What is inflation?

Inflation is a consistent and evident growth of the general prices in an economy over a long period of time.

How to calculate inflation:

Use the CPIs from year n+1 and year n to find the inflation rate.

(((CPI for year n+1) - (CPI for year n))/(CPI for year n)) • 100

For example:

CPI for year 2: 120

CPI for year 1: 108

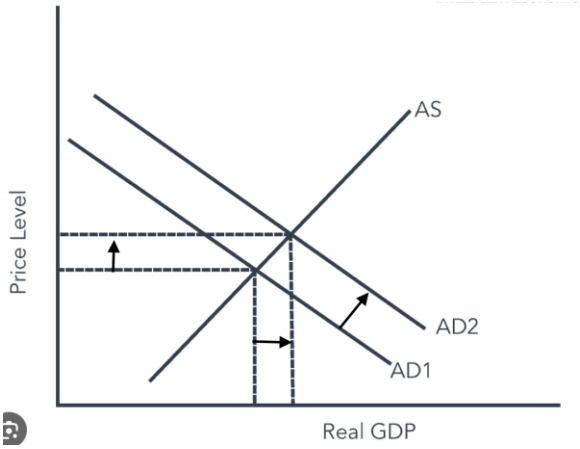
((120-108)/108) • 100 = 11.1%

Therefore, the inflation rate is 11.1% for this year compared to last year. If you want to find the basic inflation rate for the year you should replace the base year's CPI value which should always be 100 instead of the CPI for year n.

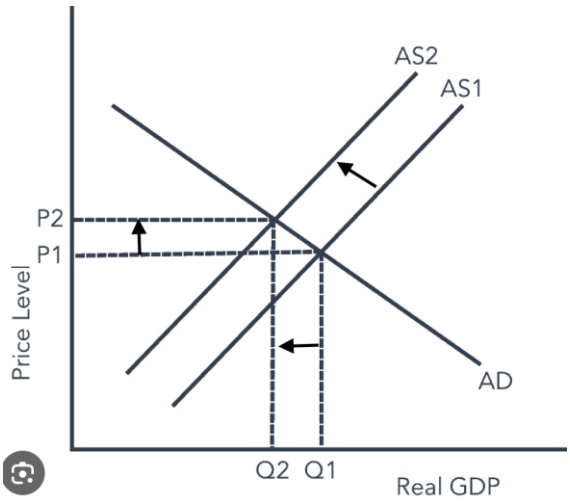
Causes of inflation:

1.) Increases in money supply, for example the government starts printing a lot of money. If there is too much money in the economy and little goods and services, the prices of these products will increase. There is a monetary rule where the government can only increase money supply at the same rate as the real GDP. The inflation from increase of money supply will take some time to occur because it takes time for consumers to start spending more money.

2.) Demand pull inflation – Increases in aggregate demand, AD will lead to inflation because AS remains the same as shown on this graph, however, real GDP also increases.



3.) Cost-push inflation – When aggregate supply shifts inwards because there is an increase in costs. Real GDP decreases, and price levels increase as shown from this diagram.



4.) Wage price spirals – As prices rise continuously, workers will ask for higher salaries to compensate for inflation. So, when wages increase, costs also increase so cost push inflation can occur, and further inflation will continue as a cycle.

5.) Imported inflation – When you are importing from a country that has inflation, these products are sold more expensive as well because costs increase as these products are expensive to make. A fall in your economy's currency can cause imports to be more expensive so costs will increase.

Examples of hyperinflation:

1.) Hungary in 1946 -> inflation rate of 13.6 quadrillion %

2.) Zimbabwe in 2008 -> inflation rate of 79 billion %

3.) Yugoslavia in 1944 -> inflation rate of 313 million %

The benefits of low and stable inflation:

1.) Encourages consumers to buy goods and services earlier, because they fear inflation may occur later. Which will also increase AD leading to economic growth and a slight increase in price levels.

2.) Interest rates are normally low when inflation is low. This encourages investment. Investment is a component of AD which increases leading to more economic growth and a slight increase in price levels.

3.) The expectations for inflation in the future are to remain low. If labor realizes this, they won't ask for higher wages, so if wages are cheap, economic growth will occur as AS shifts outwards.

4.) If you have low inflation in your country, it will be sold cheaper internationally so your product is more competitive and AS increases as more countries demand your products.

Personal costs of inflation:

1.) Skilled labor and workers can ask for higher wages because they are actually important to the firm. Consequently, costs for firms will increase and AS will decrease.

2.) The purchasing power of money will fall. If prices increase and your income doesn't change, your purchasing power will decrease.

3.) Those on fixed incomes like old-age people or unemployed people will have really low purchasing power.

4.) People who save money will suffer because when inflation occurs, their money's value depletes. Borrowers will benefit because when they borrow money from before, as they pay it back, the value of that money is not as much.

The impact of inflation on the economy:

1.) It impacts negatively on menu firms. On firms like Coca-Cola, when inflation occurs, they have to go to all their vending machines and markets to change the prices which causes a huge administrative cost for the firm.

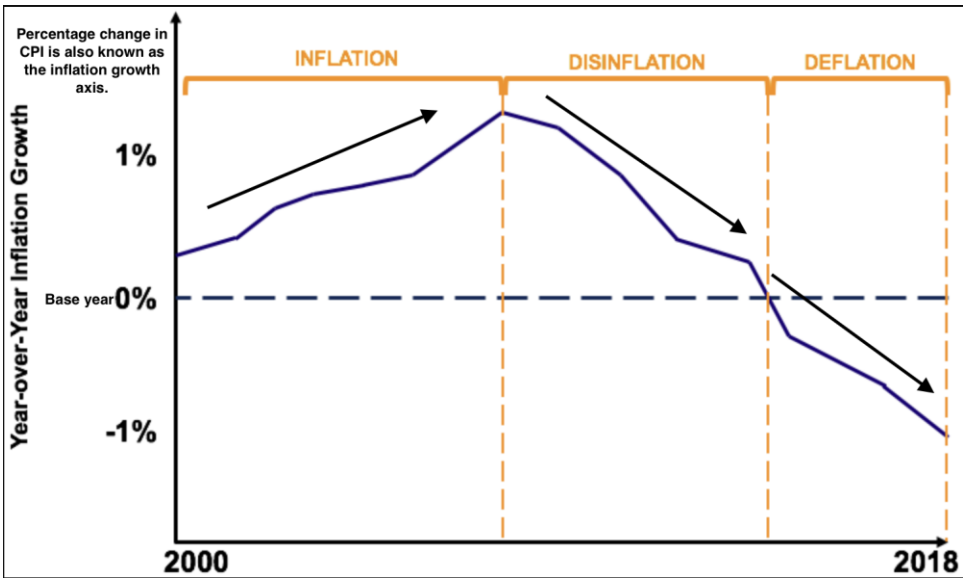
2.) There are also additional costs for consumers when inflation occurs. This is because their purchasing power decreases because they have to keep paying more.

3.) It creates economic uncertainty as governments and firms are unsure when planning for ahead. It reduces their export competitiveness because their prices will increase so demand for their goods will decrease, and real GDP will also decrease.

Deflation:

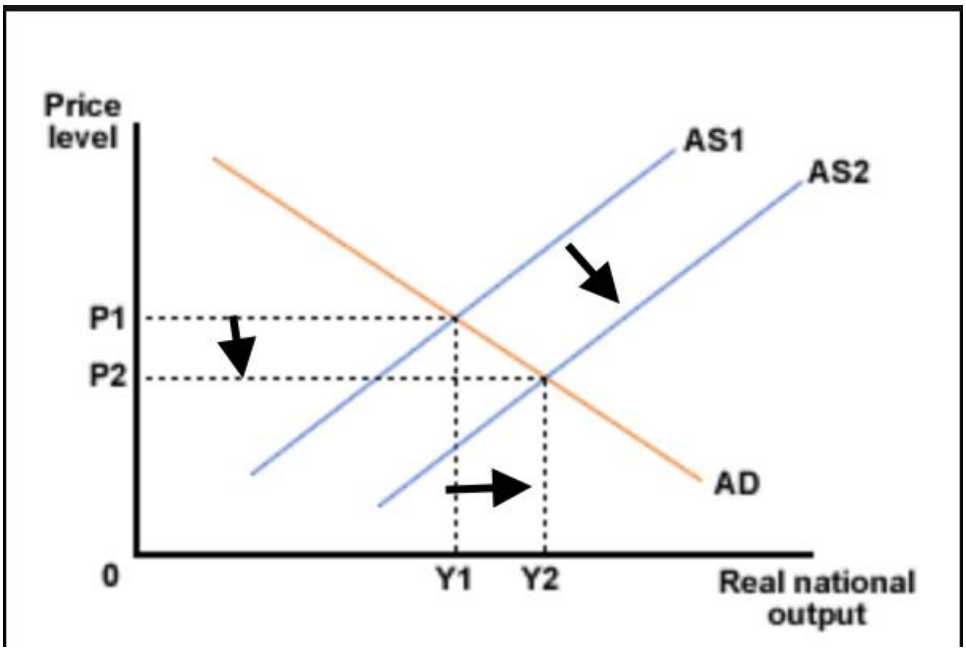
A consistent decline in the general price levels of the economy over a long period of time.

Disinflation: A fall in the rate of inflation.



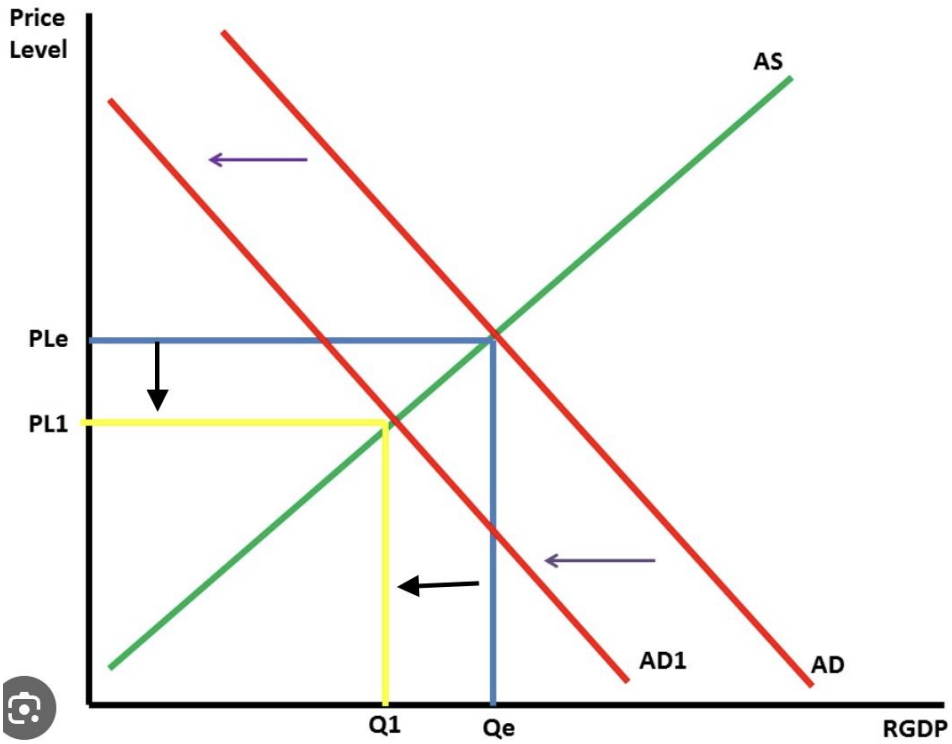
Why do prices fall?

1.) When there are more firms in the market supplying, AS will increase which will lead to deflation.



2.) Competition between firms has increased so supply increases, hence AS will increase which will lead to deflation.

3.) When aggregate demand decreases deflation occurs.



4.) Technological advancements cause reduced costs of production so AS will shift outwards and deflation will occur.

How to calculate deflation:

Use the same CPI calculation for inflation but this time you will get a value that shows deflation.

(((CPI of year n+1) - (CPI of year n))/(CPI of year n)) • 100

For example:

CPI of year 2 = 108

CPI of year 1 = 120

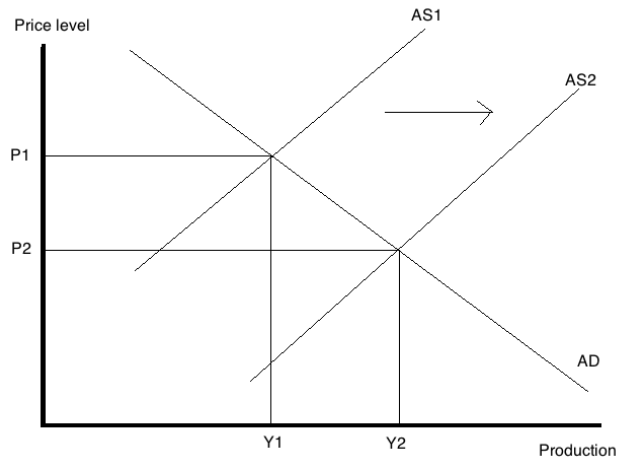
((108-120)/120) • 100 = -10%

This shows that your deflation rate was 10%

Types of deflation:

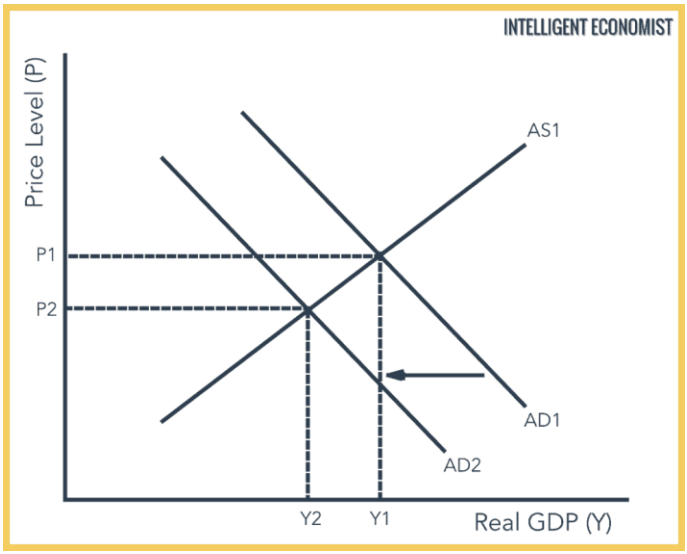
Benign deflation – Good deflation

Employment levels are increasing because there is more supply, real GDP increases, and price levels are lower.



Malign deflation – Bad deflation

A decrease in aggregate demand is bad because your real GDP decreases, and you are not solving any of your macro-objectives like unemployment.



Why deflation is generally bad for the economy:

1.) Consumers will delay their spending because during deflation they will know that prices will fall. Since people are not buying products there will be excess supply in the market.

2.) Accordingly, firms will cut prices and so firms will not have much profit to re-invest into their firm. When the firms do not have enough money to re-invest, it will cause unemployment because the firm cannot pay wages.

3.) Hence the GDP will fall, and additionally, when deflation is present the cost of borrowing money increases. Eventually, the economy goes into a deep recession, only if all of this happens on a continuous basis.

Recession: A fall in real GDP for at least 2 consecutive quarters (6 months).

Consequences of malign deflation:

1.) Consumers will delay their expenditure as they wait for prices to fall.

2.) Unsold stock will accumulate for the firm causing prices to fall, then the firms won't have enough money to re-invest.

3.) Value of debts held will rise as prices fall and this increases the burden of loan payments.

4.) Firms stop investing in their company as demand falls which further drops AD, consequently the economy cannot grow as real GDP falls.

5.) The real cost of public spending rises, and tax revenues will fall so governments have to borrow more money to meet budget expenditure for public.

6.) Eventually, firms go out of business because consumer confidence falls causing even deeper recession.

Policies to control deflation:

1.) Expansionary monetary policy: Lower rates of interest will encourage consumers to spend more money.

2.) Expansionary fiscal policy: Lower tax rates on incomes and profits to boost demand.

3.) The government could also increase money supply by printing money (not suggested).

4.) Governments can use the extra money they printed to start new projects for an increase in employment.

Unemployment:

It is a reference to the people in an economy who have the willingness and ability to work do not have a job.

Labor force:

The total number of people of working age who are working, or actively looking for jobs. It is the total supply of labor in an economy.

Labor participation rate:

The labor force as a proportion of the total working age population.

Working population	
People included	People not included
The employed	The young
Self-employed	The disabled
Armed forces	The old

Unemployment formula:

((Number of people unemployed that are actively looking for work)/(labor force)) • 100

For example:

Number of people unemployed that are actively looking for work is 30 in an economy

Labor force is 100 people

(30/100) • 100 = 30%

Therefore, the unemployment rate is 30%

The multiplier effect:

If the government spends on something, that effect will be experienced from other aspects as well. For example, DIA hires a construction company to expand the campus, the labor will also get paid, then they will spend that money and the cycle continues.

Cases of highest unemployment:

1.) South Africa has an unemployment rate of 30%

2.) Djibouti has an unemployment rate of 28%

3.) Japan has an unemployment rate of 2.8%

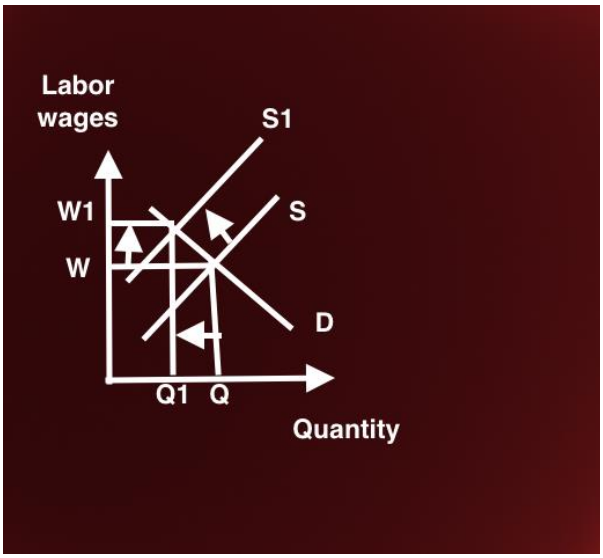
Causes of unemployment:

1.) The natural causes of unemployment (scroll one section down).

2.) Technological – industrial robots and technology replaces labor for example robots that efficiently screw toothpaste caps on in a factory.

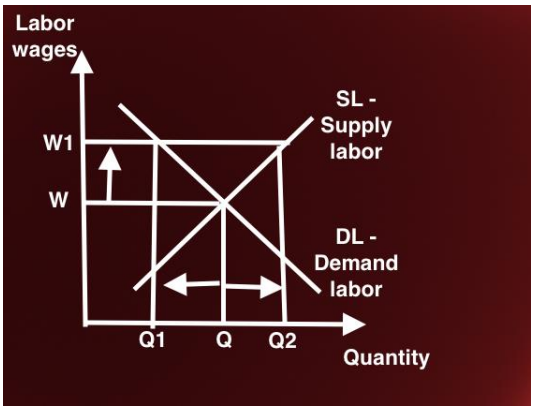
3.) Cyclical unemployment – It happens when aggregate demand falls and firms have to let go of their workers.

4.) Labor market imperfections – Trade unions will restrict the supply of labor.



5.) Unemployment payments reduce incentives for people to work. This problem only exists in developed countries where unemployment payments are present.

6.) Minimum wage law – These laws may reduce the demand for less-skilled labor. The equilibrium price is too low so labor is being exploited. Minimum wage cap is placed above equilibrium. The minimum wage cap is shown on the graph by w -> w1, the contraction in quantity of labor demanded is shown by Q -> Q1, and the extension in quantity of labor supplied is shown by Q -> Q2.



Natural rate of unemployment:

1.) Frictional unemployment – When people are switching between jobs constantly so your economy's unemployment cannot be at 0% ever.

2.) Structural unemployment – When economies are going through a structural change (when you change in economies) for example, companies replace labor with machinery.

3.) Seasonal unemployment – Tourist groups will always be unemployed during the off-season, or sports players won't be working during the off-season.

Personal costs of unemployment:

1.) Loss of income because you are unemployed

2.) Your living standards are low

3.) You have a dependency on unemployment pay in developed countries

4.) Loss of working skills

5.) Crime life

6.) Depression

7.) Drugs and abuse

Cost to society of unemployment:

1.) Higher taxes in developed countries in order to pay for the unemployment pay.

2.) A fall in tax revenues leads to less public expenditure so a loss in living standards. AD can fall leading to a fall in GDP.

3.) Waste of resources (the unemployed).