INFLATION

- Measures
- Types
- Causes
- Effects
Definition

- is a phenomenon signalizing imbalance of economy
- is a rise in the general level of prices, as measured against some baseline of purchasing power

Inflation measures how much more expensive a set of goods and services has become over a certain period, usually a year

How to measure inflation?

- Price index level
  - Expresses the level of prices of goods traded in economy at the same time
  - Price index is calculated for particular market basket for examined periods.

- The change of price index level within time is the rate of inflation.
  - Consumer price index
  - Producer price indexes
  - Wholesale price indexes
  - Commodity price indexes
CPI

Consumer price index

- The most often used index
- Measures the price of a selection of goods purchased by a "typical consumer".
- It is a statistical time-series measure of a weighted average of prices of a specified set of goods and services purchased by consumers.
- It is a price index that tracks the prices of a specified basket of consumer goods and services, providing a measure of inflation.
How to measure CPI?

- (1) Selection of the Base Year (CPI = 100)
- (2) Selection of CPI basket, Example of Consumer Basket, weightage (to measure the importance of one item in the basket)
- (3) Collection of data on prices
- (4) Calculation of CPI

**Weighted CPI**

\[ CPI_w = \frac{\text{sum of all weighted price index}}{\text{total weight}} \]

**The rate of inflation** is determined as:

\[ r = \frac{CPI_{t+1} - CPI_t}{CPI_t} \times 100\% \]
Types of Inflation

- from the quantitative point of view

- Creeping inflation
  - the rate of inflation doesn’t exceed the rate of production growth, Creeping inflation is < 10%

- Galloping inflation
  - the rate of inflation exceeds the rate of production growth, Galloping inflation is from 10% to 100%. Money loose purchase power, people hold as little money as possible.

- Hyperinflation
  - is inflation that is "out of control", a condition in which prices increase rapidly as a currency loses its value. Hyperinflation is over 100% per year. Prices as well as wages are extremely erratic. Money have no value and barter trade emerges (barter means the exchange of good for good). Example: Germany after I.WW, Hungary after II.WW.
Types of Inflation

- **Open inflation**
  - if economic imbalance is accompanied with rising price level.

- **Suppressed inflation**
  - if state authorities damp or even stop the rise of price level by administrative means. Such situation is followed by existence of scarce commodities, shadow economy etc.
  - In such cases the provision of basic necessities such as agricultural products is set by the government by introducing price controls on commodities.

- **Hidden inflation**
  - government imposes strict controls to curb price inflation, producers are forced to sell the products at the prices required.
  - Producers can not sell the commodity at higher prices to get the profit, therefore, lower on the quality of products. This means that employers are selling lower quality products at higher prices -> inflation is hidden.
Causes of Inflation

- **Demand-pull inflation**
  - Arises when aggregate demand in an economy outpaces aggregate supply
  - It involves inflation rising as real gross domestic product rises and unemployment falls. This is commonly described as "too much money chasing too few goods".
  - Possible causes of demand-pull inflation:
    - Excessive investment expenditures
    - Excessive growth of consumption expenditures
    - Low-cost loans
    - Tax cutting
    - Augmentation of government expenditures
Causes of Inflation

- **Cost-push inflation** (or supply-shock inflation)
  
  - is a type of inflation caused by large increases in the cost of important goods or services where no suitable alternative is available.

  - Possible causes of cost-push inflation:
    - Imperfect competition
    - Increased taxes
    - Rising wages
    - Political incidents (like oil crises)
Causes of Inflation

- **Built-in inflation** (or Anticipated inflation)
  - induced by adaptive expectations, often linked to the "price/wage spiral"
  - it involves workers trying to keep their wages up with prices and then employers passing higher costs on to consumers as higher prices as part of a "vicious circle."
  - Built-in inflation reflects events in the past, and so might be seen as hangover inflation.
Effects of Inflation

- Redistribution effect of inflation
  - Inflation affects recipients of fixed income firstly (nominal incomes remain the same but the real value of income drop)
  - Inflation affects the purchasing power of wages that don’t follow the rise of prices
  - Inflation causes diminishing value of loans and savings

- Social impact of inflation
  - Socially poor persons suffer from inflation more than rich
Effects of Inflation

- Impact on economy balance
  - Fall of real product below potential product
  - Changes in the structure of consumption (consumers are buying cheaper goods)
  - In case of fixed currency exchange rate higher exports are incited

- Inflation deforms prices
- Inflation causes higher costs and makes economy less efficient
- Creeping and anticipated inflation has positive effect on economy and stimulates economic growth
- High inflation and not anticipated inflation are serious problems in economy.
Stopping the inflation

- There are a number of methods which have been suggested to stop inflation.

  - Managing the wages and prices – determined by state income policy (authority can set wages ceiling)

  - Stimulating market competition – e.g. antimonopoly regulations

  - Fiscal and monetary policy – e.g. central banks can affect inflation to a significant extent through setting interest rates