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NATIONAL INCOME

Def: national income is the total money value of all those goods and services which are produced in the country within one year. It includes agricultural production mineral production, industrial production and the production of the numerous services.

National income depends upon natural resources, capital goods, human resources techniques of production, e.t.c.

The concept of national income has three interpretations.

1. It represents the total value of production
2. It represents the total value of expenditure
3. It represents the total value of receipts

These three fold interpretation arises out of the fact that every expenditure is at the same time a receipt and if goods and services bought are value at their selling prices, the value received equals the value of goods and services given in exchange.

Circular flow of national income

National income is not a stock of goods. It is a flow of goods and services between the firms and house holds measured I money value. In other words it is the flow of payments and receipts between the firms and households within one year.

Illustration

CIRCULAR FLOW OF NATIONAL INCOME

Explanation

In the above diagram the households are seen to provide the firms with the factors of production that is land, labour, capital and enterprise. And the firms are seen to provide the household with the national output of the economy produced within the year that is consumer goods, capital goods and services as shown in the inner pipes.

On the other hand the firms are seen to pay in money for the factors of production hired in forms of rent, wages, interest and profit. And the households are seen to return this money income to the firms for the volume of national output given in form of process paid on consumer goods, capital goods and services thus completing the circular flow of national income within the year.

N/B

1. The total payment made for factors of production represents the receipts total or the income total
2. Total payments made for goods and service bought represents the expenditure total
3. Total value of the goods and services marketed by the firms represents the money value of production

NATIONAL INCOME AND NATIONAL WEALTH

National wealth refers to the stock of goods existing in a country at a particular time having the following characteristics:-

1. Possessing utility i.e. capable of giving satisfaction
2. Having money value and marketable
3. Scarce i.e. limited in supply
4. Capable of transferring their ownership from one person to another.

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Distinction between National Income and National Wealth

National Income	National Wealth
1. It refers to the flow of goods and services between the firms and households in a country in one year.	1. It refers to a stock of goods existing in a country at a particular time.
2. It consists of both goods and services. It includes the skills of persons as well	2. It consists of goods only i.e. tangible things only
3. It refers to the production of the country just in one year only	3. It refers to the value of goods accumulated in a country over the years.

Economic Relationship between National Wealth and a Growing National Income

National wealth consists of land, mineral reserves, factories, roads, buildings, machinery and many other tangible resources. If a country has a large amount of these resources then there will be a higher level of economic activities leading to greater growth in national income and vice versa. On the other hand a higher growth level of national income will lead to an increase in the national wealth of a country.

Withdrawals From and Injection in the Circular Flow of National Income

If the house holds spend all the income they receive from firms and the firms pay out all the revenue they receive from sales to the household, then the level of national income will remain the same.

However this is not always the case. The flow of national income is affected by withdrawals and injections. Injections cause the level of national income to increase while withdrawals cause it to decrease.

Withdrawals

This represents any income that is not passed into the money flow. If the household earn money and do not spend it on domestically produced goods and services in the year, this is a withdrawal from the circular flow of income; similarly, if firms receive money from sale of goods and services and do not distribute it as a payment for factors of production. This is also a withdrawal from the circular flow of income.

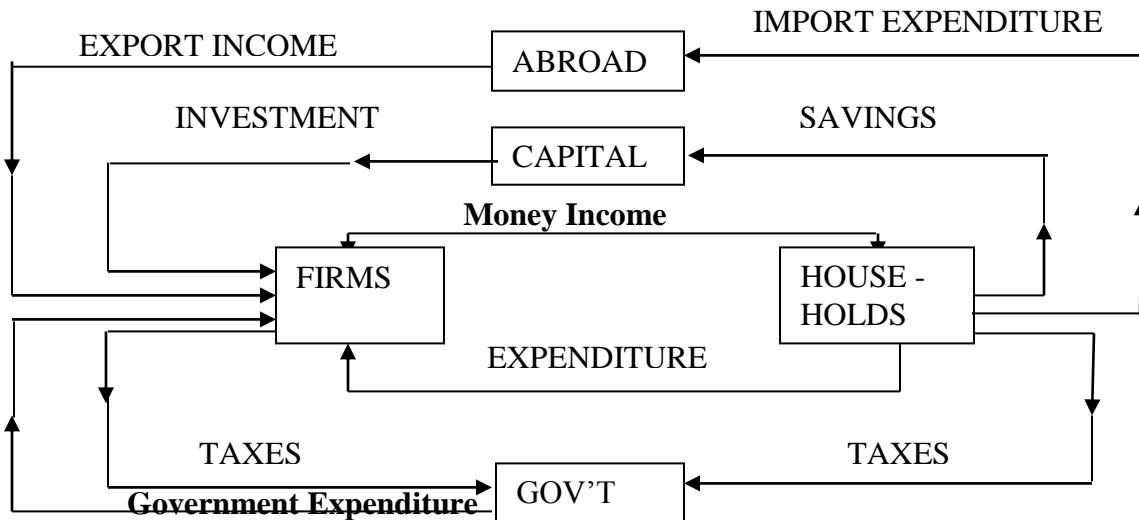
Withdrawals consist of savings, taxes, and imports. Withdrawals are also known as leakages.

Injection

This refers to any additional income to the income of the domestic firms that does not arise from the expenditure of domestic households or is an addition to the income of domestic household that does not arise from spending of domestic firms. If firms get income by producing investment goods which they sell to other firms this is an injection because the incomes of the firms rise without the households having to increase their expenditure. Injections include government expenditures, income from exports, and investment.

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Illustration



From the above diagram if the money income received by households from the firms is all returned back to the firms in form of expenditure, on goods produced by the firms and again the firms return all the revenue received to the households in payment for the services of the households and the households again return all these money to the firms, then the level of national income will not be affected and the circular flow of income will continue unaffected and the circular flow of income will continue unaffected.

The circular flow of income is however affected by the withdrawals and injections. When the households receive the money income, they can make decisions to save some income, and to import goods and services from abroad and the government can also take some of the income earned by the households in form of taxes. All these things represent withdrawals or leakages of national income and reduce the level of national income as the households will spend less than what they earned.

Similarly when the firms receive revenue from sales they may be forced to pay some tax to the government reducing their capacity to pay out all the revenue earned. This also represents a leakage.

On the other hand, if the government makes a decision to spend its tax revenue by purchasing the goods and services of the firms, then will represent an injection in National income. Also when firms make a decision to borrow more capital from the financial institutions i.e. to make additional investment then this also represents an injection.

Also when foreigners buy the goods and services of the domestic firms then the income from exports will represent an injection in national income.

Therefore in conclusions we can say that withdrawals reduce the level of national income and injections increase the level of national income will remain the same.

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VARIOUS CONCEPTS OF NATIONAL INCOME

1) **Gross Domestic Product (GDP)**

This is the value of goods and services which arise from the productive activities within a country in a year measured at market value. It does not matter whether the income is generated by the residents or non-residents but does not include income from abroad.

Gross domestic product includes the total market value of:

1. Agricultural production
2. Mineral production
3. Industrial production
4. Miscellaneous services such as services of teachers, lawyers, doctors,

2) **Gross National Product (GNP)**

This refers to the market value of all those goods and services which have been produced in a country in a year. It includes income generated from productive activities within the country and from outside the country. In other words,

$$\text{GNP} = \text{GDP} + \text{Net income from abroad} \\ \text{(Export surplus)}$$

$$\text{Export surplus} = \text{exports} - \text{imports}$$

3) **Net National Product (NNP)**

In production of goods and services we use up capital i.e. equipment machinery e.t.c. the capital goods wear out or fall in value as a result of their consumption or use in the production process. This consumption of the fixed capital is called depreciation. When depreciation is reduced from GNP we get NNP. It is national income at market prices.

4. **Net National Income or National Income at Factor Cost**

National income at factor cost means the sum of all incomes earned by the resource suppliers for their contribution of land, capital and entrepreneurial abilities which goes into the year's net production. In other words national income at factor cost shows how much it costs society in terms of economic resources to produce net output.

In fact it is the national income at factor cost for which we use the term national income.

The difference between NNP (National Income at Market Price) and NNI (**National Income at Factor Cost**) arises from the element of indirect taxes and subsidies. A subsidy causes the market price to be less than the factor cost while an indirect tax causes the market prices to be higher than the factor costs. Therefore national income at factor cost =

$$\text{NNP} + \text{Subsidies} - \text{indirect taxes}$$

Personal Income

This is the sum of all incomes actually received by all the individuals (households) during a given year. Personal income differs from national income in the sense that part of the

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income which is received by individual is not actually earned e.g. social security contributions, corporation taxes and payments e.g. sick benefits, grants to students, e.t.c. are received but not earned. Therefore personal income = national income (NNI) + Transfer payment – Social security Contributions - Corporation taxes - Undistributed corporation profits

Disposable Personal Income (DPI)

This is the total income available to the individual in a year for the purpose of spending.
Disposable personal income = personal income - personal taxes (direct taxes)
Disposable personal income can either be consumed or saved hence
Disposable personal income = Consumption + Savings

If the amount saved is spent on the purchase of capital goods in order to generate more income. It is called investment hence we can also say that disposable income = consumption + investment.

NB

From the two equations of disposable income we can say savings = investment.

MEASUREMENT OF NATIONAL INCOME

There are three methods of measuring National Income. Each method being identical to one of the three interpretations of national income. These methods are:-

1. Income method
2. Expenditure method
3. Output method

1. Income Method

According to this method we add up income received by different individuals in the year for the supply of the factors of production excluding transfer payments. We add up rent, wages and salaries of employees' interest on capital and profits of entrepreneurs including undistributed company profits and incomes of the self employed and we subtract transfer payments such as grants to students sick benefits e.t.c.

i.e. National income = income received + social contributions + undistributed company profits + corporation taxes – transfer payments.

2. Expenditure Method

This involves adding up the market expenditure on goods and services during the year. Including the purchase of capital goods and then add subsidies and deduct indirect taxes.

It involves adding up

- (i) Expenditure of individuals on consumer goods
- (ii) Expenditure of individuals on capital goods
- (iii) Expenditure of government on consumer goods
- (iv) Expenditure of government on capital goods
- (v) net expenditure of foreigners goods and services of the economy (net foreign investment)

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3. Output Method

Using this method we add together the value of the contribution to total output of all the individual firms in the country. In other words we add up the value added of each individual firm in the year. The problem with this method is double counting, to avoid double counting we add only the value added which excludes the value of raw materials or intermediate goods.

Illustration

Suppose a carpenter buys wood to make a table from a peasant who did not plant the tree but owned it for the simple fact that the tree happened to grow on his land. The carpenter pays Sh. 200 for the wood. He makes a table which he sells to a middleman at Sh. 1000. The middleman in turn sells the table to a retailer for Sh. 1500 and the retailer sells the table to the final consumer for Sh. 2,000.

We take the full values of intermediate goods at each stage of production and distribution we will end up with the value of Sh. 4700 (200 + 1000+ 1500 +2000) but the value of the table to the final consumer is only Sh. 2000. It is this value which is included in the GNP. It is the contribution to GNP. The fact that we end up with a higher figure of Sh. 4,700 means that there has been double counting.

In order to avoid counting we only take the value added to the product at each stage of production and distribution. The value added by the peasant is Sh. 200 because he did not have any intermediate inputs to grow the tree on his land. The value added by the carpenter is Sh. 800, the value added by the middleman is Sh. 500 and the value added by the retailer is Sh. 500. What goes to the GNP is the sum of the value added at each stage of production and distribution that is 2000 (i.e. 200+ 800 +500). This sum agrees with the price of the table to the final consumer.

The three methods of measuring national income i.e. the income method, the expenditure method and output method give the same total provided:-

1. Undistributed profits, corporation tax and social security contributions are added and transfer payments deducted in case of income method
2. Subsidies are added and indirect taxes deducted in case of expenditure method.
3. Only values added are included in case of output method.

This equally indicates that every expenditure is at the same time a receipt (income) and if goods and services bought are valued at selling price excluding indirect taxes and including subsidies we get the threefold identity that value paid equals value received equals value of goods and services given in exchange i.e.

$$E = Y = 0$$

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Question

1.	Total Output (Billions)	Inter Mediate Purchases (billions)
Manufacturing	30	10
Services	70	45
Agric	55	25

(a) Calculate GNP using value added method

(b) If depreciation equals 8 billions and indirect taxes equals 7 billions calculate

(i) NDP at market price

(ii) NDP at factor cost

2.	Billions of Sh.
Wages and salaries	45
Income from rent	3
Net interest	4
Profits of corporations	8
Indirect taxes	7
Subsidies	3
Depreciation	8
Net income from abroad	-5

Required

(a) GDP

(b) NDP at market prices

(c) NDP at factor costs

(d) GNP

(e) National income

Solution

(a) GNP using valued added method

$$\text{Manufacturing} = 10 + 20 = 30$$

$$\text{Services} = 45 + 25 = 70$$

$$\text{Agriculture} = 25 + 30 = 55$$

$$\text{GNP Sh. 155 billions}$$

(b) (i) NDP at market price

$$= \text{GNP} - \text{Depreciation}$$

$$= 155 - 8$$

$$= 147 \text{ billions}$$

(ii) NDP at factors cost

$$= \text{NDP at market price} + \text{subsidies} - \text{indirect taxes}$$

$$= 147 + 0 - 7$$

$$\text{NDP} = \text{Sh. 140 billions}$$

2. (a) GNP using the income method

$$\text{GNP} = \text{factor cost} + \text{depreciation} + \text{indirect taxes} - \text{subsidies}$$

$$= 45 + 3 + 4 + 8 + 8 + 7 - 3$$

$$= 75 - 3$$

$$= 72$$

(b) NDP at market price

$$\text{NDP} = \text{GDP} - \text{depreciation}$$

$$= 72 - 8$$

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- =64
- (c) $GNP = GDP + \text{net income from abroad}$
 $= 72 + (-5)$
 $= \underline{67}$
- $NNP = DNP - \text{depreciation}$
 $= 67 - 8 = \underline{59}$
- (d) $NNT (NY) = NNP + \text{subsidies} - \text{indirect taxes}$
 $= 59 + 3 - 7$
 $= 62 - 7$
- National income = 55
- (e) $NDP \text{ at factor cost}$
 $= \text{NDP at market} + \text{subsidies} - \text{indirect taxes}$
 $= 64 + 3 - 7$
 $= \underline{60}$

FACTORS INFLUENCING NATIONAL INCOME

The level of national income in a country is influenced by the following factors:-

- a) The quality and quantity of factors of production
- b) The value of raw materials in a country
- c) The state of technical knowledge
- d) The level of education
- e) The health condition of the labour force
- f) Entrepreneurial abilities i.e. abilities to bring together the factors of production and preparedness to take risks.
- g) Attitude to work of the people
- h) Political stability
- i) The rate of saving and investment

Reasons for keeping national statistics

1. For assessing the growth of the economy
By comparing national income estimates of a country over a period of time we can know whether the economy is growing, stagnant or declining. If national income increases over the years it means that the economy is growing and if it remains the same it indicates that the economy is stagnant and if it is falling over a period of time it indicates that the economy is declining. If the economy is growing we can also change the rate of its growth by implementation of the relevant policies.
2. For indication of economic welfare
National income estimates reveal the overall performance of the economy. By looking at per capita income of a country (income per person i.e. total income over total population) we get an idea about the standard of living of the people. A low per capita income indicates a low standard of living while a high per capita income indicates a high standard of living. A low standard of living means a low state of economic welfare of the people and vice versa.
3. Distribution of income

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National income estimates shows the distribution of income among the different categories of people in the economy i.e. among the labourers, the suppliers of land, the suppliers of capital and the entrepreneurs. It reveals the causes of inequality in income distribution.

4. For indication of the contribution of different sectors
National income estimates show the contribution of different sectors of the economy to the national income, i.e. industry, agriculture, trade, manufacturing, e.t.c.
It is possible to know which sectors are more important so that emphasis can be put on them.
5. For comparison of the standard of living of different countries
By looking at national income estimates of various countries we can compare the standard of living and level of economics welfare of the people living in those countries. A country with a higher percapita income in terms of real income will be one where the standard of living of its people is higher.
6. For formulation of government policy
National income estimates are a valuable guide to the government for formulation of economic policies especially in these days of development planning and government intervention in the economy. By looking at the national income statistics the government can be able to decide if the whole economy or some sectors of the economy require stimulation.
7. For economic planning
Economic planning is not possible without national income estimates. They are very useful for formulation of plans and fixing targets of production. Preparation of plans depends very much on the available data regarding national income, consumption, selling and investments which are all provided in the national income estimates. Furthermore they help to assess and evaluate the achievements of the targets laid down in the plans from the changes in the national income components.
8. For comparing the level of development of different countries
If the level of percapita income of one country is higher that the pother, the country will be said to be more developed that the other.

PROBLEMS OF MEASURING NATIONAL INCOME

There are two main problems encountered when measuring National Income. These are:-

1. Statistical problems
2. Conceptual problems

1. Statistical Problems

These include:

- (a) Incomplete statistical information
- (b) Difficulty in getting the data
- (c) Inaccuracy of the data.
- (d) Lack of statistics

2. Conceptual Problems

These are problems which remain no matter how accurate or complete the statistical data may be. These associated with the idea of different concepts of national income.

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They include:-

(a) Production boundary

It is difficult to determine the production boundary i.e. to distinguish between economic and non-economic activities. The theory of national income requires that the activities to be included in national income are those which are scarce. In practice however there are services which are scarce but are regarded as non-economic activities e.g. church services.

(b) Unpaid services

The concept of national income requires that we should include the value of all goods and services produced in the year. But there are some services where payment is not made. The services of a house wife are not included in national income. On the grounds that there is no means of assessing their market value.

(c) Illegal activities

Some illegal activities use up scarce resources but are not included in national income estimates because of the difficulty of getting information about their earnings e.g. smuggling, drug trafficking, prostitution e.t.c.

(d) Problem of valuing unmarketed goods

For goods which are consumed for instance by a farmer himself, there is a problem as to whether to value them at ex-firm price or at what the farmer would actually pay for them if he would have bought them. Normally the farmer will give a higher price if he were to sell them and a lower price he were to buy them hence this becoming a problem.

(e) The value of inventories

It is not easy to calculate the value of inventories i.e. raw materials and semi-finished goods since they are not yet marketed.

(f) Capital consumption

It is normally difficult to calculate and get accurate figures for depreciation. This has led to the preference of GNP i.e. National Income without allowance for depreciation

(g) Government services

It is difficult to calculate the value of government service which are given collectively to people e.g. defense since consumers do not pay for them directly. The value is normally estimated by the amounts spent on them. It should however be noted that increasing the salaries of soldiers may not mean that more services have been given. The services may remain the same.

(h) Double counting

The concept of national income requires that care must be taken not to count twice or more than more once. Double counting however is a problem especially with subsistence production where peasant farmers do not account for the inputs.

(i) Changing prices

It is difficult to estimate the value of goods and services when prices keep on changing. National income by current prices can increase poverty especially in times of inflation for instance a bag of maize can be sold for Sh. 1,000 in January and in December for Sh. 2,000 in times of inflation. This inflates the figures of National Income.

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Difficulties of Measuring National Income in Less Developed Countries (LDCs)

1. Non- monitorized output
Most of the output in LDCs does not go to the market. The major part of the output is consumed locally on the farm. So it is difficult to attach value on such unmarketed output. Crude estimates are therefore made which can result in under-estimating or exaggerating the national income estimates.
2. Non- availability of reliable information
Due to illiteracy most producers have no idea of the quantity and value of their output and do not follow the practice of keeping regular accounts. This makes the task of getting reliable information from petty producers more difficult.
3. Lack of definite measure
The quantities produced are sold in definite units such as in heaps which make valuation very difficult.
4. Lack of differentiation in economic functioning
Because of under-development, occupational specialization is still in-complete so that there lacks differentiation in economic functions. An individual may be receiving income partly from manual work in industry, partly from trade and partly from his personal work.
5. Lack of adequate statistical data
Sometimes important information is completely missing making it difficult to estimate the national income estimate.
6. Double counting
Normally peasant farmers do not take note of the value of inputs and these results in double counting.

COMPARISON OF NATIONAL INCOME

National income statistics indicate the standard of living of the people in the country. However these figures need to be used with caution when comparing the standard of living of two countries or of the same country over time because of the following reasons:-

1. Different production boundary. Some countries may include in their national income estimates what other countries may not include e.g. in 1960s Tanzania used to include local beer brewing in her national income while Kenya and Uganda excluded it on ground that it was a domestic service.
2. Different concepts of national income i.e. GNP, GDP, NNP e.t.c. makes it difficult to calculate and compare percapita income.
3. Price level prices may be different for non-traded good. They may also be different due to transport cost; e.t.c a vast country like Tanzania spends more on transport than a compact country like Uganda. The percapita income for Tanzania may therefore be high because of transport cost.
4. Differences in value in use and value in exchange the same satisfaction may be obtained and yet the expenditure may be different e.g. Kenyan man may have a meal of Ugali and an American rice and they both get the same satisfaction but the amount spent is different.

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5. Differences in climate and customs. This leads to different requirements. A Briton for example spends a lot of money on heating and warm clothing whereas a Kenyan does not and yet he is comfortable.

Differences in customs can also make the percapita income of one country to be higher than another e.g. a Muganda woman in Uganda can spend more money on dressing than a Luo woman in Kenya.

6. Expenditure on defense

This appears in national income much the same way as expenditure on consumer goods but some countries spend less per head on defense than others and as such enjoy more consumer goods than those where defense is high yet their percapita income may be small.

7. The proportion of goods and services produced and exchanged for money

This varies from country to country. In LDCs there are more unpaid services e.g. services of housewives. Housewives in LDCs do most of the house work such as washing, mending cloths, cooking, ironing e.t.c. and are not paid.

In MDCs with greater specialization of duties, the domestic duties which are unpaid for in LDCs are paid for and, included in National Income hence swelling the national income estimates.

8. Exchange rate problem

Comparing the standard of living of people in different countries by converting one country's currency into another's currency at the official exchange rate can give a misleading result e.g. if the percapita income of Kenya is Sh. 2,000 and that of U.S.A is US dollars 2,000 and the exchange rate is 1 dollar to Sh. 10 it would mean that USA is ten times better off than Kenya who's percapita income will be 200 dollars.

To get the true value of dollars in terms of shillings which would be used in comparison, we get a basket of goods a unit of money can buy in each country e.g. if in Kenya Sh. 170 can buy a loaf of bread, a kilo of meat, and a kilo of sugar and in USA 34 dollars can buy the same basket of goods, then the exchange rate based on the basket of goods would be 1 dollar to Sh. 5.

Using this exchange rate, we find that USA is only five times better off than Kenya but not 10 times as indicated by the difficult exchange rate.

Income and Wealth Distribution in Kenya

There is uneven distribution of income and wealth in Kenya. There are few relatively rich people while the majority of the people are generally poor. The economy's wealth has been distributed in favour of business class. The incomes of the civil servants, industrial workers and peasants have tended to be low.

To try to narrow the wide gap of income and wealth between the rich and the poor, the government has been trying to adjust the salaries of wages earners and also has been getting involved in ensuring that farmers are paid a reasonable price for their agricultural output.

Causes of Inequalities of Income Wealth Distribution

1. Inheritance

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Some people are born in rich families so they inherit riches while others are born in poor families so they inherit poverty

2. System of private ownership
Under the system of private ownership a person is free to own personal property e.g. land or a building or a vehicle e.t.c. it breeds further wealth and there are large accretions thereafter almost automatically.
3. Differences in natural qualities
No two persons are the same; some people are endowed by nature with superior intelligences, better physique and greater capabilities for hard work. This normally surplus others in the rest of life
4. Differences in acquired talents
Differences in personal experience and educational skills are also a major cause of inequalities of income. The more educated especially in LDCs tend to earn more income than less educated.
5. Family influence
Persons coming from influential families are able to secure better jobs than their colleagues.
6. Family background
The rich families can afford better education hence better jobs
7. Luck and opportunity
Some people are lucky to get a good chance e.g. to get a well paid job or a promotion e.t.c. some people are lucky to have jobs while others have not. Some countries offer good opportunities for employment while others do not.
8. Geographical factor
Some areas are more endowed with good climatic conditions and other natural resources while others are not. Productivity in such areas is higher hence higher incomes.

Advantages of Inequalities of Income

It is sometimes desirable to have inequalities of income for the following reasons:-

1. Equality may mean that income is spread over many people so that each has got little income. This little income may all be consumed and nothing saved. So inequalities can lead to greater savings.
2. Investment
Inequalities can lead to greater investment. Those who have got more income can afford to save hence being able to invest.
3. Inequalities can lead to a taxable base
The rich can be taxed more for development.
4. Inequalities encourage hard work on the part of those who have less income.
5. Inequalities can lead to greater need to achieve prosperity, but where everybody is relatively poor there is less motivation to acquire more property.

Disadvantages of Inequalities of Income

Inequalities of income have got a number of short comings and as such governments often try to reduce them. These shortcomings are:-

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1. They may breed social tension and thus political instability which is not conducive for economic development. The poor tend to think that there should be a change of government in order to effect changes in their incomes.
2. They may lead to social and economic discontent. The discontent group may engage in criminal activities which may discourage hard work and acquisition of property.
3. The resources will be allocated to the production of goods which the rich people consume (luxuries) at the expense of the masses e.g. foreign exchange may be used to import luxury goods.
4. It leads to exploitation of the poor by the rich. The poor will work for the rich for low wages and may sell their land to the rich at low prices thereby worsening their economic and social status i.e. becoming more poorer and poorer while the rich becoming more richer and richer.
5. Low productivity
The poor may not afford basic necessities of life leading to low productivity on their part.
6. Equality of income can promote growth as follows:-
 - (a) The greater savings of the rich are often put in productive investment e.g. in lands of housing, but the smaller savings of the poor may be more productively used e.g. invested in small scale industries.
 - (b) Disposable income in the hands of the poor induces investment in many consumer goods. The rich tend to demand luxuries and imported goods limiting the scope of market for domestically produced consumer goods.

Measures to Reduce Inequalities in Income

There are basically two types of measures or policies that may be adopted to reduce inequalities of income. These are:-

1. Regulatory measures
2. Structural measures

Regulatory measures

This involves:-

1. Fixing minimum wages so that it becomes illegal to pay wages below the fixed amount. The wages are fixed in such a way that there are no underpaid or overpaid workers.
2. Fixing prices of selected products and offering subsidies
3. Fiscal measure (taxation)
 - (a) The tax may be graded in such a way that those with high income pay more
 - (b) Imposing high taxes on luxuries e.g. high import taxes aimed at taking away more income from the rich and reducing their greater wealth.

Structural Measures

This involves

1. State ownership of the means of production and distribution i.e. nationalization of some key enterprises.
2. Social security benefits e.g. free education, free medical care, pensions, sick and accident benefits, unemployment benefits, e.t.c.

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3. Redistribution of wealth especially land. This involves resettlement of people and making them have access to ownership of land.
4. Equality of opportunity either through free education or granting scholarships to the poor as well.
5. Allocation of social and economic activities i.e. taking more social and economic services to the depressed areas.
6. Equal development opportunities throughout the country so that no class of people or region is left behind.
7. Mass employment policies – this involves providing the unemployed with more employment opportunities e.g. by encouraging labour intensive industries.

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CONSUMPTION FUNCTION

Consumption means that part of income which is spent by individuals on the purchasing of different goods and services in order to achieve satisfaction.

Consumption depends on various factors like family members, taste and preferences and habit, price levels, e.t.c. but mainly it depends upon the level of income. If income is high consumption will also be high and vice versa.

Consumption is a function of income i.e. there is a relation between consumption and income and this relation is explained under the concept of consumption function also known as propensity to consume. The propensity to consume or consumption function refers to the whole of the schedule that shows consumption of the individuals in the economy at various income levels. It refers to that schedule which tells us how consumption expenditure varies with variations in income. In other words, it refers to the schedule of total consumption of all the people in the economy rather than the consumption of an individual in the economy.

For determination of national income, it is this total consumption that matters and not individual consumption.

The consumption function depends on two things:-

1. The level of income and
2. The propensity to consume

If the income of the individuals is higher the consumption of individuals will also be higher. On the other hand the propensity to consume depends again on two things

1. The average propensity to consume
2. The marginal propensity to consume

1. Average Propensity to Consume

This is the relation between total consumption and total income in a given time periods. It is a ratio at which expenditure is incurred on consumer goods out of total income. If this is high then the consumption function will also be high. The formular for deriving APC is

$$APC = \frac{\text{Total consumption}}{\text{Total income}} \quad \text{or}$$

$$\frac{C}{Y} \quad \text{e.g.}$$

Supposing the level of income is Sh. 30,000 and the consumption is Sh. 24,000 then

$$\begin{aligned} APC \text{ will be } & \frac{24\,000}{30\,000} \\ & = 0.8 \text{ or } 80\% \end{aligned}$$

2. Marginal Propensity to Consume

This is the relation between change in consumption and change in income i.e. it is the ration at which consumption changes to a change in income

The formular is

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$$\text{MPC} = \frac{\text{Change in consumption}}{\text{Change in income}} \quad \text{or}$$

$$\frac{\Delta C}{\Delta Y} \quad \text{e.g.}$$

If the level of income is Sh. 50,000 and increase to Sh. 10,000 and consumption changes from Sh. 24000 to 45000 then MPC will be equal to

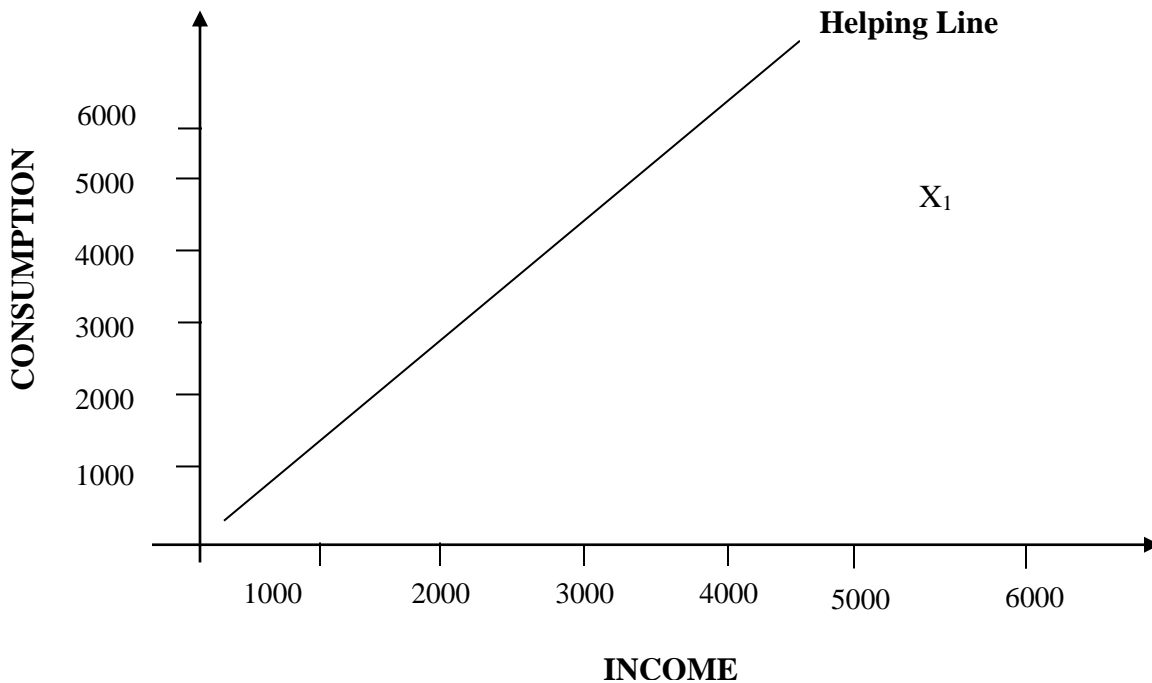
$$\frac{45000 - 24000}{10000 - 50000}$$

$$= \frac{21000}{50000} = 0.42 \text{ or } 42\%$$

The higher the rate will be the higher the consumption function.

Graphical illustration of the consumption function

Income (I)	Consumption (C)	APC c/y	MPC
1 000	1100	+1.1	-
2000	2000	1	0.9
3000	2700	0.9	0.7
4000	3200	0.8	0.5
5000	3500	0.7	0.3
6000	3600	0.6	0.1



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In the above diagram the consumption function is initially higher than the equality line indicating that at very low levels of income consumption can exceed income. But as income increases the consumption function becomes less than the equality line and continues to rise but less than proportionate as compared to the increase in income. The function rises at a stable state.

Keyne's law of consumption

Keyne's formulated a law called the fundamental law of consumption or the physiological law of consumption function. The law has three proportions:-

1. That when aggregate income increases, consumption expenditure will also increase but less proportionately. The reason for this is that as income increases more and more wants get satisfied hence not as much income is again spent on consumption as the increase in income.
2. That when income increases the increment in the income is divided between savings and consumption. This is why consumption does not increase at the same rate as increase in income. Savings complements consumption i.e. what is not consumed is saved.
3. That as income increases both consumption spending and saving increases.

DETERMINANTS OF CONSUMPTION FUNCTION

The consumption function or the propensity to consume remains generally more or less stable in the short run. It varies with increase in income but the variation occurs at a declining rate but maintaining a certain pattern. It is this pattern that appears to be stable in the short run. However in the long run, this pattern can change. The factors which can cause a change in the pattern of the consumption function in the long run have been classified by Keynes in two categories as:-

1. Objective factors
2. Subjective factors

1. Objective Factors

(a) Distribution of income

If the distribution of income is unequal, the consumption function (APC and MPC) will be lower. The reason is that poor people will not be able to spend and so their expenditure will be lower. As for rich people they will have achieved already a high standard of living and will have relatively less urgent wants i.e. less urgent wants will remain to be satisfied, so that in their case any addition to their income will more likely be saved rather than be spent on consumption.

But when a more equal distribution of income takes place it can change the pattern of consumption function from a lower one to a higher one.

(b) Fiscal policy

High taxes depress consumption but when the taxes are reduced people are left with more income and this will stimulate them to spend more on consumption raising the consumption function.

(c) Substantial changes in the rate of interest

A rise in the rate of interest lowers the propensity to consume as individuals will be induced to save more and more so as to earn more interest. But when the rate of interest falls the consumption function rises.

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(d) Changes in business expectations

Business expectations such as bright chances of profit will lead to a lower propensity to consume and vice versa

(e) Liquidity preference

If liquidity preference is greater, consumption will be lower and if this rises then consumption function will become higher.

2. Subjective Factors

These include:-

- (a) The physiological characteristics of human nature
- (b) The social practices and institutions i.e. the behavioural patterns of the individuals and business institutions.

Subjective factors manifest themselves in the following ways:-

- (i) The desire by some individuals, to build up reserves for some unforeseen risks such as unemployment.
- (ii) The desire by some people to make provisions for anticipated future needs such as to meet expenses of a daughter's marriage or a son's education.
- (iii) The desire by some people to enjoy and enlarged future income hence investing more funds out of the current income.
- (iv) The desire by some people to have enjoyment of a sense of economic independence.
- (v) The desire by some individuals to hold their heads high in society e.g. politicians seeking praise hence spending large sums of money.
- (vi) The desire by some people to accumulate property for their successors thus investing
- (vii) The power by some individuals to do things i.e. the ability to invest.
- (viii) The desire by some individuals to achieve satisfaction of pure miserliness.

SAVINGS FUNCTION

Saving is that amount of consumer income which is not spent on purchase of consumer goods and services. It is the difference between income and consumption.

Savings function is the relationship between savings and income. It is a schedule that shows how much income is saved at different levels of income. It is also called propensity to save.

Determinants of Saving Function

The savings function depends on two factors that is:

- 1. The power to save and
 - 2. Will to save.
1. The power to save
- The power to save depends upon the level of income, the rate of interest, the banking system, peace and security in the country, e.t.c.
2. The will to save

The will to save depends on the subjective factors that influence consumption. The savings function or the propensity to save is of two kinds i.e.

- (i) Average propensity to save
- (ii) Marginal propensity to save

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(i) Average propensity to save (APS)

APS is the relationship between total savings and total income in given time period. It is a ratio at which savings are made out of total income. The formula is

$$APS = \frac{\text{Savings}}{\text{Income}} = \frac{S}{Y}$$

Marginal propensity to save (MPS)

MPS is the relationship between change in savings and change in income. It is a ratio at which savings change due to change in income. The formula is

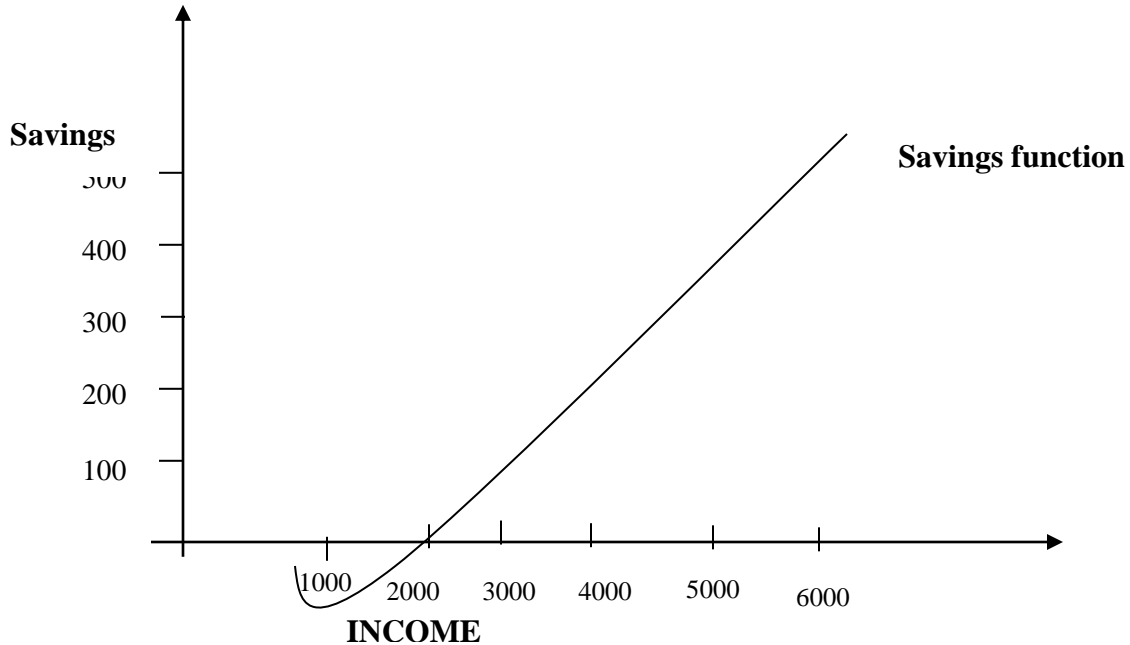
$$MPS = \frac{\text{Change in saving}}{\text{Change in income}}$$

$$MPS = \frac{\Delta S}{\Delta Y}$$

Like consumption when income increases savings also increases but not at the same level with increase in income. This is because an increase in income is partly consumed and partly saved. But as income increases more of it is saved than is consumed because with increase in income APS and MPS go to rise while APC and MPC go to fall.

Illustration

Income (y)	Consumption (c)	Savings (s)	APS(s/y)	MPS ($\frac{\Delta S}{\Delta Y}$)
1,000	1100	-100	-0.1	-
2000	2000	-	0	0.1
3000	2700	300	0.1	0.30
4000	3200	800	0.2	0.5
5000	3500	1500	0.3	0.7
6000	3600	2400	0.4	0.9



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In the above schedule and diagram we can see that at low levels of income savings can be negative but as income increases further and further savings also increase at an increasing rate. This is because as income increases further and further people become more and more wealthier thus reducing the level of consumption of consumer goods and services and thus saving more of the income.

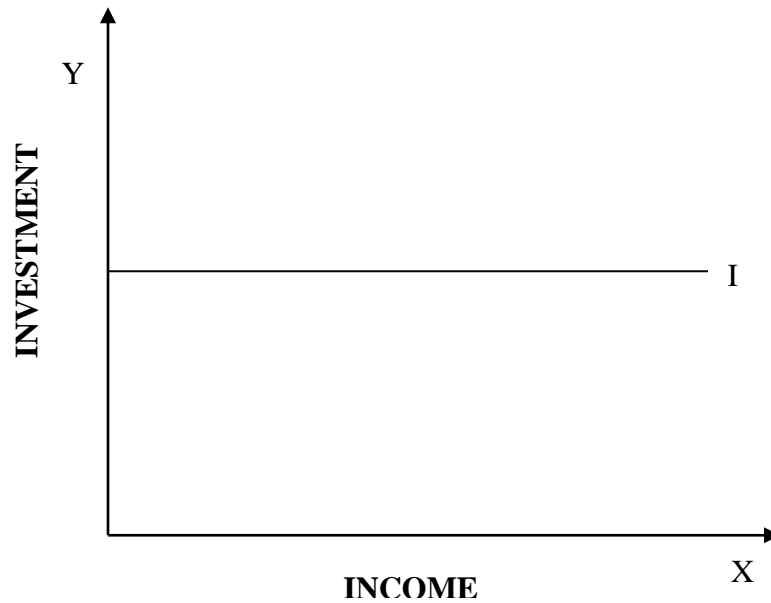
INVESTMENT

As already said investment and consumption are the two main determinants of national income because these are what constitutes effective demand which influences the level of national income. But as already said the consumption function in the short-run tends to remain more or less stable as income rises. In other words consumption does not rise as a steady rate as income rises so as to maintain a high level of production. This means that if a high level of production is to be maintained, then there must be greater investment in the economy. Thus investment is the most important and active determinant of effective demand. There can be great fluctuations in investment and these are important in influencing effective demand which then influences the level of national income.

TYPES OF INVESTMENT

1. Real investment
This refers to that expenditure which add to the capital assets of the nation e.g. the expenditure to produce a new vehicle or to construct a new building.
2. Financial investment
This is the expenditure which is incurred on existing assets e.g. the purchase of a matatu vehicle.
Financial investment does not lead to increase in the nations stock of physical capital. The person sells the asset simply disinvests it. Such investment has no economic importance from the national economic point of view.
3. Gross investment
Is the expenditure which is incurred on new capital assets
4. Net investment
Is the expenditure incurred on capital assets after allowance for depreciation. It is expenditure incurred on already used capital assets.
5. Autonomous investment
Is the investment expenditure which is undertaken by the state for the purpose of promoting people's welfare. It is also called planned investment. This type of investment expenditure does not depend on income but depends on public income as shown in the graphical illustration below:-

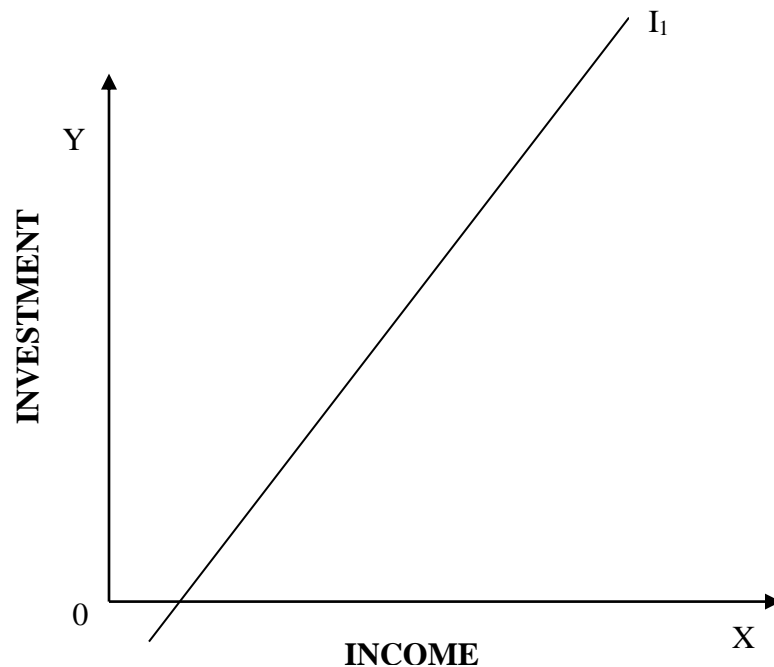
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In the above diagram (a) is the level of autonomous investment which is constant at various levels of income.

6. Induced investment

Is that investment expenditure made by private individuals as a result of change in national income. It is also called private investment. Induced investment depends on income. When income increases it also increases and vice versa. Diagrammatically it is represented as below:



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Investment plays an important role in the determination of national income and employment level of any country.

National income is influenced by effective demand which consists of investment and consumption. But as the level of income rises the average propensity and marginal propensity to consume decline (propensity to consume) meaning that consumption is not able to maintain a high level of production. On the other hand as the level of income rises the propensity to save rises as well and the income saved if utilized for investment expenditure a high level of production in the economy can be sustained. Therefore in order to have sufficient demand to sustain the increase in income and gap between income and consumption. In other words there cannot be an increase in income and employment in the economy there must be as increase in real investment equal to the gap between income and consumption. In other words there cannot be an increase in income and employment unless investment increases.

DETERMINANTS OF INVESTMENT

Autonomous investment depends on government policy and the level of technology. As for induced investment it depends on two factors:-

1. Marginal efficiency of capital
2. Rate of interest

1. Marginal Efficiency of Capital

This refers to the highest rate of profit which is likely to be earned by a marginal increase in the rate of investment.

2. Rate of Interest

This refers to the rate at which payment is made for the use of capital invested. Assuming that the investors will borrow the money to make the investment and will have to pay interest on the capital borrowed.

An investor normally compares the rate of interest which he has to pay and the rate of return on the capital which he has to employ (profit). If the rate of profit is greater than the rate of interest then he will invest. But if the rate of interest is greater than the rate of profit then he cannot invest.

It should however be noted that investment majority depends on marginal efficiency of capital. This is because the rate of interest does not quickly change; it remains more or less stable. Great fluctuations in investment in an economy are therefore mainly due to fluctuations in the marginal efficiency of capital.

The Equilibrium Level of National Income and Full Employment

According to Keynes's Employment is a function of National Income. The greater the level of national income the greater will be the volume of employment in the economy and vice versa.

As already said national income depends on effective demand. This means that employment level also depends on effective demand. When demand for goods and services is greater more will be produced and vice versa. And if more goods and services are produced then more resources will have to be employed.

The equilibrium level of national income refers to that level where aggregate demand equals aggregate supply. Aggregate demand means the demand consumer and producer

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goods. And aggregate supply refers to total production of consumer and producer goods in a country in one year.

Aggregate demand is represented by $C + I$

Where $C = \text{Consumption}$

$I = \text{Investment}$

Aggregate supply on the other hand is represented by $Y = C + S$

Where $Y = \text{Income}$

$C = \text{Consumption}$

$S = \text{Savings}$

It is represented this way because national income (y) is simply the market value of the total production in one year. and income received by the households in one year for the supply of the factors of production can only be distributed in two ways i.e. can either be consumed or saved. Hence $\text{income} = \text{consumption} + \text{savings}$ or

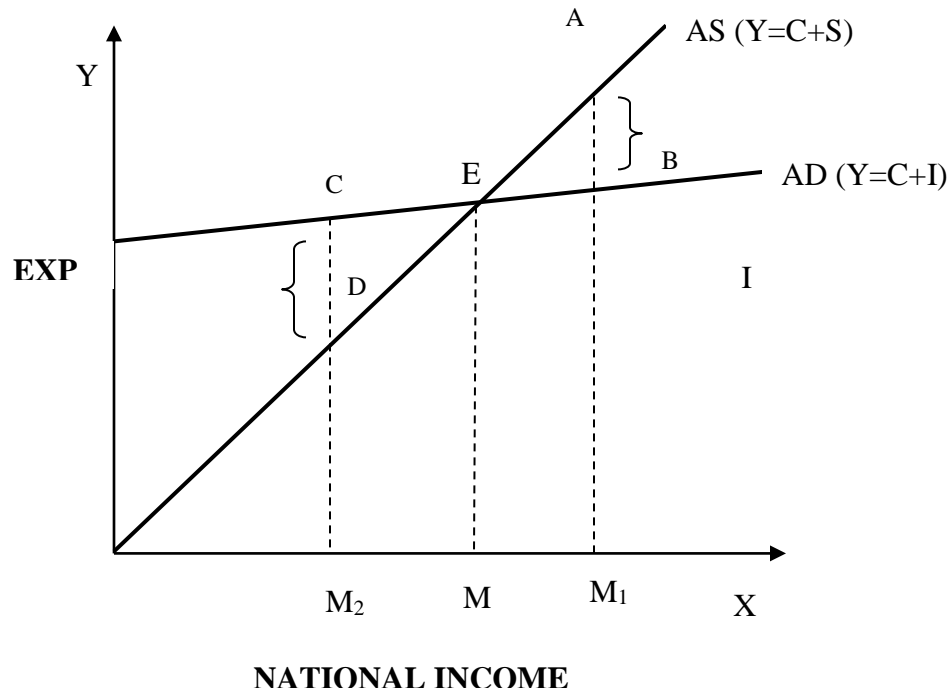
$$Y = C + S$$

From the above formula of aggregate supply and aggregate demand, at equilibrium level of national income the following conditions are fulfilled:-

1. Aggregate demand equals aggregate supply
2. Total expenditure equals total income
3. $C + I = C + S$
4. $I = S$

NB

It should be noted that by equilibrium level of national income it means that level of national income or level of production where the firms have no tendency to remain stable in the following year. This can be illustrated by the help of a diagram shown below:-



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In the above diagram AS is the aggregate supply function and AD the aggregate demand function. The two functions intercept at point E and this becomes the equilibrium point of national income. The equilibrium level of national income being OM. It is this level of income or production that can remain stable in the economy for some time. If for instance the level of income goes up to OM aggregate supply will be higher than aggregate demand by the gap a b and there will be overproduction.

The producers will fail to sell all their output in the year of production or may sell at throw away prices leading to a fall in profits. And in the following year they will have to produce less goods and services. So income (production) will fall back until point OM where producers can sell everything that they can produce.

At this point the level of income will be stable again i.e. there will be no tendency to cut down on output further thus the equilibrium level of national income.

On the other hand if income (production) is less than OM say at OM₂ aggregate demand will be greater than aggregate supply by the gap CD and there will be under production. In this situation, it will be profitable to produce more and more goods and services because of the high pressure of effective demand.

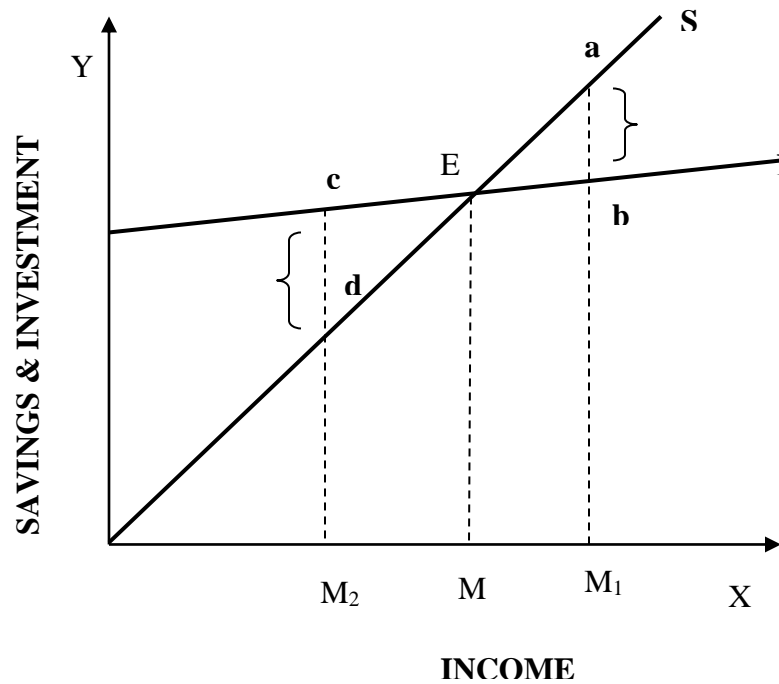
And therefore in the following year more goods and services will be produced until point OM where there will be no further incentive to increase the production. National income will then be stable at this point. Hence the equilibrium level of national income.

It should be noted that when in the economy aggregate supply exceeds aggregate demand, the economy is headed for unemployment because as the producers cut down on production in the following year labour is laid off. On the other hand where aggregate demand exceeds aggregate supply there exists chances for additional employment because as the firms undertake to produce more goods and services more labour is employed.

Determination of equilibrium level of national income by savings – investment approach
By this approach the equilibrium level of national income is explained by the equality of savings and investment. The equilibrium position occurs when savings equals investment. If savings are greater than investment income will be higher i.e. production will exceed demand or there will be over-production and in the following year less goods and services will have to be produced leading to a fall in income or production.

On the other hand if investment is greater than savings, income or production will be less than expenditure and there will be a shortage and there will be a tendency for firms to increase production. In this way the level of income (production) will rise in the following year and savings will also rise until the equilibrium of savings and investment is reached.

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In the above diagram I is the investment function and S the savings function and point E is the equilibrium point of national income with the level of national income as OM as this is where savings equals investment.

If savings exceed investment e.g. at a level of income OM_1 where savings exceed investment by the gap a b there will be overproduction and firms will have a tendency to reduce production in the following year. So in the following year less goods and services will be produced and less people will be employed. In this way income (production) will fall and savings will decrease until point OM where the equilibrium will be attained.

On the other hand if savings are less than investment e.g. at point OM_2 where investment exceed saving by the gap c d there will be under production and firms will have a tendency to increase production in the following year. so in the following year more goods and services will be produced and in this way more people will be employed, income will rise and savings will increase until the equilibrium of savings and investment i.e. OM level of income is reached.

At the level of income OM i.e. when savings equals investment, the economy will be equilibrium (stable) because the amount of income which has not been spent on consumption and has been saved is now fully spent in form of investment and in this way total income or total supply will be equal to total expenditure.

The logical identity of investment and savings

Before Keynes's economists were of the view that savings cannot be equal to investment. They argued that savings are made by different people and investment by different people and in this way the two cannot be equal. Keynes's however stated that the savings and investment can be equal because according to him the desire to invest determines the desire to save. Thus what is saved is intended to be invested. Keynes therefore stated that national income is equal to consumption + investment i.e. $Y = C+I$

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We also know that income can either be consumed or saved. So that income can be represented by $Y - C + S$. If these equations of national income are equated, we derive the following relationship

$$C + S = C + I$$

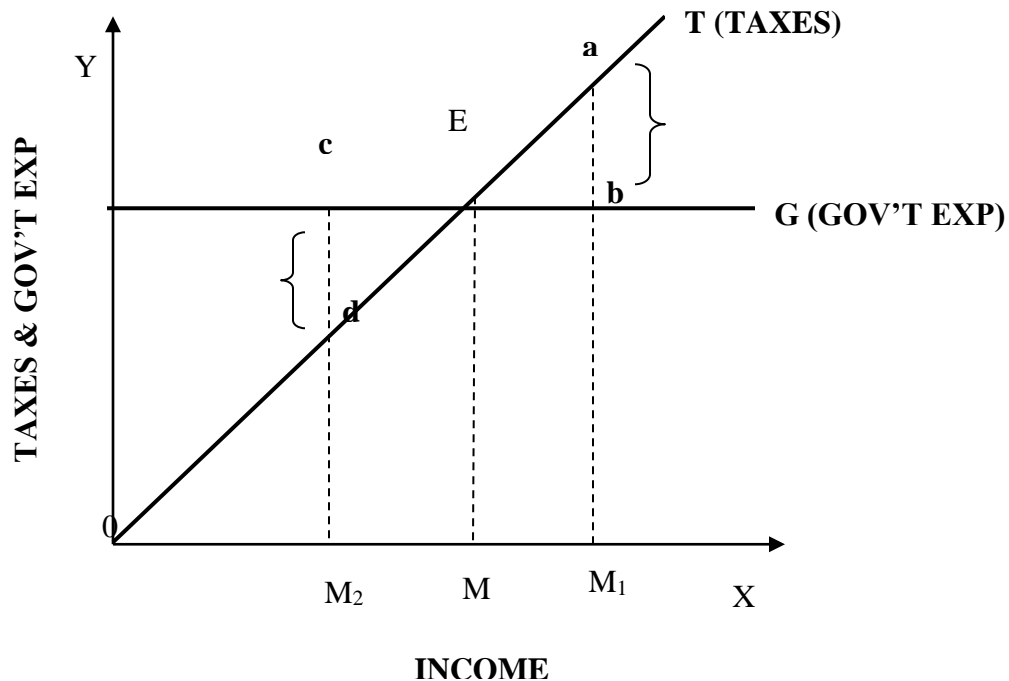
And if this is further simplified we derive $S = I$

Therefore according to Keynes savings and investment can be equal because what people save, they save to invest.

Equilibrium of National Income in an Economy with a Government

In an economy with a government, leakages and injections are not represented by investment and savings only. They are also represented by taxes and government expenditure. Like savings, taxes represent leakages from the circular flow of national income while like investment; government expenditure represents injections in the circular flow of national income.

In an economy with a government, the equilibrium level of national income is attained when taxes equals government expenditure as shown in the graphical illustration below:-



In the above diagram the equilibrium level of national income is OM because this is where taxes equals to government expenditure. In other words all that is taken by the government from the flow of income in form of taxes is returned to the flow of income in form of government expenditure, e.g. at the level of income OM_1 where taxes exceed government by the gap **a**, there will be over production in the economy in that year i.e. the entire output of the firm's will not be sold. There will be a tendency by the firms to

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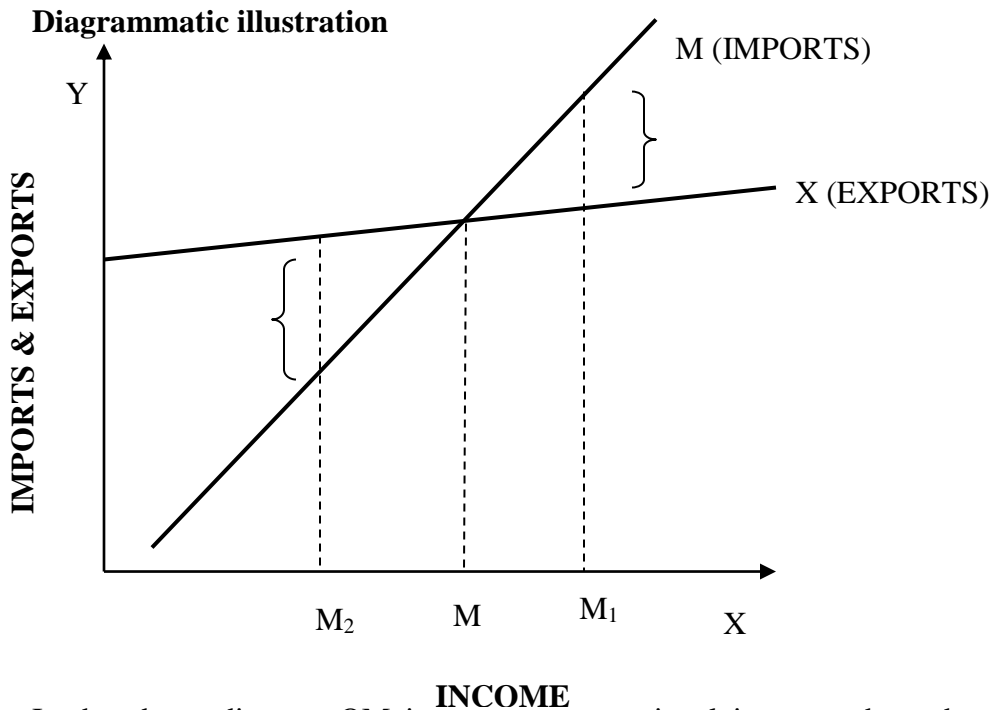
lower production and so in the following year production will fall until all that is produced can all be bought and that is point E at the level of income OM.

On the other hand if government expenditure exceeds taxes at the level of income OM_2 where government expenditure exceeds taxes by the gap **c d** there will be under production. Demand will exceed supply and there will be a tendency by firms to increase production and so in the following year production will increase and the level of income will also increase and this will make taxes to increase until an equilibrium of taxes and government expenditure is reached i.e. level of income OM.

So the economy will only be in equilibrium at the level of income OM when taxes equals government expenditure.

Equilibrium of National Income in an Open Economy

An open economy is one which trades with the outside world i.e. an economy which imports and exports goods and services. In an open economy equilibrium level of national income is attained when imports (M) equals exports (X). In this case imports represent leakages or withdrawals from the circular flow of national income and exports represent injections into the circular flow of national income. So when these two aspects are equal national income will be in equilibrium.



In the above diagram OM is the level of national income where the economy is in equilibrium because imports equals exports. When the two are equal it means that everything that has been produced in the year is all that will be bought and there will be no shortage or surplus, so in the following year the level of production will be the same.

However if imports exceed exports e.g. at the level of income OM_1 where imports exceed exports by the gap **a b**, there will be unsold stocks because part of the income paid out by

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the domestic firms to producers will be paid to foreign firms and the domestic firms will receive less than what they spent.

In addition, the expenditure of foreigners on the local produce will be less than the expenditure of locals on foreign produce. In this way, there will be a tendency to produce production in the following year, and therefore production will be cut down until all that is produced can be sold i.e. until the level of income (production) OM.

On the other hand if exports exceed imports e.g. the level of income OM_2 where exports exceed imports by the gap **c d** there will be a shortage of output as the expenditures of foreigners on local produce will be for much more than what the locals spend on foreign goods and services. In this case firms will have a tendency to increase production and so in following year output will increase until all that is demanded can be produced. And this will be the level of production OM.

Therefore in an open economy the equilibrium level of national income occurs when imports equals exports.

NB

The fact that the economy will be in equilibrium position as far as the level of national income is concerned when savings equals investment or when taxes equals government expenditure or when imports equals exports is not true for a real economy.

Today, most economies are open economies and for a realistic model of an open economy the necessary conditions for the equilibrium level of national income are the following:-

1. Aggregate demand must equal aggregate supply
2. Withdrawals must equal injections; equality between savings and investment or taxes and government expenditure or imports and exports is not a sufficient condition for the equilibrium position. The e necessary condition is that injections must equal leakages (withdrawals) i.e.

$$I+G + X= S+T+M$$

Where

I - investment (private investment)

G - Government expenditure

X - Exports

S - Savings

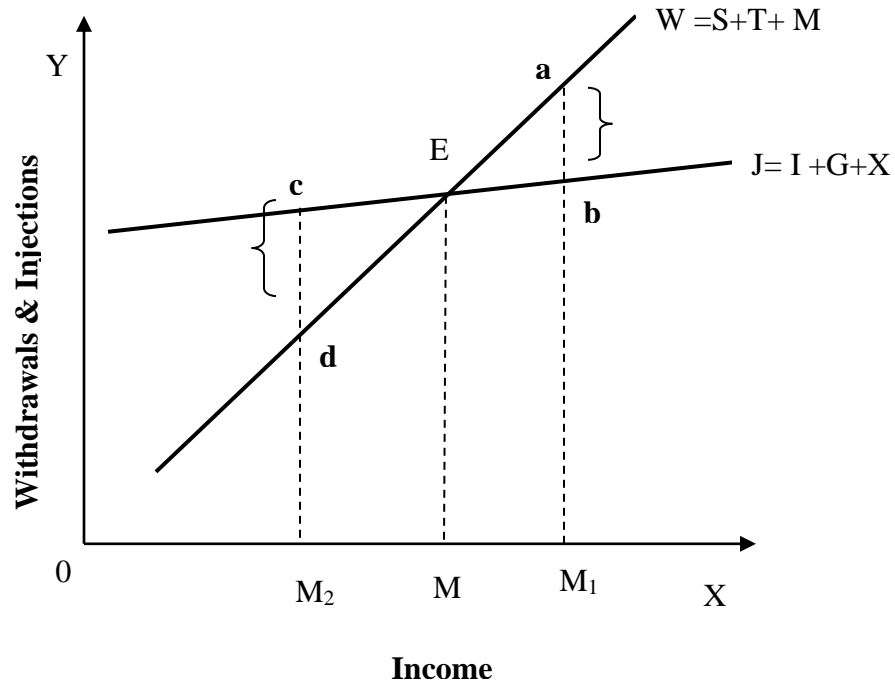
T - Taxes

M - Imports

This is so because an excess of savings over investment may be off set by a budget deficit or by an export surplus. A balance of payment surplus may be off set by a budget surplus.

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Graphical illustration of equilibrium level of national income of a real model of an economy



In the above diagram OM is the equilibrium level of national income because withdrawals from the circular flow of national income are just equal to injections in the circular flow of national income. If the two are different the economy will be in disequilibrium. For instance if withdrawals exceed injections e.g. at the level of income OM_1 where withdrawals exceed injections by the gap **a b** there will be over- supply and firms will not maintain such a high level of production they will be forced to cut down on production in the following year until the level of production OM where the equilibrium of withdrawals and injections will be attained.

On the other hand if the injections exceed withdrawals e.g. at the level of production of OM_2 where injections exceed withdrawals by the gap **c d** there will be under-supply i.e. aggregate demand will exceed aggregate supply and firms will have a trend to increase production in the following year until the level of production OM where the equilibrium is achieved.

Effects of injections and withdrawals on the equilibrium level of national income

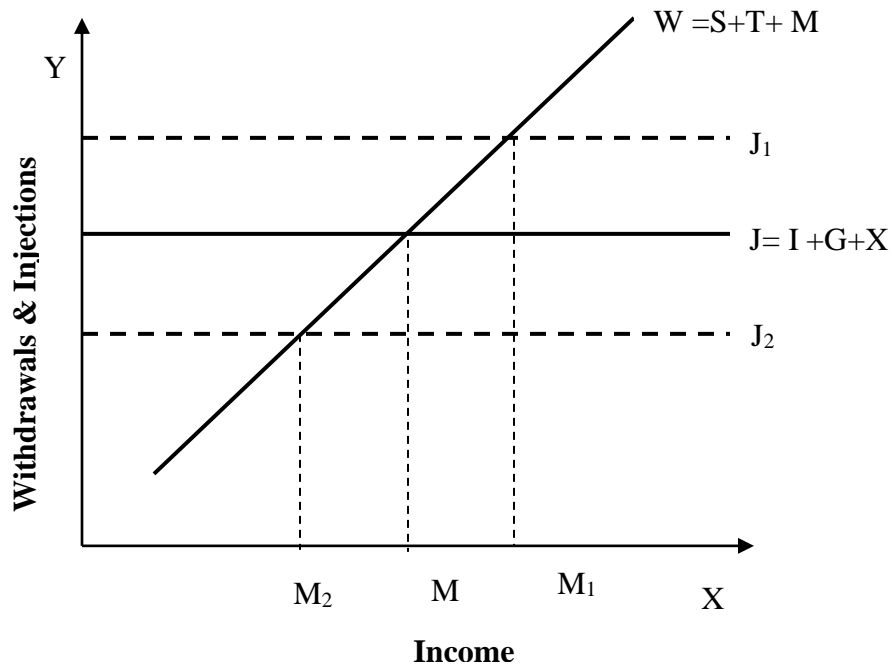
A rise in injections increase the equilibrium level of national income and a fall in injections reduced it.

On the other hand a rise in withdrawals reduces equilibrium level of national income and a fall increases it.

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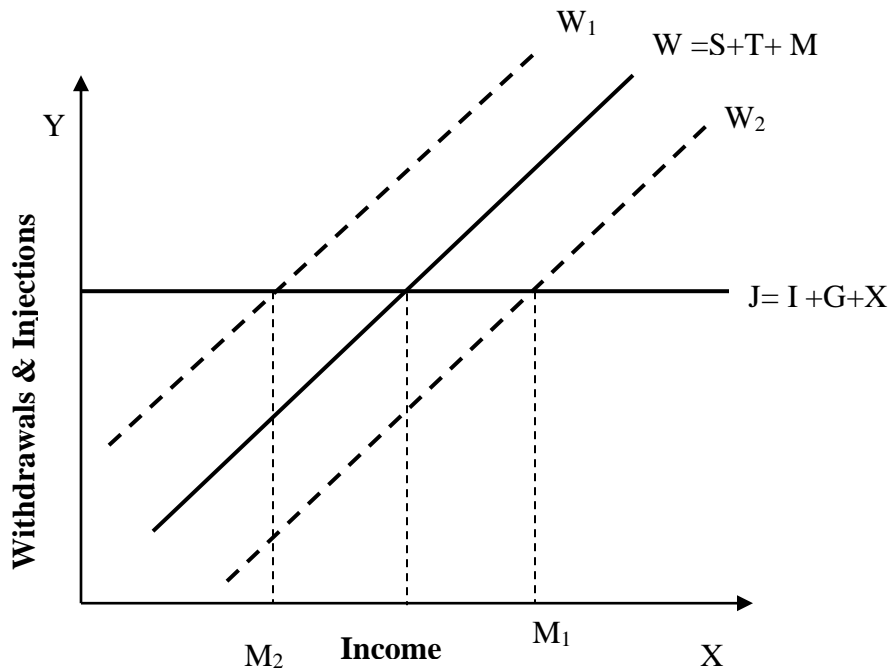
Graphical illustration

1. Effect of changes in injections on equilibrium level of national income



In the above diagram a rise in injections from J to J_1 increases the equilibrium level of national income from OM while a fall in injections from J to J_2 reduces the equilibrium level of national income OM to OM_2

2. Effects of change in withdrawals on equilibrium level of National Income



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In the above diagram a rise in withdrawals from W to W_1 reduces the equilibrium level of national income from OM to OM_1 and a fall in withdrawals from W to W_2 increases the equilibrium level of national income from OM to OM_2 .

MULTIPLIER

Change in withdrawals or injections may bring about a more than proportionate change in national income due to multiplier effect.

Multiplier is a number by which change in investment or any other element of aggregate demand multiplies by to yield the increase in national income.

If the initial increase is an investment item, then the number with which the investment multiplies to generate additional income is called the investment multiplier. There can also be export multiplier where the initial increase leading to increase in national income is income from exports.

Multiplier is a coefficient which explains by how much total income will change following an initial change in one of the elements of aggregate demand. The process through which the initial change in one of the elements of aggregate demand e.g. investments or government expenditure undergoes in order to yield the resulting change in total income is called the multiplier process, it is important to note that expansion or contractions in national income as a result of an initial change in one of the elements of aggregate demand does not continue for ever. It gradually comes to an end. This is because there are forces at work which tend to bring the economy into equilibrium and these are leakages.

Determinants of the Multiplier

The size of the multiplier depends upon the proportion of any increase in income which leaks out of the system. The smaller the leakage the larger will be the multiplier and vice versa e.g. if people receive an income of sh. 100 and spend sh. 90 and save sh. 10, then the multiplier in this case will be greater than when such people would spend 80 and save Sh. 20.

The concept of the multiplier can be explained better by the help of a numerical example. In the example we will explain the concept of investment multiplier.

Let us suppose that an autonomous investment of Sh. 100 million take place. This money will be paid to workers and to those who supply raw materials and those who supply capital equipments. The first impact of this change will be that income of those people who participated in the investment activity will go up by sh. 100million but the process does not end there. The persons who will receive this income will in turn spend it on a wider range of commodities generating further income among those responsible for the supply of consumer goods and services. These people will however not spend all their income but only a proportion of it will be spent. The magnitude of the additional spending will depend on their marginal propensity to consume(MPC) let us suppose that MPC is $\frac{4}{5}$ or 80%, then they will be spend 80 millions and save 20 millions. When they spend 80 millions, this expenditure becomes income of other people. The people who will get this amount of Sh. 80 millions will in turn spend part of it depending on their

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MPC and save the rest. Assuming that M.P.C for all the people is the same, then they will spend Sh. 64 millions and save Sh. 16 millions. And this will be the income of those who receive it. This process will go on as a series of further rounds of expenditure will continue to take place and will stop when the initial investment equals leakages i.e. when the initial investment is equal to the savings.

Every round of expenditure will create income much higher than the original amount, and ultimately the increase in income will be many times greater than the increase in investment. The number of times the income will increase as compared to the initial increase in investment will be the multiplier. The multiplier process will stop because of leakages in savings, it will stop when leakages into savings are equal to the original amount of investment. Other leakages that contribute to the stopping of the multiplier process are taxes and imports.

Tabulation

Rounds of Spending	Increase in Income	Cumulative	
		Increase in Income	Savings
	Sh.	Sh.	Sh.
1 st	100m	100m	-
2 nd	80m	180m	20m
3 rd	64m	244	16
4 th	51.2	295.2	12.8
5 th	40.96	336.16	10.24
6 th	32.768	368.928	8.192
7 th	26.2144	395.1424	6.5536
8 th	20.97152	416.11392	5.24288
9 th	16.77722	432.89114	4.1943
10 th	13.42178	446.31292	3.35544
-	-	-	-
-	-	-	-
-	-	-	-
nth	-	500	-
Total	<u>500</u>		<u>100</u>

In the above table we can see that when the last round of expenditure is made total savings add up to the initial investment and the cumulative increase in income equals the total of income generated at every round of spending i.e. 100+80+64+51.2+40.96 + etc = 500. In the last round or in the round the total increase in income can be found by using the multiplier formula which is expressed as follows:

$$\Delta Y = \frac{\Delta I}{1 - MPC} \quad \text{or}$$

$$\Delta Y = \frac{\Delta I}{MPS}$$

Given that change in investment in our example is Sh. 100 millions and MPC is 4/5 or

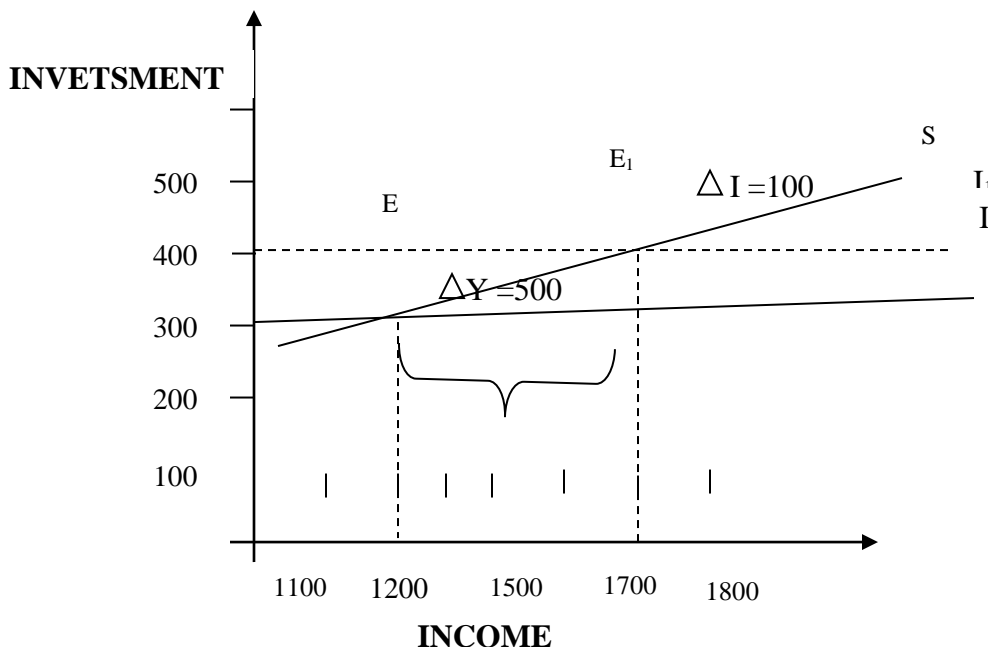
Macroeconomics notes

MPS is 1/5 then change in income when the process stops will be determined as follows:

$$\begin{aligned} \Delta Y &= 100m = 100m \\ &= 100m \times \frac{5}{1} \\ &= \underline{\underline{500m}} \end{aligned}$$

Thus we find that the initial investment of 100m gives rise to an increase in national income of 500m. In this case the multiplier is 5 because the increase in income is 5 times greater than the increase in investment. The number happens to be the reciprocal of MPS. It therefore follows that the coefficient of the multiplier is the reciprocal of MPS.

It should be noted that if the MPC is higher, the multiplier will be greater and vice versa. Graphical illustration of the effects of investment multiplier on the level of National income



In the above diagram the equilibrium level of national income is initially at 1200 when the investment is 300. When the investment rises by 100 from 300 to 400 the equilibrium level of national income changes from 1200 to 1700. The change in investment of 100 brings about a more than proportionate change in national income of 500. This is due to the multiplier effect in this case is 5.

THE ACCELERATOR

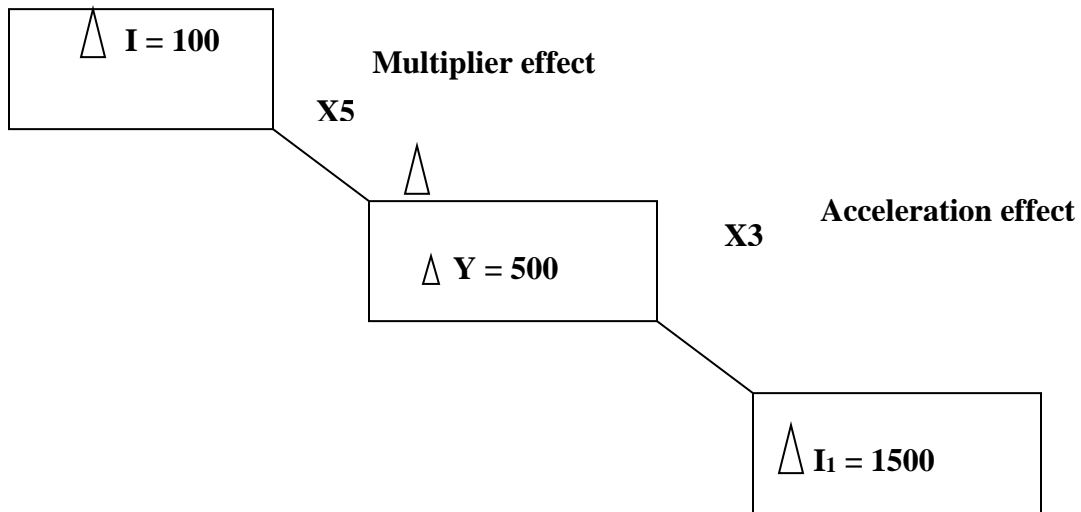
When income increases due to multiplier effect this induces an increase in the demand for goods and services. The increase in demand for goods and services induces business men to invest further. Thus a rise in income leads to a further induced increase in investment and this is called the acceleration effect.

Macroeconomics notes

The accelerator is the numerical value of the relationship between an increase in income and the resulting increase in investment. It explains by how much investment must rise to meet the rise in aggregate demand, e.g. if income increases by 500 millions and as a result of this, induced investment increases by 1500 millions then the accelerator in this case is 3. For instance if we were to produce cloth worth 500 millions this being the additional demand for cloth and it requires a machine worth 1500 millions then the accelerator is 3. the accelerator simply shows that when the demand rises by 500 additional investment of 1500 will take place. The accelerator can therefore be said to be the ration of change on investment to change in income i.e.

Accelerator = $\frac{\Delta I_1}{\Delta Y}$ it is a
Capital – output ratio

INTERACTION BETWEEN MULTIPLIER AND ACCELERATOR



In the above illustration ΔI means change in autonomous investment, ΔY means change in income and I_1 means change in induced investment.

When autonomous investment changes by 100 it leads to change in income by 500 because the multiplier is 5 and the change in income of 500 generates additional demand leading to change in investment by 1500 because the accelerator is 3. Therefore the multiplier and accelerator interact to cause changes in income and investment in economy.

Fluctuations in National Income Due To Interaction in Multiplier and Accelerator

Economic activities in a country pass through phases of adversity and prosperity. There are down ward swings and upward swings. There are periods of depressions and periods of booms. These phases arise form fluctuations in national income caused by the interaction of the multiplier and accelerator.

Macroeconomics notes

According to the concept of multiplier –accelerator, national income is majority constituted by three items and these are:

1. Autonomous investment (government expenditure)
2. Private consumption expenditure induced by increase in income (multiplier effect)
3. Induced private investment (accelerator effect)

These three components can be expressed in an equation as follows

$$Y_t = G_t + C_t + I_t$$

Where

Y_t = National income at time t

G_t = Government expenditure at time t

C_t = Private consumption at time t

I_t = induced investment at time t

For the purpose of analyzing the interaction of multiplier and accelerator this equation is expressed as follows:

$$Y_t = G_t + (\alpha Y_{t-1}) + \beta (C_t - C_{t-1})$$

Where

α represents MPC

β represents accelerator

Y_{t-1} represents national income of the previous year

C_{t-1} represents private consumption of the previous year.

C_t represents private consumption of the current year.

G_t Government expenditure in the current year

Y_t National income of the current year

Illustration

Let us assume that the current year national income is 10millions and then government expenditure of 10 millions takes place and that MPC (alpha) =2/3 and accelerator $\beta =2$, the multiplier accelerator will interact as shown in the table below to cause fluctuations in the level of national income on the economy.

Period in years	Autonomous investment	Induced private consumption $C_t = (Y_{t-1})$	Induced private investment $I_t = \beta (C_t - C_{t-1})$	National income $Y_t = G_t + C_t + I_t$
1.	10m	-	-	10m
2.	10m	6.7m	13.4m	30.1m
3.	10m	20.1	26.8m	56.9m
4.	10m	37.9m	35.6m	83.5m
5.	10m	55.7m	35.6m	101.3m
6.	10m	67.5	23.6m	101.1m
7.	10m	67.4	-0.2m	77.2m

From the table we can see that from an initial investment of 10m by the government fluctuations in national income take place through the multiplier – accelerator interaction until the level of income sh. 101.3m. In other words through the interaction of multiplier/accelerator, - -

Macroeconomics notes

The initial investment of 10m revives the economy from a depression to a boom. The boom is realized in the 5th year. Beyond the 5th year the continued interaction of the multiplier and the accelerator changes the trend of the economy into a recession. This trend of the economy i.e. the recession can only be altered or reversed by additional autonomous investment which through the interaction of multiplier/ accelerator will revive the economy back to a boom. It should therefore be noted that the fluctuations in economic activities in a country are brought about by the interaction of the multiplier and the accelerator.

EXPORT MULTIPLIER

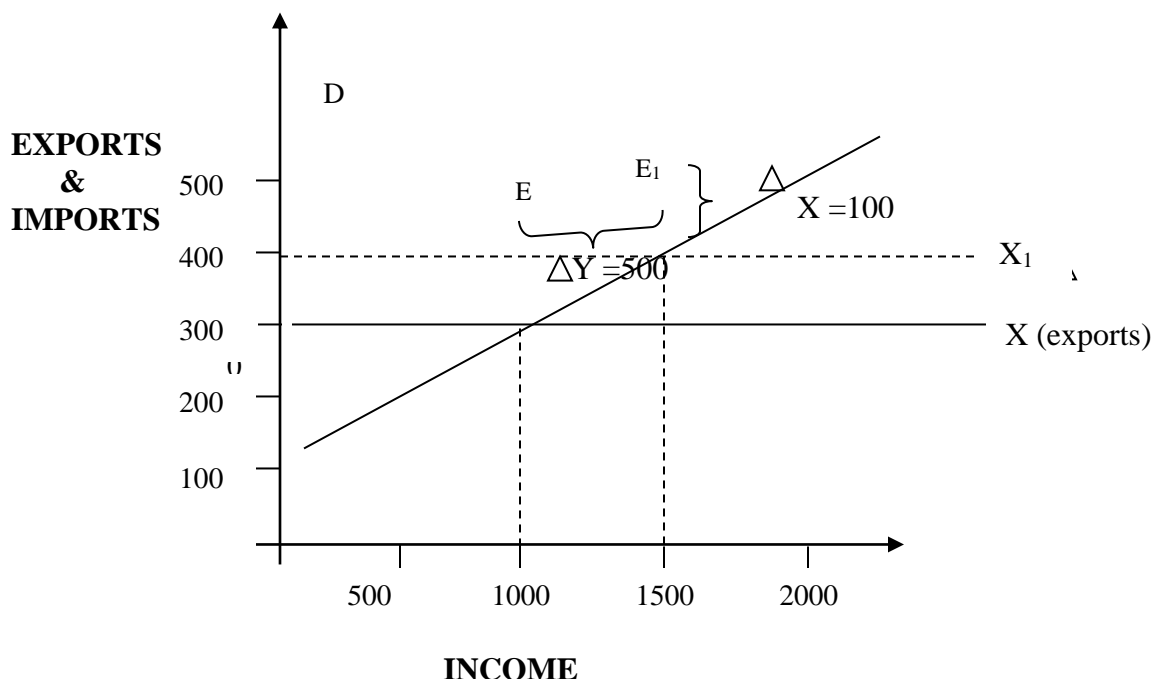
This is the ratio at which national income changes due to change in exports. Coefficient of export multiplier depends on the marginal propensity to import (MPM) the formular for determining export multiplier is expressed as follows:

$$\text{Export multiplier} = \frac{\text{Change in income}}{\text{Change in exports}}$$

Or $\frac{\Delta Y}{\Delta X}$

Through the process of export multiplier an increase in export income will lead to more than proportionate increase in national income and the new equilibrium level of national income will be set where exports equals imports.

The concept of multiplier is a very important concept in economic development especially as regards third world countries because the majority of people get income from export crops. These incomes when spent have multiplier effects on national income. So to increase income in such countries, there is need to increase earnings from exports. Graphical illustration of the effect of export multiplier on the equilibrium level of national income



Macroeconomics notes

In the above illustration the equilibrium level of national income is 1000 i.e. when exports and imports both equal to 300. When a rise in export income occurs over imports by 100, through the multiplier process national income changes from 1000 to 1500 i.e. changes by 500 and this is a more than proportionate change. It means the export multiplier in this case is 5.

Multiplier in a Complex Economy (Open Economy)

In a more complex economy i.e. an economy with a government and which engages in foreign trade, the multiplier is still governed by any marginal change in income a country pays on domestic output i.e. the expression.

$$\frac{1}{1-MPC}$$

Still governs the coefficient of the multiplier but the proportion of any additional income which is passed on within the system is now reduced by 3 leakages i.e. savings, imports and taxation. This means that in this case $1-MPC$ is no longer equal to MPS or MPM or MPT alone. It is in fact equal to that proportion of any increase in income thus the multiplier formula in this case equals to $MPS + MPM + MPT$. Thus the multiplier formula in this case is expressed as follows:

$$\text{Multiplier} = \frac{1}{1-MPC} = \frac{1}{MPS + MPM + MPT}$$

The multiplier takes effect wherever there is a change in the planned rate of spending thus a change in private investment, government expenditure or exports will have multiplier effects. In other words change in the propensity to consume will have multiplier effects on the economy.

Example

Out of every Sh. 100 of additional income a commodity saves Sh. 20 and spends Sh. 15 on foreign commodities and the government takes Sh. 15 in taxation. Determine the value of the multiplier.

Solution

$$MPS = \frac{20}{100} = 0.2$$

$$MPM = \frac{15}{100} = 0.15$$

$$MPT = 15 = 0.15$$

$$MPC = \frac{\text{Change in C}}{\text{Change in Y}}$$

$$\begin{aligned} \Delta C &= \Delta Y - (\text{savings (s) + Taxes + Imports}) \\ &= 100 - (20 + 15 + 15) \\ &= 100 - 50 \end{aligned}$$

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$$\text{i.e. MPC} = \frac{50}{100} = 0.5$$

$$\text{Multiplier} = \frac{1}{1-\text{MPC}} = \frac{1}{1-0.5} = 2$$

$$\begin{aligned} \text{or multiplier} &= \frac{1}{\text{MPS} + \text{PMP} + \text{MPT}} \\ &= \frac{1}{0.2 + 0.15 + 0.5} \\ &= \frac{1}{0.85} \\ &= 2 \end{aligned}$$

Conclusion on determinants of equilibrium level of national income

1. A rise in autonomous investment (government expenditure), induced private investments and exports rise the level of national income.
2. a fall in autonomous investment (G) induced private investment (I) and exports (X) lowers the level of national income.
3. a fall in taxation (T), savings (S) and imports (M) rises the level of national income
4. A rise in taxes (T) savings (S) and imports (M) lowers the level of national income.

Macroeconomics notes

THE CONCEPT OF FULL EMPLOYMENT, INFLATIONARY GAP AND DEFLATIONARY GAP

FULL EMPLOYMENT

This refers to that situation in an economy where all those people who are willing to work and are able to work, are employed according to their abilities. In this case national income will be maximum out of the available resources.

INFLATIONARY GAP

This refers to an excess of anticipated expenditure over the base price of the available output. In other words it is the amount by which aggregate expenditure will exceed aggregate supply given full employment level of national income.

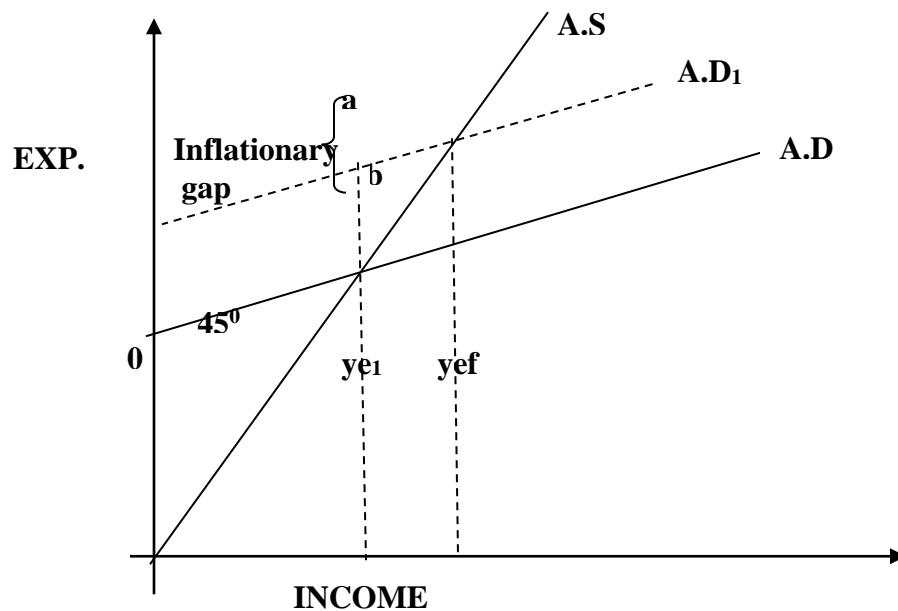
When national income is at full employment the expenditure on production must equal its value in order to maintain national income at full employment level. If total expenditure in any year is greater than national income at full employment, then this excessive expenditure is known as inflationary gap.

DEFLATIONARY GAP

This refers to a situation whereby at full employment level aggregate expenditure is less than aggregate supply i.e. there is a deficiency of expenditure over supply

An inflationary gap if not checked is likely to lead to inflation while a deflationary gap if not checked is likely to lead to unemployment

Graphical illustration

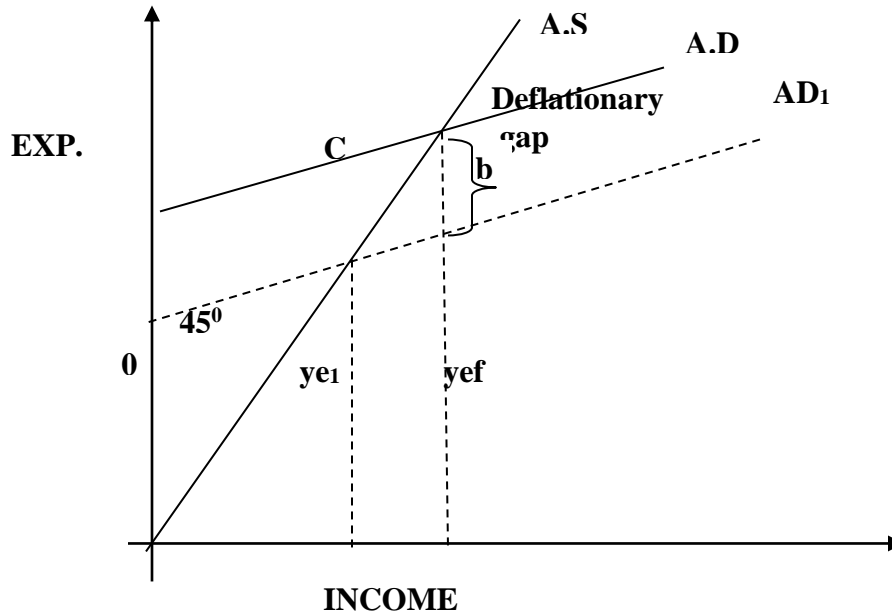


In the above diagram Y_{ef} represents the equilibrium level of national income at full employment. At this level aggregate demand is equal to aggregate supply hence national income is in equilibrium. Suppose now that there is a rise in aggregate demand from AD to AD_1 caused by a rise in effective demand, a disequilibrium in national income takes place. Buyers will want more than what is available and suppliers will desire to hire more

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factors of production and produce what buyers want. In other words there will be a tendency to change the equilibrium level of national income to Y_{e1} but this cannot be achieved because there are no additional labour resources to employ and increase production to Y_{e1} . So production will still remain at Y_{ef} but aggregate demand will exceed it by the inflationary gap which if not regulated by the government will lead to a rise in prices (inflation).

Deflationary gap



In the above diagram Y_{ef} represents equilibrium level of national income at full employment. National income is in equilibrium at this level because aggregate demand is just equal to aggregate supply. Suppose now that aggregate demand falls from AD to AD_1 aggregate supply will now exceed aggregate demand by the gap a b and this will be a deflationary gap.

Faced by this gap firms will not afford to maintain the full employment level of resources. They will cut down on production until what they can produce can all be bought. In other words there will be a tendency to create a new equilibrium at Y_{e1} and this will mean mass unemployment. Therefore a deflationary gap if not checked by the government leads to unemployment in the economy.

The equilibrium level of national income and interest rates

The rate of interest is also one of those factors that can affect the equilibrium level of national income. This is because national income is influenced by effective demand and effective demand manifests itself in investment and consumption and investment is determined by marginal efficiency of capital and the rate of interest. Therefore since the rate of interest influences investment and investment influences effective demand which influences national income, then obviously the rate of interest influences national income.

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Determinants of the Interest Rate

The rate of interest depends upon demand for money and supply of money.

Demand for Money

Demand for money is the desire to keep a quantity of money in money form or in cash form. It is also called demand for liquidity or liquidity preference.

The quantity of money which people desire to hold in cash form determines their liquidity preference. People hold money for three main motives. These are

1. Transaction motive
Money held for transaction motive is for fulfillment of general transactions
2. Precautionary motive
Money held for precautionary motive is for meeting unforeseen emergencies
3. Speculative motive
Money held for speculative motive is intended to be used to secure gains from expected favorable changes in the market e.g. to purchase shares when they become cheap; to purchase other assets when they become cheap, e.t.c

SUPPLY OF MONEY

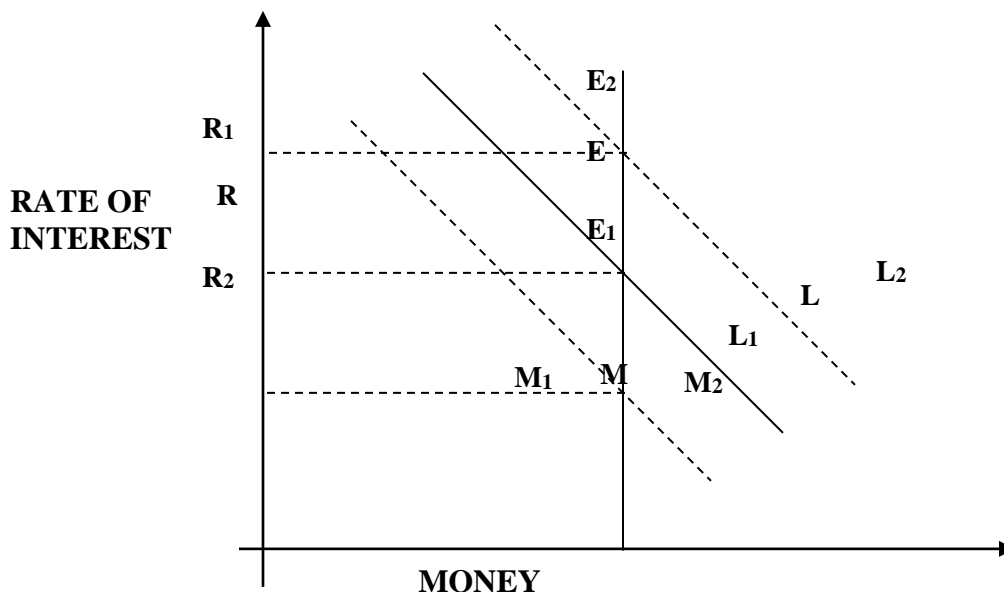
This refers to the quantity of money which is in circulation in the economy in a given time period. The supply of money depends on the ability of the central bank to issue the currency and the ability of commercial banks to create credit.

Money supply remains the same at different rates of interest whereas demand for money rises with the rate of interest except money held for precautionary motive.

The rate of interest is determined at a point where demand for money equals supply of money. If any of these changes, the rate of interest will change but since the supply of money tends to be constant (remains the same) at different rates of interest, then the demand for money must be the active determinant of rate of interest.

When the liquidity preference is very strong the rate of interest will be high and when its very weak the rate of interest will be low.

Graphical illustration



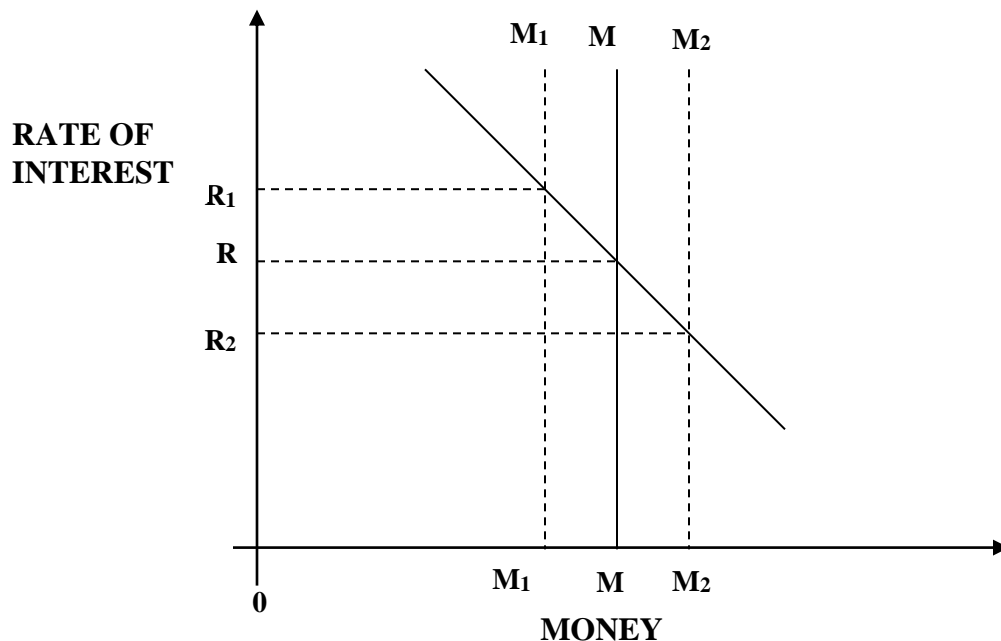
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In the above diagram LL represents the money demand curve and MM represents the money supply curve. In these circumstances the rate of interest is OR as this is where money demand equals money supply. When liquidity preference (money demand) falls so that the money demand function shifts to L_1L_1 the rate of interest will fall from OR to OR_1 . This fall in the rate of interest will raise the level of investment and a rise in investment will raise the level of national income.

On the other hand if the liquidity preference rises so that the money demand function shifts to L_2L_2 the rate of interest will rise from OR to OR_2 . This rise in the interest rate will reduce the level of investment (people will not borrow capital) and the reduction in the level of investment will reduce the level of national income.

It should be noted that although money supply does not depend on interest rate but if it changes then it will affect the interest rates. A rise in money supply causes the interest rate to fall while a fall in money supply causes the interest rate to rise.

Graphical illustration



In the above diagram the rate of interest is OR as this is where money demand equals money supply. If a fall in money supply takes place, the money supply function shifts to M_1M_1 and this leads to a rise in interest rate to OR_1 . On the other hand if the money supply rises the function shifts to M_2M_2 and this leads to a fall in the rate of interest to OR_2 .

A rise in the rate of interest because of a fall in money supply reduces investment expenditure hence reducing the level of national income while a fall in the rate of interest because of a rise in money supply increases investment expenditure hence increasing the level of National income.

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Questions May 99

- Why is it important to estimate national income of country. What difficulties do economists encounter while carrying out such a task particularly in developing countries?
 - The table represents economic transactions for country XYZ in billions of shillings

	Total output	Inter mediate purchases
Agriculture	30	10
Manufacturing	70	45
Services	55	25

Required:

- Calculate the gross national product of this economy using the value added approach.
- If depreciation and indirect taxes equal 8 billions and 7 billions shillings respectively, find the net domestic product both at market prices and at factor cost.

June 98

The table below represents values of economic transactions for hypothetical country in billions of shillings

Wages and salaries	45
Income from rent	3
Net interest	4
Profits of corporations	8
Indirect taxes	7
Subsidies	3
Depreciation	8
Net income form abroad	-5

Required:

From the table derive the following:

- Gross domestic product
- Gross national product
- Net domestic product at market prices
- Net domestic product at factor cost
- National income.

December 97

- Distinguish between gross national product and gross domestic product Explain which of the two is higher and why in developing countries
 - Explain the three conceptual approaches to measuring national income figures.
 - What is the importance of estimating national income figures and what are some of the problems encountered in doing so.

December 97

- The commodity and money markets of a given economy are represented hypothetically below:

Commodity market

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$Y = C + I$ (National function)

$C = 100 + 0.3y$ (Consumption function)

$I = 100 - 2.1r$ (Investment function)

Money market

$L_t = 0.2Y$ (transaction demand for money function)

$L_s = 10 - 2r$ (speculative demand for money function)

$M_s = 1500$ (money supply function)

Required

- Derive the IS curve
- Derive the LM curve
- Derive the equilibrium level of income and rate of interest
- If money supply increased by 50, what would be the effect and the equilibrium level of income and rate of interest.

June 97

4. (a) A hypothetical closed economy has a national income model of the form

$$Y = C + I + G$$

Where $C = 30 + 0.8Y$ and

I & G = the private investment and government expenditures are exogenously determined at 50 and 80 units respectively

Compute the national equilibrium level of income for this economy using aggregate income = aggregate expenditure and withdrawals = injections methods.

(b) What are some of the limitations of using gross national product as a measure of economic performance.

June 96

- Define the term national income
 - List and explain different methods of estimating national income /of a country and state some of the problems which are experienced in computing national income.

December 94

- Distinguish between GNP and GDP
 - In developing countries DNP is normally lower than GDP explain why this is so.
 - Outline the various methods used in computing national income. Why do these methods arrive at the same estimate?
 - What major practical and conceptual problems are encountered when estimating national income.

June 1994

8. Distinguish carefully between the multiplier and the accelerator. How do the two interact in the determination of the level of economic activity and National Income.

November 1992

9. Present the circular flow of income and expenditure in a simple closed economy. Show how such a flow provides a basis for the three approaches to national income accounting.

Others

10. What constitutes national income? Briefly but clearly describe the national income accounting methods.

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11. Distinguish between national wealth and national income. Describe the economic relationship between national wealth and a growing national income.
12. What do you understand by the multiplier effect? To what extent does it apply in real situations.
13. Write short notes on
 - (a) inflationary gap
 - (b) Marginal propensity to consume and save.

With the help of suitable diagrams describe the circular flow of income clearly indicating the critical points at which the flow may be influenced.

ECONOMIC FLUCTUATIONS

TRADE/BUSINESS CYCLES

The world has registered remarkable economic progress during the last few decades. But it would be wrong to think that this economic progress has been a steady upward swing and a continuous movement forward. On the other hand, every business man knows that economic circumstances do not remain constant over a very long period of time. After ten or twelve years, the production machinery receives a rude shock, which throws it out of gear for a number of years.

There are upward swings and then down ward swings in business. The periods of business prosperity alternate with the periods of adversity. This is called a trade/ business cycle.

A trade cycle simply means “the whole course of trade or business activity which passes through all phases of prosperity and diversity.”

Economic Crisis

An economic crisis, on the other hand, means a period of stress and strain when businessmen find it difficult to meet their commitments, in the words of Adolf Wagner, “crisis imply the overwhelming simultaneous occurrence of inability on the part of independent entrepreneurs to pay their debts” or in J .S Mill’s words, “There is said to be a commercial crisis when a great number of merchants have a difficulty in meeting their engagement, it’s a commercial crisis when only merchants are involved in a difficulty. But when it is accentuated and leads to bank failures, it’s called a financial crisis”

Phases of a Trade Cycle

1. Depression

During a depression, prices are too low and there is unemployment in the country. The lucky ones, who are employed, get distressingly low wages. The purchasing power of money is high but that of man low. The general purchasing power of the community being very low, the productive activity, both in the production of consumers goods and capital goods, especially the latter is at a very low level. Business settles down at a new equilibrium at a low level of prices, costs and profits. This new equilibrium may last for a number of years. This is a period of economic adversity.

2. Recovery

But the things are not going to remain in a depressed state for ever. After the depression has lasted for sometime, rays of hope appear on the business horizon. Pessimism gives place to optimism because the depression contains within itself the

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germs of recovery. After the depression has lasted for some time, the situation is found favourable for a business venture. Wages are low even for efficient workers, sufficient number of whom is now available.

Money is cheap and so are the other materials and the factors of production. Prices may be low but the costs too are low. Thus, the margin of profit re-appears. This induces an entrepreneur, who may have sufficient financial backing to take the risk. He orders repairs, renewals, and replacements and perhaps, a new plant. Constructional and allied industries receive orders and re-employ workers who spend their newly-acquired purchasing power on consumer goods. This stimulates further investment and production in several other industries.

Business has turned a corner. This is called a period of recovery.

3. Boom

Recovery once started gathers momentum. The slender stream of recovery when it has started flowing is strengthened by numerous tributaries on its way. The revival of investment in one industry leads to a revival in another. With the general revival of demand, prices show an upward trend. The businessman's income takes a forward jump while wages, interest, and other costs lag behind. Profit margins are thus widened. Optimism grows and spreads far and wide. Exceptional business prosperity turns a businessman's head and he indulges in over-trading. During this period investment is too high, income and employment are highly favourable and profit margins are too wide. This phase of a trade cycle is called a boom or expansion.

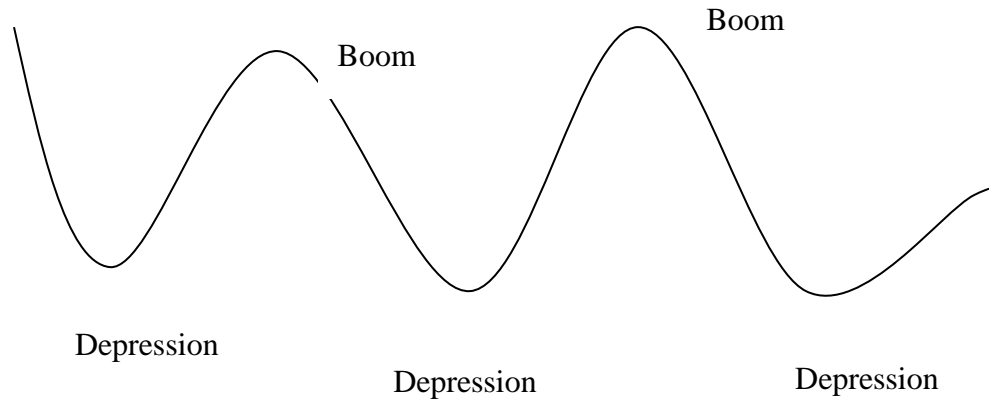
4. Recession

Just as depression created conditions for recovery, similarly the boom creates conditions for recession. All idle factors have been employed and further demand, for them must raise their prices, but the quality available now is inferior. Less efficient workers have to be taken on higher wages. Rate of interest rises and so also the prices of essential materials. As a consequence costs take an upward swing. They overtake prices and the profit margins are first narrowed and then begin to disappear. The boom conditions have come to an end. Then starts the down-ward course. Fearing that the era of profits has come to an end, businessmen stop ordering further equipment and materials. The government applies the axe mercilessly.

The bankers insist on repayment. The bottle-necks appear and stocks accumulate. Desire for liquidity increases all round. This accentuates the depression. Just as recovery is self-reinforcing, the forces of depression are also self-accumulating. There is general distress. The economy is in a crisis. This is a period of utmost suffering for businessmen. It is called a period of recession. But they recover in course of time from the stunning blow. Their commitments are liquidated somehow and business enters into the stage of depression or slump or a state of stagnation.

The phases of a trade cycle can be explained diagrammatically as under,

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Characteristics of a Trade Cycle

1. Cyclical nature or periodicity
Trade cycles occur periodically at fairly regular intervals. The interval is not precise one but the degree of regularity is sufficient to demonstrate the periodicity of a trade cycle. There's a general consensus of opinion that the cycle takes seven to ten years nearly to complete itself.
2. General nature or synchronism or its all- embracing nature.
The business world is one economic unit, like a living organism. An attack on one part of the business organism is bound to send a shock to the other parts. If one firm is in grief, those who deal with it cannot remain unaffected, and they in turn, will affect others with whom they may be in commercial intercourse. Thus, depression passes from one industry to another. A time comes when all industries in all districts and all firms in the country are affected. Few can escape the adversity.
3. Revival from a depression to a boom is very slow but recession from boom to depression is very rapid.
4. Prices of agriculture commodities change more proportionately as compared to those of industrial goods.

THEORIES OF TRADE CYCLES

Several theories of trade cycles have been put forward from time to time. Some well known theories are explained as follows:

1. Climatic/ Harvest Theory

The earliest explanation of trade cycle is that a trade cycle occurs due to the variations in the climatic conditions. It is said that there are cycles of climate.

For some years the climate is favourable and then comes an unfavourable turn. The state of climate is linked with the state of agricultural production i.e. changes in climate bring about changes in agricultural production. If the climate is favourable, the agricultural production will be greater and vice versa.

There are bumper crops for some years followed by failure of crops. The cycle of agricultural production results in a cycle of industrial activity, because industry depends upon the state of agricultural production. If agricultural production is greater in any particular year, there will be economic prosperity in the country and vice versa.

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Economists like W. S Jevons and H.I Moore are the main supporters of this theory. According to W S Jevons spots appear on the face from the sun which in turn affects the conditions of rainfall. The rains affect agricultural production which in turn affects trade and industry. This is how trade cycles are caused.

Comments:

Modern economics do not place much reliance on this theory. Nobody can say with certainty about the nature of the sun-spots and the degree to which they affect rain. There is no doubt that climate affects agricultural production. But the climatic theory does not adequately explain the periodicity of the trade cycle.

2. Psychological Theory

Attempts are made by some economics to explain trade cycles in terms of psychology.

It is said that nothing is good or bad but thinking makes it go. Every economic fact has a psychological aspect. The subject matter of economic science is human behaviour which can hardly be separated from its psychological basis. There are moods of optimism alternating with moods of pessimism without there being any tangible basis for the same.

At some stage, people just think that trade is good and that it is going to remain good this is a period of high profits. Business activity is intensified i.e. businessmen are encouraged to invest. There is economic prosperity in the country. Then, all of a sudden, people start thinking that the period of prosperity has lasted long of a sudden, people start thinking that the period of prosperity has lasted long enough and adversity is round the corner. Realizing that depression may come at any time, business men start contraction of their businesses and depression prevails in the country due to the pessimism of the individuals. Thus although there was no valid reason for depression to come about, but it is brought about by the people themselves. It is psychological.

Comments:

The psychological theory also lacks any sound basis. Trade cycle is too complicated a phenomenon to be explained by such a simple theory. There is no doubt that fluctuations are affected by optimism and pessimism, but they do not explain the course of trade cycles or their periodicity aspect.

3. Monetary Theory

Money and credit occupy such a central positions in any system that it is almost certain that they play an important role in bringing about business cycles. According to R.G Hawtrey, the trade cycle is purely a monetary phenomenon, in the sense that changes in the supply of money are the sole and sufficient cause of changes in economic activity. According to him variations in flows of money are the determinants of business activity

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and account for alternating phases of prosperity and depression. Non-monetary causes like drought, floods, earthquakes, wars, strikes, unbalanced development of certain industries can at best cause partial depression but a general depression arises from monetary cause.

Hawtrey says that most of the business is done with borrowed money. When business prospects are good, the banks freely extend credit facilities. Assured of cheap and easy credit facilities, the businessmen go on expanding their business entering into further and further commitments. A huge superstructure of credit is built up.

This super structure can be maintained by the continuance of cheap money conditions, and their further extensions. But a point is reached when banks think that they have gone too far in the matter of advances. Probably their reserve ratio has fallen dangerously low. In self-defence they apply the brake, curb further expansion of credit and begin to recall advances.

This sudden suspension of credit facilities proves a bombshell to the business community.

Business men have been counting on the renewal of overdrafts and cash credit facilities. But contrary to their expectations money are being called in.

They have to sell off their stocks in order to repay. This general desire for liquidity by the banks depresses the market, for the stocks are being unloaded all round. Some firms fail to meet their obligations and bring to grief those whom they could not pay. Very solvent firms may fail simply because they do not receive timely financial assistance from the banks.

Thus, the monetary phenomenon of hoarding and dis-hoarding, credit expansion and contraction have a lot to do with business cycles, since they represent a succession of inflationary and deflationary processes.

Comments:

It is no doubt that banking institutions play an important part in building up trade activity. But it is a bit of unkind to say that they cause a crisis. The most that can be said is that they aggravate matters.

They prop up a boom by an over-issue of credit and they accentuate a depression by suspension of credit. But neither the boom nor depression originates with them.

Secondly, a world phenomenon like a modern slump (depression) cannot be attributed to the isolated action of banks in one country. A trade cycle cannot therefore be exclusively attributed to the misbehaviour of money.

4. Over-Investment Theory

Some writers attribute the boom to excessive investment and regard the depression as the necessary corrective for the imbalances created during the boom. That investment becomes excessive during a boom is borne out by the fact that investment goods industries (industries producing capital goods) expand faster than consumption goods industries (industries producing consumer goods) during the upward phase of the trade cycle. During the depression, investment goods industries suffer more than consumption goods industries.

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But why do investment goods industries expand faster than the consumption goods industries in the boom phase of the cycle.

On this point, there is difference of opinion among the various theorists, who believe in the over-investment and Robbins traced this to the banking system. Though they do not regard the trade cycle to be a purely monetary phenomenon yet they believe that the disparity in the growth rate of consumption goods industries and investment goods industries could not occur if the banking system were not elastic.

According to this version, an increase in investment opportunities results from a low rate of interest. In this way there is encouragement to adopt more and more round about methods of production. Resources are increasingly withdrawn from consumption goods industries through the process of forced saving.

When the credit system becomes inelastic, investment goods industries cannot withdraw resources from the consumption goods industries as borrowing is no longer easy and cheap and the result is a fall in the rate of investment and as a result of this the phase of depression starts. Similarly after a specific time, the banking system increases the supply of money and production begins to increase.

Comments:

The over investment theory correctly states that fluctuations in the rate of investment are the main cause of trade cycles. However the theory fails to offer a convincing explanation as to why investment fluctuates in so regular manner. Many authors trace back fluctuations in investment to the behaviour of the satisfactory answer.

5. Under- Consumption Theory

According to under-consumption theory, there is too much of saving during a boom and further additions to savings reduce the level of consumption. A reduction in the level of consumption in the face of increasing productive capacity associated with the same of J.A Hopson and Major Douglas.

But why does over-saving or under consumption take place? This is because during a boom though process rise, wages lag behind so that profit margins are progressively increased. There takes place a shift in the distribution of income in favour of profits and against the wage earners. The saving propensity of the rich is greater than that of the poor, so that, a shift in income distribution in favour of the rich leads to an increase in the volume of saving. This process goes on till prices keep on rising and wages lag behind.

However, one result of such a state of affair is that the demand for consumption goods gets steadily reduced. This leads to contraction in their output which (accelerates) precipitates the crisis.

Comments:

The under-consumption or over-saving theory contains an element of truth. But it cannot be the sole or adequate explanation e.g. if the under consumption goods industries to fluctuate more than investment goods industries. But exactly the reverse is the case in real life during a trade cycle.

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6. Keynes's Theory of Trade Cycles

According to Keynes fluctuations in the rate of investment and these are caused mainly by fluctuations in the marginal efficiency of capital. The rate of interest, which is the other determinant of investment, is more or less stable and does not play a significant role in cyclical fluctuations of investment. Therefore economic fluctuations result from the changes in expectations about the rate of profit (marginal, efficiency of capital) on new investment. The fluctuation in the marginal efficiency of capital occurs due to changes either in the prospective yield or replacement cost.

The prospective yield makes marginal efficiency of capital very unstable and subject to violent fluctuations. The turning point from expansion to contraction is thus explained by a collapse in the marginal efficiency of capital.

As investment falls because of the decline in marginal efficiency of capital, the income also falls. As income falls rapidly under the multiplier effect the employment also goes down.

Just as the collapse of marginal efficiency of capital is the main cause of the upper turning point in the trade cycle, similarly the lower turning point i.e. change from depression to recovery, is due to the revival of the marginal efficiency of capital. The interval between the upper turning point and the start of the recovery is conditioned by two factors.

- (i) The time necessary for wearing out of durable capital assets and
- (ii) The time required to absorb the excess stock of goods left over from the boom.

Just as the marginal efficiency of capital was pushed down by the growing abundance of capital goods during the period of boom, similarly as the stocks of capital goods are depleted and there grows a scarcity of capital goods, the marginal efficiency of capital rises, thereby inducing the businessmen to invest more. Income increases due to the multiplier effect. So the cumulative process starts upwards.

Comments:

Keynes's theory is the theory of multiplier. It tells us that changes in investment will bring about magnified changes in the level of income and employment. This theory helps us in understanding the relationship between investment and income.

But the theory of multiplier alone does not offer a full and satisfactory explanation of the trade cycle. As has been observed above, a basic feature of a trade cycle is its cumulative character both on the upswing and downswing, i.e. once economic activities start rising or falling, it gathers momentum and for a time feeds on itself thus, what has to be explained is the cumulative character of economic fluctuations.

The theory of multiplier does not prove adequate for this explanation e.g. suppose investment rises by 100/= and that the magnitude of the multiplier is 4. Then, from the theory of multiplier we know that marginal income will rise by 400/= and if multiplier is the only force at work that will be the end of the matter, with the economy reaching a new stable equilibrium at a higher level of national income.

But in real life, this is not likely to be so for a rise in income, produced by a given rise in investment, will have further repercussions on the economy as we saw in the theory of accelerator.

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7. Modern Theory of Trade Cycles

(Interaction of multiplier and accelerator)

None of the theories above is fully satisfactory. The main drawback of Keynes's theory of trade cycle is that he ignored the acceleration effect in his explanation of the trade cycle.

As pointed out above, the multiplier alone cannot provide an explanation of the cyclical fluctuation; it is the interaction between the multiplier and the accelerator that gives rise to cyclical fluctuations in economic activity. An autonomous increase I the level of fixed investment raises income by a marginal amount according to the value of the multiplier. This increase in total income will induce further increase in investment through acceleration effect. When this happens the chain of causation is linked round in a 'loop'.

Investment affects income which in turn affects investment plans.

How the interaction between multiplier and accelerator causes fluctuations in income can easily be understood from the following table

In the table, it is assumed that mpc (α) is two thirds ($2/3$) the accelerator (β) is 2. It is also assumed that an autonomous investment of 10million Sh. is added in each period which is continuously maintained in the succeeding period.

Period (yrs)	Autonomous investment (Gt)	Induced consumption $C_t = (I_t - r)I$	Induced investment $I_t = \beta (C_t - C_{t-1} - I)$	National Income $Y_t = G_t + C_t + I_t$
	Sh. m	Sh. m	Sh. m	Sh. m
0	0	0	0	0
1	10	0	0	10
2	10	6.7	13.4	30.1
3	10	20.1	26.8	56.9
4	10	37.9	35.6	83.5
5	10	55.7	35.6	101.3
6	10	67.5	23.6	101.1
7	10	67.4	-0.2	77.2
8	10	51.5	-31.8	29.7
9	10	19.8	-63.4	-33.6
10	10	-22.4	-84.4	-96.8
11	10	-64.5	-84.2	-138.7
12	10	-92.4	-55.9	-138.4
13	10	-92.3	0.4	-81.9
14	10	-54.6	-75.4	-30.8
15	10	20.5	150.3	180.8
16	10	120.5	200.1	330.6

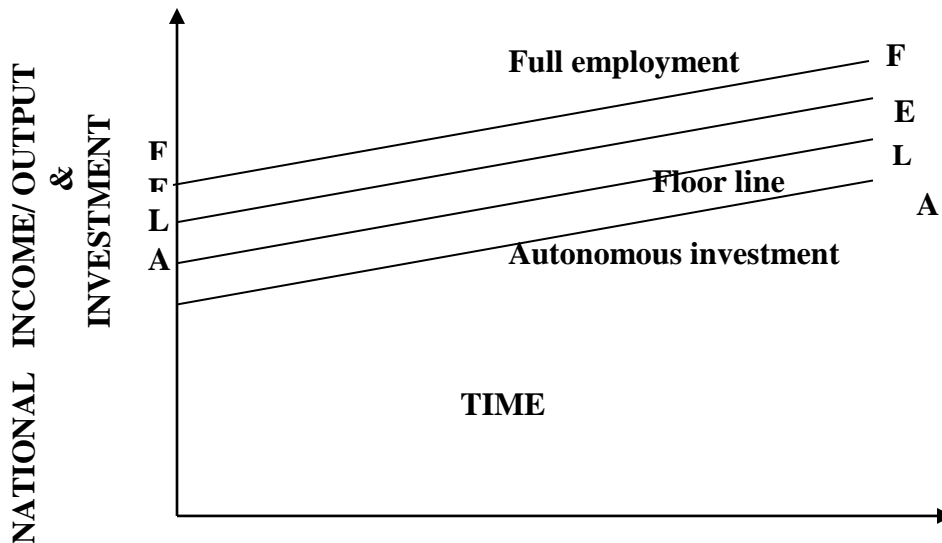
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From the above table we notice that under the combined effect of the multiplier and the accelerator, national income increase up to the 5th period but beyond the fifth period it begins to decrease. The first to the fifth period is the stage of expansion or upswing. The fifth period is a turning point and from the fifth onwards is the phase of contraction or downswing. This is how the multiplier and accelerator interact to cause fluctuations in national income, i.e. a trade cycle.

In the above table it has been assumed that there is no limitation of productive resources. In other words there is no full employment ceiling. In the table, we have only tried to convey the idea that interaction between the multiplier and the accelerator gives rise to fluctuations in total national income. We have taken certain values of mpc (hence the multiplier) and the accelerator. The different value of the mpc and the accelerator will produce fluctuations of different magnitude.

Now introducing the fact that there is a limit to the increase in national income set by the full employment ceiling, we may explain the different phases of a trade cycle with the aid of a diagram used by professor Hicks

(Phases of Trade Cycle)



In the above diagram AA is the line representing autonomous investment. Professor Hicks assumes that autonomous investment grows annually at a rate given by the slope of AA.

Given the **mpc**, the simple multiplier is determined. Then, the multiplier and autonomous investment together determine the equilibrium level of income shown by the line LL. Hicks calls this the floor line but induced investment has not yet been taken into account. If national income grows from one year to the next as it would along the line LL there is some amount of induced investment via accelerator.

The line EE shows the equilibrium line path of national income determined by autonomous investment and the combined effect of multiplier and accelerator.

Ff is the full employment ceiling; it is a line that shows the national maximum output at any period of time.

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Starting from point E, the economy will be in equilibrium moving along the path EE determined by the combined effect of the multiplier and accelerator and the growing level of autonomous investment. When the economy reaches point **p** along the path EE suppose there is an external shock, e.g. an outburst of investment due to certain innovations or jump in government investment. When the economy experiences such an outburst of autonomous investment, it pushes the economy above the equilibrium path EE after point P_0 . The rise in autonomous investment due to external shock causes national income to increase as a greater rate than shown by the slope of EE. This increase in national income will cause further increase in induced investment through acceleration effect.

The increase in induced investment causes national income to increase by a magnified amount through multiplier.

Thus under the combined effect of multiplier and accelerator, national income or output will rapidly expand along the path from P_0 to P_1 . But this expansion must stop at P_1 because this is the full employment ceiling.

The limited human and material resources of the economy do not permit a greater expansion of national income. Therefore when point P_1 is reached the rapid growth of national income must come to an end. Professor Hicks assumes that the full employment ceiling grows at the same rate as autonomous investment. Therefore FF slopes gently unlike the greater slope of the line from P_0 to P_1 . When point P_1 is reached the economy must grow at the same rate as the usual growth in the autonomous investment.

For a short time the economy may crawl along the full employment ceiling FF. but because national income has caused to increase at the rapid rate, the induced investment via accelerator falls off to the level consistent with the modest rate of growth.

But the economy cannot crawl along its full employment ceiling for along time. The sharp decline in induced investment, when national income, and hence consumption ceases to increase rapidly, initiates a contraction in the level of income and business activity.

Thus there is a slackening off at P_2 and the level of national income moves towards EE. Investment falls off rapidly and multiplier works in the reverse direction.

The fall in National Income and output resulting from the sharp fall in induced investment will not stop on touching the level EE, but will go further down. The economy must consequently move all the way down from P_2 to point Q_1 . But at point Q_1 the floor has been reached. National income will not fall further because this is the equilibrium level given by the working of ordinary multiplier and autonomous investment free from the simultaneous operation of the accelerator.

The economy may crawl along the floor through the path Q_1 to Q_2 and in doing so; there is a growth in the level of national income. This rate of growth as before induced investment and both multiplier and accelerator come into operation, and the economy will move towards Q_3 and the full employment ceiling FF.

This is how the interaction between the multiplier and accelerator cause economic fluctuations.

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MONEY AND BANKING

Def: Money is defined as a medium of exchange. It is something generally accepted as a means of payment for goods and services. It may be a commodity introduced to enable exchange of other commodities.

Many things have served as money in the past such as cows, salt, tobacco, cowry shells, precious stones, precious metals e.g. gold, e.t.c.

Money developed because of disadvantages of barter system of trade.

Disadvantages of Barter Trade

1. Double coincidence of wants
this requires that before a transaction can take place one not only needs to find someone who has go to what he wants but at the same time that person must be willing to accept what one has to offer. It is difficult to get a person who has what one wants and at the same time wants what the other offers.
2. Indivisibility of the commodities
Exchange of large commodity for a small commodity is difficult. A person with a small commodity may just want part of the large commodity but it will be difficult to divide that commodity.
3. Difficulty in transportation due to bulkiness
4. Difficulty infixing the rate of exchange
It is not easy to determine how much of one commodity should be given for another commodity.
5. Difficulty in storage while awaiting exchange.
6. lack of store of value for perishable goods e.g. tomatoes
7. Lack of standard measure for deferred payment. It is difficult to determine whether the same value has been returned or not when the borrower pays in goods.

FUNCTIONS AND USES OF MONEY

Functions of Money

1. It acts as a medium of exchange
It is a means by which two commodities can be exchanged.
2. It is a measure of value or a unit of account
It is a means by which value of different commodities can be compared
3. It acts as a store of value
Wealth can be stored in form of money and the possessor can have immediate command over the resources of any kind.
4. It acts as a means of deferred payment. Payments can be postponed to future dates without fear of loss in value to be received.
5. It acts as a means of transferring immovable property. if one has a building in one town and wishes to transfer it to another town then he will simply sell that house for money and use the money to buy or construct another house in the other town.

Uses of Money

1. It is used by producers in paying for factors of production
2. It is used by consumers in purchasing goods and services.

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3. It is used by the government in paying of its expenditures e.g. payment of salaries of civil servants, payment of government contractors.

Limitations over the Use of Money for Expansion Purposes

Greater use of money leads to increased economic activities. Where there is more money in the economy more economic activities will take place because effective demand will be high and producers will have enough money to pay for the factors of production.

However there are situations where even though there is more money in the economy, economic activities may not increase as expected. Such situations arise when:-

1. There is unequal distribution of money, when money concentrates in few hands only while the majority of the people do not have it, consumption will be low and therefore economic activities will also be low.
2. When there is political instability in the country. In such times people may fear to invest their money and thus there will be saving without investment.
3. When government plan over nationalization of private firms is not clear. If people suspect that the government has a plan to nationalize private business they will fear to invest even when they have the money.
4. When the individuals do not have the desire to develop. They will not use the money to better their standards of living.

Qualities of a Commodity to Be Used As Money

1. It should be universally acceptable so that wherever one goes is able to use it.
2. It should be fairly durable i.e. should not wear out easily.
3. It should have intrinsic value i.e. value for its own sake e.g. a silver coin when melted down should have value equivalent to the silver metal.
4. It should be divisible i.e. should be capable of being divided into smaller units with no loss in the division e.g. there should be money in denominations of 500, 200, 100, 50, 20 and 10 e.t.c.
5. It should be easily portable so that it can be easily carried about i.e. must have greater value in small quantity.
6. It should be uniform in quantity so that any other piece is identical to other pieces. (homogeneity)
7. It should be relatively scarce to have e.g. gold so that it is difficult to have much of it in circulation
8. It should be difficult to forge.
9. It must be convenient and cheap to print and to write something on the material.

Forms of Money

The main forms of money are:

1. Coins
2. Bank notes (paper money)
3. Bank deposits transferable by cheques.

1. Coins

A coin is a definite amount of metal whose weight size and value are determined by the central bank. Coins are made out of metal whose value is for less than their face value. They are token money.

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2. Bank notes (paper money)

These are bank notes printed and issued by the central bank. Bank notes like coins show a higher value than their intrinsic value. They are also token money. They are accepted as a means of payment simply because they have been given legal recognition by the central bank as a legal tender.

NB

Legal tender

A legal tender is a means of payment which a debtor can legally compel a creditor to accept in settlement of the debt.

3. Bank deposits transferable by cheques

This refers to the cash deposits with commercial banks which are transferred between individuals by means of cheques. Cheques being a means of payment forms part of money.

Other forms of money (quasi money)

Certain instruments through agreement can act as money. These include bills of exchange, treasury bills and bonds, patents and copy rights, share certificate, credit cards, e.t.c.

SUPPLY OF MONEY

Supply of money refers to the total amount of money in circulation in the country. The supply of money is constituted by:

1. Primary money
2. Secondary money

1. Primary money

This consists of the currency. It is also called cash. It is divided into two:

1. Coins
2. Paper money (bank notes)

Primary money is created by the central bank and it is held by the public and the institutions. It is also held by the central bank as commercial bank's balances and as a custodian of government balances.

2. Secondary money

This is money created by commercial banks. It originates from the bank deposits held by commercial banks from individuals and institutions. These deposits are then transferred between individuals and institutions through the system of cheques as follows:-

When a cheque is paid in by the payee, the drawer's account is debited and the payee's account is credited. So the transaction is settled by the transfer of money from one account to another merely by book entries. Infact the large part of the money supply in circulation today consists of bank deposits transferable by cheques (secondary money).

What constitutes money supply in a country?

The value of money

The value of money refers to the purchasing power of money. It means the quantity of goods and services a unit of money can purchase.

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Many theories have been put forward trying to explain what determines the value of money.

THEORIES OF MONEY

1. The quantity theory of money
2. The Cambridge theory of money
3. The modern theory of money

1. The Quantity Theory Of Money

This theory was formulated in 1860 by economists Tausig to explain the relationship between the quantity of money and the general price level. It was supposed to explain inflation in terms of changes in the quantity of money.

According to this theory an increase in the quantity of money would bring about a proportionate increase in the price level. People then believed that the value of money actually depended on the quantity of money. Tausig expressed his theory symbolically as follows:

$$P = \frac{M}{Y}$$

Where P = Price level

Y = Production level

M = Quantity of money

If for instance M = 1000 and p = Sh. 20 and Y remaining constant, when M changes to Sh. 2000 p becomes Sh. 40.

Tausig's theory was modified by Fisher who introduced the idea of velocity of circulation of money.

Velocity of circulation of money is the rate at which a unit of money changes hand within a given period.

Fisher believed that not only the quantity of money is responsible for bringing about change in price level but also the velocity of circulation. If the velocity of circulation increases the price level will also increase. Fisher expressed his theory symbolically as follows:

$$MV = PT$$

Where M – Quantity of money in supply

V - Velocity of circulation

P – Price level

T – Volume of transactions (product level)

NB

MV represents the total amount of money spent. For instance if M is Sh. 1000, V is 1 and p is Sh. 20 given T,

If other things remain constant but V changes to 2 then p will change to Sh. 40.

Fisher's equation proves that the price level not only depends on the quantity of money but also on the rate at which money circulates i.e. the velocity of circulation.

2. The Cambridge Theory Of Money (The Cambridge Equation)

This theory was put forward by economics teachers of the Cambridge University Keynes being one of them. The Cambridge theory explains the value of money in

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terms of demand for money suggests that the demand for money is much responsible for changes in the value of money.

Demand for money

Is the desire to hold money in liquid form instead of in some form of assets. It is also called liquidity preference.

According to the Cambridge theory when demand for money increases the price level goes down and when the demand for money decreases the price level will go up. The theory is expressed symbolically as follows:

$$P = \frac{M}{KR}$$

Where P = Price level
M = Quantity of money in supply
K = Quantity of money held in liquid form (liquidity preference)
R = Production level

For instance if p is 20 when m is 1000, k is 100 and r is a given variable and m and r remaining the same k changes to 50, p changes to 40.

i.e. if $20 = \frac{1000}{100(R)}$

Then $40 = \frac{1000}{50(R)}$

The Modern Theory of Money

This theory was put forward by Milton Friedman in 1996. This theory emphasized on the fact that the value of money is actually a consequence of the level of national income rather than the quantity of money. It emphasizes more on production level rather than the supply of money. It suggests that if aggregate demand exceeds aggregate supply then the price level will go up. The equation is expressed symbolically as follows:

$$MV = PY$$

Where M = Quantity of money in supply
V = Velocity of circulation
P = Price level
Y = National income (production level)

For instance if P is 20 when m is 1000, V is 2, and Y 100, and Y decreases to 50 while M and V remains the same then P will rise to 40.

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MEASURING THE VALUE OF MONEY BY PRICE INDEX NUMBERS

Index numbers are devices of measuring the difference in the levels of a group of related products. Price index numbers indicate the price level at any given date compared with the price level in some standard date called the base year.

Preparation of Price Index Numbers

1. Choose the base year
Choose a year to serve as a base year of reference. The year chosen should be a year of stable prices.
2. Select a basket of commodities
Select a basket of commodities the prices of which are to be taken to represent the general price level. The commodities should represent ordinary purchases and the number should be sufficiently large.
3. Get the prices for the commodities both in the base year, and in the current year preferably retail prices should be used.
4. Represent the prices as percentages
The price of each commodity in the base year will be represented as 100% and the price of the commodity in the current year should be represented as the percentage of the base year. If for example the price of maize in the base year was Sh. 10 per kg it will be represented as 100%. If it increased to Sh 20 per kg in the current year it should be represented as 200%.
5. Get the average of the index numbers obtained with reference to each year. The average of the base year will of course be 100%. The other average (current year average) may be 100% or lower than 100% or higher than 100% if it is 100% then the general price level has not changed, if it is lower than 100% the general price levels has fallen and if it is higher than 100% the general price level has risen.

Illustration

Commodity	Base year =1990		Current year 1998	
	Price	Index no.	Price	Index no.
Unga	20/= per kg	100%	40/= per kg	200%
Sugar	40/= kg	100%	120/= kg	300%
Milk	10/= per litre	100%	15/= per litre	150%
Cloth	50/= per metre	100%	125/= per metre	250%
Kerosene	10/= per litre	100%	20/= per litre	200%
		<u>500%</u>		<u>1100%</u>
Average		$\frac{500}{5} = 100\%$		$\frac{1100}{5} = 220\%$

From the above illustration the general price level has gone up by 120%. This indicates that the value of money has fallen by that much.

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Measuring Cost Of Living Index Numbers

Cost of living index number measures the changes in the standard of living of a group of consumers over a period of time. It measures the effects of changes in prices of different commodities on the general standard of living of the people.

If we have to measure the cost of living index, we have to select the group of consumers for which we are interested in measuring their cost of living and then we have to choose weights to attach to various commodities that they purchase.

In this case the weights are multiplied by the purchase and an average is obtained. Alternatively the following formula is utilized (used)

$$\text{Cost of living index number} = \frac{\sum (P_1 \times W) \times 100\%}{\sum (P_0 \times W)}$$

Illustration

Cost of living index numbers

Base year = 1990				Current year = 1998		
Commodity	Price(p)	Weight (w)	Value (P ₀ w)	Price (P ₁)	Weight (w)	Value (P ₁ w)
Fish	60/= per kg	4	240	80/= per kg	4	320
Unga	25/= per kg	2	50	60/= per kg	2	120
Beans	20/= per kg	2	40	25/= per kg	2	50
Salt	30/= per kg	1	30	15/= per kg	1	15
			<u>360</u>			<u>505</u>

$$\begin{aligned} \text{Cost of living index number} &= \frac{\sum (P_1 \times W) \times 100\%}{\sum (P_0 \times W)} \\ &= \frac{505}{360} \times 100\% \\ &= 140\% \end{aligned}$$

From the above illustration the cost of living has gone up by 40% meaning that the standard of living has fallen by the same level.

NB

It should however be noted that the weights used in the above illustration have been random weights. Generally we are supposed to use the actual monthly expenditures as weights if we have to derive a true and representative cost of living index number.

Example

Below is an average of monthly expenditures of certain selected families over the selected commodities in the base year and in the current year.

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Commodity	Base Year			Current Year		
	Price(P ₀)	Quantity (Q ₀)	Value (P ₀ W ₀)	Price (P ₁)	Quantity (Q ₀)	Value (P ₁ Q ₁)
Wheat	80	20 kg	1600	120	20 kg	2400
Rice	150	10 kg	1500	200	10 kg	2000
Cloth	100	15 m	1500	120	15 m	1800
Sugar	20	5 kg	100	30	5	150
Butter	30	6 kg	180	50	6	300
Fuel	40	8 L	320	60	8	480
			5200			7130

Required:

Calculate the cost of living index number and give the interpretation

$$\begin{aligned}
 \text{Cost of living index number} &= \frac{\sum (P_1 \times Q)}{\sum (P_0 \times Q)} \times 100\% \\
 &= \frac{7130}{5200} \times 100 \\
 &= 137\%
 \end{aligned}$$

Interpretation

The cost of living has gone up by 37% hence the standard of living has fallen by the same level.

RELATION BETWEEN COST OF LIVING INDEX AND WAGE DEMANDS

When the cost of living index number rises the purchasing power of money falls. The fall in the purchasing power of money means a fall in the standard of living. In order to maintain the standard of living at the previous level wages must also be increased. If the cost of living index number rises by 37% wage levels must also rise by 37% and so on if the same standard of living has to be maintained.

1. What is meant by the cost of living index?
How is it measured? And what is its relationship with wage demand?
2. Define money and outline its functions in the economy of the country.

Uses of Index Numbers

1. They are used to measure the cost of living
2. They are used to measure price levels
3. They are used to measure changes in the value of money
4. They are used to determine the rate of inflation

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5. They are used to measure the general level of retail and wholesale prices
6. They are used to measure price levels of a particular group of commodities
7. They assist in salary and wage revision
8. They assist in determining by, what percentage to inflate or deflate National income estimates so as to determine the actual growth of the economy
9. They assist in controlling prices and wages.

PROBLEMS OF COMPILING INDEX NUMBERS

1. It is difficult to compile index numbers because different groups spend differently depending on income, availability of commodities, taste and preferences e.t.c. the index number may not therefore be a true representative.
2. Weights – different people give different weights so it is difficult to attach weights to the commodities leading to the use of averages.
3. Change in the structure of population
As the population structure changes there is a change in weights
4. Change in the basket of goods –new commodities come in and some old ones are left out hence not easy to maintain a uniform basket of commodities.
5. Change in prices- with frequent changes in prices there is need to revise the index numbers from time to time.
6. Choice of the base year – it is difficult to get a year when prices are stable since years of inflation and years of deflation should be avoided.
7. Difficulties in collecting data
 - (a) It is difficult to get reliable information and there is need to visit the market several times.
 - (b) Goods may be sold in indefinite weights. Some goods are sold in heaps hence rendering the weights to be indefinite.
 - (c) Prices are not fixed. They are arrived at after a bargain. Sometimes the price may remain the same but the quantity and quality may go down.
 - (d) It is often difficult to get reliable information about prices or the base year.
 - (e) It is difficult to get the personnel or staff to collect and compile data especially in LDCS.

BANKING

A bank is an institution which deals with money as a commodity. The term banking is a comprehensive term referring to a number of institutions which deal with money as a commodity. A bank keeps and lends money. Some banks also provide convenient means of payments

TYPES OF BANKS

1. Central bank
This is a bank whose primary function is to carry out the monetary policy (regulate supply of money in the economy)
2. Commercial banks
These are banks that undertake all kinds of banking business that is storage and lending of money as well as providing convenient means of payments.
3. Savings bank

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- These are banks for small savings. They encourage small savings e.g. post bank
4. Development bank
This is a bank specializing in management of development finance e.g. the east African development bank.
 5. Exchange banks
These are banks whose primary function is to buy and sell foreign currencies.
 6. Agricultural banks
These are banks specializing in lending for agricultural development only.
 7. Industrial banks
These are banks specializing in lending money for industrial development only.

THE CENTRAL BANK

The central bank occupies the central position in the banking system of a country by nature of its function. It is established and managed by the government to control and guide the financial institutions and more particularly to assist and advise the government on financial matters.

It provides a channel through which the government can carry out the monetary policy. Today every country has a central bank. In Kenya we have got the central bank of Kenya. It is under the ministry of finance and is headed by a governor.

Before the establishment of the central bank of Kenya the functions of the central bank from the whole of east Africa were being performed by the East Africa currency board.

FUNCTIONS OF THE CENTRAL BANK

1. It acts as a government's bank

As the government's bank it fulfils the following functions;

(a) Lender to the government

It lends the government short-term finance when government expenditures exceed the available revenue.

(b) Banker to the government

All government accounts are kept with the central bank. Revenue from various taxes is kept in the central bank as a public deposit. From these deposits the government issues cheques for payments of various ministries. Because the central bank keeps the government deposit, it is in position to advise the government on financial matters.

(c) Management of public debts

The government uses the central bank to raise loans referred to as public debts through the issuing of securities. The central bank is again supposed to ensure that the loans are paid when they mature by buying back the securities.

In case of foreign debts the central bank ensures that they are paid back in time including interest

2. It acts as a currency issuing authority

The central bank is the only legal currency issuing authority. It is the only bank which issues the bank notes and coins. This is a very important role because over-issuing of currency may cause inflation.

3. It acts as a banker to commercial banks

As a banker to commercial banks it fulfils the following functions:-

(a) Acts as a clearing house

Macroeconomics notes

Commercial banks keep some of their surplus funds with the central bank. By having their accounts with the central bank, it facilitates the clearing of debts between the commercial banks.

(b) Lender of last resort

The central bank sometimes lends money to commercial banks although it is not basically a money lending institution. There are cases where commercial banks may run short of money especially when big days approach e.g. Christmas where cash withdrawals become great. In such times the central bank will lend money to commercial banks as the lender of last resort in order to maintain customer confidence in the commercial banks. It charges an interest rate referred to as the bank rate or minimum lending rate.

(c) It assists in settling financial disputes arising between commercial banks.

4. Custodian of government foreign reserves

The central bank keeps government foreign exchange which is used by the government for making international payments.

5. Monetary policy(credit controller)

This is the primary function of the central bank. It involves the regulation of the amount of money in circulation. The implementation of monetary policy involves the utilization of the following tools:-

- a) Bank rates
- b) Special deposits with the central bank
- c) Variable cash ratio
- d) Open market operation (OMO)
- e) Instructions to commercial banks
- f) Selective credit control
- g) margin requirement

COMMERCIAL BANKS

Commercial banks are established basically with the aim of making profits. They receive deposits in form of current accounts deposits, savings accounts deposits and fixed accounts deposits. They then lend out these money to the borrowers at some rate of interest.

FUNCTIONS OF COMMERCIAL BANKS

1. Storage of money

They accept deposits from people who have surplus money and keeps it in current, savings and fixed deposit accounts.

2. Transfer of money

They facilitate the transfer of customers' money from one account to another through the following means:

- (a) use of cheques for people with current accounts
- (b) use of bank drafts
- (c) Travelling cheques (use) i.e. cheques which help individuals to avoid carrying about large sums of money while travelling which is risky.
- (d) Use of credit transfer i.e. a cheque which can be used to pay collectively a large number of people.

Macroeconomics notes

- (e) By use of standing orders i.e. instructions given by the customer to the bank to pay at regular interval on his behalf a specific sum of money to a named organization.
3. collecting of money
Commercial banks can for example arrange to collect dividends on behalf of the customers and other cheques paid to the customer by people having accounts in other banks.
 4. Lending of money
This is the most profitable business of the banks. They lend out money using any one of the following methods:
 - (i) Discounting of bills
 - (ii) Overdrafts
 - (iii) Personal loans
 5. They assist on international trade by obtaining foreign exchange and making payments abroad. They also give information on credit worthiness of foreign buyers.
 6. Provision of cash
Commercial banks can provide money in various forms i.e. can provide all forms of notes and coins.
 7. Status inquiry- commercial banks can give information on a person's or company's financial position.
 8. Night save services
Commercial banks facilitate banking of money after the banks have closed for the day through the provision of this facility.
 9. Custodian of valuable items.

THE PROCESS OF CREDIT CREATION

How do banks create money?

What limits the process of credit creation?

Most people have heard that in some mysterious manner, banks can create money out of thin air. If for example somebody deposited Sh. 100 in a bank, the bank can create demand deposits of Sh. 1000 out of these. How does this happen?

It happens through the process of credit creation.

Credit creation is a process whereby commercial banks create new demand deposits through lending out surplus funds.

By experience banks have found that they need about 10% of cash as a proportion of total deposits. This 10% represents a proportion of the transactions that customers prefer to settle by means of cash rather than by cheques.

Let us take an example of a bank with the following balance sheet:-

Macroeconomics notes

Table 1

(Initial position of a single bank)

Assets		Liabilities	
Cash	100	Demand deposits	1000
Loan	<u>900</u>		<u>1000</u>
	<u>1000</u>		

In the above table Sh. 100 represents a cash ratio of 10% which the bank requires to meet the needs of the customers who do not use cheques but demand cash.

If a customer deposits Sh. 100 in cash demand deposits go up to sh 1000 and on the asset side cash held increases to Sh. 200. The ratio of cash to total deposits in this position becomes 18%.

$$\text{i.e. } \frac{200}{1100} \times 100\%$$

Table 2

(After deposit of Sh. 100)

Assets		Liabilities	
Cash	200	Demand deposits	1100
Loan	<u>900</u>		<u>1000</u>
	<u>1100</u>		

The cash ratio of 18% in the above table is unnecessarily high compared with the conventional ratio of 10%. To restore the ratio demand deposits have to be increased to sh.2000 i.e.

$$\frac{200}{10\%}$$

The increase in cash deposit increases the money the bank can lead. In this case the bank can now lend an extra of Sh. 900 and its balance sheet becomes as below:-

Table 3

(Restoration of the conventional cash ratio by creation of additional demand deposits)

Assets		Liabilities	
Cash	200	Demand deposits	2000
Loan	<u>1800</u>		<u>2000</u>
	<u>2000</u>		

Macroeconomics notes

The table shows that demand deposits have been created to the extent of 10 times than the new cash deposits and the loans have increased by Sh. 900. This increase in loans by Sh. 900 is what is referred to as money created by the commercial banks mysteriously out of thin air.

If customers write out cheques in payment for goods and services and they are in the same bank, no cash leaves the bank. Transactions are just made by book entries. The drawer's account is debited and the payee's account is credited.

Total deposits, cash, and cash ratio will not be affected. However in most cases people write out cheques payable to other banks. What then happens to the process of credit creation?

The Process of Credit Creation with Many Banks (Multiple Credit Creation)

If the amount deposited is Sh. 100, the first bank may just want to retain its cash ratio. It will create Sh. 90 worth additional loan and retain Sh. 10. The Sh. 90 will be received by the other banks which will each retain 10% and creating loans with the remaining amount equal to 90%.

This new deposit will generate more demand deposits and so on each new round 90% of the previous value will be created.

Illustration

Table 1

Initial position of bank A before deposit of sh. 100

Assets		Liabilities
Cash	100	Demand deposits 1000
Loan	<u>900</u> 1000	

Position of bank A after deposit of Sh. 100

Assets		Liabilities
Cash	200	Demand deposits 1100
Loan	<u>900</u> <u>1100</u>	<hr style="width: 50px; margin-left: auto; margin-right: 0;"/> <u>1100</u>

Macroeconomics notes

Table 3

Position of bank A after lending 90% of Sh. 100

Assets		Liabilities	
Cash	110	Demand deposits	1100
Loan	<u>990</u>		<u>1100</u>
	<u>1100</u>		<u>1100</u>

The Sh. 90 is deposited in bank B

Table 4

Initial position of bank B			
Assets		Liabilities	
Cash	100	Demand deposit	1000
Loan	<u>900</u>		<u>1000</u>
	<u>1000</u>		<u>1000</u>

Table 5

Position of bank B after deposit of Sh. 90

Assets		Liabilities	
Cash	190	Demand deposits	1090
Loan	<u>900</u>		<u>1090</u>
	<u>1090</u>		<u>1090</u>

Table 6

Position of bank B after lending out 90% of Sh. 90

Assets		Liabilities	
Cash	109	Demand deposits	1090
Loan	<u>981</u>		<u>1090</u>
	<u>1090</u>		<u>1090</u>

Macroeconomics notes

The Sh 81 lent by bank B is now deposited in bank C and bank C keeps 10% and lends 90% i.e. 72.9. This money is possibly banked in bank D which also keeps 10% out of this and lends out 90%. This process will go on until no more money can be created.

When the rounds are completed i.e. when the process comes to the end the total change in money supply will be several times the initial deposit, the change in money supply will equal:

$$\frac{\text{Initial deposit}}{\text{Cash ratio}}$$

In this case it will be:-

$$\frac{100}{10\%} = \frac{100}{\frac{10}{100}} = 100 \times \frac{100}{10} = 1000$$

This means that from the currency deposit of Sh. 100 and addition of Sh. 900 is created ultimately. This Sh. 900 is the money collectively created by the commercial banks mysteriously out of this air i.e. through the process of credit creation.

Looking at it from another way the Sh. 1000 being the additional demand deposit equals Sh. 100 +90+81+72.9++n. in other words bank A's demand deposit changes by Sh. 100, bank B's by Sh. 90, bank C's by Sh. 81, bank D's by 72.9 and so on until the process stops. These total claims which add up to Sh. 1000 are all arising from an Sh. 100 in cash and can afford to lend out Sh 900.

The process of credit creation with many banks is shared among the various banks in proportion to the cash retained by each bank out of the additional deposit. Banks which handle more money or more business create more money and vice versa.

LIMITATIONS OF THE PROCESS OF CREDIT CREATION

What limits the process of credit creation?

1) Lack of demand for loans

When there is a general lack of demand for loans by the public, the banks cannot create additional demand deposits

2) Lack of credit worth borrowers

Where borrowers cannot furnish the necessary security banks cannot give them loans and this limits the process of credit creation

3) The minimum percentage of cash which the central bank will want commercial banks to keep

The central bank may want commercial banks to keep a high cash ratio or to keep some of their funds with it. This limits the ability of commercial banks to credit create. This happens when the central bank wants to restrict the amount of money in circulation

4) The minimum percentage of cash in relation to deposits, which banks feel safe to keep i.e. the cash ratio.

If low they can create more money and if high they can create less money.

5) The amount of money deposited in the banks.

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In LDC's few people have bank accounts and this limits the ability of commercial banks to create more credit.

- 6) The extent to which cheques are used.

In LDC's most transactions are made by cash and this limits the process of credit creation.

- 7) The amount of business a bank does

Banks with more business retain more cash deposits and are able to create more demand deposits.

- 8) The total amount of money in the country

If the total amount of money in the country is more, then more deposit can be made into commercial banks enabling them to create more credit and vice versa.

MONETARY POLICY

Monetary policy is a policy by which the government uses the central bank to regulate the behaviour of the banking institutions. In order to regulate the circulation of money in the economy. It refers to measures adopted by the central bank to increase or decrease the supply of money in circulation.

Objectives of the Monetary Policy

1. Price stability

The monetary policy is intended to bring about desirable changes in the price level. It is supposed to ensure that prices remain stable

2. Exchange stability

The monetary policy can help to maintain foreign exchange rate at desirable level.

3. Higher employment level

During a deflation where employment level is likely to decline, the monetary policy can be used to remove the economy from a deflation so that a high employment level is maintained.

4. To increase the rate of capital accumulation

By identifying projects which commercial banks should give loans, it can increase the rate of capital accumulation.

TOOLS OF THE MONETARY POLICY

1. Bank rate

This is the rate of interest which the central bank charges commercial banks when it lends them money as a lender of last resort. If the central bank wants to reduce the amount of money in circulation it will charge a higher bank rate which will make commercial banks raise their lending interest rates and this will discourage borrowing. On the other hand if there is too little money in the economy and the central bank wants to expand credit it will lower the bank rate.

2. Open market operation (OMO)

This involves the selling and buying of government securities. If the central bank wants to reduce the amount of money in circulation, it will sell government securities to the public who are required to write cheques payable to the central bank. This leads to an exodus of money from the commercial banks to the central bank reducing the amount of money in circulation.

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On the other hand if the central bank wants to increase the amount of money in circulation it will buy back the government securities and this involves payment of cash to the members of the public.

3. Variable cash ratio

Cash ratio is the amount of deposits which the commercial banks feel safe to keep in form of cash. This ratio determines the amount of credit commercial banks can create. A high cash ratio limits ability of commercial banks to create more credit and vice versa. The central bank has the power to change this ratio from time to time. If it desires to reduce the amount of money in circulation it will reduce the cash ratio. On the other hand if it desires to increase the amount of money in circulation it will lower the cash ratio.

4. Special deposits with the central bank

The central bank has the power to require the commercial banks to keep the amount of percentage of their deposits with it. If it wants to reduce the amount of money in circulation it will require commercial banks to keep with it a higher percentage of their deposits. On the other hand if it wants to increase the amount of money in circulation it will lower the percentage of the special deposits.

5. Instructions to commercial banks

This may involve:

(a) Direct action

This involves giving orders to commercial banks regarding the amount of loans to make.

(b) Moral persuasion/ snassion

This involves the central bank persuading commercial banks to conduct their business in a specific way in the interest of the economy.

(c) Publicity

This involves publishing periodical reports by the central bank requiring commercial banks to adjust their policies according to the reports.

If the central bank wants to reduce the amount of money in circulation, it will order commercial banks to issue less loans, or persuade them to conduct their activities in a style likely to reduce the amount of money in circulation or may publish reports requiring commercial banks to adjust their policies so that the money in circulation can reduce.

On the other hand if there is too little money in circulation and the central bank wishes to increase the circulation of money, then it may require commercial banks to give more loans or to conduct their activities in a style that can increase money in circulation, e.t.c.

6. Selective credit control

This involves the central bank requiring commercial banks to give loans for certain projects only. This is done when the central bank wishes to reduce the amount of money in circulation. But if it wants to increase the amount of money in circulation then the selective credit control requirement is removed.

7. Rationing of credit

Normally commercial banks are able to borrow money from the central bank up to given limits. If there is too much money in circulation and the central bank wishes to

Macroeconomics notes

reduce the amount of money in circulation, it will lower the limit. But if there is too little money in circulation, then the limits are raised.

8. Margin requirement

Margin requirement is the difference between the amount of the loan and the value of the security. If the central bank wants to reduce the amount of money in circulation, it will widen the margin requirement. And if it wants to increase the amount of money in circulation it will narrow the requirement.

LIMITATIONS OF THE MONETARY POLICY

1. The change in the bank rate may be ineffective if commercial banks do not respond to it.
2. Even if the rates of interest do rise for instance they may not be able to curb borrowing significantly especially if prospects for profit are very good. Business men will still borrow even at high interest rates.
3. The success of securities needs a broad market. There are no organized markets for sale of securities in the market areas. This makes the market for them small.
4. Most people in LDCs do not understand about securities. They are ignorant about them and as such they cannot buy them.
5. Securities have a low yield and as such are less attractive. People may prefer to invest in real estates rather than in buying securities.
6. The central bank may not have enough control over commercial banks and so special deposits, variable cash ratio and selective credit control programmes may not be effective.
7. Some financial institutions are not under the control of the central bank
8. Some businessmen do not need to borrow money from banks for investment. They normally invest the retained profits, so the rise in the lending rates may not affect their financial activities.

LIQUIDITY VS PROFITABILITY

1. How do commercial banks compromise between liquidity requirement and profitability motives?
2. Clearly expound on the concept of liquidity preferences as it refers to banking practices or analyze commercial banks assets and discuss the importance of each item to the operation of these banks.

The secret of sound banking consists of maintaining adequate reserves while at the same time making profits for the shareholders.

A bank as we have already seen deals with some other people's money such that the money can be withdrawn with or without notice. But from experience banks know that only a small proportion of the total deposits is withdrawn in cash.

Their aim therefore is to maintain adequate reserves to meet these demand and at the same time make profit by lending the rest. This requires a good deal of skill. As already pointed out, a wise bank must maintain a proper balance between liquidity and profitability. Too much caution will mean too little profits while reckless lending may endanger the safety of the bank.

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It should be noted that if people wish to withdraw some of their money and the bank cannot meet their demands, this will lead to loss of confidence in the bank and people will close their accounts then move to other banks which can guarantee the safety of their money. If such a thing happened the bank will not have money to lend and will lose business.

In order to have a good balance between profitability and liquidity, banks keep their assets in the following order of liquidity.

1. Cash

Banks maintain a certain amount in actual cash (about 10% of total deposits). This cash is either kept in form of coins or in form of currency notes within the banks or as balances in the central bank. The balances with the central bank can always be withdrawn and as such are treated as cash.

2. Money at call

Banks also lend money for very short periods technically called in England money at call at short notice. This is mainly lent to bill brokers and petty stock brokers. Such loans can be recalled either on demand or within a few days.

3. Bills discounted

This may be treasury bills issued by the government or commercial bills (bills of exchange) commercial banks normally agree to discount such bills and wait to receive money when the bills mature. These bills normally mature in a very short time.

4. Investments

These are normally government securities particularly government bonds which can mature in about five years.

5. Advances to customers

These take the form of loans and overdrafts. These bring the highest profits to the banks although the risk in them is greatest.

The proportion in which the assets are kept is a matter of great importance. If the assets mainly consist of advances to customers and investment, the bank will be making more profits but it will be endangering its liquidity position.

On the other hand if the assets mainly consist of cash and money at call at short notice, the bank will be having a good liquidity position but will not be making good profits for the shareholders. It is therefore necessary that a proper balance be made between the liquidity and profitability motives.

STRUCTURE OF A COMMERCIAL BANK'S BALANCE SHEET

Balance sheet		Assets	
1. Share capital	xx	1. Cash (coins, notes, balances with	
2. Reserves	xx	central bank)	xx
3. <u>Deposits</u>		2. Money at call at short notice	xx
(a) Current A/C	xx	3. Bills discounted	xx
(b) Savings A/C	xx	4. Investments	xx
(c) Fixed deposit A/C	xx	5. Advances to customers	xx
		6. Other assets	xx
	xxx		xxx
	xxx		xxx

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THE ROLE OF BANKS IN ECONOMIC DEVELOPMENT

1. They attract small scattered savings which would otherwise be idle and turn them into active capital
2. They encourage the spirit of thriftiness (spirit of saving). They facilitate saving which would be difficult without them
3. They remove the deficiency of capital by stimulating saving and investment and making loans readily available.
4. The channel money into profitable investment. The central bank can identify appropriate projects where the money should be invested.
5. Through the monetary policy the government can stimulate economic growth. Interest rates can be lowered to encourage investment.
6. They facilitate government borrowing by selling the securities to the members of the public.
7. They contribute to industrial and agricultural development by lending money to farmers and industrialists for expansion.
8. The central bank can guarantee money which institutions may borrow from abroad.
9. They help to transform the economy from subsistence to monetary by introducing better means of payment.
10. They can facilitate international trade through:
 - (a) providing foreign exchange
 - (b) giving advice on international trade
11. They can create money through the process of credit creation. This increases the supply of money and loanable funds.

QUESTIONS

May 1999

- 1 (a) What are the major functions of money
(b) Discuss some of the likely factors that may be behind the recent banking crisis in the developing countries and state some possible economic implications of such crisis.

November 1998

2. (a) What are the main functions of the central bank?
(b) What factors impede the central bank in a developing country in its endeavors of efficient implementation of monetary policies?

June 1997

3. (a) How do commercial banks create credit?
What are the limits to this credit creation?
(b) Between the classical (qty) and the Keynesian theories of money

June 1996

4. (a) Explain the main functions of money
(b) Itemize and explain in brief the reasons why people hold or retain money

December 1995

5. (a) What are the traditional functions of a central bank?
(b) Using the central bank of your country as an example, explain the changes in the functions of the central bank in recent years.

June 1995

6. (a) define money and outline its major functions

Macroeconomics notes

(b) Explain the various motives of holding money

(c) What are the likely effects of an expansionary monetary policy in an economy?

December 1993

7. (a) How can the supply of money in a given economy be increased?
(b) What purpose can such an increase serve? What are the probable effects of such an increase on the economy's equilibrium level of income and its prevailing rate of interest?

June 1993

8. (a) What are the principle functions of the central bank in your country?
(b) To what extent are commercial banks in your country able to create credit? How does the central bank limit the ability of commercial banks to create credit?

November 1992

9. What is money? Elaborate on the factors which determine the demand for and supply of money in an economy.

November 1998

10. Clearly expand on the concept of liquidity preferences as it refers to banking practices and the individual behaviour.

OTHERS

11. Briefly explain how liquidity preference influences the effects of the use of money in an economy.
12. Discuss how in the final analysis the functions of the central banks bear on the economic development process of a country.
13. What is meant by supply of and demand for money? What factors influence them?
14. Briefly explain how commercial banks create credit and indicate the relationship between currency, bank deposits and money.
15. What is meant by the term cost of living index? How is it measured and what is its relationship with wage demand
16. Why is it necessary to control the process of credit creation and what instruments are utilized to control credit creation?
17. What is meant by monetary policy?
Explain the operations and effects of such a policy on the economy. (effects- changes that can place in the economy is objectives)

FINANCIAL MARKETS

The financial consists of all those financial institutions which provide money both for commercial and industrial purposes. They may also provide certain valuables instead of money in form of credit. The financial market is composed of the banking and non-banking financial institutions. The banking institutions are especially the commercial bank (offer means of payments – cheques)

the non-banking financial institutions include institutions like discount houses, merchant banks, markets for treasury bills, building societies, finance houses, investment trusts insurance companies, stock exchange markets development banks, post office savings banks, e.t.c. they don't offer means of payments. They are simply go between the lenders and borrowers. The non-banking financial intermediaries offer both short term and long term credit. They may thus be divided into two:

Macroeconomics notes

- 1) Those offering short term credit only
- 2) Those that can offer long term credit as well.

The non- bank financial intermediary that offer short term credit only are known as the money markets. While those that can offer the long term credits are known as the capital markets.

1. MONEY MARKETS

These consist of the discount houses, the merchant bank and the commercial banks. The money markets borrow money and lends for a short period. They borrow at low interest rates and lend at high interest rates.

Capital markets: this consists of the building societies, the finance houses, investment trusts; stock exchange markets development banks, insurance companies. Post office savings bank e.t.c. they provide long term credit facilities

(1) Building societies

This attracts funds from people and loan it to those who wish to purchase houses for their own occupations. The borrower pays the loan in installments plus interest. The house bought is mortgaged to the society as security. They retain full right of ownership of the house until the right owner has settled the loan and then he redeems it.

They also loan money to those who want to construct houses.

(2) Financial houses

These helps to finance the consumer goods e.g. cars, tractors, TVs, e.t.c. they also offer hire-purchase services. The borrower pays the loan in installments plus interest.

(3) Investment trusts

These are institutions whose business is buying shares from one company to another. The members of the investment trust pay in their shares and the management uses these funds to buy shares from different prosperous firms. In other words these institutions aim at spreading the risk of investment. They receive dividends which are used to pay dividends to heir members (shareholders)

(4) Insurance companies

These are financial institutions whose operations are based on the principle of “pooling of risk” people who insure contribute to a common fund (known as the pool” but of which payments are made to those who suffer loss. This money can be lent to other institutions or individuals who wish to borrow money

(5) Stock exchange market

This is a market for old shares. It is a place where one can buy or sell old shares or government securities. A member of public who wishes to buy or sell shares goes through a stock broker. The stock broker deals with a jobber who is the actual buyer or seller of shares. When a stock broker approaches a jobber, he asks him to quote his prices the jobber quotes two prices of which one is slightly higher than the other. The high price is his selling price and the lower is his buying price, the difference is known as the jobbers turn. The broker earns a commission for his services.

(6) Development banks

These specialize in lending medium and long term finance for development purposes which may not be possible with commercial banks. They perform the following functions:

Macroeconomics notes

- (i) Lending money for development projects
- (ii) Evaluating investment opportunities
- (iii) Mobilizing funds especially from abroad.

COMPARISON BETWEEN NON- BANK FINANCIAL INTERMEDIARIES AND COMMERCIAL BANKS

- (1) Non-banking financial intermediaries are merely go between lenders and borrowers where as commercial banks are more than that i.e. offer more services.
- (2) Non bank financial intermediaries lend money deposits with them only i.e. they cannot create credit where as commercial banks can loan money created through thin air.
- (3) Non-bank financial intermediaries do not offer cheque facilities where as commercial banks doffer money transfer facilities or services e.g. by way of cheque.
- (4) Some non- bank financial intermediaries can convert the funds offered to them into liquid very easily i.e. the funds offered to them are very liquid where as commercial banks tend to keep some of their funds in long term investment.

THE NEED FOR NON- BANK FINANCIAL INTERMEDIARIES

Non-bank financial intermediaries bridge the gap left by commercial banks in a number of ways.

- (1) Commercial banks may not mobilize enough savings for borrowers due to a limited number of depositors.
- (2) Commercial banks may not lend for a long period of time necessary for development projects.
- (3) With non-bank financial intermediaries specialization is possible e.g. post office savings bank concentrates on collecting very small savings, building societies concentrate on a particular type of investment e.t.c.
- (4) Non-bank financial intermediaries provide liability by widening the choice of assets and liabilities open to both borrowers and lenders.
- (5) Commercial banks may not be wide spread especially in rural areas, post office savings banks and savings bank and savings and credit societies may be found operating in deep rural areas.
- (6) Non-bank financial intermediaries can facilitate savings i.e. they can encourage the spirit of thriftiness e.g. the post office savings bank and the co-operative savings societies.
- (7) In case of a development bank, it can carry out feasibility studies and can mobilize money from a broad for development.

THE UNEMPLOYMENT PROBLEM

The Concepts of Full Employment and Unemployment

Full Employment

This is a situation in an economy where al resources are fully employed and every person who wants to work has a job. This is a goal which most economies desire but it is difficult to attain. In the present day, most economies have varying degrees of unemployment.

Macroeconomics notes

Unemployment

This is a situation in an economy where there are people who wish to work at the on-going wage rates but they are not working because there are no jobs for them.

Unemployment is a major economic problem for any economic and is harmful for economic, social and political stability of any country. It is therefore desirable to identify the causes of unemployment in the economy and device appropriate measures to remove the unemployment.

TYPES OF UNEMPLOYMENT

The main types of unemployment are:-

1. Seasonal unemployment
 2. Frictional unemployment
 3. Keynesian unemployment
 4. structural unemployment
 5. Disguised unemployment
 6. Open unemployment
 7. Technological unemployment
- Other minor types of unemployment include
8. Voluntary unemployment
 9. Residual unemployment
 10. casual unemployment

1. Seasonal Unemployment

This arises because of the seasonal character of a particular productive activity so that people become unemployed during certain seasons e.g. people working on farms during the dry season from seasonal unemployment.

Also people working on road construction, fruit pickers, e.t.c. suffer from this type of unemployment.

2. Frictional Unemployment

This arises when people are temporarily out of work because of lack of perfect mobility of labour both occupationally and geographically. People are between jobs.

In a growing economy where some industries are growing and others are declining, some volume of frictional unemployment exists. This is because;

(a) it takes some time for an employee (worker) to shift to new places where there is demand for his services.

(b) It takes some time for the workers to learn a new trade.

This type of unemployment exists when there is demand for labour but workers are not for the jobs or are not in the right place.

3. Keynesian Unemployment

This is also called cyclical or mass unemployment. It arises due to the deficiency of aggregate effective demand to maintain the current level of production. It arises due to too much capital for a short while in relation to demand for goods and services. When aggregate effective demand of the community is not sufficient to absorb the

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entire output of the economy that can be produced with the existing capital, producers will begin to lay off some workers so that they can produce only that which can be bought. This type of unemployment is commonly found in developed countries.

4. Structural Unemployment

This is called Marxian unemployment or long-term unemployment. In this situation people lack jobs but the sorts of jobs available do not fit them. It is similar to frictional unemployment except for its long term nature. It arises due to structural changes in the economy such as:

- (i) When there is long term decline in demand for certain products.... Due to changes in consumer taste or introduction of substitute goods.
- (ii) When the resources get exhausted
- (iii) When the people affected in the declining industries consists mainly of the elderly people who cannot easily adopt new skills.
- (iv) When there is a rapid population growth which is not matched by the increase in capital.

This type of unemployment is commonly found in LDCS with deficiency of capital to absorb the growing labour force.

5. Disguised Unemployment

This occurs when the marginal productivity of labour is zero or below zero. In agriculture it occurs when land cannot absorb the increasing population. Work is shared out among many workers each working less hours. In this case some workers can be withdrawn without a fall in output. It also occurs when people are engaged in full time but socially unnecessary activities though well paying e.g. hawking.

6. Open Unemployment

This is also called urban unemployment. This occurs when people who are suffering from agricultural under-employment or disguised unemployment come to the urban areas where they expect to find job opportunities but instead do not find employment at all. Instead of being disguisedly unemployed they become openly unemployed. Therefore this type of unemployed can be said to arise from urban migration.

CAUSES OF URBAN MIGRATION

- (a) High expected income- there is a tendency for labour to migrate from rural areas to urban areas after weighing the urban income compared with the income in the rural areas. Urban unskilled labour is over-valued while rural unskilled labour is under-valued.
- (b) Probability of getting a job - People migrate from the rural areas to the urban areas because the probability of getting a job in the urban areas is higher than that in the rural areas.
- (c) Cultural factors –people move to urban areas because of the social facilities in the urban areas which may not be available in the rural areas e.g. casinos (cinemas), good hospitals, good schools, night clubs, electricity, piped water, e.t.c. these things cause rural urban migration.

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- (d) High rate of population growth in the rural and urban areas – those in the rural areas due to high pressure on land move to the urban areas.
- (e) Nature of urban jobs- urban unskilled jobs are preferred to the tedious tilling of the land which is physically much demanding.

Solutions to Open Unemployment

- (i) Lower real wages in the urban sector- this can be done by allowing inflation to proceed without adjusting wages. It reduces the wage differentials.
- (ii) Set up a ceiling on wages and salaries i.e. set up maximum wages.
- (iii) Use labour intensive technology or intermediate technology especially in the agricultural sector so that more people can be absorbed on the farms.
- (iv) Increase tax on income of urban employees.
- (v) Raise rural income by lowering taxes in rural areas and increasing prices of agricultural products.
- (vi) Encourage greater rural sector output by increasing the price of agricultural products.
- (vii) Create more job opportunities through rapid industrialization
- (viii) Make tripartite agreements i.e. agreements between the government, trade unions and employers. The government should agree to lower taxes and give subsidies to producers, the producers should agree to employ a certain number of workers and the trade unions should accept a certain amount of wages.

7. Technological Unemployment

This arises due to the use of inappropriate technology e.g. the use of capital intensive technology at the expense of labour intensive technology.

LDCS when seeking assistance from LDCS readily find capital intensive technology available and it accounts for some degree of unemployment. This is because LDCS have plenty of labour and requires labour intensive technology or intermediate technology.

Minor types of unemployment

8. Voluntary Unemployment

This is where people are staying out of work although there are jobs for them. Their reason of being out of job may be because:

- a) the prevailing wage and conditions of service are unsatisfactory
- b) they are waiting for better opportunities
- c) they are living on accumulated earnings
- d) they have got political differences

9. Residual Unemployment

This occurs where people who on account of their mental or physical disability are of low standard of efficiency that few occupations are open to them

10. Casual unemployment

This occurs when people are temporarily out of work because of the casual nature of their work e.g. car washers, builders, e.t.c. suffer from this type of unemployment whenever the contract engaged into its completed.

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CONSEQUENCES OF UNEMPLOYMENT

1. it leads to low standard of living
2. it leads to a decline in moral standards e.g. can lead to an increase in the rate of prostitution
3. It can lead to an increase in the rate of crime.
4. It leads to a decline in the rate of saving because of an increase in the dependency ratio. Low savings leads to low investment, low investment leads to low production. Low production leads to low income hence a high rate of poverty.
5. Unemployment means low effective demand and this can encourage greater production leading to a decline in national income.
6. It leads to a high pressure on public services making the cost of maintaining them very high e.g. public hospitals, public schools, e.t.c.
7. When the bulk of the population is unemployed the tax base of the government will be small and the government will not be able to raise adequate revenue to meet its recurrent and development expenditures.
8. Because of high rate of crime arising from unemployment the cost of maintaining security and fighting crime will be high.
9. It can result in political instability. The unemployed may feel that the present government is responsible for their unemployment and may therefore advocate for forceful change of the government in the hope of having a remedy to their problem.

General Solutions to Unemployment Problem in LDCs

1. The government should institute sound fiscal and monetary policies to encourage savings and investments so that there can be a faster rate of capital formation for the purpose of enlarging employment opportunities.
2. There should be state participation especially in areas where private entrepreneurs do not find profitable to undertake.
3. Introduce population policies to check rapid population growth.
4. Attract foreign investors by improving the investment climate e.g. giving tax holidays, allowing repatriation of capital and remission of profits.
5. Change the education system. The education system should be geared to development of skills rather than imparting theories. It should include practical subjects like agriculture.
6. Encourage migrations from high density areas to low density areas.
7. Use more labour intensive technology and intermediate technology.
8. Promote self employment by aiding people with the initial required capital.
9. diversify the production of the economy i.e. there should be production of a variety of both agricultural and industrial products and this will result in employment of a large number of people.
10. Transform the rural areas so that rural urban migration can be reduced. There is need to provide social services such as roads, schools, hospitals, e.t.c. in the rural areas.
11. Improve on marketing, set up settlement schemes and irrigation schemes in order to encourage settlement in rural areas as well as production through out the year.

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12. Decentralize the industries. Industries should be established in various parts of the country so that the jobs may be close to the people.
13. Device alternative jobs e.g. set up cottage industries for seasonal and casual workers.
14. Train the physically disabled and create appropriate employment opportunities for them
15. Set up employment bureau in various parts of the country so as coordinate job seekers and employers.
16. Introduce policies that will enlarge the size of the economy e.g. trade liberalization policies, price decontrol policies, privatization policies e.t.c.

QUESTIONS

May 1999

1. (a) Explain any four major types of unemployment experienced in your country.
(b) Discuss ways and means of alleviating the unemployment problem in developing countries
(c) Briefly explain the concept of “Philips curve”

December 1997

2. (a) With the use of appropriate examples distinguish between voluntary and involuntary unemployment.
(b) Discuss the nature of unemployment problem in third-world countries showing ways in which under-utilization of labour is manifested in these countries.

December 1996

3. “Unemployment is one of the major economic problems facing most of the developing countries” explain its major causes and suggest some possible economic policies that these countries would adopt and implement in order to reduce it.

June 1996

4. (a) Define the term rural-urban migration
(b) Explain the consequences of high rate of rural –urban migration and give specific measures which would be taken to contain the phenomenon.

June 1995

5. (a) Explain the different types of unemployment.
(b) List in point form some economic measures that may be taken in order to reduce the high unemployment rates in developing countries.

December 1994

6. (a) Despite the high and rising levels of urban unemployment, large numbers of unemployed people continue to migrate from rural areas to the urban centers, state and explain the reasons for this state of affairs in developing countries.
(b) List in point form the steps that economic planners in developing countries should take to minimize this problem.

June 1993

7. Why is unemployment an issue of concern in development planning? What are the main causes of this problem? Explain the measures that may be taken in a developing country to reduce the consequences of the problem.

November 1990

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8. One of the most topical issues currently in unemployment. Briefly but clearly explain the causes of unemployment and measures that may be taken to ease off the problem.

POPULATION

Def. population refers to the number of people living in a given area at a particular time. Population supports the economy by providing labour services and market for the products. The economy in turn gives the population the goods and services produced. The study of population trends is a very important study in economic analysis. The study of population has been conducted under two popular theories. These are:-

1. The Malthusian theory
2. The optimum population theory.

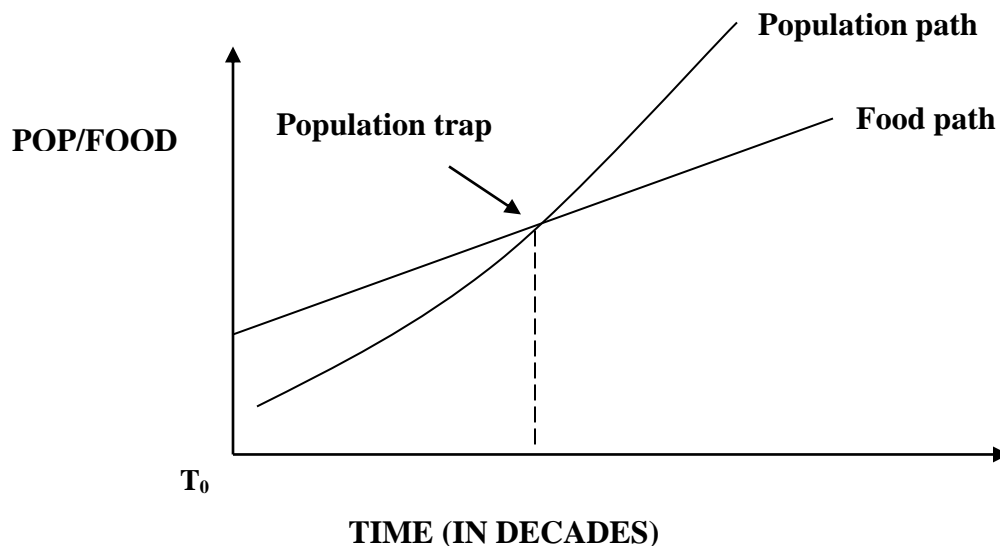
1. MALTHUSIAN THEORY

Sir Robert Malthus wrote an essay on population in 1798 and modified it in 1803. Malthus feared that England was headed with disaster because population was increasing more rapidly than ever before due to improvement in medical services and living standards. This rapid increase would result in food shortage. Malthus based his theory on the law of diminishing returns.

Malthusian theory has got 4 propositions:

1. That food is necessary for life and exercises a check on population. In other words population is necessarily limited by means of subsistence.
2. That human population increases at a popular rate than the food production i.e. that man's reproductive ability exceeds his ability to produce food. Population grows at a rapid geometric progression (2, 4, 16, 32, 64) while food increases at a slow arithmetic progression (8, 16, 24, 32, 40, 48). According to Malthus after some time population growth will surpass the food increase and the excess population will have to die of starvation. He calls such a time the population trap.

Illustration



Macroeconomics notes

3. Population always increases when the means of subsistence increase unless prevented by the strong checks.
4. That there are two strong checks that may work to check population increase. These are:
 - (i) Preventive checks
 - (ii) Positive checks
- (i) **Preventive checks** – this work by reducing the birth rate. They are applied by man himself through birth control. They include avoidance of marriage, self restraint during marriage life, family planning e.t.c.
- (ii) **Positive checks**- this reduce the population by increasing the death rate. They are applied by nature itself. Positive checks occur through wars and epidemics.

Criticisms of the Malthusian Theory

1. The gloomy forecast of suffering as predicted by Malthus has never occurred in Western Europe.
2. With improvement in transport food was imported into England and other European countries from the new lands i.e. from America, Australia, New-Zealand, e.t.c.
3. the theory did not take into account the discovery of high yielding varieties of crops i.e. the green revolution
4. Living standards have never fallen below subsistence level in western Europe
5. The theory was based on the law of diminishing returns which can now be post-poned by use of fertilizers, irrigation e.t.c.
6. Food and population have never grown at progression predicted by Malthus i.e. the arithmetic and geometric progressions.

Validity of Malthusian Theory Today

1. Preventive checks are used to day e.g. late marriages, family planning e.t.c. are being practiced.
NB
Malthus is infact said to be the father of family planning
2. There is high death rate in LDCs due to mal-nutrition and under- nutrition.
3. There is a high rate of poverty and low standards of living prevailing in LCDs.
4. There are communal quarrels, clashes, wars and land disputes.
5. LDCs are not being self sufficient in food production. They are importing food from outside to supplement on what they have.
6. There is use of marginal land and diminishing returns are taking place especially in agriculture.

Quiz

Discuss the Malthusian theory of population. Is it applicable to your country?

2. Optimum population theory (modern theory of population)

Optimum population is defined as the ideal or the rights size of the population which matches with the resources. It is that size of population existing in a country where percapita income is highest. If population exceeds the optimum size per capita income will again fall. The optimum population theory is optimistic about population. It conducts

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its study of population from the development point of view. It has no fixed maximum population.

It all depends on the availability of resources for population to work on. If the resources are high the optimum size of the population will also be high and if the resources are less then the optimum size of population will also be low.

According to the optimum theory of population, any population below the optimum size is regarded as under-population while any population above the optimum is regarded as over-population.

Under- population

Is the population below the optimum size. The number of people is not sufficient for the given resources and as such income per capita is low. Income per capita will be low because:-

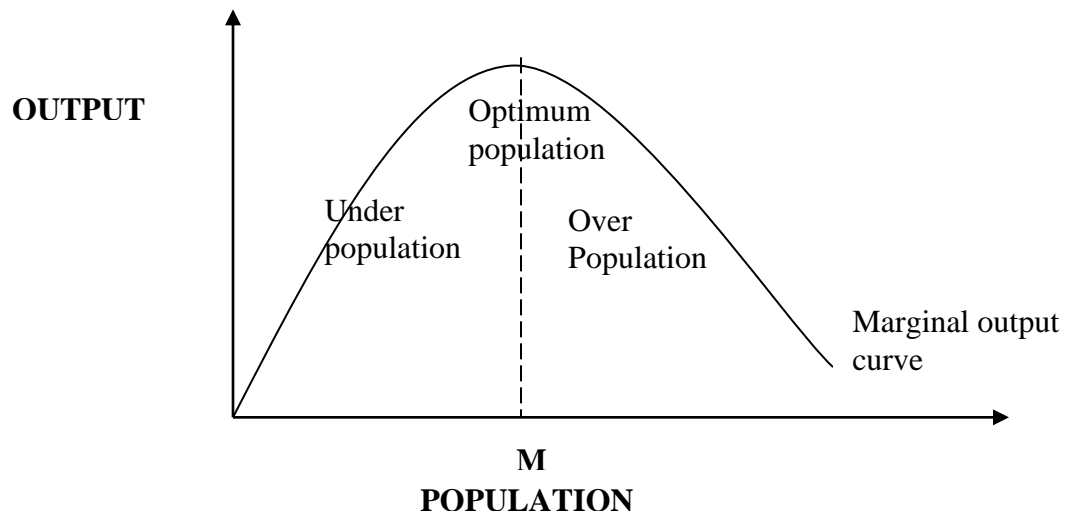
1. The resources will not be fully utilized as the number of people is too small to work on the available resources.
2. The small population will offer a small market for the products discouraging greater production.
3. The smallness of the population will limit the possibilities of specialization.

OVER-POPULATION

This is the population above the optimum size. There are too many people for the available resources and as such income per capita (output per man) is low. Income per capita will be low. Because:-

1. The available resources will be shared among many people and each will have less resources to work upon.
2. There will be over-utilization of the resources hence the law of diminishing returns will set in.

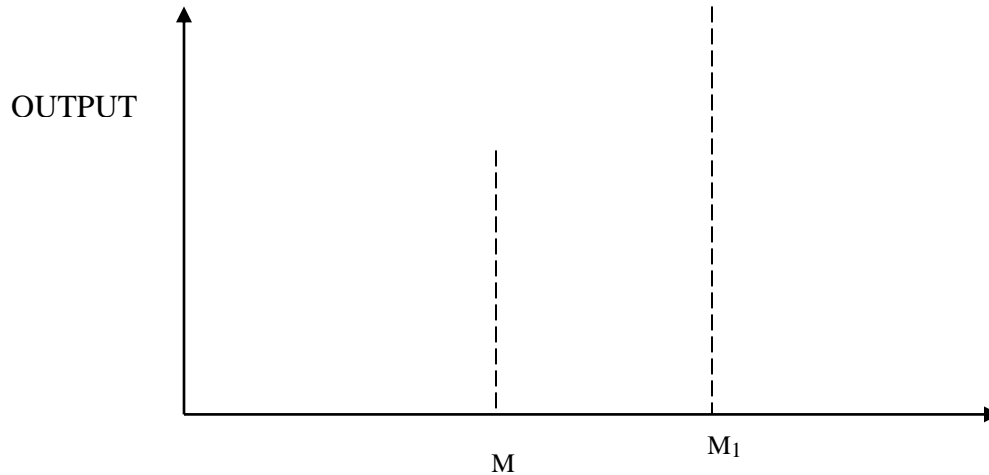
Graphical illustration of the concept of optimum population



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In the above diagram OM is the optimum size of the population. Beyond this point is over population and below this point is under-population.

The optimum size of the population is however not fixed. It depends on resources and technology. When resources increase or technology changes, the optimum size will also change as shown in the illustration below:-



In the above diagram an increase in resources and advancement in technology changes the optimum population from OM to OM₁.

Indicators of Overpopulation (Criteria for Overpopulation)

1. Falling per capita income and falling living standards as the population increases.
2. Persistent unfavourable balance of trade due to increased importation especially food.
3. Operation of positive checks i.e. wars, famine, diseases e.t.c.
4. Unemployment – in LDCs particularly the disguised type.
5. High birth rate and high death rate.
6. high level of migrations both rural-urban and rural –rural migrations

QUIZ

- (a) What do you understand by over-population?
Is your country overpopulated?
- (b) Expound on the concept of optimum population

Comparison of Malthusian and optimum theories

1. Malthusian focused his attention on food while the optimum theory on development.
2. In Malthusian theory, there is rigidity fixed maximum population while in the optimum theory; there is no fixed maximum population. It all depends on improvements in technology and increase in resources.

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3. Malthus was pessimistic about population i.e. he viewed the increasing population as a disaster. While the optimum theory (modern) is optimistic about population i.e. it views the increasing population as a resource as long as technology is advancing and resources are increasing.
4. In Malthusian theory over-population is indicated specifically by positive checks i.e. famine, wars, diseases, e.t.c. while in optimum theory over-population is indicated specifically by falling per capita income.

Factors Affecting Population Size and Growth

1. Natural increases (natural rate of population increase)
This is an increase in population resulting from the increase in number of births. Natural population increase is the difference between the birth rate and the death rate.
2. Population migration
This refers to an increase in population resulting from people coming into the country. It is the difference between immigration and emigrations (going out) if immigrations then the population size will increase.
Migrations are influenced by political instability, wars and economic opportunities.
3. Fertility rates
This refers to the rate at which a person is able to get a child and the number of children the person can ultimately bear in her life span. Fertility rate is influenced by:-
 - (i) Marriage age- a person who marries at an early age has more chances of having more children than one marrying at an advanced age.
 - (ii) The ratio of adult population
 - (iii) The desire for higher standards of living. This may lead to family planning.
 - (iv) The sex ratio
 - (v) Entertainment outside home
 - (vi) Availability of electricity

What is meant by natural population growth?

Population Factors Affecting Economic Development

1. Population growth
2. Population density
3. Population distribution
4. Population quality
5. Population structure

1. Population Growth

Population growth is the rate at which population increases every year. Rapid population growth can be detrimental to economic development especially if the number of people will exceed the size of resources in the economy. If the rate of population growth is higher than the rate of economic development then income per capita will decline and the rate of economic development will slow down. Furthermore a rapid population growth arising from natural increase consists mainly of the young, population which leads to problem of high dependence ratio which affects the level of saving and investment.

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2. Population Density

This refers to the number of people per square area. High population density may lead to the following problems:-

- (i) Falling per capita income because resources especially land are not sufficient for the population.
- (ii) deterioration of natural resources
- (iii) Pollution and overcrowding affecting productivity of man.
- (iv) Land fragmentation and the land disputes

Low population density leads to:-

- (i) Under-utilization of resources especially land.
- (ii) High transport costs.
- (iii) Difficulty of trade due to smallness of market.
- (iv) Low degree of specialization hence low marginal productivity of labour.
- (v) Subsistence production due to smallness of the market.
- (vi) High cost of social infrastructures e.g. schools, hospitals, roads e.t.c.

3. Population Distribution

This refers to the outlay of the population of the country. It refers to how the population is spread. The population of a country can be evenly spread or there can be sparse population in some parts of the country and dense population in other parts of the country.

In LDCs there is a tendency of high population to concentrate in urban areas with sparse population in rural areas. The concentration of the population of a country in the urban areas may lead to the exploitation of the rural dwellers by the urban dwellers. This is because it is the rural dwellers who produce cash crops which earn foreign exchange used in importing goods and services which are oftenly consumed by the urban dwellers who may even be unemployed or suffering from disguised unemployment.

In general population distribution is an important factors as far as economic development is concerned in the following ways:

- (a) Sparse population may lead to underutilization of resources.
- (b) High density population may lead to over-utilization of the resources.

Therefore an evenly spread population is desirable for the proper utilization of the resources of a country.

4. Population Quality

This refers to the level of productivity of the population. It is achieved by acquisition of skills and proper education.

In LDCs the equality of the population is generally low. Man as a productive agent is less productive. Low population quality is usually due to low education and lack of skills.

Low population quality undermines economic development because man as an economic resource is not effectively utilized.

5. Population Structure

This refers to the age and sex composition of the population. It is a break-down of the population into different age-groups.

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In LDCs the bulky of the population consists of the young. About 40% of the population is below 15 years of age the population structure consist of 3 age groups. These are:-

- (i) The youthful population (0-14 yrs)
- (ii) The working age (15-64 yrs)
- (iii) The declining population/ aged population (above 64 yrs)

If the population structure consists of more youth the population and declining population , then the rate of economic development of such an economy will be in the following ways:-

(a) Problems of youthful population

- (i) High dependence ratio- working age-group will have to work harder to maintain the young population.
- (ii) There will be low savings and investment on the part of the working population.
- (iii) High investment on social services e.g. education and health reducing investment in direct productive projects e.g. industry and agriculture.
- (iv) The problem of unemployment sets in when a large number of the youth enter the labour force and begin to demand jobs.

(b) Problems of the aged/ declining population

- (i) Fall in demand caused by fall in population. This may lend to unemployment
- (ii) High expenditure on social services especially on medical services, pensions and on homes for the elderly.
- (iii) Low efficiency the elderly people are slow and inefficient.
- (iv) Structural unemployment may also set in due to decline in certain industries e.g. the firm and toy industries.
- (v) The declining population can result in a shortage of labour reducing the productive capacity of the economy.
- (vi) The declining population may worsen the BOP problem due to low production.
- (vii) It causes a high burden of public debt on the working population.
- (viii) Rapid declining population may lead to under-utilization of resources especially the social infrastructures.

NB: It should however be noted that:-

- (a) Declining population can result in reduction of unemployment
- (b) Declining population can lead to efficient use of resources as social services such as hospitals and schools will not be over-strained and there will be sufficient resources for the remaining population.

The Nature of Population Problems in Kenya

Population problems facing Kenya are the following:-

1. High population growth rate- Kenya's population growth rate is very high due to high birth rate and a relatively low death rate. The population growth rate is about 4% per annum. There is also a large number of foreigners coming to Kenya as compared to Kenyans leaving the country. The large number of foreigner's living in Kenya consists of refugees. The rapid population growth rate has out pared the rate of

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economic growth and has contributed to a decline in the rate of economic growth and development.

2. Population structure – the bulk of Kenya’s population consist of the young and the aged. The young are approximately 49% and the aged 5%. This has caused a serious strain on the working population (see notes on problems of youthful and declining population)
3. Poor population distribution- the bulk of Kenya’s population is found in urban areas while the rural areas are sparsely populated. This has resulted in the exploitation of the rural population by the urban population (refer to notes on population distribution).
4. High population density – some parts of Kenya have got a high population density e.g. Western province, Central province, Nyanza province while some other parts of Kenya have got low population density e.g. the Rift Valley province.

In the density populated areas there is the problem of land fragmentation, land disputes, use of marginal land, cultivation of quick yielding crops at the expense of cash crops leading to loss of foreign exchange, rural-urban migration and rural to rural migration e.t.c. there is disguised unemployment or under- employment in this particular areas.

On the other hand in the low density population areas there is under-utilization of resources and a high cost of infrastructures.

5. Low population quality – the bulk of Kenya’s population is uneducated and even those who are educated, the majority do not possess relevant skills for exploitation of the economy’s resources. The marginal productivity of labour in Kenya is therefore very low and so per capita income is low.

Factors contributing to high population growth in Kenya

1. Decline I death rate due to improved nutrition, better health services and higher standards of living
2. Ignorance about family planning
3. An increase in the fertility rate
4. Increased early active sexual habits among the adolescents.
5. Traditional believes – most Kenyan tribes believe that man is not a man if he has only one wife. This makes some men to marry many wives and end up having very large families.
6. Religious believes – Christians believe in filling the world.
7. Most rural families prefer a large number of children because children are regarded as a kind of insurance against old age. They are also regarded as a source of labour.
8. Low standards of living. This has made some families to produce many children because to them children will serve as a source of income
9. Some people produce a large number of children to guard against infant mortality
10. A high influx of refuges – Kenya’s stable political climate has attracted many refugees from the surrounding countries.

Merits of an increasing population

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1. An increasing population is mainly composed of young people who are energetic and innovative and ready to accept change. The result is greater mobility of labour and increased economic growth and development.
2. Population growth provides the necessary force to increase output especially when labour is scarce.
3. A large employed population increases the size of the market thereby acting as a catalyst to further growth of the economy.
4. A large population may be of military advantage

Population Policies

The policy measures that can be adopted to control population include:-

1. Family planning programmes – this involves spacing of children and getting them when required. People should be educated of this through family planning programmes.
2. Persuasion of the people to have smaller families. This can be done by communication both informally and formally through the media.
3. Deliberate manipulation of economic incentives and disincentives to have children. This can be done by reduction or elimination of maternity leaves, by imposing financial penalties by people having a high number of children through high cost of education, high cost of health services, e.t.c.
4. Direct force –people may be forced to have small families through state legislation. This may involve sterilization.
5. Giving economic incentives to small families such as low level of taxation free education, free housing, free medical care, loans e.t.c. this measure has been very much used in china.
6. Setting minimum age limits before which people are not allowed to get married. In China women are not permitted to get married before the age of 23 years and men before the age of 26 years.
7. Imposing strict legislation on pregnancies outside marriage.
8. Reducing infant mortality through expanded public health programmes and better nutrition thereby increasing life expectancy of children.
9. Improving family income levels by creation of more employment levels and by paying people good wages and salaries. This will make them desire material; wealth hence desiring child quality rather than quantity.
10. Development of old age social security system outside the extended family network so as to eliminate economic dependence of parents on their children.
11. Setting up settlement schemes and resettling people in highly populated areas to the settlement schemes. Also the easing of migration procedures can make people to freely move outside the country to seek residence elsewhere.

The theory of demographic transition (population growth in historical perspective)

Demographic transition is the study of population trends from the historical outlook (perspective)

In historical perspective, the populations of all nations of the world have had three characteristically similar stages of growth:-

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However demographic transition in MDCS has not been the same as that of LDCs although in both economies, the three stages have been maintained.

Demographic transition in MDCS

Stage 1

In MDCS stage 1 begins from around 1800 to 1850. This is a period before economic modernization in those countries.

It is observed that during this period the population of these countries was very stable or was growing very slowly. This is because the death rates were high and the birth rate was also high.

Stage 2

This is a period between 1850 and 1910. It is a period when economic modernization set in and there was improved public health-techniques, improved diets or nutrition, improved incomes, e.t.c. these improvements caused a decline in the death rates but the birth rates remained high. The population therefore increased greatly.

Stage 3

This is a period after 1910. In this stage the forces of economic modernization and development caused the fertility levels to decline leading to decline in the birth rates still remaining low. This resulted to almost no population growth.

Graphical illustration

Demographic transition in MDC's

BIRTH RATE & DEATH RATE	STAGE I	STAGE II	STAGE III
	Stable Growth	Rapid Growth	Declining Growth
	1850	1850	1910

Demographic transition in LDCs

The study of demographic transition in LDCs begins from the period 1900.

Stage 1

This period is placed between 1900 and 1950. In this period there was economic backwardness in LDCs i.e. there were poor medical facilities and other economic facilities so the death rates were high but the birth rates were also high. The population was therefore growing very slowly or was almost stable.

Stage II

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This period is placed between 1950 and 1965, in this stage there was an improvement in economic development in LDCs. There was increased application of highly imported medical technology which leads to decline in the death rate but the birth rates remained high and there was a rapid growth in the population.

Stage III

This is a period after 1965. In LDCs the third stage is characterized by increased level of poverty due to the rapid growth in population with a slow rate of economic growth and development. Because of increased poverty it was difficult to improve the living conditions. So the birth rates still remained high with already fallen death rate. The population growth rate therefore remained high.

	STAGE I	STAGE II	STAGE III
BIRTH RATE & DEATH RATE	Stable Growth	Rapid Growth	Rapid Growth

Why should demographic analysis and information be of interest to Kenyan planners

In planning economic planners endeavor to achieve certain economic goals after some period of time, e.g.-

1. Employment for all
2. Education for all
3. Accessibility to medical facilities by all citizens
4. Good housing for all
5. Accessibility to water electricity, good roads and communication facilities by all
6. Higher standards of living by all citizens
7. Greater level of saving and investment e.t.c

It should however be noted that these goals cannot be achieved if the size of the population exceeds the size of resources available in the economy because this will represent overpopulation. With overpopulation per capita income will be low and all the objectives of planning may not be achieved.

Demographic analysis and information about LDCs indicate that LDCs have a rapidly growing population Kenya inclusive. And unless the policy makers institute population measures to check these rapid population growth in Kenya, overpopulation will impede the planning objectives.

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INFLATION

Inflation is a persistent or continuous rise in the general level of prices in the economy in aggregate. It involves a rise in prices of all or of most commodities may not just a rise in price of one commodity

Inflation can also be defined as a situation in the economy whereby aggregate demand is persistently ahead of aggregate supply leading to an increase in the general level of prices.

Inflation is also sometimes described as a situation in the economy where there is so much money chasing far too few goods leading to the rise in the general level of prices.

TYPES OF INFLATION

Inflation is often classified into two categories:

- According to the degree on intensity
- According to cause

1. According To Degree of Intensity

According to this inflation may be

- (i) Creeping inflation
- (ii) Moderate inflation
- (iii) Rapid inflation
- (iv) Hyper inflation

(i) Creeping inflation

This is also referred to as gradual inflation. It is a mild type of inflation. It occurs when the rise in prices is between the rate of 1% - 3% p.a. with this type of inflation money still fulfils its functions. It is a desirable type of inflation as it can stimulate production. It is caused by a mild increase in demand which is not matched by an increase in supply.

(ii) Moderate inflation

This occurs when prices rise between 4% - 6% p.a. this rate is not as desirable as the creeping type and may require steps to control.

(iii) Rapid inflation

This occurs when prices rise at a rate slightly above 6% p.a. this rate is dangerous and requires quick attention to control it.

(iv) Hyper inflation

This is also known as galloping or run away inflation. This occurs when prices rise at a very high rate as it happened in Germany after the First World War in 1920. Prices at the end of the year are several thousands fold. It is a wild type of inflation. Under this type of inflation money ceases to fulfill its functions such as being a store of value and medium of exchange. People lose confidence in the currency's ability to carry out its functions. The only possible cure of this type of inflation which normally results from a large increase in money supply is to withdraw the currency and issue a new one as was done in Uganda in 1987 after the collapse of the Obote II Regime.

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2. According To Cause

According to this, inflation may be:

- (i) Demand- pull inflation
- (ii) Cost- push inflation
- (iii) Bottle-neck inflation
- (iv) Imported

(i) Demand-pull inflation

This occurs when there is a rise in aggregate demand which cannot be met by the current available supply of output leading to a rise in the general level of prices.

The rise in demand may be due to:

- (a) Increase in money supply
- (b) Increase in disposable income
- (c) Increase in foreign demand for domestic exports
- (d) Increase in population
- (e) Increase in capital accumulation at the expense of consumer goods.
- (f) Increase in the community's aggregate spending on consumption and investment

NB: In MDCS demand - pull inflation occurs when a country is at full employment level and aggregate demand goes up and it becomes impossible to increase output due to lack of labour; thus raising the price of the available output.

But in LDCS where there exists volume of unemployment, demand-pull inflation occurs due to deficiency of capital to be matched with the labour for increasing output and not due to lack of labour.

(ii) Cost-push inflation

This arises when prices are forced upwards by increase in prices of factors of production which does not arise from excess demand. The high cost of production is transferred on to the consumers by the producers by way of high prices.

The rise in cost of production may be due to:-

- (a) A rise in wages, without any rise in productivity hence wage-push inflation.
- (b) Rise in normal profits i.e. entrepreneurs desiring to get high profits hence profit-push inflation.
- (c) Increase in indirect taxes on raw materials and capital goods. This also rises the prices of materials and capital goods raising the cost of production.

(iii) Bottle-neck inflation

This is also known as structural inflation or scarcity inflation. This occurs when prices are pushed up due to decline or slow rate of growth in the supply sector e.g. sluggish growth of the food production sector or decline in the industrial sector owing to war due to lack of raw materials, spare parts, skilled man- power, managerial abilities e.t.c. (i.e. structural break down in the economy)

Structural inflation is largely a problem of LDCs where supply rigidities exist in numerous forms which include:

a) Foreign exchange bottle-neck

Due to a slow rate of growth of the export sector and a decline in some parts of the export sector there is acute scarcity of foreign exchange limiting importation hence pushing up the prices of the available output.

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- b) Failure of agricultural production due to slow growth rate as compared with rapid growth rate of the urban population in general.
- c) The increasing gap between the demand for social and economic infrastructures and the resources available for providing them which forces the government into deficit financing hence, increasing the supply of money.
- d) Decrease in imports due to war or restrictions on imports due to unfavorable balance of payments problem.
- e) Speculative hoarding by producers, traders and middlemen in anticipating of further rises in prices.

(iv) Imported inflation

This arises when prices rise because of importation and sale of highly priced imported goods. It is caused by either:

- (i) Importing from a country which is experiencing inflation or
- (ii) Importing raw materials at very high prices.

(i) Importing from a country which is experiencing inflation

When the prices of imported goods are high, producers of local products will also push up prices of their products.

(ii) Importing raw materials at very high prices.

When the price of imported raw materials is high then the producers will transfer this high cost to the consumers by way of high prices.

- (b) Define inflation?
- (c) What are its causes?
- (d) What are major effects of continued inflationary conditions on the economy of the country?
- (e) What measures should a country take to limit this effects?

EFFECTS OF INFLATION

Inflation affects different groups of people in the economy and different economic aspects in different ways as follows:-

1. Workers

- (i) It leads to a fall in their standard of living as wages do not always change at the rate of inflation
- (ii) It leads to an increase in the supply of effort by workers in an attempt to maintain their current living standards which can lead to an increase in economic activities and production.

2. Peasants

- (i) It leads to a decline in their standard of living since prices of agricultural products tend to lag behind the rate of inflation
- (ii) It leads to an increase in the supply of efforts by peasants in an attempt to maintain their standards if living.

3. Pensioners

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It leads to a decline in the standard of living of pensioners since their incomes are not often revised at the rate of inflation.

4. Creditors and debtors
Inflation has adverse effects on creditors and favourable effects on debtors. Creditors get less in real terms when money is paid back while debtors part with less in real terms when paying the debts. It can therefore discourage financial lending.
5. Businessmen and manufacturers
These generally gain from inflation because while the selling prices are rising, their cost of production usually lags behind. For instance, wages and salaries are not immediately revised and rent and interest also remain almost the same. This can lead to higher investment from the increased profits.
6. Uneconomic use of resources
Inflation may lead to uneconomic use of resources because businessmen will be in favourable position despite their inefficiency. It allows inefficient businessmen to continue surviving and this kills the incentive to be more efficient.
7. Difficulty in planning
It is difficult to plan for the future since tomorrow's prices are substantially different from today's. This can lead to production without plan.
8. Saving
Inflation can lead to low saving because what is earned may all be consumed, or if one saves money will lose value. This therefore discourages financial saving. Low saving can adversely affect the economy as there will be low investment.
9. Investment
Investments shifts from productive activities e.g. manufacturing to non-productive activities e.g. housing.
10. Effect on international trade
High domestic prices reduce the volume of exports and increase the volume of imports leading to a balance of payments deficit.
11. Distribution of income
Income is redistributed away from workers and peasants making them more poorer to business groups making them more richer.
12. Consumption
Inflation leads to a fall in the level of consumption. Consumers now consume less goods and services which again discourages production.
13. Capital outflow
There will be a tendency for people to bank their money abroad depriving the economy essential capital and foreign exchange
14. It makes money lose value and people lose confidence in the currency. They will want to spend it as soon as they get it and this increases the rate of circulation which worsens the inflationary pressure. Money ceases to be a good store of value and a medium of exchange and a means of differed payments. People may start accepting other things as a means of payments or may prefer other country's currencies which may begin to circulate in the country. Other country's currencies will be good money and the domestic currency will be bad money.
15. Increase in output

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Rising prices may lead to more profits which encourage producers to produce more output.

CONTROL OF INFLATION

Most policies or measures to control inflation aim at reducing aggregate monetary expenditure taking the available output as given.

Inflationary measures include:-

1. The monetary policy
2. Fiscal policy
3. Physical (non-monetary policy)

1. Monetary Policy

This aims at reducing aggregate spending by controlling the cost and availability of credit. It is a policy adopted by the central bank whose implementation affects the operations of the banking institutions reducing the availability of credit.

During inflation the central bank will adopt a contractionary monetary policy so that the circulation of money in the economy reduces and then the price level will come down.

Contractionary monetary policy

1. Bank rates

The bank rate is raised and this makes commercial banks to raise their rate of interest as well which will discourage borrowing and the amount of money in circulation will reduce.

2. Special deposits with the central bank

The central bank will require commercial banks to keep some of their depositing in the central bank. This reduces the amount of money they have got to lend.

3. Valuable cash ratio

The central bank will require commercial banks to keep a high cash ratio in relation to deposits. This reduces the ability of commercial banks to create more credit.

4. Open market operations (OMO)

During inflation the central bank will sell government securities to the public which results in transfer of money from commercial banks to the central bank reducing the amount of money in the hands of the public and commercial banks.

5. Instructions to commercial banks

The central bank will issue instructions to commercial banks which if followed will lead to a reduction in the circulation of money in the economy.

6. Selective credit control

The central bank will identify priority projects which commercial banks will be allowed to finance only.

7. Margin requirement

The central bank will widen the margin requirement during inflation so that less money can be borrowed with the available securities

8. Rationing of credit

During inflation the central bank will lower the limit of money commercial banks can borrow from it. This makes commercial banks to be cautious with the amount of money they have.

2. Fiscal Policy

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This involves manipulation of taxes, public expenditure and public borrowing by the fiscal authority in order to regulate aggregate spending in the economy. It involves increasing taxes, increasing internal borrowing and decreasing

3. Physical policy

This is a non-monetary measure which involves:-

(i) Output adjustments

This involves

- (a) Increase in output
- (b) Decrease in exports
- (c) Increase in imports

These measures improve the available supply of goods at home.

(ii) Price and income adjustments

This involves

- (a) Price freeze i.e. controlling individual major prices e.g. price of sugar, price of unga, price of fuel, e.t.c.
- (b) Wage freeze i.e. controlling individual major wages to keep down costs. Low costs of production reduce the prices of end products.
- (iii) Organizational controls

This involves

(a) Rationing

In this case certain quantities are to be purchased by an individual for a given period of time e.g. 3 kg of sugar per family per week

(b) Reorganization of distribution channels

This may involve public ownership of major distribution channels e.g. cereal boards, national trading corporations (NTC s) and the use of chiefs and sub- chiefs to distribute essential commodities to the people.

QUESTIONS

1. (a) What is inflation
(b) Explain any two types of inflation and indicate clearly what are the main causes of each.
(c) Outline the economic effects of high inflation level
(d) Specify what policies should be adopted by a country experiencing high levels of inflation to bring it down.

June 1997

2. (a) examine the main causes and types of inflation in developing countries
(b) What measures can a government take in order to control inflation?

June 1996

3. same as June 1998

June 1995

4. same as June 1997

November 1992

5. Causes and measures of controlling inflation, effects of inflation

June 1992

6. (a) What is meant by an inflationary gap
(b) Causes and measures of controlling inflation

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June 1991

7. definition, causes, effects and solutions of inflation

November 1989

8. Causes, effects and solutions of inflation

Other questions

9. Explain how monetary and non- monetary measures may be used in controlling inflation in a country.

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INTERNATIONAL TRADE

Def: International trade is the exchange of goods and services among residents of different countries. It is trade among countries.

In the present day man's wants have become many and varied and he can no longer satisfy all of them out of his own production. He has therefore to trade with other people to obtain what he cannot produce himself.

A country, like an individual, cannot produce all her needs, so she has to trade with other countries if she has to satisfy more fully the increased wants of her people.

Division of International Trade

International trade is divided into bilateral and multi-lateral trade.

(i) Bi-lateral trade

It is trade carried out between two countries only e.g. between Kenya and Uganda.

(ii) Multi-lateral trade

It is trade carried out among many countries. It is this kind of trade that exists today in the world. It is hard to find two countries only trading between themselves.

Basis of International Trade

It is based on the principle of comparative advantage/ comparative cost.

The Principle of Comparative Advantage

The principle of comparative advantage was formulated by the classical economists and was supposed to answer two questions.

1. Why international trade takes place?
2. What gains it offers to participating countries?

It was supposed to show the superiority of free trade over protection and autarchy (isolation) and to demonstrate the gains from trade.

The theory of comparative advantage improved on Adam Smith's theory of absolute advantage

Absolute advantage

Absolute advantage exists in a country in production of a product when it can produce more of that product with a given quantity of resources than another country.

Example: Let us suppose that in country X to produce 1 unit of cloth requires 60 men/hour and to produce one unit of wine requires 80 men/hours while in country Y to produce 1 unit of cloth requires 80 men/hours and to produce 1 unit of wine require 60 men/hours.

i.e.

Product	Country X	Country Y
Wine	80 men/hrs	60 men/hrs
Cloth	60 men/hrs	80 men/hrs

In this case country X has absolute advantage over country Y in production of cloth while country Y has absolute advantage over country X in production of wine.

If the two countries specialized on the line of absolute advantage i.e. X to produce cloth and import wine and Y to produce wine and import cloth, it is found that X will use 60

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men/hours to produce 1 unit of cloth which it will exchange for a unit of wine and thus save 20 men/hours.

Y will also save 20 men/hours by using 60 men/hours to produce 1 unit of wine which it exchanges with one unit of cloth.

So both countries can be seen to have saved 20 men/hours which can be used to increase production of each commodity.

Recardo and Torrens later proved that even if one country has absolute advantage in production of both commodities it is still beneficial for both countries to specialize where they have got comparative advantage.

Comparative advantage exists in a country if the opportunity cost of producing one commodity rather than another commodity is lower in that country than in other country. Let us investigate this by an illustration.

Men/hours (units of labour) per unit of product without trade in a year

Product	England	Portugal
Wine	120	80
Cloth	100	90

This is Recardo's own example. He considers only two countries with only two commodities.

Before trade takes place the production of a unit of cloth in England is assumed to require the work of 100 men/hours in a year while a unit of wine requires 120 men/hours in a year. Both cloth and wine in England can be seen to utilize more labour than in Portugal where it takes 80 men/hours to produce a unit of wine and 90 men/hours to produce a unit of cloth.

Portugal can be seen in the illustration to have absolute advantage over England in production of both commodities.

Portugal can still benefit more comparatively speaking by concentrating on production of wine and importing cloth from England since this is where she has got comparative advantage.

For costs of 80 men/ hours Portugal will obtain cloth requiring 90 men/hours to produce domestically. It means she can save 10men/hours which she can use for increased production of wine.

On the other hand it will be in England's interest to specialize in production of cloth where she has got comparative advantage. For the cost of 100 men/hours she will obtain wine requiring 120 men/hours to produce domestically. So she too can save 20 men/hours which she can use to increase production of cloth. So by exchange of one to one terms of trade (1:1) the countries can be seen to benefit from trade.

The benefit from trade according to comparative advantage can also be shown by using the idea of opportunity costs.

In England

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1. The opportunity cost of producing one unit of wine rather than cloth (i.e. the sacrifice in terms of units of cloth which is made when a unit of wine is produced) is 1.2 units of cloth i.e.

$$\begin{aligned} 100 &= 1 \\ 120 &=? = \frac{120 \times 1}{100} = 1.2 \text{ units} \end{aligned}$$

2. The opportunity cost of producing 1 unit of cloth is equal to 0.833 i.e.

$$\begin{aligned} 120 &= 1 \\ 100 &=? = \frac{100 \times 1}{120} = 0.833 \text{ units of wine} \end{aligned}$$

In Portugal

1. The opportunity cost of producing one unit of wine rather than cloth is equal to 0.889

$$\begin{aligned} 90 &= 1 \\ 80 &=? = \frac{80 \times 1}{90} = 0.889 \text{ unit of cloth} \end{aligned}$$

2. The opportunity cost of producing 1 unit of cloth rather than wine is equal 1.125 units of wine.

$$\begin{aligned} \text{i.e. } 80 &= 1 \\ 90 &=? = \frac{90 \times 1}{80} = 1.125 \end{aligned}$$

So England can be seen to sacrifice less wine if she produces cloth but the sacrifice of cloth is greater if she produces wine. Therefore, England has comparative advantage in production of cloth and so should produce cloth and import wine.

On the other hand, it pays Portugal to specialize in production of wine since the sacrifice of cloth is less when she produces wine while the sacrifice of wine is more when she produces cloth. So Portugal has got comparative advantage in the production of wine and so should produce wine and import cloth.

What is the two countries gain from trade as compared to protection?

In the absence of trade the prices of the two commodities i.e. the value of a unit of each commodity measured in terms of the other commodity will be determined by their cost of production.

The following will be the non-trading prices.

In England

1. One unit of wine will exchange for 1.2 units of cloth
2. 1 unit of cloth will exchange for 0.833 units of wine.

In Portugal

1. 1 unit of wine will exchange for 0.889 units of cloth
2. 1 unit of cloth will exchange for 1.125 units of wine

Suppose trade begins between the two countries:-

1. For 1 unit of cloth England can obtain 1.125 units of wine in Portugal instead of 0.889 units which she will get at home so she gains 0.292 units of wine.
2. For 1 unit of wine Portugal can obtain 1.2 units of cloth in England instead of 0.889 units which she would get at home. So she gains 0.311 units of cloth.

Both countries are seen to benefit from international trade.

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Basis/ Assumptions of the Principle of Comparative Advantage

1. Existence of perfect competition
2. Full employment in all countries
3. Free trade without artificial restrictions like tariffs and quotas.
4. Absence of currency restrictions
5. The study is based on two countries two commodities
6. No transport cost.
7. No operation of the law diminishing returns
8. The opportunity cost ratios are constant

Criticisms of the Theory/ Principle of Comparative Advantage

1. Change in technology:
The theory of comparative advantage is static and does not take into account change in technology. Change in technology can make a high cost country a low cost one. E.g. acquisition of skills or improvement in the method of production can change comparative advantage
2. Development of infant industries
Infant industries need protection and if the theory of comparative advantage is strictly followed young industries will not develop.
3. Labour migration
The theory assumes that labour does not move yet labour can move to countries with high cost making them low cost countries.
4. No transport cost
The theory assumes that there is no transport cost yet this exists. By assuming no transport cost, a country can produce a commodity and yet the market is very far away.
5. Perfect competition
The theory is based on perfect competition which does not exist in reality. It assumes among other things, free mobility of factors of production which is not true e.g. if a country is predominantly agriculture and the theory say, it should specialize in industry, it is impossible to move all farmers, agricultural officers, hoes e.t.c. to industry.
6. Two countries two commodities
the theory is based on a world in which there are country X and country Y producing commodities A and B. if the world was composed of say Kenya and Libya and Libya specializes in production of petroleum and Kenya in production of pork, Kenya will of course import petroleum from Libya but she cannot export pork to Libya since it is Islamic country. This will force Kenya to produce something else which can be sold to Libya.
7. Full employment
The theory assumes that all factors of production are fully employed which is not true. There exist unemployed factors of production especially in LDCs (unemployed labour). These makes it difficult to determine on which line of production a country has got comparative advantage.
8. No currency restrictions

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The theory assumes that there are no currency restrictions; which is not true. In the first place currencies have to be exchanged and exchange rates among countries differ and fluctuate which hinder trade.

Secondly for economic and political reasons a country can restrict acquisition of foreign currency for importation of goods.

9. No artificial restrictions

The theory assumes that there are no artificial restrictions (barriers to trade); which is not true. Countries often impose tariffs and quotas on imports which prevent the free flow of goods and services among countries.

10. Volume of production

The theory is based on volume of production rather than value of production, e.g. with a given amount of resources, a country may produce 100 kg of coffee worth 100 dollars or 200 kg of sisal worth 50ndollars. According to comparative advantage theory, the country should concentrate on production of sisal but this earns it less foreign exchange.

11. Income redistribution

If for instance Kenya is growing coffee and tea and it is found out that comparative advantage in Kenya lies in coffee, the tea growers will not easily destroy their shambas to grow coffee because this will amount to loss of income for a long period.

12. Absence of diminishing returns.

The theory assumes that the diminishing returns do not exist which is not true. The law of diminishing returns normally operates especially in agriculture and this can change comparative advantage.

QUESTIONS

1. Explain carefully the doctrine of comparative based on the concept of specialization
2. Explain the basis of comparative advantage theory in international trade and clearly state its limitations especially with LDCs.

Distribution of benefits from international trade between MDCs and LDCs

The principle of comparative advantage concludes that countries engaged in international trade will mutually benefit. This conclusion is not quite true. MDCs seem to benefit more from international trade than LDCs. This has made LDCs to complain that they are not benefiting as much.

The benefits from international trade have not been distributed to LDCs due to the following factors:-

1. International trade has not stimulated manufacturing industries in LDCs as they are subject to importing and marketing of manufactured goods from MDCs. It has not allowed development of domestic industries in LDCs.
2. LDCs face declining terms of trade vis-à-vis MDCs. They concentrate on exporting primary products which fetch low prices and import highly priced manufactured goods.
3. Goods from LDCs are out-competed by cheap imported goods. Attempts to produce manufactured goods in LDCs have made little success because the cheap imported goods and sometimes of high quality out-compete goods from LDCs both at domestic

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market and foreign markets. The low prices are due to economies of scale and superior technologies which MDCs have got.

4. According to the theory of comparative advantage, LDCs should concentrate on agriculture but agriculture compared with industry has little growth potential.
5. MDCs are increasingly producing their own raw materials e.g. cotton, minerals e.t.c. this means that the share of LDCs in international trade is diminishing.
6. Slow population growth in MDCs vs rapid population growth in LDCs. The slow population growth in MDCs has meant little market for the products of LDCs. But the situation is worsened by the fact that population is growing rapidly in LDCs requiring increased importation of highly priced manufactured goods.
7. Increased use of synthetic materials and scrap metals by MDCs has meant low demand for raw materials from LDCs
8. Technological innovations in MDCs have led to more efficient use of resources (raw materials) reducing the export prospects of the LDCs.
9. International trade has led to the stagnation of LDCs because it was through international trade that LDCs were exploited.
10. There are also additional sources of supply of raw materials in MDCs e.g. there is a lot of petroleum in U.S.A.
11. Inequalities of income- the theory assumes that advantages from international trade will accrue to the country as a whole, it ignores the fact that those who gain are those who export. This encourages inequalities of income especially in LDCs
12. Protectionist policies- MDCs tend to put tariffs and quotas on products for LDCs for the purpose of protecting their own industries. Very often they put tariffs and quotas on agricultural products to protect their farmers reducing the volume of exports for LDCs.
13. Shortage of foreign exchange – LDCs often suffer from a shortage of foreign exchange due to foreign exchange restrictions. This limits the flow of goods in LDCs.
14. LDCs are at the same stage of development and produce similar export goods. This means that they cannot provide each other with market. If they attempt to increase their production they end up flooding the markets in MDCs and as such process fall resulting in dumping (selling at throw away prices)
15. The law of diminishing returns
International trade makes LDCs to specialize in agriculture yet this is more subjected to the law of diminishing returns.
16. Elastic demand for exports from LDCs vis-vis inelastic demand for imports from MDCs. This implies that prices of imports can rise without reduction in demand while rise in the price of exports will invite a huge fall in demand.

Quiz

Trade between developed and developed countries is trade among unequal partners” in light of the above statements and considering that many developing countries have liberalized their economies, discuss the consequences of free trade between developed and developing countries.

TERMS OF TRADE

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Terms of trade, is the expression of the relationship between import and export prices. The terms of trade index expresses the terms upon which a country exchanges imports for exports.

Terms of trade can also be defined as a ratio of export prices to import prices expressed as a percentage i.e.

$$\frac{p_x}{p_m} \times 100\%$$

Where p - Price

x - Exports

m - Imports

Terms of trade improve or become favourable when exports command a greater value of imports in exchange and they deteriorate when exports command a lesser value of imports in exchange.

Measurement of terms of trade

Terms of trade are measured by dividing the index of export prices (px) by the index of import prices (pm) and expressing the result as a percentage is

$$\frac{p_x}{p_m} \times 100\%$$

Example

Suppose that 1997 is the year (where the index is taken to be 100%) and that by the end of 1998 export prices have risen by 5% and import prices have fallen by 3%, then the export price index will now stand at 105% and the import price index will now stand at 97% and the terms of trade will be calculated as follows:

$$\begin{aligned} \text{T.O.T} &= \frac{p_x}{p_m} \times 100\% \\ &= \frac{105\%}{97\%} \times 100\% = 108.25\% \end{aligned}$$

If the terms of trade index goes above 100% it indicates an improvement in terms of trade by that extent and vice versa. So in this case terms of trade have improved by 8.25%.

Causes of Changes In Terms of Trade

1. A shift in demand- if the demand for export commodities declines their price will fall and this will cause deterioration in terms of trade of the exporting country.
2. Change in commercial policy e.g. imposition of a tariff. When an importer imposes a tariff on imports, they become expensive and this will force the exporter to lower the price if he has to continue selling more of his exports especially if the supply of the exports is inelastic.
3. Devaluation- devaluation makes imports expensive reducing importation and in case the supply of imports is inelastic, the price will be lowered and this will improve the terms of trade of the devaluing country.
 - shift in demand

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- change in commercial policies – tariffs
- Devaluation

Terms of Trade in LDCs (KENYA)

LDCs are facing unfavourable terms of trade as far as trade in agricultural exports and import of manufactured goods is concerned. This is due to the following reasons:

1. The raw materials are lowly priced as the price is mainly determined by the consuming countries who are strong in trade negotiations.
2. manufactured goods are highly priced for the same reasons as above
3. Exports from LDCs have elastic demand due to existence of close substitutes e.g. cotton.
4. Manufactured goods from MDCs have inelastic demand especially capital goods.
5. MDCs put import restrictions on imports from LDCs such as tariffs aimed at improving their terms of trade.
6. MDCs try to protect their agricultural production through subsidies and artificial restrictions on agricultural imports which results in unfavourable terms of trade for LDCs.
7. Raw materials saving innovations in MDCs have meant a decline in demand for exports from LDCs hence leading to a fall in their prices.
8. Change in fashion abroad has reduced the use of timber, skins and hides e.t.c. leading to a decline in their prices.
9. Slow population growth in MDCs and rapid population growth in LDCs. This has meant increase in demand for imports both capital and consumer goods pushing up their prices with a constant or even reducing demand for export products from LDCs hence leading to a decline in their price.

Importance/Significance of Terms of Trade

1. The changes in terms of trade explain differences of income in different countries. Countries with favourable terms of trade have higher incomes.
2. Effect of international distribution of income. The unfavourable terms of trade provide an explanation of low levels of income in LDCs.
3. Terms of trade can show the extent by which the LDCs were exploited by their colonial masters.
4. Terms of trade can be used as a basis of formulating economic policies e.g. policy to increase export of goods which fetch more foreign exchange from abroad.
5. Terms of trade measure the purchasing power of a unit of export
6. Favourable terms of trade show:-
 - (a) Increase in foreign exchange earnings
 - (b) Improvement in balance of payments
 - (c) Increased capacity to import
7. Unfavourable terms of trade show
 - (f) A drain on a country's resources
 - (g) That exports fetch less per unit
 - (h) Balance of payments deficit
 - (i) Adverse foreign exchange rate

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Attempts to Improve Terms of Trade

1. To reduce dependence on foreign aid. A country should try to rely mainly on its resources.
2. Expand trade among LDCs
3. Adopt import substitution strategies i.e. set up industries that will produce what is being majorly imported
4. Adopt export promotion strategies – this can be done by diversification of export products as well as semi-processing the exports before they are finally exported. This will increase their value.
5. Other measures may include devaluation of the currency and change in the commercial policy. However these are risky measures as other countries may retaliate.

The Wider Gains from Specialization and Trade

(Advantages of International Trade)

Where there is no comparative advantage there is nothing to gain from international trade. Discuss.

Countries engaged in international trade derive the following advantages:

1. they have the advantage of reaping the gains arising from specialization based on comparative advantage (see notes on comparative advantage)
2. Economies of scale. With international trade there is a possibility of expanding production since there is market. This leads to reduction of costs per unit of output (economies of scale)
3. External competition – external competition can make home industries to be more efficient so as to compete with cheap imported goods. The local producers have to improve on their methods of production and the equality of their products.
4. Is a means of getting technical skills, capital and new ideas which can be utilized to increase efficiency and improvement on the modes of production. International trade is important as far as capital goods are concerned especially in LDCs with a shortage of capital.
5. Market- market is acquired for local products which would not be produced due to limited market. It provides a vent for surplus. It is a means of getting rid of surplus production and earning foreign exchange necessary for development.
6. It provides a country with a variety of consumer goods.
7. it can be used to check inflation especially in LDCs where there are supply bottlenecks and rigidities
8. the presence of a variety of imported goods in a country e.g. radio cassettes, TV sets , video decks, bicycles, vehicles e.t.c. can provide incentive to work hard.
9. it allows the in-flow of foreign aid which can come as a contribution in kind.
10. it leads to mutual understanding and co-operation among the trading partners and this can lead to world peace.
11. It allows foreign investment which can lead to optimum use of resources.
12. Historical experience of development through trade. International trade has been a major factor in the development of the western countries. They have been able to develop by exploiting third world countries. The third world countries provided raw

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materials for the industries of the western countries and provided the market for their manufactured goods.

On the other hand the third world countries are also using trade to develop. It is through international trade that they are getting necessary skills, capital, ideas and technology for development. Further more the income from exports has multiplier effects on the economy.

GENERAL DISADVANTAGES OF INTERNATIONAL TRADE

1. Inter-dependence in that if war sets in, a country may not be able to get some goods especially if it is fighting with the country which is providing it with the goods.
2. In the long run goods which came to the market at very low prices may become expensive if the importing country is required to pay more for them due to collusion e.g. OPEC countries agreeing on one price for petroleum products.
3. As countries develop and industrialization sets in agriculture becomes less paying and this makes people to migrate from rural areas to urban leading to high density population in urban areas and low density in rural areas.
4. As nations specialize in the production of particular goods people who cannot produce those goods will face unemployment.
5. Specialization may be limited by the law of diminishing returns.

TRADE RESTRICTIONS/ BARRIERS TO TRADE/ COMMERCIAL POLICY

- 1) Tariff - a tariff is a tax imposed on goods entering the country. It makes imports expensive and as such reduces consumption of the imported goods.
- 2) Quotas - a quota is prescribed limit of the quantity of the commodity which should be exported or imported during a certain period of time. This limits trade.
- 3) Currency restrictions- this involves exchange controls which limit the availability of foreign currency for overseas transactions.
- 4) Manipulation of exchange rates- this involves complicating the exchange rate procedures so as to discourage some types of foreign transactions e.g. introducing multiple exchange rates where other people can get the foreign currency cheaper and others expensively.
- 5) Trade Embagos – this involves complete withdrawal of trade links
- 6) Employment of export subsidies- this involves subsidizing the price of export products by the government for the purpose of making the export products competitive in the foreign market.
- 7) Subsidizing domestic products so as to enable domestic industries at locally produced products to compete with cheap foreign goods.

ARGUMENTS IN FAVOUR OF PROTECTION

1. Development of infant industries - When a firm is just starting, its costs are very high, so it cannot afford to sell its products cheap. This necessitates imposition of tariffs until the industry begins to enjoy economies of scale.
2. Balance of payments problem- if a country is having unfavourable balance of payments, tariffs can assist in reducing the volume of imports easing the balance of payments problem.

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3. Terms of trade problem – if a country has got unfavourable terms of trade, tariffs can be used to reverse this problem.
4. Unemployment problem- if a country has unemployment due to excessive importation, by imposing tariffs on imports, importation will reduce and domestic production will go up hence increasing employment. Also a tariff brings revenue to the government which can be used for investments increasing the level of employment.
5. Dumping problem- dumping is the sale to a commodity in a foreign market at a low price than that charged in the home market. It is aimed at driving local competitors out of business so to prevent dumping, tariffs are necessary.
6. Revenue problem – LDCs cannot raise sufficient revenue from direct taxes so tariffs is an important means of getting the necessary revenue.
7. Encouragement of investment – by allowing investors to invest behind a tariff wall, investment can be encouraged.
8. Protection of the standard of living – To prevent low quality of goods from being imported, tariffs are necessary.
9. Problem of self sufficiency – for a country to be self sufficient or self reliant it is necessary to encourage domestic production by imposing tariffs on imports. Relying on imported food stuff for example may cause undesirable consequences when the supply is cut.
10. For protection of socially important occupations such as agriculture
11. For protection strategic industries e.g. industries producing war planes
12. For protection of key industries i.e. industries whose products many industries rely on e.g. the steel industry.
13. For preservation of a country's culture.
14. For protection of a country's ideologies
15. For protection of health – Tariffs on injurious commodities such as cigarettes and alcohol will discourage their importation and this is intended to protect the health of the consumers.

Arguments against protection

1. It creates inefficiency – industries protected always remain young and continue to be inefficient.
2. Protection leads to high prices at home either due to high prices of imports or due to existence of monopolists who charge high prices.
3. It can lead to closure of those industries using imported raw materials due to high price of raw materials caused by tariffs.
4. Benefits arising from comparative advantage are lost.
5. Foreign investment may be discouraged due to high cost of production
6. Control policies delay the arrival of capital inputs which make industries to produce below capacity.
7. Most firms protected are government owned and this discourages private investment.
8. Difficulty in obtaining foreign exchange by private firms can again discourage private investment.
9. Controls may not be effective leading to corruption and smuggling.

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10. Dangers of retaliation – other countries can adopt the same measures thereby worsening the country's trade position.

Quiz

1. In spite of the present policy of liberalization of international trade, governments in some countries are contemplating a case for imposition of trade tariffs. Why is this so?
2. Argue the case for and against free international trade.

International Payments

Balance of Payments

Balance of payments is a systematic record of all economic transactions between residents of a reporting country and residents of foreign countries during a given period of time usually one year.

Balance of payments can also be described as a summary statement of a country's financial transactions with the outside world.

Balance of payments can also be taken as the difference between total receipts and total payments of a country involving international transactions.

Types of accounts in balance of payment statement

1. Current account
2. Capital account
3. Cash account (monetary movements account)

1. Current Account

This includes all the trade items i.e. the visible trade. Visible trade refers to trade of tangible goods like coffee, radio cassettes; bicycles e.t.c. the difference between the value of visible imports and visible exports is called balance of trade. If the value of visible exports is greater than the value of visible imports, the difference is called a favourable balance of trade or a positive balance of trade and vice versa.

On the other hand invisible trade refers to the trade of intangible i.e. services e.g. shipping, banking, tourism, e.t.c.

The difference between the value of invisible exports and invisible imports is called balance on invisible trade. This balance is favourable when the value of invisible exports is greater than the value of invisible imports and vice versa.

2. Capital Account

This involves:-

- (i) Private capital investment i.e. the amount of capital that private individuals move in or out of the country.
- (ii) Official capital movements i.e. capital moved in or out by governments (government investment abroad)

3. Cash Account

This account involves the changes in the external reserves (foreign exchange) of a country intended to meet the surplus or deficit resulting from the capital and current accounts. The account shows how the external reserves have changed in response to the current account and capital account transactions. This account is the balancing item.

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The cash account is also called the accommodating finance. The deficit arising from the current and capital accounts is offset from the cash account. The amount of deficit or surplus arising from the two accounts is measured by the extent by which the accommodating finance has changed. In case of a deficit there will be a decrease in accommodating finance sufficient to bring about the overall balance of payments and vice versa.

Causes of Deficits in Balance of Payments

1. Natural disasters e.g. prolonged drought leading to poor harvest of the export cross.
2. Sudden shift in demand for exports due to change in consumer taste or technological innovations abroad.
3. When foreign assistance from abroad is sopped e.g. assistance from IMF, World Bank, e.t.c.
4. Increase in population requiring more importation
5. Decline in terms of trade as a result of a rise in price of imports or a fall in price of exports.

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6. Composition of tariffs on exports which inelastic supply forcing the exporter to lower the price.
7. Importation of more consumer goods due to increasing living standards or due to decline in production at home.
8. Increased capital outflow caused by domestic inflation i.e. people banking money abroad.
9. Limited inflow of capital due to poor investment climate (insecurity, lack of good roads, high taxes, control of prices)
10. Capital outflow in form of remission of profits and other transfers by expatriates.

Solutions to a Deficit in Balance of Payments

A deficit in the BOP can be covered in one of the following ways:

1. By payment out of accumulated reserves
2. By exporting actual gold if any
3. By borrowing or obtaining assistance from other countries
4. By acquiring imports from suppliers on credit
5. By imposing import restrictions and exchange controls
6. By employing export promotion strategies for both agricultural and manufactured products
7. By encouraging capital inflow in form of investment by offering tax holidays and improving on security
8. By establishing import substitution industries
9. By limiting the repatriation of profits and dividends to certain percentage
10. By developing export agencies abroad to find better markets for domestic products
11. By negotiating or requesting for friendly grants
12. Obtaining assistance from IMF
13. Where possible, make a total ban on unnecessary imports
14. Devaluation of the currency

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Problems Likely To Be Encountered By Some of the Above Measures

The problem with some of the above solutions is that they cannot work for prolonged period of time, e.g.

1. Foreign exchange reserves may dry up
2. Gold can get depleted
3. Loans have to be paid back usually with interest.
4.means future outflow of capital in form of repatriation of
5. Goods imported on credit have to be paid for after a relatively short period
6. Import restrictions and exchange controls may be counter veiled (revenge)
7. Import restrictions may cause inflation at home and smuggling
8. Assistance from IMF may come with conditions (strings attached)
9. Grants may come with strings attached
10. Attracting capital investments by offering tax holidays may result in low revenue for the government.
11. Controlling repatriation of profits may discourage investment.
12. Devaluation may invite retaliation i.e. other countries may devalue their currencies.

Questions

1. Kenya has been experiencing existence of balance of payments for a long time. What practical measures would you prescribe to alleviate this problem, and what obstacles would you expect to encounter?
2. Critically examine the proportion that if left unregulated, international capital movements in form of private investments, commercial loans and foreign aid, economic progress in developing nations of Africa will be retarded.

Solution Quiz (2)

1. Commercial loans
 - Repaid with interest in foreign currency
 - Some loans are dead weight- with no economic development e.g. finance military, elections.
 - Some are attached with conditions e.g. involves retrenchment of workers leading to high level of crime, increased poverty.
2. Private investment
 - remission of profits in foreign currency
 - causes scarcity of foreign currency
 - Tax holiday reduces government revenue. Makes government to miss revenue for supporting development activities.
 - Can control the economy economically and politically
 - Foreign employees – unemployment
 - Repatriation of capital – leads to deterioration in the economy.
3. Foreign aid
 - Causes overdependence making people lazy.
 - Strings attached e.g. can be tied by source or by end use.
 - Countries giving grants tend to have political –economic influence on the done.

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- Inappropriate technology
- Some assistance is not environmentally friendly.

DEVALUATION

This is official lowering of the value of the country's currency in relation to other currencies e.g. if the official exchange rate of dollars to Kenyan shillings is $1\$ = \text{Sh. } 50$ and the Sh. is devalued by 100%, then the new exchange rate will be $1\$ = \text{Sh. } 100$.

Devaluation in this case makes importation more expensive i.e. twice as expensive and makes Kenya exports cheaper. What used to require one dollar now require a less and spend less foreign exchange. On the other hand; because exports have become cheaper, Kenya will export more earning more foreign exchange. This reduces the balance of payments deficit.

Factors Affecting Effectiveness of Devaluation

1. The foreign elasticity of demand for domestic exports. This should be elastic so that when the exports become cheaper more will be demanded earning the devaluing country more foreign exchange. If the demand is inelastic foreign exchange earnings will reduce because the same quantity will be exported at a lower price.
2. The domestic elasticity of demand for imports. This should be elastic so that when imports become expensive demand for them falls leading to a fall in foreign exchange expenditure. If the demand is inelastic almost the same quantity will be imported at a higher price worsening the BOP problem.
3. The elasticity of supply of domestic exports – this should be elastic so that when the demand for them rises, supply can be increased to meet the rising demand. If the supply is inelastic, the problem will be more worsened because less foreign exchange will be earned with the same exports as before with a lower price.
4. Elasticity of supply of imports
This should be inelastic so that foreign exporters will be forced to cut down the price of their products because of inability to reduce the supply. This enables the importing country to spend less foreign exchange.
5. Possibility of retaliations
Devaluation will succeed if other countries do not follow by retaliation i.e. by devaluing their own currencies.
6. The currency in which export prices are fixed. For most LDCs e.g. Kenya prices of certain exports e.g. coffee are fixed internationally in terms of dollars so devaluation may not encourage more exports since importers do not buy Kenyan shillings before importing.

Reasons why LDCs may not improve their bop through devaluation

1. Demand for imports is inelastic especially capital goods.
2. They are producers of primary commodities so they so they are price takers and as such they cannot influence price by devaluation
3. The supply of exports goods may be restricted by international agreement (quotas) so devaluation cannot make them sell more.

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Effects of Devaluation

Devaluation policy is usually taken by a country whenever bop deficit has remained persistent after it has tried to adopt other methods like decrease in imports. Devaluation will therefore enlarge exports and reduce imports thereby improving the bop problem.

Devaluation policy may have the following effects:

1. It has the immediate effect of raising prices of imports. This reduces the real value or purchasing power of the shilling. The fall in purchasing power of a shilling may prompt demand for wage increases. Wage increases will push up the cost of production. The cost of production pushes up prices again, and this will result in spiral inflation.
2. Devaluation may result in increase in the cost of production at home and this may affect export prices which may be pushed up leading to a fall in demand for them. This may worsen the bop problem.
3. Devaluation may benefit large exporters and medium size businessmen only. This is so because devaluation is intended to boost exports and encourage export production. Those who deal in export trade benefit as export sales are boosted. On the other hand wage earners, small scale farmers, rural and urban small scale producers and suppliers of other services are hit financially by the domestic inflation resulting from devaluation as they do not participate in export trade.
4. Devaluation is likely to worsen the bop problem when the supply of export goods is restricted by export quotas. The same quantity will be sold at a cheaper price.

Questions

- (a) What is meant by devaluation?
- (b) Under what circumstances does a country decide to devalue its currency and what are the expected consequences?

Other concepts associated with the value of the currency

1. Revaluation- this is the official raising of the value of the currency in relation to other currencies. It is the opposite of devaluation.
2. Depreciation – this is the decline in the exchange rate under market forces. The currency loses value in terms of other currencies through the market forces of demand and supply.
3. Appreciation – this is the opposite of depreciation. It is the rise in the value of the currency under market forces.
4. Deflation – this is the reduction of the supply of the currency in the economy.
5. Demonitisation - this is the illegalizing of the circulation of the currency. It involves the withdrawal of the currency from circulation by stopping it from being a legal tender.

EXCHANGE RATES

Def: exchange rate is the price of one currency in terms of another. it is a ratio at which one currency is exchanged for another e.g. 1 dollar for Kshs 50.

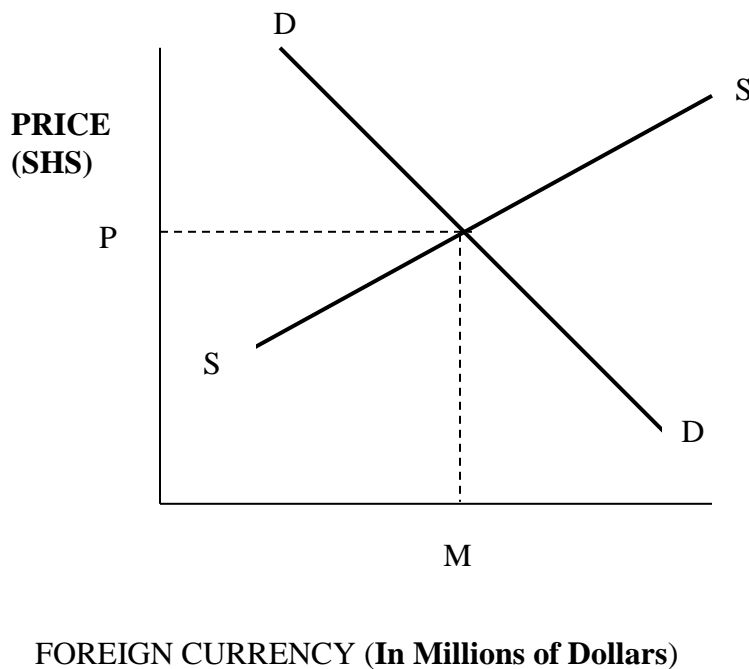
Exchange rate like any other price may be determined by forces of supply and demand or may be determined by forces of supply and demand or may be determined officially.

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When the price of a currency is determined by the forces of demand and supply it is termed as free exchange rate and when it is determined officially it is termed as fixed exchange rate.

1. Free Exchange Rate

This is also called floating or flexible exchange rate. In this case the price of the currency is determined by the market forces of supply and demand and supply. The demand for foreign currency comes from residents who wish to buy commodities from abroad or to invest abroad. While the supply of foreign currency is brought by people who wish to buy domestic products or to invest in the country. The exchange rate (the price of the foreign currency) is then determined at that point where the demand for and supply of the foreign currency interact as shown in the illustration below:



In the above diagram when the quantity of dollars in the country is OM the price per dollar will be OP because this is where supply equals demand. If supply rises the price will fall and if supply falls the price will rise.

On the other hand if demand rises the price will rise and if demand falls, the price will fall. So under a free exchange rate system, there can be demand of the foreign currency.

Aims of Floating the Exchange Rate

- 1) To control inflation by making foreign exchange easily available
- 2) To encourage foreign investors who may be given the right value of their currency more especially when the home currency is over valued.

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- 3) To discourage excessive importation by making foreign exchange expensive especially when it is artificially cheap.
- 4) To ease pressure on foreign exchange by making it expensive
- 5) To improve the balance of payments deficit
- 6) To improve terms of trade

Advantages of Free Exchange Rate

1. It allows a country to pursue its own domestic policy e.g. inflationary policy for purposes of stimulating demand.
2. It eliminates scarcities and surpluses of the foreign exchange
3. It eliminates the need for foreign exchange reserves (accommodating finance)
4. Deficits and surpluses are corrected automatically
5. It encourages investors as they can get the true value of their money. This can bring about a favourable balance on the capital account.
6. It stimulates industrialization as industries have free access to foreign exchange.
7. It encourages savings. Because of high prices of luxury goods people may spend less money on them hence saving.
8. It eliminates the lack market as prices are allowed to go up checking demand for commodities.

Disadvantages of Free Exchange Rates

1. It can discourage international trade when the exchange rate fluctuates. Traders will not know exactly what the rate will be in future and this can discourage trade.
2. It can discourage foreign investors when the rate fluctuates
3. It can lead to currency depreciation especially when the currency was over-valued.
4. The depreciation of the currency may push up-prices for imports
5. Foreign investors may get less at the time of repatriating their capital and this may discourage them.
6. Some industries may close down because of expensive imported raw materials and inability to raise local money to purchase foreign exchange.
7. A rise in price may mean a fall in the standard of living of people. Floating the shilling may cause inflation as prices of imports may rise.
8. Imports and exports may not correct the trade imbalances e.g. if the demand for imports is inelastic.
9. It allows the survival of speculators. There will be speculators who specialize in foreign exchange dealings. They buy the foreign currency when it is cheap and sell it at a profit when it is expensive. This act of speculators may destabilized the value of the currency. If they expect the price of the currency to drop they sell it increasing its supply and making the price fall further. On the other hand if they expect the price to rise then they buy increasing the demand and making the price to rise further.

2. Fixed Exchange Rate

This is where the exchange rate is determined officially by the central bank e.g. it can be determined that 1 dollar is equal Kshs. 50. Even if the market rate was different from this. It is a controlled exchange rate system whereby the market forces of demand and supply are not allowed to determine the exchange rate.

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Under this system, the exchange rate tends to be rigid i.e. cannot fluctuate like in the case of free exchange rate systems.

Advantages of Fixed Exchange Rate

1. There is no fear of currency depreciation
2. There are no currency fluctuations
3. Trade imbalances may not arise if the exchange rate is very high.

Disadvantages of Fixed Exchange Rate

- 1) It restricts international transactions especially if the currency is not properly valued.
- 2) It generates a shortage of foreign exchange.
The supply of foreign exchange cannot be easily increased to meet demand.
- 3) It can generate unemployment in a deficit country and inflation in a surplus country
- 4) A country does not freely follow its own domestic policy.

External Reserve (Foreign Exchange Reserves

External reserves, means the stock of foreign currencies e.g. dollars, sterling pounds, e.t.c at the disposal of a country, or available in a country.

The foreign exchange reserves are used for making international payments. Today most international payments are made by use of dollars and sterling pounds since they are recognized as international currencies.

Importance of Having a Sound Stock of Foreign Exchange Reserves

1. They are used for making international payments. If a country has more foreign exchange reserves at its disposal, its economic position in the international market will be stronger and vice versa.
2. They can influence the rate of economic growth. If a country has got more reserves it can import more capital goods which can lead to rapid economic growth.
3. They can influence increase in money supply in the economy. If a country has got more foreign exchange reserves it can increase the supply of the local currency without serious worries in decline in the exchange rate. An increase in money supply will lead to expansion in economic activities in a country.

Causes of Shortage of Foreign Exchange Reserves in LDCs

1. Excessive demand for imports especially capital goods
2. The high price of fuel and other imports due to global inflation.
3. Mis-management of foreign exchange e.g. by allowing importation of luxuries and allowing capital outflow (people banking money abroad)
4. The low price of primary products with a high price of manufactured goods i.e. unfavourable terms of trade.
5. Restriction of exports by quota system and inability by LDCs to increase export production.
6. Failure to attract capital inflow because of poor investment climate e.g. frequent wars and incidence of insecurity.
7. Increased importation of ammunitions necessitated by increased insecurity.

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Attempts to Improve Foreign Exchange Shortages

- 1) Improve investment climate so as to attract foreign investors
- 2) Adopt import substitution strategy i.e. establish import substitution industries so as to reduce excessive importation.
- 3) Adopt exchange control measures i.e restrict the use of foreign exchange.
- 4) Adopt proper management measures of foreign exchange so that capital outflow can be avoided. Also eradicate the practice of over-invoicing imports.
- 5) Adopt export promotion strategies such as:
 - Diversification of export crops
 - Semi-processing export products to improve their quality
 - Pegging prices of raw materials to prices of finished goods

QUIZ

1. The foreign exchange position is of critical importance to Kenya. Why is this so? And what measures can a country take to ensure a healthy foreign exchange position.
2. (a) What do you understand by a country's foreign reserves?
(b) Of what economic significance are these reserves?
(c) What measures would a country like Kenya adopt to ensure a stable reserves position?
3. Write short notes on:
 - a) Exchange rate
 - b) Devaluation
 - c) A country external reserves
4. How are external reserves generated and what role do they play in a country's economy.

Solution 4

How external reserves are generated

- Exports
- Borrowing from abroad
- Private foreign investment
- Official foreign investment
- Aid.

INSTITUTIONS AND AGREEMENTS IN INTERNATIONAL TRADE

A number of institutions and agreements have been made to facilitate and promote international trade. Some of these institutions include:

1. GATT: General Agreement On Tariffs And Trade

Established in 1948 by major capitalist nations, primarily to stimulate trade among the capitalized countries by removing harmful restrictions to trade like tariffs and quotas. Third world countries (independent) were permitted to join GATT provided a forum for discussion of matters or issues concerning trade between LDC's and the MDC's. GATT has led to the reduction of tariffs and removal of quotas.

2. Customs Unions

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This is a form of economic integration that involves the removal of restrictions to trade among the member countries e.g. quotas and tariffs have been removed among the members of (EEC).

Other forms of economic integration include:

- COMESA
- SADC
- e.t.c.

3. **The United Nations Conference On Trade And Development (UNCTAD)**

The UNCTAD met in Geneva from march 23 to june 16,1964. it was the largest such conference ever held, assembling over two thousand delegates from 120 countries and its proceedings covered the whole field of trade and development problems and policy. Following lines of the report of Dr. Prebisch, the work of the conference was organized in five committees dealing with:

- a) International problems
- b) Trade in semi- manufactured and manufactured goods
- c) the financing of development
- d) Continuing institutional arrangements and
- e) Expansion of international trade and its significance for economic development.

The major reasons for the change in the procedure was that the 75 less developed countries which were present in the conference were determined to present a united front. They succeeded in maintaining the principle of presenting agreed resolutions jointly, even on issues on which their interests were fundamentally different. In contrast to the unity of the less developed countries, the developed countries were divided among themselves. it was soon evident that it will not be possible for developed countries to face the decisions of the less developed countries.

The many fold resolutions and recommendations of the conference were embodied in its final act contained 15 general and 13 special principles to govern international trade relations and trade policies conducive to development. From the point of view of the less developed countries, the UNCTAD obviously failed and indeed could not have hoped to succeed, in establishing a new international order for the conduct of world trade helpful to increase their export earnings.

The main purpose of U.N.C.T.A.D is to enable the less developed countries to improve their terms of trade and develop their economies. After 1964 other meetings of U.N.C.T.A.D were held in 1968, 1973, 1976, 1980 and 1983.

4. **WORLD BANK: International Bank For Reconstruction And Development (IBRD)**

This was established in 19477 at Bretton Woods's conference with the following objectives:

- To assist in reconstruction and development of member countries by facilitating the investment of capital for productive purposes.
- To promote balanced growth of international trade and maintain an equilibrium in bop by encouraging international investment.

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- To promote productive foreign investment by means of guaranteeing loans and other investments made by private investors.
- To conduct its operations in such a manner as not to affect investment objectives of member countries.
- To ensure that the loans advanced by it or guaranteed by it are paid back.

The World Bank obtains its funds from the member countries. its headquarters is in Washington D.C. the leading member countries are Britain, France, USA, Germany, Italy and Japan.

The World Bank has played a role in economic development of MDC's by providing low interest rates in loans. LDC,s too have borrowed loans from world bank to develop.

5. IMF: International Monetary Fund

Created in 1947 at the Bretton Woods Conference

AIMS OF IMF

1. Promote international monetary cooperation through a permanent institution.
2. Facilitate a balanced growth and expansion of trade in member countries.
3. Promote exchange stability and maintaining orderly exchange arrangements among members and to avoid competitive exchange depreciation.
4. To assist in the establishment of a multi-lateral system of payments n respect of current transactions between member states and in the elimination of foreign exchange restrictions
5. To give confidence to members by making the funds resources available to them under adequate safeguards, thus providing them with opportunity to correct mul-adjustments in their bop without resorting to measures destructive of national or international prosperity e.g. deflationary policies.
6. In accordance with the above, to shorten the duration and lesser the degree of disequilibrium in the international bop of members i.e. to eliminate bop problems by allowing a country to buy with a local currency.
IMF can recommend devaluation or appreciation of a country's currency which may lead to correction of balance of payments deficits.

ACHIEVEMENTS OF IMF

1. It has provided an excellent forum for the discussion and solution of the economic, physical and financial problems having an international aspect.
2. It has promoted the expansion of international trade in a variety of ways to the mutual benefit of member countries.
3. It has promoted exchange stability while at the same time providing for an orderly adjustment of exchange rates.
4. The fund has been instrumental in promoting steady progress to wards the establishment of multi-lateral systems of payments in respect of current transactions.
5. It has liberalized the use of its resources by members in a number of ways.
6. by promoting economic stability of the member countries, it has accelerated the pace of economic development of the LDC's
7. It has shown great interest in the economic growth of LDC's

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SHORTCOMINGS OF IMF

1. It was unable to tackle the immediate post war economic problems affecting members.
2. The existence on devaluation in some cases as a cure of disequilibrium in BOP was not well advised.
3. In spite of persistent shortage of dollars, IMF did not declare it a scarce currency and takes steps to ensure its ready availability
4. It is said to have granted undue credit to certain countries without making sure of their credit worthiness.
5. It has been accused of being partial to MDC's and not helping adequately the LDC's.
6. Domination of USA administration over the funds operations has laid it open to severe criticisms by other member countries.

6. COMMODITY AGREEMENTS

These are agreements aimed at increasing the incomes of primary producing countries. They include:

- (i) The organization of petroleum exporting countries (OPEC)
- (ii) International coffee organization (ICO)
- (iii) International cocoa organization (ICO)
- (iv) International rubber council (IRC)
- (v) International tin council (ITC)
- (vi) Council of copper exporting countries (CCEC)

THE POSITION OF LDC'S IN INTERNATIONAL TRADE

The theory of international trade concludes that participating countries are benefiting as much while the LDCs complain. The position of LDCs in international trade stands as below:

- 1) LDC'S have for long depended on international trade to earn the necessary foreign exchange for development. They have been able to find market for their surplus production. Thus international trade being a rent for surplus.
- 2) They have been exporters of primary products and importers of manufactured goods.
- 3) There is little trade among LDC's because they produce almost similar commodities being in the same stage of development.
Most of the trade tends to go to former colonial masters. This is more so with French speaking countries.
- 4) There is more trade among MDC's than between LDC's and MDC's. this is mainly due to low income in LDCs

IMPROVING THE POSITION OF LDC'S IN INTERNATIONAL TRADE

1. Participation of the state: Through state corporations to control imports and exports. Here the primary co-operatives buy produce and sell it to the state controlled. Marketing boards which export the commodities. This ensures that foreign exchange earned goes to the government and it is possible to control the quality and quantity to increase the price.

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2. Rigid restriction on expenditure of foreign exchange earned and remittance of profits. This can be done through currency restrictions e.g. Tariffs or Quotas.
3. Semi processing of exports to increase their value in the overseas market as well for the internal sales e.g ginning of cotton, processing of coffee etc before export.
4. Raising import duty. This is to increase state Revenue as well as to discount imports which compete with locally made goods.
5. Restriction of importing of luxury goods requiring a lot of foreign exchange
6. Attempts to peg prices of raw materials to those of finished goods so that if the prices of finished goods to up by 5% the price of raw material should also go up by 5% the price of cotton should also go up by 5%.
7. Efforts of the United Nations conference on trade and developed (UNCTAD). This conference attempted to remove restrictions on trade and provided a fort for Discussion of matters concerning trade. The conference has tried to liberalize trade and increased gains for LDC' by pegging prices of raw material to finished goods.
8. Commodity agreement aimed at stabilizing and increasing the earnings of raw materials exported e.g. OPEC led e.t.c.
9. Establishment of import substitution. Industries to reduce importation of highly priced manufactured goods.

ECONOMIC INTEGRATION

Def: economic integration is the co-ordination of decision making mechanism in particular fields of economic activities among countries. It is economic co-operation among countries.

Forms/Levels of Economic Integration

Economic integration can take several forms depending on the degree of co-operation which the participating countries intend to foster. They include:-

1. Free Trade Area (FTA)
This is the simplest form of economic integration to negotiate. it involves abolition of tariffs and quotas among member countries, but each member country is left to establish and independent tariff system against non-member countries.
2. Custom union
This involves abolition of tariffs and quotas among member countries and a common external tariff system against non-member countries.
3. common market
This involves:-
 - a) All the features of a custom's union plus
 - b) Free factor movement e.g. free movement of labour among member countries.
4. Economic union
This involves
 - a) All the features of a common market plus.
 - b) Some degree of harmonization of economic policies e.g. similar and coordinated policies on investment, industrialization, employment, taxation, e.t.c.
5. Economic federation

Macroeconomics notes

This is perhaps the most difficult form of cooperation to negotiate and as such it is not very common. it involves:-

- a) All the features of an economic union plus
- b) Harmonization of all economic and social policies.
- c) A unified monetary system (same currency)

An economic federation requires a supra national body consisting of various ministers from member countries charged with the responsibility of conducting the affairs of the co-operation outside the control of individual government.

N/B

This rigid text book classification of economic integration must be appreciated only as a useful guide. The regional economic grouping in developing countries do not conform fully to this forms of economic integration.

AIM OF ECONOMIC INTEGRATION

Many countries both LDC's and MDC's suffer from the small size of the market and a small Markey retards growth and development. it restricts development of employment and specialization. Depending on the small domestic market and restricted international trade denies countries benefits from trade.

One of the solutions to this limited has another aim. It is aimed at reducing their dependence on rich industrialized countries.

Therefore economic integration mostly takes place among countries preferably of equal size and at equal stages of development.

Advantages of Economic Integration

1. Trade creation
It enables trade to be carried out freely among member countries which would have been hindered by tariffs and quotas.
2. Creation of market
It creates a large market which increases the growth of consumer goods industries.
3. New industries will emerge which reduces dependence on primary products for export e.g. textile industries, daily products industries, bicycles industries, fertilizer industries, e.t.c. may emerge.
4. It saves on foreign exchange as import substitution industries are set up.
5. It increases specialization along lines of comparative advantage e.g. under the former east African community Kenya specialized in the manufacture of paper, Uganda fertilizer and Tanzania tyres and tubes.
6. Shortages and surpluses of output can be eliminated as member countries can supply products or provide the market depending on the case.
7. Economies of scale
Economies of scale can be reaped and as such firms can attain optimum, sizes.
8. Efficiency
Competition among industries is encouraged and this leads to economic efficiency
9. Increased investment
Foreign investors are attracted while local investors are stimulated

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10. It increases the level of employment and acquisition of skills as more industries get set up.
11. It allows free factor movement e.g. labour can freely move about leading to favourable income, redistribution people who are unemployed in their own countries can get employment from member countries in which case the income they earn is sent home. Also when goods are exported to member countries the income of the exporting country increases.
12. It leads to increased agricultural production. a wide market for agricultural products might improve and encourage agricultural production. Where countries have got different climatic and natural conditions economic integration will allow production of a variety of agricultural products.
13. Operation of common services which would be uneconomic to operate on a national level may be operated economically at a regional level e.g. railway services airway services, posts and telecommunication services e.t.c.
14. Common currency - where the grouping uses a common currency problem of currency convertibility are eliminated and the problem of balance of payment deficit does not arise.
15. It promotes political unity among member states. This promotes peace economic development and trade.

Disadvantages of economic integration

1. Trade diversion of economic integration
Trade diversion – goods may be imported from a high cost source and yet they could be got more cheaply from a non-member country. The goods may even be of low quality. This leads to loss of economic welfare.
2. It can lead to sacrifice of political rights for the purpose of sustaining the co-operation.
3. Polarization of economic activities. Economic activities may concentrate in one country or region. e.g. in the former east African community industries tended to concentrate in Nairobi.
4. Loss of revenue from tariffs.
5. Difficult in distributing revenue from joint services.
6. Loss of corporation tax when individual countries abolish or reduce the tax in an attempt to attract foreign investment.
7. Problems of location of industries – if freely left to locate their industries, investors may tend to locate their industries in one country or region.
8. Problem of foreign influence. The foreign investors who are attracted to the region might control the region economically and thus politically.
9. Inefficiency – it allows the protection of inefficient industries which may continue operating uneconomically supplying low quality products.
10. It results in closing of markets to non-member countries whose export earnings reduce. These countries may retaliate by refusing exports coming from countries in the trading block, making them lose export revenue.
11. Countries in the co-operating block tend to have different currencies whose external value is not always uniform. Further more the values of some countries currencies

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may be over-valued. This leads to differences in actual cost of goods exchanged between countries.

12. In most cases each country has got her own development plans which may contradict with the objectives of economic integration for instance, in trying to allow free movement of goods an industry say in country A producing cloth may be more efficient than that in country B producing the same product. This means its industry and lay-off its workers thus unemployment. This out come may not be acceptable to B.
13. It requires establishment of bureaucratic bodies with regular meetings to coordinate the activities of the trading block and these are expensive to maintain.
14. Differences in political policies e.g. some countries may be socialist oriented while others may be capitalist oriented.

Problems Which Were Encountered By the Farmer East African Community

1. Member countries had different economic and political policies. Tanzania being a socialist oriented state, nationalized most of her key industries while Kenya and Uganda following free enter price policy attracted more investors especially Kenya something which Tanzania was not happy about.
2. Restrictionist policies. Each country wanted to protect her own industries e.g. Kenya used to restrict the movement of maize and locally manufactured goods in order to protect her farmers and industries from regional competition.
3. Balance of payments problem- Uganda and Tanzania persistently had deficits while Kenya had surpluses as far as the community's trade was concerned.
4. There was restricted employment of labour. As far as skilled labour was concerned Ugandans were given priority over other nationals.
5. Difficulty in dividing revenue from common services. It was difficult to divide the revenue from the common services like the east African railways, east African posts and telecommunication, east African airways.
6. Polarization of economic activities – industries tended to concentrate in Nairobi and yet they enjoyed the east African market.
7. Each country wished to control her economy and as such separate currencies were introduced resulting in a problem of different monetary policies.
8. Kenya was developing at a very high speed as compared to the other countries and this brought tension.
9. Political misunderstanding – there were political misunderstanding between Tanzania and Uganda during Amin's regime between 1971- 1978 which made it difficult for the heads of state to meet in order to resolve major issues concerning the community.
10. Refusal to pay or to contribute money for running the common services which made Kenya to ground the places belonging to the community and the other countries seized whatever was in their possession.
11. The closure of the Kenya, Tanzania border in 1977 due to political misunderstanding between Kenya and Tanzania brought the community to an end.

Questions

1. a) What is the rationale behind regional integration

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- b) Carefully discuss why the four main levels of regional integration efforts have not been successful in sub-Saharan Africa.
2. Argue the case for and against economic integration within the African continent. (advantages and disadvantages)
 3. Recently the East African countries signed an agreement to become members of the East African Community. What may be future problems to be experienced as experienced by other trade agreements.

Rationale

- Reduce dependence on developed countries.
- Expand market
- Promote peace.

SUPPLEMENTARY

COMESA

COMMON MARKET FOR EASTERN AND SOUTHERN AFRICA

COMESA is a sub-regional grouping which provides for co-operation in all major sectors including trade, agricultural and Industrial Corporation, transport and communication, financial and other arrangements.

COMESA was established in 1994 to replace the preferential trade area for eastern and southern Africa, which had been in existence since 1981.

The PTA was established to take advantage of a large market size to share the regions common heritage and destiny and to allow a greater social and economic co-operation with ultimate objectives being to create an economic community.

The PTA treaty encouraged its transformation into a common market for east and southern Africa, and in conformity with this, the treaty establishing COMESA, was signed on 5th November, 1993 in Kampala, Uganda and was ratified a year later in Lilongwe, Malawi on 8th December, 1994.

The current members of COMESA are:

- | | | |
|--------------|--------------------------------|-------------|
| - Angola | - Democratic republic of Congo | - Eritrea |
| - Burundi | - Djibouti | - Ethiopia |
| - Comoros | - Egypt | - Kenya |
| - Madagascar | - Malawi | - Mauritius |
| - Namibia | - Uganda | - Rwanda |
| - Seychelles | - Sudan | - Swaziland |
| - Zambia | - Zimbabwe | - Lesotho |
| - Mozambique | | |

Altogether COMESA membership comprises of 21 countries with an estimated total population of about 400,000,000 people, an area of 12.88 million square kilometers and a gross domestic product of about 180 billion dollars (year 2000)

OBJECTIVES OF COMESA

The main objective of COMESA is to create a fully integrated regional economic community where there is freedom of movement of goods, services, capital, labour and persons so as to improve the living standards of the people of the countries in the region.

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To achieve this objective COMESA member states have agreed on the need to create and maintain the following:

1. A full free trade area guaranteeing the free movement of goods and services produced within COMESA and the removal of all tariffs and non- tariff barriers.
2. A customs union under which goods and services imported from non- COMESA countries will attract an agreed single tariff in all COMESA states.
3. Free movement of capital and investment supported by adoption of common investment practices and policies so as to create a more favourable investment climate for the COMESA region.
4. A gradual establishment of a payments union based on the COMESA clearing house and eventual establishment of a common monetary union with a common currency.
5. The adoption of common visa arrangement including the right of establishment leading eventually to the free movement of bonafide persons.
6. Organizing trade fares to enable member countries to know what is available in the sub-region.
7. Promotion of freedom of tariff transit within the COMESA sub-region.

PROBLEMS OF COMESA

1. Reluctance to ratify COMESA decisions, so far, only nine countries out of 21 member countries have agreed to implement the 0 tariff structure. These are:
 - Egypt
 - Mauritius
 - Djibouti
 - Kenya
 - Malawi
 - Sudan
 - Zimbabwe
 - Madagascar
 - ZambiaThree others i.e. Uganda, Rwanda and Burundi have indicated to ratify later, Namibia, Swaziland and Lesotho are still dragging their feet citing need for consultation and Seychelles has said that it will open its borders in June 2001 up setting the set deadline of 'October 31 2000'
2. Lack of foreign exchange to clear net balances
3. Loss of foreign exchange by not exporting outside COMESA. It should be noted that initially foreign exchange is needed to import industrial inputs.
4. Some countries e.g. Egypt, Kenya and Zimbabwe (being the most developed in the region) have favourable balance of trade while other member countries suffer deficits.
5. fear that benefit from COMESA may not accrue to COMESA countries in case of operation of multi-national corporation within member states. This has led to the requirement that only those products that satisfy the rules of origin will enjoy the COMESA market. The rules of origin are a criteria which specifies the goods that originate in a member country.
6. COMESA poses a threat to South Africa's economy and so member countries face South Africa's destabilizing designs. E.g. castle breweries tournament along side COMESA tournament.
7. Some economically weaker countries are skeptical about benefits from COMESA arrangement which may undermine national development effort e.g. Uganda and Eritrea.

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- Uganda for example: fears that there could be a negative fallout on the economy hurting local manufacturing which is not yet well positioned to compete against cheaper goods from other countries.
8. It may lead to importing from a high cost source and yet the commodity may be cheaper outside COMESA.
 9. Transport and intra-COMESA communication is not well developed and intergrated. This is a hindrance to trade.
 10. COMESA market is limited by:
 - a) High rate of poverty in many countries with the exception of Egypt, the per-capital income of other countries is too low i.e. high rate of poverty in other countries, meaning a low purchasing power.
 - b) Member countries produce similar goods.
 11. Loss of revenue

Tanzania for example, has pulled out of COMESA citing the reason being to protect its revenue base.
Uganda has advanced the same argument and in effect charges 10% duty on Kenyan imports, but had not pulled out of COMESA.

ACHIEVEMENTS OF COMESA

1. Tariff reduction

As at 1st august 2000:

 - a) Two countries had reduced tariffs by 100%
 - b) Three countries had reduced by 90%
 - c) Six countries had reduced by 80%
 - d) One country – 70% (Malawi)
 - e) Two countries – 60%
 - f) Two countries had promised to reduce the tariff by 31, October 2000.
 - g) One country had promised to reduce by June 2001.
 - h) Four countries had done nothing
2. Elimination of non-tariff barriers

All traditional and controversial non-tariff barriers such as import licensing import quotas and foreign exchange rationing have been eliminated in the vast majority of COMESA a member states.
3. Rules of origin

These have been simplified with more scope for import content, by the adoption of a 35% local value added criterion, with the rules undergoing further changes to take into account development of the WTO.
4. COMESA customs document

A single COMESA customs document (COMESA- CD) has been adopted to replace the previous multiplicity of documents (up to 32 in some countries) and also to serve for clearance of customs, warehousing, re-export and transit purposes.
5. Customs management system

Efficient customs management systems have been installed to facilitate data and revenue collection.

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6. Customs bond guarantee scheme: the scheme at facilitating traffic and reducing the cost of financing transits goods.
7. Trade information network
A trade information network (TENET) comprising of some 47 computerized focal points set up in 20 member states has been established.
8. Trade facilitation
In order to facilitate the smooth flow of goods across the region, a number of programmes are currently being implemented. These include:
 - a) Harmonized road transit charges.
 - b) COMESA carrier license.
 - c) Harmonized Axle loading and max vehicle dimension.
 - d) Advanced cargo information.
9. Web-sites
COMESA has also set up its own website to provide information on business from within.
Other economic grouping worth noting
 1. The black central Africa customs and economic union (BCACEU) in central Africa.
 2. West Africa customs union- in west Africa WACU.
 3. East Africa co-operation (EAC)
 4. The southern Africa Development Coordination (SADC)
 5. Central America market. (CAM) in Latin America.
 6. The association of Asian Nations(AAN)
 7. The European economic community (EEC)

Discuss some of the possible factors that may cause regional developments disparity observed on a developing economy:

1. Some parts of the country have got more infrastructures while others lack them.
2. Some regions have got industries while others are agricultural zones. Areas with industries have higher capital output ratio while the agricultural zones have a low capital output ratio. This means a rapid growth in industrial regions and slow growth in agricultural regions.
3. Some regions are endowed with more natural resources such as good fertile lands, etc while others are not. This means that those areas with more natural resources are developing faster than those with poor natural resources.
4. Some regions have high population while others have low. In the high population areas there is over-utilization of resources leading to low per capital income hence disguised unemployment. In the low population regions, there is adequate exploitation of resources leading to a higher per capital income hence higher rate of economic growth.
5. Some regions still use primitive methods of production because of limited accessibility to finance e.g. they do not use fertilizers, herbicides, irrigation, improve seeds, etc while others have got accessibility to this facilities. So this causes variations to output per capita income hence regional development disparities.

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Also populations in some region have not had accessibility to good training due to unavailability of training facilities and therefore there has been no significant improvement in entrepreneurial abilities hindering the pace of development disparities.

What Economic recommendations would you suggest in order to reduce such disparity?

1. Encourage the use of new techniques of production by increasing accessibility to finance.
2. Provide more education and training facilities in the disadvantaged regions to equip the people with the technical skills and entrepreneurial abilities.
3. Introduce population policies in areas with population problem and encourage the people to take up the policies.
4. Set up the infrastructure such as roads and bridges to facilitate economic development in the disadvantaged regions.
5. Diversify economic activities i.e. encourage industrial locations in areas that are basically depending on agricultural production through proper planning.
6. Increase the income per capita of people in the disadvantaged regions e.g by taxing more people in successful regions and spending the money on people in the unsuccessful region. This may break the vicious circle of poverty in those regions and speed up development.

QUESTION ONE

Most developing countries especially the sub-Saharan African countries have not realized that full benefits from international trade

Required:

- (a) Discuss the main reasons why countries have not realized these benefits
- (b) What policy measures would you recommend to help the countries realize those benefits?

QUESTION TWO

- a) What is meant by the term “trade liberalization”?
- b) What are the advantages of trade liberalization?
- c) (i) Specify at least three negative effects of trade liberalization to the business community of the importing country.
(ii) Would you recommend the imposition of trade tariffs to counter the negative effects explained in c (i) above?
Explain

QUESTION THREE

- (a) Recently the government has been emphasizing the concept of export-led growth. This has been well covered by the press and the media.
 - (i) What is the export-led growth?
 - (ii) Explain the impact of export-led growth on the balance of payments and terms of trade.
- (b) What are the advantages of Kenya being a member of the International Monetary Fund?

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QUESTION FOUR

Developing countries have experienced persistent and rising external debt for decades now.

- a) Explain the major causes of the problem
- b) Suggest the economic policy measures which may be used to ameliorate this problem

QUESTION FIVE

- a) What is meant by the term international trade?
- b) In the context of international trade briefly explain the concept of comparative advantages
- c) In spite of the present policies on liberalization of international trade, governments in some countries are contemplating a case for the imposition of trade tariffs. Why is this so?

QUESTION SIX

“ Trade between developed and developing countries is trade between unequal partners “ considering that many less developed countries have liberated their economies, discuss the consequence of free trade between the developed and less developed countries.

QUESTION SEVEN

- (a) State the case for and against foreign aid disbursed to developing countries from international sources
- (b) What are some of the economic policies that you would recommend for these countries to adopt in order to reduce over reliance on foreign aid for their economic growth and development?

QUESTION EIGHT

Argue the case for and against regional integration within the African continent

QUESTION NINE

Define the term Structural Adjustment Programme and give reasons why the World Bank and the International Monetary Fund insist on the implementation of structural adjustment programmes in developing countries

QUESTION TEN

Many developing countries have in the recent past adopted liberalization policies in their economies. What are the likely and possible effects on the following groups:

- a) Consumers
- b) Producers
- c) Importers

QUESTION ELEVEN

- a) Explain the term /free trade
- b) Argue the case for and against free trade among countries of the world

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QUESTION TWELVE

- a) (i) What is meant by the term “balance of payments”?
(ii) Outline the major balances included in this account
- b) (i) Why do most developing countries experience balance of payments problems?
(ii) Suggest some policy measures that these countries may adopt to overcome these problems.

QUESTION THIRTEEN

What is the rationale behind regional integration? Carefully discuss the four main levels of regional integration. Why in your opinion have regional integration efforts in sub-Saharan Africa not been very successful?

QUESTION FOURTEEN

Explain briefly the doctrine of comparative advantages based on the concept of specialization. What problems are often encountered when nations attempt to individually maximize gains from trade through specialization?

PUBLIC FINANCE

Nature and Scope of Public Finance

Public finance deals with financial activities of the state. In public finance we study how the government raises its revenue and how it spends it. In other words public finance is an investigation into the nature and principle of state revenue and expenditure.

It deals with the income and expenditure of the public authorities i.e. the central government, the local authorities e.g. district administration, municipalities, town councils, e.t.c. and public corporations.

The study of public finance involves:

1. The methods of raising public revenue and the principles of taxation
2. The principles of public expenditure
3. The principles of financial administration i.e. principles of budgetary preparation.
4. The principles of public borrowing
5. The application of the fiscal policy for economic growth and stability.

Why does the state need money?

1. For the provision of administration and security
2. For the provision of social services e.g. schools, hospitals e.t.c.
3. For the provision of those services which private individuals may not provide e.g. roads, railways e.t.c.
4. For provision of social security e.g. pension, unemployment benefits; homes for the old, sickness benefits e.t.c.

How does the state get money?

The government taps a number of sources to get its revenue. There are two main sources. These are:

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1. Tax revenue source
2. Non-tax revenue source

1) Tax Revenue

This is revenue derived from various taxes i.e. from both direct and indirect taxes. Examples of direct taxes are income tax (PAYE). Corporation tax, graduated tax, e.t.c. examples of indirect taxes includes;

Customs duty (import duty) exercise duty, export duty, sales tax, e.t.c.

2) Non- tax revenue

This is revenue derived from public enterprises and other sources. Revenue derived from public enterprise is called prices e.g. revenue derived from railway services e.t.c.

Other sources include:

- a) Fees- there are payments to the government for any direct service rendered e.g. road license fee, e.t.c.
- b) Special assessment these are amounts assessed by the government and payable to the government by a certain group of people who are to benefit directly from the government project.
- c) Fines- these are amounts paid by way of penalties by individuals who are been convicted of breaking the law.
- d) State property – this is income derived from state property like national parks, forests, mines, e.t.c.
- e) Gifts and grants
- f) Forfeitures (tributes) e.g. contributions towards poverty alleviation hunger, disaster fund, e.t.c.
- g) Public borrowing both from within and from outside.

N/B

The major sources of government revenue are taxes and borrowing.

TAXES

A tax can be defined as a generally compulsory contribution .of wealth levied on a person to defray (cove) the expenses incurred by the state in conferring common benefits like road, schools, hospitals e.t.c. to the residents

N/B

An individual on payment of a tax does not expect the government to render him or her with a specific service. There is no quid proquo (direct payment). This leads to a tax to be defined as a “non-quid proquo payment made to the fiscal authority for administrating social services to the general public as a whole”

Canons (Principles) of Taxation

Canons of taxation are the fundamental characteristics of a good tax which were suggested by Adam Smith. They are as such popularly known as Adam Smith’s canons of taxation.

Adam Smith suggested four canons of taxation which are as follows:-

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1. Canon of equality of sacrifice

According to this canon the subjects of every state ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities i.e. in proportion to the income which they respectively enjoy under the protection of the state. According too this canon the rich should contribute more than the poor. This canon is fulfilled by levying progressive taxes e.g. income tax (PAYE) in Kenya.

2. Canon of certainty

The tax which each individual is bound to pay ought to be certain and non-arbitrary. The time of payment, the manner of payment and the amount to be paid ought to be clear and plain to the contributor and to the collector.

The tax payer should also see the necessity of paying the tax. A good example of a tax in Kenya which satisfies the canon of certainty is the corporation tax which is a fixed percentage on company profits.

3. Canon of conveniences

Every tax ought to be levied at the time or manner in which it is likely to be convenient for the contributor to pay. A tax on income for example should be collected at the time of earning the income and not after the contributor's has had an opportunity to use the money e.g. in Kenya income tax (PAYE) is conveniently collected. For a farmer, the tax should be collected at the time he harvests his crops.

4. Canon of economy

The cost of collecting the tax must be as minimal as possible. A tax ought to take and keep out of the pockets of the people as little as possible but at the same time bringing enough to the public treasury of the state.

Adam Smith argued that lack of economy would result into:

- a) Taxes whose administration is costly
- b) Taxes which can service out people from business
- c) Taxes which can discourage industrialization
- d) Taxes whose collection is complicated which can interfere with smooth running of business. Most indirect taxes have minimal costs of collection e.g. the export and import duties which are collected at custom points or at airports or at border entries at the time the goods are exported or imported

Characteristics of Good Tax Systems

A good tax system should be composed of taxes which conform to Adam Smith's canons of taxation and in addition the following:-

1. It should interfere as little as possible with economic decision e.g. should not discourage investment or the payer from earning more income.
2. Should rectify inefficiencies in the private sector i.e. should encourage efficient use of resources in the private sector.
3. It should satisfy growth objectives i.e. should not discourage saving and investment which are crucial in economic growth.
4. It should be simple to understand straight forward so that no misunderstanding should arise which can lead to delay in payments.

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5. The taxes should be impartial i.e. all tax payers should be treated alike. People with the same income and wealth should pay the same amount.
6. The cost of compliance should be as low as possible so that no costs are incurred in dealing with defaulters.
7. It should be flexible i.e. should be easy to later to meet the changing fiscal requirements
8. It should be elastic i.e. the amount contributed should increase with the individual's income and vice versa.

CLASSIFICATION OF TAXES

Taxes may be classified as:-

1. Proportional/ progressive digressive
2. Direct or indirect
3. Ad-valorem or specific
1. Proportion taxes

This is one which whatever the size of income the same rate is charged from all payers.

2. Progressive tax

This is when the burden of the tax rises as the taxable income increases. The principal here is higher the income the higher the rate.

3. Regressive tax

This is when the burden of the tax falls more heavily on the poor than the rich. It is the opposite of progressive tax e.g. indirect taxes are regressive.

4. Digressive tax

This is when higher incomes do not make the same sacrifice or when the burden imposed on them is relatively less e.g. graduated tax,

Direct tax

This is tax levied on a person who is intended to bear it i.e. the person who pays it is the one intended to bear it e.g. PAYE, corporation tax, graduated tax; death duty

Indirect tax

This is a tax levied on a person who is expected to shift it to another person, usually taxes on commodities e.g. custom duty, sales tax, vat, exercise duty, e.t.c. indirect taxes tend to be regressive i.e. when the rich and the poor buy the same commodities the poor tend to pay at a higher rate than the rich.

Ad valorem Tax

This is a tax on the value of a commodity. it is calculated as a percentage of the cost of the commodity. it is normally charged on commodities with a high value e.g. motor vehicles.

Specific Tax

This is tax on individual units e.g. kilogrammes, liters, meters, e.t.c. it is normally charged on commodities which are of low value but are bulky.

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Impact of a Tax

This refers to a person who pays tax in the first instance.

Incidence of a Tax

This refers to the final resting place of a tax i.e. who finally pays the tax. the incidence is on one who ultimately bears the money burden of the tax for example if Kenya breweries pays a tax on beer, which it shifts onto the consumer through the price, the impact is on Kenya Breweries but the incidence is on the final consumer of the beer.

N/B

For direct taxes PAYE the impact and incidences are on the same person i.e. the employee.

PROBLEMS OF TAXATION

5. It can be deterrent to work; if the tax is progressive and falls on marginal income, it can encourage absenteeism or can make people less inclined to work hard. It may also discourage overtime work.
6. It can be a deterrent to saving. As more income goes in form of taxes as price rises due to taxes on commodities, there can be a reduction on people's ability to save.
7. Taxes reduce enterprise and willingness to take risky undertakings. People will undertake risk when profits are high but when profits are reduced by taxes, investors are discouraged or may invest in the low tax areas.
8. Taxation can cause inflation- under full employment situation; indirect taxes may lead to demand for higher wages which may spark off spiral inflation.
9. Diversion of economic resources. Factors of production may be moved from highly taxed to lowly taxed forms of production which may be of less economic viability.

The Role of Taxation in Developing Countries

1. It is used to check over consumption and the resources so saved transferred to the government.
2. It is a means of reducing gross inequalities of income
3. It is a means of mobilizing resources for public sector investment.
4. It promotes economic growth by taxing heavily the profits which are not reinvested.
5. It reduces consumption of luxury goods and the savings are used for economic development.
6. It can be used to protect infant industries.
7. It can be used to improve the terms of trade of a country by taxing imports and forcing the exporter to reduce the price.
8. It can be used to reduce the balance of payments problems. Taxes can reduce the volume of imports thereby improving the deficit in the balance of payments.
9. They can be used to reduce consumption of injurious commodities e.g. cigarettes, alcohols e.t.c.

THE BUDGET

The budget is an estimate of revenue and expenditure for a certain period of time usually one year. the government budget contains a summary of national income, balance of payments position, the production of various sectors e.g. agriculture, industry, mining, forestry, e.t.c.

Macroeconomics notes

It also contains a summary of government investment, expenditure of various ministries. It also contains a summary of all taxes i.e. the direct and indirect taxes.

The budget is divided into two:

1. Recurrent budget
2. Development Budget

1. Recurrent budget

This is a budget concerning the daily revenue and expenditure of the government. It is also known as revenue budget.

The source of revenue for this budget comes from various taxes while the main forms of expenditure include expenditure on defense, administration, education, health, revenue collection cost, e.t.c.

The difference between recurrent budget revenue and expenditure is called recurrent budget surplus if it is positive and recurrent budget deficit if it is negative.

2. Development budget

This is a budget concerning the revenue and expenditure of the government in the line of development. It is also referred to as capital budget. The main source of income for development budget is from borrowing both internally and externally and from a recurrent budget surplus.

The money so raised is used for development projects such as establishment of new schools, new hospitals, roads, factories industries, agricultural projects, e.t.c.

BUDGET AS AN INSTRUMENT FOR DEVELOPMENT AND GOVERNMENT POLICY

1. It can be used to stimulate recovery of an economy from trade recession. The budget may be unbalanced e.g. deficit financing i.e. the government spending more than it receives from taxes. This will increase demand, stimulate the production and increase employment.
2. It can be used to check inflation. This is the aim of dis-inflationary budget. The amount of the purchasing power in the hands of the community can be reduced by increasing taxes. Thus a government planned surplus i.e. planning to spend less than received.
3. It can be used to provide social services e.g. schools, hospitals e.t.c. i.e. a budget to spend more on social services.
4. It can be used to reduce inequalities of income i.e. by taxing the rich more and providing social services free of charge thereby enabling the poor to save.
5. It can assist in the balancing of payments problem taxes can be imposed on particular imports to reduce their importation.
6. It can be used to achieve steady economic growth. Through budgeting, proper allocation of resources can be done to facilitate economic growth.
7. It can be used to bring balanced regional development i.e. a budget to allocate more resources to less developed areas.

PUBLIC DEBT

Macroeconomics notes

This refers to borrowing by the government from within the country or from abroad. It may be from individuals or from associations of individuals or from banking or non-banking financial institutions.

Necessity of Borrowing

1. The amount raised through taxation is limited thereby necessitating borrowing. In LDC's in particular, incomes are so low that the taxable capacity is limited. The amount raised may not be enough to cover expenditure. High taxes may encourage tax evasion and avoidance and this leads to low yield.
2. At times to get money through taxes may affect incentive to work hard and save.
3. Borrowing can be used to avoid resentment which high taxes may cause.
4. High taxes may lead to reduction in economic activities e.g. investments.

NB

To avoid the above situations the government tries to get money through borrowing both internally and externally.

Advantages of Borrowing

1. Whereas taxes are compulsory non- quid-pro payments, loans on the other hand are voluntary transfers from which the lender expects some returns in form of interest at indicated intervals. More money can therefore be raised through borrowing.
2. Loans help to avoid increasing taxes and thereby help to avoid the effects of taxation e.g. reduction of supply of effort, investment, tax evasion and avoidance, inflation, tax resentment. e.t.c.
3. For loans, the government can borrow with no fixed date of repayment and therefore all that is needed is to pay interest which represents no cost to the community nor is it an additional burden to the payer.
4. In case of dated loans, the government can repay the principal sum by borrowing again from other people and therefore without imposing a burden on the tax payer.
5. Some big enterprise that the government undertakes just would not take off the ground with taxes alone for what is collected is adequate e.g. airports, power plants, e.t.c.
6. Loans from abroad can fill the low saving- investment gap.
7. Borrowing from abroad may be a means of filling the foreign exchange gap and easing the balance of payments problems

Classification of Public Debt

Public debt can be classified into three major categories as follows:

1. According to source – according to source, public debt may be
 - a) internal debt or
 - b) external debt
2. According to productivity – according to this, public debt may be:
 - a) productive debt
 - b) non-productive debt

Macroeconomics notes

3. According to duration of time of repayment – according to this, public debt may be:
 - a) long term debt or
 - b) Short-term debt.

1. Internal and external debts
 - a) Internal debts – this is a debt raised from within the country. it involves a series of transfers of wealth within the country i.e. when money is borrowed by the government it is transferred from the lenders to the government and when the government makes payments for services of government contractors, government servants e.t.c, the money is transferred to those who receive it. Therefore with internal borrowing, money is transferred from some section of the community to others.

Internal borrowing consist mainly of short-term debts i.e. those repayable between 1–10 years from the date of borrowing e.g. treasury bills.
 - b) External debt – this is that debt owed to foreigners. It is raised from the foreign community. it involves a series of transfer of wealth but not within the same country like the case of internal debt, wealth is transferred from lending country to the borrowing country when a loan is raised and when it is repaid, the transfer takes the opposite direction.
2. Productive and non-productive debts
 - a) A productive debt - is that debt which is expected to increase assets which yield income sufficient to repay the principal sum and interest. It is a self-liquidating.
 - b) Non-productive debt- is that debt which is not self liquidating. it is a dead weight e.g. debts acquired during war.
3. Long term and short term debts
 - a) Short term debt- is a debt which is repayable after a short period of time usually between one and 10 years and sometimes less than one year.

They are supposed to bridge the gap between the revenue and expenditure of a recurrent budget. They are sometimes referred to as floating debts main examples are treasury bills and other short-term loans raised from IMF.
 - b) Long term debt- it is that debt which covers several years e.g. 20 years, 50 years, e.t.c. An example is the funded debt acquired from institutions such as the World Bank or from individual foreign governments.

Causes of Increasing Public Debts in LDC's

1. War and war preparedness
2. Budget deficits because of welfare schemes e.g. pensions
3. To maintain public utilities which have continuously made losses.
4. The desire to bring economic development which has made LDCs to attract debts from both internal and external sources.
5. Energy crisis i.e. shortage of energy supply at the global level thereby pushing up its cost.
6. Population explosion hence high cost of its maintenance.

Macroeconomics notes

Debt Redemption (Management)

This refers to those methods which can be adopted by the government to settle debts.

This include:

1. The use of surplus budget in this case the government utilizes the surplus revenue to repay the debt.
2. By terminal annuities – this involves arrangements by the government to be paying the lender some fixed amounts for a number of years.
3. By conversion – this involves arrangement to convert high interest loans to low interest loans. it can be done by borrowing from low interest sources (soft loans) and using the money to repay the high interest loans(hard loans).
4. By sinking fund account- this involves arrangement by the government to be setting aside every year a certain sum of money which goes to pay the debt.
5. By purchase of government securities- involves arrangements by which the government purchases back its securities from the public thus wiping up internal debt.
6. Refusal to repay-this involves the deliberate refusal by the government to repay its debts, this however is not a good method because it amounts to a breach of contract and makes it difficult for a country to negotiate any other loans.

QUIZ

Many LDCs are currently forcing increasing external debts; clearly describe the possible causes of the indebtedness and efforts made to reduce debt burden necessity.

Solution

Possible remedies

- Privatization of public utilities
- Population policies to check rapid population increase.
- Develop other sources of energy e.g. biogas, hydro-electric power.
- Encourage dialog and democratic means so as to reduce expenditure on war.
- Fostering economic integration among LDCs will make them peaceful
- Seeking foreign investment and also gong for foreign assistance

Difficulties of Internal Borrowing in LDCs

1. There are not properly organized capital and money markets where securities can easily be bought
2. Many people are ignorant about securities
3. Many people prefer to invest in real properties e.g. housing which give social prestige than investing in securities
4. Most securities would come from rural areas by there are no sufficient financial institutions in those areas to mobilize savings.
5. The response towards securities is also poor because of inflation which reduces the yield of the securities.

Difficulties of External Borrowing in LDCs

1. Inability to meet the conditions set y the lenders e.g. conditions of IMF and World Bank.

Macroeconomics notes

2. Uncredit worthiness – some countries usually fail to pay credit in time and so the lenders become unwilling to lend them.

Role of Public Borrowing in LDCs

1. It is a means of getting capital for development
2. It is a means of bridging the low saving – investment gap.
3. It is a means of getting the necessary foreign exchange i.e. a means of filling the foreign exchange gap.
4. It supplements the amount raised through taxation.
5. It reduces the need to impose high taxes which would be resented.
6. It is a means of earning interest from idle money e.g. by purchasing treasury bills.
7. The management of the public debts such as the buying back the securities from the general public and paying the interest can be used as a method to influence the structure of interest rates. if the rate of interest on government securities is high it will lead to an increase in other interest rates which has a direct bearing on investment i.e. it encourages saving necessary for investment.

Deficit Financing

This is part of government expenditure met by over drawing the cash balances of the government (borrowing from the Central Bank)

Deficit financing leads to a net increase in the money supply with the public.

There is a difference in the method of deficit financing practiced in LDCs and MDC's.

In MDC's deficit financing takes place by the government borrowing from the banking institutions rather than from the central bank which involves credit creation by commercial banks. Deficit financing in MDCs therefore means allowing commercial banks to create more money through the process of credit creation.

On the other hand in LDC's where the banking habit is not fully developed deficit financing takes the form of government borrowing from the central bank instead of the banking institutions. it involves the issue of additional currency. so in the ultimate analysis deficit financing in LDC's means printing more money.

Uses of Deficit Financing

There are three situations of which resort to deficit financing is necessary:

- (i) For financing a war
- (ii) For fighting a depression i.e. a situation where factors of production are lying idle and there is mass unemployment.
- (iii) For financing economic development.

1. Deficit Financing During A War

During a war the military requirements of the government are high and this cannot be met from the available revenue. This forces the government to go into borrowing from the central bank since it is the only source from which immediate revenue can be got. The Central Bank will then print more notes hence deficit financing.

2. Deficit Financing During Depression

During a depression there is a deficiency in aggregate spending leading to unemployment and excess capacity in the stock of capital.

Macroeconomics notes

Deficit financing can be used to increase private consumption and investment. By the government lowering taxes while maintaining expenditure deficit financing can safely be used to expand income, output and employment without any inflationary danger.

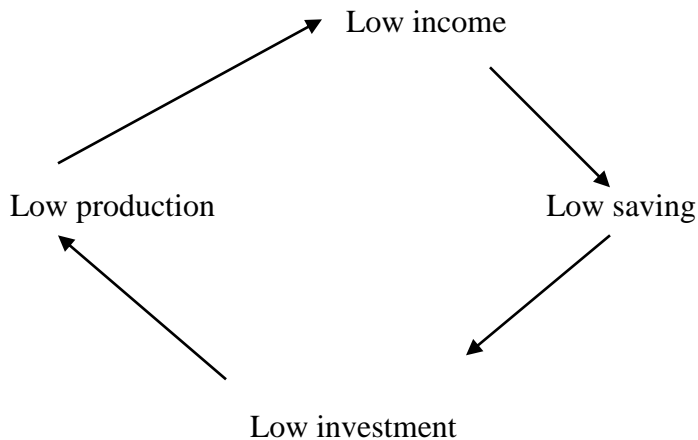
During a depression it is rather better to finance government expenditure by deficit financing than by increasing the rate of taxation.

3. Deficit Financing For Economic Development

In LDC's where the majority of the people are poor and are living at subsistence level, the margin between income and consumption expenditure is very low. So voluntary saving howsoever welcome cannot by itself provide sufficient resources for development.

The government may also attempt to increase the volume of resources by additional taxes, but again this may not raise enough revenue since people are already poor.

Due to the low levels of income and a high propensity to consume, aggregate saving in the economy is low and due to low saving there is low investment. Investment being inadequate as compared to the national development requirements the level of production is low. Low production means low income, low income means low saving, low saving means low investment and low investment means low production hence the vicious circle of poverty.



Thus in such a situation investment cannot increase sufficiently to break up the vicious circle of poverty. It is therefore necessary for the government to intervene so as to break the vicious circle of poverty in such an economy. But steady economic development is too large since investment expenditure required for to finance from the normal sources of revenue, deficit financing becomes inevitable.

Consequences of Deficit Financing

The possible effects of deficit financing are:

1. Increase in money supply in the hands of the public
2. A rise in the level of income
3. A rise in the general level of prices thus inflation

Macroeconomics notes

N/B

It should however be noted that deficit financing may not lead to inflation if output is increased with increased expenditure.

However in LDC's the expenditure is usually on infrastructure e.g. roads, schools, hospitals, e.t.c. which do not lead to immediate increase in output. The short-run effect of deficit financing in such economies may be inflation.

QUIZ

Explain in detail the meaning of deficit financing of a national budget. To what extent can economy be supported by such practice.

Public Expenditure

Expenditure means outlay. it means spreading the income. Public expenditure means those amounts which are spent by the government for different purposes.

Principles of Public Expenditure

1. Maximum social benefit – government expenditure should be made in such a way that people get maximum possible benefit from it.
2. Economy – the government should not indulge in extravagant use of its revenue.
3. Elasticity – government expenditure must be capable of being adjusted according to circumstances e.g. during a depression public expenditure should go up and during inflation it should be possible to lower it.
4. Approval – public expenditure should be approved by a competent independent governmental organ e.g. parliament.
5. Sound financial administration – public accounts must be maintained properly and must be audited in order to investigate any misuses or discrepancies.

Causes of Increased Public Expenditure in LDCs

1. Increasing population
2. Growing state functions
3. Increasing provision of public utilities e.g. schools, hospitals e.t.c.
4. Efforts to have effective government administration e.g. computerization of various departments.
5. Changing technology necessitating the government to update itself
6. Increasing requirements of economic growth
7. Increasing requirement of full employment
8. Increasing prices (inflation)

The Role of Public Expenditure in a Developing Economy

1. Socio-economic infrastructure e.g. hospitals, schools, roads, e.t.c. can be provided which can facilitate economic development.
2. It can lead to balanced regional growth. by the government spending more money in depressed areas, it can lead to balanced regional growth.
3. It can lead to development of agriculture and industry. by the government spending more money on agriculture and industry it will result in the development of those sectors.

Macroeconomics notes

4. It can facilitate exploitation and development of natural resources particularly in those areas where private entrepreneurs find it less profitable.
5. Government subsidies and grants can induce the public to spend on desired projects. e.g. subsidising agricultural inputs, it can encourage agricultural development.
6. Equitable distribution of income. It can lead to equitable distribution of income by the government taxing the rich and spending the revenue on the poor.
7. It can lead to economic stability. By increasing public expenditure during a depression and decreasing it during inflation, economic stability can be achieved
8. It can lead to higher employment level. Increased public expenditure in a situation of unemployment can generate additional demand which can generate additional employment.

Fiscal Policy

Fiscal policy is the policy according to which the government changes its revenue and expenditure programmes to achieve desirable effects and to avoid undesirable effects on production, distribution and employment levels.

Objectives of Fiscal Policy

1. To achieve desirable price levels and to check inflation
2. To achieve desirable consumption level
3. To maintain fair distribution of national income e.g. taxing the rich more and using the money to help the poor
4. To maintain economic stability
5. To increase the rate of economic growth and development

Tools of the Fiscal Policy

- 1) Public revenue (taxation)
- 2) Public borrowing
- 3) Public expenditure

Application of the tools of fiscal policy to achieve the objectives of the fiscal policy

1. Fighting inflation – during inflation taxes are raised, public borrowing is raised and public expenditure is reduced.
2. To achieve a desirable level of consumption for instance if the level of consumption in the economy is so low, it can be raised by lowering taxes, buying back government securities and increasing public expenditure.
3. To raise the level of employment, if there is unemployment in the economy due to low level of aggregate demand, this can be raised by lowering taxes, buying back government securities and increasing public expenditure.
4. Equitable distribution of income, if there is unequal distribution of national income; a fair distribution can be achieved by taxing heavily the rich and spending the revenue on the poor i.e. giving the poor free services which enables them to save.
5. To increase the rate of economic growth and development. If the rate of economic growth and development is low due to the fact that people are caught up in the vicious circle of poverty, this can be raised by lowering taxes, borrowing more from abroad and spending more of the government revenue on the public.

Macroeconomics notes

Limitations of the Fiscal Policy

1. Taxation may not be successful as it may be avoided and evaded e.g. where the rich are supposed to declare their incomes which is the subject to taxation this may be falsified thus evading the tax.
2. There may be improper assessment of taxes leading to under-assessment.
3. Taxation as a form of government revenue or economic growth and development may discourage savings and investments.
4. Borrowing may not be successful because:
 - (i) There are no properly organized markets for securities
 - (ii) Many people prefer to invest in real property e.g. housing than in government securities so the government may not succeed in influencing the economy through sell of securities.
 - (iii) There are no organized financial institutions to mobilize funds from rural areas.
 - (iv) The response towards government securities is poor because of inflationary tendencies.
 - (v) In case of external borrowing, inability to meet conditions of the donor community.
 - (vi) Failure to be considered credit worth
5. Public expenditure may not be successful because:
 - (i) It may not bring any benefit to the people at all.
 - (ii) There may be no effective supervision in the way government revenue is spent and so the expenditure may exceed the approved amounts.
 - (iii) It may not be possible to enlarge government expenditure owing to limitation of resources.
 - (iv) Government expenditure arising from deficit financing may lead to inflation.

The Role of Public Finance in LDCs

1. It is an instrument of capital formation. By taxing the rich heavily and forcing people to save where there is low voluntary saving it will increase investment.
2. It is a means of matching the fiscal development through the monetary and fiscal policies. By application of the instruments of public finance, the financial plans will be implemented and targets in money terms will be achieved.
3. Public finance can be used to reduce inequalities of income e.g. by taxing the rich more and providing social services free.
4. It is an instrument for regulating consumption. Fiscal policy can be used to reduce consumption of luxuries. By imposing of high taxes on luxuries it can discourage their consumption and the money rescued used for investment.
5. Public finance can be used to reduce expenditure in less productive investment. This can be done by reducing taxes in desirable areas of investment and increasing them in undesirable areas of investment.
6. Public finance can be used to achieve desirable price levels i.e. it can be used to fight inflation.
7. Public finance can also be used to achieve the desirable level of employment

Macroeconomics notes

8. It can be used to bring about balanced economic growth and development.

Questions December 1996

1. a) Explain how fiscal and monetary policies are used to influence the performance of an economy.
b) What factors limit the effectiveness of these policies in developing countries.

June 1996

2. A good tax schemes must fulfill four basic principles
 - a) Name the four principles
 - b) Explain how two of the following taxes fulfill the four principles.
 - (i) VAT
 - (ii) Customs and exercise duties
 - (iii) Local authority service charge
 - (iv) Airport service charge
3. a) Differentiate between fiscal and monetary policies and show how the two policies are used to influence the economy.
b) Assess the success of implementing the policies in LDCs
4. a) Discuss the main features of fiscal and monetary policies.
b) To what extent are such policies tools for the management of a national economy.
5. A tax policy needs to be clearly balanced between the need for increased public expenditure and increased private investment.
Briefly but clearly explain the importance of the need for this balance from the economic point of view.
6. State and explain Adam Smith's cannons of taxation. Give local examples as appropriate in each case.
7. Modern economies can be highly influenced by the way their budgets are managed. Clearly explain the role of budgetary management in economic development.
8. The exchequer must always strive to achieve the concept of equity in designing the tax policy. Explain how this is done in practice.
9. Differentiate between budgetary and monetary policies and show how the two policies are used to influence the economy.
10. What are the characteristics of a good tax system? To what extent are they attainable in a country like Kenya?
11. Explain the relationship between a government budget, fiscal policy and monetary policy.
12. Explain how a country may use its tax system to influence the general level of productivity.
13. Developing countries have experienced persistent rising external debts for a long time. Explain the major causes of this problem and suggest economic policies which may be applied in order to minimize this problem.
 - War and war preparedness
 - Population
 - Budget deficit
 - Public utilities
 - Energy crisis

Macroeconomics notes

- Desire for economic growth and development.

Solutions

- Dialog- diplomacy
- Policies to reduce population
- Borrowing
- Privatization
- Alternative sources of energy biogas

ECONOMIC GROWTH AND ECONOMIC DEVELOPMENT

The terms economic growth and economic development have got a tendency of being used interchangeably as if they mean the same thing. The two terms however have got different meanings. Infact a close analysis shows that one leads to the other.

Economic Growth

This refers to an increase in output pre capita. it is a quantitative change. it involves increase in the volume of goods and services e.g. cars, houses, household goods, education services, medical services, transport services, legal services, banking services, e.t.c.

As more goods and services are produced and consumed, the standard of living increases. So, economic growth can lead to a high standard of living.

Economic growth can also be described as the steady process by which the productive capacity of the economy increases over time to bring about a rising change in the level of national income.

Economic growth is measured by output per capita.

Economic Development

This is a wider concept than economic growth. It is a process by which the economy is transformed from one whose rate of growth is small or negative to one where there is a significant increase in per capita income. That is a permanent and long term feature.

Economic development involves both quantitative and qualitative change. it therefore involves economic growth i.e. increase in output per capita and qualitative change gin the economy.

Qualitative change occurs in the economy when institutional arrangements e.g. customs, belief, values and attitudes change and the changes are geared towards increasing quality.

It also involves movement to highly scientific and technological arrangements e.g. customs, beliefs, values and attitudes change and the geared towards increasing quality.

It also involves movement to highly scientific and technological methods of production. It involves acquisition or improvement of skills and increased capacity to deal with the environment.

Therefore development = Economic growth + new methods of production
+(plus) Improvement in social institutions

It involves changes in the whole system, i.e. cultural changes, political changes, social changes, economic growth and economic development.

Macroeconomics notes

Differences between Economic Growth and Economic Development

Economic Growth	Economic Development
1. It uses the available techniques to increase output e.g. in agricultural sector, output can be increased by increasing acres of land	1. it involves the use of new scientific and technical methods or production to increase output e.g. in agricultural sector output can be increased without increasing acres of land but by use of scientific methods of production e.g. irrigation, use of fertilizers, spraying, e.t.c.
2. It can discriminate between sectors e.g. there would be improvement in output in the industrial sector.	2. It does not discriminate between sectors e.g. there cannot be development of agricultural sector without the industrial sector
3. It does not change the social set up of the nation e.g. it does not change religious beliefs, customs e.t.c.	3. It is gradual i.e. changes in beliefs, customs, values, attitudes and technology and skills acquisition does not take a short time. it takes a long time.
4. It does not change the social set up of the nation e.g. it does not change religious beliefs, customs e.t.c.	4. It changes the social set up of the nation e.g. customs, religious beliefs
5. It involves a low rate efficiency	5. Involves a high rate of efficiency due to increased skills and improved technology
6. There is no sustained permanent increase in output per capita.	6. There is a sustained permanent increase in output per capita which is a long term feature.

N/B

It should be noted that economic growth can do without economic development but economic development follows economic growth. Economic development cannot occur without economic growth. in other words, in order to increase the rate of economic development i.e. change in beliefs, customs, acquisition of skills and new technology output must increase first.

Determinants of Economic Growth and Economic Development

1. Rate of capital formation
2. Capital-output ratio
3. Rate of resource exploitation
4. Rate of population growth
5. Technical progress and enterprise

Rate of Capital Formation

No economic growth and development is possible without construction of roads and bridges, buildings, factories with machinery installed, railways, airports, harbours, ships, producing tools and equipments for industrial and agricultural purposes and producing all other facilities necessary for further production associated with high level of productivity.

Macroeconomics notes

In LDC's insufficiency of capital is the most limiting factor in their development strategies.

Capital- Output Ratio

This ratio determines the rate at which capital grows as a result of a given volume of capital investments.

A lower capital- output ratio tends to lead to a comparatively high rate of growth of output than a higher capital-output ratio e.g. a capital output ratio of 3: 1 means that capital investment of Sh. 3 results in additional output worth Sh. 1. Thus given the output, a smaller capital investment will be needed if the capital output ratio is lower than when it is high.

Rate of Population Growth

Natural resource may exist in an economy but the labour is needed to be employed to exploit the resources and if this is small owing to smallness of population, then the rate of growth and development will be small and resources will not be fully exploited.

On the other hand rapid population growth may result into high population which may lead to overcrowding and resources may not be sufficient to support the population hence output per capita will decline.

Population is also necessary for providing market. a high population provides market and encourages greater output.

Availability of Natural Resources and the Rate Of Their Exploitation

Where a country is endowed with more natural resources such as minerals, forests, fishing grounds, e.t.c. and the rate at which these resources are exploited is high then the rate of economic growth and development will also be high and vice versa. Also if the country does not have natural resources but has got the means of importing them, then this can facilitate a higher rate of economic growth and development.

Technical Progress and Enterprise

improvement in technology e.g. introduction of modern methods of production can highly influence the rate of economic growth and development for example, in agriculture the use of fertilizers, improved seeds, herbicides, irrigation, tractors, e.t.c. will lead to greater output and development.

Also improvement in entrepreneurial abilities can highly influence the rate of economic growth and development. Improvement in entrepreneurial abilities can be achieved by training people in management courses, equipping them with good management principles so that they can have the courage to borrow capital, manage it efficiently and generate steady additional income.

QUIZ

1. a) Discuss factors considered essential for economic development
b) Explain why there are low levels of growth and development in LDCs.
(Hint – obstacles to economic growth and development)
2. Explain the nature and role of entrepreneurship and technology as a means of achieving rapid economic growth development in your country.

SOLUTION

Macroeconomics notes

The nature of technology and entrepreneurial abilities essential for rapid economic growth and development is the improved highly scientific modern technology and the improved entrepreneurial abilities.

The use of improved technology will lead to a faster rate of economic growth and development e.g. in agriculture the use of fertilizers, will differ (postpone) the law of diminishing returns leading to greater output. Also the use of improved seeds will ensure that the seeds are resistant to natural infections which will guarantee greater yield.

Also the use of herbicides will ensure effective weed management especially in places where labour resource is limited and this will lead to greater output. Also the application of irrigation ensures that the crops do not suffer from the effects of the draught and allows production throughout the year leading to greater output.

also the use of mechanized methods of agriculture e.g. the use of tractors leads to farming greater acreage of land leading to greater output.

In case of industrial production, the use of improved technology such as computers leads to increased efficiency thus greater output and greater expansion of the industrial sector.

As regards entrepreneurial abilities the use of improved entrepreneurial abilities will lead to a higher rate of economic development in the following ways:

- (i) There will be proper management of enterprise avoiding inefficiencies and this will lead to greater output.
- (ii) Where there is a large number of trained entrepreneurs, more economic activities will come up and this leads to greater output and development.
- (iii) Where the entrepreneurs possess sufficient managerial skills, they will have confidence to manage their business successfully and will have the courage to go for loans from banks which they will use to expand their businesses and to open up new businesses and this will lead to greater output and development. this is the need for improved entrepreneurial abilities.

Measurements of Economic Development

Economic development is measured by the following factors:

1. Life expectancy and mortality rate
2. Number of teachers and doctors per head
3. Number of calories in the diet
4. Steel and electricity consumption per head
5. The share of value added in manufacturing
6. Capital labour ratio in manufacturing
7. Miles of roads railways e.t.c. and the number of automobiles
8. The level of GDP per capita (output per capita)
9. Proportion of labour force engaged in primary activities. If high is a manifestation of under-development
10. Ratio of foreign trade to gross domestic product. If high is an indication of under-development.

Under-development

From a political point of view under development is defined as a process by which the present under-developed countries were and have been exploited by their colonial and neo-colonial masters making them under-developed.

Macroeconomics notes

On the other hand from the economic point of view under-development is defined as the state of backwardness, poverty, low income, e.t.c. in the economy. an under developed country is one that is backward in terms of development, one where the level of poverty is very high, one where the level of incomes is so low, e.t.c.

Under-developed countries, the rate of resource exploitation is so low such that the rate of economic development is low as well. There is inadequate utilization of resources i.e. land, labour and capital.

Characteristics of Under-Development

1. Excessive dependence on agriculture. Third world countries excessively depend on agriculture because there are very few non- agricultural occupations to match with the high rate of population growth. About 70-80% of the population is engaged in agriculture.
2. Insufficient capital equipments. Third world countries do not have adequate capital equipments per head. The amount of capital per head is small.
3. Low rate of capital formation. In third world countries, the rate of capital formation is very low because of low rate of investment and low inducement to invest.
4. Small size of domestic market. In third world countries, the size of domestic market is small because of the low level income.
5. Weak under-developed industrial sector. In third world countries, the industrial sector is very weak and under-developed. There are very limited manufacturing industries. What majority exists are those industries which process primary products for export and value added in this case is small.
6. Abundant supply of un skilled labour and unskilled entrepreneurs. This is due to low level of education and inappropriate education.
7. Low and un-even distribution of income. In third world countries the level of income is low and there is a remarkable inequality in the distribution of income. The low level of income is mainly due to investment in unproductive activities e.g. housing.
8. Dependence on external sources. in third world countries there is a high level of dependence on foreign investment, foreign aid and foreign technical know how which in the long run may become the causes of retardation of the economies.
9. Foreign trade orientation i.e. greater dependence on the foreign market than on the local market. In LDC's the ratio of export output is normally greater than output from the local market due to small size of the domestic market.
10. Inadequate physical infrastructures such as roads, railways, e.t.c.
11. Inadequate social and cultural facilities e.g. insufficient housing and sanitation.
12. Inadequate education and training
13. High level of unemployment especially disguised unemployment
14. High population growth rate
15. Others include:
 - a) Low life expectancy
 - b) Prevalent malnutrition and under-nutrition
 - c) High infant mortality rate
 - d) Low degree of specialization
 - e) High level of illiteracy e.t.c.

Obstacles to Economic Growth and Development

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1. Foreign domination- this leads to exploitation of the natural resources e.g. through selling in the local market the highly priced manufactured goods while buying raw material at very low prices. In other words, by being in the market for manufactured goods, there is no attempt to develop local industries and the few industries available are owned by foreigners who pay low wages and charge high prices.
2. Mis-use of resources due to market imperfections such as immobility of factors of production, price controls, ignorance regarding market trends, monopolistic practices, unawareness of foreign markets, e.t.c. these factors make the productive capacity of the economy to be low so that there is under-utilization of the resources.
3. High population growth. If population grows at a faster rate than the rate of resource exploitation then the rate of economic growth and development will slow down.
4. The vicious circle of poverty-low income leads to low savings and low saving leads to low investment, low investment leads to low production and low production leads to low income hence the vicious circle of poverty.
5. The present pattern of trade whereby LDCs are importers of highly priced manufactured goods and exporters of lowly priced raw materials leading to persistent Unfavourable terms of trade.
6. Demonstration effect – international demonstration effect which the MDCs export their high standards of living to LDCs has made it difficult for LDCs to save and invest. it should be noted that a person's consumption does not merely depend on his own income but is very much influenced by the living standards of his relatives and friends. This means that instead of increasing his own savings when his income increases, he increases his consumption as a result of the demonstration effect. Thus demonstration effect increases the propensity to consume which reduces the rate of savings and investment.
7. Very low standards of living e.g. under-nutrition, poor hygiene inadequate medical attention, inadequate education thus illiteracy, all of which lead to low productivity.
8. Shortage of entrepreneurial abilities and the spirit of innovation and experimentation.
9. Social and political factors such as:
 - Lack of fore thought
 - Lack of ambition
 - Unwillingness to bear risks and risk ventures
 - In ability to co-operate
 - Submissiveness
 - Insufficient administration
 - Low punctuality
 - Arbitrary legal system
 - Political instability such as frequent changes of governments
 - Tribalism

Attempts to Over-Come Under-Development

1. Increase the level of income percapita
2. Reduce rapid population growth through population policies.
3. Provide more education and training facilities to the people to equip them with the necessary skills.

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4. Develop different sectors of the economy on simultaneous basis so that there is linkage between the sectors.
5. Use new methods of production to increase the levels of productivity.
6. Encourage greater saving and investment through sound monetary and fiscal policies.
7. Diversify economic activities i.e. encourage the production of a variety of both agricultural and industrial products.

QUESTIONS

1. What are the key obstacles to economic development in Kenya.
2. Explain how the fiscal and monetary policies may be used to accelerate economic growth and economic development
3. Explain the characteristics of under-development. what are their possible solutions
4. a) What are the objectives (goals) of economic development?
b) Discuss the factors considered essential for economic growth and development. (Hint- determinants of economic growth and development)

Goals/Objectives of Economic Development

1. increase in income percapita
A higher income percapita leads to a higher standard of living of the people.
2. To raise the level of employment. In LDCs about 20-30% of the employable populations are unemployed so economic development aims at creating more employment opportunities.
3. To maintain price stability- great fluctuations in price levels are harmful to economic activities, e.g. can discourage agricultural output. Therefore economic development aims at ensuring price stability.
4. Removal of inequalities of income and wealth – great inequalities of income reduce the size of the market since the ability of the majority of the population to consume is limited. Inequalities of income also reduce the level of investment as the rich tend to engage in luxurious consumption.
5. To fight poverty ignorance and disease. These factors reduce the rate of development.
6. To build an independent, integrated self sustaining national economy.
7. To transform the economic from agricultural to industrial. This is because heavy reliance of agriculture contributes greatly to the low standards of living since fluctuations i.e. agricultural output and agricultural prices leads to fluctuations in income and foreign exchange earnings.
8. To transform the economy from subsistence to monetary so as to widen the production potential
9. To bridge the gap between the technologically advanced countries and the under-developed countries. This is necessary because third world countries will continue being poorer and poorer as they continue depending on he developed countries for capital, technology, investment, e.t.c.
10. To become economically independent. This is important because it will enable the economy to be operated in the interest of the natives and reduce neo-colonialism where multi-national companies control the policies of eh country. It should be noted that there cannot be political independence when there is no economic independence.

Development/ Economic Planning

Development/ economic planning refers to the conscious effort by the government to influence and mobilize and even control certain economic variables e.g. investment,

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saving, imports, exports, production, consumption, e.t.c. in order to achieve certain pre-conceived and pre-determined objectives and targets in a region or in a country over a certain period of time.

A country is said to be engaged in planning if it makes a deliberate and conscious attempt to accelerate the rate of economic progress.

Unplanned Economy

An unplanned economy is one in which there is absence of government intervention in influencing economic activities. The economy relies on the market forces (on the price mechanism) for the utilization of its resources for production purposes.

The price mechanism is the one responsible for coordinating production and consumption. It interprets consumers preferences to the producers by their willingness to pay high prices and this being a promise of high profits producers will allocate resources in the production for those commodities.

Need For Planning

Planning has become popular owing to the basic deficiencies of capitalism and free enterprise. And owing to the realization that unless a free enterprise economy is regulated, it will not ensure steady growth and maximization of social welfare. Therefore there is need to plan especially in LDCs. This is because:

1. The price mechanism working under the private sector does not allocate scarce resources in the most efficient way. It leads to growth of monopolies which restrict output and charge high prices and pay low wages. The price mechanism assumes perfect competition which in reality does not exist. Therefore it cannot allocate resources efficiently. Hence the need for government intervention in the allocation of resources.
2. Private investors tend to invest in less risky ventures and neglect the risky ones which may affect for example the level of employment and capital accumulation.
3. The private sector and the price mechanism can lead to social cost which may endanger the economy e.g. pollution, slum conditions, e.t.c.
4. Private investors can create economic instability and unemployment. They are profit motivated and so they invest in ventures where there are more profits, even though these may be having low employment potential. This may result in unequal distribution of the resources which may lead to economic instability and distortions.
5. The price mechanism does not lead to balanced regional development hence the need for planning. This is necessary if rapid development has to be achieved.
6. Some ventures are too big to be undertaken by the private sector who may be lacking capital e.g. the construction of railway lines, airports, e.t.c. hence the need for government intervention by planning to construct such ventures.
7. To cope up with major economic changes. Economic planning can enable the economy to cope up with large structural changes in the economy.
8. Coordination of production – planning is necessary to eliminate unnecessary duplication of resources.
9. For having favourable terms of trade; planning can ensure that the terms of trade remain favourable which cannot be guaranteed by the free enterprise economy.
10. Rapid industrialization – in LDCs there is a tendency for private developers to develop land, housing and jewelry which are useless for rapid economic

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development. Hence government intervention by identifying useful areas of investment can lead to rapid economic development.

11. To remove disguised unemployment; planning can remove people from agricultural under-employment to industry.
12. Some strategic ventures need to be under government control because of the vital position they hold in the economy e.g. a broadcasting station.

Main Planning Decisions

Planning involves making major decisions. Some of these decisions are:

1. Allocation of resources over time e.g. how much income should be invested, how to use the existing labour, capital and natural resources.
2. Choice of techniques e.g. whether to use labour intensive or capital intensive.
3. Social overheads capital versus direct productive projects i.e. whether to build social infrastructures like schools, roads, railways, hospitals e.t.c. or whether to build industries which produce direct consumer goods. e.g. textile industries, agro-industries.
4. Social services versus economic services i.e. whether to provide social services like education and housing or to provide economic services like banking, insurance, transport e.t.c.
5. Agriculture versus industry i.e. whether to allocate more resources on agriculture or on industry.
6. Balanced growth versus unbalanced growth i.e. whether to develop the economy in a balanced style or in unbalanced style.

PROBLEMS OF DEVELOPMENT PLANNING

1. Lack of accurate sufficient and detailed information. Information in LDC's is not enough and not easily available. The statistics are very poor and do not give a clear picture of the economy as a whole.
2. LDCs are economically dependent on MDCs for various things e.g. they depend on MDCs for capital (dependence of foreign capital in planning). They anticipate that they will be able to raise enough capital from outside. They then become frustrated when they fail to get the capital and sometimes the capital acquired may be of high interest.
3. Dependency on agricultural exports, LDCs depend on agricultural exports for income and yet the prices of these exports fluctuate so much. Planning is therefore limited in the sense that planners expect a steady income from exports while the reality is the opposite. Fluctuation in export income is also due to the fact that agricultural production is greatly affected by natural hazards like bad weather.
4. Plans are often made by foreigners who after making them pack up and go. They never wait to see the implementation of the plans so that they can make necessary adjustments as the plan is being implemented. The plans therefore are rigid and cause difficulties in implementation.
5. Existence of large private sector. This means that a large part of the economy is not controlled by the planning authority. The private sector may not work according to the planned objectives e.g. the objectives of the plan may be to increase employment by employing labour intensive techniques but this may not be in the interest of private investors who wish to maximize profits.

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6. Lack of projects from which to choose the best alternative. Because of lack of alternative projects, a plan may be limited to an existing project which may not represent the best alternative.
7. One sector may fail leading to failure inconsistency. One project may fail which will make other projects also to fail and this may bring loss of confidence or faith in the plan on the part of the public.
8. Lack of planning machinery – in LDC's there is no efficient planning machinery though there's the ministry of planning. The indigenous people are not able to compile the plans and this necessitates the importation of expatriates. These are not familiar with the problems of the country and may not make good plans to suit the needs of the economy.
9. Lack of coordination and consistency. In most cases there is no proper coordination between the ministry of planning and the other ministries.
10. Lack of caution. The plans tend to aim at higher growth rates and this may not be achieved in due course. In Kenya for example it was expected to have Kenya an industrialized country by the year 2000 AD which has been found not achievable and has now been shifted to the year 2020 AD. This means that the original plan had been doomed to failure. It's therefore better to travel on the right rails and if the line has already been washed away it's rather silly to keep steaming the engine. It's better to make a short cut out or build a new track all together. This means that if the plan fails it's better to formulate another plan and make it flexible.
11. Very low income. In LDCs incomes are very low both to individual and to the state. It's relatively expensive to carry out a plan for long consecutive years, this has therefore in most cases led to neglect of plans by most governments.
12. Domination by local authorities – in LDCs the economies are mostly dominated by local authorities who do not know planning – this limits planning, therefore is plan formulation only and no implementation.
13. Bulky plans – it has been noted that LDCs tend to publish massive plan documents of about 1000 pages. These are rather tiresome to read and therefore the general public for whom it's intended tend to dodge it. They are not informed of the general policies aimed at. The plans also do tend to look at the country as a whole and they avoid regional planning. This has therefore brought about unequal benefits from development.
14. Lack of already existing productive sectors. Development planning in LDCs is also limited by the lack of the existing productive sectors. The supply of a development plan entails that there should be already existing productive sectors. So that production can take place immediately during plan implementation. In LDC's most of these are non-existent and it acts as a limitation to planning.
15. Centralization of the plans. Planning may be too centralized and does not take into account regional level. People who do not have access to the central plans are not encouraged by the plan objectives to work harder.
16. Political instability – when governments change they never continue with plans drawn by the previous governments.
17. Inadequate financial resources – it's difficult in mobilizing the local financial resources to support the plan objectives.

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18. Position of the economy – in LDCs the economies themselves tend to lie outside the central zone of the government e.g. there's reliance on few export crops, reliance on foreign aid, reliance on foreign capital, reliance on foreign markets, e.t.c.

QUESTIONS

4. a) Discuss some of the possible factors that may cause regional development disparity observed in a developing economy. (what are the causes of uneven development)
b) What economic recommendations would you suggest in order to reduce such a disparity?

Solution to a)

- (i) Certain parts of the country have more infrastructures while other parts of the country lack them.
- (ii) Certain regions have got industries while others are agricultural zones. Areas with industries have higher capital output ratio while the agricultural zones have low capital output ratio. This means growth will be more in industrial zones than agricultural zone.
- (iii) Some parts of Kenya are favourable with good natural resources e.g. good climate, fertile land, therefore farming is doing well while others are arid where no much resource exploitation can take place rendering them backward.
- (iv) Some regions have high population while others have low population in high populated areas there's over-utilization of resources leading to low per capita income i.e. disguised unemployment in agriculture. In low populated areas they have more resources to exploit this makes them more productive leading to growth in those regions.
- (v) Some parts of the economy still use the primitive methods of production, because of limited accessibility to finance e.g. they do not use fertilizers, herbicides, irrigation, improved seeds, e.t.c. while others have got accessibility to those facilities. so this causes variation in output per capita hence regional development disparities. also the population in some zones has not had accessibility to good training due to unavailability of training facilities and therefore there has been no development in such regions.

(b) Recommendations

- (i) encourage the use of new techniques of production by increasing accessibility to finance
- (ii) Provide more education and training facilities in the disadvantaged regions to equip the people with technical skills and entrepreneurial abilities.
- (iii) Introduce population policies in areas with population problems and encourage the people to take up the policies.
- (iv) Set up the infrastructure such as roads and bridges to facilitate economic development in the disadvantaged regions.
- (v) Diversify economic activities i.e. encourage industrial locations in areas that are basically depending on agricultural production, through proper planning.
- (vi) Increase the income per capita of people in the disadvantaged regions e.g. by taxing more people in the successful regions and spending the money on people in the unsuccessful regions. This may break the vicious circle of poverty in those regions and speed up development.

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5. Briefly discuss the important factors that may influence the progress of development. (determinants of economic development)
6. What role can economic planning play in overcoming obstacles to economic development in Kenya?

THE DEVELOPMENT PROCESS AND THE CHOICE OF THE DEVELOPMENT STRATEGY

AGRICULTURE

Agriculture is the dominant sector in the economies of East Africa. About 80% of the population depends on agriculture for their employment and livelihood.

The rate of economic growth therefore is largely dependent on the performance of the agricultural sector.

Agriculture contributes 61% of GNP in TZ, 55% in UG, and 32% in Kenya. Agriculture and livestock products are important earners of foreign exchange in East Africa. About 60% of exports are agriculture in origin.

This means that the ability to purchase the increasing volume of imported goods is largely determined by the performance of agriculture.

Agriculture, because of its importance in the economy has been accorded the highest priority in the allocation of productive resources in order to ensure its rapid and sustained development.

IMPORTANCE OF AGRICULTURE

1. It provides employment to the bulk of population. Over 80% of people in East Africa depend on agriculture production for their livelihood.
2. It provides export crops, which are foreign exchange earners, i.e. coffee, tea, tobacco, e.t.c, used to import machinery for industries.
3. It supplies raw materials to industries e.g. cotton for textile industry, tobacco for tobacco industry, maize for maize milling (flour) industries, hides and skins for leather industries, e.t.c.
4. It supplies food for the workers in other sectors.
5. It provides market for the output of other sectors e.g. fertilizers, machinery.
6. Because of its large share in GNP, it provides capital for development. In Russia for example capital was accumulated by taxing the agricultural sector. In China, the rural sector is taxed for industrial development.
7. Agriculture improves the distribution of income to more people than any other sector, e.g. an increase in the income of agricultural products goes to more people than increase in industrial development.

PROBLEMS OF AGRICULTURE

While the individual governments in east Africa have tried to put emphasis on agriculture, there are a number of problems, which impedes agricultural development:

1. Land tenure system

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Land tenure refers to the right to own or possess or use the natural resources from a few metres below the land surface to roof high. It is the system regarding the right of ownership or use of land.

In Kenya, there are a number of systems through which an individual owns land. Nevertheless, the government of Kenya is the owner of land on behalf of people. In other words, the government of Kenya is custodian of land or the trustee. Individuals can own land in different ways as follows.

- a) Customary ownership (e) freehold tenure system
- b) Communal ownership
- c) Leasehold ownership
- d) Public land

These land tenure systems are a hindrance to agriculture development in a number of ways. For instance:

- (i) Customary ownership of land leads to land fragmentation hindering large scale farming, use of modern machinery like tractors, use of modern methods of production and also encourages selling of land causing landlessness.
- (ii) Communal ownership of land leads to less care of land through overgrazing, overstocking, over cropping, careless burning of bushes whose consequences is soil erosion.
- (iii) Lease hold ownership leads to land remaining idle especially when the leasee is not ready to develop it since the land cannot be given to people who may want to use it.
- (iv) Public land is land owned by the state i.e. forests, game reserves e.t.c. some of this land may not be profitably utilized e.g. some parks may not actually have enough game at all but cannot be given to people to use it for agriculture.
- (v) Freehold tenure system
Under this system, large areas of land were given to prominent personalities regardless of whether it was occupied or not. This created landlords and tenants. The problem with this system is that some landlords owned a lot of land which they were unable to develop.

2. The traditional role of women in agriculture:

Women are mostly left to work on land yet they have had little access to education and hardly attend meetings and demonstrations organized by extension officers.

This means that men leave the land to be mismanaged by women who have not been exposed to modern agricultural practices and land conservation.

Extended family system:

This leads to land being divided into small plots (fragments) this implies that each has little land for cultivation and the land may be too small for economic use.

Fluctuating agricultural prices

Fluctuations in agricultural prices caused by fluctuations in output leads to fluctuations in farmers income.

Lack of market, transport and storage facilities

Lack of market frustrates farmers and poor storage facilities leads to output getting spoilt.

Controlled prices:

Controlled prices especially of cash crops discourages their production.

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MEASURES TO INCREASE AGRICULTURE PRODUCTION:

1. Removal of uncertainties
Farmers are always faced with uncertainties as far as their earnings are concerned. This problem can be overcome by diversification i.e. planting different crops or practicing mixed farming.
2. Introduction of new varieties e.g. new varieties of sorghum, hybrid maize e.t.c. which may be quick yielding or resistant to pests or productive. Also, introduction of exotic cattle can increase cattle production.
3. Irrigation
This will enable cultivation of crops throughout the year.
4. Insurance
Farms can be insured and this makes farmers to invest more
5. Improvement in marketing
One of the things which frustrates farmers is inability to sell their produce in time. The marketing can be improved through, co-operatives and marketing boards which can provide transport and storage facilities.
6. Avoid price and income fluctuations
This can be done by operating buffer stock and stabilization fund systems
7. proper crop and animal husbandry and soil conservation
8. Modernization of agriculture
This involves:
 - a) Introduction of improved seeds and livestock varieties
 - b) Pest and disease control
 - c) Increased use of machinery e.g. tractors
 - d) Development of institutions such as research institutions, demonstrations finance banks e.t.c.
 - e) Break-up of traditional land tenure system.
 - f) Improvement in agricultural practices e.g. use of fertilizers.

INSTRUMENT OF GOVERNMENT POLICY TO PROMOTE AGRICULTURE:

The government of Kenya aims at boosting agriculture production, in both quantity and quality so that the country is not only self sufficient in food production but can also effectively compete in international export market with high quality agricultural commodities.

The government also aims at income distribution and increased employment in agriculture.

It also aims at increasing of non-traditional cash crops such as maize.

To achieve this, the government is pursuing a number of policies, which includes:

1. Credit extension:
This aims at extending capital to farmers, which is a major hindrance to agriculture as most farmers are poor people.
2. Research policy
This involves:
 - a) Biological research i.e. dealing with investigations into the biology and genetics of plants and animals including animal diseases and production

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- b) Pasture studies and plant studies. Research studies are being carried out in various research centers in Kenya e.g. KARI.
3. Extension services
This involves extending technology and research results to farmers and informing them about marketing opportunities. This is being done through the media, both press and electronic, district farm schools, and through extension officers.
4. Training of agricultural staff
The government has undertaken the training of agricultural staff from field assistants to agricultural offices with diploma and degrees.
5. Provision of farm inputs e.g. ploughs, fertilizers at sub-sidized prices, low enough to be afforded by farmers.
6. Pricing policy
The revision of prices of export crops such as coffee and tea from time to time by the government has been intended to encourage greater production of export crops. Also, Kenya government operates a buffer stock system for maize and wheat intended to encourage greater production.
7. Marketing policy
The government tries to ensure that what the farmers produce finds Market...this is done through co-operatives and marketing boards set-up by the government. They provide transport, storage and market.
Promotion of non-traditional cash crops e.g. maize, beans, Soya beans e.t.c. this are meant at supplementing forex earnings from traditional cash crops.

INDUSTRY

Industrialization is a process by which a non-industrialized country becomes an industrial one.

An industrial country is one in which 25% of G.D.P arises from the industrial sector of which at least 60% comes from manufacturing and it has at least 10% of its population employed in industry.

Industrial sector includes:

- Mining and quarrying
- Manufacturing
- Processing
- Packaging
- Assembling
- Construction
- Electricity generation
- Water and sanitation

In Kenya, the industrial sector contributes about 15% of GDP.

IMPORTANCE OF INDUSTRY IN ECO-DEVELOPMENT

1. The market (dd) for industrial products is much higher than the dd for agricultural products since industrial products have more uses than agricultural products.
2. The value added in industry is usually higher than that added in agriculture.
3. Prices of industrial products do not have serious fluctuations like those of agriculture hence stable government revenue and stable foreign exchange earnings.

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4. Industry provides agriculture with inputs such as fertilizers, tools and equipments e.t.c., which leads to greater agricultural production.
5. Availability of industrial output generates supply of effort in rural areas. It makes people work hard in order to purchase the industrial products such as cloth, bicycles, radio, TVs. e.t.c.
6. Industrial projects have greater complimentaries e.g. from sugar industry, we can get a spirit industry: a confectionary industry e.t.c. generating more employment.
7. Industries increase the power of saving in the economy through taxation i.e. corporation tax and income tax. It is more difficult to tax people in agriculture sector where there are no records of income and profits.
8. Industrialization leads to reduction of BOP problem. Import substitution industries reduce the expenditure on imports.
9. Industry absorbs surplus labour in agriculture which would be otherwise idle

POLICIES FOR INDUSTRIAL DEVELOPMENT

1. Import – substitution strategy
2. Export- promotion strategy
3. Establishment of machine tool industry
4. Setting up small-scale industry

IMPORT-SUBSTITUTION STRATEGY

These is a government effort to promote the emergence and expansion of domestic industries by replacing major imports such as textiles, shoes, sugar, household appliances e.t.c. with locally produced substitutes. It is a policy aimed at replacing imports with domestically manufactured commodities.

It involves either processing local raw materials or assembling imported components.

It may also involve transforming imported raw materials.

Advantages of Import-Substitution Strategy

1. Wastage of resources can be avoided by producing what is demanded locally.
2. They have a guaranteed market since the commodities are being consumed
3. They help reduce the BOP problem.
4. The have got high capacity to generate more jobs
5. The trade policy of imposing external tariffs to protect ISI is more acceptable to GATT than subsidizing imports.
6. Value added in ISI is higher than in agriculture.
7. Frees the economy's growth from a bottleneck sector unlike agriculture, which cannot generate sufficient incentive to growth

Disadvantages

- Small market due to small population or low income
- Difficulty to pre-determine the reaction of consumers to local products in respect to price and quality. They may reject the local product.
- The policy of protecting infant industries via tariffs may become permanent and may lead t inefficiency.

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- Consumers may suffer savings because they increase the availability of goods, which encourages consumption. Their establishment is based on current demand disregarding the future.
- They are biased towards production of consumer goods, neglecting production of intermediate and capital goods, which may not promote development.
- In the initial stages, foreign exchange is required to import capital goods, which may not be available.

EXPORT PROMOTION STRATEGY

This is a purposeful government effort to expand the volume of a country's exports. It works best in the case of availability of raw materials domestically and cheap labour supply.

It also needs LDC's to be able to withstand competition from MDC's. In Kenya export promotion is in the area of tea processing, cotton ginning, beef canning, leather and tanning.

POLICIES REQUIRED:

1. Market research
To identify products with export market through sales promotion and advertising
2. Export promotion institutions e.g. marketing boards.
3. Fiscal incentives e.g. tax holidays or reduced taxes e.g. reduced corporation tax.
4. Credit incentives i.e. availing investors with loans
5. Trade agreements and corporations to create market e.g. AGOA.

Advantages

1. Helps the country to earn foreign exchange, which is necessary for development.
2. Can ease BOP problem
3. Reduces heavy dependency on raw materials for export
4. Increases the value of export commodities e.g. cotton yarn fetches more money than lint.
5. Can provide employment and hence acquisition of skills.
6. Value added in export promotion industries is higher than in agriculture.

Disadvantages

1. Limited market within LDC's since being at the same level of development produce similar products.
2. The MDCs produce their own domestic products, which LDCs wish to export hence high competition. Also because of the advanced technology of MDCs they produce substitutes to products of LDC's.
3. MDCs normally impose tariffs on products from LDCs intended to protect their domestic products, which retards LDC's export prospects. Also MDCs have a preference in some cases for non-processed goods.
4. Exporting to MDCs is limited because of income elasticity of demand of LDCs products is low hence their demand is also low.

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5. MDCs have better products because of advanced technology and sometimes they are cheap because of economies of scale. This makes it difficult for LDCs products to compete in foreign markets.
6. Initially the industry may require a lot of capital, which LDCs may not have.

3. SMALL SCALE INDUSTRIES

Small-scale industries are industries which involves little capital and simple organization. They usually employ between 10-100 people. They include posh mills, bakeries, jaggeries, garages, soap and oil mills, metal works, woodworks, e.t.c.

Advantages

1. labour intensive
This is considerable importance to LDCs with a large number of unemployed people. It also helps to reduce seasonal unemployment in agriculture thus utilizing labour, which would go to waste.
2. Capital formation
They may encourage capital formation. The spread of industries over the rural areas encourages habits of thriftiness and investment by small investors who may mobilize money from relatives e.t.c.
3. Skill light
Small-scale industries do not require much skill. This is beneficial to LDCs where skills are in short supply. They also act as training ground of labour for the large-scale industries.
4. Import light
They require low proportion of imported goods (equipment and raw materials) as compared with the total amount of capital used in them. This low use of capital in puts reduced the need for foreign exchange, which can be channeled, to other development projects. They also eliminate the BOP problem.
5. Quick yielding
Their output is quick LDCs with high inflationary potential need quick yielding industries so that the supply of goods is kept constant.
6. Decentralized structure
They tend to be scattered all over the country. This helps to achieve balanced regional development.
7. Overcoming territorial immobility
By taking the job to the worker as in the case of small-scale industries, the problem of territorial immobility is eliminated. Problems of housing, sanitation, e.t.c., are also avoided

Disadvantages

1. Inefficiency
Small scale industries are generally technically inefficient, due to low level of technology applied.
2. Absence of economic of scale
Economies of scale are not reaped such as technical, managerial, financial e.t.c.
3. Low investment

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The spread of income over many people increases consumption, hence reducing saving for investment.

4. Innovation and experimentation may not be possible because of small-scale operation and lack of finance.
5. Dispersing industries may not be possible because of lack of power and because of government policy.
6. Consumers tend to be biased against products of small scale industries. They believe that they are of low quality.

LOCATION OF INDUSTRIES

This refers to the physical situation of industrial establishment. A pure competitor always tries to lower his cost of production by trying to locate his industries where production costs are lowest.

Factors Influencing Location of Industries

1. Accessibility to raw materials so that transport cost can be reduced, especially if raw materials are bulky and have less considerable weight when processed. This explains why cement industries in Athi River and Bamburi are located where there is local supply of limestone, textile industries in Eldoret where there is local supply of cotton, the sugar industry in western Kenya where sugar cane is available.
Also industries processing perishable goods are located near the source of raw materials e.g. milk processing plants, tea processing plants, fish processing plant, sugar refineries e.t.c.
2. Proximity to market
 - a) Where the finished products is bulkier than the raw materials e.g. beer industry is usually established near the market.
 - b) For highly perishable goods the location is near the market e.g. bread, milk, local newspapers e.t.c.
 - c) for industries producing rigid goods e.g. furniture
 - d) Industries producing fragile products e.g. glass.

NB: The nearness to market explains why industries have been attracted to major towns like Nairobi, Mombasa, Kisumu, Nakuru, Eldoret, Bungoma, Kitale e.t.c. because of large population and income.

3. Source of power
Power can be human, animal, electrical or water, e.t.c. industries needing a lot of power tend to be located near the source of power.
4. Trained labour
Existence of trained labour can attract industries to a particular area. This is why many industries in Kenya concentrate in urban areas where there is accessibility to trained man power
5. Availability of capital
Location is also influenced by financial institution i.e. banks, insurance companies e.t.c. the major towns of Kenya are centers of industries because they can get credit facilities easily. Industries are also attracted where there is fixed capital such as buildings.

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6. Good communication and transport
Industries also tend to be located where there is easy means of communication and transport.
7. Availability of land
Some industries tend to be located where there is enough land for expansion e.g. the sugar industry.
8. Historical accident
Some industries are established where the entrepreneur is born.
9. Political factor
Sometimes political factors are responsible for location of industries the intention being to bring about balanced regional development.
10. Industrial inertia
There is a tendency for industries to get established where other industries got established first so as to enjoy external economies of scale. This explains why most industries are established in Nairobi and other major towns.
11. Personal reasons
Attachment to one's own home where one has friends or relatives may influence the location of an industry e.g. many Asian owned industries are located in towns where they stay.
12. Lack of power caused by drought and mismanagement necessitating frequent rationing there by hampering production

PROBLEMS OF INDUSTRIAL DEVELOPMENT IN KENYA

Industrial development in Kenya has not grown as expected and as such has not created much desired employment. Some of the factors impeding the development of industries in Kenya are:

1. Low productivity of labour
This is due to low education, lack of training and low adjustments to industrial conditions.
2. Lack of trained man power and competent management. It is often very hard to get good managers to man the industries. This has led to the use of foreign managers who are not used to local conditions and problems. Some of these managers need to be paid in foreign exchange, which may be difficult for the economy to meet. State owned industries tend to be mismanaged where the local managers are involved. There is often corruption, nepotism and other malpractices involved.
3. Lack of capital
There is low capital accumulation because of incomes and high propensity to consume and unwillingness to take risk. Kenya has not been able to attract the much-needed foreign capital because of increasing cases of insecurity. Low capital accumulation can also be attributed to a tendency to invest in business and other projects like land and buildings, which do not create much employment.
4. Local industries have faced competition from foreign established industries e.g. textile industry, the sugar industry.

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5. The smallness of the market also restricts expansion. The market is small also due to low income and big subsistence sector.
6. Lack of raw materials e.g. the sugar industry has complained of shortage of cane for crushing.
7. High cost of foreign exchange due to depreciated in the local currency. This has made it costly for industries to import spare parts.
8. The manufacturing sector has experienced a constant decline due to break down of machines as a result of lack of proper maintenance e.g. Miwani, Muhoroni.
9. Before trade liberalization in the late and mid 90s the industries faced a problem of selling their products at controlled process which often had little relationship with the actual production costs.
10. Industries have also faced the problem of shortage of effective labour force due to low pay and rising cost of living in urban areas.
11. Lack of transport and efficient communication
The infrastructure in Kenya has been seriously damaged and this makes it difficult to transport raw materials and finished products.
12. Foreign investors have often-preferred capital-intensive techniques, which reduce the employment prospects.

THE ROLE OF GOVERNMENT INDUSTRIAL DEVELOPMENT GENERAL INDUSTRIAL POLICY

1. Capital and management
There has been increased government participation through parastatal bodies to provide capital and management where private entrepreneurs are unable to invest due to lack of capital or where the venture is less profitable.
2. Attraction of foreign investors by giving tax holidays, guaranteeing security of property and of person, repatriation of capital and profit
3. Improvement of infrastructure e.g. roads, transport, facilities
4. Training of man power i.e. training of managers, engineers, technicians, accountants e.t.c.
5. Provision of financial institutions e.g. banks, insurance companies, which are used in mobilizing savings for industrial development.
6. Protection of home industries by tariffs e.g. tariffs on textile, maize, sugar, e.t.c.
7. Importation of industrial inputs and spare parts with low import duty or without it
8. Liberalization of the foreign exchange market, to allow accessibility to foreign exchange for importation of spare parts and raw materials
9. Encourage the establishment of:
 - a) Small scale industries (Jua Kali)
 - b) Import substitution and export promotion industries.
10. Removal of rigid price control on industrial products i.e. price de-control.
11. Privatization of state owned industries to improve their management.
12. Provision of local raw materials for industries so that to have an integrated economy i.e. agriculture feeding industry in turn feeding agriculture.

FOREIGN AID AS A STRATEGY FOR ECONOMIC DEVELOPMENT

It includes all forms of resources transfer from one country to another. It can take the form of:

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1. Loans
2. Contribution in kind i.e. relief supplies
3. Technical assistance e.g. technical experts
4. Scholarships/ grants to students.

In recent years, LDCs have tended to rely more and more on foreign aid as a means of getting the necessary capital and technical know-how which are crucial for development. The aid received by LDCs is about 2% of GDP and about 10% of investment. It should however be noted that for foreign aid to be beneficial to LDCs, it should be a grant. Being a grant, it is non-repayable and with no strings attached.

MOTIVES OF FOREIGN AID

1. Commercial
This aims at intensifying trade between the donor and recipient
2. political
The donor may wish to control the recipient politically.
3. Strategic e.g. for getting military support (military basis)
4. Humanitarian i.e. on the feeling that those who have should assist those who do not have
5. Self-interest e.g. aimed at creating employment abroad for excess labour at home or getting rid of excessive production.
6. Compensatory
i.e. the feeling that the problem of the recipient has been contributed partly by the donor.
7. To sustain their growth i.e. on the belief that the continued growth of the donor depends on the growth of the recipient

NEED FOR AID

Aid is needed mainly for three reasons:

1. To fill the savings-investment gap, LDCs with high level of poverty have got very low savings as compared to the investment hence the need for foreign aid to fill this gap.
2. To fill the foreign exchange gap
The forex earnings of LDCs are far less than they require. Forex is required to finance imports hence the need for foreign aid.
3. To fill the manpower gap
The available manpower, falls below the required personnel hence the need for technical assistance.

TYPES OF AID

1. Bi-lateral aid
Is assistance given by one country directly to another
2. Multi-lateral aid
Assistance involving a number of countries getting engaged in one project or the aid is channeled through an international agency e.g. IMF, World Bank. This type of aid is the most preferred by recipient countries because no single country can control the recipient and it may not have strings attached.

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PROBLEMS OF AID

1. Debt servicing which includes payment of interest and the principal sum can be a problem since the repayment has to take place in forex reducing the forex earnings which LDCs need.
2. Debt servicing also represents a claim on the national output of the recipient she has to sacrifice what she has produced in order to pay the debt.
3. aid can be tied to a project reducing the flexibility in resource allocation funds cannot be shifted to more profitable projects and this distorts development priorities of LDCs
4. In case of aid, which is tied by source, it may involve, purchasing good at higher priced and yet the same goods could be bought from other markets at lower price. It leads to buying from a high cost source.
5. Aid may involve importation of expatriates who are paid in foreign exchange making a strain on forex earnings. Sometimes the expatriates may not even be well qualified.
6. When the do not wishes to solve her own unemployment problem, she would want aid to come with man power which may create unemployment of the local personnel.
7. Aid may lead to the recipient to adopt the political system of the donor, which may not be suitable to the recipient, or the donor may control the recipient politically.
8. Aid can discriminate against projects with large amounts of internal inputs. It tends to act as a substitute to domestic resources rather than adding to domestic resources.
9. There can be a problem of absorption capacity. LDCs cannot absorb high amounts of real capital because of lack of complimentary factors, e.g. Baraton University producing graduates whom the economy cannot absorb.
10. Aid may not be sufficient to carry out a project which is starting and when the project is not completed it amounts to wastage of both local and resources
Furthermore aid may not be reliable because it can be withdrawn e.g. World Bank and IMF suspended aid to Kenya in the mid 90s citing mismanagement and non-transparency.
11. It can lead to hindrance of development because it affects adversely quality objectives and motivation of the people. It does not lead to improvement in or creation of development oriented political and social institutions.
It leads to LDCs to be international beggars. It makes them believe that nothing can be done without aid.
12. It can discourage domestic saving as people would always expect aid.
13. It can also discourage hard work as people will always expect aid. Relief aid for example can make people less inclined to work.

COSTS OF FOREIGN AID

1. To attract foreign aid or foreign investment there is need to give certain concessions e.g. tax holidays, remission of profits, repatriation of capita;, yet there is need to provide social services such as schools, hospitals, housing which may be costly.
2. It can reduce domestic saving, as people will always expect aid.
3. Terms of trade might turn against LDCs if foreign investment over concentrates in the export sector and neglects the import sector.

Revision Questions

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June 1998

1. a) explain the Malthusian Theory of population
b) Discuss why economists should be interested in the changing structure of population of a country such as Kenya.

November 1992

2. discuss the concept of optimum population
Explain the concept of optimum population
Analyze the nature and magnitude of Kenya's population problem.

June 1992

3. Why should demographic analysis and information be of interest to Kenya planners
4. Discuss the problems and opportunities which rapid population growth possess for the economy of Kenya.

Others

5. The issue of a fast growing population has repeatedly featured prominently in Kenya's economic deliberations.
Explain why this is so and clearly describe measures, which may be taken to reduce the effects of a fast growing population.
6. Briefly explain the Malthusian population theory. Discuss the incompatibility of this theory with the present population trends.