UNIT 6

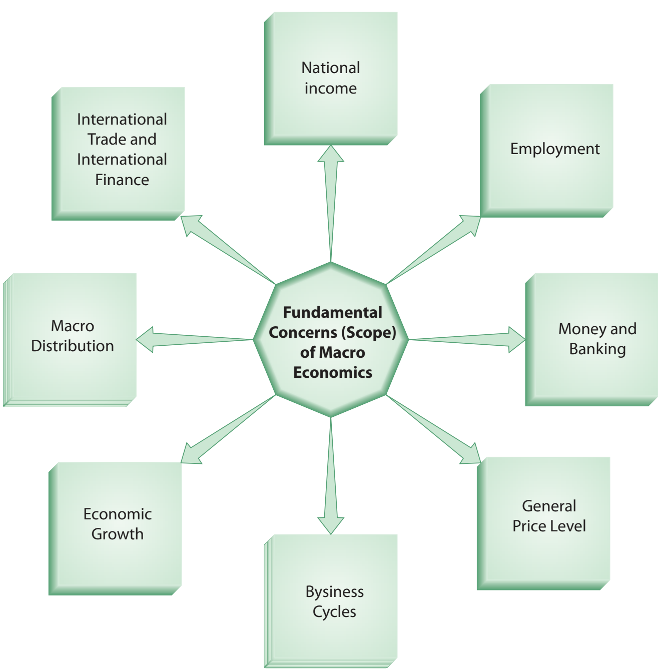
THE FUNDAMENTAL CONCERNS OF MACROECONOMICS

Unit Objectives

After completing this unit, you will be able to:

- recognize the objectives and problems of macroeconomics;
- elaborate the concepts of the business cycle;
- understand the relationship among unemployment, inflation, and budget deficit; and
- appreciate the sources of government revenue.

Main Contents



INTRODUCTION

Recall from Unit 1 that economics as a subject has many branches and its scope includes a vast range of topics and issues. However, the core of modern economics is formed by its two major branches, namely *microeconomics* and *macroeconomics*. What we have studied in the first five units are mainly the themes and topics covered under microeconomics, which primarily deals with the behaviour of individual economic units. On the other hand, macroeconomics *deals with the aggregates or averages covering an entire economy. For instance, total employment, national income, national output, total investments, total consumption, total savings, aggregate supply, aggregate demand and general price level, wage level and cost structure come under the scope of macroeconomics. In other words, macroeconmics is aggregative economics which examines the interrelations among various aggregates, their determination and causes of fluctuations in them.*

Because the central problem of macroeconomics is the problem of the determination of income and employment, it is known as *the theory of income and employment* or simply *income analysis*. Aggregate demand and aggregate supply are the main tools of analysis in macroeconomics.

We Introduce the fundamental concerns (scope), objectives, and central problems of macroeconomics in the present unit. Then we continue by studying the tools and methods of macroeconomic analysis through the units that follow.

6.1 CONCERNS OF MACROECONOMICS

At the end of this section, you will be able to:

- define the concepts of macroeconomics.

Key Terms and Concepts

- National income
- Employment
- Business cycle
- Price stability
- Inflation
- Budget deficit

Start-up Activity

Discuss the macroeconomic development of the FDRE for the last five years.

The Fundamental Concerns (Scope) of Macroeconomics

The scope of aggregative economic analysis or the fundamental concerns of macroeconomics can be summarised as follows:

- ***National Income:*** *Macroeconomics deals with national income. It includes the study of the concepts of national income, product, and expenditure and the methods of measurement of aggregates and sub-aggregates of national income and output.*
- ***Employment:*** *Macroeconomics is also concerned with the determination of the level of employment in the whole system and variations in it. It deals with aggregate demand, aggregate supply, consumption, savings, and investment functions which determine the level of employment in an economy.*
- ***Money and Banking:*** *Macroeconomics deals with monetary theory, which further deals with the demand and supply of money, central banking, commercial banking, monetary policy, and the impact of monetary changes upon the general level of economic activity.*
- ***General Price Level:*** *Macroeconomics concentrates upon the general level of prices. It explains the inflationary and deflationary movements in the system and the impact of these movements upon the general level of economic activity.*
- ***Business Cycles:*** *The theories of business cycles and policies to control cyclical fluctuations come within the sphere of macroeconomics.*
- ***Economic Growth:*** *Economic growth is a long-run process. It depends upon complex economic, sociological, institutional and technical factors. Macroeconomics analyses the actions and interactions of these factors.*
- ***Macrodistribution:*** *Macrodistribution theories deal with the distribution of income among various factors. An analytical study of these theories helps in achieving equitable distribution of income and constitutes a part of macroeconomics.*
- ***International Trade:*** *International Trade and International Finance (or International Economics): Macroeconomics deals with the theories of international trade, problems related to tariff and non-tariff barriers upon trade, balance of payments, foreign exchange, international capital flows, and international economic order.*

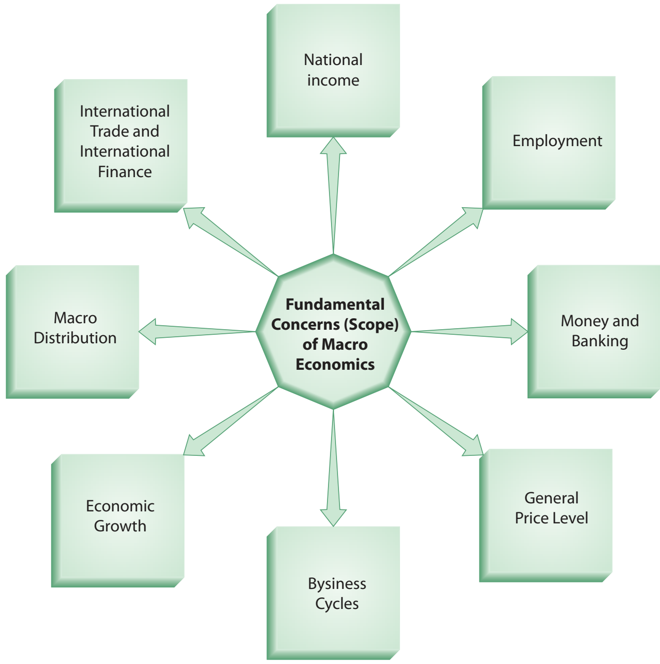


Figure 6.1: Fundamental Concerns of Macroeconomics

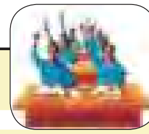
General Objectives of Macroeconomic Policy

We know that macroeconomic analysis deals with the behaviour of the economy as a whole with respect to output, income, employment, general price level and other aggregate economic variables. With a view to bringing about desirable changes in such variables, nations (developed as well as developing) need to adopt various macroeconomic policies. These policies vary from one economy to another and according to the prevailing economic conditions within a specific economy.

The *general objectives* of a macroeconomic policy are to achieve:

- *maximum feasible output*
- *high rate of economic growth*
- *full employment*
- *price stability*
- *equality in the distribution of income and wealth, and*
- *a healthy balance of payments.*

To achieve these objectives, normally three types of macro-economic policies – *fiscal policy, monetary policy,* and *income policy* – are adopted. We shall discuss these policies in detail in a later unit (Unit 10).



Activity 6.1

Discuss this question in your economics workgroup: Are all the general objectives of a macroeconomic policy (as given in your text), are applicable in the specific case of Ethiopia?

6.2 PROBLEMS OF MACROECONOMICS

At the end of this section, you will be able to:

- identify and analyze problems of macroeconomics;
- display the business cycle and the overall economic activity;
- explain the meaning of unemployment;
- identify and give examples of types of unemployment;
- distinguish the differences among types of unemployment;
- measure unemployment level;
- examine the impact of unemployment on economic growth;
- define what inflation is;
- compute the rate of inflation and interpret the result;
- explain causes of inflation;
- examine the impact of inflation on economic growth;
- explain the effects of inflation in terms of redistribution and output;
- define budget;
- identify and explain the source of government revenues;
- classify the sources of tax and non-tax revenue;
- identify and explain external assistance;
- explain capital revenue;
- define and identify types of expenditure.

Key Terms and Concepts

- Recession
- Depression
- Recovery
- Structural unemployment
- Frictional unemployment
- Cyclical unemployment
- Cost-push inflation
- Demand-pull inflation
- Surplus budget
- Ordinary revenue
- Recurrent expenditure
- Capital expenditure

As has been stated in the introduction to this unit, the central problem of macroeconomics is the problem of determination of income and employment. We also know that macroeconomics is concerned with problems such as inflation, business fluctuations, inequalities of income and wealth, instability of prices, budget and trade deficit, etc. In the following sections we discuss in detail four of these problems, namely, *business cycle, unemployment, inflation,* and *budget deficit*.

Business Cycle

Business cycle or trade cycle 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. When the values of these economic variables over time are plotted on a graph, we get a wave-like figure, which is given the name business 'cycle'.

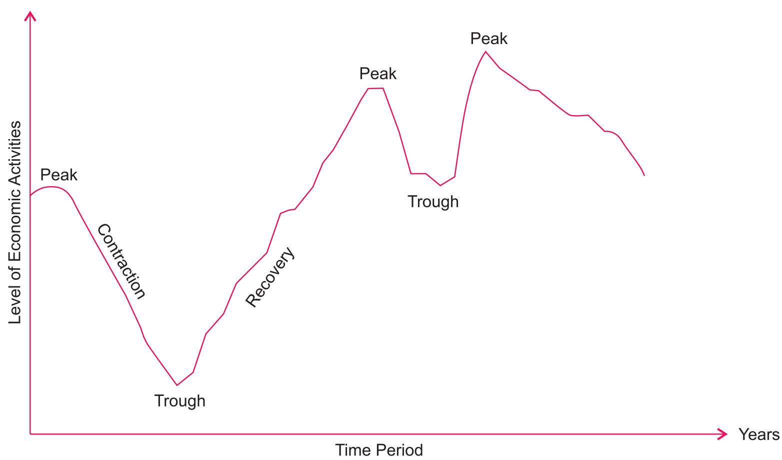


Figure 6.2: Business Cycle Phases

Phases of Business Cycles

A business cycle is typically divided into four phases:

- *peak (or boom)*
- *contraction (or recession)*
- *trough (or depression)*
- *recovery (expansion)*

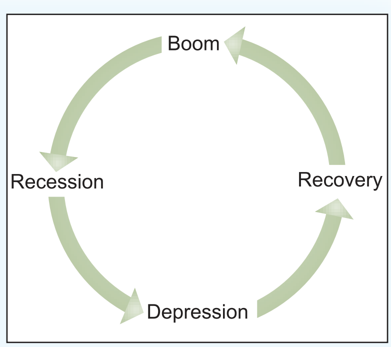


Figure 6.3: Business Cycle

What are these four phases?

- ***Peak or Boom:*** *This is a phase of economic activity characterised by rising demand, rising prices, rising investment, rising employment, rising incomes, rising purchasing power and so on. Boom conditions prevail in the business. The investors, therefore, voluntarily undertake risks and go in for investment, which further fuels boom conditions through the working of the multiplier effect.*
- ***Contraction or Recession:*** *During the boom period, there is over-optimism in business psychology, and thus the economy can get over-heated. If that occur, the monetary authorities, the financial institutions and business itself may become cautious. Thus, there may be 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. The economy may be caught now in a web of pessimism. This marks the phase of recession or contraction.*
- ***Trough or Depression:*** *If effective corrective measures cannot be undertaken for a recession, the economy may find itself caught up in the whirlpool of depression. This is a stage when the business confidence is at its lowest. Investment, employment, output, income, and prices reach bottom.*
- ***Recovery:*** *As the economy moves out of depression, it enters the phase of recovery. 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 complete.*

Note that there are significant changes in output, employment and prices during the business cycle. We find reductions in output, employment and prices during recession and depression, while they tend to move in the upward direction during recovery and boom.

Characteristic Features of Business Cycles

- *Business cycles are the wave-like fluctuations in economic activity as reflected in basic economic variables like employment, income, output and price level,*
- *These fluctuations are cyclical in nature,*
- *The sequence of changes in a business cycle (i.e., boom, recession, depression and recovery) recur frequently and in a fairly similar* pattern,
- *Periodicity between the cycles need not be same or similar,*

- *Business cycles are fluctuations found in overall economic activities, and are not limited to any particular firm or industry,*
- *Normally, if the boom is high the succeeding depression will also be severe. However, this relationship might not hold good in the reverse,*
- *Business cycles usually last for a period of 2 to 10 years.*

Causes of Business Cycles

Business cycle is the tendency for real output to rise and fall over time in a reasonably regular pattern. It is alternating increase and decrease in level of economic activity.

Note

In a case of boom or expansion, the causes are normally opposite to those of recession, since the situations are mirror images of each other.

Activity 6.2

1 Identify the two well-known global depressions in recent economic history.

2 Making use of the internet and other resources, collect available information and write a brief note on the Great Depression of the 1930's.

3 Prepare a report on the current global economic slowdown (global financial crisis), which started in December 2007. If possible, highlight the origin of the crisis and its causes. Collect the required information from the internet and other resources.

Unemployment

To have a better understanding of the concept of unemployment, we must first discuss what we mean by employment. We also need to know what is meant by the term labour force.

Employment

This refers to any arrangement by which a person earns income or a means of livelihood. Such an arrangement may be in the form of self-employment, wherein a person uses his/her own resources (apart from his/her labour) to make a living. Examples of self-employment are the activities of shopkeepers, traders, businessmen, professionals, etc. In contrast, the only resource that other people have for learning their livelihoods is their own labour. They offer their labour services to others and in return get wages. Such an arrangement, in which a worker sells his/her labour and earns wages in return, is called *wage-employment*. In this case, the supplier of labour (worker) is called *employee* and the buyer of the labour is called an *employer*.

In the case of self employment, a person is himself/herself an employee as well as the employer.

Labour Force

A labour force consists of all those who are fit for work and are willing and available to work. In other words, if we exclude children, old persons, individuals who are unable to work, etc., from the population of a country, we get the number of those who are able to work. We further deduct from this those who are not willing or are not available to work. This gives us the labour force. The ratio of this labour force to the total population is called the labour-force participation rate. This gives us the number of people who are able to work, willing to work and available for work. To arrive at the size of a labour force, it is customary to exclude children below the age of 15 years and persons above the age of 60 years from the total population. In Ethiopia, among poor people, unfortunately even children take up jobs to augment family earnings.

Meaning of Unemployment

Unemployment 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 or activity 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 rate.*

Those people who have other means of living, like property incomes, and thus do not desire to have a job cannot be called unemployed. They are idle or not working due to their own will. Thus they can be termed as 'voluntarily unemployed'. Such people are not in the category of unemployed persons. In the category of unemployment we include only those people who are unemployed involuntarily — i.e., they want work but do not get it. Involuntary unemployment exists when able-bodied, willing persons fail to get jobs at the on-going wage rate.

Types of Unemployment

Normally, in economics, three different types of unemployment are identified—*frictional*, *structural*, and *cyclical*.

Frictional Unemployment

This is temporary unemployment which exists during a period of the transfer of labour from one occupation to another.

Frictional unemployment may also arise where people are thrown out of work in one location and are unwilling or unable to move to a similar work in another area. For example, big industrial units and polluting industries are sometimes moved out of large towns and cities and relocated in distant places. The labour thus thrown out of jobs may be either unwilling or unable to move to these new locations of work, thus giving rise to frictional unemployment. Other examples of frictional unemployment are students searching for jobs for short durations or people reentering the labour force due to changed social or family situations.

Structural Unemployment

Structural unemployment refers to a situation in which workers become jobless due to loss of demand in particular regions or industries. For example, a change of energy use from coal to electric power is bound to curtail coal mining activity and cause unemployment there. Similarly, an increased use of synthetic rubber is bound to reduce demand for natural rubber and lead to unemployment in rubber plantations. And since the person thus unemployed may not be in a position to learn the technologies used in the newly expanding industries, they may be rendered permanently unemployed. Thus, *unemployment which arises due to change in the pattern of demand, leading to changes in the structure of production in the economy, is called structural unemployment*. We may say, structural unemployment signifies a mismatch between the supply of and the demand for labour.

Cyclical Unemployment

As the name 'cyclical unemployment' suggests, this form of unemployment is associated with 'trade cycles' or 'business cycles' or cyclical fluctuations in economic activity. This is caused by slackness in business conditions. During depressions, investment activities get discouraged. Contractions in business activities renders large numbers of workers unemployed.

Thus, *unemployment which arises due to inadequate overall demand associated with the downswing, recession or depression period of a trade cycle is called cyclical unemployment*.

Remarks: *In the study and analysis of unemployment, we come across many other terms and concepts. A brief introduction to such terms is given below, for the sake of reference.*

- ***Full Employment:*** *This refers to a situation where all those workers who are able and willing to work get employment. At full employment levels, there is an optimum utilisation of resources.*
- ***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 qualifications.*
- ***Involuntary Unemployment:*** *This 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. In some parts of the world, the economy fails to provide employment opportunities to the work force.*
- ***Voluntary Unemployment:*** *When the economy offers employment opportunities to the workers, but they themselves are not willing to take up jobs because employment conditions, such as wage rate, location, promotional avenues, physical environment, attitude of the employer, etc., do not suit them – such a situation is known as voluntary unemployment.*
- ***Technological Unemployment:*** *This is generally found in the advanced countries. The main cause of this unemployment is the introduction of a new technology which requires changes in a labour force.*
- ***Disguised Unemployment:*** *When more workers are engaged in a type of work than actually are required to do that work, it is called disguised unemployment.*
- ***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 or even overworked, and there are slack seasons, when most of them are without work. This type of unemployment is called seasonal unemployment. Apart from agriculture, such unemployment is found in seasonal industries like ice factories, or seasonally affected trades like the tourist industry.*

Measurement of Unemployment

Unemployment is usually measured as the ratio of the unemployed persons to the total labour force in a country and is expressed in percentage terms. Thus:

$$\text{Rate of unemployment} = \frac{\text{No. of unemployed persons}}{\text{Total labour force}} \times 100 \qquad (6.1)$$

Remarks: *Usually in a developing country like Ethiopia, unemployment is a mixture of many different types of unemployment. Thus it is not possible to estimate it by using any single measure of unemployment. Such countries have open as well as disguised unemployment in agriculture, underemployment and seasonal unemployment in both rural and urban areas, industrial unemployment, and unemployment among educated persons in urban areas. It is therefore not possible to use the conventional yardstick of 'involuntary idleness' as the common measure of all these types of unemployment. The concept of involuntary idleness, i.e., the able-bodied and willing persons not finding a job at the ongoing wage rate is only a measure of open unemployment. We cannot use it for measuring other types of unemployment.*

Impact of Unemployment on Economic Growth

Unemployment is a major problem worldwide, affecting not only underdeveloped or developing countries but also the developed ones. Its economic cost is very high, and it is a big hurdle in the path towards rapid economic development or economic growth. Because of unemployment, the level of national output remains below the optimal level, since the available human resources are not able to contribute to the production of goods and services. We list below some of the major adverse economic effects of unemployment.

- ***Loss of Valuable Human Resources:*** *Unemployment means that some able and willing persons have not been able to get work. In other words some labour is lying idle. Since labour is an important agent of production, unemployed labour means unused human resources, and consequently less than full production. This naturally means lower GNP and smaller per capita income.*
- ***Increase in Poverty:*** *Unemployment and poverty go together. When some people are unemployed, and hence unable to contribute in production and income, they become dependent upon others. Sharing other peoples' income in low income groups depresses overall consumption levels and pushes people below the poverty line.*
- ***Unemployment is Demoralising:*** *Unemployment has a demoralising effect on people. Of all the evils befalling mankind, unemployment is one of the worst. It creates a sense of unwantedness among the unemployed persons and lowers their self esteem. A nation of demoralised people cannot make any significant economic progress.*

- ***Exploitation of Labour:*** *Unemployment is a situation in which supply of labour is in excess of its demand. This 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 may thus offer only lower wages and demand longer hours of work and thus exploit the poor workers.*

Remark: *The economic cost of unemployment is certainly very high; its social cost is also not less. Unemployed people failing to get any legitimate means of livelihood, may take recourse to anti-social activities such as gambling, theft, robbery, etc. This creates law and order problems for the country. When unemployment assumes wider proportions, the unemployed people may become restless and pressurise the government for more jobs. This pressure may initially take the form of simple demonstrations, but may ultimately get manifested in the dangerous forms of terrorism, militancy and secessionist demands, which is bound to cause political instability, economic destability and social tensions.*

Activity 6.3

1. Identify the various types of unemployment found in Ethiopia.
2. Collect available statistical information related to unemployment in Ethiopia and prepare a brief report based on the information that you could collect.
3. Is unemployment a major problem for the Ethiopian economy? Discuss in a group.
4. Discuss the major causes of unemployment in Ethiopia.
5. Discuss the economic cost of unemployment.

Inflation

Since the second World War price rise has been a universal phenomenon; however, the pattern and degree of rise has been different in different countries. It is generally observed that prices do rise during the process of economic development. It happens so because money supply immediately increases, but corresponding to that, the national output does not increase. However, if the prices go up much more than what they should have on account of development activities, it is a cause of concern for the country and its economic planners. Such a situation is termed as *inflation*.

Meaning of Inflation

Inflation, in general terms, is described as a situation characterised 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. It is a persistent and appreciable rise in prices which is 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 producer prices.*

Causes of Inflation

Inflation cannot be attributed to a single factor. Rather, a mix of several factors is responsible for it. Normally, these factors are divided into two broad types: *Demand-Pull factors* and *Cost-Push factors*. Accordingly, we have the concepts of *Demand-Pull inflation* and *Cost-Push inflation*.

Demand-Pull Inflation

When the demand for goods and services exceeds the available supply at current prices, it is a demand-pull inflation. The situation is described as "*too much money chasing too few goods*". For some reason people come into possession of more money or purchasing power, but there is no corresponding expansion of the supply of goods and services. The expenditure increases, and prices keep on rising continuously.

The various causes for *demand-pull inflation* include:

- ***An increase in government expenditure:*** *This increases the demand for goods and services, and hence, is responsible for price rise,*
- ***An increase in money supply:*** *Such a situation is followed by rises in prices. Money represents purchasing power over goods and services,*
- ***An increase in investment:*** *When this is done by the private or public sector it leads to a large demand for goods and services, which is followed by price rises,*
- ***An increase in wages:*** *particularly when this does not match a corresponding increase in productivity, it increases the general price level,*
- ***Black money:*** *Such money, which is normally spent on non-essential goods and services, plays an important role in pushing up the prices in a country.*

- ***Deficit financing:*** *This is an important factor for rises in money supply and therefore for rises in price level,*
- ***Credit Expansion:*** *This is also a major cause of price rise. As a result of credit expansion, people buy more goods, leading to increases in the demand for goods and this leads to increase in the prices of goods.*

Cost-Push Inflation

Inflation resulting from rising costs of production and slack resource utilisation is called cost-push inflation. This is sometimes also known as *supply-shocked inflation*. *Setbacks in agricultural and industrial production* due to various reasons –shortage of raw materials, power breakdowns, strikes and lockouts, bad weather conditions, increase in input prices, etc. – lead to a decreased supply of goods in comparison to their demand, 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, which leads to a rise in price level. Firms are interested in speculative dealings to earn large profits, whereas households hoard goods when they expect that prices will rise in the future.

Remarks: *Demand-pull and cost-push inflation go together in an economy*. In both situations, two common features exist:

- *rise in the prices of factor inputs, and*
- *rise in the prices of final goods.*

Therefore, demand-pull and cost-push inflation intermingle, and it may not be possible to separate them.

Measuring Inflation

Inflation means a persistent or sustained rise in general price level. Thus measuring inflation means a measurement of variations in general price level. To do this, various types of *price index numbers* or simply *price indexes*, such as wholesale price index, consumer price index, etc. are constructed. These price indexes are indicators of the overall or general price level. The Consumer Price Index (CPI) is the most widely accepted index for measuring the rate of inflation, since it measures the average price of goods and services bought by general consumers. CPI measures the cost of a "market basket" of consumer goods and services relative to the cost of that bundle during a particular base year. The base year is a reference year.

$$\text{CPI} = \frac{\text{Cost of a market basket of consumer goods and sevices in a particular year}}{\text{cost of same basket during the base year}} \times 100 \qquad (6.2)$$

Rate of Inflation

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

$$\text{Rate of inflation (year t)} = \frac{\text{CPI (year t)} - \text{CPI (year t} - 1)}{\text{CPI (year t} - 1)} \times 100 \qquad (6.3)$$

Example: Calculating the consumers price index and the inflation rate. Assume a simple economy in which a typical consumer buys only two goods-wheat and edible oil. The consumer buys 50 kg of wheat and 10 liters of oil per year and assume that the prices of these basket of goods in three different years are the following

YEAR	Price of a kilo of wheat	Price of a liter of oil
2000 E.C.	Birr 2	Birr 10
2001 E.C.	3	13
2002 E.C.	2	14
2003 E.C.	4	24

Find: 1 The price index in each year

2 The inflation rate from 2000 E.C. to 2001 E.C., from 2001 E.C. to 2002 E.C., from 2002 E.C. to 2003 E.C. and in 2003 E.C. from 2000 E.C.

Solution:

Step 1: Compute the cost of the basket of goods in each year.

Year	Price of a kilo of wheat	Price of a liter of oil
2000 E.C.	(Birr 2 per kg × 50 kg) +	(Birr 10 per liter × 10 liter) = birr 200
2001 E.C.	(Birr 3 per kg × 50 kg) +	(Birr 13 per liter × 10 liter) = birr 280
2002 E.C.	(Birr 2 per kg × 50 kg) +	(Birr 14 per liter × 10 liter) = birr 240
2003 E.C.	(Birr 4 per kg × 50 kg) +	(Birr 20 per liter × 10 liter) = birr 400

Step 2: Choose one year as a base year (2000) and compute the consumer price index in each year

$$\text{Consumers Price Index in 2000 E.C.} = \left(\frac{\text{Birr 200}}{\text{Birr 200}}\right) \times 100 = 100$$

$$\text{Consumers Price Index in 2001 E.C.} = \left(\frac{\text{Birr 280}}{\text{Birr200}}\right) \times 100 = 140$$

Consumers Price Index in 2002 E.C. = $\left(\frac{\text{Birr } 240}{\text{Birr } 200}\right) \times 100 = 120$

Consumers Price Index in 2003 E.C. = $\left(\frac{\text{Birr } 400}{\text{Birr}200}\right) \times 100 = 200$

Step 3: Use the consumer price index to compute the inflationrate from previous year

Inflation Rate in year 2 = $\frac{(\text{CPI}_2 - \text{CPI}_1)}{\text{CPI}_1} \times 100$

Inflation rate in 2001 E.C. from 2000 E.C. = $\frac{(140 - 100)}{100} \times 100 = 40\%$

Inflation rate in 2002 E.C. from 2001 E.C. = $\frac{(120 - 140)}{140} \times 100 = -14.3\%$ (*Approximately*)

Inflation rate in 2003 E.C. from 2002 E.C. = $\frac{(200 - 120)}{120} \times 100 = 66.6\%$ *Approximately*)

Note that: The value (–14.3%) in the year 2002 E.C. shows a decrease in the general level of the prices of goods and services. A decrease in the general level of the prices of goods and services is known as deflation. Deflation is the opposite of inflation.

Therefore, there was inflation in the years 2001 E.C. and 2003 E.C. and deflation in the year 2002 E.C.

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. A state of zero inflation rate is not expected to yield the desired growth rate in the case of a developing economy. Inflation leads to a shift in real incomes, provides encouragement to investment, and can be used as a tool to raise the level of savings. However, inflation may also retard economic development in a number of ways. It may lead to lopsided development; lead to increased consumption and have a negative effect on savings; have an adverse effect on the balance of payments; and introduce uncertainty and instability. It may be noted that unchecked inflation may change into hyper-inflation, which is the most severe type of inflation.

We discuss briefly, in the following paragraphs, some of the specific effects of inflation including redistribution effect, price effect, income effect, and effect on production (or output). For a better understanding of the impact of inflation on economic growth, we classify these effects into two categories: favourable effects and adverse effects.

I *Favourable Effects*

Mild inflation has some favourable effects on production, capital formation and economic development. Some such favourable effects are the following:

- ***Effect on Production:*** *When prices are rising, profit expectations become brighter and thus investment climate becomes favourable. Therefore the entrepreneurs undertake new investments, set up new production units, and expand the existing plants. All these lead to greater production.*
- ***Effect on Capital Formation:*** *Rising prices bring in higher profits to the capitalists. In turn, a greater part of these profits is reinvested with a view to earning further profits. Thus, investment increases and rate of capital formation becomes higher.*
- ***Effect on Employment:*** *Rising prices lead to increased investment by the entrepreneurs in various sectors of the economy with a view to producing and selling larger quantities of goods and services, and thus further adding to their profits. Increased production requires more labour and other resources. Thus employment of labour also increases.*
- ***Effect on Economic Development:*** *Rising prices that raise profit expectations, build up favourable 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.*
- ***Inflation May be Self-Liquidating:*** *As discussed above, a slow and mild rate of inflation helps to increase investment, production and employment. It increases the tempo of development. Thus, over a period of time more goods flow from the farms and factories, and the overall supply in the economy increases. Since inflation is 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*

Many times, inflation is not self-liquidating; it 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:

- ***Income Effect:*** *Inflation adversely affects fixed-income groups like wage and salary earners and those whose income consists of rent from property or interest on loans. The wages and salaries are fixed payments which do not increase with prices (unless full dearness allowance equivalent to price rise is given). Thus, when wages remain more or less fixed, rising prices continuously reduce purchasing power and hence the wage and salary earners suffer a loss in real income. The same is the case with other fixed incomes like rents, interest, etc., which are contractual payments and do not increase with rising prices.*
- ***Saving Effect:*** *With a rise 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 the level of savings out of a given level of income.*
- ***Redistribution Effect:*** *Under mild inflation or a continued slow rise in prices, profits keep on increasing. As wages and salaries remain more or less fixed, income of the industrial and business classes increases relative to the income of working classes. Thus, there is a redistribution of income in favour of the rich capitalists and business people, and therefore, the gap between the rich and the poor increases. The share of profits in national income increases, whereas that of wages and salaries falls, and thus income redistribution takes place in favour of the richer sections of society.*
- ***Price-Wage Spiral:*** *Due to rises in prices, labourers demand higher wages. If this demand is fulfilled, the increase in wages leads to a further rise in prices. The rise in prices, in turn, leads to further rises in wages. This creates a vicious circle of wage and price rises.*
- ***Effect on Economic Planning:*** *Most of the under-developed countries, including Ethiopia, have adopted planning as a means for furthering rapid economic development. A plan is prepared, say for five years ,in which targets are fixed and resources are mobilised and put in the planned channels of production to achieve these targets. If prices start rising, then the actual cost of inputs to be used for achieving production targets becomes higher, and hence more financial resources are needed. But under inflation, savings get 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 or most of them remain beyond reach, thereby upsetting the whole planning process.*
- ***Effect on Balance of Payments:*** *Balance of payments shows how much a country has to receive from the rest of the world as payment for goods and services it has exported and how much it has to pay*

for such imports from other countries. When total payments are more than the total receipts, it is called a balance of payments deficit. With inflation or rising prices this deficit increases. This is because under prevailing high prices, foreigners will not buy our high priced goods. So, our exports will fall. On the other hand, our people will buy more of the relatively cheaper foreign goods, thereby increasing our imports. Since imports are more than exports, it means that the country has to make more payments than what it receives. Thus the deficit in balance of payments increases.

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

Activity 6.4

Identify the various tools and methods used by the government to control inflation.

Note: *In addition to referring to other sources, study Unit 10 of your textbook to help you in carrying out this activity.*

Budget Deficit

Government budget is a forceful instrument of economic growth. In simple words, it is an account of planned expenditures and expected receipts of the government, usually for a year. When the receipts of the government are less than the expenditure, the government is said to have a budget deficit. The government deficits or budget deficit is one of the major concerns of macroeconomic policy of a country. With a view to have a better understanding of budget deficit or the budgetary process itself, we discuss the major components of government budget and some allied aspects.

Meaning of Budget

The budget provides details of the various sources through which money flows to the government, and also the details of the various types of expenses on which money is spent by the government. It is a useful tool to plan and control the fiscal affairs of the government. We may say, *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*. We need to specify, at this point, the objectives, types and components (structure) of budget. We do this as follows.

Objectives of a Government Budget

The general objectives of a government budget are the following:

- ***Economic Growth:*** *to promote rapid economic growth so as to improve the living standard of the people.*
- ***Reduction of Poverty and Unemployment:*** *to eradicate mass poverty and unemployment by creating maximum employment opportunities and providing maximum social benefits to the poor. Social welfare is the single most important objective of the government.*
- ***Reallocation of Resources:*** *to reallocate resources in line with social and economic objectives.*
- ***Reduction of Inequalities:*** *to reduce inequalities of income and wealth through levying taxes and granting subsidies. Equitable distribution of wealth and income is emphasised. Economic progress in itself is not a sufficient goal but the goal, must be equitable progress.*
- ***Price Stability:*** *to maintain price stability and correct business cycles involving depression characterised by falling output, falling prices, and increasing unemployment.*
- ***Management of Public Enterprises:*** *to manage public enterprises which are of the nature of monopolies like railways, electricity, etc.*

Types of Budget

As we now know, a budget shows the receipts and expenditures of the government. It is not necessary that the receipts and expenditure should be equal. usually, it is not be so. There may be a surplus or deficit in the budget. Accordingly, we have the following three types of budget:

A *Surplus Budget:*

If the receipts of the government are more than its expenditure, the government is said to have a surplus budget.

A surplus budget implies that the government is pumping out more money from the economic system than what it is pumping back in. When the government draws money from the economic system, it has a contractionary effect. The level of economic activity falls. A whole sequence of events may follow indicated in Figure 6.4. The economy will tend to move backwards.

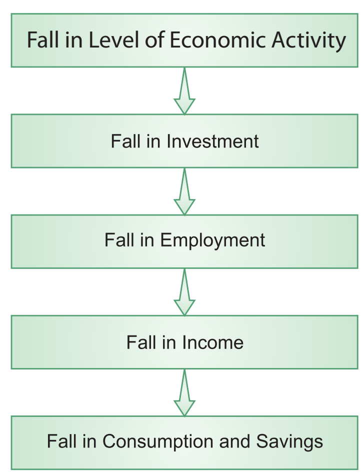


Figure 6.4: Implication of budget surplus

B *Balanced Budget:*

- *If the receipts of the government equal its expenditures, the government will be said to have a balanced budget.*
- *A balanced budget will have a neutral effect on the level of economic activity. It will have neither an expansionary effect nor a contractionary effect on the economy.*

C *Deficit Budget*

If the receipts of the government are less than its expenditure, the government is said to have a deficit budget.

A deficit budget implies that the government is pumping more money into the economic system than it is pumping out. When it puts in more money into the economy, the level of economic activity expands. The process works as shown in Figure 6.5.

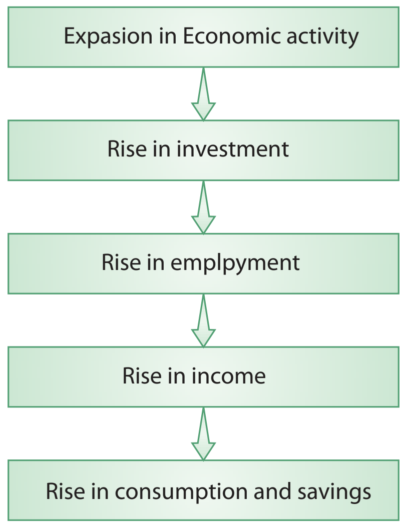


Figure 6.5: Implications of budget deficit

This will move the economy further on the growth path. Usually governments of developing economies plan for a deficit budget.

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

Structure (or Components) of Budget

Usually, budget is divided into two parts: *Revenue Budget and 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:

i Ordinary Revenue,

ii External Assistance, and

iii Capital Revenue.

i ***Ordinary Revenue:*** The total of ordinary revenue is made up by tax revenue and non-tax revenue. Tax revenue is further divided into three parts – direct tax, indirect tax, and foreign trade tax.

a A *tax* is generally defined as a compulsory payment that the citizens of a country have to make to the government without a *quid pro quo*, i.e., the taxpayers cannot expect to get any direct benefit in return for the tax paid by them.

Those who are liable to pay tax have to pay the tax; otherwise they can be prosecuted and penalised by the state. Now, let us look at the three kinds of taxes.

- ***Direct taxes:*** *These are those taxes which are paid by the same persons on whom they have been levied. The burden of the tax cannot be shifted onto anybody else. An example of this is personal income tax. Income tax is levied on individual persons on the income earned by them in a year. Every person who is liable to pay this tax has to bear the burden of this tax. Other direct taxes imposed in Ethiopia include rental income tax, business income tax, agricultural income tax, tax on dividend and lottery winning, and land-use fees and leases.*
- ***Indirect taxes:*** *These taxes, on the other hand, are those taxes whose burden can be shifted. Examples are excise duties and sales tax. These taxes are imposed on the producers and sellers of goods and services. They are liable to pay the tax to the government. But the producers (or sellers) can transfer the burden of this tax onto the consumers, collect the tax-amount from them, and deposit the same with the government. Indirect taxes in Ethiopia include excise and sales tax on domestically manufactured goods, services sales tax, stamps and duty, and VAT.*

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

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

b *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*.

ii ***External Assistance:*** *Grants received in cash, or some other form, from outside the country are known as external assistance*. These receipts form an important source of financing the deficit budget of the government and play an active role in economic development of the country. External assistance received from friendly countries is called *bilateral assistance*; whereas assistance (grant) received from multilateral or international institutions is known as *multilateral assistance*.

iii ***Capital Revenue:*** *Capital revenue* is the third constituent of revenue budget. It *comprises the money received by the government from the sale of government assets, collection of loans, counterpart fund and external loans*.

Expenditure Budget

Expenditure budget is a forecast of the total expenditure by the government, in a year. In Ethiopia, it is classified into two parts:

i Recurrent Expenditure, and

ii Capital Expenditure.

i ***Recurrent Expenditure:*** *Recurrent expenditure represents expenses made by the government which are recurrent in nature, i.e., they are repeated. Normally, it is an expense on consumables that facilitate productive activities,* for example, salaries of civil servants, purchase of raw materials, fuels and other factors of production. The recurrent expenditure is classified in Ethiopia under four functional categories: Administrative and General Services; Economic Services; Social Services; and Other Expenditures. All government bodies fall under one of these categories. For instance, Administrative and General Services include such activities as performed by political organs of the state such as council of representatives, ministries, defence and so on. Economic Services include such activities as ones that come under agricultural, industrial and service sectors. The Social Services include such activities as health, education, and culture. Other Expenditures include pension payments, repayment of public debts, provision of unforeseen expenses and similar items.

ii *Capital Expenditure:* *Capital expenditure represents expenses made by the government for the implementation and expansion of development projects. These are in the nature of acquisitions of fixed assets like buildings, machinery, equipment, etc.* Government expenditures on construction of infrastructure, industries, and research and development programs are also part of capital expenditure. The capital expenditure is classified in Ethiopia under three categories: Economic Development; Social Development and General Development. Economic Development includes production 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.

Remarks:

- *In most developing countries, recurrent expenditure is mostly financed from domestic revenue sources — that is, from tax and non-tax revenues, whereas capital expenditure is usually financed by external borrowing and grants.*
- *The annual budget for the Federal Government of Ethiopia is prepared by the Ministry of Finance and Economic Development (MoFED) and the budgets for the regional governments by the respective regional finance bureaus.*

Activity 6.5

1 Make a list of direct taxes prevalent in Ethiopia.

2 Identify the main objectives of government expenditure in a developing economy.

3 With your friends, discuss the merits and demerits of direct taxes. Prepare a brief report on the outcomes of your group discussion.

UNIT REVIEW

UNIT SUMMARY

- *Macro-economics* deals with aggregates or averages covering the entire economy. For instance, total employment, national income, national output, total investments, total consumption, total savings, aggregate supply, aggregate demand and general price level, wage level, and cost structure come under the scope of macro-economics. In other words, it is aggregative economics which examines the interrelations among various aggregates, including their determination and the causes of fluctuations in them.
- *General objectives of a macro-economic policy* are to achieve:
  - *Maximum feasible output*
  - *High rate of economic growth*
  - *Full employment*
  - *Price stability*
  - *Equality in the distribution of income and wealth and*
  - *A healthy balance of payments.*
- *Macroeconomics* is concerned with problems such as inflation, business fluctuations, inequalities of income and wealth, instability of prices, budget and trade deficit, etc.
- *Business cycle* or trade cycle refers to regularly recurring fluctuations in economic activity in market economies.
- A business cycle is typically divided into four phases:
  - *Peak (or boom)*
  - *Contraction (or recession)*
  - *Trough (or depression)*
  - *Recovery*
- *Unemployment* refers to a situation where the persons who are able to work and willing to work fail to secure work or activity which gives them income or a means of livelihood.
- *Frictional unemployment* is temporary unemployment which exists during a period of the transfer of labour from one occupation to another.
- *Structural unemployment* refers to a situation in which workers become jobless due to loss of demand for labour in particular regions or industries.
- Unemployment which arises due to inadequate overall demand associated with the downswing, recession or depression period of a trade cycle is called *cyclical unemployment*.

- *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.
- *Voluntary Unemployment:* When the economy offers employment opportunities to workers, but they themselves are not willing to take up jobs because employment conditions, such as wage rate, location, promotional avenues, physical environment, attitude of the employer, etc., do not suit them.
- *Unemployment is usually measured* as the ratio of the number of unemployed persons to the total labour force in a country and is expressed in percentage terms. Thus:

$$\boxed{\text{Rate of Unemployment} = \frac{\text{No. of unemployed persons}}{\text{Total labour force}} \times 100}$$

- *Adverse economic effects of unemployment* are: 1. Loss of valuable human resources, 2. Increase in poverty, 3. Demoralising effect, and 4. Exploitation of labour.
- *Inflation is* generally described as a situation characterised by a sustained increase in the general price level.
- When the demand for goods and services exceeds the available supply at current prices, it is a *demand-pull inflation*.
- Inflation resulting from rising costs of production and slack resource utilisation is called *cost-push inflation*.
- Demand-pull and cost-push Inflation go together in an economy.
- Rate of inflation measures the extent of increase in general price level over time. It is usually measured as the percentage change in the general price level from one year to the other.

$$\boxed{\text{Rate of inflation (year t)} = \frac{\text{CPI (year t)} - \text{CPI (year t} - 1)}{\text{CPI (year t} - 1)} \times 100}$$

- A moderate inflation is generally believed to be a necessary condition of economic growth. Inflation leads to a shift in real incomes, provides encouragement to investment, and can be used as a tool to raise the level of savings. However, inflation may also retard economic development in a number of ways. It may: lead to lopsided development; lead to increased consumption and have a negative effect on savings; have an adverse effect on the balance of payments; and introduce uncertainty and instability. It may be noted that unchecked inflation may change into hyperinflation.
- A budget shows the details of the planned expenditures of government program and the expected revenues from tax and non-tax sources for a year.
- General objectives of a budget are:
  - *Economic growth*
  - *Reduction of poverty and unemployment*

- *Reallocation of resources*
- *Reduction of inequalities*
- *Price stability, and*
- *Management of public enterprises.*

- A budget is said to be balanced if the government revenues and expenditures are equal; it is said to be a surplus budget if the government revenue exceeds its expenditure; and, it is said to be a deficit budget when the government expenditure exceeds its revenue.
- Usually, budget is divided into two parts: Revenue Budget and Expenditure Budget.
- Revenue Budget forecasts the total revenue collections of the government from tax and non-tax sources.
- Revenue budget has three parts:
  - *Ordinary Revenue*
  - *Capital Revenue*
  - *External Assistance, and*
- Ordinary Revenue is made up of tax revenue and non-tax revenue.
- Tax revenue has three parts:
  - *Direct tax*
  - *Foreign trade tax.*
  - *Indirect tax*
- 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.
- Grants received in cash, or in some other form, from outside the country, are known as external assistance.
- Capital revenue comprises the money received by the government from sale of government assets, collection of loans, counterpart fund and external loans.
- Expenditure budget is a forecast of the total expenditure, by the government in a year.
- Expenditure budget has two parts:
  - *Recurrent Expenditure*
  - *Capital Expenditure.*
- Recurrent expenditure represents expenses made by the government which are recurrent in nature, i.e., they are repeated. Normally, it is expenses on consumables that facilitate productive activities.
- Capital expenditure represents expenses made by the government for implementation and expansion of development projects. These are in the nature of the acquisition of fixed assets like buildings, machinery, equipment, etc.
- The annual budget for the Federal Government of Ethiopia is prepared by the Ministry of Finance and Economic Development (MoFED) and the budgets for the regional governments by the respective regional finance bureaus.

REVIEW EXERCISE FOR UNIT 6

I ***Write detailed answers to the following questions.***

1 Define macroeconomics and discuss its major concerns.

2 Explain the general objectives of a macroeconomic policy.

3 What are the central problems of macroeconomics?

4 What do you mean by a business cycle? Describe the four main phases into which a business cycle is usually divided.

5 Discuss the characteristic features of a business cycle.

6 Explain the various causes of a business cycle.

7 What do you mean by unemployment? How is it measured?

8 Discuss the concepts of frictional, structural and cyclical unemployment with the help of examples.

9 Explain the impact of unemployment on economic growth. Also describe social costs of unemployment.

10 Explain the concept and causes of inflation. In particular, differentiate between demand-pull inflation and cost-push inflation.

11 How is the rate of inflation for a particular year calculated by making use of the concept of Consumer Price Index?

12 How does inflation affect the economic growth of a country? As part of your explanation, identify the favourable/adverse effects of inflation.

13 Discuss the meaning and general objectives of a government budget.

14 Explain how a difference between the receipts and expenditures of the government gives rise to deficit or surplus budgets. Point out the methods usually adopted for financing a deficit budget.

15 Explain the various components of a government budget with specific reference to the case in Ethiopia.

II *Differentiate between the following:*

16 Ordinary revenue and capital revenue

17 Direct taxes and indirect taxes

18 Recurrent expenditure and capital expenditure

19 Deficit budget and surplus budget

20 Boom and depression

III *Write 'True' or 'False' for each of the following:*

21 A macroeconomic policy aims to achieve full employment in an economy.

22 There is economic over-optimism during the period of depression in an economy.

23 Periodicity between the business cycles is always the same.

24 Frictional unemployment is a temporary unemployment.

25 Unemployment leads to exploitation of labour.

26 During inflation the prices of all goods and services rise together.

27 When the demand for goods and services exceeds the available supply, we call it cost-push inflation.

28 A moderate inflation is a necessary condition for economic growth.

29 Inflation has a positive effect on balance of payments.

30 If the receipts of the government are more than its expenditure, we call it a surplus budget.

IV *For each of the following, four choices are given, but only one out of them is correct. Choose the correct one.*

31 The phase of business cycle during which business confidence in the economy is at its lowest is known as:

A Peak
C Recovery
B Depression
D Contraction

32 Labour force consists of all those:

A who are fit for work
B who are willing to work
C who are available for work
D all of the above

33 Which one of the following is a capital expenditure of the government?

A payment of pension
B payment of subsidies on production
C purchase of machinery
D grants

34 Which one of the following is a recurrent expenditure of the government?

A payment of salaries
B purchase of buildings
C purchase of machinery
D loans granted to a state government

35 Which of the following is a direct tax?

A excise tax
B income tax
C stamp duty
D sales tax

36 Which of the following is an indirect tax?

A dividend tax
B income tax
C sales tax
D business tax

37 Which one of the following is a tax revenue of the government?

A custom duty
B fines
C pension contribution
D fees

V *Match the following.*

38 Demand exceeds the available supply
39 Boom
40 Temporary unemployment
41 Personal income tax
42 Indirect tax
43 Disguised unemployment

A overoptimism in business
B more workers engaged in a work that actually required
C demand-pull inflation
D excise tax
E frictional unemployment
F direct tax

VI *Write very short answers to the following.*

44 Mention two fundamental concerns of macroeconomics.
45 Mention any three objectives of a macroeconomic policy.
46 With what types of problems is macroeconomics is concerned?

47 List the names given to four phases of a business cycle.

48 List two causes of recession.

49 Name three types of unemployment.

50 What is disguised unemployment?

51 Name two sectors of an economy where seasonal unemployment is common.

52 Mention two adverse effects of unemployment.

53 Is inflation necessary for economic growth?

54 List two favourable effects of inflation.

55 List two adverse effects of inflation.

56 What are the three components of tax revenue?

57 Give two examples of direct taxes.

58 Give two examples of recurrent expenditure of a government.

59 Calculate the unemployment rate for a country with the following profile.

- a The number of employed persons 24 million
- b The number of unemployed persons who are actively seeking for employment is 10 million.
- c The total number of the labor force equals to 34 million.

60 Based on the following data calculate inflation rate in the years, 2009 and 2010. Assume the basket of goods to a typical consumer in a country is composed of two goods *teff* and meat. His/her annual consumption is 200 kg *teff* and 20 kg of meat.

Year	Price of teff per kg (in Birr)	Price of meat per kg (in Birr)
2008	3	40
2009	5	45
2010	8	52