

## **THIRD TERM SCHEME OF WORK FOR SS2**

### **ECONOMICS**

#### **WEEK TOPIC**

#### **Week 1 REVISION OF SECOND TERM UNIFIED EXAMINATION**

##### **MONEY**

- **MOTIVES FOR HOLDING MONEY**
- **DEMAND FOR AND SUPPLY OF MONEY**
- **ELEMENTARY QUANTITY THEORY OF MONEY**
- **VALUE OF MONEY AND PRICE LEVEL.**

#### **Week 2**

##### **FINANCIAL INSTITUTION**

- **MONEY MARKET (MEANING, FUNCTIONS AND INSTRUMENTS USED)**
- **CAPITAL MARKET (MEANING, FUNCTIONS AND INSTRUMENTS USED)**

#### **WEEK 3**

##### **INFLATION**

- **MEANING, TYPES, CAUSES OF INFLATION**
- **EFFECTS AND CONTROLS OF INFLATION**

##### **DEFLATION**

- **MEANING AND CAUSES**
- **EFFECTS AND CONTROLS**

#### **WEEK 4**

##### **PUBLIC FINANCE**

- **MEANING OBJECTIVE**
- **TAXATION (MEANING, TYPES DIRECT AND INDIRECT)**
- **ADVANTAGES AND DISADVANTAGES**

#### **WEEK 5**

##### **SOURCES OF GOVERNMENT REVENUE**

- **INCIDENCE OF TAXATION/EFFECTS**
- **STRUCTURES OF PUBLIC EXPENDITURE (RE-CURRENT AND CAPITAL EXPENDITURE)**

## **WEEK 6**

### **BUDGET**

- MEANING TYPES AND IMPORTANCE
- NATIONAL DEBT (MEANING AND TYPES)
- FINANCING DEFICIT BUDGET
- REVENUE ALLOCATION IN NIGERIA

## **WEEK 7**

### **CAPITAL MARKET**

- MEANING AND FUNCTIONS
- STOCK EXCHANGE
- HOW STOCK EXCHANGE OPERATES
- SECONDARY AND PRIMARY MARKET
- DEVELOPMENT BANK (FUNCTIONS)

## **WEEK 8**

### **NATIONAL INCOME**

- MEANING AND CONCEPT (GDP, GNP, NNP)
- MEASUREMENT OF NATIONAL INCOME
- PROBLEMS OF MEASURING NATIONAL INCOME
- USE OF NATIONAL INCOME

## **WEEK 9**

### **THEORY OF INCOME DEVELOPMENT**

- CIRCULAR FLOW OF INCOME
- CONCEPT OF INVESTMENT, CONSUMPTION AND SAVINGS

## **WEEK 10**

### **THEORY OF MULTIPLIER**

- MEANING OF THE THEORY OF MULTIPLIER
- EQUILIBRUM LEVEL OF INCOME
- MULTIPLIER EFFECT

## **WEEK 11 REVISION**

## **WEEK 12 EXAMINATION**

## **WEEK ONE**

### TOPIC: QUANTITY THEORY OF MONEY

This theory in its earnest form states that an increase in the quantity of money would bring about a proportionate increase in the price level i.e. the price level is proportional to the quantity of money in circulation.

Quantity theory of money was improved upon by Irving Fisher in 1920's. It introduces two variables, volume of transaction and velocity of circulation.

The theory is expressed by the equation below,

$$MV = PT$$

Where, M = is the quantity of money

V = is the velocity of circulation of money

P = is the price level

T = is the volume of transactions (i.e. the quantity of goods)

From the equation, it can be deduced that general price level can be influenced not only by the change in quantity of money but also a change in the velocity of circulation of money and volume of production and also that a change in M or V can be offset by a contrary change in T. Thus, inflation is caused by increase in the supply of money.

### VALUES OF MONEY

The value of money refers to the purchasing power of money, that is, the quantity of goods and services which a given sum of money can buy.

There is an inverse relationship between price and value of money.

The higher the level of price, the lower the value of money and vice-versa, the value of money is not constant. It changes from time to time. For example, if a commodity cost #100 in 2010 and 2011, it has jumped to #200, it means that the value of money has fallen.

If a #100 note can now buy 10 cups of garri instead of 5, this means an increase in the value of money.

### FACTORS DETERMINING THE VALUE OF MONEY

1. The general price level: There is an inverse relationship between the price level and value of money when price increases, the value of money falls because it can only buy few goods. On

the other hand, when price reduces the value of money increases. It means money can buy more goods.

2. The supply of money and its speed or velocity of circulation: If the quantity of money in circulation increases while there is little or no increase in the available quantity of goods and services, this would mean that a larger quantity of money would purchase fewer commodities.

The value of money therefore be low. On the other hand, a contraction in the supply of money would make money have a higher value (assuming that the supply of goods and services has not decreased). This is because a given sum of money would purchase more goods and services.

1. The volume of goods and services available: If there is increase in the volume of goods and services and the supply of money is constant the value of money will increase. More goods and services can be purchased.

## **WEEK 2**

### **MONEY AND CAPITAL MARKETS**

#### **MONEY MARKET**

The money market is a financial market made up of institutions which provide short-term finance for investments. They bring short term borrowers and lenders together.

The market consists of institutions or individuals who either have money to lend or wish to borrow on a short term basis. They provide loans to borrowers for periods from a few months to two years.

#### **INSTRUMENT USED IN THE MONEY MARKET**

1. Treasury Bills: Treasury bill is normally issued by the central bank of a country which assists the government to borrow money from the money market on short term basis.

These are instrument, which the federal government of Nigeria uses to borrow money for-short term period of 3 months. The maturity date of treasury bills is 91days.

1. Bill of Exchange: Bill of exchange refers to a promisory note which shows the acknowledgement of indebtedness by a debtor to his creditor and his intention to pay the debt on demand or at an agreed time in future normally ninety (90) days.
2. Call money funds: The call money fund or market is a special arrangement in which the participating institutions invest surplus money for their immediate requirement on an overnight basis with the interest and withdrawal on demand. The call money has an advantage of early return and at the same time is withdrawable on demand.

#### **INSTITUTIONS INVOLVED IN THE MONEY MARKET**

1. Central Bank
2. Commercial Banks

- Merchant banks or acceptance houses
  

  1. Discount houses
  2. Finance companies
  3. Hire – purchase companies

## FUNCTIONS OF THE MONEY MARKET

1. Provision of short-term capital to investors in both the private and public sectors
2. Provision of short – term investment opportunities from which income may be earned
3. Mobilisation of saving for investment
4. Provision of investment, technical and managerial advice
5. Provision of opportunity for the public to participate in the management of the economy.

## THE CAPITAL MARKET

The capital market is made up of financial institutions which deal in long term financing.

The capital market provides medium and long-term loans for investment. They therefore, bring long-term lenders and borrowers together. Loans given are usually for more than two years.

## INSTRUMENTS USED IN CAPITAL MARKET

Instrument used in capital market are mainly stocks and shares.

Stocks and shares are securities purchased by individuals, which is an evidence of contributing part of the total capital used in running an existing industry. At the end of a normal business year, stocks and shareholders receive **dividend** as a reward for contributing the money in running of the business.

## INSTITUTION INVOLVED IN CAPITAL MARKET

1. Insurance companies
  2. Issuing houses
- 
- Development banks
1. Investment bank
  2. Building societies or mortgage bank

## FUNCTIONS OF THE CAPITAL MARKET

1. Provision of long-term capital to investors both in the public and private sectors
2. Provision of long term investment opportunities from which income may be earned
3. Mobilisation of savings for investment
4. Encourage the growth of merchant banking
5. Provision of investment advice
6. Provision of opportunity to the public to participate in running of the economy.

## Assignment

What are the advantages of Capital Market?

### WEEK 3

#### INFLATION

Inflation refers to a persistent or sustained rise in the general price level of goods and services or in an economy.

During an inflationary period, there is too much money in circulation, and too much money chases fewer goods and services. The value of money, therefore, falls during inflation. A period of rising prices deliberately caused by government is known as REINFLATION.

When the price level rises, each unit of [currency](#) buys fewer goods and services. Consequently, inflation reflects a reduction in the [purchasing power](#) per unit of money – a loss of [real value](#) in the medium of exchange and unit of account within the economy. A chief measure of price inflation is the inflation rate, the annualized percentage change in a general [price index](#), usually the [consumer price index](#), over time. The opposite of inflation is [deflation](#).

#### TYPES OF INFLATION

1. Demand-Pull inflation: This occurs when the demand for goods and services is greater than their supply caused mainly by increase in worker's salaries and wages or population explosion. Demand-pull inflation is associated with periods of trade boom.
2. Cost-Push inflation: Cost-push inflation occurs when increase in cost of production are passed onto consumers in the form of high prices for the goods and services on sale. The price of goods and services are pushed up rising cost.
3. Hyper-inflation: Hyper-inflation, also known as galloping or run-away inflation occurs when a persistent inflation becomes uncontrollable and the value of money keeps declining rapidly. War, budget deficits, etc. are the major causes of high-inflation.
4. Persistent or creeping institution: Persistent or creeping inflation, also known as chronic inflation, occurs when there is a slow but steady rise in the volume of purchasing power and a fall in supply of goods and services.

In other word, creeping inflation involves a slow but steady rise in the general price of goods and services.

#### CAUSES OF INFLATION

1. Increase in demand: When the demand for goods and services is greater than supply, this result in inflation (demand– pull inflation).
2. Low production: Low production of goods and services can lead to the scarcity and when supply cannot meet up with high demand, inflation set in.
3. War: War is a major cause of inflation as people no longer produce, resulting in high volume of money pursuing fewer goods.
4. Increase in Salaries and wages: When salaries and wages are increased without corresponding increase in supply of goods and services, it can lead to excess money in circulation chasing few goods.
5. Hoarding: Hoarding which is the act of creating artificial security of goods can lead to inflation.
6. Excessive bank lending
7. Poor storage facilities
8. Population increase
9. Higher cost of production
10. Reduction of imports

## EFFECTS OF INFLATION

Inflation has both desirable and undesirable effects:

1. It leads to increase earning and higher profits on the part of businessmen (Positive)
  2. Inflation discourage saving, thereby leading to low capital formation (Negative).
- Fall in standard of living (Negative)
1. Fixed income earners will suffer (Negative)
  2. Creditors will loss (Negative)
  3. Debtors will gain (Positive)
- Reduction in the value of money (Negative)

## HOW TO CONTROL INFLATION

1. Use of contractionary monetary measures: The use of contractionary monetary measures such as increase in bank rate, Open market operation (OMO), deposit ratio and moral persuasion, can help to control inflation.
2. Use of fiscal measure: inflation can also be controlled with the use of fiscal measures to reduce the amount of money in circulation, e.g. increase in direct taxation.
3. Reduction in government expenditure or surplus budget
4. Industrialisation: Industrialisation will reduce over reliance on imported goods and bring about increase in output which will reduce prices.
5. Increase production
6. Checking the activities of hoarders
7. Discouragement of importation.

## **DEFLATION**

Deflation refers to a persistent fall in the general price level of most goods and services.

Since price falls, the value of money rises during deflation.

Deflation occurs when the [inflation](#) rate falls below 0% (a negative [inflation rate](#)). Inflation reduces the real value of [money](#) over time; conversely, deflation increases the real value of money – the currency of a national or regional economy. This allows one to buy more goods and services than before with the same amount of money.

### CAUSES OF DEFLATION

1. Excess supply over demand
2. Restriction on bank lending
3. Excessive use of budget – surplus
4. Increase in taxation
5. Under – population
6. Excessive price control

### EFFECTS OF DEFLATION

1. Fall in price of goods and services
2. Reduction in profit
3. Decrease in investment
4. Fixed income earners will gain
5. Money lenders gain at the expenses of borrowers.
6. Reduction in production
7. Encourages export of goods
8. Discourages importation
9. Increase in value of money

### HOW TO CONTROL DEFLATION

1. The adoption of an expansionary monetary policy by the central bank.
2. Use of deficit – financing by the government
3. The government could reduce taxation on incomes
4. A physical measure of controlling deflation is to increase the wages or salaries of the people.
5. Reduction in taxes.

### Assignment

Write short note on the following:

1. Inflationary gap
  2. Dis-inflation
- Reflation
1. Open inflation
  2. Slumpflation
  3. Price instability



## **WEEK 4**

### **PUBLIC FINANCE**

Public finance is an aspect of economics which deals with government revenue and expenditure.

A public finance involves a detailed analysis of the various sources from which the government derives its income (revenue). The items on which the government spends its money and the impact of such government revenue and government expenditure on different aspects of the economy.

## OBJECTIVES OF PUBLIC FINANCE

1. Revenue generation: Public finance assists the government to achieve an effective and efficient generation of revenue for the nation.
2. Price stability: Public finance maintains stability in the prices of goods and services thereby preventing constant fluctuation and inflation and deflation that tend to destabilize the economy of a country.
3. Provision of employment: Public finance is also used to create employment opportunities in the country.
4. Satisfaction of Needs: public finance is also used to determine the needs of the people to enable government, meet those needs.
5. Equitable Distribution of Income: Public finance also ensures that income accruing to a nation is equitably distributed to various sectors of the economy.
6. Maintaining favourable balance of payments: Tariffs and other fiscal policies are used in maintaining favourable balance of payment of a country.

## FISCAL POLICY

Fiscal policy is the use of government income and expenditure instruments to regulate or control the economy.

It is referred to the government plan of action concerning the raising of revenue through taxation and other means and the pattern of expenditure to be applied.

## OBJECTIVES OF FISCAL POLICIES

1. Economic development: A good fiscal policy can be used by government to ensure rapid economic development of a country.
2. Revenue generation: Fiscal policy can equally be used to ensure that enough revenue is generated for government use.
3. Creation of employment: A good fiscal policy can be used by government to provide job opportunities for the people by increase expenditure on employment generating ventures.
4. Industrial development: Industrial growth and development can be achieved through a well packaged fiscal policy by the government.
5. Income redistribution: government can use fiscal policy to ensure that the wealth of the country is equitably distributed.
6. Control of inflation: Fiscal policy instruments can be used by government to control inflation in the country e.g. increased taxation on personal income, reduced government expenditure etc.

## SOURCES OF GOVERNMENT REVENUE

1. Taxes: Taxes include both direct and indirect taxes government generates income or revenue by taxing individuals and corporate bodies.
2. Loans: Government can obtain loans from both internal and external sources, e.g. the World Bank, individuals or institutions within the country etc.
3. Grants, Aids and Gifts: Government can receive grants, aids and gifts as revenue from wealth or developed countries.
4. Licence: Government can generate revenue through licences e.g. driving licence.
5. Rents and Rates: Earnings from water, properties, housing etc. owned by the government are sources of income to the government.

6. Fees, Fines and Royalties: Government can generate revenue through court fees, miming companies, postage charges etc.
7. Earning from government investment: government can also earn income from government owned business enterprises or from joint ventures.

## Assignment

State and explain five objectives of Fiscal Policies

## WEEK 5

### TAXATION

Tax is a compulsory levy imposed by the government or its agency on individuals and firms or on goods and service.

#### FEATURES OF TAXATION

- It is a compulsory levy that must be paid by the individuals or corporate bodies.
- Tax is meant for the general welfare of everybody.
- It is levied by the government or its agencies
- People must attain certain age before they start paying tax.
- It is a payment made as a sacrifice.

#### PRINCIPLE OF A GOOD TAX SYSTEM

Adam smith in his book ‘Wealth of Nation’ in 1776 has lead down certain principles of a good tax system which he called **canons of good tax system**. A good tax system has the following qualities:

**EQUALITY OR ABILITY TO PAY:** People should be made to pay tax according to their abilities.

**ECONOMY:** The amount spent in the course of collecting tax should be smaller than the amount collected.

**CERTAINTY:** The method and time of tax collection should be convent to the tax payer.

**CERTAINTY:** Tax payer should know the exact amount they are expected to pay as tax, when and how to pay it.

**FLEXIBILITY:** The tax system should be flexible enough for adjustments when the need arises.

**SIMPLICITY:** A tax system should not be difficult to administer and understand.

### REASON OR WHY GOVERNMENT IMPOSED TAXES

1. **TO RAISE REVENUE:** Taxes are used to raise revenue for government.
2. **TO REDISTRIBUTE INCOME:** Through the Pay as You Earn (P.A.Y.E) system, government can narrow the gap between the rich and the poor by introducing progressive taxation.
3. **TO CONTROL INFLATION:** Taxes can be used as anti-inflationary devices. Government can do this by increasing direct tax without increasing its expenditures.
4. **TO STOP THE IMPORTATION OF DANGEROUS OR HARMFUL GOODS:** Taxes imposed on such goods are high in order to discourage their importation
5. **FOR THE PROTECTION OF INFLATION INDUSTRIES:** This is done by heavily taxing foreign made goods in order to discourage their importation.

### THE ECONOMICS EFFECT ON TAXATION

1. It reduce production
2. Tax increase prices of goods
3. It reduces the income of workers
4. It discourages savings

### SYSTEM OF TAXATION

1. **PROGRESSIVE TAX:** This is a tax system where higher tax rate falls on high income earners and lower tax rate on low income earners. In other words the high income earners pay more tax than the low income earners e.g. Pay As You Earn.
1. **PROPORTIONAL TAX SYSTEM:** Under this system, every tax payer pays equal proportion of his or her income. The slight difference between proportional and progressive tax system is that while progressive tax rates varies with income, proportional tax rates is usually fixed, but the amount of tax payable varies in both cases.
1. **REGRESSIVE TAX:** regressive tax is a tax system where the tax rate decreases as income increase. In this case, the higher the income of a consumer, the lower the rate of tax. In regressive tax, a poor person pays a higher proportion of his income than a rich person. A good example is regressive tax is a poll tax flat rate tax.

### DIRECT TAX

Direct tax is refers to the type of tax imposed directly on the income of individuals or organisations by government or its agency. Such income would include wages,

salaries, profit rents and interests. The burden (incidence) of direct taxes falls directly on the payers.

## TYPES OF DIRECT TAX

1. **PERSONAL INCOME TAX:** This refers to tax levied on the income of an individual, usually during a period of one year. Personal income tax is usually progressive, i.e. the rate of tax increases as income of the individual increases.
2. **COMPANY TAX:** It is levied on the profit made by the companies that operate in a particular country. It is also known as corporate tax.
3. **POLL TAX:** This is a flat rate tax usually imposed on those with low incomes.
4. **CAPITAL TAX:** This is the type of tax levied on property on capital assets e.g. land, cars, personal houses etc.
5. **CAPITAL GAINED TAX:** An increase in the value of capital assets is called a capital gain. A capital gains tax is tax levied on the gains or profits derived from the sale of land and capital assets.
6. **EXPENDITURE TAX:** This is tax levied on the part of a person's income which is actually spent. This type of taxation is used to encourage saving.

## ADVANTAGES OF DIRECT TAXES

1. Direct taxes are more equitable: They lead to a more equitable distribution of income.
2. Direct taxes are convenient to payers: Most direct taxes are due when the tax-payer can afford to pay. Salaried workers usually pay at the end of each week or month and the tax is deducted before payment is made.
3. They are cheap to collect: Under the P.A.Y.E system, the cost of collecting direct tax is usually very small.
4. They are non-inflationary: They do not increase prices and therefore, are not inflationary because money is taken from consumers and then purchasing power is thereby reduced.
5. They are progressive in nature: Income tax is usually administered with a graded scale, i.e. the more or higher an income, the more tax the person has to pay.

## DISADVANTAGES OF DIRECT TAXES

1. They discourage savings: When tax is removed from one's income, savings may become very difficult.
2. They discourage investment: High tax on individuals and corporate bodies discourages potential investors from investments.
3. Disincentive to hard work: High incidence of tax can discourage people from working hard as they always believe that the more one works hard, the higher the tax one has to pay.
4. Direct taxes are prone to tax evasion: People and firms could make false declarations of income in order to pay less tax.
5. They are inconvenient: Tax payers always feel the pain any time a certain amount of money is deducted from their salaries.
6. They reduce purchasing power: When tax is imposed on the income of a worker, the balance may be small thereby reducing the purchasing power of such income earner.

## INDIRECT TAXES

Indirect taxes are taxes levied on goods and services.

The producers or sellers bear the initial burden of tax before shifting them to the final consumers in the form of increase in prices.

## TYPES OF INDIRECT TAXES

1. Custom Duties or Tariffs: These are grouped into two:
2. Import Duties: Import duties are taxes levied on goods imported or brought into the country from other countries. They are paid initially by the importer.
3. Export Duties: These are taxes levied on goods sent out (or exported) to other countries. Such tax is paid by the exporter.
4. Excise Duties: These are taxes levied on certain goods produced within the country, that is, on locally manufactured goods.
5. Sales Tax: This is tax levied on the sale of certain commodity.
6. Purchase Tax: This tax is imposed on certain consumer items such as cars, radios, and television sets etc.
7. Value Added Tax (VAT): This is the type of tax imposed on goods and services at each stage of production.

## CLASSIFICATION OF INDIRECT TAXES

1. Ad Valorem Tax: an ad valorem tax is a tax imposed on commodities in accordance with their respective values and at specified percentages.
2. Specific Tax: This is a fixed tax sum imposed (or charged) per unit of a commodity irrespective of its value.

## ADVANTAGES OF INDIRECT TAXES

1. Sources of government revenue: Indirect tax is used to generate substantial revenue for government.
2. Protection of Infant industries: Indirect taxes can be used to protect infant or local industries when heavy taxes are imposed on imported goods.
3. To check importation of harmful commodities: Commodities that are considered harmful are taxes heavily in order to discourage their importation.
4. Easy and cheap to collect: As soon as a consumer purchases in taxed commodity, he has paid the tax.
5. Prevention of dumping: High import duties can be imposed on certain imported goods as a way of discouraging dumping of such goods.
6. To correct balance of payment deficit
7. Indirect taxes do not discourage hard work

## DISADVANTAGES OF INDIRECT TAXES

1. They increase prices of goods: This is because the amount paid as taxes is shifted to the consumers in form of high prices of goods.
2. Indirect Taxes are regressive in nature: This is because both the poor and the rich buy goods on which these taxes are imposed from the same source and at the same price.
3. They are unreliable sources of revenue.
4. Indirect taxes may generate inflationary trends within the economy.
5. It discourages investment: High custom duties on raw materials or finished products do discourage prospective investors.

## **Problems Associated with Tax Collection**

1. **False declarations of income** : Many workers especially those in private firms do not declare their real income.
2. **Improper book of account**: Majority of the trader keep improper or no book of account at all.
3. **Tax evasion** : Many people not fulfil their civic responsibility by paying tax at as when due.
4. Ignorance of the importance of taxation
5. Mismanagement of government funds
6. **Wrong belief of the people**: Many people think that the money collected is for the tax collectors and therefore refuse to pay.

-

## INCIDENCE OF TAXATION

The incidence of taxation refers to the burden of tax with reference to where this burden rests.

The incidence or burden of taxation lies on the person who finally pays the tax.

## TYPES OF INCIDENCE OF TAXATION

1. **Formal Incidence**: This refers to the initial effects of tax on the tax object i.e. tax payer. The payer of a direct tax bears the initial burden of tax. For indirect taxes, the producers or middlemen bear the initial burden of taxation.
2. **Effective Incidence**: The effective incidence of tax makes reference to who bears the final burden of taxation.

For example, a person who pays income tax bears the full burden of the tax and he cannot shift to another person. In the case of indirect taxes, the burden of taxation may be borne by the producer (seller) or the consumer, or it may be shared between the producer (seller) and the consumer. The extent to which the producer (seller) or the consumer will bear the burden of indirect tax will depend on the elasticity of demand for the commodity which is taxed.

1. **Incidence of indirect tax when demand is perfectly inelastic**: The burden of an indirect tax on a commodity whose demand is perfectly inelastic is borne by the consumer.

In this case, the whole tax burden can easily be shifted to the consumer by the producer (or seller) in the form of higher prices because increase in price does not bring about any change in quantity demanded.

1. **Incidence of indirect tax when demand is perfectly elastic**: If demand for a commodity is perfectly elastic, the producer or seller will bear the whole burden of taxation. This is so because any attempt to increase price will make the demand for the product fall to zero. The tax burden under this situation cannot be passed to the consumer.
2. **Incidence of indirect tax when demand is moderating elastic or is moderately inelastic**: if the demand is moderately elastic or moderately inelastic, the burden of taxation will be shared between the producer (or seller) and the consumer. The more inelastic the demand for the commodity, the more the burden of tax is shifted to the consumer. On the other hand, the

more elastic the demand for the commodity, the greater the burden of taxation the producer (or seller) bears.

3. Incidence of tax when demand unitary: If demand is unitary, the tax burden is shared equally between the producer (or seller) and the consumer.

## STRUCTURES OF GOVERNMENT REVENUE

Public revenue refers to the total income that accrues to the government of a country from various sources.

Government needs enough revenue in order to enable it to carry out its numerous functions.

## TYPES OF PUBLIC REVENUE

1. Capital Revenue (or receipts): Capital receipts, also called irregular or extraordinary sources of revenue are sources of revenue used for meeting expenditure on heavy capital projects e.g. grants, loans etc.
2. Recurrent Revenue: Recurrent revenue is a regular source of revenue. Recurrent revenue is income which is received on a regular or yearly basis e.g. taxation fee, license and interest on loans etc.

## SOURCES OF GOVERNMENT REVENUE

1. Taxes
  2. Loans
- Grants and aids
1. Money from government investments
  2. Issuing of license
  3. Licence
- Rents and rates

## GOVERNMENT EXPENDITURE

Government expenditure refers to total expenses incurred by the public authorities at the federal, state and local government levels.

## CLASSIFICATION OF GOVERNMENT EXPENDITURE

1. Capital Expenditure: Capital expenditure are expenses on projects which are permanent in nature .Such as construction of roads and bridges, building of houses, school, hospitals etc.
2. Recurrent Expenditure: Recurrent expenditure are those expenses which are repeated on yearly or regular bases. In this case, they are not permanent. Such expenditure includes money spent on salaries, electricity bills, maintenance of infrastructures etc.

## OBJECTIVES OF MAIN AIMS OF GOVERNMENT EXPENDITURE



1. Defence: The government of every country spends huge sum in defending its territorial integrity.
2. Maintenance of internal peace and security: To achieve these, the police, courts and prisons have to be fully equipped and maintained.
3. Food and Agriculture: West African countries spends more money in agricultural sector, because, it is the back-bone of their economies apart from providing food for their citizens.
4. Political Expenditures: A lot of money is spent in maintaining the army of politicians and their political instruments like political parties, legislatures etc.
5. Economic Expenditure: These expenses are in the areas of industries, mining, trade, transport and communication etc.
6. Social Service Expenses: The government of every country allocates a huge sum of money for the provision of social amenities to the people in return for taxes they paid.
7. Expenses on servicing on loans: Paying interest on borrowed money as well as paying part or all the principal amount borrowed internally and externally reduce the huge sum of money for government purse.

### Assignment

What are the problems associated with tax collection?

## **WEEK 6**

### **THE BUDGET**

A budget may be defined as a financial statement of the total estimated revenue and the proposed expenditure of a government in a given period, usually a year.

#### TYPES OF BUDGET

1. Balanced Budget: There is balanced budget if the estimated government revenue is equal to the proposed expenditure for a given financial year.

Balance budget =  $Y = E$

$Y = \text{Income}$

$E = \text{Expenditure}$

1. Budget Surplus: There is a budget surplus if the proposed government expenditure is less than the estimated government revenue during a financial year.

Budget surplus =  $Y > E$

1. Budget Deficit: There is a budget deficit if the estimated government revenue is less than proposed expenditure for a given financial year.

Budget deficit =  $Y < E$

#### IMPORTANCE / USES OF BUDGET

1. To allocate resources from one sector of the economy to another.
  2. It is used as a tool to curb inflation and deflation
- The government uses it as a medium to communicate government's economic objectives and policies to the citizenry.
1. It is used to foster economic growth and development
  2. It provides standard for measuring performance.
  3. It is also used to correct balance of payment deficit.

## **NATIONAL OR PUBLIC DEBT**

National or public debt refers to the debt a country owes to its citizens or other countries or organisations such as the international monetary fund (IMF) and the World Bank.

**Public debt or public borrowing is considered to be an important source of income to the government. If revenue collected through taxes & other sources is not adequate to cover government expenditure government may resort to borrowing. Such borrowings become necessary more in times of financial crises & emergencies like war, droughts, etc.**

## SOURCES OF BORROWING

Government can borrow from internal and external sources

Internal Sources: These are sources of borrowing within the country. The government can take loans from the following people or institutions;

1. Rich citizens
2. Commercial banks
3. Central Bank
4. Mortgage bank
5. Insurance
6. National provident fund
7. Development bank

External Sources: Government can take loan from organisations outside the country i.e. international organisations or countries

The sources are as follows:

1. International Monetary Fund
2. World Bank
3. Africa Development Bank
4. Paris club

5. Foreign government like Britain, Japan, France and USA.

## Nigerian government revenue allocation

### HOW FUNDS ARE ALLOCATED TO LG, SG, AND FG NIGERIAN GOVERNMENT REVENUE ALLOCATION

The Nigerian government financial system operates a structure where funds flow to the three systems of government from what is termed the FEDERATION ACCOUNT. This presentation takes an empirical look at the components of the Federal Allocation formula and State & Local Government Allocation indices. The Federation Account serves as the central pocket through which our Governments – Federal, State, and Local Government – fund developmental projects as well as maintain their respective workforce.

THE FLOW OF REVENUES OIL REVENUE (MARKET PRICE) EXCESS CRUDE BUDGETED OIL REVENUE NCS CUSTOMS & EXCISE CIT VAT SALES OF ASSETS SURPLUS FROM SOE DIVIDEND FROM SOE FIRS INDEPENDENT REVENUE FEDERATION ACCOUNT VAT POOL LOCAL GOVT STATE GOVT 13% DERIVATION LOCAL GOVT STATE GOVT FGN CONSOLIDATED REVENUE FUND OF THE FEDERATION FEDERAL BUDGET SPECIAL FUNDS NAT. RESOURCES STABILIZATION ECOLOGICAL FCT 7% Cost of Collection 93% 96% 96% 4% Cost of Collection 1.68% 0.5% 1% 1% 1% 4.18% of Federation Account 48.5% of Federation Account 14% of VAT Pool 52.68% 26.72% 20.60% 15% of VAT Pool 35% of VAT Pool 50% of VAT Pool Source: Budget Office of the Federation

REVENUE ALLOCATION FORMULA VERTICAL ALLOCATION FORMULA BENEFICIARY ALLOCATION (% Federation Account) 1 Federal Government 52.68 2 State Governments 26.72 3 Local Governments (Including Area Councils) 20.60 100.00 HORIZONTAL ALLOCATION FORMULA PRINCIPLE/FACTOR ALLOCATION (%) (i) Equality 40 (ii) Population 30 (iii) Internal Revenue Generation Effort 10 (iv) Landmass and Terrain 10 (v) Education 4 (vi) Health 3 (vii) Water 3 100

LOCAL GOVT. ALLOCATION FORMULA OLD INDICES OCT 06 - NOV 2013 NEW INDICES FROM NOV 2013 LOCAL GOVERNMENT EQUALITY 40% POPULATION 30% LANDMASS 50% OF 10% TERRAIN 50% OF 10% REV EFFORT 25% OF 10% REV EFFORT 75% OF 10% PRIMARY SCH ENROLLMENT 40% OF 10% HOSPITAL BEDS 30% OF 10% WATER SUPPLY SPREAD 15% OF 10% RAINFALL PROPORTION 15% OF 10% LOCAL GOVERNMENT EQUALITY 40% POPULATION 30% LANDMASS 50% OF 10% TERRAIN 50% OF 10% INTERNAL REV EFFORT 25% OF 10% PRIMARY SCH ENROLLMENT 40% OF 10% HOSPITAL BEDS 30% OF 10% TERRITORIAL SPREAD RAINFALL 15% OF 10% RAINFALL EQUALITY 15% OF 10% EQUALITY POPULATION 40% 30% IGR 10% LANDMASS/ TERRAIN 10% EDUCATION HEALTH WATER 4% 3% 3%

STATE GOVT. ALLOCATION FORMULA OLD INDICES OCT 06 – AUG 2013 NEW INDICES FROM AUG 2013 EQUALITY (40%) POPULATION (30%)

LANDMASS (50% OF 10%) TERRAIN EQUITY (50% OF 10%) IGR EFFORT (25% OF 10%) REV. EFFORT (75% OF 10%) PRIMARY SCH. ENROLMENT (24% OF 10%) DIRECT SEN. SEC. ENROLMENT (8% OF 10%) INVERSE SEN. SEC ENROLMENT (8% OF 10%) HOSPITAL BEDS (30% OF 10%) TERRENTIAL SPREAD (15% OF 10%) RAINFALL PROPORTION (15% OF 10%) EQUALITY (40%) POPULATION (30%) LAND MASS (50% OF 10%) TERRAIN EQUITY (50% OF 10%) IGR EFFORT (25% OF 10%) REV. EFFORT (75% OF 10%) PRIMARY SCHOOL ENROLMENT (24% OF 10%) SECONDARY SCH. ENROLMENT (8% OF 10%) INVERSE SEC. SCHL ENROLMENT (8% OF 10%) HOSPITAL BEDS (30% OF 10%) WATER TERRITORIAL (15% OF 10%) RAINFALL PROPORTION (15% OF 10%) EQUALITY POPULATION 40% 30% IGR 10% LANDMASS/ TERRAIN 10% EDUCATION HEALTH WATER 4% 3% 3%

STATE & LOCAL GOVERNMENTS EQUALITY POPULATION LANDMASS / TERRAIN IGR EDUCATION HEALTH WATER Education is vital and its importance cannot be over-emphasized. Priority must go to these three – Water, Health, and Education. 40% 30% 10% 10% 4% 3% 3%

CURRENT ALLOCATION FACTOR DATA (S T A T E S)

POPULATION (138,568,341 Million) STATE POPULATION KANO 9,383,682 LAGOS 9,013,534 KADUNA 6,066,562 KATSINA 5,792,578 OYO 5,591,589 RIVERS 5,185,400 BAUCHI 4,646,465 JIGAWA 4,348,649 BENUE 4,219,244 ANAMBRA 4,182,032 BORNO 4,151,193 DELTA 4,098,391 NIGER 3,950,249 IMO 3,934,899 AKWA IBOM 3,920,208 OGUN 3,728,098 SOKOTO 3,696,999 ONDO 3,441,024 STATE POPULATION OSUN 3,423,535 KOGI 3,278,487 ZAMFARA 3,259,846 ENUGU 3,257,298 KEBBI 3,238,628 EDO 3,218,332 PLATEAU 3,178,712 ADAMAWA 3,168,101 CROSS RIVER 2,888,966 ABIA 2,833,999 EKITI 2,384,212 KWARA 2,371,089 GOMBE 2,353,879 YOBE 2,321,591 TARABA 2,300,736 EBONYI 2,173,501 NASSARAWA 1,863,275 BAYELSA 1,703,358

LANDMASS / TERRAIN (930,309.75sq. km) STATE LANDMASS BORNO 75,541 NIGER 74,109 TARABA 60,292 BAUCHI 49,934 YOBE 46,910 KADUNA 45,711 ADAMAWA 38,823 KEBBI 37,728 ZAMFARA 35,171 KWARA 34,468 SOKOTO 33,777 BENUE 31,277 KOGI 29,582 OYO 28,245 NASSARAWA 27,271 PLATEAU 27,217 KATSINA 24,971 JIGAWA 24,516 STATE LANDMASS CROSS RIVER 21,637 KANO 21,277 EDO 19,819 GOMBE 17,982 DELTA 17,239 OGUN 16,981 ONDO 15,820 RIVERS 10,432 BAYELSA 9,416 OSUN 9,026 ENUGU 7,660 AKWA IBOM 6,772 EBONYI 6,421 EKITI 5,888 IMO 5,183 ABIA 4,902 ANAMBRA 4,816 LAGOS 3,496

INTERNALLY GENERATED REVENUE EFFORT STATE AMOUNT (N) KOGI 309.7 NASSARAWA 247.99 ENUGU 247.76 CROSS RIVER 247.73 BAYELSA 244.92 GOMBE 236.22 PLATEAU 228.25 SOKOTO 225.89 EKITI 221.93 JIGAWA 219.71 EBONYI 215.78 KANO 208.81 BORNO 205.8 KEBBI 202.51 NIGER 201.82 ABIA 201.58 BENUE 201.23 IMO 199.58 STATE AMOUNT (N) YOBE 194.69 KADUNA 170.42 ZAMFARA 167.13 KATSINA 156.2 BAUCHI 154.86 AKWA IBOM 143.5 ADAMAWA 137.22 ANAMBRA 120.29 TARABA

117.78 DELTA 116.37 ONDO 109.49 RIVERS 108.24 KWARA 106.85 EDO 102.17  
OSUN 67.13 OGUN 50.73 OYO 48.54 LAGOS 13.64

SCHOOL ENROLMENT – PRY & SEC. STATE PRIMARY SECONDARY  
KANO 1,806,269 1,758,839 KATSINA 1,804,579 1,195,378 AKWA IBOM  
1,703,182 645,705 KADUNA 1,552,931 1,274,873 BAUCHI 1,521,363 1,063,806  
BENUE 1,352,752 809,611 KOGI 1,331,025 743,638 BORNO 1,158,720 858,070  
OYO 1,113,306 839,865 IMO 1,109,835 939,548 PLATEAU 1,055,255 855,057  
TARABA 1,049,741 263,829 ENUGU 976,004 710,866 NASSARAWA 941,695  
432,448 SOKOTO 938,710 792,034 JIGAWA 922,798 478,422 EBONYI 920,015  
534,643 OSUN 898,878 591,093 STATE PRIMARY SECONDARY KEBBI 891,583  
716,616 ANAMBRA 872,088 789,246 CROSS RIVER 832,139 663,792 YOBE  
813,283 593,854 NIGER 774,627 481,007 BAYELSA 750,852 546,734 ONDO  
733,930 525,238 ADAMAWA 706,665 708,162 ABIA 697,051 823,412 DELTA  
664,186 768,357 GOMBE 604,276 819,519 LAGOS 573,255 1,009,816 EDO  
557,264 768,418 EKITI 526,884 521,992 RIVERS 500,299 923,832 KWARA  
457,566 397,686 OGUN 439,332 516,352 ZAMFARA 412,017 355,938

HOSPITAL BEDS STATE HOSPITAL BEDS LAGOS 19,901 KANO 19,424  
BAYELSA 17,265 EBONYI 14,628 ABIA 14,521 IMO 14,424 OSUN 14,167  
SOKOTO 13,636 DELTA 13,461 JIGAWA 13,124 KEBBI 13,039 BORNO 12,673  
RIVERS 12,637 OGUN 12,346 EDO 12,249 ENUGU 12,246 YOBE 12,208  
PLATEAU 12,188 STATE HOSPITAL BEDS ANAMBRA 12,174 BAUCHI 11,903  
CROSS RIVER 11,531 GOMBE 11,388 EKITI 11,170 KWARA 10,054 AKWA  
IBOM 10,002 KATSINA 9,584 KADUNA 9,479 KOGI 9,036 ADAMAWA 8,792  
BENUE 8,775 ZAMFARA 8,266 NASSARAWA 7,117 OYO 7,049 TARABA 6,696  
NIGER 6,646 ONDO 6,498

## **WEEK 7**

### **THE STOCK EXCHANGE MARKET**

The stock exchange market is a highly organised capital market which provides facilities for the buying and selling of securities such as shares, stocks, debentures and government bonds.

The stock exchange is principally concerned with the creation of market for second-hand securities. E.g. The Nigerian Stock Exchange which was incorporated in 1960.

The principal dealers in the Stock Exchange are the Brokers and Jobbers. Brokers act as agents of individuals or firms wish to sell or buy securities. The public does not operate directly in the Stock Exchange.

The brokers sell and buy securities on behalf of their clients or customers. They charge commission for performing these services.

The Jobbers are the main dealers in stocks and shares and other forms of securities.

They transact business with brokers and have no direct dealing with the public. They have two prices: a lower price for buying and a higher price for selling.

## FUNCTIONS OF THE STOCK EXCHANGE

1. The stock exchange provides a market for the buying and selling of long-term financial securities.
2. The stock exchange helps in raising capital for development
3. It provides employment opportunities to workers in the Stock Exchange especially brokers and jobbers.
4. The stock exchange offers investment opportunities to those with a small capital base.
5. The stock exchange helps existing investors to sell or transfer their shares to other people who wish to buy them

## The difference between primary and secondary capital markets

The difference between the [primary capital market](#) and the [secondary capital market](#) is that in the primary market, investors buy securities directly from the company issuing them, while in the secondary market, investors' trade securities among themselves, and the company with the security being traded does not participate in the transaction.

When a company publicly sells new stocks and bonds for the first time, it does so on the primary capital market. In many cases, this takes the form of an [initial public offering](#), or IPO. When investors purchase securities on the primary capital market, the company offering the securities has already hired an [underwriting](#) firm to review the offering and created a prospectus outlining the price and other details of the securities to be issued.

Companies issuing securities via the primary capital market hire investment bankers to obtain commitments from large institutional investors to purchase the securities when first offered. Small investors are not often able to purchase securities at this point, because the company and its investment bankers seek to sell all of the available securities in a short period of time to meet the required volume and must focus on marketing the sale to large investors who can buy more securities at once. Marketing the sale to investors can often include a "road show" or "[dog and pony show](#)," in which investment bankers and the company's leadership travel to meet with potential investors and convince them of the value of the security being issued.

The secondary market is where securities are traded after the company has sold all the stocks and bonds offered on the primary market. Markets such as the New York Stock Exchange (NYSE), London Stock Exchange or Nasdaq are secondary markets. On the secondary market, small investors have a better chance of buying or selling securities, because they are no longer excluded from IPOs due to the small amount of money they represent. Anyone can purchase securities on the secondary market as long as they are willing to pay the price for which the security is being traded.

On the secondary market, an investor requires a broker to purchase the securities on his or her behalf. The price of the security fluctuates with the market, and the cost to the investor includes the commission paid to the broker. The volume of securities sold also varies from day to day, as demand for the security fluctuates. The price paid by

the investor is no longer directly related to the initial price of the security as determined by the first issuance, and the company that issued the security is not a party to any sale between two investors. However, the company can engage in a stock buyback on the secondary market.

## **DEVELOPMENT BANK**

A development bank is a bank specifically established to provide long-term finance (loan) for various development projects, which help to accelerate economic development.

Examples of development banks are the Nigerian Bank for Commerce and Industry (NBCI) (1973), Nigerian Industrial Development Bank (NIDB) (1964), the Nigerian Agricultural and Co-operative Bank (NACB) (1973) etc.

### **FUNCTIONS OF DEVELOPMENT BANKS**

1. Provision of Fund for capital project: Development banks provide long-term loans for capital projects in specific areas.
2. Manpower development: They contribute to manpower development by making funds available to manpower training institutes.
3. Implementation of government policies: Development banks also help to implement government policies or industrial, commercial and agricultural development.
4. Supervision of development projects: They help industrialists and other investors to supervise development projects in order to ensure their success.
5. They undertake research: Development banks do undertake research to determine viable areas to develop industries.

### **Assignment**

State three (3) functions of development bank.

## **WEEK 8**

### **NATIONAL INCOME ACCOUNTING**

National income accounting may be defined as the ways or means of computing or determining the money value of the total volume of goods and services produced in a given country over a period of time, usually a year.

### **DEFINITION OF CONCEPTS**

1. NATIONAL INCOME (NI):

It is the estimated monetary value of all goods and services produced in a country during a specified period of time, usually a year. It is the sum total of all profits, interests, wages and rent received within a year.

1. GROSS DOMESTIC PRODUCT (G.D.P)

This is the total value (in monetary terms) of all final goods and services produced in a country within a period of one year, by all the residents of the country regardless of whether they are citizens or foreigners.

It emphasises the geographic aspect of production; that is, value of output within a country. It therefore excludes the earning of citizens or their investments abroad but includes the earnings of foreigners or earnings from foreign investment in the country.

In calculating G.D.P., no allowance is made for depreciation. GDP is the same as Gross Domestic Income. This is because the income received for producing goods and services must be equal to the value of goods and services (the product)

$$\text{GDP} = \text{NDP} + \text{Depreciation}$$

$$\text{GDP} = \text{GNP} - \text{Net income from abroad}$$

1. GROSS NATIONAL PRODUCT (G. N. P)

This is the total monetary value of goods and services, produced by the citizens of a country (including income from their investments) both at home and abroad.

It includes the earnings of the citizens or their investment in other countries but excludes the earnings of foreigners or their investment in the country.

In this case also, no allowance is made for depreciation.

$$\text{GNP} = \text{GDP} + \text{Net Income from abroad} - \text{output of foreigners}$$

1. NET DOMESTIC PRODUCT (N.D.P)

This is the GDP less depreciation.

In this case, allowances are made for the, wear and tear of capital (i.e. capital consumption).

It can therefore be defined as the total monetary value of all final goods and services produced by all the residents of a country and earnings from their investments (whether citizens or foreigners) after allowances have been made for depreciation.

$$\text{NDP} = \text{GDP} - \text{Depreciation.}$$

1. NET NATIONAL PRODUCT (N.N.P)

This is the Gross National product less depreciation.



It is therefore the total monetary value of all final goods and services, produced by all the citizens of a country and income from their investments (whether at home or abroad) after allowance has been made for depreciation.

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

#### 1. PERSONAL INCOME

It is the earnings of an individual (in monetary terms) for taking part in the production of goods or for services, either by him or his property.

It includes wages to labour for its services, interest received by capital owner, rent paid to the owner of the land, and profit received by an entrepreneur.

#### 1. DISPOSABLE INCOME

This is the part of income which is left after personal income tax is deducted; that is personal income less taxation.

It is the amount left for spending and saving

$$Y^d = Y - T$$

Where  $Y^d$  = Disposable income

$Y$  = Income

$T$  = Tax

#### 1. INCOME PER CAPITA

This is the income per head of the population. It is the national income divided by the total population of a country.

Per capital income = National Income

Population

#### 1. REAR INCOME

This is National income expressed in term of general level of prices with prices of a particular year taken as base.

Increase in price may affect the NNP in a particular year.

Real NNP = NNP for current year x Base year index

Current year index

#### 1. STANDARD OF LIVING

This refers to the level of welfare attained by individuals in a country at a particular time.

This level of welfare is measured in terms of the quantity and quality of goods and services consumed within a period of time.

For example, it is measured in terms of the quantity and quality of food eaten, the type of house one lives in, the quality of educational facilities used, the availability of medical facilities etc. The higher the quantity and quality of goods and services consumed, the higher the standard of living and vice versa,

The standard of living also depends on the prices of goods and services. If the prices of goods and services are high, people will obtain them in fewer quantities and their standard of living will be low and vice versa.

Income per capital is therefore one of the indices for measuring differences in the standards of living between countries.

## **METHODS OF MEASURING NATIONAL INCOME OF A COUNTRY**

### **INCOME APPROACH (INCOME METHOD)**

In using this method, account is taken of all the income received by individuals, firms and government within a year for their participation in production. The income received by factors of production in the form of wages and salaries, rent, interest and profits, is added together. To avoid double counting, transfer income or payments are not included. Examples of transfer incomes are gifts given to old people, students and beggars, pensions paid to old people etc. they are part of people's income which are already counted. The income which is included must be that which arises from the production of goods and services. There must be something given out in return for a payment. Apart from not adding transfer payments, business expenses are excluded. However goods and services consumed by producers are included.

By using this approach, we arrive at either the G.N.P or G.D.P. at factor cost. This is because the total figure is found by adding up the costs (i.e. income) of the various factors of production. To get the G.N.P or G.D.P at market prices, we add taxes and subtract subsidies.

**OUTPUT OR NET PRODUCT APPROACH OR METHOD:** This method sees national income in terms of the monetary value of all goods and services produced by the various economic units (individuals, firms and the government) in a year. In this method, national income is measured by adding together the value of the net contributions of the various sectors or enterprises (both private and public) in the country. To avoid double counting, income is measured on a value added basis (Value-added is the value of output, less cost of inputs). For example, the cost of raw materials such as flour and sugar used in making bread must be subtracted from the value of bread to get the net contribution of bakeries to national output.

In addition, the value of exports is included while the value of imports is subtracted. Also, the value of goods and services produced and consumed by the producer they are included. The values of owner-occupied houses are included. In these cases, rent is imputed. The value of service rendered by voluntary organisations, house helps and housewives should be included. The value of public services such as defence and justice are included.

National income derived in this way gives the GDP at market price. To get the GDP at factor cost, we subtracted taxes and add subsidies.

**EXPENDITURE APPROACH OR METHOD:** This method of measuring national income measures the total expenditure on goods and service by individuals, firms and government in a country within a given period. In using this approach, it is necessary to avoid double counting by identifying expenditure (consumption or investment) of a final nature. For example, in calculating the value of bread, which is a final consumption type of goods, we shall take care not to add the final price of bread the price of flour, sugar, yeast, and other ingredients used in making bread.

In addition, transfer payments such as pensions paid to retired workers, gift to beggars etc, are not included.

Formula for calculating national income using expenditure approach or method.

$$N.I = C + I + G + X - M + \text{subsidies} - \text{taxes} - \text{depreciation}$$

Where:

N.I = National income

C = Private consumption expenditure

I = Private investment expenditure

G = Government expenditure on consumption and investment

X = Exports

M = Imports

Example:

The following is trading account for Nigerian in the year 1978 (one millions).

1. Government expenditure on goods and service =N6m
2. Citizens' private expenditure =N 0m
3. Various stocks at home =N8m
4. Exports income from abroad = N5m
5. Imports income paid abroad =N4m
6. Taxes on expenditure = N0m
7. Capital consumption =N8m

8. General subsidies = N3m

From the information given above, calculate the national income for Nigeria for the year 1978.

Solution

Expenditure (N M)

- Citizens' private expenditure = 35.0
- Government expenditure on goods and services = 15.6
- Stocks at home = 11.8
- Exports income = 13.5
- General subsidies = 1.3 =77.2

Less

- Import's income =10.4
- Taxes =7.0
- Capital consumption =5.8

=23.2

National income = N 77.2m – N 23.2m

N 54.0m

OR

$N.I = C + I + G + (X - M) + \text{subsidies} - \text{Taxes} - \text{Depreciation (or capital consumption)}$

$N.I = N 35.0 + 11.8 + 15.6 + (13.5 - 10.4) + 1.3 - 7.0 - 5.8$

= N 54.0m

#### PROBLEMS OF MEASURING OR COMPUTING NATIONAL INCOME

1. Difficulty of measuring the subsistence production. In West African, which production is done for personal consumption and not for exchange market?
2. Double counting: It may inflate the value of wealth to avoid this; value added is taken into account in the output approach.
3. Transfer payment: These are part of income which is given to others freely, and not as a result of their participation in production. Examples are gifts to beggars and old people, pension payments etc. Sometimes some of these transfer payments are mistakenly recorded as part of income.
4. Inadequate data: Most West Africa countries are faced with statistical problems relating to lack of data or to inaccurate data. Many people who are self-employed, especially the small

scale producers do not keep any records of their output (income) or consumption (expenditure).

5. Effect of depreciation: In calculating the net national income, it is necessary to know the rate of depreciation. It is not easy to know the actual value of depreciation of capital.
6. Payment in kind: Many payments are made with materials objects rather than money and it is not easy to calculate the value.
7. Changes in the value of money.

Assignment:

State 5 ways of National Income estimate

## **WEEK 9**

### **THEORY OF INCOME DETERMINATION**

#### CIRCULAR FLOW OF INCOME

There is a constant flow of inputs and outputs as well as income among the different sectors of the economy, that is, the household or the personal sector and firms or the business sector. The members of households supply factors or production (inputs) to firms which require them for production purposes.

In return, they are paid wages, interest, rent and profits which constitute their incomes. The members of household use their incomes to purchase goods and service produced by a firm. This consumption from expenditure made by household constitutes income for firms. This process leads to the formation of an income cycle. The firms again use the income to purchases the productive services of household.

Income continues to move in a cycle constituting the circular flow or income. While income flows in one direction, commodities (consisting of goods and services produced by firms and the productive services of households) flows in the other direction.

Commodity And Money Flow Between Household And Firms

#### FACTOR AFFECTING CIRCULAR FIRM OF INCOME

1. SAVING: This constitutes part of income which is not consumed immediately. If they do not spend such money on consumption it causes linkage in the system.

2. **INJECTION:** This is an addition to the flow. Injections can be in form exports, government expenditure and investment. Increasing government expenditure creates more income for household and firms.
3. **AIDS AND GRANT:** Income received from other countries in form of aids and grants are an addition in the circular flow. They are injections which increase the income in the flow.
4. **INVESTMENTS:** investment creates an additional income leading injections into the circular flow of income.
5. **IMPORTS AND EXPORTS:** While imports involve expenditure on foreign made goods and services leading to withdrawals from circular flow of income, exports provide funds leading to injections into the circular flow of income.
6. **TAXES:** This is a form of withdrawal from the circular flow income.

## CONCEPTS OF SAVINGS, INVESTMENT AND CONSUMPTION.

**SAVINGS:** are made up of disposable incomes which are not spent on consumer goods and services. In other words, saving refers all or part of income which are not spent immediately but reserved for future purpose.

Saving involves forgoing some present consumption. Money which is saved constitutes withdrawal from the circular flow of income. However, part of savings may come back into income flow through investments.

### TYPES OF SAVING

1. Personal saving
2. Corporate saving
3. Government saving

### FACTORS THAT DETERMINES THE PERSONAL SAVING

1. Rates of interests
2. Political stability
3. Size of income
4. Government policy
5. Sense of responsibility.

## INVESTMENT

Investments involve expenditure on capital goods. It may be defined as expenditure on physical assets which are not for immediate consumption but for the production of consumer and capital goods and services.

### TYPES OF INVESTMENTS

1. Individual investment
2. Corporate investment
3. Government investment.

### FACTOR THAT DETERMINES INVESTMENT

1. Saving
2. Level of income
3. Rates of taxation
4. Interest rate
5. Change in technology
6. Profit earned
7. Political climate

## CONSUMPTION

Consumption means making use of resources to satisfy human wants. Consumption can also be defined as the use of goods and service for the direct satisfactory of human wants.

Consumption, in relation to National income, would mean all expenditure on goods and services which are meant for current use in direct satisfaction of wants. Consumption is part of the income which is spent on goods and services at a particular time. It is depended on the level of income. As income increases, consumption also increases.

## TYPES OF CONSUMPTION

1. Durable goods e.g. houses, motor vehicle etc.
2. Non-durable goods e.g. food, clothing, water etc.
3. Services e.g. Legal fees, medical fees, entertainment fees, educational fees

## FACTOR THAT DETERMINE TO LEVEL OF CONSUMPTION

1. Level of income
2. Availability of credit facilities
3. Rate of taxation
4. Profit earned
5. Change in disposal
6. Attitude of saving

## RELATIONSHIP BETWEEN INCOME, CONSUMPTION, SAVINGS AND INVESTMENT.

### INCOME, CONSUMPTION AND SAVING ARE RELATED

This is represented by the formula;

$$Y = C + S$$

Where Y = income

C = consumption and expenditure

S = savings.

The amount of income earned determines to a large extent of the level of consumption of an individual as well as the amount which can be saved.

The higher the level of income, the higher the level of consumption and savings and vice-versa, other things remaining equal.

Again, income, consumption and investment are related

Thus,  $Y = C + I$ , where

$Y$  = income

$C$  = consumption expenditure

$I$  = investment expenditure

This relationship is based on the fact that all expenditure in the economy can be regarded as either consumption or expenditure or investment expenditure.

If  $Y = C + S$  and  $Y = C + I$ , then  $S = I$  other things remaining equal. The above relationship between savings and investment stems from the fact that all investment emanate from saving which have been made in one way or the other by individuals, firms and governments.

Assignment:

The table below represent a traveller's consumption of bottles of coca cola. Study the table carefully and answer the question that follows:

No of bottles	Total utility	Marginal Utility
---------------	---------------	------------------

1	15	15
---	----	----

2	29	F
---	----	---

3	42	13
---	----	----

4	D	12
---	---	----

5	65	G
---	----	---

6	75	H
---	----	---

7	E	0
---	---	---

1. Complete the missing figures D,E,F,G and H



2. Draw the demand curve for the traveller's consumption of Coca-Cola.
3. Explain the law of diminishing marginal utility as the basis for the slope of the traveller's demand curve.

## AVERAGE PROPENSITIES TO CONSUME AND TO SAVE

1. AVERAGE PROPENSITY TO CONSUME (APC): this is the ratio of consumption to income. Also, it is the fraction of the National Income consumed, that is,

$$APC = \frac{\text{Total National consumption}}{\text{Total National Income}} = \frac{C}{Y}$$

Total National Income = Y

The average propensity to consume decrease with increasing income levels. At low levels of income, an individual may consume almost all his income. In this case the APC will be close to 1. But as income increases, the proportion of income consumed will be less.

Example 1: Calculate the average propensity to consume, if the national income is N20m and the total National consumption is N15m.

Solution:

$$APC = \frac{C}{Y}$$

Y

$$APC = \frac{N15m}{N20m} = 0.75$$

N20m

1. If the national income is 150m and the average propensity to consume is 0.2. calculate the total National Consumption.

Solution:

$$C = Y \times APC$$

$$= N150m \times 0.2$$

$$= N30$$

1. Average propensity to save (APS): this is defined as measure of the proportion of income which is saved (not spent on consumption) i.e. ratio of saving to total income .It tells the expected amount of savings at different levels of income. The average propensity to save

increases with increases in income. As the level of income increases one is able to save more money.

Note:  $APC + APS = 1$ .

$$APS = \frac{\text{Total National Saving}}{\text{Total National Income}} = \frac{S}{Y}$$

Total National Income = Y

Example:

If total National saving is 50m and the total national income is 500m, then the APS will be thus;

$$APS = \frac{S}{Y}$$

Y

$$APS = \frac{N50m}{N500m}$$

$$APS = 0.1$$

Example 2:

If an individual earns an annual income of N6,000.00 and spends N4,000.00 on the consumption of goods and service, calculate his average propensities to consume and to save.

Solution

$$\text{Total income} = N6000.00$$

$$\text{Consumption expenditure} = N4,000.00$$

$$APC = \frac{C}{Y} = \frac{4000}{6000} = \frac{2}{3} = 0.67$$

$$Y = 6000 \quad = 67\%$$

Since  $APC + APS = 1$

$$APS = 1 - APC = 1 - 0.67 = 0.33 \text{ or } 33\%$$

$$\text{Expected savings} = N6,000.00 - N4,000.00 = N2,000.00$$

$$APS = \frac{N2000.00}{N6000.00} = 0.33$$

$$N6000.00$$

1. Marginal propensity to consume and save

Marginal propensity to consume (MPC): MPC measure the relationship between changes in income and change in consumption. It is the ratio of the change in consumption to the change in income.

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

$$\text{Change in income} = Y$$

Where C = change in consumption and

Y = change in income

Example

If total national income increase from N1,500m to N1,800 and the total national consumption increase from N500m to N650m, what is the MPC?

Solution

$$\text{MPC} = \frac{c}{Y}$$

Y

$$\text{MPC} = \frac{(N650 - N500) \text{ m}}{(N1,800 - N1,500) \text{ m}}$$

$$\frac{N150\text{m}}{N300\text{m}} = 0.5$$

$$\text{MPC} = 0.5$$

$$\text{N300m} = 0.5$$

1. Marginal propensities to save (MPS): the MPS is defined as a measure of the relationship between changes in the level of savings and changes in income.

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

$$\text{Change in income} = y$$

It shows the change in savings brought about by a change in income level.

$$\text{MPS} = \frac{s}{Y}$$

Y

Where S = change in saving

MPC and MPS are concerned with finding out what happens to addition to income with respect to how much of the addition is devoted to consumption or saving. On the

other hand, if income falls ,by how much does the level of consumption and saving fall?

Note:  $MPC + MPS = 1$

Example

What is the MPS if the total national income increase from N375 to N450m and the total national savings increases from N85m to N100m?

Solution

$$MPS = \frac{N100m - N85m}{N450m - N375m} = \frac{N15m}{N75m} = 0.2$$

$$MPC = 1 - MPS = 1 - 0.2 = 0.8$$

Example

If the monthly income of an individual increases from N300.00 to N450.00 and he increases his level of consumption by N50.00, calculate the marginal propensities to save and to consume.

Solution

$$\text{Initial income per month} = N300.00$$

$$\text{New income per month} = N450.00$$

$$\text{Change in income ( } \Delta y) = N450.00 - N300.00 = N150.00$$

$$\text{Change in consumption ( } \Delta c) = N50.00$$

$$MPC = \frac{\Delta c}{\Delta y} = \frac{50}{150} = 0.33$$

$$MPC = 0.33$$

$$MPC + MPS = 1$$

$$MPS = 1 - MPC$$

$$MPS = 1 - 0.33 = 0.67$$

OR

$$\text{Change in level of consumption} = N50.00$$

$$\text{Change in level of savings} = N150.00 - N50.00$$

$$= N100.00$$

$$MPS = S = \text{N}100.00 / \text{N}150.00 = 100 / 150$$

$$Y = 2/3 = 0.67$$

## **WEEK 10**

### THE CONCEPT OF THE MULTIPLIER (K)

The multiplier measures the effect of a change in any of the components of aggregate demand such as private consumption, private investment, government expenditure, export and import on national income.

The multiplier is the ratio of change in income to a change in any of the components of total spending. For example, if total investment changes by a stated amount, the extent to which income will change can be determined by using the multiplier. If aggregate demand is lower than total output there will be a fall in national income. To increase national income, therefore, aggregate expenditure has to be increased. The multiplier works in two directions, increasing or decreasing income at a faster rate than the change in expenditure.

### CONSUMPTION EXPENDITURE AND THE MULTIPLIER

An increase in consumption expenditure leads, to higher increase in national income.

On the other hand, if consumption expenditure is reduced the fall in income will be greater than the rate at which consumption expenditure has been reduced. In this connection the multiplier can be defined as the ratio of increase or decrease in income to increase or decrease in consumer spending.

$$\text{The multiplier (k)} = 1 / 1 - MPC = 1 / MPC \quad Y / C$$

Where k = Multiplier

MPC = Marginal Propensities to Consume

MPS = Marginal Propensities to Save.

Y = Change in National income

C = Change in Consumption Expenditure.

A Knowledge of the marginal propensity to consume or marginal propensity to save helps us to know the multiplier.

The knowledge of multiplier helps us to know the extent to which consumption expenditure should be increased or decreased to achieve a desired level of income or output.

The higher the MPC, the higher the multiplier effects and the higher the MPS, the lower the multiplier. Therefore, a higher MPC increases national income while a higher MPS will reduce it.

Example

1. If the marginal propensity to consume is 0.75, calculate the multiplier.
2. By how much must consumption expenditure be increased to increase income by N2000.00?

Solution

$$K = \frac{1}{1 - MPC} = \frac{1}{1 - 0.75} = 4$$

$$K = \frac{Y}{I} = 4$$

$$K = \frac{Y}{I}$$

C

$$4/1 = 2000 / C$$

$$C = N2000 / 4 = 500.00$$

## INVESTMENT EXPENDITURE AND THE MULTIPLIER

Expenditure on investment goods constitutes part of aggregate expenditure. If investment expenditure is increased, there will be an increase in national income which is greater than increase in investment expenditure. On the other hand, a reduction in the level of investment will reduce income by a higher proportion compared with the proportion by which investment is reduced.

$$\text{Multiplier (k)} = \frac{1}{1 - MPC} = \frac{1}{MPS} = \frac{Y}{I}$$

Example

If the marginal propensity to save is 0.5, calculate:

1. The Multiplier
2. The level of investment which is required to raise income by N3000.00

Solution:

$$K = \frac{1}{MPS} = \frac{1}{0.5} = 2$$

$$K = \frac{Y}{I}$$

$$2 = 3000 / I$$

$$2I = N3000.00$$

$$I = N3000.00 / 2 = N1500.00$$

### Government expenditure and the multiplier

As with private consumption and investment, expenditure by government has multiplier effects on the national income.

Increased government spending increases national income at an increasing rate, while a reduction in government spending will have a reverse effect.

$$K = 1 / 1 - MPC = 1 / MPS = Y / G$$

Example: If the marginal propensity to consume is 0.6, by how much will national income increase, if government expenditure is increased by N4000.00?

Solution

$$K = 1 / 1 - MPC = 1 / 1 - 0.6 = 1 / 0.4 = 2.5$$

$$K = Y / G$$

$$2.5 = Y / N4000$$

$$Y = N4000.00 \times 2.5$$

$$= N10000.00$$

### INTERNATIONAL TRADE AND NATIONAL INCOME DETERMINATION.

1. Effect of imports on the multiplier: Increased importation reduces the sizes of multiplier with a consequent reduction in the size of national income. Imports constitute a withdrawal from the circular flow of income.

Income is spent abroad and does not help in the raising the level of investment at home. Total income therefore falls.

1. Effect of exports on the national income: Exports constitute an injection into the circular flow of income. When goods are exported, income is derived from abroad. There is increased national income with the attendant multiplier effect. Increased exports increase the multiplier effects of income, while a decrease in exports will have a reverse effect.

### EQUILIBRUM LEVEL OF INCOME

Equilibrium means situation in which economics forces have no tendency to change. The level of equilibrium always occurs where aggregate expenditure is equal aggregate national income.

There are various approaches depending on the fact that the economy is a closed or open or spend thrift or governed.

Two approaches as follow:

Income expenditure approach: This equilibrium in which National expenditure is equal to National Income or where aggregate supply is equal to aggregate demand.

$$\text{Aggregate supply} = Y = C + S + T$$

$$\text{Aggregate demand} = E = C + I + G + (X - M)$$

$$Y = C + S + T = E = C + I + G + (X - M)$$

Where this happens, desired expenditure is just sufficient to purchase the whole of national output and there is tendency to change.

Assignment:

1. Differentiate between change in supply and change in quantity supplied.
2. Given demand and supply equation

$$Q_d = 12 - 2p; Q_s = 2p + 4$$

1. Determine equilibrium price
2. Determine equilibrium quantity demanded at the price
- Determine equilibrium quantity supplied at a price
1. The supply situation for rice in country x over a period is a shown in the table below. use the table information in the table to answer the question that follow

Period Price (N) quantity supplied

December, 2004            30 100

January, 2007    40 150

April, 2009            50 160

1. Calculate the co- efficient of price distributing of supply for rice between December, 2004 and January 2007.
2. Is the supply of rice elastic? Given reason for your answer?
3. State any three reason which may causes an increase in supply of rice