Macroeconomics: It is the study of economic activity in relation to an economy as a whole.

PLC: Public limited company meaning that this company has its shares listed publicly.

What are the different roles of the government?

1.) Employer: The government normally employs a lot of people; they are one of the largest employers in the country (jobs like military and state-owned enterprises). Which is why any policy changes can affect many employees.

2.) Producer: The government has to provide public and merit goods. For example, the police or healthcare companies that are state-owned need to be cared for by the government.

3.) Provider: To specific vulnerable groups in the economy like old age homes. The government will provide goods and services to certain groups of people. They provide research and development to private sector firms; this is because it encourages innovation and better-quality products. Governments also subsidize agricultural industries to lower the cost of production for private agricultural firms in order to increase productivity.

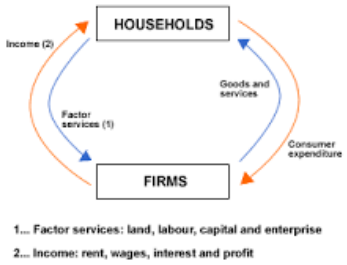
4.) Consumer: The government is a major consumer of goods and services, which is why public expenditure is large. Current expenditure is expenditures on a daily basis, whilst capital expenditures is when they buy assets, for example, buying roads that will last for a while. An example of current expenditure would be paying wages.

5.) Law maker and regulator: The government will create laws to influence people to behave in a certain way. Many health and safety regulations are put in place to make sure society is moving in the right direction.

6.) As a tax collector: The government sets and collects taxes. The government reinvests the revenue they get from taxes. Countries that have developed infrastructure, it shows that they have a government who have enough tax money to invest in the country. Taxes also discourage the consumption of certain goods like demerit goods, for example, placing taxes on cigarettes would discourage the consumption of such products because it is taking a greater proportion of their income.

Circular flow of income:

National income flows between 3 different stakeholders, the government, consumers, and suppliers. GDP (gross domestic product) is the value of your nation's production. If you divide the GDP by the population, you get the GDP per capita which is the average income. Consumers are buying products from suppliers, and suppliers are paying for factors of production, so the money circulates back to the consumers (labor wages).



Total expenditure: The total money you as a consumer pay for goods and services.

National income: The payments to owners of resources (wages).

Total expenditure = National income

Consumers are the owners of land, labor, and capital. They will give it to firms, where the entrepreneur will use them to create goods and services. Which consumers will consume. Total expenditure = Total output = national income.

National income = GDP

Macroeconomic aims:

1.) Economic growth – An increase in the real GDP.

2.) High and stable level of employment – To make sure there are low levels of unemployment. Unemployment means someone is willing and able to work but does not.

3.) A low and stable rate of inflation – Inflation is a sustained increase in the general price levels of an economy. Meaning that the overall prices in the economy are increasing.

4.) A stable balance of international trade and payments – A recording process that tracks the import expenditure and export revenue.

Real GDP = nominal GDP (money value) - the rate of inflation

GDP = Price of products • quantity of all products produced

Example:

Country X produces 10 cars for a price of $100.

Year 1 nominal GDP = (10)(100) = $1000

Due to inflation, the prices went up from $100 to $200

Year 2 nominal GDP = (10)(200) = $2000

Additional Macro aims:

1.) To reduce poverty and inequalities in the distribution of income and wealth in an economy.

2.) To reduce pollution and waste. To protect the natural environment.

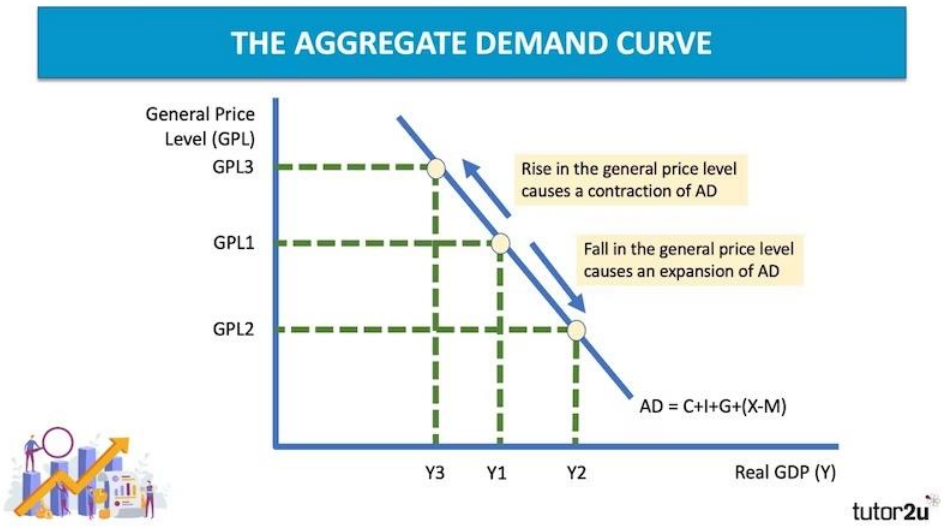
Macroeconomic management:

Demand side policies: Influences the aggregate demand for all goods and services in the economy.

Supply side policies: Influences the aggregate supply for all goods and services in the economy in the economy.

Aggregate demand:

It is the sum of the total planned expenditure for a given price level by the households, firms, the government, and the foreign sector (the total demand of an economy).



Factors affecting aggregate demand:

1.) Households through their demands for goods and services.

2.) The government through their demands for products and investments.

3.) Firms through their demands for products and investments.

4.) Foreign department through import/export

The AD (aggregate demand) equation:

AD = C + I + G + (X-M)

C = consumer expenditure

I = Investment expenditure

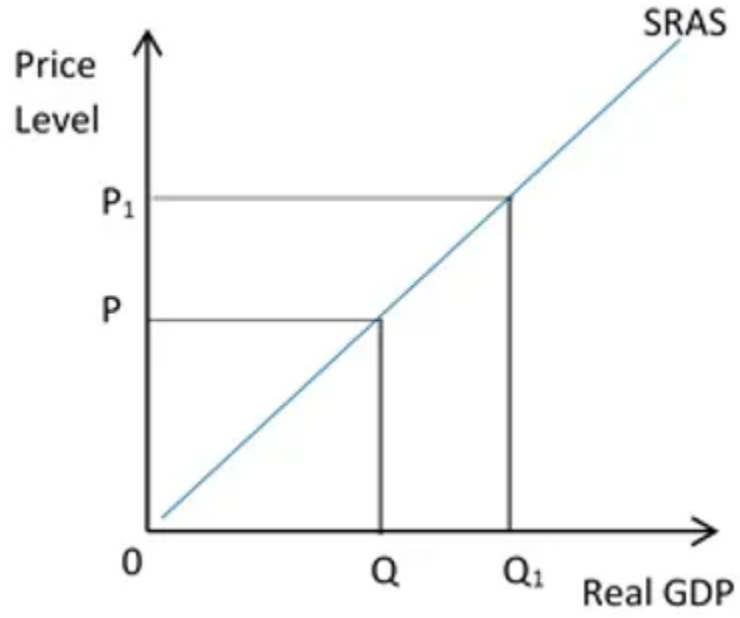
G = government expenditure

X = Export revenue

M = Import expenditure

Aggregate supply:

It is the total supply of all goods and services in the economy.



Factors affecting AS (aggregate supply):

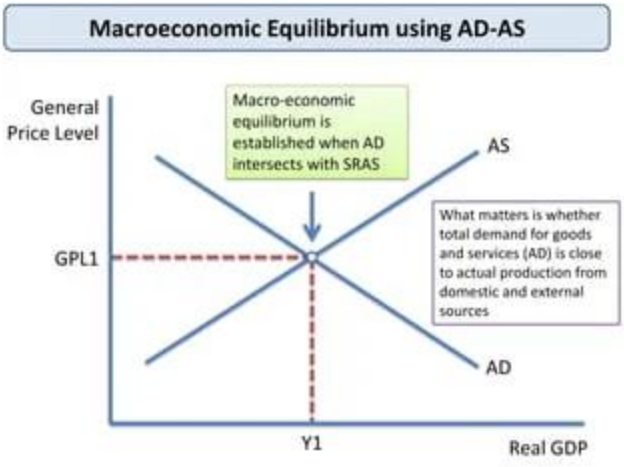
1.) Changing wage rates in the economy. When the wages increase, costs of production in the economy increase so the aggregate supply will shift inwards.

2.) Changes in other resources prices. For example, the average rent in an economy increases so the costs of production will be higher and aggregate supply would shift inwards.

3.) Taxes and subsidies, taxes increase costs of production so AS would shift inwards. Subsidies decrease the costs of production so AS would shift outwards.

4.) Supply-side shocks, because of global events the AS will change. For example, if a drought occurs in your economy, your AS will shift inwards. The pandemic, or wars, would be an example of global events that influence AS. Internal supply-side shocks happen only in your economy like the drought, but external supply-side shocks affect AS globally as the pandemic.

Macroeconomic equilibrium diagram:



There are no conditions for this graph, ceteris paribus is not applicable to this graph. Just because your economy is at equilibrium, doesn't mean your economy is doing good, it means you are doing well from an economic perspective.

Printing money:

When your economy prints money, everyone has that money meaning that everyone is technically rich, so the money gets devalued and so the currency power is less.

CPI – Consumer price index:

CPI (Consumer price index): The measurement of inflation is done with the use of a consumer price index.

Year 0 = base year

1.) Identify the typical basket of goods and services purchased by the average household in your economy.

2.) Take the average price of the basket of goods and services, from a sample of different retailers.

3.) Your CPI in the base year will always be 100. If it is above, there is inflation, and below 100 is deflation.

4.) Monitor how much the typical family spends on each item from the basket. This is normally found with the use of a family expenditure survey.

5.) Weigh the average price of each item by the proportion of household expenditure spent on the item.

6.) Now you multiply the weight by the price and add up the weighted averages.

7.) The total weighted average price of the basket is equal to 100 in the base year.

Year 1 process:

1.) Repeat the same process from the base year.

2.) Now compare this figure with the base year's figure (100).

3.) For any other year you do the same.

Example:

	2016 Base Year		2017	2018
Good	Price	Quantity	Price	Price
Soccer Balls	$10	100	$15	$18
Shoes	$50	40	$52	$56
Concert Tickets	$100	20	$104	$110

1. Calculate the total cost of purchasing the base year fixed basket (100 soccer balls, 40 shoes, and 20 concert tickets) in each year.

For 2016: ($10 x 100) + ($50 x 40) + ($100 x 20) = $5,000

For 2017: ($15 x 100) + ($52 x 40) + ($104 x 20) = $5,660

CPI = (Weighted average of basket in year n)/(weighted average of basket in year 0)

$$CPI \quad 113.2 = \left(\frac{5,660}{5,000}\right)100$$

To calculate the rate of inflation, use this equation: (((year n CPI) - (base year CPI = 100))/(base year CPI)) • 100 = rate of inflation.

For example:

Base year CPI = 100

Year 1 CPI = 108

(108 – 100)/100 = 0.08

0.08 • 100 = 8 -> inflation rate is 8%

If you get the CPI of year n and year n + 1 you can calculate the change in inflation rate with the same equation, just replace base year with year n.

Year 2 CPI = 120

Year 1 CPI = 108

((120 – 108)/108)•100 = 11.1%

Hence, the increase of inflation from year 1 to 2 was 11.1%, and year 2 had an inflation rate of 20% compared to the base year.

Uses of price indices:

1.) It is an economic indicator which lets you know how your country is doing. You can internationally compare the cost of living.

2.) Indexation, if the government knows that 5% inflation will occur, to keep expenditure values intact they can tell firms to increase the minimum wage by 5%.

3.) Used as a price deflator, it is useful to reduce the price of products based on real wages. This can allow you to calculate the real purchasing power.

Disadvantages of price indices:

1.) Expenditure patterns of a typical household can change over time for a number of reasons and so CPI must be adjusted.

2.) Changes in taste and fashion can change the expenditure pattern.

3.) When new products enter the market like innovations in technology, for example, electric cars.

4.) A change in the composition of the population. If there is an ageing population, they won't spend as much on traveling. If there is a lot of European immigration, there would be European products added to the basket.

5.) Changes in the quality of products, for example, a product gets outdated, so it is not bought as much.

6.) Changes in retailers, for example, you have online retailing now which changes the price.

7.) International comparisons of CPI can be very difficult, because the proportions of income are different.