LABOUR ECONOMICS I – ECO 213

COURSE OUTLINE AND LECTURE NOTES

1. Meaning/definition and scope of labour economics
   - Labour economics in perspective
   - Labour Market and the economy

2. Nature of labour problems in developing economies
   - The problem of child labour
   - Causes of child Labour
   - Ways of tackling the problem of child Labour

3. Labour force - Definition and factors influencing the size and composition of labour force.
   - Worker Mobility and turn over
   - Sectorial distribution of labour force
   - Population growth and its implication on labour force

4. Concept of unemployment
   - Types of Unemployment
   - Causes of Unemployment
   - The nature of Unemployment in Nigeria
   - Consequences of unemployment
   - Using monetary policy as a tool in solving the problem of unemployment

5. Labour demand and labour supply
   - Simple model of labour demand
   - Elasticities of demand for Labour
   - Supply of Labour
   - Determinants of the supply of labour
   - Determinants of equilibrium of wage rate

6. Informal and Formal (modern) sectors

7. Labour market theories
   - The role of the theory
INTRODUCTION OF LABOUR ECONOMICS:

In previous lectures on economics adequate attention has been given to the concept of economic. Economics problems, scope of economics and its branches, now, we introduce labour economics which is a subdivision of economics.

LABOUR – is one of the primary factors of production other factors include. Labour, capital and enterprurship derived demand, these are input we derive. Note that labour is the collect name given to the productive service, embodied in human physical efforts, skill, intellectual power. e.t.c.

There are different types of effort and skill content. This means that labour input is not homogeneous according to the principle of economics production. Resources are relatively scarce or limited this means that the desire of consumer, business and governmental unit for goods and services exceed our productive capacity.

Since resources are scarce and the want unlimited, society is obliged to manage this resource efficiently. Labour economics therefore looks at ways labour as a resource could be efficiently utilized.
**DEFINITION LABOUR ECONOMICS:**

Labour economics is the branch of economics which studies the workings and outcomes of the market for labour services, labour economics deals with the behavior of employers and employees to the pecuniary (wages, prices, profits) and non-pecuniary (working conditions, work environmental) aspects of the employment relationship firms operate in three markets as they pursue their objectives of profit maximization; the labour markets, the capital market and the product market.

It is the study of the labour force as an element in the process of production. Labour force comprises a part of the population which is employed or available for work.

The labour force is made up of all those who work for gain whether as employees, employers or as self-employed. It also includes the unemployed who are seeking for employment.

Labour economics is therefore the study of the factors affecting efficiency of workers, their development between different industries and occupations and the determination of their pay.

**IMPORTANCE OF LABOUR ECONOMICS:**

The study of labour economics is importance for the following reasons.

1. It helps economists to understand labour related problems e.g Issues on fair wage or salaries workers, welfare of workers, labour productivity, workers safety, gender related matters, job security and Job satisfaction.
2. The study important in providing data for economic planning and policy e.g. It helps economists to know the contribution of labour services to peoples income (wages and salaries). There is evidence that in most economy, labour input is the most of economic resources.
3. The study of labour economics helps us to understand the nature of the market in which labour services are bought and sold.

**SCOPE OF LABOUR ECONOMICS**

Labour economics is concerned with issues that affect or concern the labour force. Issues that concerns labour forces include;

1. Labour mobility and migration
2. Labour markets
3. Supply of labour
4. Unions and collective bargaining
5. Work leisure decision
6. Government and institutions
7. Participation rates of Labour
8. Wage structure
9. Quality of labour
10. Personal distribution of earning
11. Labour productivity
12. Wages and inflation
13. Employment and unemployment

Most of the above issues are discussed under topics in micro economics theory and macroeconomics.

**IMPORTANCE OF SOME OF THE SCOPES OF LABOUR ECONOMICS:**

1. **Mobility of labour/worker mobility and Migration** – it refers to the ease with which labour can move from one occupation or geographical area to another. It has two components or aspects namely:

   - **Geographical mobility of labour:** is the movement of labour between geographical locations or areas. That is mobility of workers from one region, country and location to another. If the present value of the benefits associated with mobility exceeds the costs, both monetary and psychic, we assume that labour will
decide to change jobs or move, or both. Also if the discounted stream of benefits is not as large as the costs, then people will decide not to change jobs.

- **Occupational mobility of labour** – it measures the extent to which workers change occupation or skills in response to differences on their wages or job availability.

Migration is highly selective in the sense that it is not an activity in which all people are equally likely to be engaged. To be specific, mobility is much higher among the young and better educated than the old.

**Characteristics of Migrants**

a. **Age:** is the single most important factor in determining who migrates. The peak years for mobility are 20 – 24; 12% of this age group migrates across the country or state lines each year. By age 32 the rate of migration begins to drop gradually and by age 42 it drops very low. There are two reasons for this situation.

   **Firstly,** migration is greater among the young with great potentials and ability to take high risk. They bring high investment returns from any human capital investment.

   **Secondly,** a large part of the cost of migration are psychic, the losses associated with giving up friends, community ties, and benefits of knowing ones way around can easily be forgone because at such early adult age one is not yet established as a matured adult. However as one grows older such things begin to count.

b. **Education:** while age is the best indicator of who will move, education is the best indicator of who will move within the age group. Educated people tend to want to migrate more to areas where they can find good jobs with high wages and incentives within the country or outside the country. One cost of migration is
ascertaining where the opportunities exist and how lucrative are the jobs.

c. **The role of distance:** As the cost of migration gets higher the desire for mobility reduces as a result. There is also the cost of getting relevant information of where opportunities exist. This can either encourage or discourage labour from migrating.

2. **Labour Market:** It is the market in which wages and conditions of employment are determined. Remember that in the market system the forces of demand and supply determine commodity prices while in the labour market, what we talk about is service and the wages for labour services.

*Note:* Labour services are not homogenous, they are classified based on the quality of skills requirement.

3. **Supply of Labour** – number of hours of labour service that the working population is prepared to offer within a given period of time and at a given wage rate

4. **Union and Collective Bargaining** – This is a negotiation and the agreement between the employer and the employee. Collective bargaining is the establishment by negotiation and discussion of agreement on matters of mutual conscience to employers and to unions covering the employment relationship and terms and conditions of employment within and about a disputed matters that can lead to disorder considered or may be considered with the aim of taking care of the problems or issues and averting the disorder.

**Nature of Labour Problem in Developing Economies Or Countries:**

Labour Problem can be defined as the problem of improving the conditions of employment of the wage-earning classes. It encompasses the difficulties faced by wage-earners and employers who began to cut wages for various reasons including increased technology, desire for lower costs or to stay in business at all cost. The wage-earning classes responded with strikes, by unionizing and by committing acts of outright violence.
It was a nationwide problem that spanned nearly all industries and helped contribute to modern business conditions still seen today. Possible causes include the failure to account for the negative externality of reproduction in the face of finite natural resources which results in over-supply of labor and falling living standards for wage-laborers, depersonalization by machines and poor working conditions.

Most developing economies have labour related problems, such problems include:-

1. Shortage of labour – many developing countries lack skilled labour. The reasons are because majority of the population are not skilled or semi-skilled labour. For that reason they use expertise (foreigner) in productions that need high level skilled manpower.
2. Most people who are working receive low wage payments which are common among employees who have no skills or are semi-skilled. That is those who have little or no education.
3. Labour is abundant for agriculture, while there is less labour for industries, commerce and services.
4. Government is the chief employer of labour. While the employment by the organize private sector is minimal in such economy.
5. Labour force problem is a characteristic of many self-employed artisans who are not organized nor have anything to do with government, government institutions or the organized private sector.

**Labour Problems in Nigeria**

We have identified the following as some of the labour problems in Nigeria;

1. **Disparity between the supply of labour and the demand for labour force:** This does not march with a corresponding increase in job opportunities. The total number of youths and graduates who are willing and ready to participate in the labour market cannot find places to work.
The implication is that the supply for labour is more than the demand for labour. Under such situation the wage rate will be affected negatively. The rate could even fall below the market equilibrium under the free enterprises economy.

The effect is that supply of labor increases while it demands falls drastically and at the end of the day, the problem compounds into low wage payments.

2. **Series of Industrial conflict** – conflicts take the form of strike and other destructive form of man-days are lost and production activities are also stopped. In the same way important services that could have contributed to economic development and to human welfare are held by the labour force. These are thought to affect negatively the pace of economic development especially in less developed Countries (LDCs). It affects all economic activities of the state, thus determination of wages are no longer triggered by the free interplay of the forces of demand and supply.

3. **The role of inflation** – The problem of inflation has serious negative influence in the labour market. Inflation gives rise to the prices of the factors of production. Similarly it has influence in the commodity price; it leads to low production because of its effect on the factors price. Inflation is most times heightened by low production, money laundering or structural defects which are very peculiar to the Nigerian economy.

4. **Consistent failure of imported ideas or strategies**: In the past years most imported ideas, approaches and strategies have failed to work in Nigeria. Non workability of the ideas is attributed to differences in collective and historical background. Attempt to emulate foreign ideas or policies would end up aggravating the problems already faced in the Nigerian labor market rather than solving them.
5. **Insecurity** – This is one of the major problem facing the labour force in Nigeria. It is more pronounced in the labour sector and amongst our youths.

6. **Violation of Institutional Arrangements:** Wages are supposed to be negotiated and not rewarded. Basically there is always an institutional arrangement for wage determination which could either be by collective bargaining, labor courts or sometimes the police force.

   Unfortunately the institutional arrangements are completely violated and flawed by the state which of course distorts the flow or functioning of the labor market. A very good example is the award of wages to workers by the state.

7. **The problem of informalization of the economy:** It is one of the labour problems faced by Nigeria. It has caused labour issues and has affected the demand of labour in the labour market.

8. **Mismatch of skills:** This is one of the major problems in the Nigerian labour market and it is greatly affecting the demand for labour in the market.

9. **Geographical mismatch**, political and regional interference and regional differences or crisis are some of labour problems in Nigerian.

**THE PROBLEM OF CHILD LABOUR:**
The problems of child Labour exist throughout the world. It is however common in developing countries, particularly rural areas where the capacity to enforce minimum age requirements for schooling and work does not exist. Here children are being exploited and forced into child labour. They have little or no chance of receiving formal education. Children in this category are working objects of extreme exploitation with minimal wage. The conditions under which these children work in most developing countries are very severe. They are often not provided the sanitation for proper physical and mental development.
In most countries of the world there are restriction on child labour but not followed in many developing countries. Most state leaves these children vulnerable to exploitation. Child labors are the worst paid categories in the world. They face health hazards and potential abuse. Most employers take undue advantage of child labour knowing that they cannot legally form unions to change their conditions of employment.

This manipulation stifles the development of youths in the society. The working conditions of these children do not provide the stimulation for proper physical and mental development. Consequently, these children are deprived of the simple joy of childhood. (Gbosi, 2005).

There is no uniform international law or agreement that defines child labour. Many countries have different minimum age for work restrictions.

**Causes of Child Labour:**

The following are the causes of child labour;

1. **Poverty:** Children in the child labour category work for many reasons. The most important is poverty. Children work to ensure the survival of their family and themselves. Children are paid far less than adults. The income they earn is of benefit to their poor families. One of the reason why parents have in developing countries is because they can be profitable.

   In Nigeria about 14.2 million children are engaged in child labour. This is as a result of the high incidence of poverty in the country.

2. **Schooling Problems:** The school problems contribute to child labour. Many times children seek employment because they don’t have access to schools or good education. Even when there is access to education, the low quality of education often makes attendance a waste of time for most students.

   In Nigeria, poor parents believe that the poor quality of education and condition of overcrowding, inadequate sanitation and apathetic teachers make education a waste of time. They prefer their children learning a skill and thereby supplementing the family income. Parental education plays a major role in determining child schooling and employment.
3. **Traditional Factors:** In Africa most female children, based on cultural believe and traditional believe that women will not fit into native roles if they become educated. They believe that educated women will not get married or have children. Therefore many families prefer their female children to take over household duties. The intended purpose is to release mothers for paid employment in many developing countries. Such cultural practices eventually restrict the education of females and promote child employment in many developing countries. This makes certain siblings going to school while others work.

4. **Rapid Rural Urban-Migration:** This is another reason for the increasing rate of child labour in urban areas of developing countries. Families leave the severity of agricultural working conditions for cities in order to search for economic opportunities that often do not exist. This movement has been drastic rural urban migration in most developing countries. Such increases coupled with worsening economic trends, force children and their families into urban poverty. Thus children are forced into child labour or required to work.

**Ways of Tackling the Problem of Child Labour:**

1. **Improved quality education:** This is one of the ways to tackle the problem of child labour. If the governments improve the quality of education, the value will increase to children and parents. School represents the most important means of drawing children away from the labour market. School provides children with guidance and opportunity to understand their role in the society. Therefore there is need to adequately fund all levels of education in developing countries.

2. **Provision of Subsidies:** Poor families should be provided with subsidies prone to having children. This will enable them afford their children’s school fees and other fees associated with attendance. The
issue of poverty should be addressed so as to reduce the level of child labour.

3. Establishing partnership with International Organizations:
These organizations should include united nation (UN), the International Labour Organization (ILO), the World Bank, the International Monetary Fund (IMF) and other international agencies should be encouraged to assist government of developing countries in the area of financial aid, public enlightenment campaigns and the establishment of a world labour court. The court should be charged with handling matters relating to the problems of child labour throughout the globe.

SECTORAL DISTRIBUTION OF LABOUR FORCE

Labour force is that part of the population which is employed or available for work. It can also be defined as everyone who is classified as either Employed or Unemployed. The available labour services to the society depend on the following:

1. The size and demographic composition of the population.
2. The labour force participation rate – that means the percentage of the working age which is actually working or seeking job.
3. The number of work hours per year or month or week or day or hour
4. The quantity of labour force – labour input is provided in form of services, the total productive effort available in the economy depends upon a number of factors that leads to the factors that determine the size and composition of labour force.

By Sectorial Distribution of Labour Force, we mean the number or percentage of persons that are gainfully employed in various sectors of the national economy. During the recent years there has been a fluctuation in the manufacturing sector and it contributed to a total high of gainful employment when compared with other sectors as electricity, gas, and water and mining
respectively. The breakdowns of the various groups in the country are as listed below;

**Nigeria: Female Labor force participation rate:**
Female labor force is a percentage of the total that show the extent to which women are active in the labor force. Labor force comprises people ages 15 and older who meet the International Labour Organization's definition of the economically active population.

The World Bank provides data for Nigeria from 1990 to 2014. The average value of women for Nigeria during that period was 39.9 percent with a minimum of 34.13 percent in 1990 and a maximum of 42.95 percent in 2004. As at 2014 the female labour force in Nigeria stood at 42.4%

**Nigeria: Male labor force participation rate:**
The male labor force participation rate is the percent of the male population ages 15 and older who are economically active. That includes the employed people as well as the unemployed people.

The World Bank provides data for Nigeria from 1990 to 2014. The average value for Nigeria during that period was 66.79 percent with a minimum of 61.9 percent in 2004 and a maximum of 74.8 percent in 1990. As at 2014 the male labour force participation rate stood at 63.8%.

**Nigeria: Dependent people as percent of the working age population:**
The age dependency ratio for Nigeria is calculated as follows: \( \text{Age dependency} = \frac{\text{people younger than 15 and older than 64}}{\text{working age people ages 15-64}} \). A higher value for Nigeria and other countries means that employed people have to support more non-working people, either young or old.

The World Bank provides data for Nigeria from 1960 to 2015. The average value for Nigeria during that period was 86.93 percent with a minimum of 79.98 percent in 1960 and a maximum of 92.37 percent in 1987. By 2015 the percentage of dependent age stood at 87.71%

**Nigeria: Youth unemployment, ages 15-24:**
The Rate of youth unemployment for Nigeria is the percent of 15-24 year olds who are part of the labor force but are unemployed. Recall that the labor force includes the employed and the unemployed people.

The World Bank provides data for Nigeria from 1991 to 2014. The average value for Nigeria during that period was 13.72 percent with a minimum of 13.6 percent in 1991 and a maximum of 14.2 percent in 2002. By 2014 the percentage of unemployed youths in Nigeria was 13.6%.
**Nigeria: Unemployment rate for females:**
Female unemployment rate for Nigeria is the percent of 15-64 year olds who are part of the labor force but are unemployed. Recall that the labor force includes the employed and the unemployed people.

The World Bank provides data for Nigeria from 1991 to 2014. The average value for Nigeria during that period was 7.37 percent with a minimum of 7.1 percent in 2002 and a maximum of 7.5 percent in 1999. The figure for 2014 was 7.3%.

**Nigeria: Unemployment rate for males:**
Male unemployment rate for Nigeria is the percent of 15-64 year olds who are part of the labor force but are unemployed. Recall that the labor force includes the employed and the unemployed people.

The World Bank provides data for Nigeria from 1991 to 2014 of the male unemployed. The average value for Nigeria male during that period was 7.65 percent with a minimum of 7.4 percent in 1991 and a maximum of 8 percent in 2002. By 2014 the figure of male unemployed in Nigeria stood at 7.6%.

**Population growth and its implication on labour force:**
As at Nigeria’s independence and in recent years, the large size of the population was considered an asset to the country. However in relation to her current resources, the rapid growth of the population became a source of concern. For instance, from an estimate of 28.6 and 58.5 million person in 1960 and 1970 respectively, the Nigerian population grew rapidly at an annual rate of 21.0% to 62.8%, 70.2% and 79.1% in 1975 and 1980 respectively.

Since 1980 there had been a phenomenal growth in Nigeria’s population. In 1985 Nigeria’s population was at 79.0 million. But by 2005, it has risen to an unprecedented high of 140 million people. And by 2010 it rose to over 158.8 million people (NBS, 2010).

Today most economic analysts believe that the Nigeria’s population is as high as 200 million people.

With these population sizes, the major consequence of the galloping population growth and rapid urbanization is mounting unemployment, especially in the urban centers in the face of rising rural – urban migration.
At this time the rural agricultural labour force declined rapidly from 75% of the total in 1970 to 55% in 1985. For a labour intensive dominant agricultural sector, productivity declined dramatically. The high level of population in the cities led to high levels of unemployment and hardship on the populace.

According to CBN in 2004 the number of unemployed persons in the country registered with the Employment Exchange Offices increased dramatically by 12.43% to 402.382%. In recent years the figure has gone so high.

**Nigeria: Unemployment rate:**
The unemployment rate in Nigeria is defined as the number of unemployed people as a percent of the labor force. The labor force includes the people who are either employed or unemployed, i.e. who don't have a job but are actively looking for one.

The labor force does not include people who are not looking for work, children, and the retired.

The unemployment rate seldom declines below 4-5 percent even during boom times. There are always people who move between different sectors of the economy or between cities. When the economy goes into recession, then unemployment can reach much higher numbers, sometimes even in the double digits.

The World Bank provides data for Nigeria from 1991 to 2014. The average value for Nigeria during that period was 7.54 percent with a minimum of 7.4 percent in 1991 and a maximum of 7.7 percent in 2002. By 2014 the unemployment rate was 7.5%.

**Factors that affect the size of Labour Force**
Factors affecting the size of a labor force include population, income, educational attainment, home ownership, number of industries and government policies. Economic Online reveals that a 1 percent growth in state population causes a 0.74 percent growth in the size of the labor force. Additionally, an increase in minimum wage causes an increase in the size of a labor force.

According to Economic Online, home ownership has many benefits to the society, but it reduces employee mobility, decreasing the size of a labor force. An increase in the wage rate reduces the demand for labor, reducing the size of a labor force. On the other hand, high productivity increases the demand for labor and the size of a labor force.

The supply of labor also affects the size of a labor force. Immigration increases the size of a labor force while migration reduces it. Preference for work also affects the size of a labor force because the benefits of working
motivate people to seek employment. Trade unions prevent a decrease in the size of a labor force by protecting the rights of workers.

The cost of living has no impact on the size of a labor force. Labor force includes the unemployed because of their potential for employment within formal and informal sectors

**Factors that determine the size and composition of labour force:**

1. **Population size** - Labour force is part of the population, the relationship between the population and labour force depends on birth rate, death rate and net immigration. Other demographic factors include:-
   a. **Age composition of the population** – This helps to determine the labour force. For example in Nigeria age eligible population that can participate in labour force is within 15-64 years. Because they are qualified to belong to the labour force. The more we have people within this range the more the size of the labour force.
   b. **Sex composition of the population** – in any economy where the population skew favor any particular sex, for instance more men, it mean that more members of the population will be available for work whether skilled or unskilled.

2. **Labour force participation rate of the population:**
   Participation rate means the percentage of the working age population which is actually working or seeking for work. Labour force participation rate is determined by compiling the actual with the potential labour force or what is called the age eligible population.
   I. **Potential labour force** – The potential labour force or age eligible population is defined as the entire population less (i) young peoples under 15 years of age and the (ii) peoples who are institutionalized, children under 15 years of age are excluded on the assumption that in some countries schooling and child labour laws keep most of them out of the labour force.
   II. **Actual labour force** – It consists of those people who are either employed or unemployed but actively seeking a job. In percentage form
labour force participation rate is expressed as actual labour force divided by potential labour force multiply by 100. i.e. actual labour force \times 100

Potential labour force

3. **The average number of hours worked weekly and annually:** By this the labour force minus the total amount of labour supplied in the economy does not depend only on the number of labour force that participates but also on the average no of hours worked per week and per year by those participants. Experience show that work week decline on weekly basis as follows:-

   a. Workers income – leisure preferences
   b. Non-wage income – if non-wage income increases, the no of working hours will reduce.
   c. Assumption that leisure is a normal goods

4. **People attitude to work:** General attitude of people in a particular society will affect the size of the labour force. In countries where those who belong to the labour force do not depend on the unemployment effort or any form of it (Social allowance or Benefit). The size of labour force would be large. In such a situation people will be willing to provide labour services for their up keep.

5. **Quality of labour:** A qualitative or superior labour force is one that is more experienced, more educated and better trained. Productivity of labour may be considering an investment in human capital. Human capital investment include expenditures on:-

   a. Formal education
   b. On the job training
   c. Health and migration

Worker can become more productive by;

(i) Improving their physical and mental health
(ii) By moving from locations and jobs where their productivity is relatively low to where their productivity is relatively high.
6. **Legal requirement on women participation in the labour force:**

In some countries as a result of religious influence, women are excluded from the labour force, for that reason the size of the labour force in such a country will be limited to the no of men who are willing to work. If it happens in a country where the population of women exceeds that of men, it could mean that the greater no of the labour force is excluded from the labour market.

**LABOUR FORCE PARTICIPATION RATE:**

The labor force participation rate is the percentage of working-age persons in an economy who:

- Are employed
- Are unemployed but looking for a job

The labor force participation rate is the percent of the population ages 15 and older that is economically active. That includes the employed and the unemployed individuals. All people who supply labor for the production of goods and services during a specified period.

Typically "working-age persons" in Nigeria is defined as people between the ages of 15-64. People in those age groups who are not counted as participating in the labor force are typically students, homemakers, non-civilians, institutionalized people, and persons under the age of 64 who are retired.

The Labor Force Participation Rate is how many people are available to work as a percent of the total population.

Here's how to calculate the Labor Force Participation Rate (LFPR):

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LFPR = \frac{\text{Labor Force}}{\text{Civilian Non-Institutionalized Population}}
\]

Where the Labor Force = Employed + Unemployed
To calculate the formula correctly, you must first understand the underlying definitions outlined by the National Bureau of Statistics (NBS). Formerly Federal Office of Statistics (FOS)

The National Bureau of Statistics (NBS) is the Federal agency that reports on the labor force and its participation rate. Here the labor force are:

Civilian Non-institutional Population - Everyone living in Nigeria who is 15 or older MINUS inmates of institutions such as prisons, nursing homes and mental hospitals and MINUS those on active duty in the Armed Forces.

**Labor Force** - Everyone who is classified as either Employed or Unemployed

**Employed** - Anyone aged 15 + in the civilian non-institutional population who worked in the last week. That means they worked an hour or more as paid employees or 15 hours or more as unpaid workers in a family-owned business or farm.

It also includes those who had jobs or businesses, but didn't work that week because they were on vacation, sick, were on maternity or paternity leave, on strike, were in training, or had some other family or personal reasons they didn't work.

It doesn't matter whether it was paid time off or not. Each worker was only counted once, even if they held two or more jobs.

Volunteer work and work around the house did not count.

**Unemployed** - those ages 15 or more who weren't employed, but were available for work and actively looked for a job within the past four weeks

People who were only waiting to be recalled to a job from which they had been laid off were counted as unemployed, even if they didn't look for work.

Here's more definition of the unemployed. People who would like work, but haven't ACTIVELY looked for it in the last month are NOT counted as being in the labor force no matter how much they want a job. They are counted in the population, however.

The other group that isn't included in the labor force are students, homemakers, retired people and those under 15 who are working. They are, however, counted in the population.

**THE CONCEPT OF UNEMPLOYMENT**

Unemployment is a phenomenon that occurs when a person who is actively searching for employment is unable to find work. Unemployment is often used as a measure of the health of the economy of a nation. The Bureau of Labor Statistics (BLS) defines unemployment as people who are jobless and
have actively looked in the past four weeks. If they don't keep looking, the BLS doesn’t count them in the labor force.

The most frequent measure of unemployment is the unemployment rate, which is the number of unemployed people divided by the number of people in the labour force. Economists divide unemployment into many different categories.

The two broadest categories of unemployment are voluntary and involuntary unemployment. When the unemployment is voluntary it means that a person has left his job willingly in search of other employment.

It is involuntary, when a person has been fired or laid off and now must look for another job. Both voluntary and involuntary unemployment are broken down into three major types. Structural, Frictional and Cyclical unemployment.

Unemployment in Nigeria has become rampant that many of the unemployed indulge in social ills like armed robbery, pick pocketing, prostitution and those sometimes called Area Boys. Unemployment in Nigeria range from the weakness in the educational curriculum that is bias towards academic courses and inability of the public sector to provide jobs for school leavers.

In recent times, students enrollment in primary, secondary and Tertiary institutions increased tremendously, and job to opportunities are not increasing simultaneously. It is therefore, feared that in some years to come, this problem of employment will become unbearable, except plans are made to avert it now.

Economists worldwide agree that unemployment is an economic problem that must be solved; but many of them have varied opinions of how to solve it, their solutions vary between two extremes. On one end, is considered that of the classical idea which originated from Say. The other extreme is that which was originated by Keynes and is known as the Keynesian model.

THE CLASSICAL DOCTRINE OF UNEMPLOYMENT:

The classical macroeconomics was the dominant system of economic thought during the one hundred and fifty years preceding the 1930s. The foundation for Classical Macroeconomics lies in the quantity theory of money, Says law and the notion of self-regulation markets. SAYS LAW and the system of self-regulating markets lead to classical economists to conclude that prolonged periods of unemployment were impossible in a competitive market economy.

This theory which emphasizes that the price at which any good is sold represents the wages of labour, the interest of the capitalist, the rent of the
owners of the land and fixed resources and the profit of entrepreneur. Says
idea was based on the relationship among production, income and spending.

He argued that the creation of products for the market generated amount of
income equal to the value of the product produced. If business produced
products worth N10,000.00 they also create income equal N10,000.00. Since
the value of their money is the same as the worth of the products, this
production process had created the income necessary to buy the goods
produced hence no unemployment.

**The Keynesian Doctrine of Unemployment:**
**KEYNES** stressed that under
investment is the main cause of unemployment
in an economy. According **KEYNES** the national income has two components,
that part saved and that part consumed (Y=C+S) he emphasized that the
entire amount saved must find its way to investment; if this is not so, it will
result to chronic unemployment.

However the liquidity preference of individual who desire to hold fund in the form of cash
as impediment. The amount of employment in an economy will depend on the
volume of the national income. In order to maintain a high level of
employment as previously, the amount of investment should be kept as high
in the present period.

This has to be followed in some instance with the interest rate low enough to
encourage saving and investment. Keynes said that even though it is possible
saving and investment to be equal a level high enough to achieve full
employment equilibrium is more likely to be reached at a lower point and
demand for labour will not be enough at that point to ensure employment to those who
desire job.

Some later followers of Keynes laid emphasis on interest rate as a method of
inducing investment. They said that the decision of businessmen is more
influenced by profit expectation and also by any cost reduction, which might
be obtained from theological invention.

General unemployment shows that If the government fails to generate
adequate level of aggregate monetary demand there will be general
unemployment in the economy.

Government can influence the level of aggregate monetary demand by the
manipulation of tax rates and public sector expenditures, so as to maintain
full or nearly full employment.

**Types of Unemployment**

1. Structural Unemployment
2. Frictional Unemployment
3. Demand deficiency or Cyclical Unemployment
4. Seasonal Unemployment

1. **STRUCTURAL UNEMPLOYMENT:**
   Structural unemployment comes about through technological advances, when people lose their jobs because their skills are outdated.

   These are people who are laid off from sectors that are in decline and are in the process of making a transition to sectors that are expanding. For example, if the textile industry is shrinking while the health care industry is expanding, workers have to retrain and retool for the new opportunities.

   It occurs when production structure changes from labour intensive method to capital intensive method. This type of change leads to job losses and unemployment.

   Structural unemployment is due to changes in demand. This unemployment is caused by changes in the country’s industrial structure through the switching of production from one kind of work to another. Such a change produces unemployment only because of the immobility of factor of production.

   It is possible for structural unemployment to occur when an industry suffers a decline in the demand for its product without any compensating new demand arising. In this case, if labour were perfectly mobile it would quickly be reabsorbed by other expanding industries. But if labour are immobile the workers will have to be unemployed.

**Features of Structural Unemployment:**

I. It results from a mismatch between skills needed for available jobs and the skills possessed by those seeking job.

II. It may occur because of geographical mismatch between the location of job openers and job seekers.

2. **Frictional unemployment:**
   Frictional unemployment arises when a person is in-between jobs. After a person leaves a company, it naturally takes time to find another job, making this type of unemployment short-lived. It is also the least problematic from an economic standpoint.

   This is a type of the unemployment problem in Nigeria. The feature of this unemployment involves a short term unemployment which follows workers strikes, natural disasters, layoff or the conscious action of workers who quit their job that are low paying in search of high paying ones.
The Nigeria work force has borne the worst consequences of the current economic crisis, the rising prices, falling wages, massive retrenchment without adequate compensation, and drastic reduction of public expenditure on social services has imposed the burden of structural adjustment programme on the work force.

Frictional unemployment occurs because not all active job seekers would have found job or accepted employment and not all employers would have filled their job vacancies in this case. Unemployment rate always remains positive for the following reasons;
1. People continually quit their present job to search for new jobs.
2. People enter the labour force to seek work or job for the first time.
3. People re-enter the labour force after periods of absence
4. People move from one job to another within the 30 days.

Similarly employers consciously;

a. Search for replacement for workers who quit or retire
b. They discharge some employment in hope of finding better ones.
c. Employers seek new workers to fill jobs created by expansion of their firms.

3. DEMAND DEFICIENT OR CYCLICAL UNEMPLOYMENT:
Cyclical unemployment comes around due to the business cycle itself. Cyclical unemployment rises during recessionary periods and declines during periods of economic growth.

It is as a result of decline in the aggregate demand when the aggregate demand for a product fall. For example, if sales are low, which leads to low profit as demand falls, there would be unsold inventories as a result, profits will drop and as a result, workers will be laid off their jobs which will lead to unemployment.

4. SEASONAL UNEMPLOYMENT:
This is another type of unemployment in Nigeria. This is a situation in which particular workers chances of being employed are subjected to the dictates of the seasons. In Nigerian, there is a high incidence of seasonal unemployment and it is usually associated with labour fluctuation or changes in the agricultural and construction industries.

The average peasant farmer in Nigeria is mainly seasonally unemployed as there are certain periods of the year in which he does virtually nothing on his farm.

There are many workers who are employed to work in cocoa plantations, rice mills, field and maize farms during planting and harvesting periods. These often have little or nothing to do during the slack period and if they cannot find other job these periods, they remain unemployed, albeit seasonally.

**Causes of Unemployment:**

There are seven causes of unemployment. Four cause frictional unemployment. That occurs whenever employees leave their job to find a better one. There are two causes of structural unemployment. That's when workers' skills, or income requirements, no longer match the jobs available. These occur even in a healthy economy. The natural rate of unemployment is between 4.7 percent and 5.8 percent according to the Federal Reserve.

The seventh reason for unemployment is when fewer jobs than applicants are. The technical term is demand-deficient unemployment. When it happens during the recession phase of the business cycle, it's called cyclical unemployment.

1. One reason for unemployment is voluntary. Some of the unemployed have saved enough money so they can quit unfulfilling jobs. They have the luxury to search until they find just the right opportunity.

2. The second cause is when workers must move for unrelated reasons. They are unemployed until they find a position in the new town.

3. The third reason is when new workers enter the workforce. That includes students who graduate from high school, college, or any higher degree program. They have more skills than if they didn't go to school. That's a big primary reason for youth unemployment.

4. The fourth reason is when job seekers re-enter the workforce. They went through a period in their lives when they stopped looking for work.
These include mothers who are re-joining the workforce after their children are old enough. Other re-entrants got married and set up the household while their spouses worked. Others had to care for elderly relatives before returning to the labour force.

5. The fifth cause is technology advances. That's when computers or robots replace worker tasks. Most of these workers need retraining before they can get a new job in their field.

6. The sixth cause is job outsourcing. That's when a company moves its manufacturing or call centers to another country. Labor costs are cheaper in countries with a lower cost of living. That occurred in many states in 1994. Many manufacturing jobs moved to Mexico from USA. It also occurred once when workers in China and India gained the skills needed by American companies.

7. The seventh reason for unemployment is when there are fewer jobs than applicants. The technical term is demand-deficient unemployment. When it happens during the recession phase of the business cycle, it's called cyclical unemployment.

That results in large-scale unemployment. Consumer demand slows down enough that companies lose too much profit. If they don't expect sales to pick up anytime soon, they will lay off workers. Examples include the financial crisis of 2008 and the Great Depression of 1929.

OTHER CAUSES OF UNEMPLOYMENT:

Poor education: This is the major cause of unemployment in most countries that do not take serious care of their education sector. Nations who do not backup what the students are taught in their individual institutions of higher learning with practical background are likely to 'vomit' graduates yearly who cannot make good impact to the society.

When the graduates that are given out every year cannot defend what they studied, the only thing they do is to add to the unemployment level of the country.

Linking poor education level of nations with unemployment, Democratic Republic of Congo has one of the lowest education enrolments in Africa Continent. This poor education contributes seriously to unemployment in that country as many of their institutions were destroyed during the nation’s Civil wars. So, the poorer the educations sector of any country, the higher the increase in unemployment rate of the country.
Nigeria as a country located in Africa has high unemployment as a result of weak education standard. Every year many graduates graduate from the universities and colleges of education with little or nothing to contribute to the society (poor skill). According to National Bureau Statistics of Nigeria, more than 200,000 graduates graduate from Nigeria tertiary institution yearly.

The question is: how many of these graduates secure jobs after their graduation? The answer is that very little number of them secure jobs after years of their graduation. The reason is because there are little facilities and poorly trained teachers who rendered poor services to the graduates when they were in their institutions.

According to Thisday News (a news publication company in Nigeria) on 15th November, 2012, about 60% of Nigerian graduates are unemployed. The reason also centres on poor education of the country.

**Lack of Skills:** It is hard to see any person who is full of skills and still suffer from unemployment. A skilful person can adapt in many environments and feed appropriately to the fullness. One of the principal causes of unemployment among adults of different locations of the world is because good skills which can give them good self-employment are lacking in them. There are many importance of skill acquisition.

In many nations of the world, undergraduates are seriously working hard to acquire material certificates without putting into consideration the importance of skill acquisition. A skilful human being can stand at any point of test. When paper certificates are supported with skills their strengths are increased.

It is not a crime for someone who is studying mechanical engineering to go to a road-side mechanic (technician) and learn how to repair vehicles. When he learns this, it lessens insult which may be added to his injury (worsen the situation of unemployment) after his graduation.

What do I mean? Many who have graduated from mechanical engineering department most especially in African Continent are unable to defend their certificates when they are called for practical interview. They may perform well in theoretical examination but failed when they were called to show their skills from what they learnt by repairing faulty vehicles.

So to avoid worsening of the situation, they should learn skills necessary to see them through and can help them get their dream jobs even immediately after their graduation. When they have the necessary skills on their area of specialization, unemployment will be reduced as they will be employed; but contrary to that, there will be consistence rise in unemployment level.
It is shameful to hear that those who graduated from electronics and computer engineering in most developing or underdeveloped countries cannot produce or repair any electrical appliance. The major reason for that is because the skills needed are lacking. Youths, adults, and even the young are to go for skills to back themselves up.

**Poor moral**: One may ask: how can poor moral behaviour be a cause of unemployment? It is a cause of unemployment because many citizens have lost their jobs because their moral actions are too bad and negates the ethics of most structured organizations. Ladies wear some offensive clothes to their places of work and after advices by their boss get fired as a result of their stubbornness. They get sacked because their top banana (boss) could not take that from the poor morally trained ladies.

Furthermore, some workers do not have good manner of approach. As a result of consistence complains received by the managers from their customers, the managers have no other option than to sack the workers before the misbehaved workers first 'sack' the customers. When the weak morally trained are given their walking papers (sacked), their numbers add to the number of those who have been 'swimming in the ocean of unemployment'.

There are those who suffer laziness the way patients suffer from diseases. They cannot attend work in a week without being late in at least two work days. This cankerworm that has eaten deep into their bodies became difficult for them to stop. After some time of lateness to duties, the Chief Executive Officer gets tired of them and decides to 'give run to them'. In order words, the CEO has to get the late comers sacked.

**Poor government planning**: A government that fails in her duty to help minimize unemployment in any country is as bad as a shepherd that does not care for his flock. Some top government officials are after their selfish interest without considering the importance of making provisions for her citizens. Due to the government's weakness, unemployment becomes the major problem in the country.

Selfish governments does not work hard in creating production companies where citizens of the country can get employed to reduce unemployment; rather, they keep on stealing and embezzling the public fund. When the funds that are supposed to be used by the government to provide employment for the masses is not used, the next that follows is persistence rise in unemployment status.

**Corruption**: What is corruption? How can corruption be a cause of unemployment? Corruption can be defined as immoral action which could involve bribery and embezzlement (misuse) of public fund for personal use. A corrupt government can be said to be a government which makes use of public fund for their (the government officials) personal and selfish use.
Corruption is a cause of unemployment because when those in government who are to use public money for building more manufacturing industries are busy embezzling the funds for their selfish use, the next is massive increase in unemployment rate.

According to 2008 census calculation in Liberia, 68 per cent of Liberians were unemployed in that year. In the same year, 2008, Liberia ranked 138 on the scale of 180 countries surveyed by Transparency International, which is a watchdog that fights corruptions in countries and keep the records. This means that when 138 is subtracted from the 180, Liberia is known to be the 42nd most corrupt in the world in 2008 and that is still high when it comes to corruption.

When unemployment is connected to corruption, Liberia was the world most corrupt nation in 2013. It is clear evidence that corruption is also the major cause of unemployment.

Without going too far, Nigeria is the 8th most corrupt country in the world and this country also have high unemployment rate. The corruption in Nigeria government makes government of the country to spend less on the welfare of the citizens of the country.

When corruption is taken as normal routine, functions which are to be done by three persons is being taken up by one person alone and that same one person collects salaries made for three persons. Why won’t unemployment rate increase when such action is being observed in the country?

**Do Minimum Wages Cause Demand-Deficit or Cyclical Unemployment:**

Occasionally demand-deficit unemployment occurs when wages are too high. That's one of the arguments against higher *minimum wages*. It says that businesses have a fixed cost for labor. When they are forced to pay a higher salary per person, they must let other workers go. In some price-sensitive industries, that's true. But most other companies can pass the cost onto their customers.


**Not All Causes of Joblessness Create Unemployment**

If someone gives up looking for work, on the other hand, the **Bureau of Labour Statistics** (BLS) does not count them in the *unemployment rate*. If someone retires, goes back to school or leaves the work force to take care of children or other family members that is not unemployment. That's because they no longer look for work. Even if they would prefer a job, the BLS doesn't count them as unemployed unless they looked in the past month.
People, who have searched in the past year, but not the past month, are called marginally unemployed. For this reason, some people say the government undercounts the real unemployment rate.

The nature of Unemployment in Nigeria:

Unemployment in Nigeria is one of the most critical problems the country is facing. The years of corruption, civil war, military rule, and mismanagement have hindered economic growth of the country. Nigeria is endowed with diverse and infinite resources, both human and material. However, years of negligence and adverse policies have led to the under-utilization of these resources. These resources have not been effectively utilized in order to yield maximum economic benefits. This is one of the primary causes of unemployment and poverty in Nigeria.

As per the report of the World Bank, the GDP at purchasing power parity of Nigeria was $170.7 billion during 2005. Unemployment in Nigeria is a major problem both economically and socially.

Unemployment in Nigeria has resulted in more and more people who do not have purchasing power. Less consumption has led to lower production and economic growth has been hampered. Unemployment also has social consequences as it increases the rate of crime.

The secondary-school graduates consist of the principal fraction of the unemployed accounting for nearly 35% to 50%. The rate of unemployment within the age group of 20 to 24 years is 40 % and between 15 to 19 years it is 31 %.

Under employed farm labor, also referred as disguised unemployed, makes the rural unemployment figures less accurate than those for urban unemployment. Almost 2/3 of the unemployed rural population is secondary-school graduates.

Economic growth is not the only solution to curb unemployment in Nigeria, as the official statistics illustrate that previously unemployment did not always decline with the economic growth. Other solutions such as the provision of right skills to the people to help them tackle the problems and lead a more prosperous life should also be given importance.

Recently the experts have suggested some techniques, which can play important role in curbing Unemployment in Nigeria. These include –

- Sports schools, evening clubs that teach kids to play football, swim etc
- Computer training schools and clubs that specializes in teaching programming softwares such as Java, Oracle, ASP, Cold fusion, JSP, digital photography, and video editing, etc.
• Language schools teaching foreign languages like French, Spanish, and Chinese.
• Setting up of provisional work agencies, which provides temporary staff to small companies
• People with good web and programming skills can think of starting the following projects in order to deal with the problems of unemployment - program unique JAVA based applications to be used in 3G phones, a project to structure a complete phone directory of all Nigerian phone numbers, online map project of major Nigerian cities, and project, which can provide sufficient information about everything in Nigeria.

Other projects such as building solar powered water pump for use in rural areas, solar powered streetlights, hybrid powered generators using solar and battery power, can also generate employment in the Nigerian economy.

Consequences of Unemployment:

Unemployment is not a friend and nobody of any kind even a mad person will not like to make it his friend. The reason is because there are many consequences it can bring. The word, consequence, is an English word, which means results or effects. So, consequences of unemployment are those things which unemployment can result to. Hence, the consequences of unemployment are:

• Migration;
• Conflict;
• Crime;
• Low national industrial output;
• Poverty;
• Kidnapping and robbery; and
• Lawlessness

Migration: Who will like to stay in any country where unemployment is on the high increase? Will you like to stay there if you are unemployed when you have other places to migrate to and secure good job at last? I am very sure that you will leave your country to another man’s country where there is more availability of jobs to continue life in that part of the world.

What is migration? In this context, migration is movement from one particular area where one is located to another in search of ‘greener pasture’. Unemployment have made many citizens of specific country to move to other countries, work in the new locations, earn their money from that new location, and even die there at their old ages because they take the new place they migrate to as their new homes.
**Conflict:** There is a popular saying: an angry man is a hungry man. What is that that make the man angry which subsequently leads to hunger? The answer is that unemployment can make a man angry which results to hunger. When large numbers of citizens are unemployed, conflicts can come in because they are angry and hungry at the same time.

Many disagreements that are going on in some states of the world can be attributed to unemployment. People who are unemployed can come up one day and plan to indulge in rioting because of the problem of unemployment in the state. They in some cases move to Government Houses of their states in anger to show the disagreement they have against the ruling government.

**Crime:** What business does an employed worker have with criminal act going on in his or her country? Most people start thinking of one crime or the other that they will indulge in to make money when there is no source of income for them.

It is said that: an idle mind is devil’s workshop. Unemployment has made many minds to be idle which hence results to crime engagement. Many crimes committed today are because people do not have what they do for their living—unemployment. So, when they stay alone, they ‘fabricate’ one wicked act they will carry out, which is known as crime.

**Low national industrial output:** It is clear that any nation which faces unemployment will have decline in industrial production. This is because those who are to be employed into various manufacturing companies are not given opportunities to boost the output of the country.

Employing graduates and learned persons will increase products which are yearly produced in many nations. When there is fewer numbers of cosmetic companies in a nation instead of having many, the yearly output made by the country will be small. But when there are many cosmetic companies that produce the same products, the yearly cosmetic products will be of high increase. The high increase is because more workers were employed which help in rapid outputs that were obtained. In the contrast, due to low national industrial output because of unemployment, nations Gross Domestic Product (GDP) decreases.

**Poverty:** Mathematically, unemployment is directly proportional to poverty. Even any baby who is taught on unemployment can know that unemployment can result to Poverty. In the 2013 release of top countries that face high unemployment rate by International Labour Organization, Africa faces the highest unemployment rate. When this is compared with poverty level of African Continent, it is not farfetched that Africa continent is the poorest continent in the world. Yes! It is the poorest.

From the list of the world poorest country in the year 2013, the world poorest country is Democratic Republic of Congo located in African continent. In fact
out of the top fifteen poorest countries released by the International Monetary Fund World Economic Outlook, fourteen of them came from Africa.

The increasing order in the poverty level of the top fifteen poorest nations in the world as in 2013 is given as: Mozambique→ Ethiopia→ Guinea→ Togo→ Mali→ Afghanistan→ Madagascar→ Malawi→ Niger→ Central African Republic→ Eritrea→ Liberia→ Burundi→ Zimbabwe→ Democratic Republic of the Congo. Out of these top fifteen poorest countries of the world, it is only Afghanistan that merged from another continent.

**Kidnapping and robbery:** What is kidnapping? Kidnapping can be defined as abduction of any person to receive ransom which can be money before the kidnapped is released from the captive. In criminal Law, kidnapping is the taking away or transportation of a person against the person’s will, usually to hold the person in false imprisonment, a confinement without legal authority (definition from Wikipedia).

Kidnapping is of higher increase in the recent time and government and other important organizations are fighting on daily basis to see that the menace is reduced in many parts of the world.

Missing of human beings is a daily occurrence in the United States of America. An astounding 2,300 Americans are reported missing every day, including both adults and children. This is as reported by the body in charge of keeping the records of the missing persons.

The question is: what are they used for or where can the abducted be found? Many persons said that some of these persons are used for sacrifices while others said that they are sold out to people in the form of slavery but nobody can really tell. According to a justice department study, nearly 90 per cent of the abductors are men.

According to the report on kidnapping, in the year 2000, Iraq was known to be the country with highest kidnapping activity with total of about 1,500 foreigners kidnapped in that year. In the year 2004, Mexico registered the highest in kidnapping activity. Again, an estimate of about 12,500 to 25,500 persons are kidnapped per year in the world.

In totality, the cause of the kidnapping can be traced to be unemployment as one who has no job to sustain him can indulge in such act to make some money which he or she will use for daily expenses.

I do not think that a full flesh human being who makes enough money from where he is employed will have time to plot evil in the name of kidnapping to get ransom in return. Even if there are those who are working and still engage in kidnapping of people, they are of minimal number.
Robbery is another social criminal activity which can to be as a result of unemployment. One whose conscience is dead and wants to make money either by hook or crook can force himself into robbery to make money. Robbers have caused a lot of injuries to innocent persons and have shaded lots and lots of blood.

Many do this because they want to meet up with the demand of life, which they think that the only option available to them is by armed robbery attacks.

**Lawlessness:** To make Law is good as it is a set of rules that govern group of persons living in a particular society or state. Laws are made by the Lawmakers and anyone who goes against it faces the ‘kind of music’ attributed to the offence. In a nutshell, any citizen that goes contrary to the Laws governing the state faces the punishment attributed to it.

Notwithstanding the importance of Law in any society, unemployment has made some Laws to be Lawlessness. How is that possible? People are no longer obedient to certain Laws that govern a group of persons because the government who made the Laws are not able to provide opportunities for the citizens to get employed in many places of work.

The constitution of every nation prohibits armed robbery, yet people break this Law as a result of what unemployment caused.

**Using Monetary Policy in Solving the Problem of Unemployment:**

There are two main strategies for reducing unemployment

- Demand side policies to reduce demand-deficient unemployment (unemployment caused by recession)
- Supply side policies to reduce structural unemployment / (the natural rate of unemployment)

Quick list of policies to reduce unemployment:

1. **Monetary Policy** – cutting interest rates to boost AD
2. **Fiscal Policy** – cutting taxes to boost AD
3. Education and training to help reduce structural unemployment
4. Geographical subsidies to help firms invest in depressed areas
5. Lower minimum wage to reduce real wage unemployment
6. More flexible labour markets, to make it easier to hire and fire workers.

1. **Monetary Policy:**

Monetary policy would involve cutting interest rates. Lower rates decrease the cost of borrowing and encourage people to spend and invest. This increases
AD and should also help to increase GDP and reduce demand deficient unemployment.

Also lower interest rates will reduce exchange rate and make exports more competitive.

In some cases, lower interest rates may be ineffective in boosting demand. In this case, Central Banks may resort to Quantitative easing. This is an attempt to increase money supply and boost aggregate demand. See: Quantitative easing.

**Evaluation**

- Similar problems to fiscal policy. e.g. it depends on other components of AD.
- Lower interest rates may not help boost spending, if banks are still reluctant to lend.
- Demand side policies can help to reduce demand deficient unemployment e.g. in a recession. However, they cannot reduce supply side unemployment. Therefore, their effectiveness depends on the type of unemployment that occurs.

**Supply side policies for reducing unemployment**

Supply side policies deal with more micro-economic issues. They don’t aim to boost overall aggregate demand, but seek to overcome imperfections in the labour market and reduce unemployment caused by supply side factors. Supply side unemployment includes:

- Frictional
- Structural
- Classical (real wage)

**Policies to reduce supply side unemployment:**

1. **Education and training.** The aim is to give the long term unemployed new skills which enable them to find jobs in developing industries, e.g. retrain unemployed steel workers to have basic I.T. skills which helps them find work in service sector. – However, despite providing education and training schemes, the unemployed may be unable or unwilling to learn new skills. At best it will take several years to reduce unemployment.

2. **Reduce power of trades unions.** If unions are able to bargain for wages above the market clearing level, they will cause real wage unemployment. In this case reducing influence of trades unions (or reducing Minimum wages) will help solve this real wage unemployment.
3. Employment subsidies. Firms could be given tax breaks or subsidies for taking on long term unemployed. This helps give them new confidence and on the job training. However, it will be quite expensive and it may encourage firms to simply replace current workers with the long term unemployment in order to benefit from the tax breaks.

4. Improve labour market flexibility. It is argued that higher structural rates of unemployment in Europe is due to restrictive labour markets which discourages firms from employing workers in the first place. For example, abolishing maximum working weeks and making it easier to hire and fire workers may encourage more job creation. However, increased labour market flexibility could cause a rise in temporary employment and greater job insecurity.

5. Stricter benefit requirements. Governments could take a more proactive role in making the unemployed accept a job or risk losing benefits. After a certain time period the government could guarantee some kind of public sector job (e.g. cleaning streets).

This could significantly reduce unemployment. However, it may mean the government end up employing thousands of people in unproductive tasks which is very expensive. Also, if you make it difficult to claim benefits, you may reduce the claimant count, but not the International Labour force survey. See: measures of unemployment

6. Improved geographical mobility. Often unemployed is more concentrated in certain regions. To overcome this geographical unemployment, the government could give tax breaks to firms who set up in depressed areas. Alternatively, they can give financial assistance to unemployed workers who move to areas with high employment. (e.g. help with renting in London)

2. Fiscal Policy:

Fiscal policy can decrease unemployment by helping to increase aggregate demand and the rate of economic growth. The government will need to pursue expansionary fiscal policy; this involves cutting taxes and increasing government spending. Lower taxes increase disposable income (e.g. VAT cut to 15% in 2008) and therefore help to increase consumption, leading to higher aggregate demand (AD).

With an increase in AD, there will be an increase in Real GDP (as long as there is spare capacity in the economy.) If firms produce more, there will be an increase in demand for workers and therefore lower demand-deficient unemployment. Also, with higher aggregate demand and strong economic growth, fewer firms will go bankrupt meaning fewer job losses.
Keynes was a strong advocate of expansionary fiscal policy during a prolonged recession. He argue that in a recession, resources (both capital and labour) are idle, therefore the government should intervene and create additional demand to reduce unemployment.

**Impact of Higher AD on Economy**

![Graph showing the impact of higher AD on economy](image_url)

However,

1. It depends on other components of AD. E.g. if confidence is low, cutting taxes may not increase consumer spending because people prefer to save. Also, people may not spend tax cuts, if they will soon be reversed.
2. Fiscal policy may have time lags. E.g. a decision to increase government spending may take a long time to have an effect on increasing AD.
3. If the economy is close to full capacity an increase in AD will only cause inflation. Expansionary fiscal policy will only reduce unemployment if there is an output gap.
4. Expansionary fiscal policy will require higher government borrowing – this may not be possible for countries with high levels of debt, and rising bond yields.
5. In the long run expansionary fiscal policy may cause crowding out, i.e. the government increase spending but because they borrow from private sector, they have less to spend and therefore AD doesn’t increase. However, Keynesians argue crowding out will not occur in a liquidity trap.
UNEMPLOYMENT IN RELATION TO LABOUR ECONOMICS:

Unemployment is the situation which exists when members of the labour force wish to work but cannot get any job. It is therefore used in the sense of involuntary unemployment rather than voluntary decision on the part of someone to choose leisure rather than work and properly earn income. It is borne out of choice rather than out of no available job to do.

Measurement of unemployed people:

A person is considered officially unemployed if in a given period of time, the person is:-

a. 15 years old or above but not above 64 and was not institutionalized and the person is not working and he is available for work.

b. The person is engaged in some specific job seeking activity for at least 4 weeks

c. The person is waiting to be called back in a job from which he or she has been laid off

d. Somebody who was looking for a job but was temporarily ill.

e. Somebody who is waiting to report for a job within 30 days.

Unemployment rate – is defined as the percentage of the total labour force that is unemployed but actively seeking employment and willing to work. This is a measure of the extent of unemployment of the labour force at any particular time.

Unemployment rate are used to access the macroeconomic health of the economy. We should know that the labour force is a composition of those who are employed and those who are unemployed. The unemployment rate is the parentage of the labour force that is unemployed.

Unemployment rate of labour force:

Unemployment rate (%) = Unemployed Persons x 100

Total Labour force
Mathematically it is expressed as: \[ UR = \frac{UP}{LF} \times 100 \]

Where;

\( UR = \) Unemployment Rate
\( UP = \) Total number of Unemployed Persons
\( LF = \) Total Labour Force

For example assume that in 2015 Nigeria’s total population was 100 million people. Out of this number, 80 million people were in the labour force, but 10 million people were unemployed. From the above show the unemployment rate;

**Solution:**

\[
\frac{10}{80} \times \frac{100}{1} = 12.5 \text{ percent.}
\]

Therefore we say that Nigeria’s unemployment rate in 2015 was 12.5 percent.

**Natural rate of unemployment**

It is the unemployment at which no excess demand or supply exists in the overall market. It is the rate at which job vacancy equal the number of unemployed

It is the unemployment rate that will occur in the long-run if the expected and the actual rate of inflation are equal.

**STOCK FLOW MODEL OF UNEMPLOYMENT**

The stock indicates the continuous movements of flow of the pipe between the various categories of labour force, remember that labour force categories are the employed, the unemployed and those who are not in the labour market.
The diagram above shows that at any point in time there is a measurable stock of people in each of the three categories which represents categories of the labour force status. Note that the stocks are simultaneously been depleted and replenished by numerous flows in and out of each category. None of them are in nature at each point in time.

There are some facts to know about the stock flow model of unemployment;

1. The unemployment rate \( \frac{u}{E} + u \) can remain constant even though the specific people in the unemployment pool change due to the flow.

2. Several distinct flow factors can act independently or interact with one another to cause the unemployment rate to change.

**Illustration:**

If for example, the rate of flow to flow increase while other flow rate remain constant this will increase the absolute number of people who are unemployed. While leaving the size of the labour force unchanged.

Secondly if the rate exists from the employed category (E) for example, due to retirement and withdrawals increase, while other flows remains unchanged the unemployment rate will rise, but in this case the absolute number of unemployed persons remain at its previous level because that flow is from employed to the labour force or the size of labour force would rise and since unemployment would remain constant more people would moved from the category to the employed category.

**Lesson:**

1. A considerable period of unemployment is due to prolong period of unemployment of relatively few people.

2. During recession, the rate of laid offs and discharges rise and the rate of new hires and recalls falls more than compensating for
decline in voluntary job and quits, consequently the overall unemployment rate rises.

3. First time labour force entrance and people reentering the labour force constitutes over 1/3 of the unemployed.
4. Unemployment rate stay higher than expected during earlier phases of an economic recovery because improved job prospects entice people who are out of labour force to seek work and become officially unemployed.

**Labour Demand and Labour Supply:**

**DEMAND FOR LABOUR**

The labour market is made up of two sides, the demand side and the supply side. The demand side refers to employers (friends) who made the decision to hire labour at a given price. While the supply side included employees (individuals and households) who are willing to offer their labour services at the best possible wage rate.

The demand for labour is not just a study of the number of labour hours an employer is willing to hire on a particular wage rate but a study of the changes on the numbers of workers employed by a firm that cause changes in the demand for its product, choice of available technologies and the amount of labour the firm can acquire at a given wage rate.

If wages increase this means higher cost for the firm and actual high product prices. Consumers will respond by buying less of the product depending on the demand elasticity, the firm will have no choice, given a decline in the demand for its product but to cut down on output and employment. Thus laying off workers.

This decline in employment due to smaller scale of production is standing the sealed effect. Conversely if the firm decides to pursue a capital intensive mode of production to cut down the cost of labour the resultant effect is a substitution effect.

If we consider a hypothetical labour demand schedule for an industry, showing the level of employment at different wage rate we will observe that
the demand curve for labour has a negative slope indicating that as wages rise less labour is demanded. Thus a demand curve for labour cost in employment varies.

**ILLUSTRATION 1**

From the illustration above \( W^2 \) is the initial wage rate at that wage the number of labour demanded is \( N^2 \), however with an increase in the wage rate from \( W^2 \) to \( W^1 \) labour demanded fall to \( N^1 \).

Evidently, at higher wage rate the level of employment is low and at a lower wage rate the level of employment is high all things being equal.

Thus the effect on various wage rates on employment level is depleted by movement along the labour demand curve.

**Factors Affecting Demand for Labour:**

There are 3 basic factors among others affecting the demand for Labour, they include; the wage rate, product demand and technological changes. As mentioned earlier the wage rate is perhaps the most important factor affecting demand for labour.

This is because wages defines the income level of employed household. Thus, changes in wage rate leads to movement along the labour demand curve as indicated in illustration 1 above.

Product demand could necessitate an increase in the demand for labour while wage rate and technology remains unchanged thus leading to a shift of the labour demand curve either to the right of to the left as the case maybe.

**1. Product demand (The Price of the Firm’s Output):**

The higher the price of a firm’s output, the greater is the firm’s demand for labour. The price of output affects the demand for labour through its influence on the value of marginal product of labour. If the price of the firm’s
output increases, the demand for labour increases and the demand for labour curve shifts rightward.

2. Technological Changes:

New technologies decrease the demand for some types of labour and increase the demand for other types. For example, if a new automated bread-making machine becomes available, a bakery might install one of these machines and fire most of its workforce which will lead to a decrease in the demand for bakery workers. But the firms that manufacture and service automated bread making machines hire more labour, so there is an increase in the demand for this type of labour.

On the other hand, technological changes also lead to a shift in the labour demand curve. If the wage rate remains constant and the product remain unchanged but a new technology which ultimately reduced the cost of production is purchased, this could lead to a sustaining effect with the entire labour demand curve shifting either to the right or to the left.

3. The Price of Other Factors of Production:

If the price of using capital decreases relative to the wage rate, a firm substitutes capital for labour and increases the quantity of capital it uses. Usually, the demand for labour will decrease when the price of using capital falls.

**ILLUSTRATION II**

From Illustrate II above, demand for labour increase from $N^1$ to $N^2$ but the wage rate remains constant at $W^1$. This increase in the demand for labour from $N^1$ to $N^2$ has led to a shift of the labour demand curve from $DL^1$ to $DL^2$. 
LABOUR AND CAPITAL INTENSIVE APPROACH OF LABOUR DEMAND

If a firm pursues a labour intensive approach all things being equal there will be an outward shift of the labour demand curve due to the increase in the demand for labour. If on the other hand the firm pursue a capital intensive approach all other things being equal the labour demand curve will shift inwards this is shown in illustration III jointly below.

ILLUSTRATION III

From illustration III; $W^1$ is the initial wage rate which remains constant throughout the period. $DL^0$ is the initial labour demand curve with $N^0$ as the equilibrium quantity of labour demanded. When the firm pursues a labour intensive approach thereby employing more labour at equilibrium wage rate $W^1$, the demand for labour curve shifts to the right to $DL^2$ at equilibrium wage rate $W^1$. But when the firm pursues a capital intensive approach the demand for labour curve shifts inward to the Left to $DL^1$ from $DL^0$ at equilibrium wage rate $W^1$ and the quantity of labour demand became $N^1$.

Demand And Supply for Labour (Continued)

The demand for labour is a derived demand. It is derived from demand for the commodities it helps to produce. The greater the consumers’ demand for the product, the greater the producers’ demand for the labour required in making it. Hence an expected increase in the demand for a commodity will increase the demand for the type of labour that produces this commodity.

The elasticity of demand for labour depends, therefore, on the elasticity of demand for its output. Demand for labour will generally be inelastic if their wages form only a small proportion of the total wages. The demand, on the other hand, will be elastic if the demand for the commodity it produces is elastic or if cheaper substitutes are available.
The demand for labour also depends on the prices of the co-operating factors. Suppose the machines are costly, as is the case in India, obviously more labour will be employed. The demand for labour will increase. Another factor that influences the demand for labour is the technical progress. In some cases, labour and machinery are used in a definite ratio. For instance, the introduction of automatic looms reduces the demand for labour.

After considering all relevant factors, e.g., demand for the products, technical conditions, and the prices of the co-operating factors, the wages are governed by one fundamental factor, viz., marginal productivity. Just as there is a demand price of commodities, so there is a demand price for labour.

The demand for labour, under typical circumstances of a modern community, comes from the employer who employs labour and other factors of production for making profits out of his business. The demand price of labour, therefore, is the wage that an employer is willing to pay for that particular kind of labour.

Suppose an entrepreneur employs workers one by one. After a point, the law of diminishing marginal returns will come into operation. Every additional worker employed will add to the total net production at a decreasing rate. The employer will naturally stop employing additional workers at the point at which the cost of employing a worker just equals the addition made by him to the value of the total net product.

Thus, the wages that he will pay to such a worker (the marginal unit of labour) will be equal to the value of this additional product or marginal productivity. But since all the workers may be assumed to be of the same grade, what is paid to the marginal worker will be paid to all the workers employed. This is all about the demand side of labour. Now let us consider the supply side.

**Elasticity of Labour demand:**

Elasticity of labour demand measures the responsiveness of demand for labour when there is a change in the ruling market wage rate. The elasticity of demand for labour depends on these factors:

1. **Labour costs as a % of total costs:** When labour expenses are a high proportion of total costs, then labour demand is more elastic than a business where fixed costs of capital are the dominant business expense. In many service jobs such as customer service centres or gas boiler repairs, labour costs are a high proportion of the total costs of a business.
2. **The ease and cost of factor substitution:** Labour demand will be more elastic when a firm can substitute quickly and easily between
labour and capital inputs. When specialised labour or capital is needed, then the demand for labour will be more inelastic with respect to the wage rate. For example it might be fairly easy and cheap to replace security guards with cameras but a hotel would find it almost impossible to replace hotel cleaning staff with machinery!

3. **The price elasticity of demand for the final output produced by a business:** If a firm is operating in a highly competitive market where final demand for the product is price elastic, they may have little market power to pass on higher wage costs to consumers through a higher price. The demand for labour may therefore be more elastic as a consequence. In contrast, a firm that sells a product where final demand is inelastic will be better placed to pass on higher costs to consumers.

10 Main Determinants of Elasticity of Demand for Labour:

Some of the main determinants of elasticity of demand for labour are as follows:

i. **The proportion of labour costs in total costs:**

If labour costs form a large proportion of total costs, a change in wages would have a significant impact on costs and hence demand would be elastic.

ii. **The ease with which labour can be substituted by capital:**

If it is easy to replace workers with machines, demand would again be elastic.

iii. **The elasticity of demand for the product produced:**

A rise in wages increases costs of production which, in turn, raise the price of the product. This causes demand for the product to contract and demand for labour to fall. The more elastic the demand for the product is, the greater the fall in demand for it and hence for workers – making demand for labour elastic.

iv. **The time period:**

Demand for labour is usually more elastic in the long run as there is more time for firms to change their methods of production.

v. **The qualifications and skills required:**

The more qualifications and skills needed, the more inelastic supply will be. For instance, a large increase in the wage paid to brain surgeons will not have much effect on the supply of labour. This is especially true in the short run, as it will take years to gain the requisite qualifications and experience.
vi. The length of training period:

A long period of training may put some people off the occupation. It will also mean that there will be a delay before those who are willing to take it up are fully qualified to join the labour force. Both effects make the supply of labour inelastic.

vii. The level of employment:

If most workers are employed already, the supply of labour to any particular occupation is likely to be inelastic. An employer may have to raise the wage rate quite significantly to attract more workers and encourage the workers employed in other occupations to switch jobs.

viii. The mobility of labour:

The easier workers find it easy to change jobs or to move from one area to another. The easier it will be for an employer to recruit more labour by raising the wage rate. Thus, higher mobility makes the supply elastic.

ix. The degree of vocation:

The stronger the attachment of workers to their jobs, the more inelastic supply tends to be in case of a decrease in wage rate.

x. The time period:

As with demand, supply of labour tends to become more elastic over time. This is because it gives workers more time to notice wage changes and to gain any qualifications or undertake any training needed for a new job.

Supply of Labour:

By the supply of labour, we mean the various numbers of workers of a given type of labour which would offer themselves for employment at various wage rates.

For an industry, the supply of labour is elastic. Hence, if a given industry wants more labour, it can attract it from other industries by offering a higher wage. It can also work the existing labour force over-time. This in effect will mean an increase in supply. The supply of labour for the industry is subject to the law of supply, i.e., low wage, small supply and high wage, large supply. Hence, the supply curve of labour for an industry rises upwards from left to right.
The supply of labour for the entire economy depends on economic, social and political factors or institutional factors, e.g., attitude of women towards work, working age, school and college leaving age and possibilities of part-time employment for students, size and composition of the population and sex distribution, attitude to marriage, the size of the family, birth control, standard of medical facilities and sanitation, etc.

The supply of labour may be decreased by workers refusing to work for a time. This happens when labour is organised into trade unions. The workers may not accept wages offered by the employer if such wages do not ensure the maintenance of a standard of living to which they are accustomed.

But, as we shall see, it is only when higher wages are justified by higher marginal productivity that high wages will be paid. Thus, workers with low marginal productivity cannot demand high wages merely on the basis of their standard of living. On the whole, we might say that, the number of potential workers being given, the supply of labour may be defined as the schedule of units of labour at the prevailing rates of wages.

**This depends on two factors:**

(a) The number of workers who are willing and able to work at different wages;

(b) The number of working hours that each worker is willing and able to put in at different wages.

In case the workers have no staying power and the only alternative to work is starvation, the supply of labour in general will be perfectly inelastic. This means that wages can be driven down. Over a short period, reduction in wages may not cause any reduction in the supply of labour. For any industry over a long period, the supply curve will slope upwards from left to right. In other words, supply will be somewhat elastic in the long run.

**Backward Sloping Supply Curve of Labour:**

While labour’s supply curve is sloping upwards from left to right is the general rule, an exceptional case of labour’s supply curve may also be indicated (see Fig. 31.1) When the workers’ standard of living is low, they may be able to satisfy their wants with a small income and when they have made that much, they may prefer leisure to work. That is why it happens that, sometimes, increase in wages leads to a contraction of the supply of labour. This is represented by a backward-sloping supply curve as seen under.
For some time this particular individual is prepared to work long hours as the wage goes up (wage is represented on OY—axis in Fig. 31.1). But beyond OW wage, he will reduce rather than increase his working hours. Fig. 31.1
However, this backward sloping Curve may sometimes be true of certain workers, the supply curve of labour to industry as a whole will normally slope upwards from left to right (as shows in Fig. 31.2)

**Interaction of Demand and Supply:**

We have now analysed the demand side as well as the supply side of labour. We shall now see how their interaction determines the wage level. This is shown in Fig. 31.2

In this diagram, we have shown the wage determination of a particular type of labour for an industry. The curve SS represents supply of labour to the industry. DD is the demand curve for labour of that industry. Demand and supply curves intersect at E. Therefore, the wage rate OW (= NE) will be established. The equilibrium wage rate will change if the demand and/or supply conditions change.

Under competitive conditions, wage rate in the long run will be equal to both the marginal revenue product and the average revenue product. If the wage
rate is less than the average revenue product, the firms would be earning supernormal profits. As a result, new firms will enter the industry and the demand for labour will increase which will push up the wage rate so as to be equal to average revenue product.

On the other hand, if the wage rate is above the average revenue product, the firms will be suffering losses. As a result, some firms will leave the industry and demand for labour will decrease which will force the wage-rate down. Fig. 31.2 shows the long-run equilibrium of the firms under perfect competition. This diagram shows that long-run equilibrium wage rate is OW. At wage rate OW, the firm is employing ON number of labour. This OW rate is equal to marginal revenue product (MRP) and average revenue product (ARP) at point E. The point E is the equilibrium position of the firm in the long run.

We have so far concerned ourselves with the problem of how wages in general are determined. But is there any general rate of wages?

If labour had been like any other commodity, it would also have been sold in the market at the same rate. But as you know, labour is peculiar in certain respects. Labourers differ in efficiency. They are less mobile than goods. Their supply cannot be increased to order and it is a most painful process to reduce them. If a day is lost, its labour is lost with it. For these and other reasons, a uniform rate of earnings for workers is not possible. There is thus no prevailing rate of wages similar to the prevailing rate of interest or prevailing price of a good.

All over the world, labour is spilt up into a very large number of groups and sub-groups, each with a different level of wages. Even within the same group, the differences are ever so many. Consequently there cannot possibly be a general rate of wages. All that can be done is to and out an average rate which can be discovered by dividing the total amount paid to a given group of workers by the total number of workers in it. The fact is that the wages differ from occupation to occupation. Wages are relative.

**Why is the slope of the labour demand curve downward?**

When the marginal revenue product of labour is graphed, it represents the firm's labour demand curve. The demand curve is downward sloping due to the law of diminishing returns; as more workers are hired, the marginal product of labour begins declining, causing the marginal revenue product of labour to fall as well.

The marginal revenue product of labour (MRPL) is the change in revenue that results from employing an additional unit of labour, holding all other inputs constant.
The marginal revenue product of a worker is equal to the **product** of the **marginal product of labour** (MPL) and the **marginal revenue** (MR) of output, given by \( MR \times MP = MRPL \). This can be used to determine the optimal number of workers to employ at an exogenously determined market wage rate.

Theory states that a profit maximizing firm will hire workers up to the point where the marginal revenue product is equal to the wage rate, because it is not **efficient** for a firm to pay its workers more than it will earn in revenues from their labour.

For example, if a firm can sell t-shirts for $10 each and the wage rate is $20/hour, the firm will continue to hire workers until the marginal product of an additional hour of work are two t-shirts. If the MPL is three t-shirts the firm first will hire more workers until the MPL reaches two; if the MPL is one t-shirt then the firm will remove workers until the MPL reaches two.

**Mathematical Relation:**

Let \( TR = \) Total Revenue; \( L = \) Labor; \( Q = \) Quantity.

Mathematically:

The marginal revenue product of labour MRPL is the increase in revenue per unit increase in the variable input = \( \Delta TR/\Delta L \)

- \( MRPL = \Delta TR/\Delta L \)
- \( MR = \Delta TR/\Delta Q \)
- \( MPL = \Delta Q/\Delta L \)
- \( MR \times MPL = (\Delta TR/\Delta Q) \times (\Delta Q/\Delta L) = \Delta TR/\Delta L \)

As above noted the firm will continue to add units of labor until the MRP equals the wage rate.

Mathematically until

- \( MRPL = w \)
- \( MR(MPL) = w \)
- \( MR = w/MPL \)
- \( MR = MC \) which is the profit maximizing rule.

Note that the change in output is not limited to that directly attributable to the additional worker. Assuming that the firm is operating with **diminishing marginal returns** then the addition of an extra worker reduces the average productivity of every other worker (and every other worker affects the **marginal productivity** of the additional worker) - in other words, everybody is getting in each other's way.
Because the MRPL is equal to the marginal product of labor times the price of output, any variable that affects either MPL or price will affect the MRPL. For example, changes in technology or the quantity of other inputs will change the marginal product of labor, and changes in the product demand or changes in the price of complements or substitutes will affect the price of output. These will all cause shifts in the MRPL.

**When the marginal product of labor** (MPL) **rises, marginal cost** (MC) falls. When MPL falls, MC **rises**. Since MPL ordinarily **rises** and then falls, MC will do the opposite: It will fall and then **rise**. Thus, the MC curve is U-shaped.

**Marginal Revenue Product (MRP) in a Perfectly Competitive Market:**

Marginal revenue product (MRP), also known as the marginal value product, is the market value of one additional unit of output. The marginal revenue product is calculated by multiplying together the marginal physical product (MPP) by the marginal revenue. The MRP assumes that the expenditures on other factors remain unchanged.

Under **perfect competition**, marginal revenue product is equal to marginal physical product (extra unit produced as a result of a new employment) multiplied by price.

\[
\text{MRP} = \text{MPP} \times \text{AR} \\
\text{MRP} = \text{MPP} \times \text{PRICE}
\]

Where MPP is Marginal Physical Product
This is because the firm in **perfect competition** is a **price taker**. It does not have to lower the price in order to sell additional units of the good.

In **economics** and **general equilibrium theory**, a **perfect market** is defined by several conditions, collectively called **perfect competition**. These conditions are:

- **A large number of buyers and sellers** – A large number of consumers with the willingness and ability to buy the product at a certain price, and a large number of producers with the willingness and ability to supply the product at a certain price.
- **Perfect information** – All consumers and producers know all prices of products and utilities each person would get from owning each product.
- **Homogeneous products** – The products are perfect substitutes for each other, (i.e., the qualities and characteristics of a market good or service do not vary between different suppliers).
- **Well defined Property rights** – These determine what may be sold, as well as what rights are conferred on the buyer.
- **No barriers to entry or exit**
- **Every participant is a price taker** – No participant with market power to set prices
- **Perfect factor mobility** – In the long run factors of production are perfectly mobile, allowing free long term adjustments to changing market conditions.
- **Profit maximization of sellers** – Firms sell where the most profit is generated, where marginal costs meet marginal revenue.
- **Rational buyers**: Buyers make all trades that increase their economic utility and make no trades that do not increase their utility.
- **No externalities** – Costs or benefits of an activity do not affect third parties. This criteria also excludes any government intervention.
- **Zero transaction costs** – Buyers and sellers do not incur costs in making an exchange of goods in a perfectly competitive market.
- **Non-increasing returns to scale and no network effects** – The lack of economies of scale or network effects ensures that there will always be a sufficient number of firms in the industry.

When conditions of perfect competition hold, it has been proven that a market will reach an equilibrium in which the quantity supplied for every product or service, including labour, equals the quantity demanded at the current price. This equilibrium will be a Pareto optimum, meaning that nobody can be made better off by exchange without making someone else worse off.\[1\]

Such markets are *allocatively efficient*, as output will always occur where marginal cost is equal to marginal revenue (MC = MR). But perfectly competitive markets are not necessarily *productively efficient* as output will not always occur where marginal cost is equal to average cost (MC = AC).

In perfect competition, any profit-maximizing producer faces a market price equal to its marginal cost (P = MC). This implies that a factor's price equals the factor's marginal revenue product. It allows for derivation of the supply curve on which the neoclassical approach is based. This is also the reason why "a monopoly does not have a supply curve". The abandonment of price taking creates considerable difficulties for the demonstration of a general equilibrium except under other, very specific conditions such as that of monopolistic competition.

Real markets are never perfect, but range from close-to-perfect to very imperfect. Share and foreign exchange markets are commonly said to be the most similar to the perfect market. The real estate market is an example of a very imperfect market.

**MRP in Monopoly or Imperfect Competition:**

Firms operating as monopolies or in imperfect competition face downward-sloping demand curves. To sell extra units of output, they would have to lower their output's price. Under such market conditions, marginal revenue product will not equal MPP × Price.
This is because the firm is not able to sell output at a fixed price per unit. Thus the MRP curve of a firm in monopoly or in imperfect competition will slope downwards, when plotted against labor usage, at a faster rate than in perfect specific competition.

In economic theory, imperfect competition is a type of market structure showing some but not all features of competitive markets.

Forms of imperfect competition include:

- **Oligopoly**: in which there are few sellers of a product.
- **Monopolistic competition**: in which there are many sellers producing highly differentiated products.
- **Monopoly**: where there are many buyers but only one seller.
- **Monopsony**: where there are many sellers but one buyer.
- **Oligopsony**: where there are many sellers but few buyers.

**SUPPLY OF LABOUR (Contd)**

The supply of labour to a given market is positively related to the wage rate prevailing in that particular market all things being equal. The supply of labour curve is illustrated below;

![Supply of Labour Curve](image)

If the wage is high the supply of labour will rise and vice versa. But the wage rate is not the only factor affecting the supply of labour; there are other factors such as the wage rate on other professions, entering of new firms in the market, increase in the demand for products or labour and changes in technology.

When all other factors except the market wage rate for a particular labour changes, the supply curve for that particular labour will shift to the right or left, for example; suppose there are 100 people willing to offer their labour either as nurses or paramedics.

If the wage rate of nurses were to rise more than Paramedics, more persons will prefer to become nurses rather than paramedics while some may insist of
being paramedics due to their passion for it. Those that want to move will be attracted by the increases in the wage rate of nurses. If more persons become nurses, the supply curve for paramedics will shift to the left but if fewer people become nurses the supply curve for paramedics will shift to the right.

Once a decision is made to be a paramedic or nurse an individual chooses which firm to supply its labour depending on the compensation package, working condition and other fringe benefit, while every firm in the paramedic’s or nurses labour market is a wage taker. No firm fixes a wage and avoid loosen its applicant, thus the supply curve of the firms under such conditions is perfectly elastic.

Since firms are wage-takers, firms can only attract less quality workers at a lower wage rate. A situation the firm may have to “pay for” in the future and no firm will be willing to pay above the market wage rate under a perfectly competitive environment moreover the feasibility or possibility of nurses becoming paramedics depends on their perfect substitutability which is usually difficult in the short-run.

**WAGE DETERMINATION**

The determination of wages in a labour market depends on the interaction between the demand for labour and the supply of labour irrespective of the
presence of labour unions, labour laws and other forces external to the labour market.

There are several theories of wage determination such as the subsistence wage theory, wage formed theory, the mark theory of wages and the bargaining theories of wages. Each of this theories aimed at explaining factors that affect what a firm is willing to pay for labour and what an individual is willing to accept as wages.

Generally, in a typical labour market, wages are determined by the interaction of labour supply and labour demand as shown below.

At $W^e$ the labour market is at equilibrium with $N_S^2$ number of workers, thus $W^e$ is the market clearing wage rate where there is neither excess demand nor excess supply of labour. At $W^1$ there is excess demand for labour and employers are scrabbling for available labour. At $W^1$ labour supply is at $N_S^1$ while labour demand is $N_D^1$, thus, excess demand for labour is given by $ON_{D^1} - ON_{S^1} = N_S^2$

For $N_D^1$ to attract more labour, wage rate must rise above $W^1$. At $W^2$ there is excess supply of labour and at this wage level labour is willing to accept any wage rate below $W^2$ to find a job. At $W^2$ the demand for labour is $N_D^2$ while
the supply of labour is $N_s^2$, excess supply of labour is therefore given as
\[ ON_s^2 - ON_d^2 = N_d^2 N_s^2 \]

**THE MARGINAL REVENUE PRODUCTIVITY THEORY OF WAGES**

The **marginal revenue productivity theory of wages** is a theory in neoclassical economics stating that wages are paid at a level equal to the marginal revenue product of labor, MRP (the value of the marginal product of labor), which the increment to revenues is caused by the increment to output produced by the last laborer employed. In a model, this is justified by an assumption that the profit-maximizing firm would employ labor only up to the point that marginal labor costs exceed the revenue generated for the firm.

The marginal revenue product (MRP) of a worker is equal to the product of the marginal product of labour (MP) (the increment to output from an increment to labor used) and the marginal revenue (MR) (the increment to sales revenue from an increment to output): MRP = MP × MR. The theory states that workers will be hired up to the point when the marginal revenue product is equal to the wage rate. If the marginal revenue brought by the worker is less than the wage rate, then there is no need to employ.

The idea that payments to factors of production equilibrate to their marginal productivity had been laid out by John Bates Clark and Knut Wicksell, in simpler models. Much of the MRP theory stems from Wicksell's model.

**Wage determination in perfectly competitive labour markets**

An explanation of how wages are determined in a perfectly competitive labour market.

A perfectly competitive labour market will have the following features:

- Many firms
- Perfect information about wages and job conditions
- Firms are offering identical jobs
- Many workers with same skills
The equilibrium wage rate in the industry is set by the meeting point of the industry supply and industry demand curves.

In a competitive market firms are wage takers because if they set lower wages, workers would not accept the wage.

Therefore they have to set the equilibrium wage $W_e$.

Because firms are wages takers the supply curve of labour is perfectly elastic therefore AC = MC.

The firm will maximise profits by employing at Q1 where MRP of Labour = MC of Labour.

Comparing wage of lawyers and McDonalds workers

- Lawyers get higher pay for two reasons.
  1. Supply is inelastic because of the qualifications required
  2. MRP of lawyers is high. If they are successful they can make firms a lot of revenue.

McDonalds workers however get lower pay because:

1. Supply is elastic, because there are many 1000s of people who are suitable for working, qualifications are not really required

The MRP of a McDonalds worker is much lower because there is a limited profit to be made from selling Big Macs.
Informal and Formal (Modern) Sector:
Informal sector/economy

The informal sector, informal economy, or grey economy is the part of an economy that is neither taxed, nor monitored by any form of government. Unlike the formal economy, activities of the informal economy are not included in the gross national product (GNP) and gross domestic product (GDP) of a country. The informal sector can be described as a grey market in labour.

The informal sector refers to those workers who are self-employed, or who work for those who are self-employed. People who earn a living through self-employment in most cases are not on payrolls, and thus are not taxed. Many informal workers do their businesses in unprotected and unsecured places.

The business dictionary defines Informal sector as that Sector which encompasses all jobs which are not recognized as normal income sources, and on which taxes are not paid. The term is sometimes used to refer to only illegal activity, such as an individual who earns wages but does not claim them on his or her income taxes, or a cruel situation where people are forced to work without pay.

However, the informal sector could also be interpreted to include legal activities, such as jobs that are performed in exchange for something other than money.
Other concepts which can be characterized as informal sector can include the black market (shadow economy, underground economy), agorism, and System D. Associated idioms include "under the table", "off the books" and "working for cash".

Although the informal sector makes up a significant portion of the economies in developing countries it is often stigmatized as troublesome and unmanageable. However the informal sector provides critical economic opportunities for the poor and has been expanding rapidly since the 1960s. As such, integrating the informal economy into the formal sector is an important policy challenge.

It is that economy in which the productive activities are neither taxed nor regulated and the values are not computed in national GDP. Other terms used for the informal sector includes the underground economy, the shadow economy, the black market, of the book activities and under the table economy. It is called underground economy because it is not recorded and registered. (E.g. in the GDP)

The original use of the term ‘informal sector’ is attributed to the economic development model put forward by W. Arthur Lewis, used to describe employment or livelihood generation primarily within the developing world. It was used to describe a type of employment that was viewed as falling outside of the modern industrial sector. An alternative definition uses job security as the measure of formality, defining participants in the informal economy as those ‘who do not have employment security, work security and social security.”

While both of these definitions imply a lack of choice or agency in involvement with the informal economy, participation may also be driven by a wish to avoid regulation or taxation. This may manifest as unreported employment, hidden from the state for tax, social security or labour law purposes, but legal in all other aspects. But for the government the informal economy needs to be formalized and incorporated as a whole economy.
Edgar L. Feige has proposed taxonomy for describing unobserved economies including the informal economy as being characterized by some form of non-compliant behavior with an institutional set of rules. Feige argues that circumvention of labor market regulations specifying minimum wages, working conditions, social security, unemployment and disability benefits gives rise to an informal economy that deprives some workers of deserved benefits while conveying undeserved benefits to others. The informal sector, if well organized, can complement government’s efforts in alleviating poverty levels and develop the country.

Characteristics of Informal Economy:
The informal sector is largely characterized by several qualities:
1. Easy entry, meaning anyone who wishes to join the sector can find some sort of work which will result in cash earnings.
2. A lack of stable employer-employee relationships.
3. A small scale of operations
4. Skills gained outside of a formal education.
5. Does not have any written rules or agreements.
6. It exists merely on verbal understanding.
7. It does not have fixed wages or fixed hours of work and mostly relies on daily earnings.
8. In most cases, the work atmosphere is congested and unhygienic.
9. The workers in this type of economy usually fail to come together and address their problems through an association or a group. They have poor awareness levels regarding social protection schemes, are unable to make savings and do not see the necessity of insuring themselves.

People working as small farmers, street vendors, hawkers, small traders, micro-entrepreneurs, home-based workers, cobblers, rag-pickers, porters, labourers, artisans, etc. all belong to the Informal Sector

Workers who participate in the informal economy are typically classified as employed. The type of work that makes up the informal economy is diverse,
particularly in terms of capital invested, technology used, and income generated. The spectrum ranges from self-employment or unpaid family labor to street vendors, shoe shiners, and junk collectors. On the higher end of the spectrum are upper-tier informal activities such as small-scale service or manufacturing businesses, which have more limited entry.

However, most workers in the informal sector, even those who are self-employed or wage workers, do not have access to secure work, benefits, welfare protection, or representation. These features differ from businesses and employees in the formal sector which have regular hours of operation, a regular location and other structured benefits.

The most prevalent types of work in the informal economy are home-based workers and street vendors. Home-based workers are more numerous while street vendors are more visible. Combined, the two fields make up about 10–15% of the non-agricultural workforce in developing countries and over 5% of the workforce in developed countries.

While participation in the informal sector can be stigmatized, many workers engage in informal ventures by choice, for either economic or non-economic reasons. Economic motivations include the ability to evade taxes, the freedom to circumvent regulations and licensing requirements, and the capacity to maintain certain government benefits.

International Labour Organization (ILO) defined the informal sector in 2002; the informal sector does not include the criminal economy. While production or employment arrangements in the informal economy may not be strictly legal, the sector produces and distributes legal goods and services. The criminal economy produces illegal goods and services.

The informal economy also does not include the reproductive or care economy, which is made up of unpaid domestic work and care activities. The
informal economy is part of the market economy, meaning it produces goods and services for sale and profit. Unpaid domestic work and care activities do not contribute to that, and as a result, are not a part of the informal economy.

**Formal Economy:**
This is otherwise known as the industrial economy or the Modern economy. It is that economy in which productive activities are wholly or partly regulated by the government. The modern economy has a standard tax system that allows all adults who earn income to make contributions to the social provisions in the economy; the modern economy is characterized by modern scientific research, architectural designs and efficiency regulatory body.

The modern economy is one in which just security and social security are prime, the modern industrial economy started as a traditional/informal economy however the need to improve processes in all fields led to the advancement of capitalism as the driver of modern economy. The modern economy today can be found in all parts of the earth with varying degrees of modernization; from the remote part of North Africa to the developed country of the western world. Modern economy has had their shades and impacts on mankind.

**Characteristics of Formal (Modern) Sector/Economy**

The formal economy:

1. It has an organised system of employment with clear written rules of recruitment, agreement and job responsibilities.
2. It has a standardised relationship between the employer and the employee is maintained through a formal contract.
3. The employee is expected to work for fixed hours and receives fixed salaries in addition to incentives and perks.
4. The employee works under a decent work environment and is entitled to benefits such as leave, savings, loans etc.
(5) The employees have an organised association or union where his official grievances are addressed.

(6) The employees are covered under social protection benefits such as life insurance, health insurance, pension, gratuity etc.

People working in civil service, public sector units, government service, defence, multi-national/national/private companies, schools, colleges, research institutes, management organizations, banks etc. all belong to the Formal Sector

What are the Specific differences between Formal and Informal Economy?

Mr. Chris gets a job at a software company. His letter of appointment is enclosed with a contract explaining his job responsibilities. He gets a fixed salary in addition to incentives based upon his qualifications and experience. He works in an organized environment where his colleagues enjoy similar benefits. He is entitled to seek claim from the company, if he loses this job or falls sick. He also has attractive retirement options.

Miss. Joy works as a porter at the local market. She is often hired by shopkeepers on daily basis to carry heavy sacks of vegetables from the market to the road head. She gets verbal assurance from shopkeepers that she would be paid on daily basis. But it never happens so; her payment gets delayed by days and weeks and when she is paid, it is never up to his expectations or as promised by her employers.

Besides, the time she spends on work is never regular. It could be 2 hours a day or sometimes 12 hours a day. There are other people in the market like her, but they are never organized together to realize commonly felt needs. When she falls sick, she not only has no money to afford treatment, but also loses the wage of that day.

The former belongs to the Formal Economy while the latter belongs to the Informal Economy.

In a formal economy, a worker:

- Has a formal contract with the employer
- He has pre-defined work conditions and job responsibilities
- He gets an assured and decent fixed salary with perks and incentives
- He has fixed duration of work time
- He is part of an organized group of people working in the same environment and is legally and socially aware about its rights
- He is covered by a social security for health and life risks.
While in an informal economy, worker has:

- He has no formal contract with his employer
- He has no systematic work conditions
- He gets irregularly and unevenly paid.
- He has no forum to express his grievances
- He has no fixed hours of work and mostly earns hand to mouth
- He is not covered by any kind of social security system and has poor knowledge about the need to protect himself socially and economically

LABOUR MARKET:
A labor market is a market where people offer their skills to employers in exchange for wages, salaries and other forms of compensation. Participants in the labor market include any person who is seeking to work for compensation and any person or organization that is looking for people to perform labor.

A labour market is the place where workers and employees interact with each other. In the labour market, employers compete to hire the best, and the workers compete for the best satisfying job.

Another definition of Labour Markets is that Labour markets or job markets function through the interaction of workers and employers. Labour economics looks at the suppliers of labour services (workers), the demands of labour services (employers), and attempts to understand the resulting pattern of wages, employment, and income.

The labour and capital market offers the input that firms need for productions while the product market provide the avenue for firm’s products to be sold. In analyzing how the labour market works, the demand for and the supply of labour must be studied in association with the conditions of demand and supply of labour.
There are two basic outcomes of interaction at the labour market: - The terms of employment (Wages, Benefits, Working Conditions e.t.c.) and level of employment (numbers of peoples employed)

**Labour Market Equilibrium:**

Labour market equilibrium is just another fancy way of saying that the price of labour and quantity of labour in the market have stabilized and will not change unless something significant happens to change the price or quantity. The labour market will reach equilibrium when the supply of labour equals the demand for labour.

This point of equilibrium is often called **market clearing**, in which everyone who wants to hire an employee at the current wage rate can do it, and everyone who wants to work at that rate of wage can. However, it's important to note that just because the market has 'cleared' at this point doesn't mean that the wage and labour supply at this point is the most ideal combination for all people and employers. Some employers may leave the labour market because they want to pay lower wages, and some people may leave the labour market because they want higher wages.

Let's pull these concepts together in a graph so you can see the big picture:
LABOUR MARKET THEORIES:
Most labour market theory explained how labour is compensated and what constitute labour. Examples of labour market theories include theNeo classical labour market theory, Labour market segmentation theory, Labour market theory of poverty, Dual labour market theory, the human capital theory and Theory of Labour Discrimination.

The Role and Assumption of Labour Market Theory:

Under the standard labour market theory, labour is like any other resource. Generally speaking, the market determines the allocation of labour and its costs. In other words, the market determines where people will work and how much they will get paid. Let's take a look at the theory of labour market allocation.

Assumptions:

Labour market theory is a model, and a model is a simplification of reality that we use to try to understand a complex concept. A model will make some assumptions to make things simple. The labour market theory is no different, and it makes a few important assumptions:
The most important motivation in the labour market for people is a wage or other monetary compensation. Workers are pretty much fungible - you can substitute one for another and it makes little difference. Workers are mobile - they can move to where there is a demand for work. Wages are flexible - they can go up or down.

Now that we have our assumptions, it’s time to see how sellers (people seeking employment) and buyers (employers) behave in the labour market under these assumptions. But always keep in mind that these assumptions oversimplify reality so that we can understand the way things work in general.

If the assumptions are not true for a particular set of circumstances, the model will not predict the correct outcome. For example, some people consider the nature of the work more important than the compensation being offered and may actually choose a lower paying offer.

**TYPES OF LABOUR MARKET THEORIES:**

1. **Neo classical labour market theory** – This is otherwise known as the orthodox labour market theory. States that employers act to maximize their profit by paying low wages for the workers skill they need as they can, workers also want to maximize their gain by insisting on the highest pay for the job for which they have the required essential or dispensable skill.

2. **Labour Market Segmentation Theory** – This theory state that labour market consist of various subgroup with little or no capability to cross over from one group to another. It describes a situation where different groups or individuals receive different wages or compensations for the same work. The theory explains economic marginalization due to racial, ethnic or political reason. Segmentation can result in different groups, for example men and women, receiving different wages.

The 19th-century Irish political economist John Elliott Cairnes referred to this phenomenon as that of "noncompeting groups". Modern labor market segmentation theory arose in the early 1960s. It changed the view of many
economists who saw the labor market as just a market of individuals with different characteristics of education and motivation, as well as technology, playing a major factor in terms of producing output.

3. Labour Market Theory of Poverty – This state that because wages are sticky downwards most rigid firms that want to remain in business have the only option of laying off workers during economic down-turns such action adversely affect employment and income distribution and increase the number of households in the poverty bracket.

4. The Dual Labour Market Theory – The theory states that there are two groups within the labour market, the primary market and the secondary market characterized by high income, fringe benefits, job security and a high prospect of upward mobility. However, as the word "dual" implies, a DLM usually refers to two parallel markets.

The labour market consists of two tiers. Workers in the upper tier enjoy high wages, good benefits, and employment security, and they are often unionized. Workers in the lower tier experience low wages, high turnover, job insecurity, and little chance of promotion. Until now, dual labour market theory has focused mainly on microeconomic factors such as discrimination, poverty, and public welfare. Dual Labour Markets considers the macroeconomic implications of the dual market. Theoretical models from research of over six years were used to analyse such policy issues as; the level and persistence of unemployment, the level of real wages, the accumulation of human capital, and the political viability of labour market reform.

There are two key sectors of Dual labor market: primary and secondary sector.

1. In a primary sector the workforce as a whole is motivated to serve their employer because of wages, health benefit, pension and job security. The job market consists of a majority of blue collar and white collar jobs. The primary sector generally contains the higher-grade, higher-status, and better-paid jobs, with employers who offer the best terms and conditions.

These jobs are usually considered to be the occupational labor-markets and some industrial labor-markets. The primary sector is sometimes sub-divided into an upper and lower level. The primary workers are trying to prove
themselves to their employers by portraying their skills and educational credentials.

2. In a **secondary sector**, job management is entitled to complete control because there is a larger turnout. Many in this job type either leave or are replaced quickly. These jobs give low emphasis on job morale and their workers lack motivation. The secondary jobs are mostly low-skilled, they require relatively little training, and can be learned relatively quickly on the job.

There are few barriers to job mobility within the secondary sector. This is because the jobs are unattractive, there is little incentive to stay, and there are high levels of labor turnover, with workers moving on to other jobs or employers. Wages are low, and the terms and conditions of the job are poor.

5. **Human Capital Theory** – This theory state that human capital is the stock of competency (knowledge, skill) and attribute (creativity, ingenuity) contained in the ability of a worker to perform labour services so as to produce expected economic value. This theory actually defined what labour is all about.

6. **Theory of Labour Discrimination** – Discrimination in the labour market exists if individuals who have identical productive characteristics are treated differently because of the demographic groups to which they belong.

This is the valuation, in the market place, of personal characteristics of workers that are unrelated to workers’ productivity such as colour, race, gender/sex, marital status, generation, Ethnic, etc.

**Types of discrimination in the Labour Market:**

- **Wage discrimination**: Present if prices paid by employers for given productive characteristics are systematically different for different demographic groups, e.g. men and women
- **Occupational discrimination**: Present if individuals with same education and productive potential are working in lower-paying occupations or with lower levels of responsibility than similar individuals from another demographic group, e.g. natives and immigrants, men and women etc.
• **Occupational segregation** is present if the distribution of occupation differs between demographic groups, e.g. men and women (female or male dominated occupations)

It can be difficult to distinguish between occupational segregation and occupational discrimination
- Occupational choices driven by preferences or discrimination?
- Reverse causality?

7. **Split labor market theory**, originally proposed by sociologist Edna Bonacich in the early 1970s, is an attempt to explain racial/ethnic tensions and labor market segmentation by race/ethnicity in terms of social structure and political power rather than individual-level prejudice.

**Classical Model of Employment and Labour Market Theory:**

The basic contention of classical economists was that if **wages and prices** were flexible, a competitive market economy would always operate at full employment. That is, economic forces would always be generated so as to ensure that the demand for labour was always equal to its supply.

In the classical model the equilibrium levels of income and employment were supposed to be determined largely in the labour market. At lower wage rate more workers will be employed. That is why the demand curve for labour is downward sloping. The supply curve of labour is upward sloping because the higher the wage rate, the greater the supply of labour.

In the following figure the equilibrium wage rate \( w_o \) is determined by the demand for and the supply of labour. The level of employment is \( OL_o \).
The lower panel of the diagram shows the relation between total output and the quantity of the variable factor (labour). It shows the short-run production function which is expressed as \( Q = f(K, L) \), where \( Q \) is output, \( K \) is the fixed quantity of capital and \( L \) is the variable factor labour. Total output \( Q_o \) is produced with the employment of \( L_o \) units of labour. According to classical economists this equilibrium level of employment is the ‘full employment’ level. So the existence of unemployed workers was a logical impossibility. Any unemployment which existed at the equilibrium wage rate \( (W_o) \) was due to frictions or restrictive practices in the economy in nature.

The classical economists believed that aggregate demand would always be sufficient to absorb the full capacity output \( Q_o \). In other words, they denied the possibility of underspending or overproduction. This belief has its root in Say’s Law.

**(a) Say’s Law:** According to Say’s Law supply creates its own demand, i.e., the very act of producing goods and services generates an amount of income equal to the value of the goods produced. Say’s Law can be easily understood under barter system where people produced (supply) goods to demand other equivalent goods. So, demand must be the same as supply. Say’s Law is equally applicable in a modern economy. The circular flow of income model
suggests this sort of relationship. For instance, the income created from producing goods would be just sufficient to demand the goods produced.

(b) Saving-Investment Equality: There is a serious omission in Say’s Law. If the recipients of income in this simple model save a portion of their income, consumption expenditure will fall short of total output and supply would no longer create its own demand. Consequently there would be unsold goods, falling prices, reduction of production, unemployment and falling incomes.

However, the classical economists ruled out this possibility because they believed that whatever is saved by households will be invested by firms. That is, investment would occur to fill any consumption gap caused by savings leakage. Thus, Say’s Law will hold and the level of national income and employment will remain unaffected.

(c) Saving-Investment Equality in the Money Market: The classical economists also argued that capitalism contained a very special market – the money market – which would ensure saving investment equality and thus would guarantee full employment. According to them the rate of interest was determined by the demand for and supply of capital. The demand for capital is investment and its supply is saving. The equilibrium rate of interest is determined by the saving-investment equality. Any imbalance between saving and investment would be corrected by the rate of interest. If saving exceeds investment, the rate of interest will fall. This will stimulate investment and the process will continue until the equality is restored. The converse is also true.

(d) Price Flexibility: The classical economists further believed that even if the rate of interest fails to equate saving and investment, any resulting decline in total spending would be neutralized by proportionate decline in the price level. That is, Rs 100 will buy two shirts at Rs 50, but Rs 50 will also buy two shirts if the price falls to Rs 25. Therefore, if households saves more than firms would invest, the resulting fall in spending would not lead to decline in real output, real income and the level of employment provided product prices also fall in the same proportion.

(e) Wage Flexibility: The classical economists also believed that a decline in product demand would lead to a fall in the demand for labour resulting in unemployment. However, the wage rate would also fall and competition among unemployed workers would force them to accept lower wages rather than remain unemployed. The process will continue until the wage rate falls enough to clear the labour market. So a new lower equilibrium wage rate will be established. Thus, involuntary unemployment was logical impossibility in the classical model.
Keynes Criticism of Classical Theory:

J.M. Keynes criticized the classical theory on the following grounds:

1. According to Keynes saving is a function of national income and is not affected by changes in the rate of interest. Thus, saving-investment equality through adjustment in interest rate is ruled out. So Say’s Law will no longer hold.

2. The labour market is far from perfect because of the existence of trade unions and government intervention in imposing minimum wages laws. Thus, wages are unlikely to be flexible. Wages are more inflexible downward than upward. So a fall in demand (when S exceeds I) will lead to a fall in production as well as a fall in employment.

3. Keynes also argued that even if wages and prices were flexible a free enterprise economy would not always be able to achieve automatic full employment.

**INDUSTRIAL AND OCCUPATIONAL DISTRIBUTION OF LABOUR FORCE**

**Industrial** – is the limit of production of goods and especially in factories. Industrial is connected with industry or with people working in the industry while **occupation** is related to job or profession. Such economic unit includes agriculture, manufacture and production, hostel and tourism, transportation, education services, mailing and quarry, utilities, banking, distributive trade, private professional services, estate and business services, health and science.

**Different Occupational Growth**

These are the occupational growth we can identify in Nigeria (National Bureau of Statistic).

- Professional technical and related workers
- Administrative and manager right workers
- Clerical related workers
4. Sales workers
5. Service workers
6. Agricultural, animal husbandry, forestry workers, fishermen and hunters
7. Fishermen and hunters, products and related products
8. Transport, equipment and labourers
9. Occupation not stated or occupation not adequately defined.

This information is from the National Population Commission (NPC)

A rise in the equilibrium wage rate will occur if there is an increase in them and a fall in the equilibrium wage rate that occurs if there is a decrease in the demand for labour without a corresponding decrease in the supply for labour, in practice there are forces outside the market that affect the automatic adjustment of wages and employment of labour to changes in labour supply or demand, this is likely because labour services are in separable from the workers and labour income is the basic source of income for the ordinary individual.

Some of these forces or factors include time and money for investment in new labour for training and skill acquisition, moving cost, low productivity do to fire or cutting down of wages, there are also laws, customs or institutions constraining the choices of individual and firms in terms of labour supply and labour union are designed to prevent wages from falling below a given labour.

**FEATURES OF THE NIGERIAN LABOUR MARKET**

The NLM like most developing nations is characterized by large scale heterogeneity as a consequent of different types of earning and entering into the labour market. Labour market are characterized by the structure of an economy in terms of its formalities or informalities private sector led/public sector led as well as the existence of labour laws and union. The structure of Nigeria economy is such that both the private sector and the public sector coexist in both formal and informal settings. The National Bureau of Statistics
NBS noted that the number of individuals and activities in the informal sector is as high as the number of individuals and activities in the formal sector.

An economy where much of their activities take place in the informal sector will be characterized by a lot of informalities in terms of wage earnings and entering into the labour market. Before the advent of democracy in Nigeria the economy was almost completely a public sector led with most activities which has implications for wage earning and employment in the labour market.

With the paradigm shift of public sector led economy to private sector led economics, wage earnings and employment have increased substantially. Thus, there are three key features in labour market.

1. The extent to which factors affecting inequality in wage earnings is permanent or transitory.
2. The level of earnings and degree of disparities among different groups.
3. Labour market perceptions including types of jobs and hours of labour supply.

In expression the labour market in Nigeria, the nation manpower board (1998) pacified the Nigeria labour market as follows; employer, self employed (farmer), self employed (trader), self employed (others), employed, wage and salaries earning, (privates), employed wage and salaries earnings (public), and paid wage.

In 2001, the federal office of statistics expressed the Nigeria labour market as follows: employer, employees (public companies), employees (private companies), employees (ministries and parietals) and informal employment.

**Manpower Development:**

Manpower Development is a Human Capital function which is responsible for developing the skills, knowledge and competence of the company's most important asset. The people are needed in order to meet current and future business requirements.
Manpower development in Nigeria is an essential ingredient needed in the growth of the economy. It is a process that enables organisations to ensure there is adequate human resource who will be saddled with the responsibility of ensuring continuous growth of the organisations and ability to achieve the set goals an vision of such organisation.

When Manpower development is given priority, most of Nigerian business sectors will experience tremendous growth rate. Manpower development is that factor that ensures we do not lack brain drain, that helps us build leaders and industry chiefs of the future.

Manpower development Planning is the most strategic of all human resource management functions. In planning, the organisation can ensure the manpower needed to meet the requirement of the future work that will be needed to helps discover and retain the best hands in the company.

Manpower development helps you discover the potentials of your workforce and how to fan them into flame and transform these potentials into usable skills needed for the growth of the organisation.

Planning defines the sources, number and types of manpower needed to meet future work requirements. Predetermined strategies to attract and retain the best people are also laid down. Strategic development and utilization of employees’ capabilities, will yield the best benefits to the company.

One of the most valuable resources that you have as a business owner is your employees. When you hire employees, they’re rarely fully developed as workers. Over the course of time, it’s up to you, the employer, to develop your employees by training them. The area of manpower development or human resources development deals with improving your employees over the long term. If you can help your employees grow, it may also help your business become more profitable overall.

**Steps in Manpower Development:**

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**Develop a human resources strategy or plan:** Look at the big picture in relation to your business. Determine how your employees fit into the overall plan for your company. Figure out which areas of your business need the most talented people. Set up a strategy to help individuals develop to fill
those roles. For example, set up a mentor program so that your high-level employees can mentor newer employees. Conduct regular performance evaluations so that your employees know what they need to improve on.

**Train new employees as they're hired:** Employees tend to struggle when they don't know exactly what they're supposed to do when they are newly hired. If you take the time to train them either through a seminar, class or other method, it can improve the quality of their work. Focus on getting new employees integrated into the system and working independently within a short period.

**Identify employees who have the best chance to move up:** Not every employee you hire will end up in a management role. Once you identify the right employees, you can begin grooming them for other roles in the company. Look for qualities such as leadership, integrity, self-discipline and the desire to excel. Look at past work history to make sure that the employees know how to do their jobs and that they follow through with their work.

**Encourage managers to develop their employees:** It's up to each manager to ensure that employees develop at the appropriate rate. This may involve regular performance evaluations, meetings or training sessions.

Focus on continuing education for your employees. This may include sending your employees to seminars or offering tuition reimbursement. If you put an emphasis on helping your employees develop, they'll most likely be more loyal toward the company, and you'll be able to retain them more easily.