficult to do that. Nonetheless, the evidences prove

- that inflation targeting supports the effectiveness of the framework which lowers inflation and its volatility.
- In the developing economies, inflation targeting is more resilient in disturbing environment. In some cases, inflation targeting is more effective than monetary policy in grounding the public inflation expectations.
- The United Kingdom adopted inflation targets in 1992 in order to restore a nominal anchor and to lock in past disinflationary gains. Until May 1997, inflation targeting was conducted under severe political constraints -- that is, under a system in which the government, not the central bank, set the monetary policy instruments. Despite this handicap, British inflation targeting helped produce lower and more stable inflation rates. The success of inflation targeting in the United Kingdom can be attributed to the Bank of England's focus on transparency.

Inflation Targeting is not the only solution:

- There is a need to assess by the countries that whether the inflation targeting regime is suiting their needs or not. For example in many economies, exchange rate plays the central role in stabilizing output and inflation. In such economies, it is a matter of concern that whether the inflation targeting is subordinate to exchange rate or not.

- The European Central Bank, the U.S. Federal Reserve, the Bank of Japan, and the Swiss National Bank have adopted many of the elements of the inflation targeting but they have not announced any numerical targets to achieve rather their aim is to promote maximum employment and moderate long term interest rates.

"Inflation targeting appears to have provided a successful nominal anchor for conducting monetary policy in the countries that have adopted it so far. However, indicators of long-term inflation expectations still seem to reveal lingering doubts about whether current low inflation will be extended into the future. This suggests how difficult it can be to establish the credibility of monetary policy–while institutional changes may enhance credibility, it will take years of solid performance to earn the public's full belief in the central bank's commitment to low inflation."

- Chan Huh, Economist

SUMMARY

Beginning in the early 1990s, price stability became an increasingly important goal of the monetary authorities in many countries. But some central banks found the traditional approaches–namely, influencing inflation and economic activity by controlling intermediate variables like monetary aggregates or an exchange rate–not very successful. As a result, these central banks faced the serious possibility of losing credibility.

To address this problem, several industrialized countries–New Zealand (1990), Canada (1991), the United Kingdom (1992), and Sweden (1993)–adopted monetary policy regimes that target inflation directly. These regimes are said to be "transparent," and therefore more credible to the public, because the central bank makes an explicit commitment to conduct monetary policy to meet a specified numerical inflation rate target within a specified time frame. The explicit target provides an anchor for monetary authorities, and it also serves as an anchor for private market expectations.