BUSINESS ECONOMICS MODULE -1

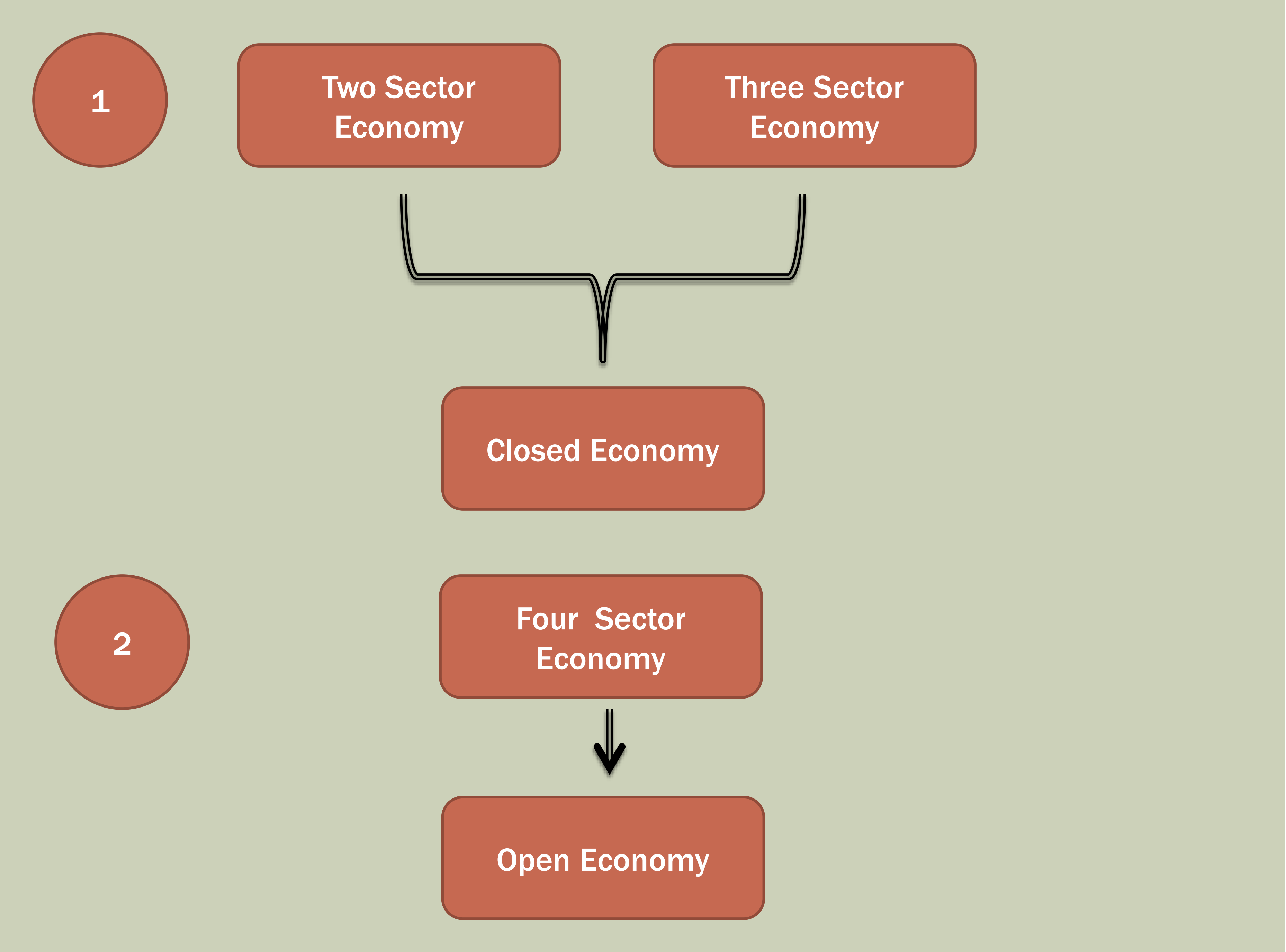
CHAPTER- 2
CIRCULAR FLOW OF INCOME

MEANING OF CIRCULAR FLOW OF INCOME

Circular flow of income is an economic model which descries the reciprocal circulation of income between Producers and consumers.

In macroeconomics we have 3 different models of circular flow of income

- Two Sector Economy
- Three Sector Economy
- Four Sector Economy


1
Two Sector Economy
Three Sector Economy
Closed Economy
2
Four Sector Economy
Open Economy

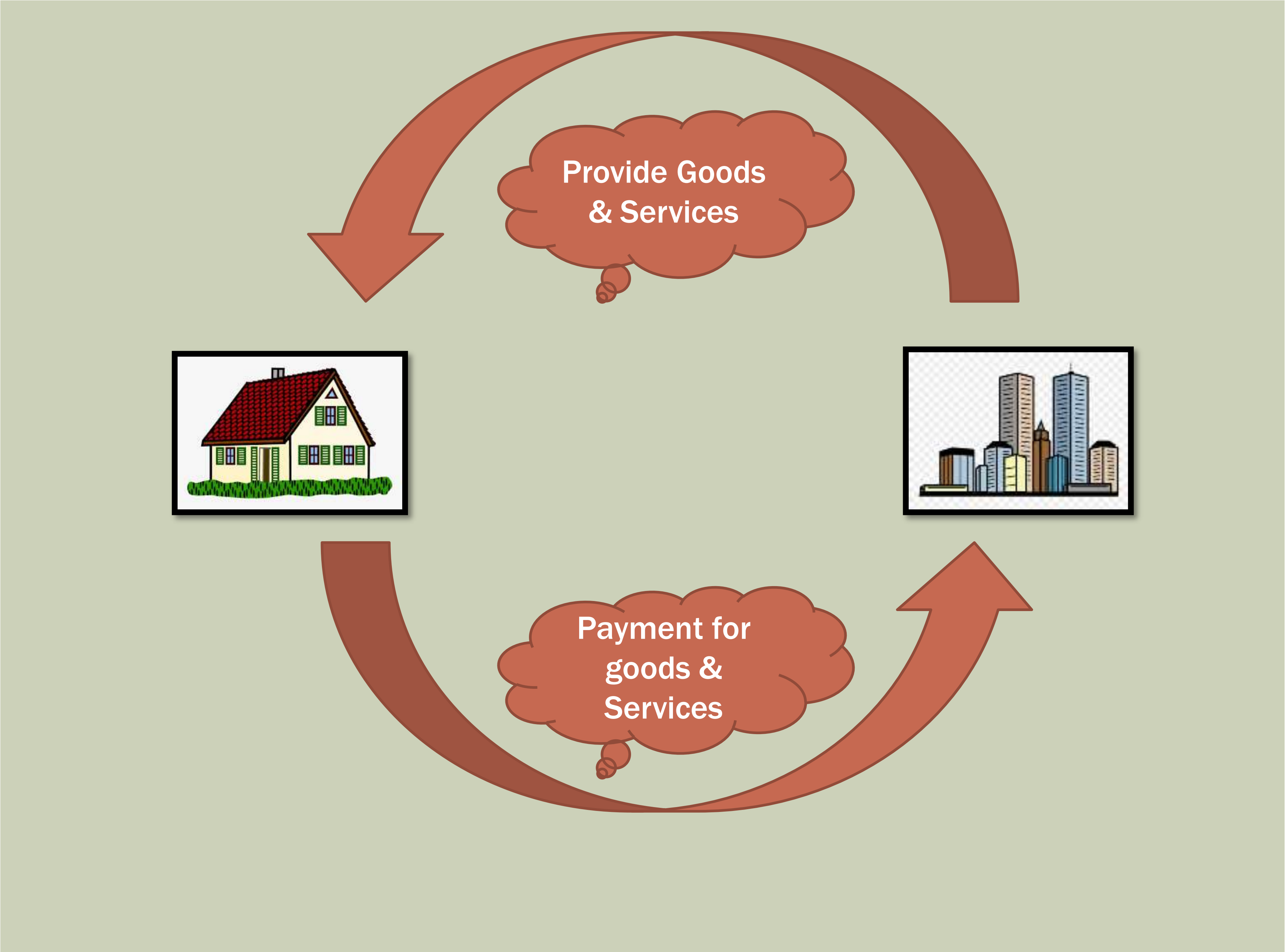
Two Sector Economy

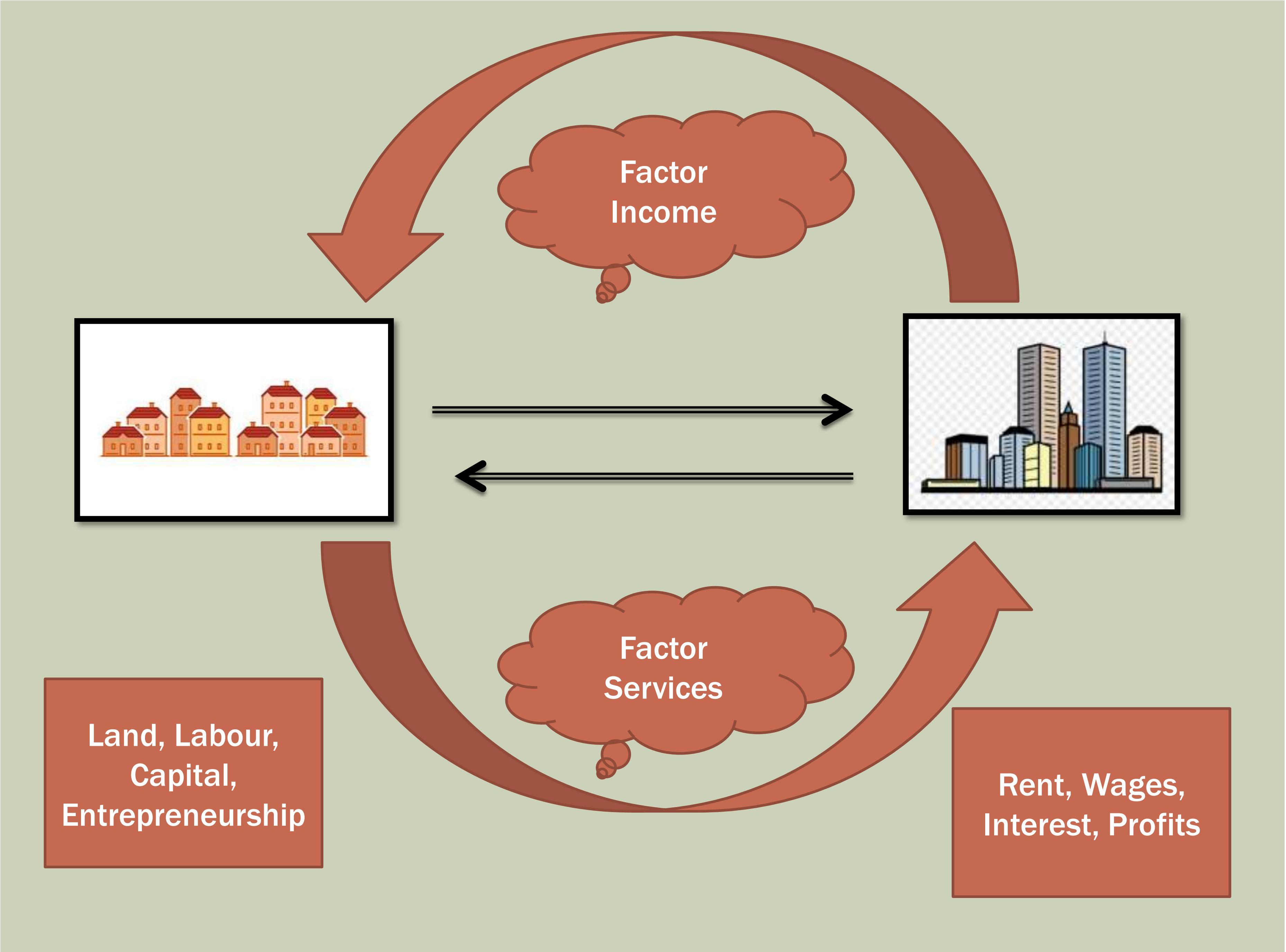
Household

Firms

Household: - Household are the main owners of factors of production- land, labour, and capital. They sell the services of these factors to producers and in return receive their income. They spend a large part of their income in purchasing goods and services from the producers. However, they save a part of their income and at the same time they pay taxes to the out of their income.

Firms/ Business Sectors:- In economics, we use the terms business sector, producers and firms interchangeably. Firms hire services of factors of production from households to produce commodities that they sell to household, to other firms, to government or other countries. Firms are principal buyers of factors of production and main producers of commodities. Business sector comprises of both private and government enterprises.


Provide Goods
& Services
Payment for
goods &
Services


Factor
Income
Factor
Services
Land, Labour,
Capital,
Entrepreneurship
Rent, Wages,
Interest, Profits

A) Two Sector Economy

I. Circular Flow without Savings:-

It is simple economy with two sectors, Households & Firms . It has some assumptions.

- Economy consists of two sector Households & Firms.
- Production takes place only in firms.
- Household spend entire income on goods & services.
- Income not spent is saved which is invested through financial markets.
- Firms supply goods & services as per demand thus do not maintain any inventory.
- There are no government operations i.e. no government expenditure and taxes in economy.
- There are no international economic relations. There is no outflow and inflow of goods and services.

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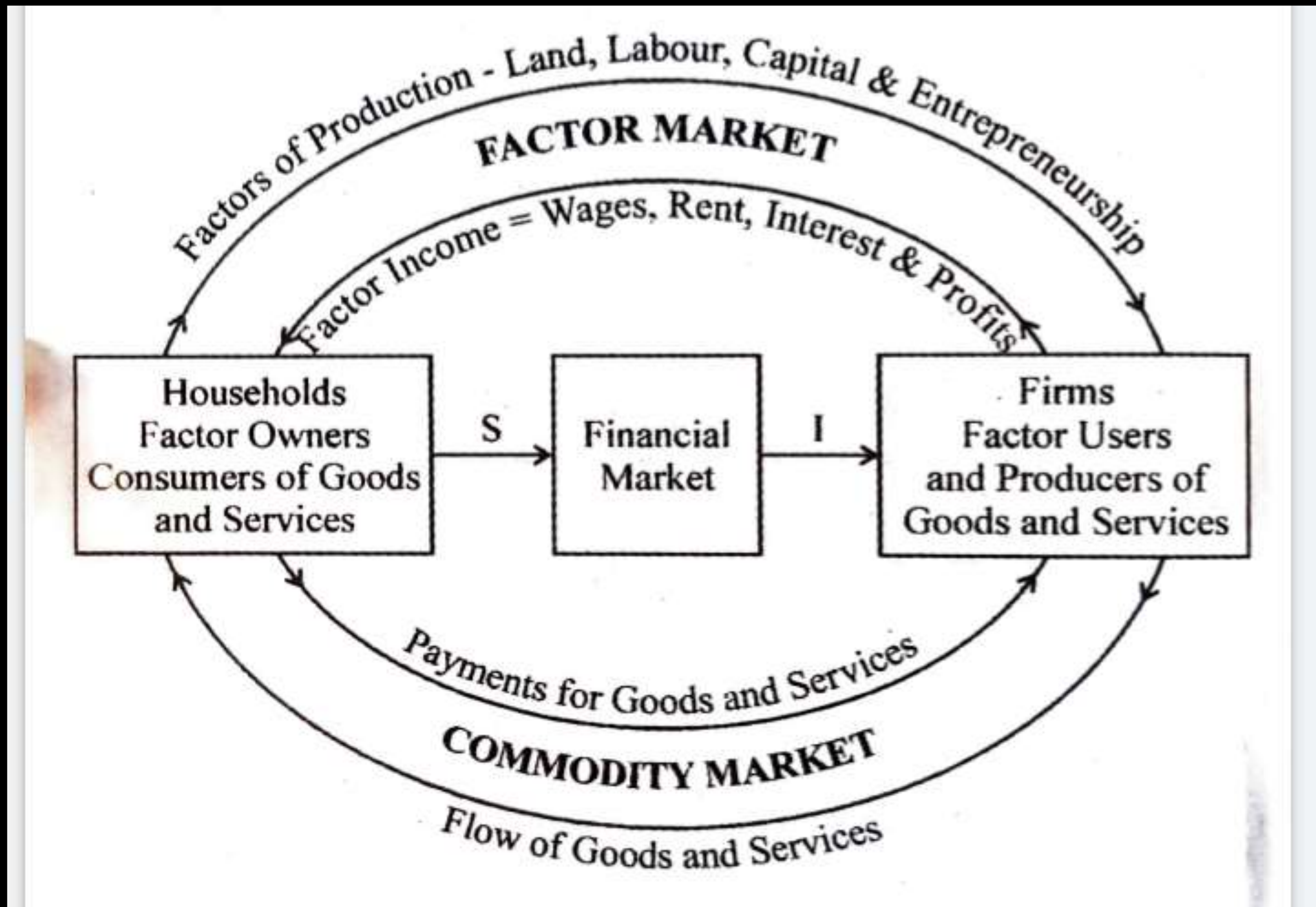
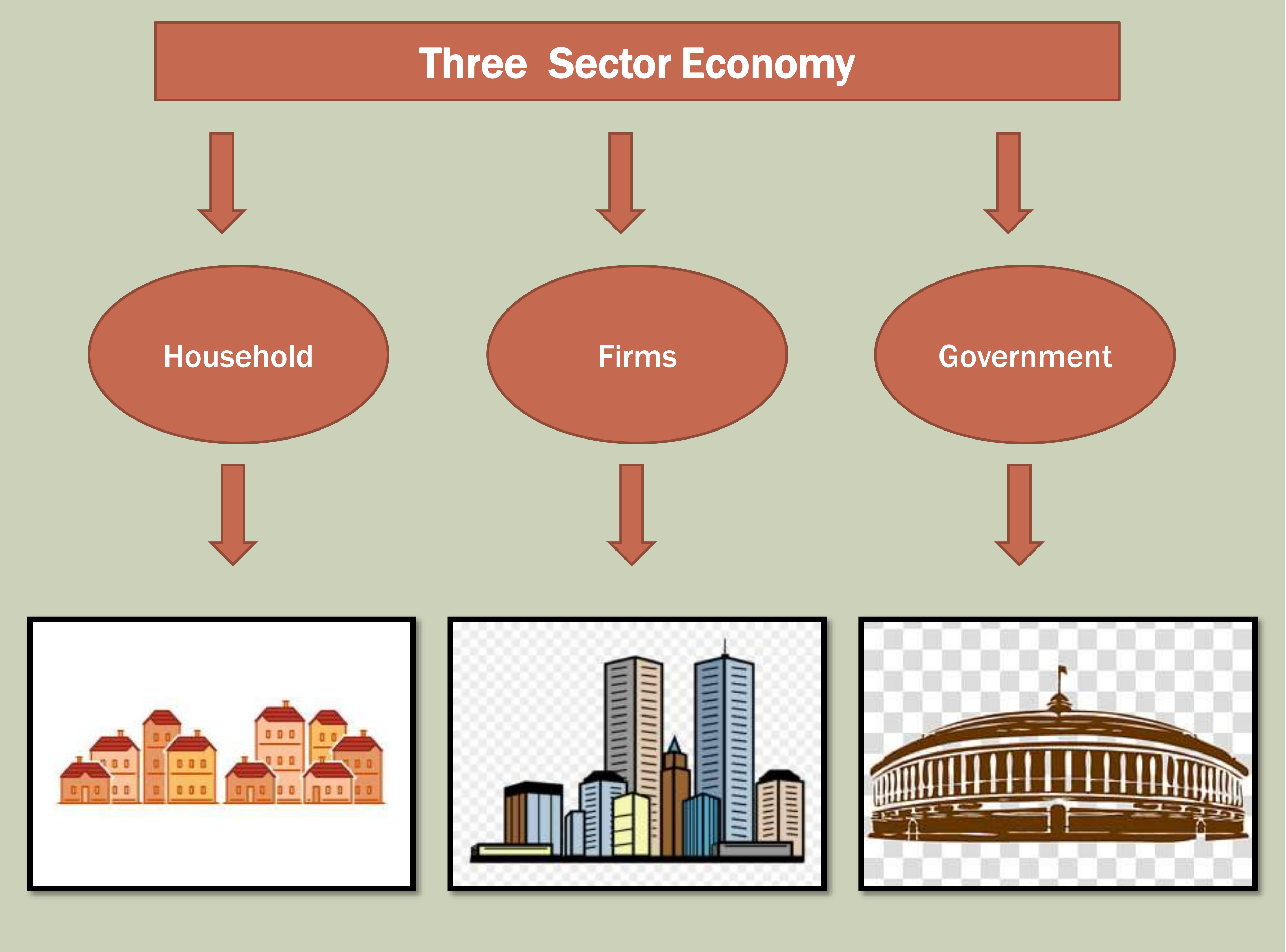
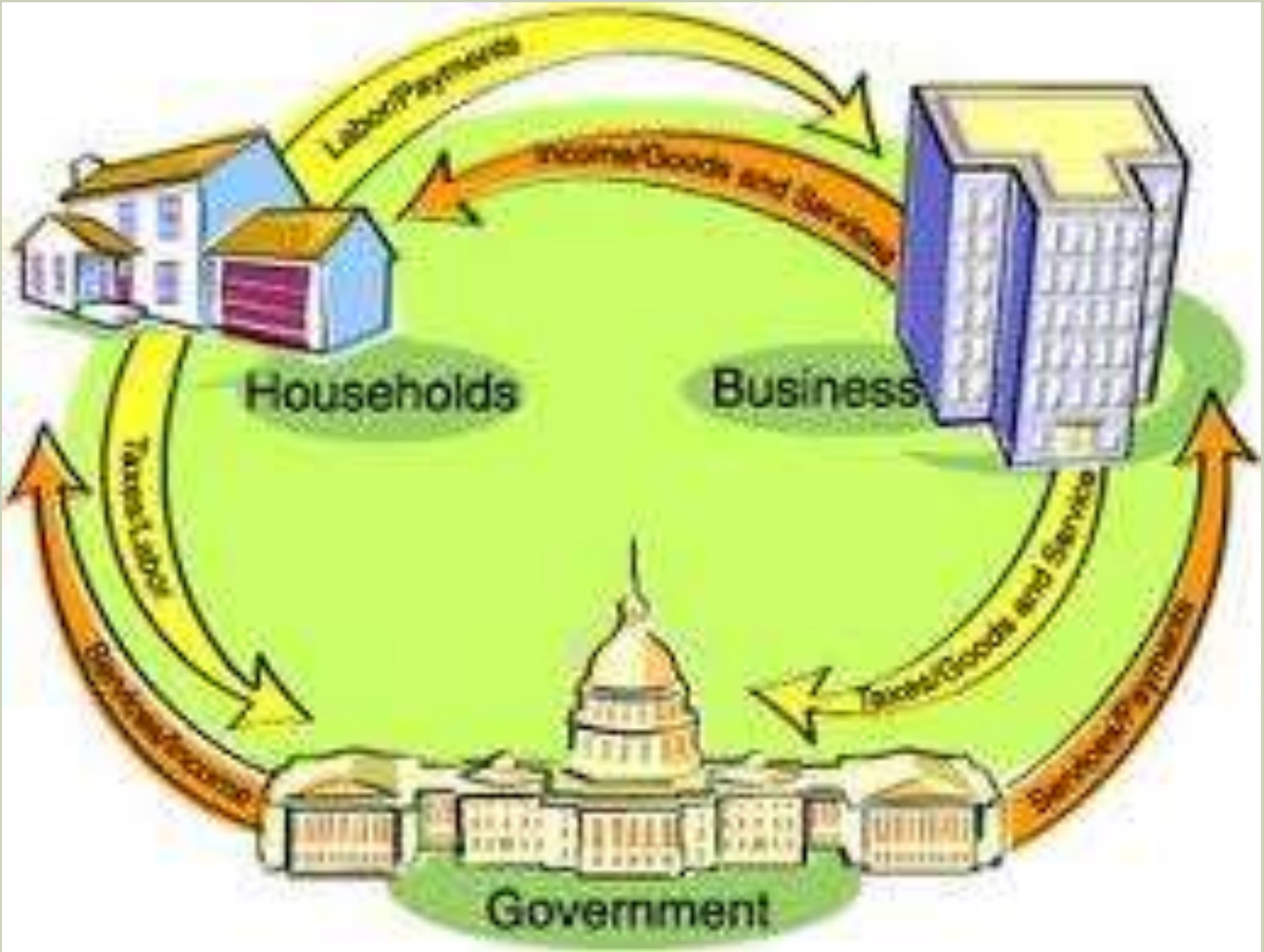
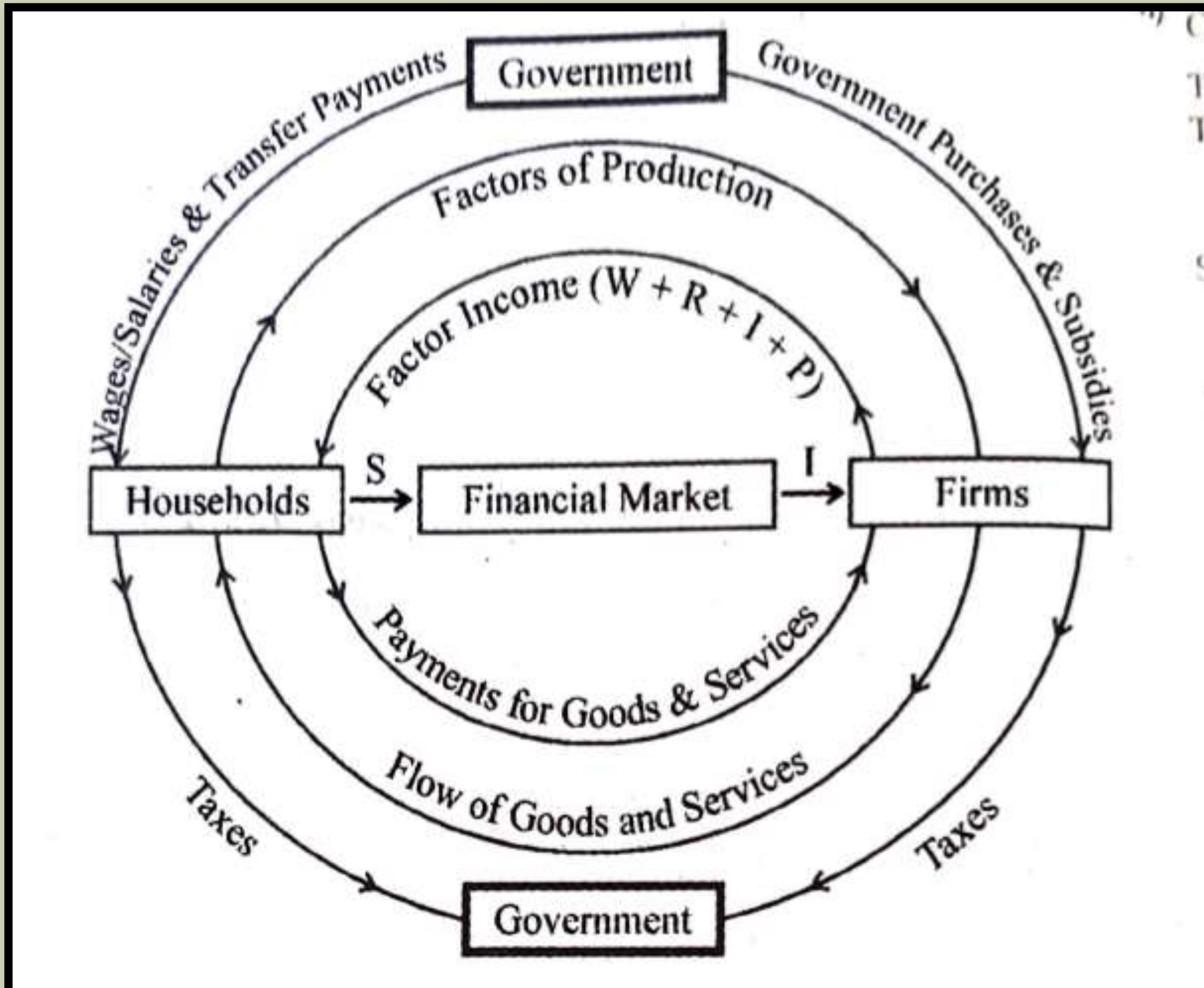
CHAPTER- 2 CIRCULAR FLOW OF INCOME


Factors of Production - Land, Labour, Capital & Entrepreneurship
FACTOR MARKET
Factor Income = Wages, Rent, Interest & Profits
Households
Factor Owners
Consumers of Goods
and Services
S
Financial
Market
I
Firms
Factor Users
and Producers of
Goods and Services
Payments for Goods and Services
COMMODITY MARKET
Flow of Goods and Services

- Factors of production and goods & services represent real flow.
- Factor payment and payment for goods & services represent money flow.
- The real flow and money flow occur in opposite direction.
- When we combine flow of factors and goods market we get circular flow.
- Factor services are provided by households to firms get converted into goods & services & flow back to households.
- The money received by households in the form of rent wages, interest & profit is spent by them in purchasing goods & services thereby money returns to the firms thus completing the circular flow.
- Saving is leakage in the circular flow and it gets injected back into the circular flow in the form of investment.
- The savings and investment flows between households and firms take place through Financial Markets or Financial Sector which consists of Commercial Banks, Stock Markets and Non-Banking Financial Institutions (NBFC's).
- The closed economy is in equilibrium when S=I. It is because in a closed economy $Y= C+S$ OR $Y= C+ I \longrightarrow S=I$


Three Sector Economy
Household
Firms
Government


Labor/Payments
Income/Goods and Services
Households
Business
Taxes/Labor
Taxes/Goods and Service
Government


Government
Wages/Salaries & Transfer Payments
Government Purchases & Subsidies
Factors of Production
Factor Income (W + R + I + P)
Households
S
Financial Market
I
Firms
Payments for Goods & Services
Flow of Goods and Services
Taxes
Taxes
Government

In a modern economy the Government plays a major role in the functioning and governing of the economic system of a country. Governments decide policy measures, spend on economic and administrative activities by collecting money from its citizens in the form of taxes.

Government receives income in the form of taxes. Tax payments reduce the disposable income of households and firms which in turn reduce their expenditure and also savings.

Governments expenditure comprises spending on goods and services and, transfer payments in the form of pension payments, subsidies, unemployment allowance, etc. Money spent by the government is an injection of income into the economy which in turn is received by the households and firms. In our simple three sector economy consisting of households, firms and government, we do not consider the government's direct economic activities in the form of investment, production, sale, etc.

The income of the government through taxes paid by both households and firms is spent by the government in the form of transfer payments salaries to government employees, purchases of goods and services etc. Transfer payments are made in the form of pension payments, unemployment allowances, subsidies, etc. Money spent by the government is received by the firms and households.

The leakages in the form of saving and taxes arise in the circular flow of income. They get injected back to the circular flow in the form of investment and government expenditure. When the leakages in the form of saving and taxes are equal to injections in the form of investment and government expenditure the flow of economic activities goes on smoothly.

The introduction of the government sector affects the overall economic activity. The total expenditure is now the sum of consumption expenditure (C), investment expenditure (I) and government expenditure (G). Thus,

$$\text{Total Expenditure (E)} = C + I + G \quad \text{.....................(1)}$$

T]ne total income (Y) received is allocated to consumption, saving and taxes (T). Thus,

$$Y = C+S+T \quad \text{..(2)}$$

The economy is in equilibrium when the expenditure is equal to income. Thus we have,

$$C+I+G = C+S+T \quad \text{...............................(3)}$$

Since C is common in both sides of the identity, we have

$$I+G = S+T \quad \text{....................................(4)}$$

By arranging we obtain,

$$G - T = S - I \quad \text{..................................(5)}$$

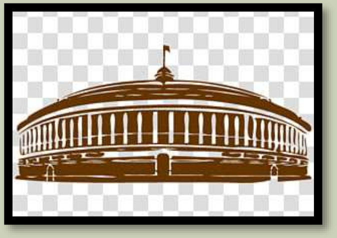
The equation 5 shows that if G > T, we have a deficit budget. To finance this government need to borrow from financial market. For this purpose, investment by business firms should be less than saving (I <-S). Thus, government borrowing reduces private investment in the economy: In other words, government borrowing crowds out private investment.

Four Sector Economy – Open Economy

Household

Firms

Government



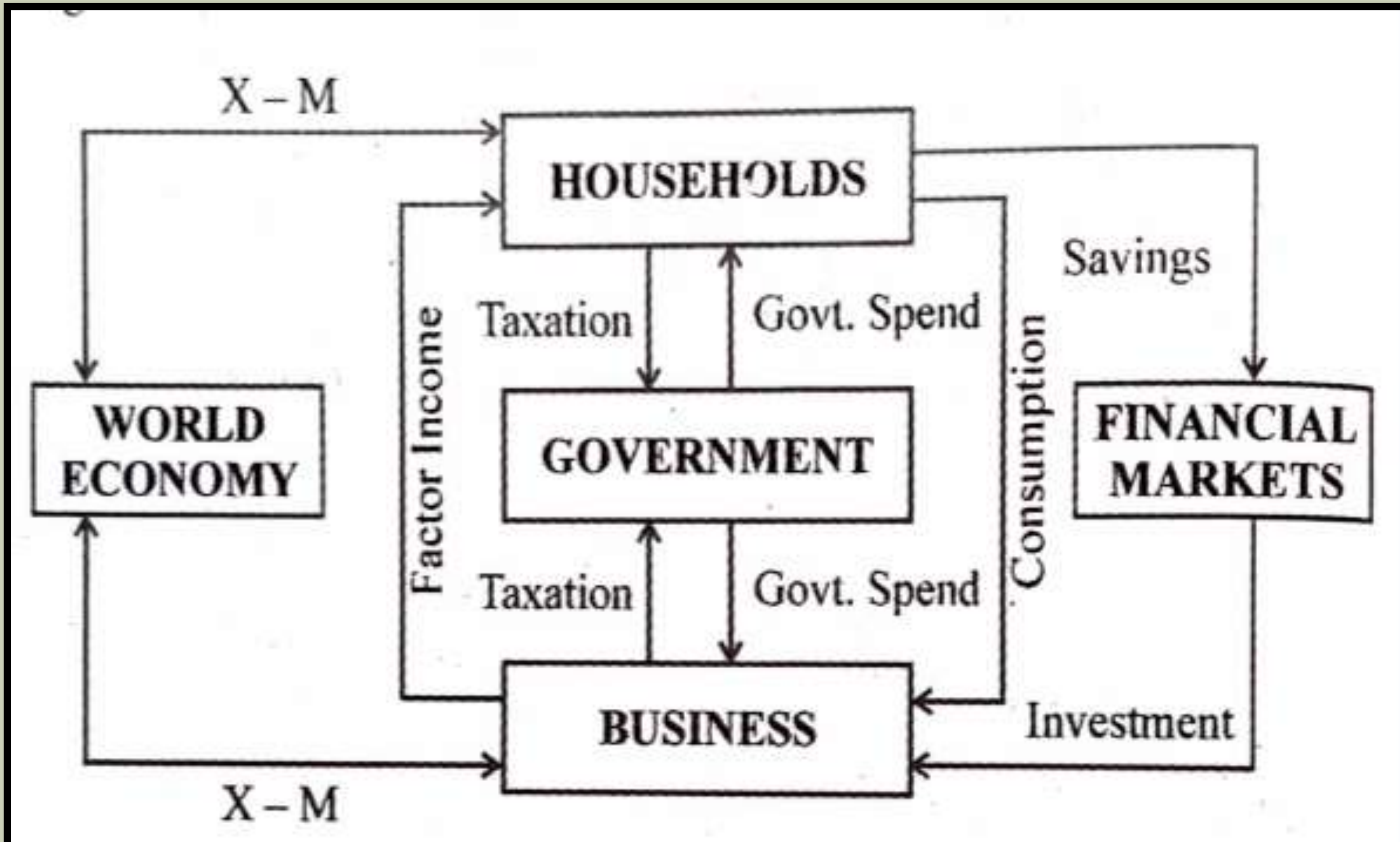
World Economy

Every economy has foreign economic relations involving exports and imports of goods and services, foreign investments, lending and borrowing. These activities bring in a fourth sector wherein we can express all the activities in the form of inflow and outflow of money. Though such monetary flows are in foreign exchange, we can convert them into domestic currencies.

Exports of goods and services as well as foreign investments and borrowings result in the inflow of money. Similarly all the imports, investment abroad and lending to other countries lead to outflow of money.

All the above activities are grouped under foreign sector, that is, the fourth sector, which is added to the existing three sector model.

Four sector economy is an open economy where it deals with the rest of the world. For the sake of simplicity we assume that only households and firms deal with the rest of the world. Both the sectors have exports and imports. The households export labour services and receive remittances. Similarly the firms export and import goods and services. Both households and firms will have a net export (X — M) showing the balance between the receipts and payments involved. Net exports could be positive or negative. Taking net exports of both households and firms, the magnitude of circular flow will be more if $X>M$, it will be less if $X<M$ and the volumn of circular flow will be left unaffected if $X = M$


X – M
HOUSEHOLDS
Savings
Factor Income
Taxation
Govt. Spend
Consumption
WORLD ECONOMY
GOVERNMENT
FINANCIAL MARKETS
Taxation
Govt. Spend
BUSINESS
Investment
X – M

The figure explains a four sector, open economy model, where households and firms, financial markets, government and foreign sector have their activities. The circular flow of economic activities among the four sectors is shown in Fig. 2.3. If saving equals investment (S = I), government expenditure equals taxes (G = T) and exports equals imports (X = M), there will be equilibrium in all the sectors.

In an economy with government sector and foreign sector, the fundamental identity in an open economy will be

$$Y=C+I+G+NX$$

where G is government spending on purchases of goods and services and NX is net exports [exports (X) minus imports (M)

Since national income (Y) is either consumed (C), saved (S) or paid as taxes (T) to government, we have

$$GC+I+G+NX= = C+S+T$$

In reality, however, in an economy there are numerous markets and several leakages, therefore it is almost impossible to have a simultaneous equilibrium in all the markets.

Importance Circular Flow of Income

1) Shows smooth functioning of the economy : The concept of circular flow gives a clear cut picture of the economy. From it we can know whether the economy is functioning efficiently or whether there is any disturbance in the smooth functioning of the economy.

2) Helps to know the problem of disequilibrium : With the help of circular flow we can study the problems of disequilibrium. It can also guide us in the restoration of equilibrium.

3) Helps to find out the leakages in the circular flow : The concept of circular flow enables us to find out the leakages in the form of saving, imports and taxes and their effects on income and expenditure.

4) Highlights the importance of monetary and fiscal policies : The study of circular flow highlights the importance of monetary and fiscal policies to bring about equality between income and expenditure.

Thank You