Dr. Jayachandran's
INSTITUTE FOR CIVIL SERVICE EXAMS
SOUTH INDIA'S PREMIER INSTITUTION FOR PUBLIC POLICY AND CIVIL SERVICE EXAMS

www.jcsias.com
Ph: 93619 21011

MACRO ECONOMIC INDICATORS

National Income Accounting

Gross Domestic Product (GDP)

Net Domestic Product (NDP)

Gross National Product (GNP)

GDP vs GNP

Net National Product (NNP)

National Disposable Income (NDI)

GDP (Nominal), GDP (Real)

GNP Deflator

Per Capita Income (PCI)

Purchasing Power Parity (PPP)

Lorenz Curve

Gini Coefficient

Notes

National Income Accounting

* It is a process of measuring the economic performance though Macroeconomic indication.
* Importance:
* Given the status of **Economic Performance** of a country at a given points of time.
* It is a **Policy Input** and **Evaluation tool** and thereby helps to lake corrective measures when required.
* It given the data regarding **Performance of Specific Sectors**.
* It helps in **International Comparison** interns of PPP.

Macro Economic Indicators:

* **GDP** - Gross Domestic Product.
* **NDP** - Net Domestic Product.
* **GNP** - Gross National Product.
* **NNP** - Net National Product.
* **NDI** - National disposable Income.
* **PPI** - Purchasing power parity.
* **PCI** - Per capita Income.
* **Lorenz** Curve.
* **GNP** deflator

Gross Domestic Product (GDP)

* It is total dollar value of all Goods and Services produced over a specific time period in a Country, even by foreigners/ foreign business group
* It is the size of the Economy.

GDP is measured by **3 methods** namely Production method, Income method and expenditure method.

Production (/Output) Method

* It is the total **value of all final products** at Market price produced (by the factors of income) within a National territory in a period of one year.
* In order to avoid double accounting the Gross value added method is used whereby the value addition at different stages in added up.
* **GDP = GVA (of all Producers)**
* Gross Value added (GVA) = Sale cost with value addition – Cost of Buying the good.

Income method

* Here GDP is Sum total of Rent, Wages, Interest, Profit and mixed income of self employed people of the entire nation.
* Calculation based on all the money **Earned** everywhere
* **GDP=W+I+P+R**
* W = Wage, I = Interest, P = Profit, R = Rent

Expenditure method

* Here GDP is Sum total of consumption, Investment, Government expenditure and Trade balance.
* Calculation based on Total Money **Spent** (on all final goods and services) by everyone in the economy.
* **GDP = C + I + G + (X-M)**
* C = Consumption of goods and services, I = Gross Investments, G =Government Purchases, X = Exports, M = Imports

These Calculation of GDP can of Two types

1. **Market Price**
2. **Factor Cost**

Gross Domestic Product at Market prices = GDP at Factor prices +Indirect taxes - Subsides

so, GDP at Factor cost = GDP at Market prices –Indirect taxes + Subsides.

Net Domestic Product (NDP)

NDP = GDP – Depreciation

* Depreciation is the reduction in the value of total capital stock in the process of production of capital goods because of wear and tear.
* Here defect production is not considered and only Gain oriented production is added.

Gross National Product (GNP)

GNP = GDP + NFIFA

NFIFA = Net factor income from abroad, It is the difference between factor income received by the Residents and the income paid to Non Residents for their factor services provided in that domestic territory.

Notes

Notes

GDP vs GNP

* Let us Understand **GDP vs GNP** with idea of two boxes
* GDP is **Money value produced in** a Country, here Box is **India** and involved people are Indian + Foreigners. Things that happen inside that box
* GNP is the **Money Value produced by** a Country men(Citizen) anywhere, here Box is World and Involved people is **IndiaN.** As we consider only our country men here(inside Indian Territory) and away(Abroad), we should also minus money produced by other country men here. So creating NFIFA.
* NFIFA included remittance from abroad minus takeaway from here.
* GDP is always greater than GNP in the case of India, Because we have many foreign player operating here and we have less Indian International players (it all depends on Indian individual bringing foreign money and not companies from Abroad) because NIFIFA is negative.
* While in case of Japan, Korea they bring lot of money from abroad than produced locally.

Net National Product (NNP)

NNP = GNP – Depreciation

* Net national Product at factor cost is National Income.

National Disposable Income (NDI)

* It is the total income available to the Residents of a country for consumption. This indicants the total market size of a country towards which the foreign investor target.

NDI = NNP + Private Transfers.

Impacts of Inflation on these Indicators.

* When these macroeconomic indicators are calculated at Current Price (Market Price) they are called as **Nominal Indicators.**
* If they are calculated at constant price in relation to a base year (India 2011-12 prices, revised in 2015 from 2004-05) they are called as **Real Indicators.**

Notes

Hence **GDP (Nominal) > GDP (Real)**

The indicator that provides the measurement or effect of inflation on the whole economic is

$$\textbf{GNP Deflator} = \frac{\text{Nominal GNP}}{\text{Real GNP}} \times 100$$

Per Capita Income (PCI)

PCI = GNP/Population.

High PCI does not necessarily Mean high Standard of Living.

Purchasing Power Parity (PPP)

* Estimates the amount of **Adjustment** needed **on exchange rate** between countries in order for the exchange to be equivalent to each currency's purchasing power.
* It facilitates International comparison, As it can't be measured rationally using **Conventional Exchange Rate** which is not only influenced by PPP but, also political stability, trade weight,, inflation/deflation, oil prices, stock market behavior etc.
* PPP is defined on the basis of **how much** an Internationally traded basket of representative goods and services can be purchased using one rupee vis a vis one American dollar.

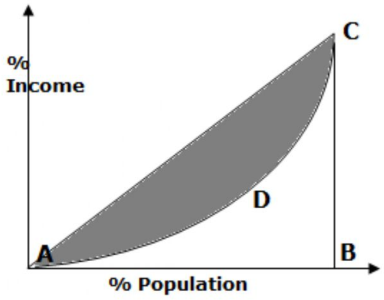
Indicator of Inequality
Lorenz Curve, Gini Coefficient

Lorenz Curve

Measures the Income inequality existing in a country.

It is indicated by **GINI** coefficient, which measures the magnitude of Income inequality quantitatively.

Consider the graph below



Here **AC = Line of Perfect Equality**

ABC = Line of Perfect Inequality

Gini Coefficient (G) = $\frac{\text{Area of ADC}}{\text{Area of ABC}}$

If G = 0 Perfect equality (ADC = AC)

G = 1 Perfect inequality (ADC = ABC extreme)

Measured of welfare = PCI (1 - G)

Notes