

Nazareth School, Addis Ababa
Economics Notes for Grade 11

UNIT 6. THE FUNDAMENTAL CONCERNS OF MACROECONOMICS

This unit contains two sub units: (i) the fundamental concerns of macro economics and (ii) problems of macro economics. Each of them is discussed below:-

6.1. THE FUNDAMENTAL CONCERNS OF MACROECONOMICS

The fundamental concern of macroeconomics can be summarized as follows:-

1. National Income (NI)
2. Employment
3. Money and Banking
4. General Price Level
5. Business Cycles
6. Economic Growth
7. Macro distributions
8. International Trade

General Objectives of Macroeconomic Policy: The general objectives of a macroeconomic policy are to achieve:

1. Maximum feasible output
2. High rate of economic growth
3. Full employment
4. Price stability
5. Equality in the distribution of income and wealth, and
6. A healthy balance of payment (BOP).

6.2. PROBLEMS OF MACROECONOMICS

The detail discussion of four of macroeconomic problems (Business cycle, Unemployment, Inflation and Budget Deficit) are presented below:

6.2.1. BUSINESS CYCLE (TRADE CYCLE)

Business cycle (Trade Cycle): It refers to the regularly occurring fluctuations in economic activity in market economies. In a business cycle, there are wave like fluctuations in **four interlinked economic variables: employment, income, output and price level.**

Phases of Business Cycles

- (a) **Peak (or Boom):-** This is the highest level of national output in the cycle. This is a phase of economic activity characterized by rising demand, rising prices, rising investment, rising employment, rising incomes, rising purchasing power and so on. The investors, therefore, voluntarily undertake risks and go in for investment.
- (b) **Contraction (or recession):** This phase is characterized by cuts in investment, resulting in cuts in employment, a fall in incomes, and declines in purchasing power and demand. Prices may then begin to fall.
- (c) **Trough (or Depression):** If effective corrective measures cannot be undertaken for a recession, the economy comes to at its lowest level. This is a stage when the business confidence is at its lowest. Investment, employment, output, income, and prices reach bottom.
- (d) **Recovery (Expansion):** In a sustained recovery, the level of investment, employment, output, income, and prices move upwards. This may finally result in **boom** conditions in the economy, and thus, the cycle is completed.

Characteristic Features of Business Cycles

1. Business cycles are the wave-like fluctuations in economic activity as reflected in basic economic variables like employment, income, output and price level,
2. These fluctuations are cyclical in nature,
3. The sequence of changes in a business cycle recur frequently and in a fairly similar pattern,
4. Periodicity between the cycles need not be same or similar.
5. Business cycles are fluctuations found in overall economic activities, and are not limited to any particular firm or industry,
6. Normally, if the boom is high the succeeding depression will also be severe. However, this relationship might not hold good in the reverse.
7. Business cycles usually last for a period of 2 to 10 years.

6.2.2. UNEMPLOYMENT

Meaning of Unemployment: It refers to a situation where the persons who are able to work and willing to work, at the current market wage rate, fail to secure work which gives them income or a means of livelihood. Thus, for a person to be categorized as unemployed, two conditions must be fulfilled:

- That the person is without a job and able to work.
- The person wants to have a job and is willing to work at the current market wage.

Labour Force: It consists of all those who are fit for work and are willing and available to work. It excludes children below the age of 15, old persons above the age of 60, individuals unable to work, etc. We further deduct those who are not willing or are not available to work.

Types of Unemployment

1. **Frictional Unemployment:** It includes unemployment resulting from seasonality (for example bad weather in agriculture and construction), voluntary switching jobs (individuals may quit their jobs to look for better jobs), entering the labour force (e.g. College graduates), re-entering the labour force (e.g. Women after delivery).
2. **Structural Unemployment:** Unemployment which arises due to change in the pattern of demand, leading to changes in the structure of production in the economy. We may say, structural unemployment signifies a mismatch between the supply of and the demand for labour.
3. **Cyclical Unemployment:** As the name suggests, this form of unemployment is associated with 'trade cycle' or 'business cycle'. During depressions, investment activities get discouraged. Contractions in business activities render large numbers of workers unemployed.

Remarks: In the study and analysis of Unemployment, you should know the following terms:

- (a) **Full Employment:** This refers to a situation where all those workers who are able and willing to work get employment. At this level, there is an optimum utilization of resources.
- (b) **Underemployment:** This refers to a situation in which people are engaged in jobs but these jobs do not measure up to their capabilities, efficiency and qualification.
- (c) **Involuntary Unemployment:** Refers to a situation in which the workers are willing to work under any conditions and at any wage rate but they fail to get employment.
- (d) **Voluntary Unemployment:** When the economy offers employment opportunities to the workers, but they themselves are not willing to take jobs because employment conditions, such as wage rate, location promotional avenues, physical environment, attitude of the employer, etc., do not suit them.
- (e) **Technological Unemployment:** The main cause of this unemployment is the introduction of a new technology which requires changes in a labour force.
- (f) **Disguised Unemployment:** When more workers are engaged in a type of work than actually are required to do that work.
- (g) **Seasonal Unemployment:** Employment and unemployment levels vary with different seasons in many sectors of the economy. There are busy seasons, when most of the people are employed even overworked, and there are slack seasons, when most of them are without work.

Measurement of Unemployment

$$\text{Rate of Unemployment} = \frac{\text{Number of Unemployed Persons}}{\text{Total Labour Force}}$$

$$\text{Rate of Employment} = \frac{\text{Number of Employed Persons}}{\text{Total Labour Force}}$$

Example:- Based on the given data below answer questions that follow:-

	Numbers in Million
▪ Total population	85
▪ People whose age fall above the upper limit of the working age	10
▪ People whose age fall below the lower limit of the working age	30
▪ People in the working age and with jobs	35
▪ People in the working age actively seeking jobs, but failed to find them	7
▪ People in the working age, without jobs, but not willing to work	3

Question1: What is the labour force?

Solution: Labour force = people in the working age and with jobs + people in the working age willing to work but don't have job = 35 million + 7 million = 42 million

Question 2: What is the total number of population not in the labor force?

Solution: Total population – Labour force = total no. of population not in the labor force = 85 million – 42 million = 43 million

Question3: The total unemployed population is

Solution: Total labour force – employed people = 42 million – 35 million = 7 Million

Question4: The unemployment rate is equal to _____

Solution: Unemployment rate = $\frac{\text{No. of unemployed person}}{\text{Total Labour Force}} \times 100\% = \frac{7\text{million}}{42\text{million}} \times 100\% = \underline{16.66\%}$

Question5: The employment rate is equal to _____

Solution: Employment rate = $\frac{\text{No. of employed persons}}{\text{Total Labour Force}} \times 100\% = \frac{35\text{million}}{42\text{million}} \times 100\% = \underline{83.33\%}$

Or it can be solved as Employment rate = 100% - unemployment rate = 100% - 16.66% = 83.33%

Impact of Unemployment on Economic Growth

The following are some of the major adverse economic effects of unemployment:

1. **Loss of Valuable Human Resources:** Unemployed labour means unused human resources, and consequently less than full production. This means lower GNP and per capital income.
2. **Increase in poverty:** Unemployed persons become dependent upon others. Sharing other peoples' income depresses overall consumption levels and pushes people below the poverty line.
3. **Unemployment is demoralizing:** It creates a sense of unwantedness among the unemployed persons and lowers their self esteem. A nation of demoralized people cannot make any significant economic progress.
4. **Exploitation of labour:** Excess labour supply creates competition among the labourers who may offer their services at wage rates lower than those prevailing in the market. The employers exploit the poor worker by offering lower wages and demand longer hours of work.

Remarks: The economic cost of unemployment is certainly very high; its social cost is also not less.

6.2.3. INFLATION

Inflation: is described as a situation characterized by a sustained increase in the general price level. It may be noted thus:

- A small rise in prices or an irregular price rise cannot be called inflation.
- During inflation, all costs and prices do not rise together and in the same proportion. It is an increase in the general level of prices measured by a **price index**, which is an average of consumer or producers prices.

Cause of Inflation

Factors responsible for inflation are divided in to two broad types: **Demand-Pull** and **Cost-Push** Factors.

Demand-Pull Inflation: When the demand for goods and services exceeds the available supply at current prices. The situation is described as “too much money chasing too few goods”.

1. An increase in government expenditure
2. An increase in money supply
3. An increase in investment:
4. An increase in wages
5. Black Money
6. Deficit Financing
7. Credit Expansion

Cost-Push Inflation: It is Inflation resulting from rising costs of production and slack resource utilization. This is sometimes also known as **supply-shocked inflation**. It is a situation where a decrease in supply of goods and services in comparison to demand for them, which further leads to price rise. Also, hoarding both by firms and households, contributes to restricting the supply of goods and services in the economy. This also leads to rise in prices.

Measuring Inflation: It means a measurement of variations in general price level. To do this consumer price index (CPI) is constructed. CPI is indicator of the overall or general price level.

$$CPI = \frac{\text{Cost of a market basket of consumer goods and services in a particular year}}{\text{Cost of same basket during the base year}}$$

Rate of Inflation: It measures the extent of the increase in the general price level over time. It is usually measured as the percentage change in the price level from one year to the next.

$$\text{Rate of inflation (year } t) = \frac{CPI(\text{year } 1) - CPI(\text{year } t-1)}{CPI(\text{year } t-1)}$$

Example:- Assume a simple economy in which a typical consumer buys only three goods – wheat, edible oil and tomato. The consumer buys 50kg of wheat, 10 liters of oil and 20kg of tomato per year as follows:

Year	Price per a kilo of wheat	Price per a litter of edible oil	Price per a kilo of tomato
2000	2	10	4
2001	3	15	3
2002	2.5	14	2.5

Question1: Find the Consumer Price Index (CPI) in each year; take the year 2000 as a base year
Solution: To calculate CPI follow the following two steps

Step1: Compute the cost of the basket of goods in each year

Year 2000, (Br 2 x 50kg of wheat) + (Br 10 x 10 liters of edible oil) + (Br 4 x 20kg of tomato) = Birr 280

Year 2001, (Br 3 x 50kg of wheat) + (Br 15 x 10 liters of edible oil) + (Br 3 x 20 kg of tomato) = Birr 360

Year 2002, (Br 2.5 x 50kg of wheat) + (Br 14 x 10 liters of edible oil) + (Br 2.5 x 20 kg of tomato) = Birr 315

Step2: Choose one year as a base year (it is given that year 2000 is a base year), compute CPI

$$CPI = \frac{\text{Cost of a market basket of consumer goods and services in a particular year}}{\text{Cost of same basket during the base year}}$$

$$CPI \text{ in } 2000 = \frac{\text{Birr } 280}{\text{Birr } 280} \times 100\% = \underline{100},$$

$$CPI \text{ in } 2001 = \frac{\text{Birr } 360}{\text{Birr } 280} \times 100\% = \underline{128.57},$$

$$CPI \text{ in } 2002 = \frac{\text{Birr } 315}{\text{Birr } 280} \times 100\% = \underline{112.5}$$

Note that: CPI is used to find out how much it would have cost to buy the same basket goods and services, back in the base year. Hence, the CPI 128.57 tells us that what costs 128.57 in 2001 costs birr 100 in the year 2000. Similarly, the CPI 112.5 indicates that what costs Br 112.5 in 2002 costs Br. 100 in the year 2000.

Question2: Calculate inflation rate for each rate

$$\text{Solution: Rate of inflation (year } t) = \frac{CPI(\text{year } t) - CPI(\text{year } t-1)}{CPI(\text{year } t-1)}$$

$$\text{Inflation rate in } 2001 = \frac{CPI(\text{year } 2001) - CPI(\text{year } 2000)}{CPI(\text{year } 2000)} = \frac{128.57 - 100}{100} = \frac{28.57}{100} \times 100\% = \underline{28.57\%}$$

$$\text{Inflation rate in 2002} = \frac{CPI(\text{year 2002}) - CPI(\text{year 2001})}{CPI(\text{year 2001})} = \frac{112.5 - 128.57}{128.57} = \frac{-16.07}{128.57} \times 100\% = -12.5\%$$

Note That: A decrease in the general level of the prices of goods and services is known as deflation. In the above example, there is **inflation** in 2001 where as there is **deflation** in 2002.

Producers Price Index (PPI): It measures the prices of products purchased by producers. It measures the price level for products which are used to produce other goods (not for personal consumption). Its computation and interpretation is similar to CPI

The impact of Inflation on Economic Growth

Inflation has different levels or degrees of severity, described as moderate, galloping, and hyper inflation. A moderate inflation is generally believed to be **a necessary condition of economic growth**. The impact of inflation on economic growth, can be categorized into two: **Favorable effects** and **adverse effects**

i. Favorable Effects of inflation

Mild inflation has favorable effects listed below:

1. **Effect on Production:** when prices are rising, profit expectation becomes higher and thus investment increases. This also leads to greater production.
2. **Effect on Capital Formation:** Rising prices bring in higher profits to the capitalists. A greater part of these profits is reinvested to earn further profits. Thus, investment increases and rate of capital formation becomes higher.
3. **Effect on Employment:** rising prices lead to increased investment to produce and sell large quantities of goods and services and thus further increase in profits. Increased production requires more labour and other resources. Thus employment of labour increases.
4. **Effect on Economic Development:** Rising prices that raise profit expectations build up favorable investment climate, and increase production and employment, thus lead to an increase in the growth rate of national income and raise the tempo of economic development.
5. **Inflation May be Self liquidation:** Since inflation caused by an excess of demand over supply, the supply will increase after some time and become equal to demand. The prices would thus fall due to increased supply, and inflation would end. "Thus, inflation can be "self-liquidating".

ii. Adverse Effects of inflation

Most of the time, inflation becomes self-sustained. Then the price level keeps on increasing continuously over a long period of time. Accordingly, inflation starts showing its adverse effects, some of which are the following:

1. **Income Effect:** rising price will lead to decline in real income or purchasing power as wages, salaries, rent income, interests, etc
2. **Saving Effect:** With a raise in prices, the purchasing power of money declines. Thus more money has to be spent to buy the same amount of goods and services. This reduces savings.
3. **Redistribution Effect:** There is a redistribution of income in favor of the rich capitalists and business people, and therefore, the gap between the rich and the poor increases.
4. **Price-wage Spiral:** Due to rises in prices, laborers demand higher wages. If this demand is fulfilled, the increase in wages, leads to a further rise in prices. The rises in prices, in turn, lead to further rises in wages. This creates a **vicious circle of wage and price rises**.
5. **Effect on Economic Planning:** Under inflation, savings reduced and, at the same time it becomes more difficult for governments to impose new taxes to collect more revenue. Hence, plan targets are either curtailed (reduced) or most of them remain beyond reach, thereby upsetting the whole planning process.

6. Effect on Balance of Payment: With inflation, Balance of payment deficit increases.

Remark: Besides these, effects rising prices encourage speculation and hoarding, leads to corruption, strikes, social unrest, and many more problems. It is therefore necessary that inflation should be controlled and prices established or allowed to rise only within narrow limits.

6.2.4. Budget Deficit It occurs when the receipt of government is less than the expenditure.

Major component of government budget

Meaning of budget: A budget shows the details of the planned expenditures of the government program and the expected revenues from tax and non-tax sources for a year.

Objectives of Government Budget:

The general objectives of a government budget are the following:

- (a) Economic Growth:
- (b) Reduction of poverty and Unemployment:
- (c) Reallocation of Resources:
- (d) Reduction of Inequalities (in income and wealth): by levied taxes and granting subsidies
- (e) Price Stability:
- (f) Management of Public Enterprises:

Types of Budgets

- A. **Surplus Budget:** If the receipt of the government is more than its expenditure.
- B. **Balanced Budget:** If the receipt of government is equal to government expenditures.
- C. **Deficit Budget:** If the receipts of the government are less than its expenditure.

Remarks: A deficit budget is financed by domestic borrowing, external borrowing and the printing of new currency.

Structure (or Components) of Budget: It has two components: Revenue & Expenditure Budget.

A. Revenue Budget

This forecasts the total revenue collections of the government from tax and non-tax sources. In Ethiopia, it is classified into three parts:

- 1. **Ordinary Revenue:** The total of ordinary revenue is made up of tax and non-tax revenues.

Tax Revenue: it includes direct taxes, indirect taxes and foreign trade tax.

Direct Tax: These are those taxes which are paid by the same person on which they have been levied. The Burdon of the tax cannot be shifted on to anybody else. Direct tax in Ethiopia includes: personal income taxes, rental income tax, business income tax, agricultural income tax, tax on dividend, lottery winning, and land-use fees and lease.

Indirect taxes: Are taxes the burden can be shifted. These taxes are imposed on the producers and sellers of goods and services. Indirect taxes in Ethiopia include: excise tax on domestically manufactured goods, services sales tax, stamps and duty, and VAT.

Remarks: Direct taxes are normally imposed on income, wealth, and property, where as indirect taxes are levied on goods and services.

- **Foreign trade tax:** This includes custom duty, excise tax and sales tax on imported goods.

Non-tax Revenue: Is the revenue collected by the government from sources other than tax. These include income of the government by way of sale of goods and services by various departments of the government. Major constituents of non-tax revenue in Ethiopia are charges, fees, fines, pension contribution, and investment revenue.

2. **External Assistance:** Grants received in cash, or some other form, from outside the country.
3. **Capital revenue:** It comprises the money received by government from the sale of government assets, collection of loans, counterpart fund and external loans.

Expenditure Budget: In Ethiopia, it is classified into **Recurrent** and **Capital** Expenditures.

- (1) **Recurrent Expenditure:** It represents expenses made by the government which are recurrent in nature, i.e., they are repeated. In Ethiopia, it is classified into four functional categories:
 - **Administrative and General Services:** Include such activities performed by political organs of the state such as council of representatives, ministers, defense, and so on,
 - **Economic Services:** Include such activities under agricultural, industrial and service sectors.
 - **Social Services:** include such activities as health, education, and culture.
 - **Other Expenditures:** It includes pension payments, repayment of public debts, provision of unforeseen expenses and similar items.
- (2) **Capital Expenditures:** Represents expenses made by the government for the implementation and expansion of development projects. These are in nature of acquisitions of fixed assets like buildings, machinery, equipment, etc. Government expenditure on construction of infrastructure, industries, and research and development programs are also part of capital expenditure.

The capital expenditures in Ethiopia classified into three:

- **Economic Development:** includes activities in the agricultural and industrial sectors and economic infrastructure in mining, roads, energy, commerce and communication.
- **Social Development:** includes such activities as education, health, urban development and social welfare.
- **General Development:** includes services in statistics, cartography, and public and administrative buildings.