# **Inflation and Unemployment**

### Unemployment

Unemployment refers to the situation in which the population that falls under the active labour force, who is capable and actively searching for jobs are unable to find jobs.

#### Types of unemployment:

- Structural unemployment: Caused by a mismatch between the skills required for the job and the skills possessed by the existing labour force. Changes in technology, consumer tastes and preferences etc. are some of the reasons.
- Frictional unemployment: Arises as a result of voluntary job transitions by the employees.
- Cyclical unemployment: Happens due to fluctuations in the business cycle and economic downturns when the businesses
  cut back on production and labour intake.
- Seasonal unemployment: Occurs when certain sectors experience regular, predictable variations in demand for labour.
   For example, agricultural labourers are not employed on all days of a year.
- Disguised unemployment: Occurs when the employed individuals are not fully utilised or engages in low-productivity work.

### Inflation

#### Inflation is a persistent rise in the general price level.

CPI (Consumer Price Index) is the most common measure of inflation which shows the percentage change in the price of a basket of goods and services consumed by the individuals.

#### Causes of Inflation:

- Demand-pull inflation: The total demand (AD) for goods and services exceeds the total supply in this case. This
  excess demand puts upward pressure on the prices and results in inflation.
- Cost-push inflation: Increase in the cost of production of goods and services caused by supply chain disruptions results in a spike in the prices of goods and services causing inflation.
- Inflation expectations: Inflation expectations refers to the beliefs that the masses have about the future price
  movements. Expectation about the future can affect the current economic decisions that may influence the future
  inflation levels.

### Inflation

#### What is stagflation?

Stagnant growth coupled with high or rising unemployment and high inflation is known as stagflation. When the costpush inflation becomes acute and causes a fall in the total output even when the prices are rising, it results in stagflation.

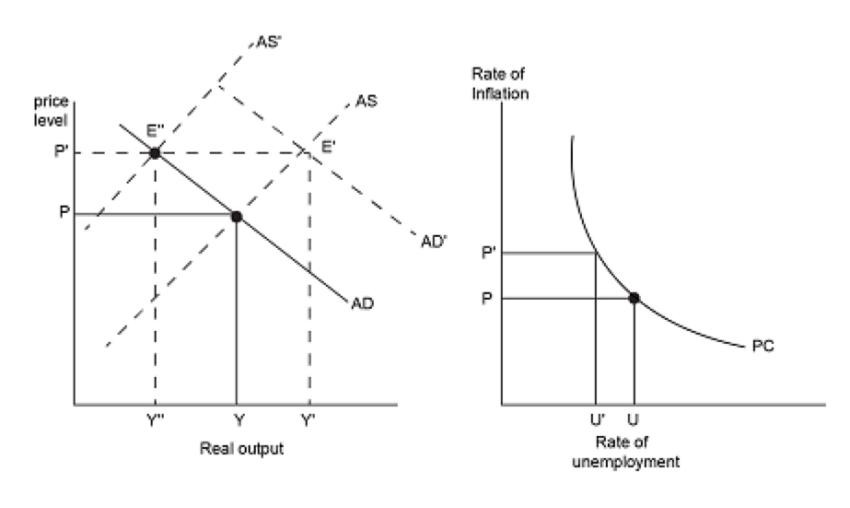
#### Can the exchange rate movements cause inflationary outcomes?

- Currency depreciation makes the foreign goods relative costlier and importing them as intermediate goods results in cost-push inflation.
- Currency depreciation also makes our exports cheaper thereby boosting the exports. Increased export goods
  production raises the aggregate demand and results in demand-pull inflation.

**Phillips Curve:** The Phillips curve shows the inverse relation between rates of inflation and unemployment. If unemployment is low, inflation will be high and vice-versa. (Why?)

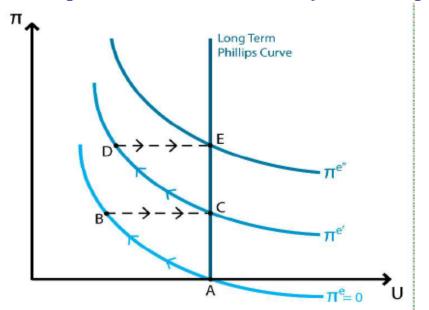
- When unemployment is low, aggregate demand (AD) will be high as lot of people are employed and they demand more goods and services.
- As we move closer to the full employment level/maximum production, this will result in inflation.
- Now, when the growth/GDP is high, more people will be employed to produce more and thus unemployment falls further.
- Similarly, when unemployment is high, the AD for goods and services will be lower which gives rise to deflationary
  pressure.
- Deflationary pressure lowers the aggregate output and causes a fall in GDP thereby resulting in lower levels of inflation.

### **Short-run Phillips Curve**



#### **Expectations-augmented Phillips Curve**

- In the long-run, once the maximum level of production is reached, an increase in AD will further increase inflation. But this time, there won't be any increase in the aggregate output/GDP.
- The monetarists argue that there is no trade off between inflation and unemployment. Even if the Central bank
  increases money supply, people will expect inflation and thus they will not spend much and the GDP will not rise.



#### **Expectations-augmented Phillips Curve**

In the figure given in the previous slide, how the economy move from points A to C to E?

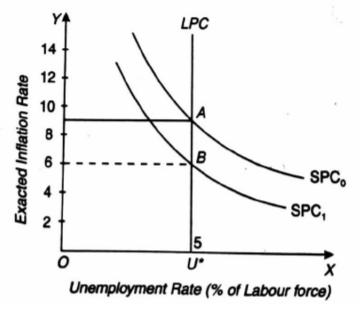
- At point A, if govt. tries to reduce unemployment, the fall in unemployment results in rise in aggregate income and
  aggregate spending. This raises the AD and results in inflation.
- As inflation increases, the economy moves to point B where unemployment is lower. At this higher level of inflation,
  the workers realise that their real wages are low and demand for higher wages. At this higher wage rate, the
  employers will find it difficult to hire more workers and thus unemployment rises and the economy moves back to
  point C.

This process repeats and thus in the long-run, the Phillips curve will be a vertical line.

#### **Long-run Phillips Curve**

- The long-run Phillips curve (LPC) which shows the long-term relationship between inflation and unemployment will be a vertical line as there exists no trade off between the two variables in the long-run.
- $U^*$  is the NAIRU or the Non-Accelerating Inflation-adjusted Rate of Unemployment. It is the rate of unemployment below which the inflation starts rising. In other words, NAIRU is the lowest rate of unemployment that can be

sustained without growth in wages and rise in inflation.



### **Adaptive Expectations and Rational Expectations**

The adaptive expectations hypothesis states that individuals form and revise their expectations regarding the future economic variables based on their previous experiences of the outcome.

The rational expectations hypothesis states that individuals form predictions about the future based on all available information and on their understanding/perceptions of the outcomes of the government policies.

### THANK YOU