Study Unit 5

Measuring the performance of the economy

Macro economic objective:

5x objectives:

- **Economic Growth:** a rate of growth which allows an increase in living standards without undue structural and environmental difficulties.
- **Full employment:** where those who are able and willing to have a job can get one, given that there will be a certain amount of frictional, seasonal and structural unemployment (*referred to as the natural rate of unemployment).*
- **Price stability:** when prices remain largely stable, and there is not rapid inflation or deflation. Price stability is not necessarily the same as zero inflation, but instead steady levels of low-moderate inflation is often regarded as ideal. It is worth noting that prices of some goods and services often fall as a result of productivity improvements during periods of inflation, as inflation is only a measure of *general* price levels. However, inflation is a good measure of 'price stability'. Zero inflation is often undesirable in an economy. ("Internal Balance" is used to describe a level of economic activity that results in full employment with no inflation)
- **External stability:** equilibrium in the Balance of payments without the use of artificial constraints. That is, exports roughly equal to imports over the long run.
- **Equitable distribution of income:** a fair share of the national 'cake', more equitable than would be in the case of an entirely free market.

UNEMPLOYMENT:

- People willing and able to work but do not have a job.
- Unemployment rate = ratio between unemployment and those willing & able to work.

(difficult calculation)

HOW TO MEASURE THESE OBJECTIVES:

- **Economic Growth:** use the increase in economic activity. Expressed in GDP *(Also look at production, income and expense)*
- **Full employment:** Use unemployment rate
- **Price stability:** Use consumer price index (CPI)
- **External stability:** Use balance of payments
- **Equitable distribution of income:** Use Lorenz curve, Gini coefficient or quantile ratio

MEASURING THE GDP

GDP = Gross Domestic Product

= total value of all final goods and services, Produced within the boundaries of the country, in a particular period (usually 1 year)

- **GROSS** means do not subtract the depreciation on capital goods. Example: Pot holes in roads, rust on machinery, broken equipment)
- In order to add different final goods together, use the price of the goods and services. This expresses the **value of the goods.**

NOTES:

- ONLY final goods are included in GDP. (if products used to make goods are counted this may cause double counting)
- GDP is only within one country
- Flow variable. GDP only concerned with new products for this year (1 year only)

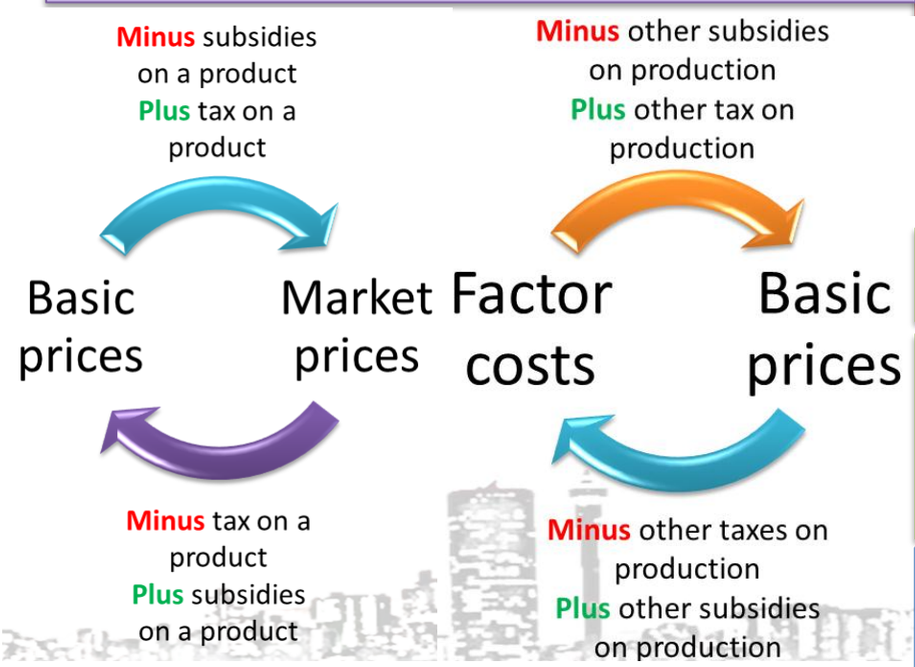
Market & Basic Prices and Factor cost

- These differ due to taxes and subsidies
- **TWO types of Taxes:**

1. Taxes on products (levied on each product)
2. Taxes on production (levied on the company)

- **TWO types of Subsidies:**

1. Subsidies on products (on each product produced)
2. Subsidies on production (on the company)



The **nominal** value of a good is its value in terms of money. The **real** value is its value in terms of some other good, service, or bundle of goods.
e.g. R10 in 2000 is still R10 Today (Nominal Value) however the value of what you can do with the R10 today versus what you could've done with it in 2000 is much less (Real Value)

Calculations

Nominal GDP – use the price of that particular year

Real GDP – use the prices in the base of the year, to exclude the effects of inflation. *(measure increase in PRODUCTION)*

CPI (consumer price index)

- Means in which inflation is measured.
- StatsSA do a survey every 5 years to determine the quantity used by SA. *(Representative basket of goods & service)*
- The year in which a survey is done = base year
- See by how much the total price of the basket increase *(way to measure inflation)*

$$Inflation_{2011} = \frac{CPI_{2011} - CPI_{2010}}{CPI_{2010}} \times 100$$

GDP (Gross Domestic Product)

CALCULATING *(three methods)*

1. Production method (use basic prices)
Sum of all the values added in each step of the production line

2. Expenditure method (use market prices)
Sum of all final goods and services only

3. Income method (use factor costs)
Sum of all incomes earned from FoP in each step of the production line.

**all the methods give the same answer, just different routes to follow.*

Economic Growth is measured in the growth of GDP.

- GDP grows when prices increase (inflation)
- GDP grows when production increases.
- *Look at real GDP instead of nominal GDP*

Nominal GDP is the market value (money-value) of all final goods and services produced in a geographical region, usually a country.

Real GDP measure of the value of output economy, adjusted for price changes. The adjustment transforms the nominal GDP into an index for quantity of total output.

GNI (gross national income) = **GDP – INCOME from FOREIGNERS in SA + INCOME from SA CITIZENS from OVERSEAS**
(Domestic in GDP = borders of country)
**all South Africans are included no matter where they live.*

GDE (gross domestic expenditure)
The spending within the borders of the country.
GDE = GDP- EXPORTS + IMPORTS

Distribution of Income

HOW total wealth is divided amongst the citizens of a country.

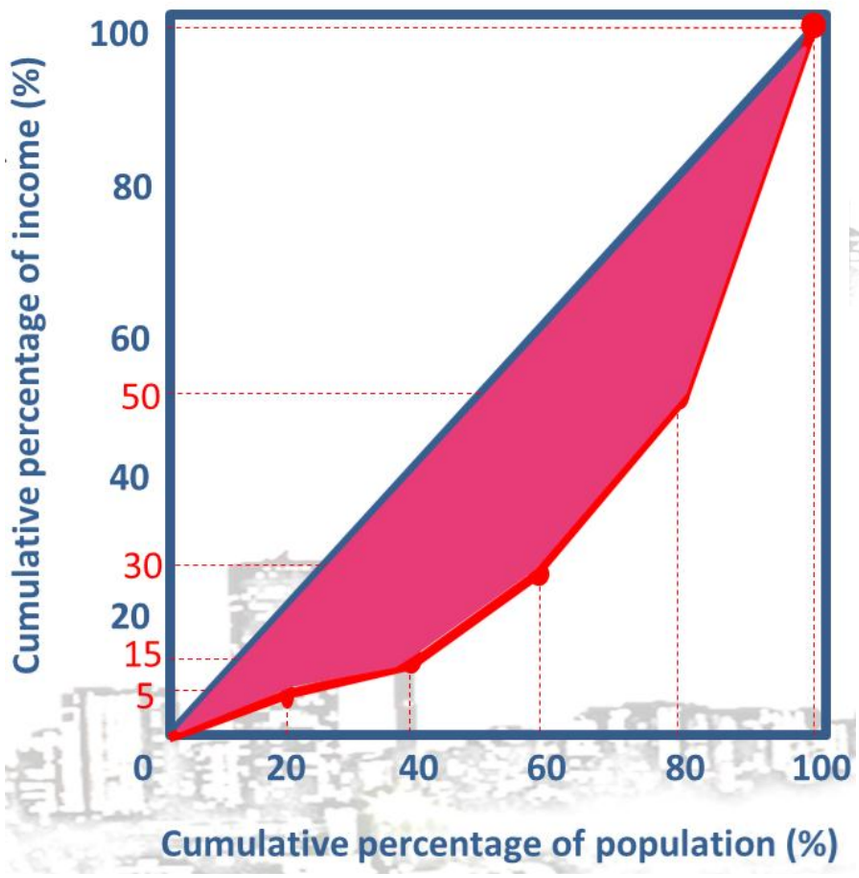
THREE ways to measure:

1. Lorenz curve
2. Gini coefficient
3. Quantile ratio

LORENZ CURVE

- Straight diagonal line representing perfect equality of wealth distribution.
- Measured in percentage (%)
- Increasing and convex
- EXAMPLE:

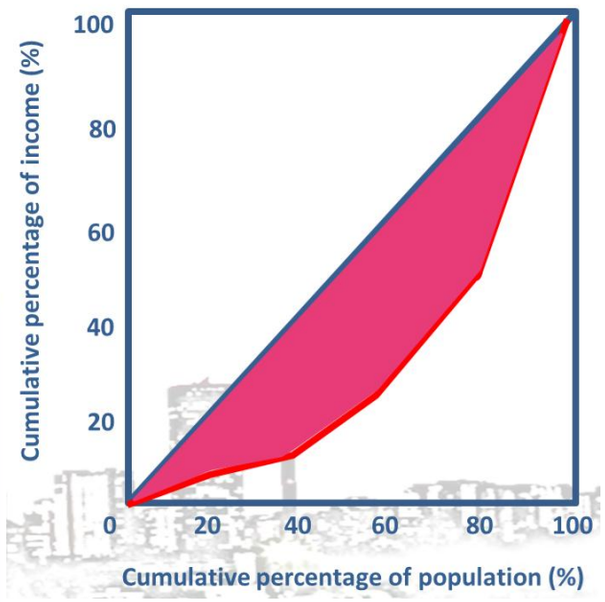
- 5 people, owning R1000 in total
- Arrange people from poorest to richest
- Johan (R50), Pieter (R100), Susan (R150) Dawid (R250), Charmaine (R450)
- Johan = bottom 20% of population, he owns 5% of income.
- The poorest 40% of the country will be Johan + Pieter (they own 15% of the total income)
- The first 60% (Johan + Pieter + Susan) owns 30% of the total income
- First 80% of the country = Johan+Pieter+Susan+Dawid, they own 50% of the total income.
- Total income (100%) belongs to all the workers (100%)
- Connect the dots, colour the area of deviation



GINI COEFFICIENT

- Known as Gini index or ratio
- A measure of statistical dispersion intended to represent the income distribution of a nation's residents.
- Lorenz curve used to calculate Gini.
- EXAMPLE:

- Divide the pink area by the area of the triangle
- It gives a value between 0 and 1
- 0 = perfect equal society
- 1 = perfect inequal society
- To get GINI index x 100



QUANTILE RATIO

- Points taken at regular intervals.
- EXAMPLE:

- Johan was the poorest 20% of country and Charmaine was the richest 20%

450 = 9
50

* A high ratio = high inequality

$$\text{Quantile ratio} = \frac{\%\ wealth\ of\ richest\ 20\%}{\%\ wealth\ of\ poorest\ 20\%}$$

Balance op Payments

A record of all the transactions between SA and the rest of the world.

* Can see whether relationship between countries are stable through BoP

Balance of current account and financial account is added together; the total balance cause change in country's gold and forex