Macroeconomics Concepts: An Overview

Macroeconomics concept was introduced by Ragnar Frisch in 1933 during the

period of great economic depression, which was globally applies to be relations

among broad economic aggregates.

In 1936, Macroeconomics was brought into prominence through the agitations

and questioning of John Maynard Keynes in his work titled; The General Theory

on Employment and Money. This break through subsequently gave rise to the

Keynesian cross which is now referred to as Keynesian Economics.

The term Macroeconomics can be defined as the study of aggregate variables in

an economy such as total consumption level, autonomous investment and

government expenditure. That is, it studies all the sectors of the whole economy.

In a clear term, it is the study of the ‗elephant‘ economy, that is, the study of the

aggregation of the entire economy.

Features and Nature of Macroeconomics

The characteristics or features of macroeconomics are encompassed in its summative or aggregative impact on variables that concern the entire geographical boundary called nation or country. The study of macroeconomics generally involves the study of a number of variables that affect the whole elephant economy. Such variables include, among others, the rate of inflation i.e. changes in general price level, population and other demographic issues, public finance, national income accounting and determination, employment and wage determination, international trade and balance of payment issues, foreign exchange and domestic currency value stabilization, economic planning issues and economic growth and development, to mention but a few. The nature, like feature, is the general outlook of macroeconomic conditions which encompasses the characterization of the entire system. In a nut shell, the nature of macroeconomics includes the macroeconomics variables and policy objectives

Macroeconomics versus Microeconomics

Macroeconomics is the study of the economy as a whole. In macroeconomics emphasis is on aggregate economic variables such as the economy‘s level of employment, total output and income, total money supply, overall government spending, the levels of taxes, investment and saving and so on. It follows that macroeconomics explores the problems of unemployment, inflation, external disequilibrium, sluggish economic growth, general poverty and inequality in the macro-economy. Microeconomics Concept and Analysis Microeconomics is concerned with specific segments of the economy, particularly the behaviour of individual, consumers and firms, and of groups of firms in industries. As a branch of economics, it examines how resources are organised, controlled and rewarded in various economic activities, as well as how relative prices of goods and services are determined. The main topics falling within microeconomics include the theory of price and wage determination, the theory of consumer behaviour, the theory of production and welfare. Differentiation between Macroeconomics and Microeconomics Microeconomics studies economic units such as household, firm and government. Any economics study that has to do with sub-aggregate and independent units in an economy is termed microeconomics. Therefore any economics study that is related to how market operates, organisation of firms into industries, public finance by sector and general behaviour of household consumers and producers are embedded in microeconomics studies. On the other hand, the study of macroeconomics involved the totality (aggregate) of the entire economy. Any study that is related to population, national income, taxation, inflation, aggregate money supply and demand, unemployment, international trade and policies that regulate the workability of the entire economy is covered under macroeconomics. Although, microeconomics pre-empts decision making, but all decision that are made collectively by government are made under macroeconomics framework. Both macroeconomics and microeconomics are important for economic analysis, which are regarded as necessary apparatus of thought. They have both theoretical and practical importance in the area of :

¬ Understanding the working of the whole economy.

¬ Providing tools for economy policies.

¬ Efficient allocation and employment of resources.

¬ Business decision

¬ Understanding the problems of taxation.

¬ International trade and balance of payment.

¬ Examining the condition of economic welfare.

¬ Economic and social prediction.

Limitations of Macroeconomics There are certain limitations of macroeconomics analysis and these are as follows: 1. Fallacy of Composition: In macroeconomic analysis the aggregate economic behaviour is the sum of individual activities. But what is true of individuals is not necessarily true of the economy as a whole. For example, if total savings in the economy increase, it will bring about a depression unless the savings is invested. If the individual depositor withdraws funds simultaneously, there will be a run on the banks and the banking system will be adversely affected. 2. It regards the aggregate as homogenous: Macroeconomic analysis regards the aggregates as homogenous without caring about their internal composition and structure. The average wage in a country is the sum of wages in all occupations, i.e. wages of clerks, typists, teachers, nurses, etc. But the volume of aggregate employment depends on the relative structure of wages rather than on the average wage. For instances, if wages of nurses increase but that of typists fall, the average may remain unchanged. But if the employment of nurses fall a little and that of typists rises, aggregate employment would increase. 3. Aggregate variables may not be necessarily important: The aggregate variables which form the economic system may not be of much significance. For instance, the national income of a country is the total of all individual incomes. A rise in national income does not mean that individual income has risen. The increase in national income might be the result of the increase in the incomes of a few rich people in the country. Thus a rise in the national income of this type has little significance from the point of view of the community. 4. Indiscriminate use of Macroeconomic analysis: An indiscriminate and uncritical use of macroeconomics in analysing the problems of the real world can often be misleading. For example, if the policy measures needed to achieve and maintain full employment in the economy are applied to structural unemployment in individual firms and industries, they become irrelevant. Also, measures aimed at controlling general prices cannot be applied with much advantage for controlling prices of individual products. 5. Statistical and conceptual difficulties: The measurement of macroeconomic concepts involves a number of statistical and conceptual difficulties. These problems relate to the aggregation of microeconomic variables. If individual units are similar, aggregation does not present much difficulty. But if microeconomic variables relate to different individual units, their aggregation into one macroeconomic variable may be wrong.

Macroeconomics tools

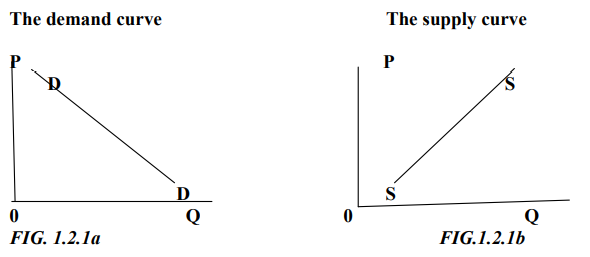
The basic macroeconomics tools imply the instrument through which the study is analysed explicitly to the understanding of the learners. These include verbal statements, graphs and equations or mathematical models.

Verbal Statement or Prose

The use of words is often the easiest way of presentation. It has the advantage of making discussion in economics available to a wide audience. Verbal statement consists of words in tape or class room teaching delivery. Verbal statement could involve different methods; it could be one to one, one to many or many to one, in teacher - student arrays. Fundamentally, verbal learning also includes virtual learning, lecturer (teacher) given lectures (teachings) online, which could also be real time or offline. The former implies receiving online lectures as at when the lectures are being delivered by the lecturer, in which real time participation is expected, teacher asks questions from students answering the question at the same time and vice versa. On the other hand, the offline imply that the teacher leaving lecturing material for student to learn and ask question that are not replied immediately

Graphs

Graphs are used as a further aid to understanding economic discussion. Moreover, it provides a clear picture of the relationship between two economic variables because of their visual appeal. The easiest graphical analyses in economics include that of demand and supply curves. The two curve shows relationship between quantity and price of the commodity, this is illustrated below;



The figures show the relationships that exist between quantity of a commodity demanded and supplied and the price adjustment. Figure 1.2.1a show that more is demanded at a lower price and less at a higher price while figure 1.2.1b implies that supplier would be willing to sell more at a high price than at lower price. The illustration above confirms the fact that a clearer picture of concept is view from a graph or curves. There is a negative relationship between demand and price while positive relationship exists between supply and price.

Equations / Models

Complex relationships of a multi-dimensional nature are expressed in mathematical language; algebraic statement of functional relationship. However, for ease of presentation variables are often reduced to two so that they could be shown on graphs. An algebraic statement could be made from illustration of demand and supply curves in figure 1.2.1a and 1.2.1b. For instance figure 1.2.1a could be algebraically represented as; Qd = f (P) meaning quantity of a commodity demanded depends on the price of that commodity, implicitly. However, it could be explicitly written as Qd = a –bP , meaning that a negative relationship exists between quantity of a commodity demanded and its price. i.e. people tend to demand more at a low price than at a high price, ceteris paribus. On the other hand figure 1.2.1b could be also implicitly written as Qs = f (P), still meaning that quantity supply of a commodity is a function of its price, and could be explicitly written as Qs = -a + bP, meaning that seller would be willing to sell more at a high price than at a low price.

Some Mathematical Concepts

Variable

A variable refers to a quantity that may assume any value in the context of a particular problem. Symbols are often used to denote variables. In economics, the two types of variables often considered are the continuous variable and discrete variable. The continuous variables are one that assumes any value within a specified interval of real numbers. Examples include all non-countable numbers between 3 and 6. Some of these may differ by very small (infinitesimal) amounts, e.g. 3.00036.

The discrete variable, on the other hand assumes values within a countable range. An example is the number of integers between 10 and 20 ( are 11) which are countable. Dependent and independent variables: The variables to which we assign value are called independent variables, and the variables whose values are determined by the independent variables are called dependent variables. Thus, if the functional relationship is Y = f(X), i.e. Y depends on X, then X is the independent variable and Y is a dependent variable.

Exogenous and Endogenous Variables:

The endogenous variable in an economic model is the one that is explained within the model. The exogenous variable is the one that affects the endogenous variable but is determined from outside the model. Using the population case again, if we hypothesize that the population of Nigeria is determined by the food supply, the endogenous variable is population and the exogenous variable is the availability of food. Food supply, although determined from outside the model, has impact on the population. Notice that population itself is assumed to have no impact on food supply, since population is being explained in the model. Another name for an exogenous variable is the autonomous variable. Note also that in the relationship Y = f(X), Y is endogenous while X is exogenous variable.

Functions

If two variables-say X and Y- are related in such a way that when the value of X is given, the value of Y is determined, we say that Y is a function of X. that means that Y depends on X. This is written as Y= f(X), where f is the notation of function and means ‗depends on‘. Suppose P stands for the population of Nigeria and Q stands for food supply produced. We can say that P = f (Q), i.e. the population of Nigeria depends on food supply, or population is a function of food supply.

What is National Income Accounting?

National income accounting refers to the government bookkeeping system that measures the health of an economy, projected growth, economic activity, and development during a certain period of time. It helps in assessing the performance of an economy and the flow of money in an economy. The double entry system principle of accounting is used to prepare the national income accounts.

National Income Accounting Equation

The national income equation represents the relationship between national income and the economy’s expense, along with other attributes, as shown in the following equation:

Where:

Y – National income

C – Personal consumption expenditure

I – Private investment

G – Government spending

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X – Exports

M – Imports

National Income Accounting and Gross Domestic Product

Gross Domestic Product (GDP), Net National Product (NNP), Gross National Product (GNP), personal income, and disposable income are the important metrics determined by national income accounting.

However, the most commonly used measure of the economy is GDP. It is the cumulative value of products and services generated in an economy over a given period of time. Only the goods produced in the home country are included in the GDP, regardless of the nationality status of the company owners.

The gross domestic product figure may not represent the correct value, as some goods may not even make it to the market, which makes it difficult to determine the true value of the market. Nevertheless, GDP reasonably represents the national output. The other economic measures can be derived from GDP.

National Income Accounting Methods

The following methods are used to measure national income:

1. Product method

Also known as the value-added method, the product method is based on the net value added to the product at every stage of production. In the product method, the economy is usually divided into different industry sectors, such as fishing, agriculture, and transport.

The national income is calculated by adding the total output of the companies in the economy. The method shows the contribution of each sector to the national income, hence demonstrating the importance of different sectors relative to each other.

. Income method

In the income method, the national income is measured by adding up the pretax income generated by the individuals and companies in the economy. It consists of income from wages, rent of buildings and land, interest on capital, profits, etc. in an accounting year. The income method shows the national income distribution among different earning groups in the economy.

3. Expenditure method

In the expenditure method, the national income is measured by adding up the expenditures made by individuals, companies, and the government. Thus, it combines consumer spending, investments made by companies, net exports, and government spending to calculate the national income.

Income determination

INVESTMENTS

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

CONSUMPTION

Consumption is the sum of current expenditure on goods and services by individuals, firms and government. It is also mean part of income not saved or invested. The level of consumption of an individual depends largely on his level of current income.

Determination of National Income

In the short run, the level of national income is determined by aggregate demand and aggregate supply. The supply of goods and services in a country depends on the production capacity of the community. But during the short period the productive capacity does not change.

If AD increases, output will also increase and the level of national output (i.e., national income) will rise. On the other hand, if AD decreases, the national output or national income will also decrease. It follows that the equilibrium level of NI is determined by AD since the aggregate capacity remains more or less the same during the short run.

Thus, there are two components of effective demand:

(a) Consumption demand, and

(b) Investment demand.

Aggregate Demand = Consumption + Investment

i.e., AD = C + I

The consumption demand depends on propensity to consume and income. At a given propensity to consume, as income increases, the consumption demand will also increase.

In the above diagram the 45o line represents aggregate supply line and it is also called ‘income line’. This income line shows two things:

(a) Total output or aggregate supply (C + I), and

(b) National income.

In the above diagram, the curve C rises upward to the right which means that as income increases consumption also increases. The distance between income line and consumption line represents saving. Thus, NI = C + S or Y = C + S.

One noteworthy thing about propensity to consume is that it remains stable or constant during the short period. Because the propensity to consume depends on the tastes and needs of the people and these do not change in the short run.

Since consumption is more or less stable and cannot be varied, therefore, variation in NI depends on variation in investment.

Investment is the second component of AD. Investment depends on two things:

(a) Marginal efficiency of capital, and

(b) The rate of interest

The rate of interest is more or less stable, hence, change in investment depends on the marginal efficiency of capital (MEC).

The MEC means expectations of profit from investment. In other words, the expected rate of profit is called MEC.

Multiplier and Accelerator

Oftentimes, people confuse multiplier with accelerator, both economic concepts differ. Multiplier reflects how a change in investment affect income and employment while accelerator reflects how a change in production and consumption affect investment. Both economic concepts seek to show the connection or interaction between investments and production/consumption. For multiplier, consumption is dependent upon investment, while accelerator maintains that investment is dependent upon consumption.

Acceleration Principle

The acceleration preceded the Keynesian economics, it was developed by Thomas Nixon Carver and Albert Aftalion, and some other economists. In economics, acceleration principle is based on an assumption that increase in production rates, consumption and incomes translates to an increase in the investments made by companies. Hence, increase or decrease in production and income rates affect investment deals. When rates of production and profits rise, investors are encouraged to make investments in order to realize profits as well. One of the criticis

An Example of The Acceleration Principle

Acceleration principle can be well understood by examining an industry that experiences a significant growth in production, demand and income. This growth will automatically be extended to companies in this industry, they increase in production rates and have quick turnover of inventories. This industry will witness an influx of investments, especially, if the rapid and significant increase will continue for a continuous period of time. Also, if there is an indication of continuous period of increase and growth, the industry will likely increase capital expenditures in order to expand its production capacity. More capital goods will be purchased and this is influenced by an increase in demand for products in the industry.

Theory of consumption

The Importance of Consumption

Every time you purchase food at the drive-thru or pull out your debit or credit card to buy something, you are adding to consumption. Consumption is one of the bigger concepts in economics and is extremely important because it helps determine the growth and success of the economy. Businesses can open up and offer all kinds of great products, but if we don't purchase or consume their products, they won't stay in business for very long! If they don't stay in business, many of us won't have jobs or the income to buy goods and services.

Consumption can be defined in different ways, but it is best described as the final purchase of goods and services by individuals. The purchase of a new pair of shoes, a hamburger at the fast food restaurant or services, like getting your house cleaned, are all examples of consumption. It is also often referred to as consumer spending. Many topics in economics explore how the income of families and individuals affects consumption and spending habits.

. Relative Income Theory of Consumption:

An American economist J.S. Duesenberry put forward the theory of consumer behaviour which lays stress on relative income of an individual rather than his absolute income as a determinant of his consumption. Another important departure made by Duesenberry from Keynes’s consumption theory is that, according to him, the consumption of a person does not depend on his current income but on certain previously reached income level.

2. Life Cycle Theory of Consumption:

An important post-Keynesian theory of consumption has been put forward by Modigliani and Ando which is known as life cycle theory. According to life cycle theory, the consumption in any period is not the function of current income of that period but of the whole lifetime expected income.

Thus, in life cycle hypothesis the individual is assumed to plan a pattern of consumption expenditure based on expected income in their entire lifetime. It is further assumed that individual maintains a more or less constant or slightly increasing level of consumption.

However, this level of consumption is limited by his expectations of lifetime income. A typical individual in this theory in his early years of life spends on consumption either by borrowing from others or spending the assets bequeathted from his parent

. Permanent Income Theory of Consumption:

Permanent income theory of consumers’ behaviour has been put forward by a well-known American economist, Milton Friedman. Though Friedman’s permanent income hypothesis differs from life cycle consumption theory in details, it has important common features with the latter. Like the life cycle approach, according to Friedman, consumption is determined by long-term expected income rather than current level of income.

It is this long-term expected income which is called by Friedman as permanent income on the basis of which people make their consumption plans. To make his point clear, Friedman gives an example which is worth quoting. According to Friedman, an individual who is paid or receives income only once a week, say on Friday, he would not concentrate his consumption on one day with zero consumption on all other days of the week.

He argues that an individual would prefer a smooth consumption flow per day rather than plenty of consumption today and little con­sumption tomorrow. Thus consumption in one day is not determined by income received on that particular day. Instead, it is determined by average daily income received for a period. This is on the line of life cycle hypothesis. Thus, according to him, people plan their consumption on the basis of expected average income over a long period which Friedman calls permanent income.

Relationship between Consumption and Permanent Income:

Now, what is the precise relationship between consumption and permanent income (that is, the expected long period average income). According to permanent income hypothesis, Friedman thinks that consumption is proportional to permanent income

CP=kYP

where

YP is the permanent income

CP is the permanent consumption

k is the proportion of permanent income that is consumed.

Theory of inflation

In economics, inflation is a general increase in the prices of goods and services in an economy.[3] When the general price level rises, each unit of currency buys fewer goods and services; consequently, inflation corresponds to a reduction in the purchasing power of money.[4][5] The opposite of inflation is deflation, a sustained decrease in the general price level of goods and services. The common measure of inflation is the inflation rate, the annualized percentage change in a general price index.[6] As prices do not all increase at the same rate, the consumer price index (CPI) is often used for this purpose.

. The Demand-Pull Inflation:

The theory of demand-pull inflation relates to what may be called the traditional theory of inflation.

The essence of this theory is that inflation is caused by an excess of demand (spending) relative to the available supply of goods and services at existing prices.

According to classicals, the key factor is the money supply because in accordance with the quantity theory of money only an increase in the money supply is capable of raising the general price level.

In modern income theory, however, demand-pull is interpreted to mean an excess of aggregate money demand relative to the economy’s full employment output level. The theory assumes that prices for goods and services as well as for economic resources are responsive to supply and demand forces, and will, thus, moves readily upward under the pressure of a high level of aggregate demand.

Economists like Friedman, Hawtrey, Golden Weiser, who regard inflation as a purely monetary phenomenon, strongly support this theory of inflation caused by excess money supply.

. Cost-Push Inflation:

The theory of cost-push inflation became popular during and after the Second World War. This theory maintains that prices instead of being pulled-up by excess demand are also pushed-up as a result of a rise in the cost of production. Under cost-push inflation prices rise on account of a rise in the cost of raw materials, especially wages. The theory holds that the basic explanation for inflation is the fact that some producers, group of workers or both, succeed in raising the prices for either their product or services above the levels that would prevail under more competitive conditions.