

Chapter 1 Determination of National Income

Unit 2 The Keynesian Theory of Determination of National Income

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In this unit we shall focus on **2 issues** namely, the **Factors That Determine the level of national income & the determination of equilibrium aggregate income & output in an economy**

- **John Maynard Keynes** in his masterpiece '*The General Theory of Employment Interest and Money*' published in 1936 put forth a comprehensive theory to explain the determination of equilibrium aggregate income and output in an economy.
- The equilibrium analysis is best understood with a hypothetical simple a two-sector economy which has only households and firms with all prices (including factor prices), supply of capital and technology constant; the total income produced Y , accrues to the households and equals their disposable personal income.
- The equilibrium output occur when the desired amount of output demanded by all the agents in the economy exactly equals the amount produced in a given time period.
- In the two-sector economy, Aggregate Demand (AD) or aggregate expenditure consists of only two components: aggregate demand for consumer goods and aggregate demand for investment goods / being determined exogenously and constant in the short run.

1. Introduction

2. Circular Flow in Simple Two Sector Model

3. Aggregate Demand Function – 2 Sector Model

4. Determination of Equilibrium Income – 2 Sector Model

5. The Investment Multipliers

6. Determination of Equilibrium Income – 3 Sector Model

7. Determination of Equilibrium Income – 4 Sector Model

Sectors

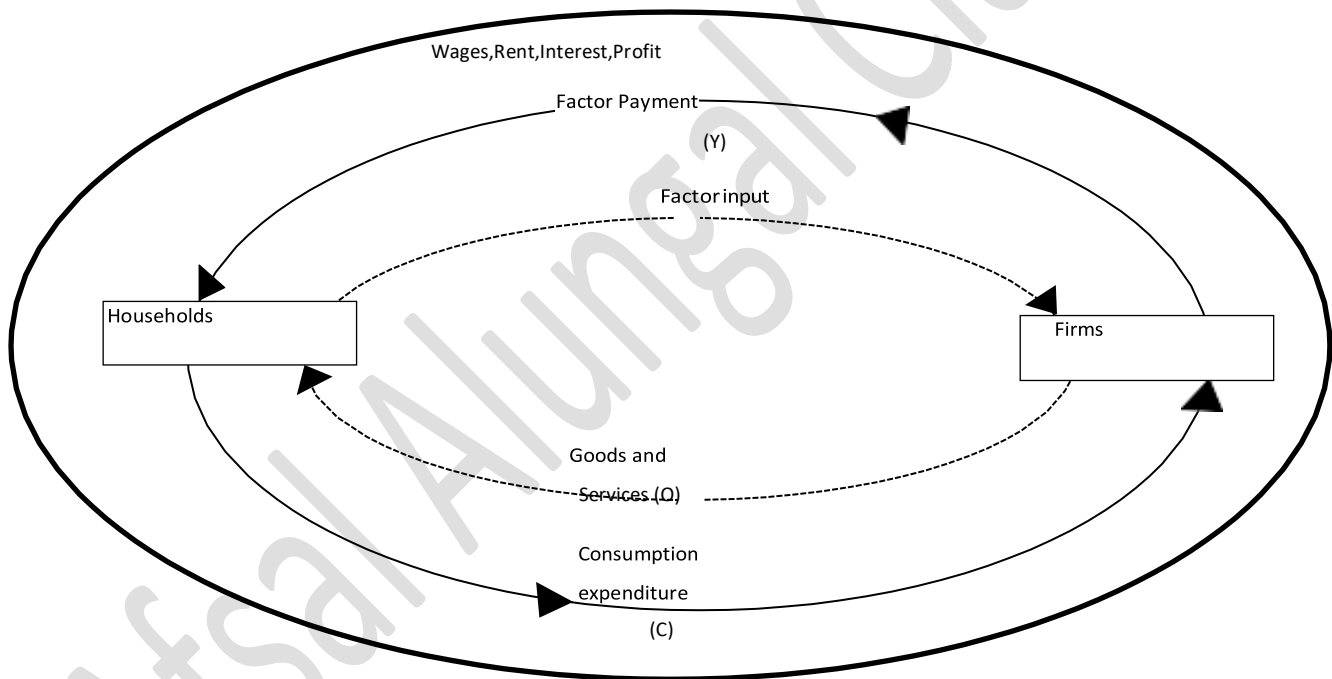
Household
Sector

Business
Sector

Government
Sector

Foreign
Sector

CIRCULAR FLOW IN A TWO SECTOR ECONOMY



Factor Payment = Household Income = Household Expenditure = Total Receipt of Firms = Value of Output

Assumptions of Two Sector Model

1. The simple 2 sector model assumes that there are **only two sectors** (household & firms)with only consumptions & investment outlays
2. **Household own all factors of production** & they sell their factor services to earn factor incomes which entirely spent to consume all final goods & services produced by business firms
3. The **business firms** are assumed to hire factors of production from the households. They sell goods & services to households and **they do not save.**
4. **There are no corporations, corporate savings or retained earnings.**
5. Total income produced Y , accrues to the households and equals their disposable personal income **$Y=Y_d$** .
6. **All prices**, supply of capital and technology remain **constant**.
7. Government sector does not exist and therefore **no taxes**, **Government expenditure or transfer payments**. The economy is a closed economy i.e. foreign trade does not exist.
8. **All investment outlays autonomous** (not determined either by the level of income or the rate of interest). All investment is net and therefore national income equals net national product.

EQUILIBRIUM

Term equilibrium (defined as a state in which there is no tendency to change or a position of rest).

Equilibrium output occur **when the desired amount of output demanded by all the agents in the economy exactly equals amount produced in a given time period.**

Logically an economy can be said to be in equilibrium when production plans of the firms and expenditure plans of households match.

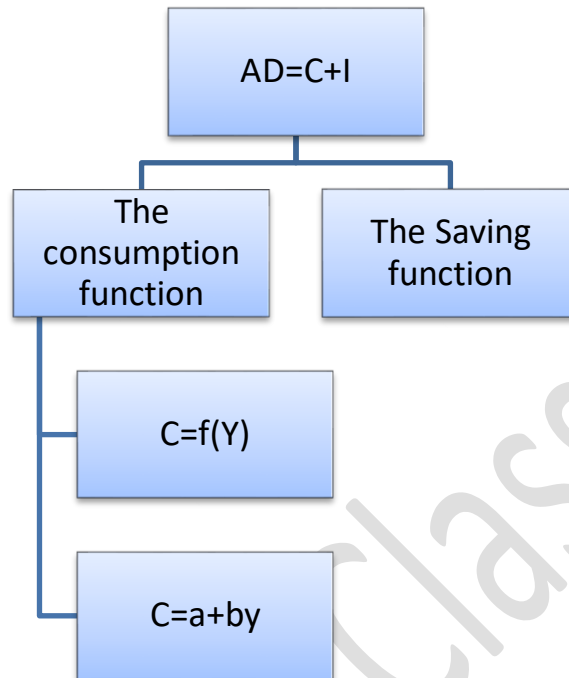
Aggregate Demand Function- Two Sector Model

$$AD = C + I$$

AD = Aggregate demand

C = Aggregate demand for consumer goods

I = Aggregate demand for investment goods



C=Aggregate consumption

f(Y)= Proportion of income

a=constant term

b= MPC

The consumption function

Marginal Propensity to Consume (MPC)

$$MPC = \frac{\Delta C}{\Delta Y} = b$$

Average Propensity to Consume (APC)

$$\frac{C}{Y}$$

The Saving function

Marginal Propensity to Save

$$MPS = \frac{\Delta S}{\Delta Y} = 1 - b$$

Average Propensity to Save

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

Investment Multiplier

Multiplier explains how many times the aggregate income increases as a result of an increase in investment.

$$\begin{aligned} & \frac{\Delta Y}{\Delta I} \\ &= 1/1-MPC \\ &= 1/1-MPS \end{aligned}$$

Higher the MPC, higher the multiplier

Lower the MPC, lower the multiplier

Higher the MPS, lower the multiplier

Lower the MPS, higher the multiplier

