

The Circular-Flow of income



The Circular-Flow Diagram

We are living in this extremely complex world, billions of people are engaged in many activities—buying, selling, working, hiring, manufacturing, and so on.

We need a simplified model that explains, in general terms, how the economy is organized and how participants in the economy interact with one another.

Circular flow of Income model

Definition: a model showing the **flow of resources** from consumers (households) to firms, and the **flow of products** from firms to consumers, as well as **money flows** consisting of consumers' income arising from the sale of their resources and firms' revenues arising from the sale of their products.

Flows:

- **Real Flows:** otherwise called as Product Flow or Output Flow, it implies the movement of factor services and, goods and services among different sectors of the economy. Thus, it comprises of:
 - Flow of **factors of production**
 - Flow of **goods and services**
- **Money Flows:** Money Flow or Nominal flow involves the exchange of goods and services (resources) for money.

It illustrates the equivalence of *expenditure flows, value of output flows, and income flows.*

The simple Circular-Flow model

Two types of sectors:

1. Households: owns resource of land, labour, capital and entrepreneurship.

- Sell the resources to firms
- Buy the goods/services from firms.



2. Firms: Firms produce goods and services using inputs, such as labor, land, and capital (buildings and machines).

- Buy the resources
- Sell the goods/services



The Circular-Flow Diagram

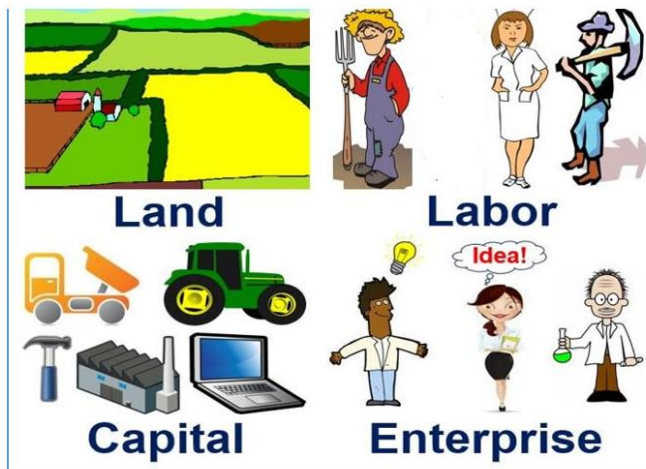
Two types of markets



1. Markets for goods and services

- Buyers: Households
- Sellers: Firms
- Households buy the output of goods and services that firms produce.

FACTORS OF PRODUCTION

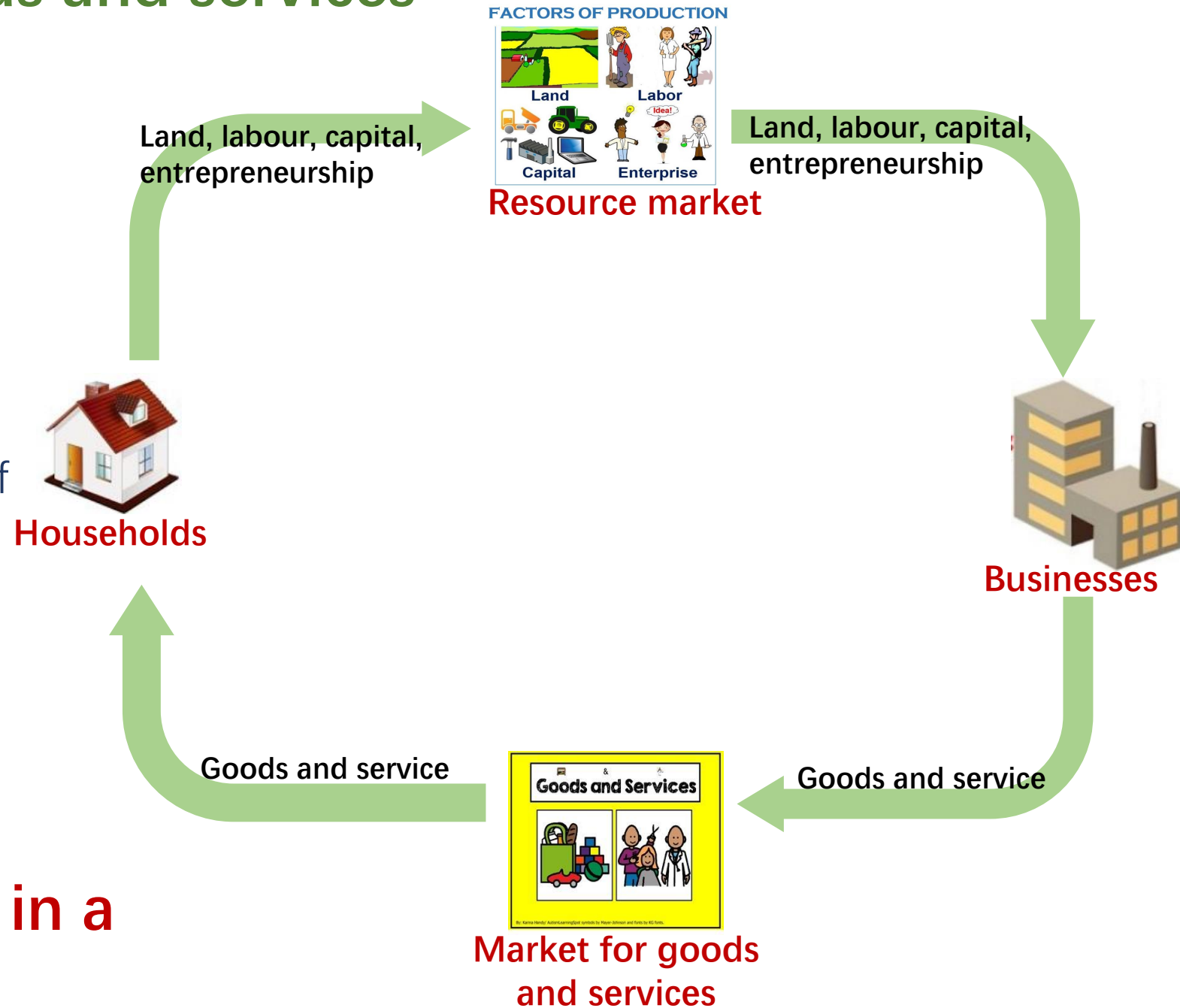


2. Markets for the factors of production

- Buyers: Firms
- Sellers: Households
- Households provide the inputs that firms use to produce goods and services.

Flow of products – goods and services (green arrow)

- Households provide firms with labour (and financial capital through stock or corporate bond markets) and other factors of production (land labor capital enterprise).
- Using labour and other factors of production such as land, physical capital and enterprise, firms generate output (goods and services). These goods and services are consumed by households and government, and other firms.

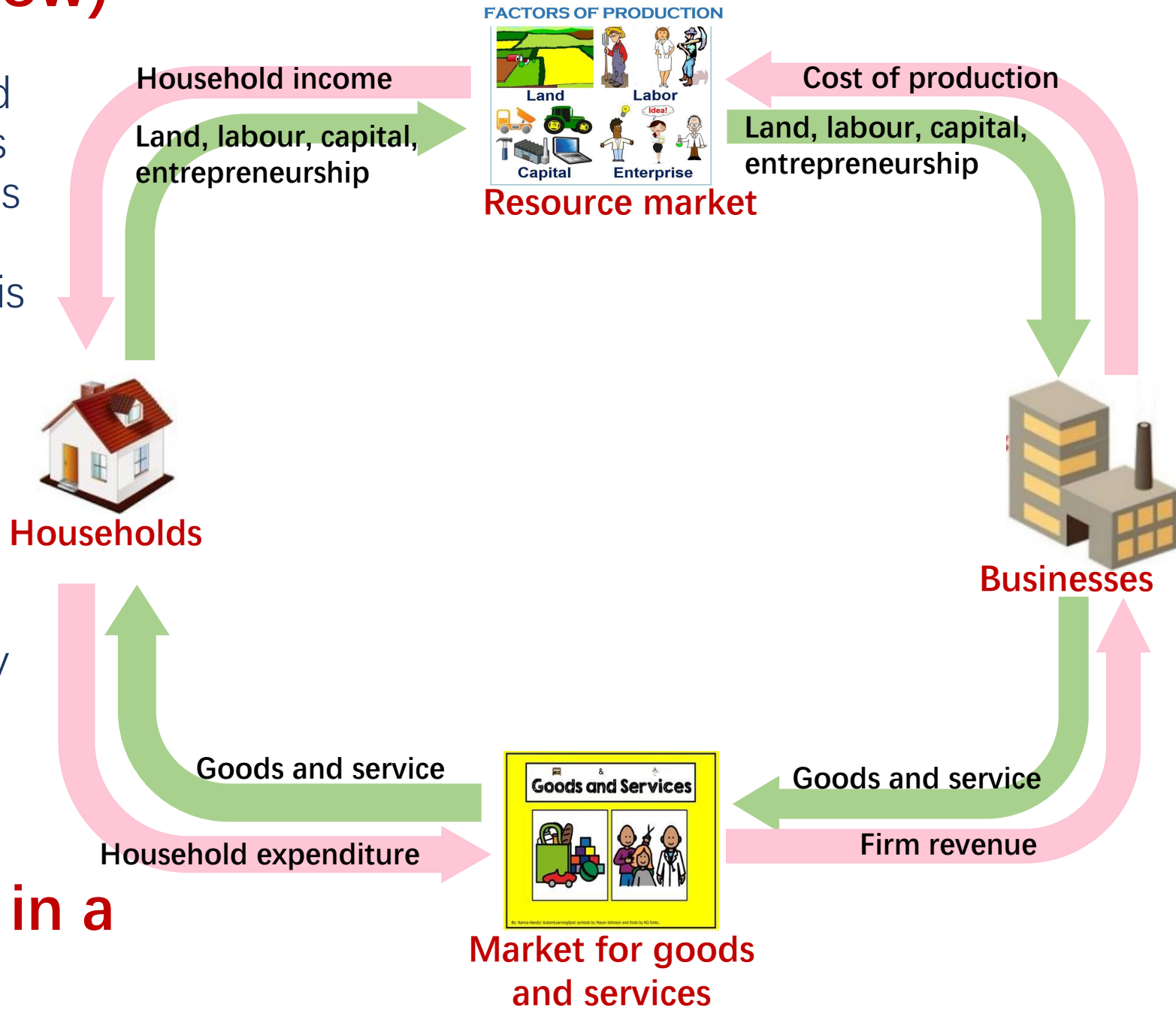


Circular Flow of Income in a Two-Sector Economy

Flow of money (pink arrow)

- For employing the factors of production, firms pay rents to land owners/capital owners, and wages to workers. The excess over what is paid for factor payments is operating profit. Operating profit is taxed by the government. Profit after taxes are distributed to shareholders of the firm as dividends (some may be kept internally for future capital investment).
- Using the wages or dividends they receive, households and shareholders of firms spend on goods and services produced by firms.

Circular Flow of Income in a Two-Sector Economy



Assumptions for a simple circular flow



- Two sectors only – **Households(consumers)** and **Businesses(producers)**
- **All production** is sold to the consumers
- **Producers** provide **all** the Goods and Services
- **Consumers** spend **all** their Income on goods and services
- **No** government and **no** overseas sectors
- **Consumers** are the **owners of productive resources** – land, labour, capital and enterprise

Three phases of circular flow

1. Production

In this phase, goods and services are manufactured by the firms, by making use of inputs, for the purpose of production of goods and services.

2. Income

In this part, the firm makes factor payments to the households, in the form of rent, wages, interest and profit, for the factor services provided by them

3. Expenditure

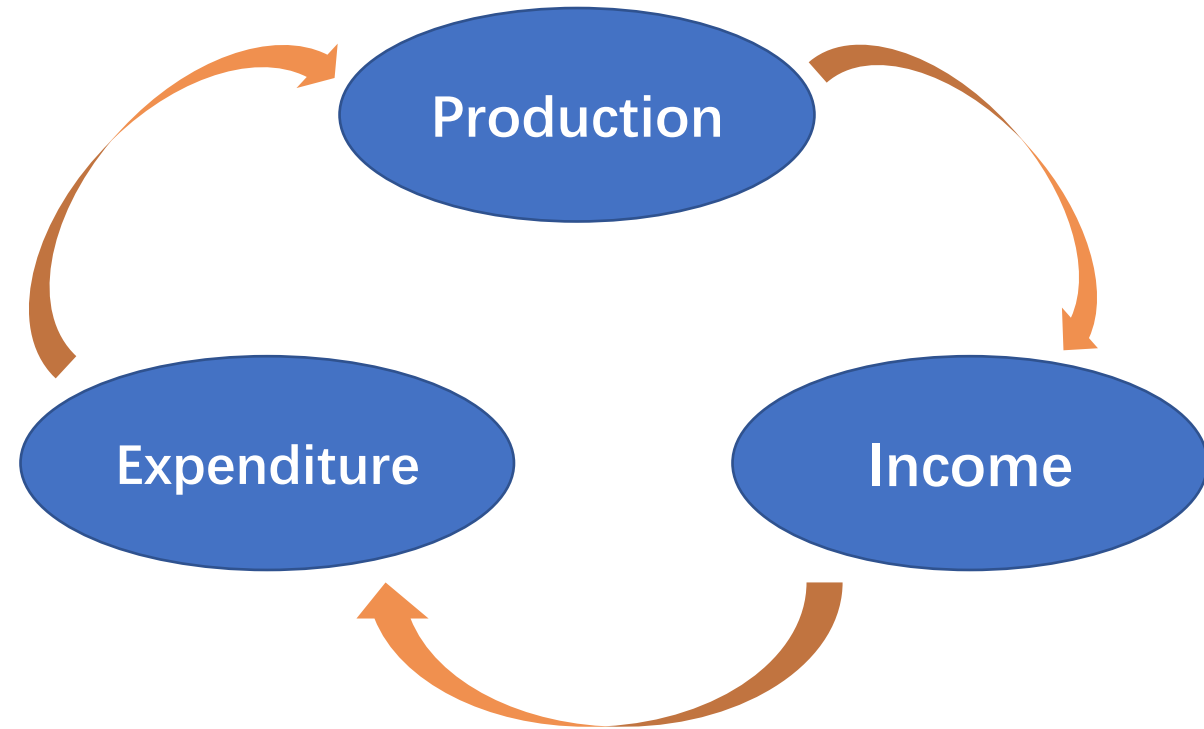
the factor incomes received is invested in the purchase of goods and services for the purpose of consumption.



Production, consumption **expenditure** and generation of **income** are the three basic economic activities of an economy that **go on endlessly** and are titled as circular flow of income.

- Production gives rise to income;
- income gives rise to demand for goods and services;
- such a demand gives rise to expenditure and expenditure induces for further production.

The whole process forms the basis for circular flow of income and related activities- production, income and expenditure are known as phases or stages of circular flow of income.



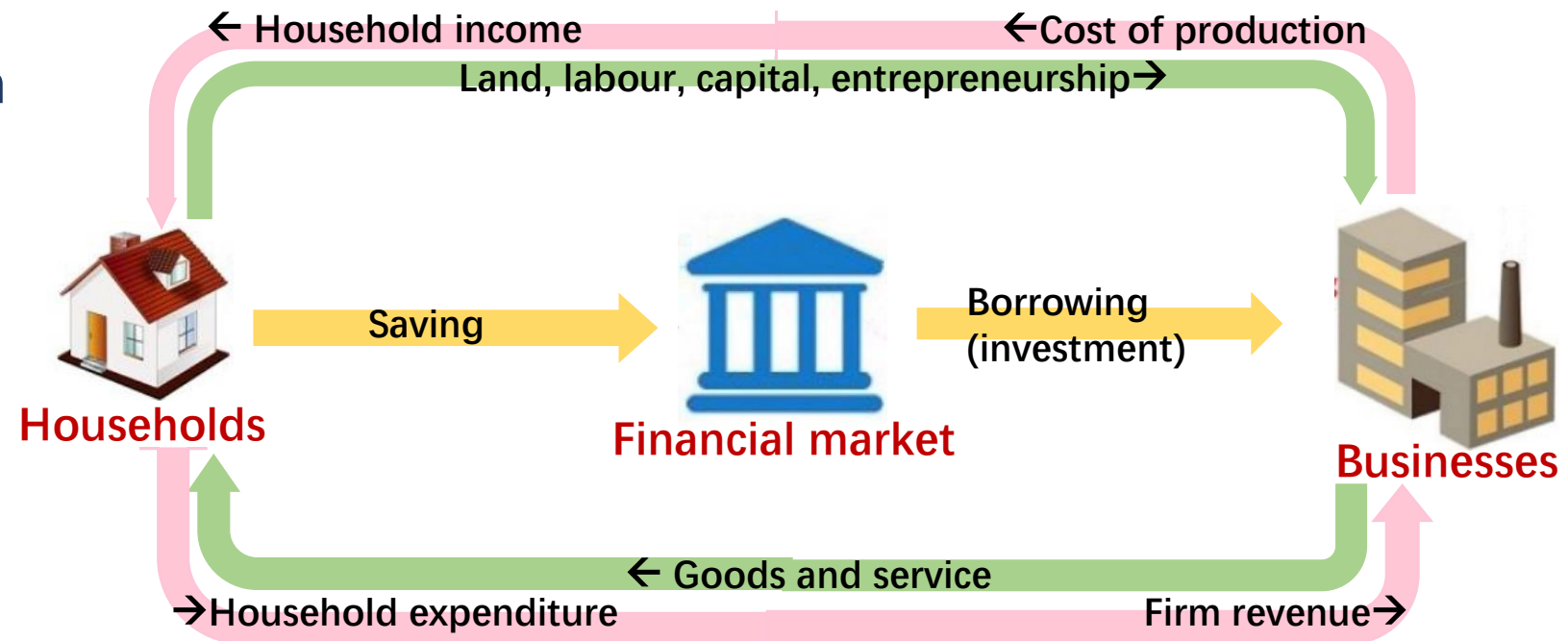
Other three key sectors in the circular flow model



- Financial markets
- Government
- Foreign countries

Circular Flow of Income in a two-Sector Economy with the financial system

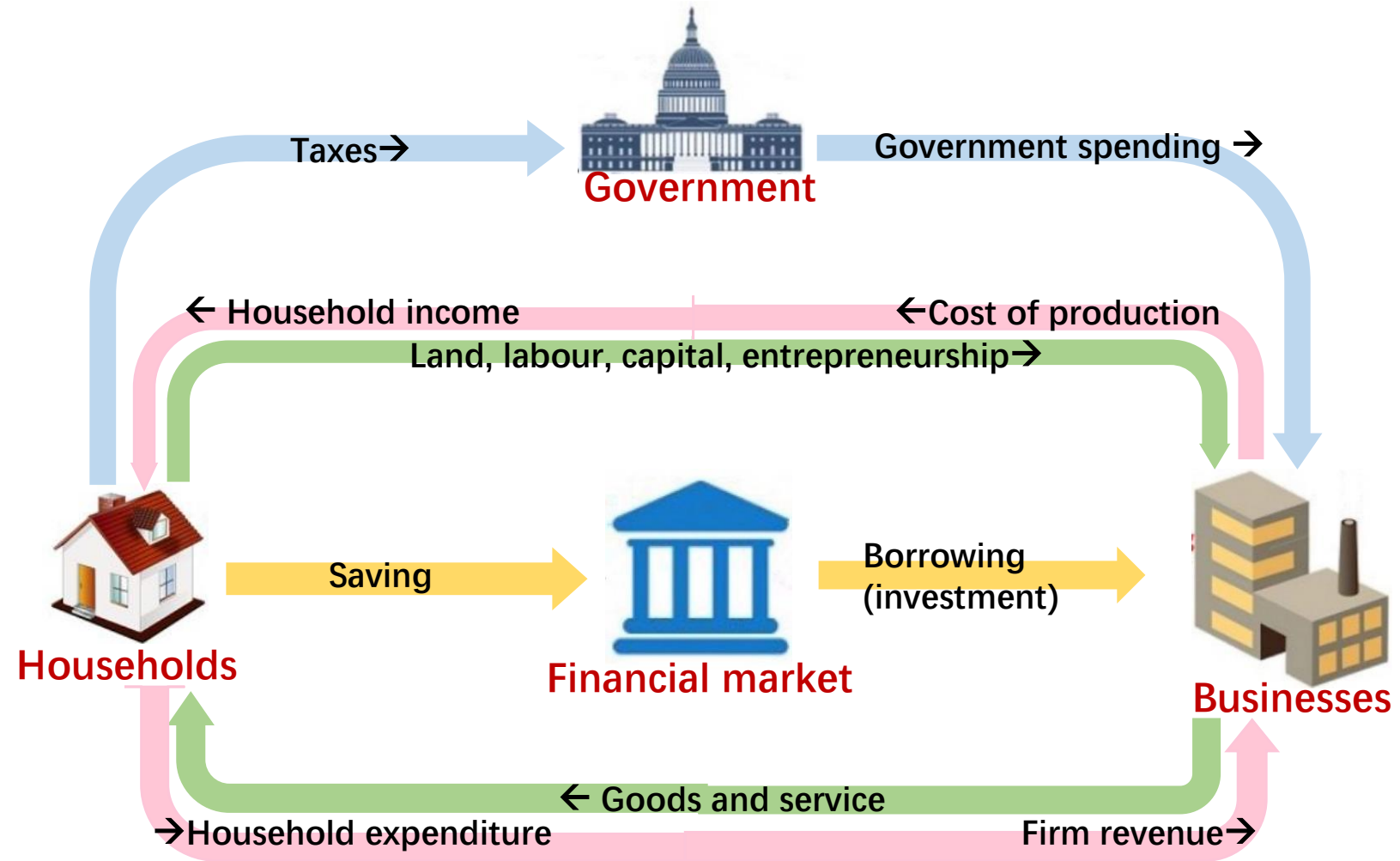
Financial markets – banks or financial institutions, banks receive deposits from households/firms and make loans to firms and consumers, earning a profit because the interest they charge on loans is higher than the interest they grant to depositors



Circular Flow of Income in a three-Sector Economy with the financial system

Government

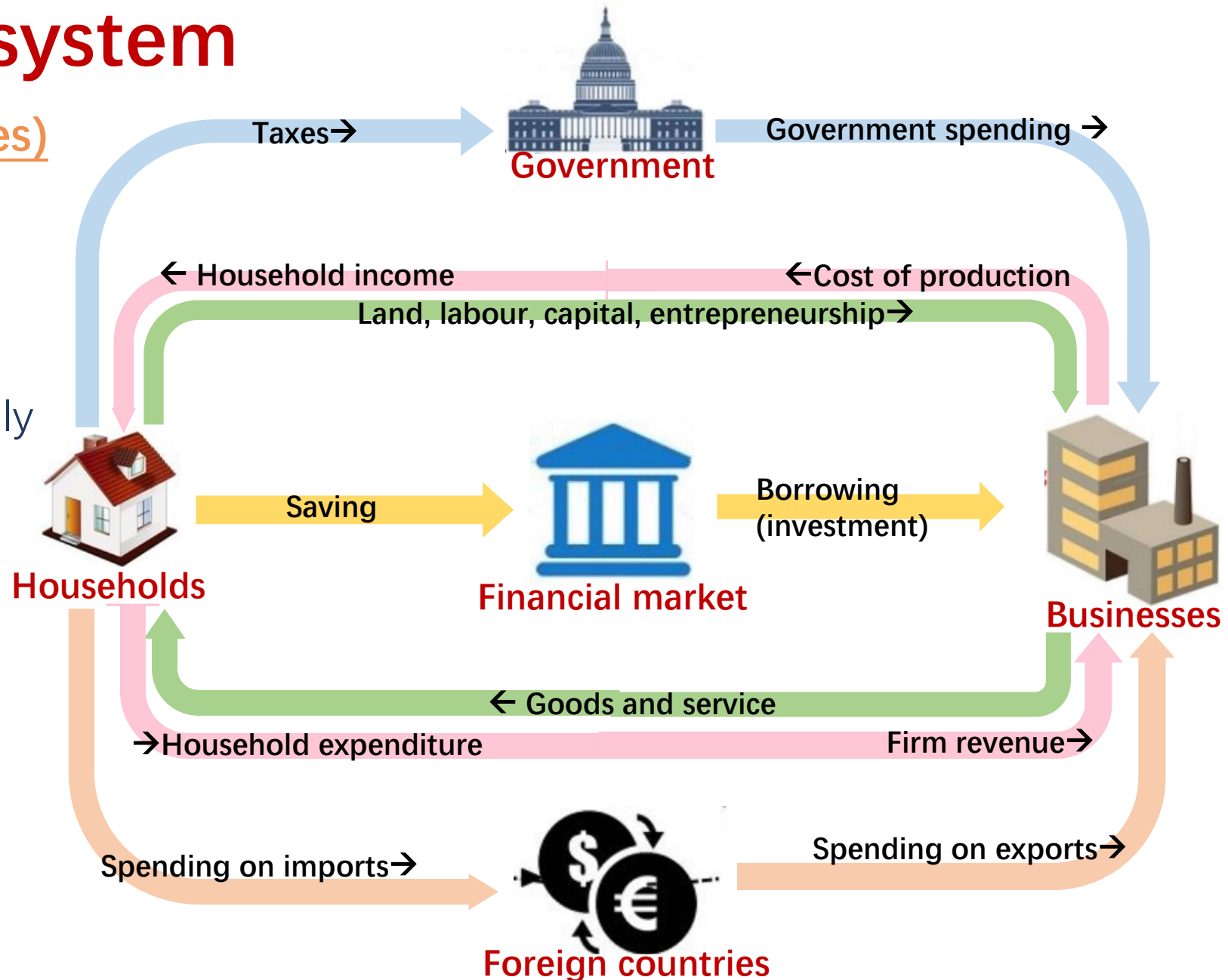
- an important player because of its ability to inject and remove money from the flow.



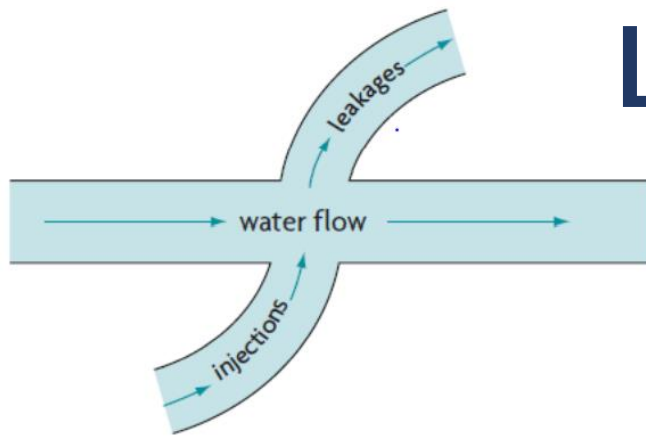
Circular Flow of Income in a four-Sector Economy with the financial system

Foreign sectors (other countries)

- Through **imports**, goods are manufactured offshore, shipped and consumed domestically.
- Through **exports**, Goods and services are produced domestically and has been export to foreign countries.



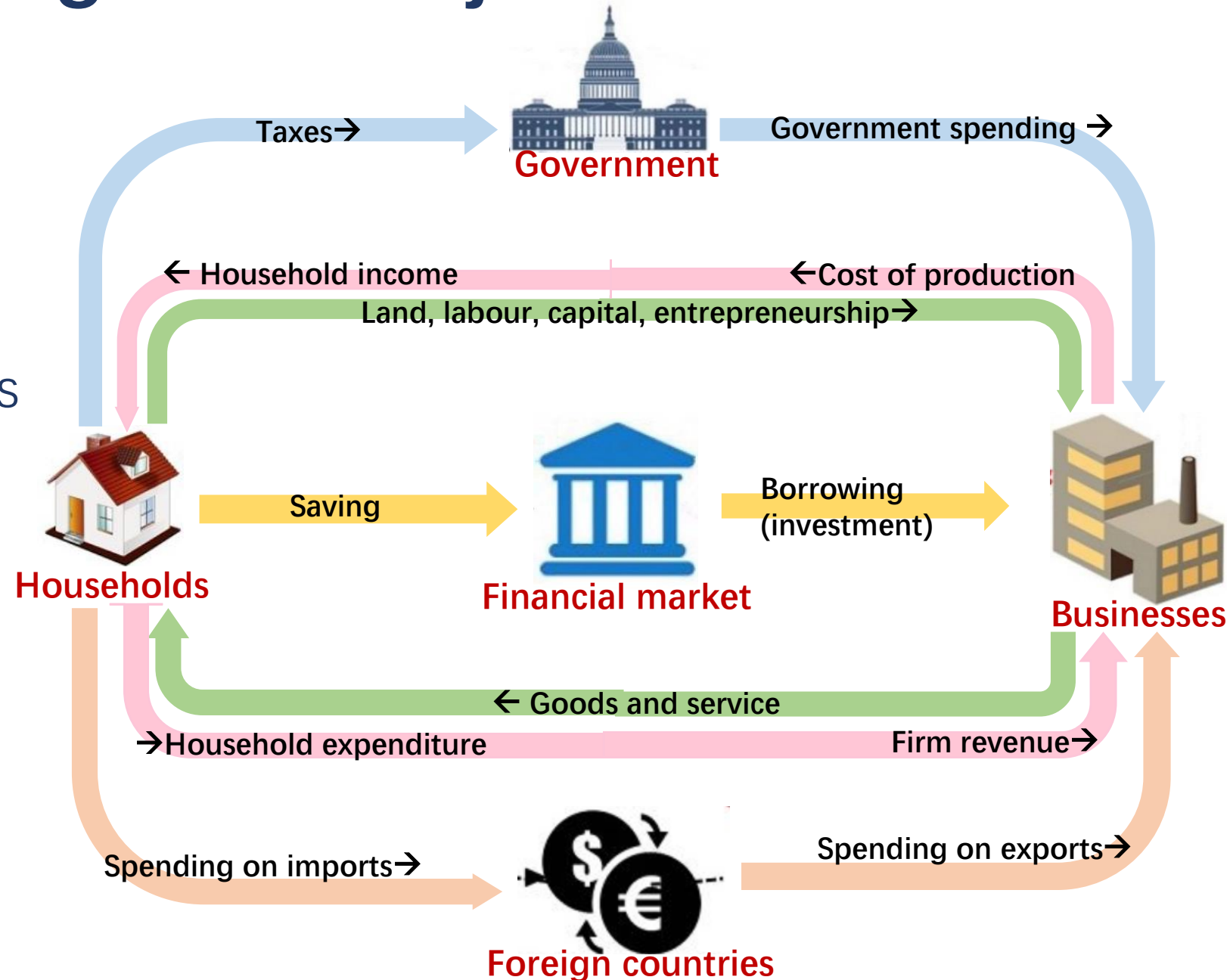
Leakages and injections



The size of the circular flow will change depending on the relative size of injections and leakages.

Three important pairs:

Leakages	Injection
Saving (S)	Investment (I)
Taxes (T)	Government spending (G)
Imports (M)	Exports (X)



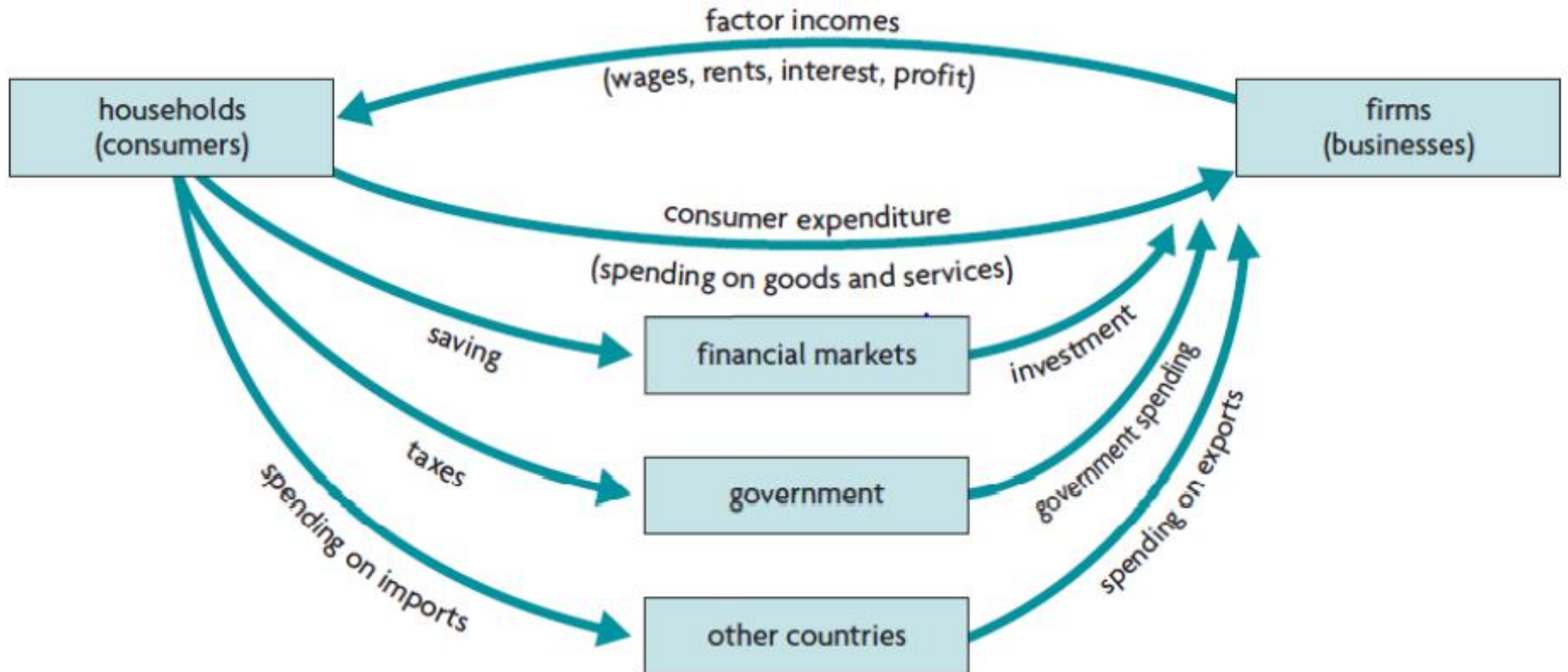
Three important pairs of leakage and injection

Leakages			Injection		
	Action	Result		Action	Result
Saving	Households put part of their income in financial market	Not buying goods and services, Leakage from circular flow	Investment	Firms obtain funds from financial markets	The money flow back as injections
Taxes	Households pay taxes to the government.	Not buying goods and services, Leakage from circular flow	Government spending	Government uses the tax funds for government expenditures	The money flow back as injections
Imports	Households spend their money to buy foreign goods	Not buying domestic goods and services, Leakage from circular flow	Exports	Foreigners spend their money to buy domestic goods	Money inflow form foreign market to domestic market

Imports are goods and services produced in other countries and purchased by domestic buyers.

Exports are goods and services produced domestically and purchased by foreigners.

Circular flow of income model with leakages and injections



The size of the circular flow in relation to the leakage & injection

- If **Leakage > injection**, the size of the circular flow become **smaller**.
 - fewer goods/services are being purchased domestically.
 - Firms reduce their output
 - Firms buy less factors of production
 - Unemployment increase (firms buy a smaller quantity of labour)
 - Household income decrease
- If **Leakage < injection**, the size of the circular flow become **larger**.
 - Foreigners demand more goods/ services.
 - Firms increase their output
 - Firms buy more factors of production
 - Unemployment decrease
 - Household income increase
- The size of the leakages and injections will be influenced by both monetary policy and fiscal policy.