

8 National Income

Unit 2 : Inflation

- I Definition of Inflation
- II Types and Various Degrees of Inflation
- III Measurement
- IV Effects and Causes of Inflation

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I Definition of Inflation

Inflation is a sustained (persistent or continuous) rise in the general price level.
A one-time jump in the price level is not inflation.

If prices of some goods are rising, at the same time the prices of other goods of similar significance (to the consumers) are falling, this is only a change in the **relative prices**. It is not a change in the **general price level** , i.e. it is not inflation.

II Types and Various Degrees of Inflation

Creeping Inflation : a low rise in the price level, say, 1 to 2 % a year.

Galloping Inflation : a moderate rise in the price level, say, 5 to 6 % a year.

Hyperinflation : an extremely rapid rise in the price level, for example, over 20 % a year.

III Measurement

Inflation is measured by the percentage change in the general price level per year. In Hong Kong, it is shown by 2 values : the Consumer Price Index (CPI) and the G D P deflator.

Consumer Price Index (C. P. I.)

In every time period, prices of a typical bundle of goods and services are compared with the prices of the same bundle in an arbitrary chosen period.

$$\text{C. P. I.} = \left(\text{Cost of the bundle in a given period} / \text{Cost of the bundle in the base year} \right) \times 100$$

It is the quantity of goods included in the typical basket of goods and services consumed.

In Hong Kong there are three C. P. I., namely the C. P. I. (A), C. P. I.(B) and the Hang Seng C. P. I.

These indexes are based on the monthly expenditures of different groups or classes of households. The ranges are adjusted from time to time.

In economics, a change in the consumer price index indicates a change in the general price level.

Limitation of the C. P. I. In Indicating The Inflation Rate

- The number of goods included in the same basket is far from a complete inventory of the economy.
- The index does not account for the changes in the quality of goods. An increase in prices may be the result of an improvement in quality and therefore should not be counted as an increase in the price level only. It is somehow an increase in the **cost of living**.
- The same basket is fixed and does not take into account that people may make substitution toward the lower-priced goods instead.
- The C. P. I. has an upward and downward bias. it overstates or understates the rate of change in price.

The G D P or G N P Deflator

It is an index of the prices of all final goods and services constituted the G D P or G N P.

$$\text{G D P Deflator} = \left(\text{Nominal G D P} / \text{Real G D P} \right) \times 100$$

IV Effects and Causes of Inflation

Effects of Inflation

- It causes a continuous reduction in the real purchasing power of money.
- It causes a rise in the **cost** of living.
- It leads to some re-distribution effects :
 - ⇒ When people do not anticipate inflation, they will lose in their real purchasing power of money.
 - ⇒ When people anticipate incorrectly on inflation, they will also lose.
 - ⇒ People who correctly anticipate inflation will gain.
 - ⇒ People with their income increased in a slower rate than the inflation rate will also lose. They include those retired civil servants receiving fixed amounts of pension. people with the opposite situation will gain.

Inflation and Interest Rate

Inflation leads to a distinction between real and nominal interest rate. If it is accurately predicted, there is no redistribution of income. However, it is normal to have errors in prediction. This is why inflation is so widely condemned as undesirable. It sets up a guessing game that no one likes.

Anticipated and Unanticipated Inflation

An anticipated inflation is the expectation that the current price level will stay at the present level but it is rising in fact.

If the inflation rate is under-estimated, there is a transfer of wealth from creditors to debtors. It is because the debtors (borrowers) bear a monetary liability which is fixed in an absolute value.

With unanticipated inflation or under-estimated inflation, the real value of the fixed monetary liability falls, so the debtors gain from this case.

Most governments had to issue bonds to finance their budget expenditures. With unanticipated or under-estimated inflation, the government becomes a debtor and gain in the end.

Inflationary Tax : A Tax Without Representation

Under a progressive income tax system, anyone would face with a higher marginal tax rate when its income increases. With inflation, the nominal income will go up to catch up with the inflation rate. In so doing, the person gradually faces with higher and higher marginal tax rates. He may eventually have a higher real tax rate at the end. The government has in fact raised the tax rates without any legislation.

Welfare Cost of Inflation

- There is a redistribution effect due to unanticipated inflation. The empirical results of these redistribution effects are not clearly known.
- There is a resource misallocation effect due to greater uncertainty about the changes in price. Since information cost is positive, we have to spend resources on forecasting future prices and to avoid lose as a result of unanticipated inflation.

Causes of Inflation

Demand-pull Inflation

At the full-employment output, aggregate demand may be greater than aggregate supply, an inflationary gap exists at full-employment level with the price level bid up.

Cost-push Inflation

It is caused by an autonomous rise in money wages or other input prices. If producers response by raising prices, it becomes a wage-price spiral.

Demand-shift Inflation

Aggregate demand often changes faster than the change on resource allocation. Whenever demand changes, the changes in output may not catch up with the change in demand, the excess demand may lead to inflation, at least in the short run.

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