

Macroeconomic Analysis

Suman Gera

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(Publishers of Educational Books)

Sales Office : 1507, 1st Floor,

Nai Sarak, Delhi-110 006

E-mail: info@neerajbooks.com

Website: www.neerajbooks.com

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Sample Preview of The Chapter

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MACROECONOMIC ANALYSIS

TRADITIONAL APPROACHES TO MACROECONOMICS

Classical and Keynesian Approaches



INTRODUCTION

Ragnar Frisch gave the concept of Micro-economics and Macro-economics. He was the first who introduced these two branches in the field of Economics. Macroeconomics is that branch of Economics that deals with the economy as a whole i.e. aggregates. There are some concepts, laws and theories which hold good at microeconomics level but they do not hold equally good at macro level. For example, saving is good from an individual's perspective but if everyone in the economy start to save then it will lead to fall in effective demand and level of output and employment in the economy because one man's expenditure is other man's income. So, Macroeconomics emerged as a separate field of study.

In this chapter, we shall discuss Classical and Keynesian approaches to output and general price level in the economy. But first of all let us elaborate some basic concepts.

CHAPTER AT A GLANCE

SOME CONCPETS

Let us elaborate on some basic concepts that are relevant to understand macroeconomics.

Aggregate Supply: Aggregate supply is the money value of total supply of goods and services available for purchase by an economy during a given period. In other words, Aggregate supply is the aggregate value of total output produced in an economy. It is Net National Product at Factor Cost.

Components of AS : $AS = C + S$

Usually, it is assumed that aggregate supply is upward sloping in the short-run and vertical in the long-run.

Supply of and Demand for Labour: The quantity of labour supplied is a direct function of wage rate. More will be the wage rate, more will be labour supplied and *vice-versa*. There is no involuntary unemployment in the economy as per classical economists. All those who are willing to work are employed and all those who are unwilling to work are called voluntary unemployed. It is involuntary unemployment that we are worried about. Unemployment rate is the percentage of work force that is not employed.

The quantity of labour demanded is a downward sloping curve of wage rate. Wage rate is determined by the intersection of demand for labour and supply of labour.

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Nominal Wage: It refers to wages in monetary terms that are not adjusted for price rise.

Real Wages: It refers to wages that have been adjusted for price rise.

Aggregate Demand: Aggregate demand means the total demand for final goods and services in the economy. It also means the total amount of money which all sections are willing to spend on purchase of goods and services produced in an economy during a given period. Aggregate demand is synonymous with aggregate expenditure.

Components of AD:

$$AD = C + I + G + (X - M)$$

Private Consumption Expenditure (C): It is defined as the value of all goods and services that households are willing to buy. Alternatively, it refers to total expenditure to be incurred by all households on purchase of goods and services.

Private Investment Expenditure (I): It refers to planned expenditure on creation of new capital assets like machines, buildings, raw material by private entrepreneurs.

Government Demand for Goods and Services (G): It refers to government planned expenditure on purchase of consumer and capital goods to fulfil common needs of the society.

Net Exports: (X - M): Net export demand is defined aggregate of all demand for our goods and services by foreign countries over our country's demand for foreign countries' goods and services.

Net exports: Exports minus Imports

Taking into account all the components:

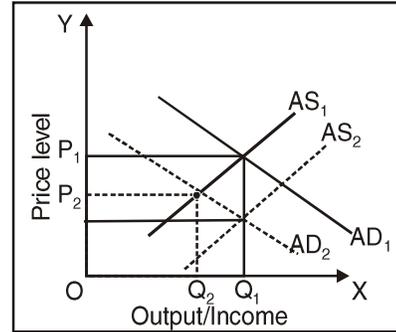
$$AD = C + I + G + (X - M)$$

In two sector economy,

$$AD = C + I$$

Equilibrium Output and Price: In the short-run, aggregate demand is upward sloping while aggregate supply is downward sloping. Therefore, equilibrium level of output and price is determined at the intersection point of AD and AS.

Whenever there will be shift in AD or AS or both, new equilibrium will get established as shown in the figure given below:



When there is decline in AD, it will lead to decrease in the equilibrium level of output. It leads to increase in the level of unemployment. It, in turn, causes pushes the wage rates down. It causes AS to shift downward. But in the long-run once again there will be full employment.

Measurement of Aggregate Output: There are three methods of measuring Aggregate output.

I. Income Method: Income method is also called factor payment method or distribution method. According to income method, national income is calculated by adding:

1. Compensation of Employees
 2. Operating Surplus
 3. Mixed income of self-employed
 4. Net Factor Income from abroad
- $$NDP_{fc} = 1 + 2 + 3$$

II. Value Added Method or Production or Output Method: It is a method which measures national income by estimating the contribution of each enterprise to the production in the domestic territory of the country plus NFIFA.

NI by output method = Gross value added by three sectors (Primary, Secondary and Territory) – Depreciation – NIT + NFIFA

Gross Value Added At Market Price = Value of Output – Intermediate Consumption or [Sales + Change in Stock] – Intermediate Consumption

III. Expenditure Method: It is a method which measures the final expenditure on purchase of new goods and services at market price in an accounting year.

According to expenditure method, GDPmp is the aggregate of all the final expenditure in an economy in a year, i.e.

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

Where Y is national income

C = Private Final Consumption Expenditure;

I = Final investment expenditure;

G = Government Final Consumption Expenditure;

X - M is net exports i.e. exports minus imports

Final Investment expenditure may take form of:

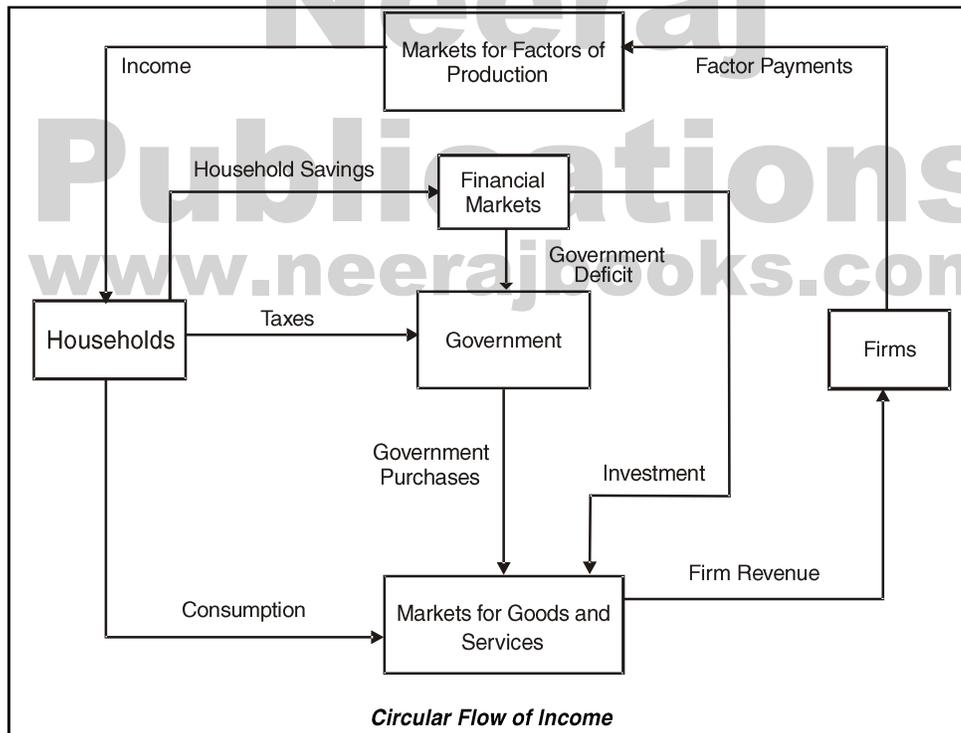
1. Business Fixed Investment
2. Residential Investment
3. Inventory Investment (Change in Stock)
4. Government Fixed Investment.

Circular Flow of Income: Actually, income is generated within firms and flows back to firms only in the form of revenue but in the process all sectors

get the share of the cake according to their contribution in this production and government rules. Thus, income flows in a circular manner in an economy.

Circular flow of income in a four sector economy: (With Financial Sector)

In two sector economy, it is assumed that government has no interference. Economy is an open economy and has economic relations with the rest of the world. Hence, there are four sectors: households, firms, government and external sector. Households provide factors of production to the firms and government who in return pay for them. Firms provide goods and services to the households and government who pay firms for them. Flow of money from one sector to other is called monetary flow. The flow of goods and services from one sector to other is called real flow. Real flow is equal to money flow. It is shown with the help of following diagram:



VARIOUS SCHOOLS OF THOUGHT

There are varied views given by economists about the adjustment process of output, prices and employment in an economy. There is no consensus even on the shape of AS and AD curves.

There are two important schools of thought:

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(i) Classical Thought

(ii) Keynesian Thought

J.M. Keynes used the term classical approach to refer to those economists who presented their ideas before him.

Keynesian theory evolved as a result of great depression of 1929 in which none of the ideas of the classical economists worked as expected. Keynes explained that great depression was caused by insufficient demand. On the contrary, classical economists always proposed that demand adjusts itself according to supply. They suggested a laissez faire economy where government should concentrate on its administrative role and does not interfere with economic activities.

Classical theory was propounded by Karl Marx, Malthus, Adam Smith, Ricardo, Marshall.

The classical economists asserted that full employment is a normal feature of a capitalist economy. Full employment is defined as an absence of involuntary unemployment. There is an in-built system in the economy that makes economy work at the full employment level.

Assumptions of the Theory

1. Say's Law of Market: This law was formulated by J.B. Say. It states that "Supply creates its own Demand". i.e. there is never a deficiency of aggregate demand. It states that an increase in output creates an equal increase in income and spending.

2. Flexibility in Wage Rates and Price Exists: Wage and price flexibility means that real wages and prices can change freely and quickly. This assumption of wage flexibility implies that supply of labour equals demand for labour i.e. there is no unemployment. Flexibility in prices implies that $AD = AS$ and there is no excess demand or excess supply.

Criticism of the theory:

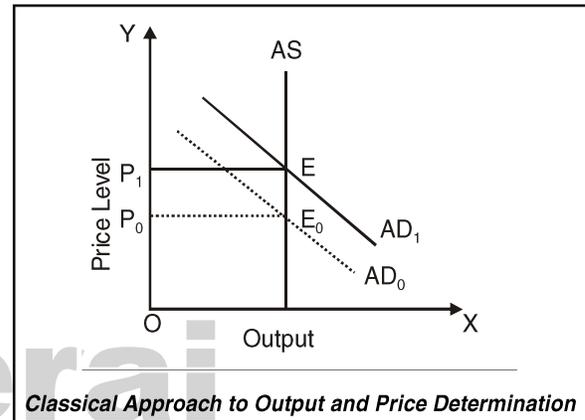
1. In reality, J.B. Say's law of market does not operate due to its unrealistic assumptions.

2. Keynes' proved that the economy may be in equilibrium at less than full employment level.

3. Saving and investment do not depend on interest rates only. Savings depend on disposable income and investment depends on expected return on investment.

4. Wage rates and prices are not so flexible in reality.

5. It ignored the role of state in influencing markets through its fiscal and monetary policy.



Statement of the Theory: It states that demand creates its own supply and economy in the short-run generally operates below full employment level and under employment equilibrium is a normal situation. Government intervention through various policies can help in bringing about equilibrium between AD and AS.

Assumptions of the Theory

1. Rigid Wages and Prices: Government intervenes through minimum wage laws to fix wages which results in involuntary unemployment. Government also intervenes to fix the prices of essential commodities through various policies.

2. Constant MP of Labour: If MP of each labour is constant and wage rates are also same then it means that each additional unit cost the same to the producer.

Under-Employment Equilibrium

The Concept of Aggregate Supply: Keynes' AS curve is perfectly elastic till full employment level and perfectly inelastic after attainment of full employment.