

# Chapter six : Macroeconomics

# Goals of macroeconomics

- Macroeconomics studies the working of an economy in aggregation or as a whole. And it aimed at how to;
  - **Achieve high economic growth**
  - **Reduce unemployment/full employment**
  - **Attain stable prices/price stability**
  - **Reduce budget deficit and balance of payment (BoP) deficit**
  - **Insure fair distribution of income among citizens**
  - **Insure economic growth**

# The National Income Accounting

- **National Income Accounting (NIA)** is an accounting record of the **level of economic activities** of an economy.
- It is a measure of an **aggregate output, income and expenditure** in an economy.

## Why do we need to study NIA?

- It enables us to measure the **level of total output** in a given period of time, and to explain the **causes for such level of performance**.
- It enables us to observe **long run trend of the economy**.
- It provides **information to formulate policies and design plans**.

## **Approaches to measure national income (GDP/GNP)**

- Before discussing different approaches of national income, it is important to understand about the measure of the economic performance of a given country at large.
- Generally, it is named as GDP or GNP.

**Gross Domestic Product (GDP):** it is the **total value** of currently **produced final goods and services** that are produced **within a country's boundary** during a given period of time, usually **one year**.

From this definition, we can infer that:

- It measures the **current production only**.
- It takes into account **final goods and services only**
  - we **do not include the intermediate products** in our GDP calculations.
  - Intermediate goods are **goods that are completely used up in the production of other products** in the same period that they themselves are produced.
- It measures the **values of final goods and services** produced within the boundary/territory of a country irrespective of who owns that output.

- In measuring GDP, we take the market values of goods and services ( $GDP = \sum P_i Q_i$ )

where,

$P_i$  = series of prices of outputs produced in different sectors of an economy in certain period

$Q_i$  = the quantity of various final goods and services produced in an economy

- **Gross National Product (GNP):** is the **total value of final goods and services currently produced by domestically owned factors** of production in a given period of time, usually one year, **irrespective of their geographical locations.**

GDP and GNP are related as follows:

$$\text{GNP} = \text{GDP} + \text{NFI}$$

$$\text{NFI} = \text{FI received from abroad} - \text{FI paid to foreigners}$$

- **NFI** denotes Net Factor Income received from abroad which is equal to **factor income received from abroad** by a country's citizens less **factor income paid for foreigners to abroad**.
- Thus, NFI could be negative, positive or zero depending on the amount of factor income received by the two parties.
- **If  $\text{NFI} > 0$ , then  $\text{GNP} > \text{GDP}$**
- **If  $\text{NFI} < 0$ , then  $\text{GNP} < \text{GDP}$**
- **If  $\text{NFI} = 0$ , then  $\text{GNP} = \text{GDP}$**

- Basically, there are three approaches to measure GDP/GNP. These are:

I. Product/value added approach,

II. Expenditure approach and

III. Income approach

**Product Approach:** In this approach, GDP is calculated by adding the **market value of goods and services** currently **produced by each sector** of the economy. In this case, GDP includes only the **values of final goods** and services in order to **avoid double counting**.



- Double counting will arise when the output of some firms are used as intermediate inputs of other firms.
- e.g., we would not include the full price of an automobile in GDP and then also include as part of GDP the value of the tires that were sold to the automobile producer.
- The **components** of the car that are sold to the manufacturers are called intermediate goods.

Two possible **ways of avoiding double** counting

- Taking only the **value of final goods and services**
- Taking the **sum of the valued added** by all firms at each stage of production
- We can illustrate the two scenarios using some hypothetical examples as follows.

**I. Taking only the value of final goods and services.**

**Example:**

<b>Sectors</b>	<b>Value of Output (in million birr)</b>
<b>Agriculture and allied activities</b>	<b>9309</b>
- Agriculture	7000
- Forestry	1000
- Fishing	1309
<b>Industry</b>	<b>147413</b>
- Mining & quarrying	9842
- Large & medium scale manufacturing	91852
- Electricity & water	13717
- Construction	32002
<b>Service</b>	<b>357 872</b>
- Banking insurance and real estate	121704
- Public administration & defense	36605
- Health	20000
- Education	32509
- Domestic & other services	147054
4. Net factor income from abroad	<u>87348</u>

$$\text{GDP} = 9,309 + 147,413 + 357,872 = 514,594$$

$$\text{GNP} = \text{GDP} + \text{NFI} = 514,594 + 87,348 = 601,942$$

## II. Taking the sum of the value added by all firms at each stage of production: Example

Stages of production	Values of output (in birr)	Cost of intermediate inputs	Value added
Farmer	500	0	500
Oil factory	2000	500	1500
Retailers	2500	2000	500

Note: If all values in the economy were added, GDP would be  $5000 = (2500 + 2500)$ . The problem of double counting is 2500, because of considering intermediate input in the calculation.

**Expenditure Approach:** GDP is measured by adding all **expenditures on final goods and services** produced in the country by all sectors of the economy.

- Thus, GDP can be estimated by summing up personal consumption of households (C), gross private domestic investment (I), government purchases of goods and services (G) and net exports (NE).

- **Personal consumption expenditure** includes expenditures by households on durable consumer goods, non-durable consumer goods and services.
- **Investment** is broken down into two categories: public and private. Public investment is, government investment on infrastructure and the like.
- **Gross private domestic investment** is defined as the sum of all spending of firms on plants, equipment, and inventories, and the spending of households on new houses by private sectors.

- **Government purchases of goods and services** include all government spending on finished products and direct **purchases** of resources less government **transfer** payments because transfer payments do not reflect current production although they are part of government expenditure.
- ***Net exports refer to total value of exports less total value of imports.***
- Note that net export is different from the terms of trade in that the latter refers to the ratio of the value of exports to the value of imports.

**Example:** GDP at current market price measured using expenditure approach for a hypothetical economy.

<b>Types of expenditure</b>	<b>Amount (in million Birr)</b>
<b>1. Personal consumption expenditure</b>	<b>4500</b>
Durable consumer goods	1500
Non-durable consumer goods	2000
Services	1000
<b>2. Gross private domestic investment</b>	<b>600</b>
Business fixed investment	250
Construction Expenditure	300
Increases in inventories	50
<b>3. Government expenditure on goods and services</b>	<b>250</b>
Federal government	100
State government	150
<b>4. Net export</b>	<b>-50</b>
Exports	150
Imports	200
<b>GDP at current market price</b>	<b>5300</b>

***Income approach:*** in this approach, GDP is calculated by adding **all the incomes** accruing to all factors of production used in producing the national output.

- It is crucial, however, to note that some forms of **personal incomes are not incorporated** in the national income.
- e.g., **transfer payments** are excluded from national income, as these are merely **redistribution of income** from **taxpayers to the recipients** of transfer payments.
- Transfer payments may take the form of **old age pension, unemployment benefit, subsidies**, etc.



- According to the income approach, GDP is the sum incomes to owners of factors of production plus some other claims on the value of output less subsidies and transfer payments.

GDP = Compensation of employees (wages & salaries)

+ Rental income

+ Interest income

+ Profits

+ Indirect business taxes

+ Depreciation

- Subsidies

- Transfer payments

**Example:**

<b>Items</b>	<b>Value (in million Birr)</b>
1) Compensation of Employees	<b>45623.71</b>
2) Rental Income	<b>1249.32</b>
3) Proprietor's Income	10561.21
4) Corporate Profits	16960.33
Subtotal (corporate and proprietor's)	<b>27521.54</b>
5) Net interest	<b>5189.73</b>
6) Depreciation	<b>503.84</b>
7) Indirect Business Taxes	<b>476.51</b>
8) Subsidy	<b>(11368.95)</b>
<b><i>Gross Domestic Product</i></b>	<b><i>69195.70</i></b>
9) Income from abroad	2036.20
10) Payments to abroad	(11231.90)
NFI	<b>(9195.70)</b>
<b><i>Gross National Income</i></b>	<b><i>60000.00</i></b>

## Limitation of GDP measurement:

- ***Definition of a nation:*** while calculating national income, nation does not mean only the political or geographical boundaries of a country for calculating the value of final goods and services produced in the country. **It includes income earned by the nationals abroad.**
- ***Stages of economic activities:*** it is also difficult to determine the stages of economic activity at which the national income is determined i.e. whether the income should be calculated at the **stage of production or distribution** or consumption.

It has been agreed that the stage of economic activity may be decided by the objective of calculating the national income.

- If the **objective** is to measure **economic progress**, then the **production stage** can be considered.
- To measure the **welfare of the people**, then the **consumption stage** should be taken into consideration.
- ***Transfer payments: this also creates a great difficulty in calculating the national income.*** It has generally been agreed that the best way is to **consider only the disposal income** of the individuals or groups.

- ***Underground economy:*** *no imputation is made for the value of goods and services sold in the **illegal market**. The underground economy is the part of the economy that **people hide from the government** either because*
  - ✓ **to evade taxation or**
  - ✓ **activity is illegal.** The parallel exchange rate market/**black market** is one example.
- ***Inadequate data:*** *in all most all the countries, difficulty has been faced in the calculation of national income due to lack of adequate data. Sometimes, the data are not reliable.*

- ***Non-monetized sector:*** *this difficulty is special to developing countries where a substantial portion of the total product is not brought to the market for sale. It is either retained for self-consumption or exchanged for other goods and services.*
- ***Valuation of depreciation:*** *the value of depreciation is deducted from the gross national product to get net national product. But the valuation of such depreciation is full of difficulties.*

- ***Changes in price levels:*** since the national income is in terms of money whose value itself keeps on changing, it is difficult to make a stable calculation which is assessed in terms of prices of the base year.
- ***No focus on quality:*** it is difficult to account correctly for improvements in the quality of goods. This has been the case for computers, whose quality has improved dramatically while their price has fallen sharply. It also applies to other goods such as cars whose quality changes over time.

## Nominal versus Real GDP

- ***Nominal GDP*** is the value of all final goods and services produced in a given year when valued at the **prices of that year**.
- i.e., nominal GDP =  $\sum P_i Q_i$  where, P is the general price level and Q is the quantity of final goods and services produced.
- Any change that can happen in the country's GDP is due to changes in price, quantity or both.



- For example, if prices are doubled over one year, then GDP will also double even though exactly the same goods and services are produced as the year before.
- Hence, GDP that is not adjusted for inflation is called Nominal GDP.

***Real GDP is the value of final goods and services produced in a given year when valued at the prices of a reference **base year**.***

- By comparing the value of production in the two years at the same prices, we reveal the change in output.
- Hence, to be able to make reasonable comparisons of GDP overtime we must adjust for inflation.
- **Example: Consider an economy producing two goods, X and Y.**

**Example:** Consider an economy producing two goods, X and Y.

Year	Product	Quantity	Unit price (\$)
2017 (base year)	X	20	5
	Y	8	50
2018	X	25	20
	Y	10	100

Given the above information, we can calculate the real and nominal GDP in both years as follows:

***In 2017:***

$$\text{Nominal GDP} = (20 \times 5) + (8 \times 50) = \$500$$

$$\text{Real GDP} = (20 \times 5) + (8 \times 50) = \$500$$

Note that both the real and nominal GDP values are exactly the same in the base year.

***In 2018:***

The outputs of 2018 valued at the prices of 2017(the base year).

$$\text{Nominal GDP} = (25 \times 20) + (10 \times 100) = \$1500$$

$$\text{Real GDP} = (25 \times 5) + (10 \times 50) = \$625$$

## The GDP Deflator and the Consumer Price Index (CPI)

- **The GDP Deflator:** The calculation of real GDP gives us a useful measure of inflation known as the GDP deflator.
- The GDP deflator is the ratio of nominal GDP in a given year to real GDP of that year.
- It reflects what's happening to the overall level of prices in the economy.

$$GDPdeflator = \frac{Nominal\ GDP}{Real\ GDP} \times 100\%$$

We can calculate the GDP deflator based on the example above.

$$\text{GDP deflator (2017)} = \frac{\text{GDP}_n}{\text{GDP}_r} \times 100 = \frac{500}{500} \times 100 = 100$$

As both the real and nominal GDP values are exactly the same, the GDP deflator in the base year is always 100.

$$\text{GDP deflator (2018)} = \frac{\text{GDP}_n}{\text{GDP}_r} \times 100 = \frac{1,500}{625} \times 100 = 240, \text{ which shows the price in 2018}$$

was 140% higher than the price in base year.

**The Consumer Price Index:** The Consumer Price Index (CPI) is an indicator that measures **the average change in prices paid by consumers for a representative basket of goods and services.**

- It compares the current and base year cost of a basket of goods of fixed composition.
- If we denote the base year quantities of the various goods by  $q'_0$  and their base year prices by  $p'_0$ , the cost of the basket in the base year is  $\sum p'_0 * q'_0$ , where the summation is over all the goods in the basket.
- The cost of a basket of the same quantities but at today's prices is  $\sum p'_t, q'_0$ , where  $p_t$  is today's price.

The CPI is the ratio of today's cost to the base year cost.

$$CPI = \frac{\sum P'_t * q'_0}{\sum P'_0 * q'_0}$$

## **The CPI versus the GDP Deflator**

- The GDP deflator and the CPI give somewhat different information about what's happening to the overall level of prices in the economy.



- There are three key differences between the two measures.
- 1) **GDP deflator** measures the **prices of all goods and services produced**, whereas the **CPI** measures the **prices of only the goods and services bought by consumers**. Thus, an increase in the price of goods bought by **firms or the government** will show up in the GDP deflator but not in the CPI.
  - 2) **GDP deflator** includes only those goods produced **domestically**. Imported goods are not part of GDP and do not show up in the GDP deflator.

3) The CPI assigns fixed weights to the prices of different goods, whereas the GDP deflator assigns changing weights. In other words, the CPI is computed using a **fixed basket of goods**, whereas the GDP deflator allows the **basket of goods to change over time** as the composition of GDP changes.

# Per Capita GDP

- calculations attempt to give us additional information about how we are doing as an economy.
- Per Capita GDP calculations may be a better measure of the standard of living.
- For citizens living in the same country over time
- For comparing standards of living between citizens of different countries

# Per Capita Nominal GDP

$$\text{Per capita GDP}_{2005} = \frac{\text{GDP}_{2005}}{\text{Population}_{2005}}$$

$$\text{Per capita GDP}_{2005} = \frac{\$12,378,000,000,000}{297,000,000}$$

$$\text{Per capita GDP}_{2005} = \$41,677$$

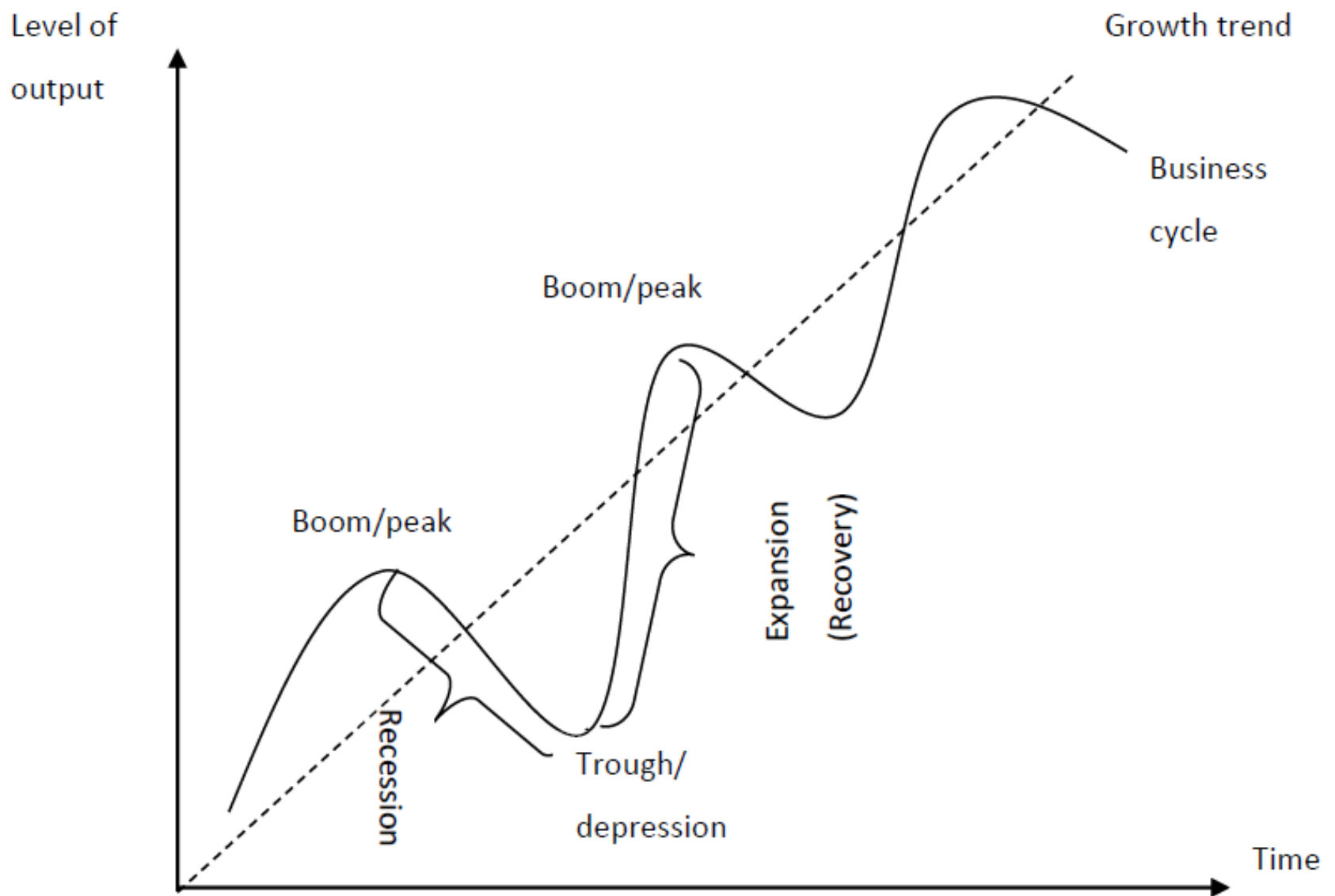
# Per Capita Real GDP

**To compare per capita GDP in one year with that of another year we have to correct for inflation. In other words, we really need to revise our formula**

$$\text{Per capita real GDP} = \frac{\text{Real GDP}}{\text{Population}}$$

## The Business Cycle

- Business cycle refers to the recurrent **ups and downs in the level of economic activity**.
- Countries usually experience ups and downs in the level of total output and employment over time.
- For some period of time the total output level may increase and other times it may decline.
- With the fluctuation in the overall economic activity, the level of unemployment also moves up and down.



**Figure 6.9: The business cycle**

- A business cycle is a fluctuation in overall economic activity, which is characterized by the simultaneous expansion or contraction of output in most sectors.
- We can identify four phases in the business cycle.
  - Boom/peak
  - Recession/contraction
  - Trough/Depression
  - Recovery/Expansion



**Boom/peak:** it is a phase in which the economy is producing the **highest level of output** in the business cycle.

- It is the point which marks the **end of economic expansion and the beginning of recession.**
- In this phase, the economy's output is **growing faster than its long-term** (potential) trend and is therefore **unsustainable.**
- Due to very high degree of utilization of resources, unemployment level is low; business is good; and it is a period of **prosperity.**

**Recession/contraction:** during a recession phase, the level of economic performance generally declines.

- **Total output declines, national income falls, and business generally decline.**
- As a result, **unemployment problem rises.**
- When the **recession** becomes particularly **severe**, we say the economy **reaches depression** or trough.
- This period can cause **hardship on businesses and citizens.**

**Trough/Depression:** - this phase is the **lowest point in a business cycle.**

- It marks the **end of a recession** and the **beginning of economic recovery/expansion.**
- During this period, there is an **excessive amount of unemployment and idle productive capacity.**

**Recovery/Expansion:** - during this phase, the economy **starts to grow or recover**, i.e. there is an option of economic activity between a trough and a peak.

- In this phase, **more and more resources are employed in the production process; output increases, unemployment level diminishes and national income rises.**
- When this expansion of the economy reaches its maximum, the economy once again comes to another boom or peak.

Note that:

- One business cycle includes the point from one peak to the next peak or from one trough to the next.
- A business cycle is a short-term fluctuation in economic activities.
- The trend path of GDP is the path GDP would take if factors of production were fully employed.
- Business cycles may vary in duration and intensity.

# Macroeconomic Problems

## Unemployment

- Problem of unemployment is one of the major issues dealt in macroeconomics.
- Unemployment refers to group of **people who are in a specified age (labour force), who are without a job but are actively searching for a job.**
- In the Ethiopia context, the specified age is b/n 14 and 60 which are normally named as productive population.
- To better understand what unemployment is, it is important to begin with classifying the whole population of a country into two major groups: those in the **labour force** and those outside the labour force.

- **Labor force** includes group of people within a specified age (e.g., people with **ages > 14** are considered as job seekers though formal employment requires a minimum of **18 years**) who are actually employed and those who are **without a job but are actively searching for a job, according to the Ethiopian labour law.**
- **The labour force does not include:**
- Children <14 and retired people age >60,
- people in mental and correctional institutions, and very sick and disabled people etc.

- A person in the labour force is said to be **unemployed if he/she is without a job and is actively searching for a job.**
- Labour force = Employed + Unemployed

## **Types of unemployment**

- Frictional unemployment
- Structural unemployment
- Cyclical unemployment



1. **Frictional unemployment:** refers to a brief period of unemployment experienced due to:
  - **Seasonality** of work e.g. Construction workers
  - Voluntary switching of jobs in **search of better jobs**
  - Entrance to the labor force e.g. **A student immediately after graduation**
  - Re-entering to the labor force

- 2. Structural unemployment:** results from **mismatch** b/n the **skills** or locations of job seekers and the **requirements** or locations of the vacancies. e.g. An agricultural graduate looking for a job at —Piassa||.
- The causes could be change in demand pattern or technological change.
- 3. Cyclical unemployment:** results due to **absence of vacancies**.
- This usually happens due to deficiency in demand for commodities/the low performance of the economy to create jobs. e.g. During recession

Note: **Frictional** and **structural unemployment** are more or less unavoidable; hence, they are known as *natural level of unemployment*.

### Measurement of rates of unemployment

Total unemployment = Frictional + Structural + Cyclical unemployment

Natural level of unemployment = Frictional unemployment + Structural unemployment  
= Total unemployment - Cyclical unemployment

Natural rate of unemployment = Natural unemployment / labor force

Unemployment rate = total unemployment / labor force

- When the unemployment rate is equal to the natural rate of unemployment, we say the economy is at full employment.
- Full employment does not mean zero unemployment.

# Inflation

- It is the **sustainable increase** in the **general or average price levels** of commodities.
- Price index serves to measure inflation.

Two points about this definition need emphasis.

1. **Increase in price must be a sustained** one, and it is not simply a one time increase in prices.
2. It must be the **general level of prices**, which is rising; increase in individual prices, which can be offset by fall in prices of other goods is not considered as inflation.

$$\text{Rate of inflation} = \frac{P_t - P_{t-1}}{P_{t-1}} \times 100\%$$

where,  $P_t$  is price index ( e.g. CPI) at time  $t$  and  $P_{t-1}$  is price index at time  $t-1$ .

## Causes of inflation

The causes of inflation are generally classified into two major groups: *demand pull and cost push inflation*.

**A. Demand pull inflation:** results from a rapid increase in demand for goods and services than supply of goods and services.

- This is a situation where “*too much money chases too few goods*”.

**B. Cost push or supply side inflation:** it arises due to continuous decline in aggregate supply.

- This may be due to bad weather, increase in wage, or the prices of other inputs.

# Economic effects of inflation

1. Generally inflation **reduces real money balance** or **purchasing power of money**.
  - This will in turn **reduce welfare of individuals**.
2. **Banks charge** their customers **nominal interest rate for their loans**.
  - Nominal interest rate however is determined based on inflation rate as it is represented by **Fisher's equation**.
  - $I = r + \Pi$  where,  $I$  is nominal interest rate,  $r$  is real interest rate and  $\Pi$  is inflation rate.



- Increase in inflation rate will raise the nominal interest rate and the opportunity cost of holding money.
- If people are to hold lower money balances on average, they must make more frequent trips to the bank to withdraw money.
- This is metaphorically called the *shoe-leather cost of inflation*.

3. Inflation **reduces investment** by **increasing nominal interest rate** and creating **uncertainty about macroeconomic policies**.

4. Inflation redistributes wealth among individuals.
- Most **loan agreements** specify a **nominal interest rate**, which is based on the **rate of inflation expected** at the **time** of the agreement.
  - If **inflation** turns out to be **higher** than expected, the **debtor wins** and the creditor loses because the debtor repays the loan with less valuable dollars.
  - If **inflation** turns out to be **lower** than expected, the **creditor wins** and the debtor loses because the repayment is worth more than the two parties anticipated.

5. Unanticipated **inflation hurts individuals with fixed income and pension.**
6. High inflation is always associated with variability of prices which induces firms to change their **price list more frequently and requires printing and distributing new catalogue.** This is known as *menu cost of inflation.*

# Trade deficit and budget deficit

## Budget deficit

- The overriding objectives of the government's fiscal policy are:
  - building prudent **public financial management**,
  - **financing the required expenditure with available resource**, and
  - **refrain** from possibility of **unsustainable fiscal deficit**.
- The government receives revenue from **taxes** and uses it to **pay for government purchases**.
- Any **excess of tax revenue** over government **spending** is called **public saving**, which can be either positive (a **budget surplus**) or negative (a **budget deficit**).

- When a government **spends more** than it collects in taxes, it faces a **budget deficit**, which it finances by **borrowing** from **internal and external** sources.
- The accumulation of past borrowing is the **government debt**.
- Debate about the appropriate amount of government debt in the United States is as old as the country itself.
- Alexander Hamilton believed that —a national debt, if it is not excessive, will be a national blessing to us,|| while James Madison argued that —a public debt is a public curse||.

- In Ethiopian case, to augment available domestic financing options, the government opted to finance its fiscal deficit from external sources on concessional terms.
- In particular, the Government of Ethiopia finances its budget by accessing external loans on concessional terms.
- As a rule of thumb, non-concessional loans cannot be used to finance the budgetary activities.
- On the other hand, external non-concessional loans are used to finance projects that are run by State Owned Enterprises.

- In recent years, the government accessed loans from international market on non-concessional terms to finance feasible and profitable projects managed by State Owned Enterprises (SOEs).
- The country's total public debt contains central government, government guaranteed and public enterprises.

## Trade deficit

- The national income accounts identity shows that net capital outflow always equals the trade balance.

Mathematically,

$$S - I = NX.$$

Net Capital Outflow = Trade Balance

Net cash out flow is Saving (S) – Investment (I)

Balance of Trade = Merchandize Exports – Merchandize Imports

- If this balance b/n  $S - I$  and  $NX$  is *positive*, we have a ***trade surplus***, so we say that there is a surplus in the current account.
- Here, we are net lenders in world financial markets, and we are exporting more goods than we are importing.



- If the balance between  $S - I$  and  $NX$  is negative, we have a **trade deficit** then we say that there is a deficit in the current account.
- Here, we are net borrowers in world financial markets, and we are importing more goods than we are exporting.
- If  $S - I$  and  $NX$  are exactly zero, we are said to have **balanced trade** because the value of imports equals the value of exports.

## Macroeconomic policy instruments

- The ultimate policy objective of any country is to have **sustainable economic growth and dev't.**
- Policy measures are aimed at achieving:
  - moderate inflation rate,
  - keeping unemployment rate low,
  - balancing foreign trade,
  - stabilizing exchange and interest rates, etc. and
  - in general attaining stable and well-functioning macroeconomic environment.

## Monetary policy

- Monetary policy refers to the adoption of suitable policy regarding the **control of money supply** and the **management of credit** which is important measure for adjusting aggregate demand to control inflation.
- It is concerned with the **money supply, lending rates** and **interest rates** and is often administered by a **central bank**.
- Monetary policy is a highly **flexible stabilization** policy tool.

- e.g., **during economic recession** where output falls with a **fall in AD**, monetary policy aims at increasing demand and production as well as employment will follow the same pattern of demand.
- In contrast, at the time of **economic boom** where **demand exceeds** production and treat to create **inflation**, the monetary policy instruments are utilized that could offset the condition and achieve price stability by counter cyclical action upon money supply.

- Government **monetary policy** regulation is under responsibilities of **Central Bank**.
- Central Bank controls the **money supply** to control nominal **interest rates**.
- **Investment** and **saving** decisions are based on the **real interest rate**.
- When government **lowers interest rate**, firms borrow more and **invest more**.
- **Higher interest rates** mean **less investment**.

## Fiscal policy

- Fiscal policy involves the use of **government spending, taxation and borrowing** to influence both the **pattern of economic activity** and the **level and growth of AD, output and employment**.
- It is important to realize that changes in fiscal policy affect both **AD** and **AS**.
- Most governments use fiscal policy to promote stable and sustainable growth while pursuing its income redistribution effect to reduce poverty.

- Fiscal policy plays an important role in influencing the behaviour of the economy like monetary policy.
- The choice of the government **fiscal policy** can have both **short and long term influences**.
- The most important tools of implementing the fiscal policy are **taxes, expenditure and public debt**.
- **Traditionally fiscal policy** has been seen as an instrument of **demand management**.
- This means that changes in government **spending**, direct and indirect **taxation** and the **budget balance** can be used to help smooth out some of the volatility of **real national output**.

- Fiscal policy decisions have a widespread effect on the everyday decisions and behaviour of individual households and businesses.
- Thus, it is mainly used to achieve internal balance, by adjusting AD to available supply.
- It also promotes external balance by ensuring sustainable current account balance and by reducing risk of external crisis.
- In general, it helps to promote economic growth through more and better education and health care.



## **Major functions of fiscal policy**

**Allocation:** The first major function of fiscal policy is to determine exactly how funds will be allocated.

- This is closely related to the issues of taxation and spending, since the allocation of funds depends upon the collection of taxes.
- The national budget determines how funds are allocated.
- The budget allocation is done on the basis of aggregated dev't objectives such as recurrent vs capital expenditures or sectoral allocation.

**Distribution:** This is implemented mainly through progressive taxation and targeted budget subsidy.

- **Allocation** determines **how much** will be **set aside** and for **what purpose**, the distribution function of fiscal policy is to determine **how those funds** will be **distributed** to each segment of the economy.
- e.g., the government might apportion a share of its budget toward social welfare programs, such as food security and asset building for the most vulnerable and disadvantaged groups in the society.
- It might also allocate for low-cost house construction and mass transportation.

- **Stabilization:** is another important function of fiscal policy in that the purpose of budgeting is to provide **stable economic growth**.
- Government expenditure **needs** particularly in developing countries such as Ethiopia are **unlimited**.
- But its **source** of financing is **limited**.
- Without some restraints on spending the economic growth of the nation could become unstable-creates **imbalances in external sector resulting in high prices**.

**Development:** The most important function of fiscal policy is that of promoting dev't.

- Dev't seems to indicate economic growth, and that is, in fact, its overall purpose.
- Fiscal policy is far more complicated than determining how much the government will tax citizens in a given year and determining how that money will be spent.
- Economic growth occurs when various projects are financed and carried out using budgetary finance.
- This stems from the belief that the private sector cannot ensure grow the economy by itself.