ECO204

INTRODUCTION TO MACROECONOMICS II

Course code: ECO 204

Course title: Introduction to Macroeconomics ll

Course credit load: 2 Units

Series 1: Government Functions and Economic Policies

Series 2: Fiscal Multipliers and Taxation Models

Series 3: Money, Banking System, and Financial Roles

Series 4: Income and Trade Policy Measures

Series 5: External Sector: International Trade and Exchange Rates

Series 1 Outline

Part 1: Government Spending and Output

- Sub-Part 1.1: Definition and Scope of Government Spending
- Sub-Part 1.2: Categories of Government Expenditure (capital and recurrent)
- Sub-Part 1.3: Impact of Government Spending on National Output

Part 2: Taxes, Transfers, and Subsidies

- Sub-Part 2.1: Nature and Types of Taxes
- Sub-Part 2.2: Government Transfers and Redistribution of Income
- Sub-Part 2.3: Subsidies and Their Role in Economic Activities

Part 3: The Role of Government in Economic Stability

- Sub-Part 3.1: Government Intervention in Market Failures
- Sub-Part 3.2: Policy Instruments for Stabilisation (fiscal and monetary links)
- Sub-Part 3.3: Balancing Growth, Equity, and Stability

Introduction

Government plays a central role in shaping the performance of the aggregate economy. From the provision of public goods and services to the regulation of markets, its functions directly influence national output, employment, and welfare. Understanding these functions is essential for grasping how policies affect everyday life and long-term economic growth.

The aim of this Series is to examine the major functions of government in the economy and to evaluate how spending, taxation, transfers, and subsidies contribute to economic stability and development.

We shall commence this Series by exploring government spending and its impact on output. Next, we will analyse the role of taxes, transfers, and subsidies in redistributing resources and influencing economic behaviour. Finally, we will conclude by considering how government policies are designed to stabilise the economy and promote sustainable growth.

Series Learning Outcomes

Upon completing this Series, you should be able to:

- **SLO 1.1** define government spending and describe its scope in relation to national output,
- **SLO 1.2** distinguish between capital and recurrent expenditure and analyse their impact on economic performance,
- **SLO 1.3** explain the nature and types of taxes and evaluate their role in resource allocation,
- **SLO 1.4** analyse the effects of government transfers and subsidies on income distribution and economic activities,
- **SLO 1.5** evaluate government intervention in market failures and assess the effectiveness of stabilisation policies.

Great, let us now begin developing the **detailed instructional content for Part 1: Government Spending and Output**. I will follow the structure you specified, including Parts, Sub-Parts, definitions of key terms, in-text fill-in-the-blank questions, pilot questions, and placeholders for illustrations.

1 Government Functions and Economic Policies

1.1 Government Spending and Output

1.1.1 Definition and Scope of Government Spending

Government spending refers to the **expenditure by the state on goods and services** to meet public needs and achieve economic objectives. It includes the provision of infrastructure, education, healthcare, defence, and other public services. Spending can be directed towards both immediate consumption and long-term investment.

Government spending is often divided into two broad categories: **capital expenditure**, which refers to investment in long-term assets such as roads, schools, and hospitals, and **recurrent expenditure**, which covers regular expenses such as salaries, pensions, and maintenance.

In-text question (ITQ): Government spending is divided into _______ and _______ expenditure.

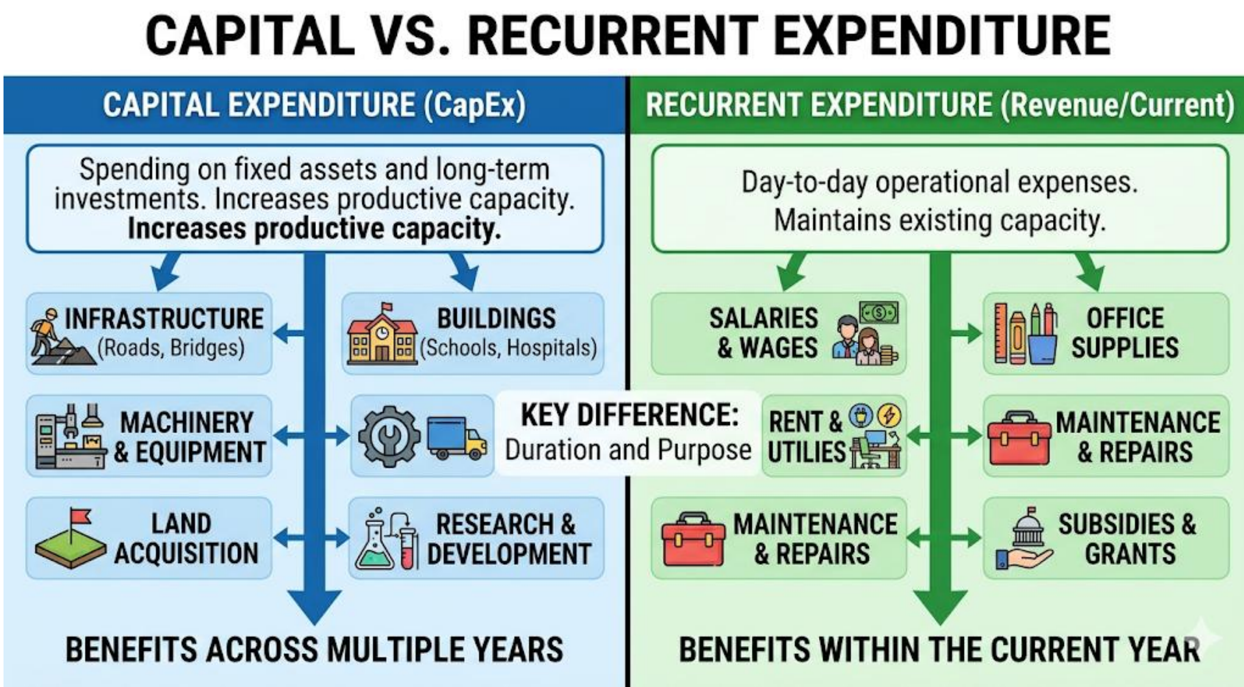


Figure 1.1: *Placeholder illustration showing categories of government spending*

1.1.2 Categories of Government Expenditure (Capital and Recurrent)

Capital expenditure is spending on projects that create future benefits, such as building highways or investing in power plants. These investments increase the productive capacity of the economy.

Recurrent expenditure is spending on items consumed within a short period, such as wages, subsidies, and administrative costs. While necessary for the functioning of government, excessive recurrent expenditure may limit funds available for capital projects.

ITQ: Expenditure on salaries and pensions is classified as _______ expenditure.

Capital Expenditure (CapEx)	Recurrent Expenditure (OpEx)
Investing in long-term assets that benefit future periods	Day-to-day operational expenses to maintain current capacity
Examples:	**Examples:**
Constructing new infrastructure (roads, bridges, power plants)	Paying staff salaries and wages

Capital Expenditure (CapEx)	Recurrent Expenditure (OpEx)
Acquiring and developing buildings (schools, hospitals, offices)	Buying office supplies, stationery, and small equipment
Purchasing industrial machinery and equipment	Covering utilities (electricity, water, internet)
Acquiring land for future projects or expansion	Paying rent for leased properties
Investing in research and development (R&D)	Performing regular maintenance and repairs (cleaning, fixing leaks)
Developing or buying major software systems	Disbursing ongoing subsidies and grants
Purchasing vehicles for a fleet	Paying for training and professional development
Key Difference: Benefits accrue over multiple years	**Key Difference:** Benefits are consumed within the current year

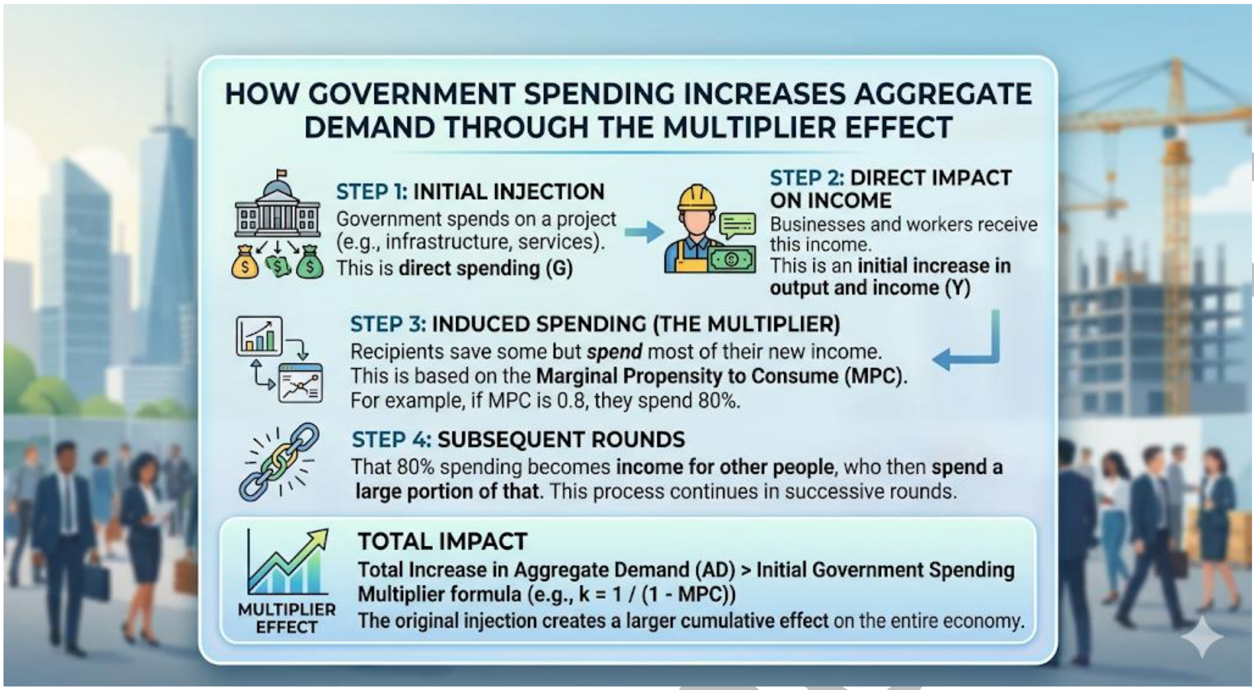
Table 1.1*: Placeholder table comparing capital and recurrent expenditure*

1.1.3 Impact of Government Spending on National Output

Government spending influences **aggregate demand**, which is the total demand for goods and services in an economy. Increased spending raises demand, leading to higher output and employment. Conversely, reduced spending may slow down economic activity.

Spending on infrastructure and education enhances productivity, while subsidies and transfers affect consumption patterns. However, excessive spending without adequate revenue can lead to budget deficits and inflation.

ITQ: Increased government spending generally leads to higher _______ and employment.



***Box 1.1**: Placeholder box explaining the multiplier effect of government spending*

Pilot questions 1.1

1. Government spending is defined as:
   a) Expenditure by households
   b) Expenditure by firms
   c) Expenditure by the state on goods and services
   d) Expenditure by foreign investors

2. Which of the following is an example of capital expenditure?
   a) Salaries of civil servants
   b) Construction of a new highway
   c) Payment of pensions
   d) Subsidies on fuel

3. Recurrent expenditure refers to:
   a) Long-term investment projects
   b) Spending on short-term consumption items
   c) Spending on durable goods by households
   d) Spending on exports

4. Excessive recurrent expenditure may:
   a) Increase productive capacity
   b) Limit funds available for capital projects
   c) Reduce aggregate demand
   d) Eliminate inflation

5. Government spending influences national output mainly through:
   a) Aggregate demand
   b) Aggregate supply
   c) Exchange rate
   d) Balance of payments

1.2 Taxes, Transfers, and Subsidies

1.2.1 Nature and Types of Taxes

A **tax** is a compulsory payment made by individuals and businesses to the government without receiving a direct service in return. Taxes are the primary source of government revenue and are used to finance public expenditure.

Taxes can be classified into **direct taxes**, which are levied on income and wealth (such as personal income tax and corporate tax), and **indirect taxes**, which are imposed on goods and services (such as value-added tax and excise duties).

ITQ: Taxes imposed on goods and services are called _______ taxes.

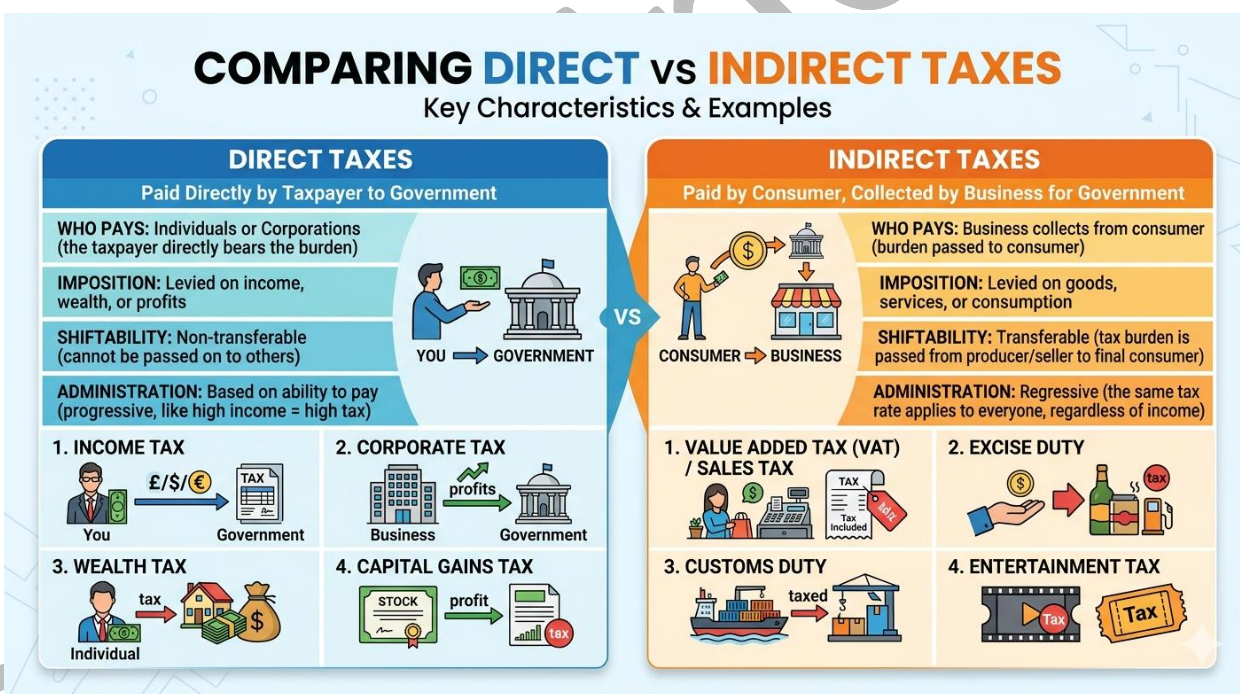


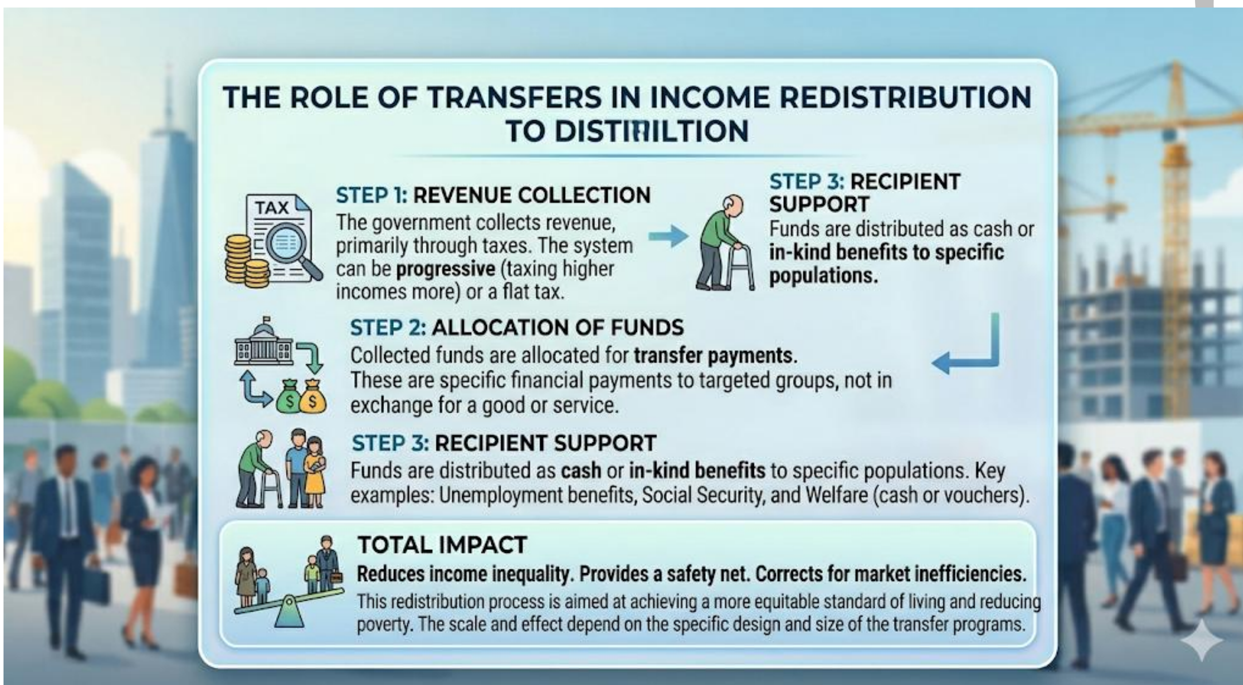
***Figure 1.2**: Placeholder illustration showing the difference between direct and indirect taxes*

1.2.2 Government Transfers and Redistribution of Income

Government transfers are payments made by the state to individuals or groups without requiring goods or services in return. Examples include pensions, unemployment benefits, and social welfare programmes.

Transfers help redistribute income, reduce poverty, and provide social security. They are essential for maintaining equity in society, although excessive transfers may strain government finances.

ITQ: Payments such as pensions and unemployment benefits are examples of _______.



***Box 1.2**: Placeholder box explaining how transfers reduce inequality*

1.2.3 Subsidies and Their Role in Economic Activities

A **subsidy** is a financial assistance provided by the government to producers or consumers to encourage the production or consumption of certain goods and services. Subsidies can lower costs, increase supply, and make essential goods more affordable.

For example, subsidies on fertilisers support agriculture, while subsidies on fuel reduce transport costs. However, subsidies may distort market prices and lead to inefficiency if not properly managed.

ITQ: Government financial assistance to producers or consumers is called a _______.

Sector	Description	Primary Goal	Examples
Agriculture	Financial aid provided to farmers and agribusinesses to supplement their income, manage the risk of farming,	Ensure food security, stabilize commodity prices, and support rural economies.	**Direct Payments:** Income support paid directly to farmers (e.g.,

Sector	Description	Primary Goal	Examples
	and influence the cost and supply of commodities.		US Farm Bill commodity payments). **Crop Insurance:** Subsidized premiums to protect against revenue loss from natural disasters or low prices. **Input Subsidies:** Direct or indirect reduction in the cost of essential inputs (e.g., subsidized fertilizer, fuel, seeds, or irrigation). **Price Supports:** Government purchases of surplus crops to maintain a minimum market price.
Energy	Government measures that keep prices for consumers below market levels, or for suppliers above market levels, or reduce costs for customers and suppliers to encourage	Ensure affordable access to energy, enhance security of supply, and promote a transition to cleaner energy sources.	**Fossil Fuel Consumer Subsidies:** Measures to lower the retail price of gasoline, diesel, or electricity for households (e.g., price caps).

Sector	Description	Primary Goal	Examples
	production or consumption of specific energy sources.		**Fossil Fuel Producer Subsidies:** Tax breaks, grants, and cheap loans for exploration and extraction of oil, gas, and coal. **Renewable Energy Subsidies:** Feed-in tariffs, tax credits (e.g., for solar panels), and grants to support wind, solar, and biofuel production. **Energy Efficiency Subsidies:** Rebates and grants for home insulation, high-efficiency appliances, and heat pumps.
Education	Direct financial aid to students, their families, or educational institutions to offset the costs of primary, secondary, or tertiary (higher) education.	Increase access to education, improve affordability, and develop a skilled workforce.	**Grants:** Direct financial aid that does not need to be repaid, often need-based (e.g., Federal Pell Grants in the US).

Sector	Description	Primary Goal	Examples
			Scholarships: Merit- or need-based aid for academic achievement, athletic ability, or field of study. **Subsidized Student Loans:** Loans with lower-than-market interest rates, or where the government pays the interest while the student is in school. **Tuition Assistance Programs:** State or institutional programs that cover all or part of tuition costs for eligible residents. **Institutional Operating Subsidies:** Government funding provided directly to public colleges and universities to keep

Sector	Description	Primary Goal	Examples
			tuition rates low for all students.

***Table 1.2**: Placeholder table showing examples of subsidies in different sectors*

Pilot questions 1.2

1. A tax is defined as:
   a) Voluntary payment to government
   b) Compulsory payment without direct service in return
   c) Payment for goods and services
   d) Donation to government

2. Which of the following is a direct tax?
   a) Value-added tax
   b) Excise duty
   c) Personal income tax
   d) Customs duty

3. Government transfers include:
   a) Salaries of civil servants
   b) Pensions and unemployment benefits
   c) Payments for goods supplied
   d) Taxes collected from firms

4. Subsidies are provided to:
   a) Increase government revenue
   b) Encourage production or consumption of goods
   c) Reduce aggregate demand
   d) Eliminate inflation

5. Excessive subsidies may:
   a) Improve efficiency
   b) Distort market prices
   c) Increase productivity
   d) Reduce inequality

1.3 The Role of Government in Economic Stability

1.3.1 Government Intervention in Market Failures

A **market failure** occurs when the free market does not allocate resources efficiently, leading to outcomes such as underproduction of public goods, externalities, or monopolies. Government intervenes to correct these failures by providing public goods, regulating industries, and addressing external costs.

For example, without government intervention, goods like street lighting or national defence would be underprovided because individuals cannot be excluded from their use. Similarly, pollution requires regulation because it imposes costs on society that are not reflected in market prices.

ITQ: Street lighting is an example of a _______ good.

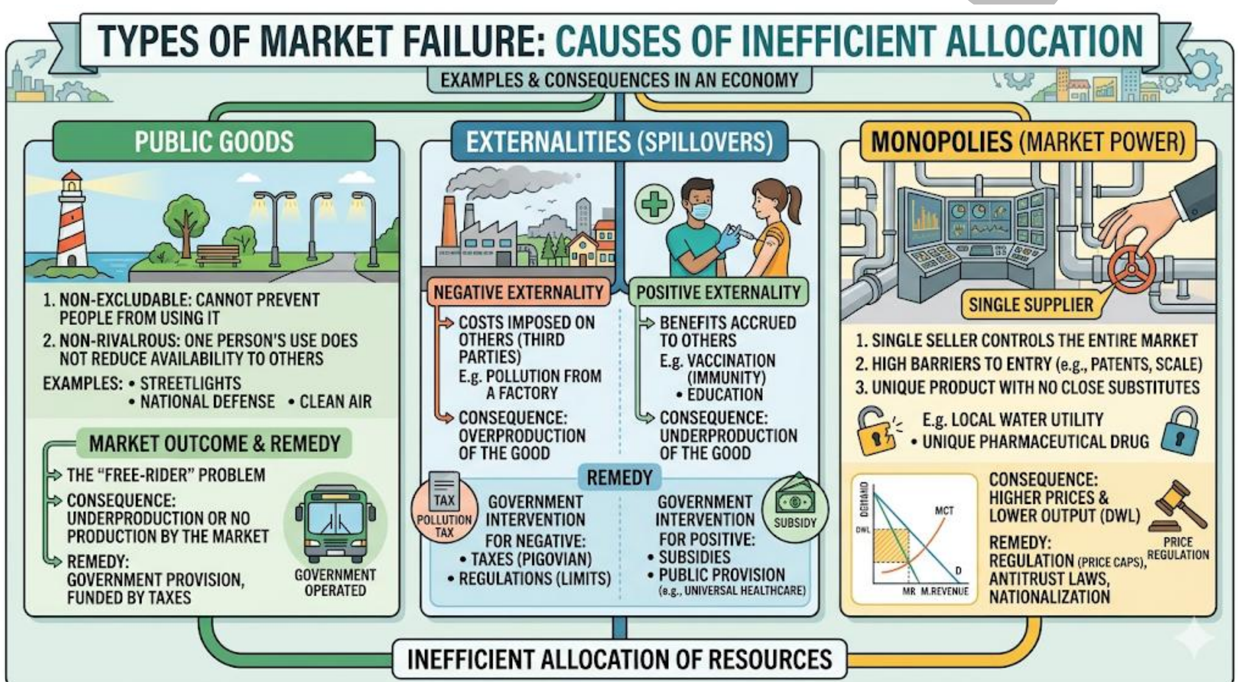


Figure 1.3: Placeholder illustration showing examples of market failures

1.3.2 Policy Instruments for Stabilisation (Fiscal and Monetary Links)

Stabilisation policies are measures taken by government to reduce fluctuations in the economy and maintain steady growth. Two major instruments are:

- **Fiscal policy**, which involves government spending and taxation decisions to influence aggregate demand.
- **Monetary policy**, which involves controlling money supply and interest rates through the central bank.

Fiscal and monetary policies are often coordinated to manage inflation, unemployment, and economic growth.

ITQ: Government spending and taxation decisions are part of _______ policy.

Feature	Fiscal Policy	Monetary Policy
Controlled By	**Government** (e.g., Congress, Parliament, Ministry of Finance)	**Central Bank** (e.g., The Federal Reserve in the US, The European Central Bank, The Bank of England)
Primary Tools	**Government Spending & Taxation**	**Interest Rates**, **Money Supply**, & **Bank Reserve Requirements**
Mechanism	Directly influences aggregate demand by changing how much money the government spends and how much disposable income consumers and businesses have.	Indirectly influences the economy by changing the cost of borrowing and the availability of credit, affecting spending and investment decisions.
Speed of Implementation	**Slower.** Changes often require legislative approval, which can be a lengthy and politically charged process.	**Faster.** Central banks can make decisions and implement changes relatively quickly, often at regularly scheduled meetings.
Impact on the Economy	More immediate and direct. A change in government spending or taxes can have a rapid effect on economic activity.	More gradual. It takes time for changes in interest rates to filter through the financial system and affect consumer and business behavior.

Box 1.3*: Placeholder box explaining the difference between fiscal and monetary policy.*

1.3.3 Balancing Growth, Equity, and Stability

Government faces the challenge of balancing three key objectives: **economic growth**, **equity**, and **stability**. Growth ensures higher output and income, equity promotes fairness in distribution, and stability reduces inflation and unemployment.

Policies must be carefully designed to avoid trade-offs. For instance, measures to stimulate growth may increase inflation, while redistributive policies may reduce incentives for productivity. Effective governance requires striking a balance among these objectives.

ITQ: The three key objectives of government policy are growth, _______ and stability.

Economic Goal	Policy Examples	Potential Trade-offs (Conflicting Goals)
Growth *(Increasing the economy's productive capacity and output)*	**Supply-Side Policies:** • Investing in infrastructure (roads, broadband). • Funding Education and Job Training. • Research & Development (R&D) Tax Credits. • Deregulation to encourage business entry. **Demand-Side Policies:**	• **Equity:** Pro-growth policies like tax cuts for corporations or the wealthy can widen income inequality if benefits don't "trickle down." Deregulation might lower wages or worker protections. • **Stability:** Rapid, consumption-led growth can cause inflation (overheating) and lead to boom-bust cycles. Strong focus on new industries might cause instability in traditional ones.

Economic Goal	Policy Examples	Potential Trade-offs (Conflicting Goals)
	• Lowering corporate or personal income taxes. • Expansionary Monetary Policy (lowering interest rates).	
Equity *(Fairness in the distribution of income, wealth, and opportunities)*	**Redistributive Policies:** • Progressive Income Tax systems. • Wealth or Inheritance Taxes. • Minimum Wage legislation.	• **Growth:** High progressive taxes may reduce incentives for investment, risk-taking, and hard work, potentially slowing overall economic expansion. High minimum wages might discourage hiring, especially of low-skilled workers. • **Stability:** Significant shifts in redistributive policy can create political and economic uncertainty, affecting business investment.

Economic Goal	Policy Examples	Potential Trade-offs (Conflicting Goals)
	Opportunity-Enhancing Policies: • Universal access to high-quality public education and healthcare. • Affordable housing programs. • Anti-discrimination laws in hiring and lending.	
Stability *(Minimizing fluctuations in output, employment, and prices)*	**Fiscal Policy:** • **Counter-cyclical spending:** Increasing spending during recessions, decreasing it during booms.	• **Growth:** Contractionary policies to fight inflation (like raising interest rates) can deliberately slow down economic growth and increase unemployment in the short term. • **Equity:** Inflation hits low-income households the hardest. However, policies used to fight it, like interest rate hikes, can increase the burden on borrowers (often

Economic Goal	Policy Examples	Potential Trade-offs (Conflicting Goals)
	• **Automatic Stabilizers:** Unemployment benefits and progressive taxes naturally smooth the business cycle. **Monetary Policy:** • **Inflation Targeting:** Adjusting interest rates to maintain a stable inflation rate (e.g., 2%). **Macroprudential Regulation:** • Capital requirements for banks to prevent financial crises.	younger or less wealthy) while benefiting savers (often older or wealthier).

***Table 1.3**: Placeholder table showing trade-offs between growth, equity, and stability.*

Pilot questions 1.3

1. Market failure occurs when:
   a) Resources are allocated efficiently
   b) The free market fails to allocate resources efficiently
   c) Government spending is too high
   d) Taxes are reduced

2. Which of the following is a public good?
   a) Street lighting
   b) Private housing
   c) Mobile phones
   d) Automobiles

3. Fiscal policy involves:
   a) Controlling money supply
   b) Adjusting interest rates
   c) Government spending and taxation
   d) Regulating monopolies

4. Monetary policy is primarily managed by:
   a) The Ministry of Finance
   b) The Central Bank
   c) Private firms
   d) International organisations

5. Government must balance three key objectives:
   a) Growth, equity, and stability
   b) Growth, inflation, and unemployment
   c) Taxes, subsidies, and transfers
   d) Spending, saving, and investment

Series Summary

In this Series, we examined the major functions of government in the economy. We began by defining government spending and distinguishing between capital and recurrent expenditure, highlighting their impact on national output. We then analysed taxes, transfers, and subsidies as instruments of revenue generation, redistribution, and incentives. Finally, we evaluated the role of government in correcting market failures, applying stabilisation policies, and balancing growth, equity, and stability. Altogether, this Series has provided a foundation for understanding how government policies shape economic performance and welfare.

Glossary of Terms

- **Government spending**: Expenditure by the state on goods and services to meet public needs and achieve economic objectives.
- **Capital expenditure**: Long-term investment spending on assets such as infrastructure and schools.
- **Recurrent expenditure**: Regular spending on items such as salaries, pensions, and maintenance.

- **Tax**: A compulsory payment made to government without direct service in return.
- **Direct tax**: A tax levied on income or wealth, such as personal income tax.
- **Indirect tax**: A tax imposed on goods and services, such as value-added tax.
- **Government transfers**: Payments made by the state to individuals or groups without requiring goods or services in return.
- **Subsidy**: Financial assistance provided by government to producers or consumers to encourage production or consumption.
- **Market failure**: A situation where the free market does not allocate resources efficiently.
- **Fiscal policy**: Government decisions on spending and taxation to influence aggregate demand.
- **Monetary policy**: Central bank measures to control money supply and interest rates.
- **Economic stability**: A condition where inflation, unemployment, and growth are managed to avoid excessive fluctuations.

Concept Check Questions

Objective Questions

1. Government spending is divided into _______ and _______ expenditure. (Linked to SLO 1.1, SLO 1.2)
2. Expenditure on salaries and pensions is classified as _______ expenditure. (Linked to SLO 1.2)
3. Increased government spending generally leads to higher _______ and employment. (Linked to SLO 1.1)
4. Taxes imposed on goods and services are called _______ taxes. (Linked to SLO 1.3)
5. Payments such as pensions and unemployment benefits are examples of _______. (Linked to SLO 1.4)
6. Government financial assistance to producers or consumers is called a _______. (Linked to SLO 1.4)
7. Street lighting is an example of a _______ good. (Linked to SLO 1.5)
8. Government spending and taxation decisions are part of _______ policy. (Linked to SLO 1.5)
9. The three key objectives of government policy are growth, _______ and stability. (Linked to SLO 1.5)

Short-Answer Questions

10. Define government spending and explain its scope in relation to national output. (Linked to SLO 1.1)

11. Distinguish between capital and recurrent expenditure with examples. (Linked to SLO 1.2)

12. Explain how excessive recurrent expenditure may affect capital projects. (Linked to SLO 1.2)

13. Distinguish between direct and indirect taxes with examples. (Linked to SLO 1.3)

14. Explain how government transfers contribute to income redistribution. (Linked to SLO 1.4)

15. Describe the role of subsidies in economic activities. (Linked to SLO 1.4)

16. Identify two examples of market failure and explain how government intervention addresses them. (Linked to SLO 1.5)

Long-Answer Questions

17. Analyse the impact of government spending on national output, highlighting both positive and negative effects. (Linked to SLO 1.1)

18. Evaluate the role of taxes, transfers, and subsidies in resource allocation and redistribution. (Linked to SLO 1.3, SLO 1.4)

19. Discuss the differences between fiscal and monetary policy, and explain how they work together to stabilise the economy. (Linked to SLO 1.5)

20. Assess how government balances growth, equity, and stability, including potential trade-offs. (Linked to SLO 1.5)

Answers to Concept Check Questions

Objective Questions

1. Capital and recurrent.
2. Recurrent.
3. Output.
4. Indirect.
5. Transfers.
6. Subsidy.
7. Public.
8. Fiscal.
9. Equity.

Short-Answer Questions

10. Government spending is the expenditure by the state on goods and services to meet public needs and achieve economic objectives, influencing national output and welfare.

11. Capital expenditure involves long-term investments such as infrastructure, while recurrent expenditure covers short-term items like salaries and pensions.

12. Excessive recurrent expenditure limits funds available for capital projects, reducing long-term productive capacity.

13. Direct taxes are levied on income and wealth (e.g., personal income tax), while indirect taxes are imposed on goods and services (e.g., VAT).

14. Transfers redistribute income by providing pensions, unemployment benefits, and welfare payments, reducing inequality.

15. Subsidies lower costs for producers or consumers, encouraging production and consumption of essential goods.

16. Examples include public goods (e.g., defence) and externalities (e.g., pollution). Government intervenes by providing goods or regulating industries.

Long-Answer Questions

Q17: Impact of government spending on national output

- *Basic response:* Increased spending raises aggregate demand, boosting output and employment. Reduced spending slows activity.
- *Value-added response:* Beyond demand effects, capital spending enhances productivity, while excessive recurrent spending may cause deficits and inflation. Strategic allocation is essential for sustainable growth.

Q18: Role of taxes, transfers, and subsidies

- *Basic response:* Taxes generate revenue, transfers redistribute income, and subsidies encourage production and consumption.
- *Value-added response:* Taxes also influence resource allocation, transfers reduce inequality, and subsidies can distort markets if mismanaged. Effective policy balances efficiency with equity.

Q19: Fiscal vs monetary policy

- *Basic response:* Fiscal policy involves government spending and taxation, while monetary policy involves money supply and interest rates.
- *Value-added response:* Coordinated use stabilises the economy. For example, fiscal expansion with monetary easing combats recession, while contractionary policies control inflation.

Q20: Balancing growth, equity, and stability

- *Basic response:* Growth increases output, equity ensures fairness, and stability reduces fluctuations.
- *Value-added response:* Trade-offs exist: growth policies may widen inequality, equity measures may reduce incentives, and stability policies may slow growth. Effective governance requires balancing these objectives.

Answers to Pilot Questions

Part 1.1: Government Spending and Output

- Expenditure by the state on goods and services.
- Construction of a new highway.
- Spending on short-term consumption items.
- Limit funds available for capital projects.
- Aggregate demand.

Part 1.2: Taxes, Transfers, and Subsidies

- Compulsory payment without direct service in return.
- Personal income tax.
- Pensions and unemployment benefits.
- Encourage production or consumption of goods.
- Distort market prices.

Part 1.3: The Role of Government in Economic Stability

- The free market fails to allocate resources efficiently.
- Street lighting.
- Government spending and taxation.
- The Central Bank.
- Growth, equity, and stability.

References and Attributions

Textbook References

- Mankiw, N. G. (2019). *Macroeconomics* (10th ed.). New York: Worth Publishers.

- Lipsey, R., & Chrystal, A. (2015). *Economics* (13th ed.). Oxford: Oxford University Press.

Open Educational Resources (OERs)

- OpenStax. (2016). *Principles of Macroeconomics*. Houston: Rice University. Available under Creative Commons Attribution Licence.
- CORE Economics Project. (2022). *The Economy: Economics for a Changing World*. London: CORE Project. Available under Creative Commons Attribution Licence.

Illustrations and AI Prompts All figures, tables, and boxes in Series 1 were either conceptual diagrams or AI-generated placeholders. Attribution notes are provided below:

- *Figure 1.1: Categories of government spending* Prompt: "Create a labelled diagram showing capital vs recurrent expenditure with examples." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 1.1: Comparison of capital and recurrent expenditure* Prompt: "Generate a table with two columns: capital expenditure vs recurrent expenditure, listing examples under each." Attribution: AI-generated table using Microsoft Copilot tools.
- *Box 1.1: The multiplier effect of government spending* Prompt: "Create a text box summarising how government spending increases aggregate demand through the multiplier effect." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 1.2: Direct vs indirect taxes* Prompt: "Create a diagram comparing direct vs indirect taxes with examples." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Box 1.2: Transfers and income redistribution* Prompt: "Create a text box summarising the role of transfers in income redistribution." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Table 1.2: Examples of subsidies in different sectors* Prompt: "Generate a table listing types of subsidies: agriculture, energy, education, with examples." Attribution: AI-generated table using Microsoft Copilot tools.
- *Figure 1.3: Types of market failure* Prompt: "Create a diagram showing public goods, externalities, and monopolies as types of market failure." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Box 1.3: Fiscal vs monetary policy* Prompt: "Create a text box comparing fiscal vs monetary policy with examples." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Table 1.3: Trade-offs between growth, equity, and stability* Prompt: "Generate a table with three columns: growth, equity, stability, listing policy examples and trade-offs." Attribution: AI-generated table using Microsoft Copilot tools.

Course code: ECO 204

Course title: Introduction to Macroeconomics ll

Course credit load: 2 Units

Series 1: Government Functions and Economic Policies

Series 2: Fiscal Multipliers and Taxation Models

Series 3: Money, Banking System, and Financial Roles

Series 4: Income and Trade Policy Measures

Series 5: External Sector: International Trade and Exchange Rates

Series Outline

Part 2.1: The Concept of Fiscal Multipliers

- **Sub-Part 2.1.1: Definition and Mechanism of the Multiplier Effect**
- **Sub-Part 2.1.2: Types of Fiscal Multipliers (spending, taxation, transfers)**
- **Sub-Part 2.1.3: Factors Influencing the Size of Multipliers**

Part 2.2: Taxation Models and Income Determination

- **Sub-Part 2.2.1: The Role of Taxes in Aggregate Demand**
- **Sub-Part 2.2.2: Income Tax Models and Disposable Income**
- **Sub-Part 2.2.3: Evaluating the Effectiveness of Taxation in Stabilisation**

Part 2.3: Policy Applications of Multipliers and Taxation

- **Sub-Part 2.3.1: Government Use of Multipliers in Fiscal Policy**
- **Sub-Part 2.3.2: Taxation as a Tool for Redistribution and Growth**
- **Sub-Part 2.3.3: Challenges in Applying Multipliers and Taxation Models**

2.1 The Concept of Fiscal Multipliers

2.1.1 Definition and Mechanism of the Multiplier Effect

A **fiscal multiplier** measures the change in national income resulting from a change in government spending, taxation, or transfers. It shows how an initial injection into the economy leads to a larger overall impact on output.

The **multiplier effect** occurs because one person's spending becomes another person's income, which in turn is spent again, creating a chain reaction. For example, if government spends money on building a road, construction workers receive wages, which they spend on goods and services, thereby increasing demand across the economy.

ITQ: The fiscal multiplier measures the change in _______ income resulting from government spending or taxation.

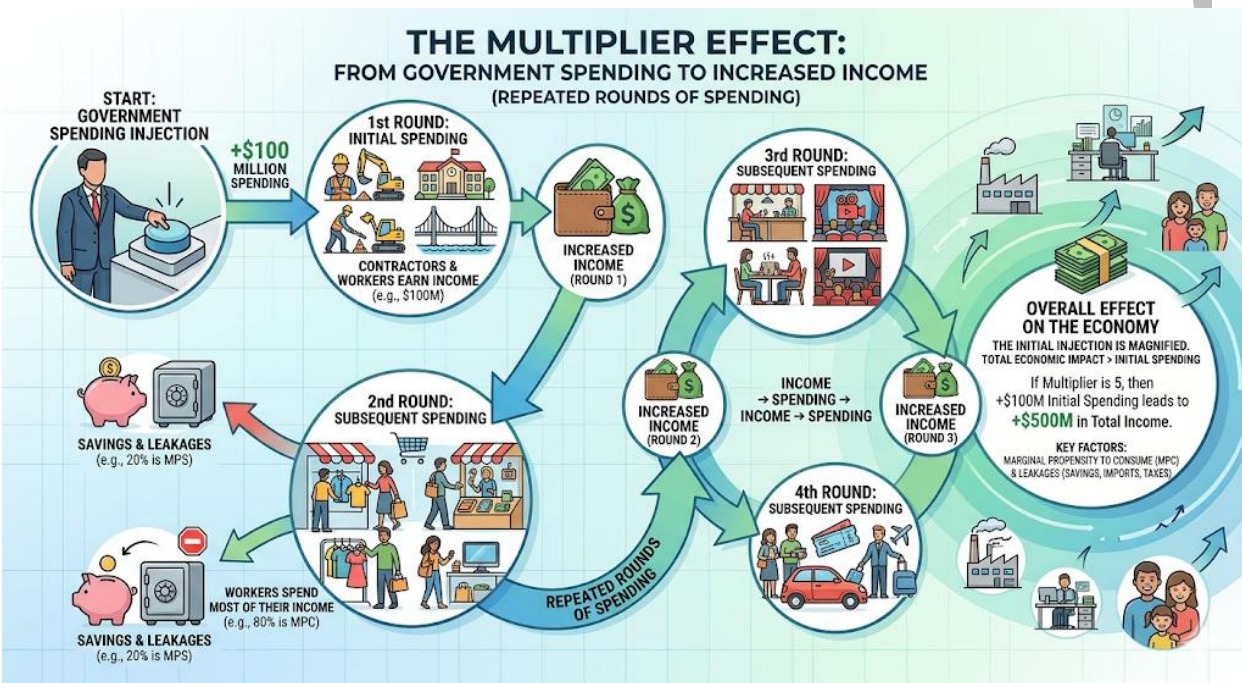


***Figure 2.1**: Placeholder illustration showing the circular flow of income with multiplier effect*

2.1.2 Types of Fiscal Multipliers (Spending, Taxation, Transfers)

There are three main types of fiscal multipliers:

- **Spending multiplier**: Measures the effect of government expenditure on national income. For example, building schools increases demand for labour and materials, which stimulates further spending.
- **Taxation multiplier**: Measures the effect of changes in taxes on disposable income and consumption. A reduction in income tax increases household spending, thereby raising aggregate demand.
- **Transfer multiplier**: Measures the effect of government transfers, such as pensions or unemployment benefits, on consumption and output. Transfers increase disposable income for recipients, who spend more on goods and services.

ITQ: A reduction in income tax increases household _______ and aggregate demand.

Type of Multiplier	Definition	Examples
Government Spending Multiplier	The factor by which a change in autonomous government expenditures (G) on goods and services causes a larger, multiplied change in the equilibrium level of national income (GDP). It measures the direct economic injection.	**Increase:** The government spends $10 billion on building new highways, employing construction workers and purchasing materials. The final increase in GDP is $40 billion (Multiplier = 4). **Decrease:** The government cuts $5 billion from the defense budget, leading to layoffs and reduced contracts. The total reduction in GDP is $20 billion (Multiplier = 4).
Taxation Multiplier	The factor by which a change in autonomous taxes (T) causes a multiplied, but opposite, change in the equilibrium level of national income (GDP). It is usually negative and smaller in magnitude than the spending multiplier, because a tax change only affects consumption indirectly.	**Decrease (Tax Cut):** The government reduces income taxes by $20 billion, increasing disposable income. Households spend most of this, leading to a final GDP increase of $60 billion (Multiplier = -3). **Increase (Tax Hike):** The government raises corporate taxes by $15 billion to reduce demand. Businesses cut investment, resulting in a total

Type of Multiplier	Definition	Examples
		GDP reduction of $45 billion (Multiplier = -3).
Transfer Payments Multiplier	The factor by which a change in autonomous government transfer payments (TR)—like social security, welfare, or unemployment benefits—causes a larger, multiplied change in the equilibrium level of national income (GDP). Unlike the spending multiplier, transfers increase disposable income indirectly.	**Increase:** The government increases unemployment benefits by $8 billion, which recipients quickly spend on necessities. The cumulative increase in GDP is $24 billion (Multiplier = 3). **Decrease:** The government reduces social security cost-of-living adjustments by $12 billion. Seniors reduce consumption, leading to a total GDP reduction of $36 billion (Multiplier = 3).

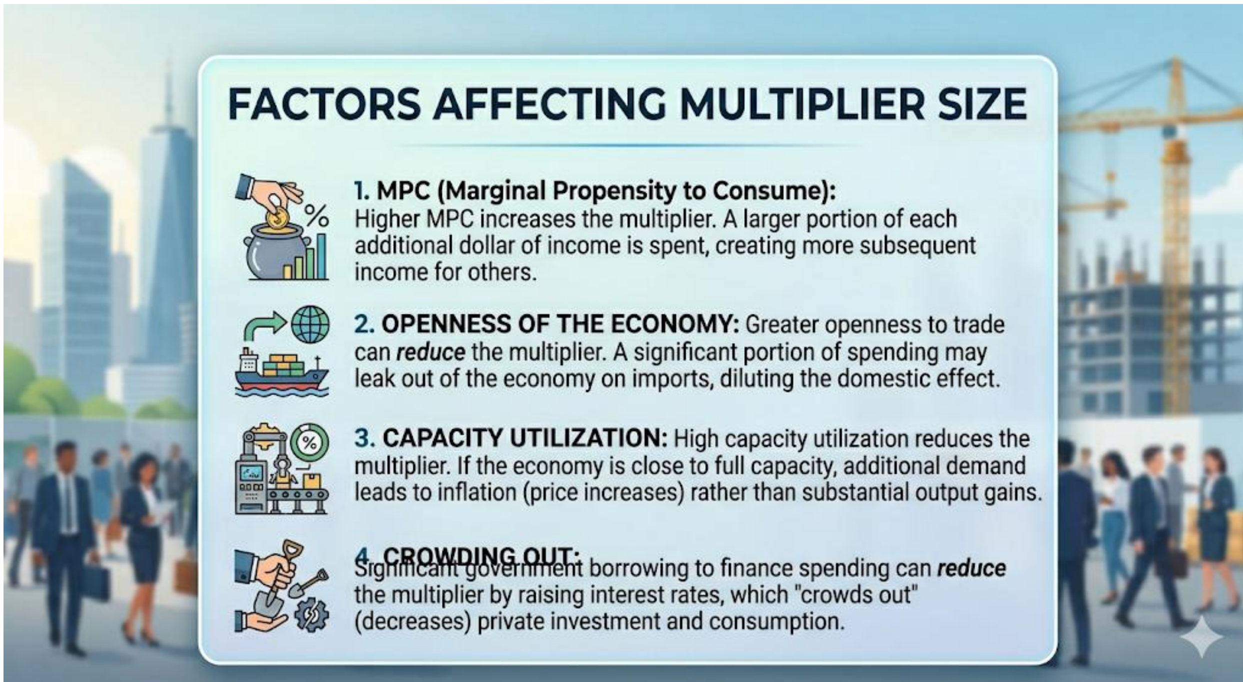
***Table 2.1**: Placeholder table comparing spending, taxation, and transfer multipliers*

2.1.3 Factors Influencing the Size of Multipliers

The size of fiscal multipliers depends on several factors:

- **Marginal propensity to consume (MPC)**: The proportion of additional income that households spend rather than save. A higher MPC increases the multiplier effect.
- **Openness of the economy**: In highly open economies, part of the spending leaks into imports, reducing the multiplier.
- **Capacity utilisation**: If the economy has idle resources, multipliers are larger because spending leads to higher output without inflationary pressures.
- **Crowding out**: If government borrowing raises interest rates, private investment may fall, reducing the multiplier effect.

ITQ: A higher marginal propensity to consume leads to a _______ multiplier effect.



***Box 2.1**: Placeholder box summarising key factors that influence multiplier size*

Pilot questions 2.1

1. A fiscal multiplier measures:
   a) Change in government revenue
   b) Change in national income from government action
   c) Change in imports and exports
   d) Change in inflation rates

2. The multiplier effect occurs because:
   a) Government spending reduces demand
   b) One person's spending becomes another person's income
   c) Taxes eliminate disposable income
   d) Transfers reduce consumption

3. Which of the following is a taxation multiplier?
   a) Effect of government spending on income
   b) Effect of tax changes on disposable income
   c) Effect of transfers on consumption
   d) Effect of imports on demand

4. The size of the multiplier increases when:
   a) Marginal propensity to consume is high
   b) The economy is highly open

c) Interest rates rise sharply
d) Savings increase significantly

5. Crowding out occurs when:
a) Government borrowing reduces private investment
b) Government spending increases aggregate demand
c) Transfers increase disposable income
d) Taxes are reduced

2.2 Taxation Models and Income Determination

2.2.1 The Role of Taxes in Aggregate Demand

Taxes influence aggregate demand by affecting disposable income and consumption. When taxes increase, households and firms have less money to spend, which reduces demand. Conversely, tax reductions increase disposable income, encouraging higher spending and investment.

Taxes also serve as a stabilisation tool. During inflationary periods, higher taxes can reduce demand, while in recessions, tax cuts can stimulate demand.

ITQ: Higher taxes reduce household _______ income and consumption.

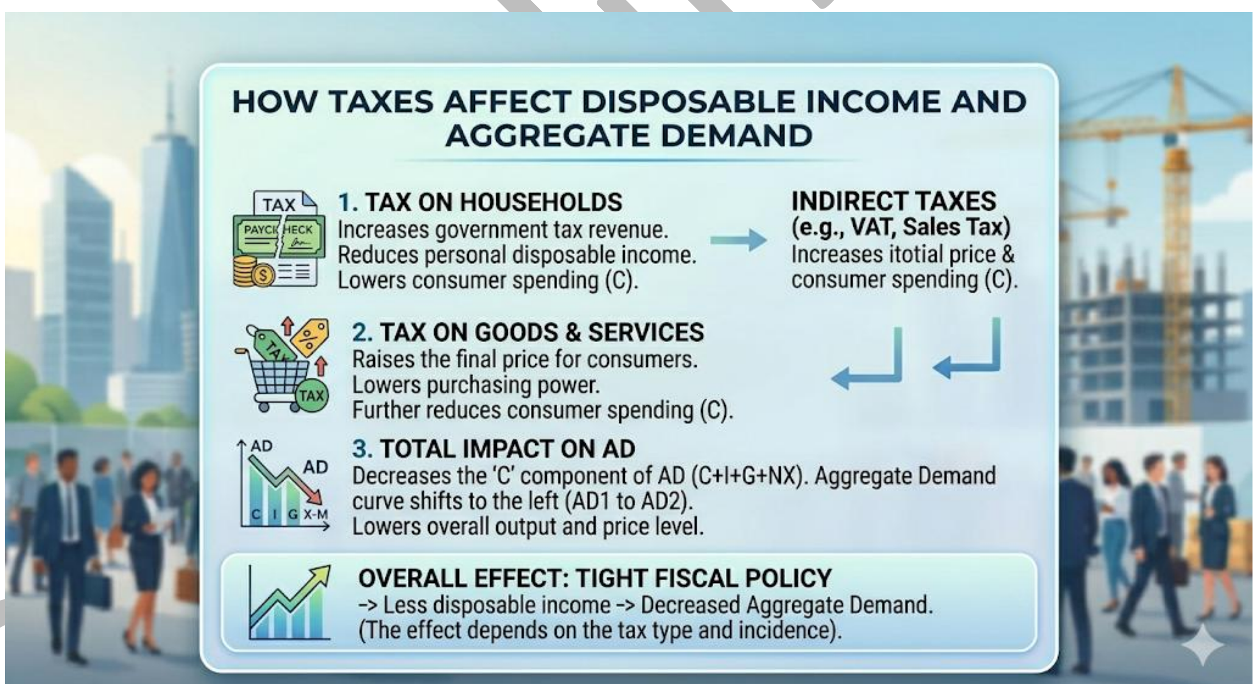


__Figure 2.2__: Placeholder illustration showing the relationship between taxes, disposable income, and aggregate demand

2.2.2 Income Tax Models and Disposable Income

Disposable income is the income households have left after paying taxes. It determines the level of consumption and saving in the economy.

Income tax models show how changes in tax rates affect disposable income. For example, a progressive tax system imposes higher rates on higher incomes, redistributing wealth and reducing inequality. A proportional tax applies the same rate to all incomes, while a regressive tax places a heavier burden on lower-income groups.

ITQ: Income remaining after paying taxes is called _______ income.

Tax Type	Definition	Examples
Progressive Tax	A tax system where the tax rate increases as the taxpayer's income increases. Those with higher incomes pay a larger percentage of their income in taxes than those with lower incomes.	**Personal Income Tax:** Most developed countries have a progressive income tax system. For instance, in the US, individuals with higher income fall into higher tax brackets and pay a larger percentage of their income in federal income tax. **Corporate Income Tax:** In some jurisdictions, corporate income is taxed progressively, with higher-earning corporations paying a higher tax rate. **Estate and Gift Taxes:** These taxes are often progressive, applying higher rates to larger estates or gifts.
Proportional Tax	A tax system where the tax rate remains constant, regardless of the	**Sales Tax:** A general sales tax is often considered proportional. For example, if

Tax Type	Definition	Examples
	taxpayer's income level. Everyone pays the same percentage of their income in taxes, regardless of whether they earn a lot or a little.	there is a 5% sales tax on all goods, everyone pays 5% of the purchase price, regardless of their income. **Flat Tax:** Some countries use a flat income tax system, where everyone pays the same fixed percentage of their income in tax, like 15% or 20%. **Property Tax:** While often based on the value of the property, property taxes can be proportional if a uniform tax rate is applied to all properties, regardless of their value or the owner's income.
Regressive Tax	A tax system where the tax burden falls more heavily on lower-income individuals. While the tax rate may appear constant, the amount of tax paid represents a larger percentage of a lower-income person's income compared to a higher-income person's income.	**Sales Tax on Necessities:** A sales tax on basic necessities like food, clothing, and medicine is often considered regressive. Lower-income individuals spend a larger proportion of their income on these items, so the sales tax takes a larger percentage of their income. **Excise Taxes:** Taxes on specific goods like cigarettes, alcohol, and gasoline are

Tax Type	Definition	Examples
		often regressive. Lower-income individuals tend to spend a larger proportion of their income on these items. **Payroll Taxes:** Social security and Medicare taxes are typically flat-rate taxes on earned income. However, they are regressive because there is usually a cap on the amount of income subject to these taxes, so higher earners pay a smaller percentage of their total income.

***Table 2.2**: Placeholder table comparing progressive, proportional, and regressive tax systems*

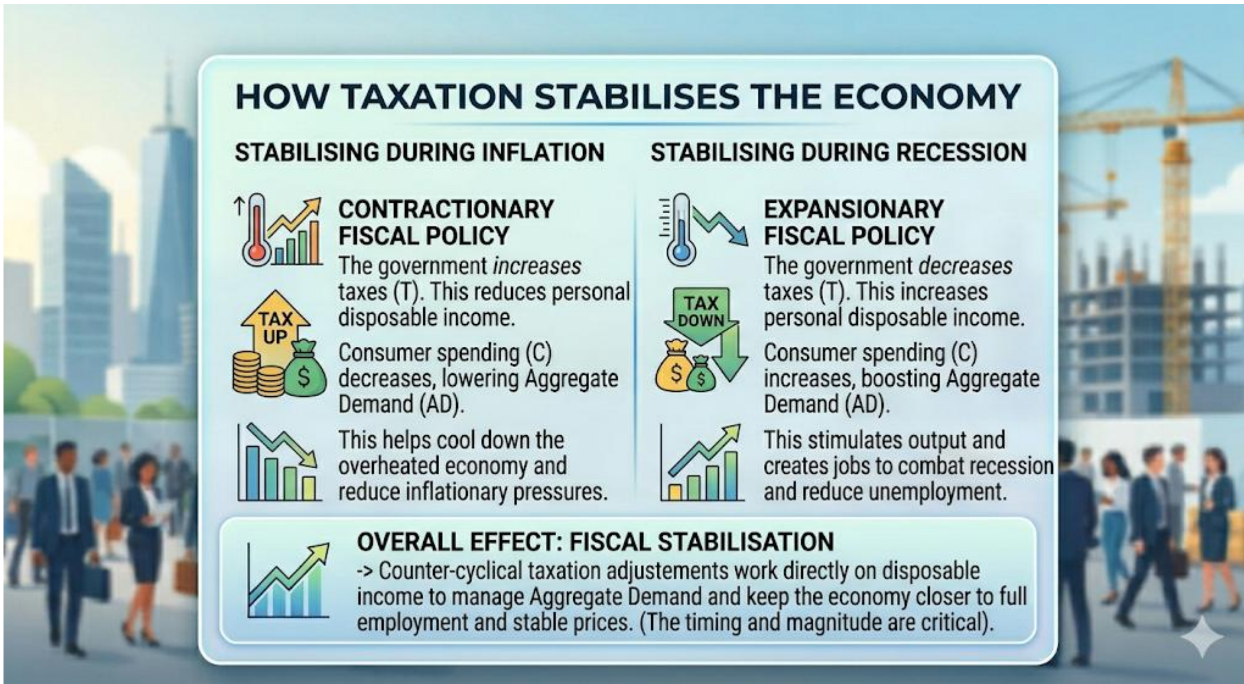
2.2.3 Evaluating the Effectiveness of Taxation in Stabilisation

Taxation is a powerful tool for stabilising the economy. By adjusting tax rates, government can influence consumption, investment, and aggregate demand.

- **During inflation**: Increasing taxes reduces disposable income, curbing demand and controlling price rises.
- **During recession**: Reducing taxes increases disposable income, stimulating demand and encouraging production.

However, taxation must be carefully managed. Excessive taxation may discourage investment and reduce incentives to work, while insufficient taxation may lead to budget deficits.

ITQ: Reducing taxes during a recession helps to stimulate _______ demand.



Box 2.2*: Placeholder box summarising taxation as a stabilisation tool*

Pilot questions 2.2

1. Taxes influence aggregate demand by: a) Increasing disposable income b) Reducing or increasing disposable income c) Eliminating government spending d) Raising imports

2. Disposable income is defined as: a) Income before taxes b) Income after paying taxes c) Government revenue from taxes d) Household savings

3. A progressive tax system: a) Applies the same rate to all incomes b) Places a heavier burden on low-income groups c) Imposes higher rates on higher incomes d) Eliminates inequality completely

4. During inflation, taxation is used to: a) Increase disposable income b) Reduce aggregate demand c) Stimulate investment d) Lower government revenue

5. Excessive taxation may: a) Encourage investment b) Reduce incentives to work c) Increase disposable income d) Eliminate budget deficits

2.3 Policy Applications of Multipliers and Taxation

2.3.1 Government Use of Multipliers in Fiscal Policy

Governments apply fiscal multipliers when designing policies to stimulate or restrain economic activity. For example, during a recession, increased public spending on infrastructure projects can generate a multiplier effect, raising employment and output. Conversely, reducing expenditure during inflation can dampen demand.

The effectiveness of these applications depends on the size of the multiplier, which is influenced by factors such as the marginal propensity to consume and the openness of the economy.

ITQ: Increased government spending during a recession can generate a _______ effect that raises output.

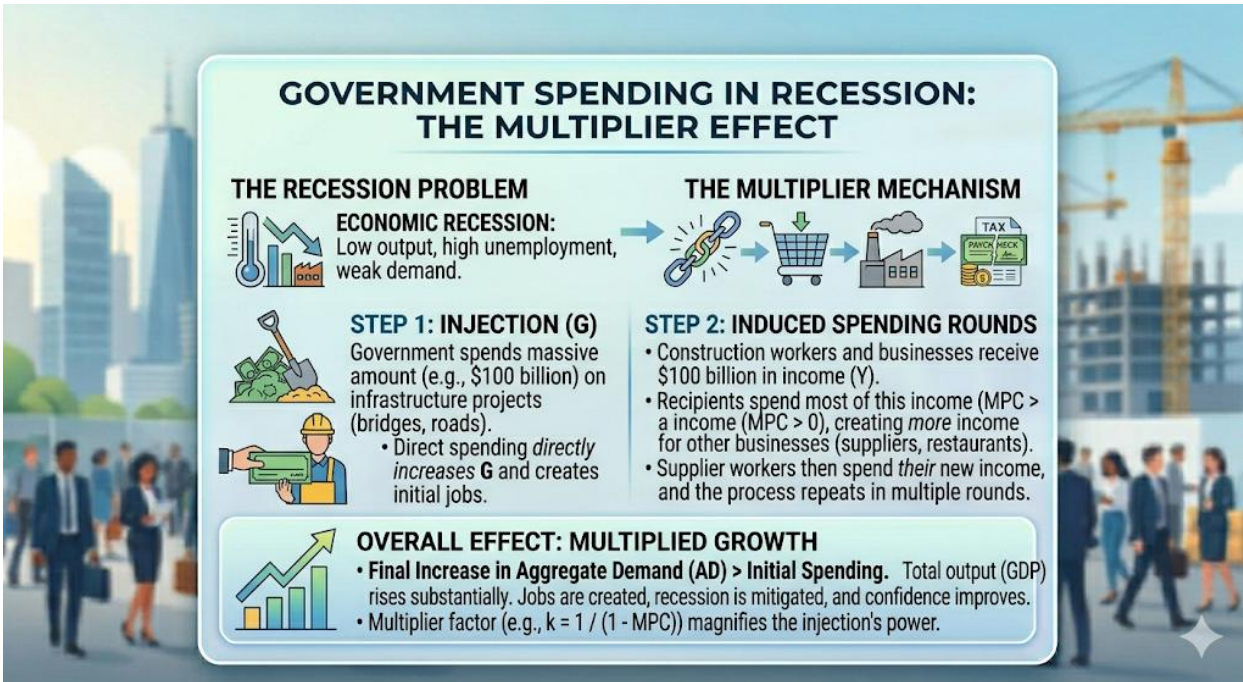


***Figure 2.3**: Placeholder illustration showing government use of multipliers in fiscal policy*

2.3.2 Taxation as a Tool for Redistribution and Growth

Taxation is not only a source of revenue but also a tool for redistributing income and promoting growth. Progressive taxation reduces inequality by imposing higher rates on higher incomes, while tax incentives encourage investment in targeted sectors.

For instance, tax breaks for small businesses can stimulate entrepreneurship, while reduced taxes on essential goods can improve welfare. However, poorly designed tax policies may discourage productivity or create loopholes that reduce effectiveness.

ITQ: Progressive taxation reduces _______ by imposing higher rates on higher incomes.

Taxation Policy	Description	Economic Effects
Progressive Tax	A tax system where the tax rate increases as the taxpayer's income increases. Those with higher incomes pay a larger percentage of their income in taxes than those with lower incomes.	**Reduced Income Inequality:** By taking a larger share from higher earners and a smaller share from lower earners, it helps narrow the income gap.

Taxation Policy	Description	Economic Effects
		Increased Public Revenue: Progressive taxes generate substantial revenue for the government, which can be used to fund public goods and services. **Stabilized Consumption:** It can help stabilize consumer spending, as lower-income households, who have a higher propensity to consume, are taxed less, while higher-income households, with a higher propensity to save, are taxed more. **Potentially Reduced Work Incentive:** Some argue that very high progressive tax rates may discourage work, investment, and risk-taking by reducing the net return on these activities.

Taxation Policy	Description	Economic Effects
		Can Moderate Growth: Progressive taxes might moderate economic growth during periods of rapid expansion by curbing spending and potentially investment by the wealthy.
Tax Incentives	These are special tax provisions or credits designed to encourage individuals or businesses to engage in specific economic behaviors that the government deems desirable. Examples include R&D tax credits, investment tax credits, and tax breaks for renewable energy.	**Increased Investment and Innovation:** By reducing the cost of certain activities, tax incentives can stimulate investment in research and development, new technologies, and capital projects. **Job Creation:** Targeted tax incentives for businesses in specific sectors can lead to job growth in those industries. **Targeted Growth:** Governments can use tax incentives to promote development in specific regions, industries, or for particular socio-economic goals.

Taxation Policy	Description	Economic Effects
		Potential Revenue Loss: Tax incentives can lead to a reduction in government revenue, which may require spending cuts or tax increases elsewhere. **Can Lead to Inefficiency:** Incentives can distort market signals, leading to investments that may not be economically efficient. Overly complex or poorly targeted incentives can also be susceptible to abuse.
Reduced Taxes on Essentials	Lowering or eliminating sales taxes or Value Added Taxes (VAT) on essential goods and services like food, medicine, utilities, and public transportation.	**Improved Equity:** Reduced taxes on essentials disproportionately benefit lower-income households, as these expenses make up a larger portion of their budget. **Reduced Regressivity:** Since sales taxes are generally regressive, lowering them on necessities can reduce the regressive impact of the overall tax system.

Taxation Policy	Description	Economic Effects
		Increased Purchasing Power: This policy directly increases the purchasing power of consumers, particularly for basic needs. **Potential Revenue Loss:** Eliminating or reducing these taxes can cause significant revenue loss for governments, impacting public services. **Complexity and Potential for Abuse:** Defining what constitutes "essentials" can be politically complex and may lead to administrative challenges and potential for tax evasion. It might also reduce economic efficiency by distorting prices.

Table 2.3*: Placeholder table showing examples of taxation policies for redistribution and growth*

2.3.3 Challenges in Applying Multipliers and Taxation Models

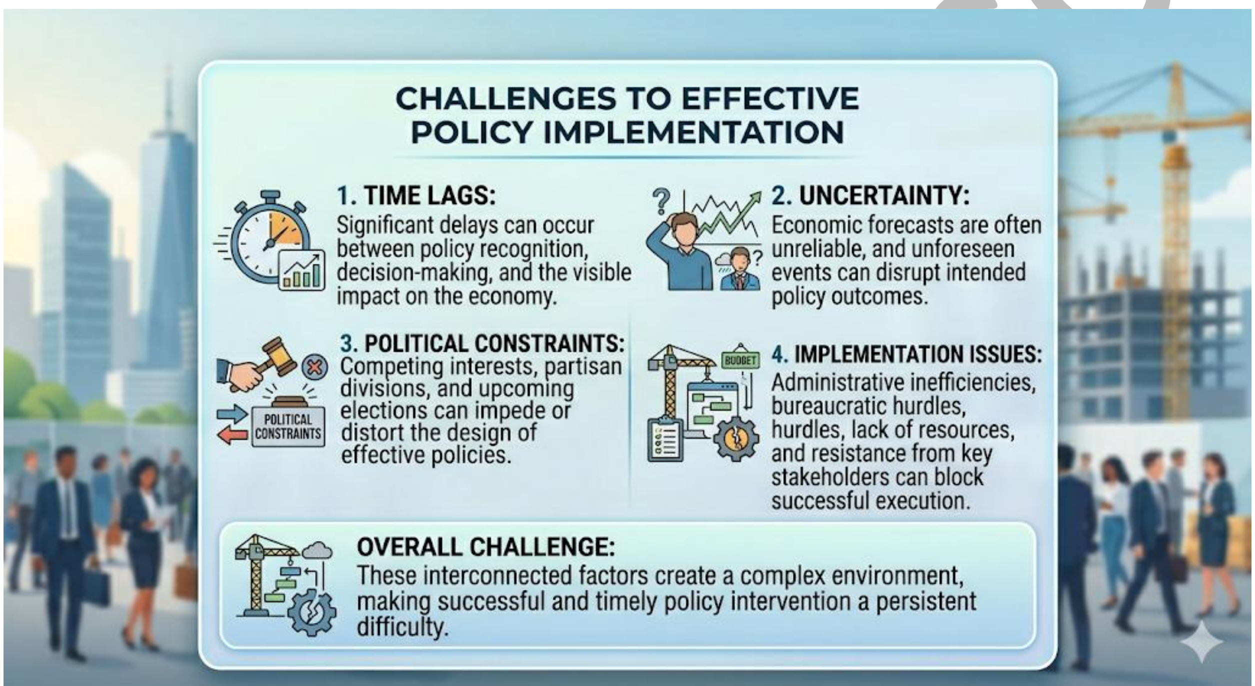
While multipliers and taxation models are powerful tools, their application faces several challenges:

- **Time lags**: Policy effects may take months or years to materialise.

- **Uncertainty**: The exact size of multipliers is difficult to predict, especially in open economies.
- **Political constraints**: Policy decisions may be influenced by political considerations rather than economic efficiency.
- **Implementation issues**: Tax collection and enforcement may be weak, reducing effectiveness.

These challenges highlight the importance of careful design and monitoring of fiscal policies.

ITQ: Policy effects may take time to materialise due to _______ lags.



***Box 2.3**: Placeholder box summarising challenges in applying multipliers and taxation models*

Pilot questions 2.3

1. Governments use fiscal multipliers in policy-making to: a) Stimulate or restrain economic activity b) Increase imports c) Reduce government revenue d) Eliminate taxation
2. Progressive taxation is designed to: a) Increase inequality b) Reduce inequality c) Encourage savings only d) Eliminate government spending
3. Tax incentives can: a) Discourage entrepreneurship b) Encourage investment in targeted sectors c) Reduce disposable income d) Increase inflation directly
4. One challenge in applying multipliers is: a) Immediate policy effects b) Time lags in implementation c) Perfect predictability of multiplier size d) Elimination of political influence

5. Weak tax collection and enforcement may: a) Increase effectiveness of taxation b) Reduce effectiveness of taxation policies c) Eliminate inequality d) Stimulate aggregate demand automatically

Series Summary

In this Series, we explored how fiscal multipliers and taxation models influence national income and aggregate demand. We began by defining the multiplier effect and examining its types—spending, taxation, and transfers—alongside the factors that determine their size. We then analysed taxation models, focusing on how different tax systems affect disposable income and stabilisation. Finally, we evaluated the policy applications of multipliers and taxation, highlighting their role in redistribution, growth, and the challenges of implementation. This Series has provided a comprehensive understanding of how fiscal tools shape economic outcomes.

Glossary of Terms

- **Fiscal multiplier**: A measure of the change in national income resulting from a change in government spending, taxation, or transfers.
- **Multiplier effect**: The process by which an initial injection of spending leads to a larger overall increase in output.
- **Spending multiplier**: The effect of government expenditure on national income.
- **Taxation multiplier**: The effect of changes in taxes on disposable income and consumption.
- **Transfer multiplier**: The effect of government transfers on consumption and output.
- **Marginal propensity to consume (MPC)**: The proportion of additional income that households spend rather than save.
- **Disposable income**: Income remaining after paying taxes, available for consumption and saving.
- **Progressive tax**: A tax system where higher incomes are taxed at higher rates.
- **Proportional tax**: A tax system where all incomes are taxed at the same rate.
- **Regressive tax**: A tax system where lower-income groups bear a heavier burden relative to their income.
- **Fiscal policy**: Government decisions on spending and taxation to influence aggregate demand.
- **Crowding out**: A situation where government borrowing raises interest rates, reducing private investment.
- **Time lags**: Delays between policy implementation and observable effects in the economy.

Concept Check Questions [Series 2]

Objective Questions

1. The fiscal multiplier measures the change in _______ income resulting from government spending or taxation. (Linked to SLO 2.1)
2. A reduction in income tax increases household _______ and aggregate demand. (Linked to SLO 2.2)
3. A higher marginal propensity to consume leads to a _______ multiplier effect. (Linked to SLO 2.3)
4. Higher taxes reduce household _______ income and consumption. (Linked to SLO 2.4)
5. Income remaining after paying taxes is called _______ income. (Linked to SLO 2.4)
6. Reducing taxes during a recession helps to stimulate _______ demand. (Linked to SLO 2.5)
7. Increased government spending during a recession can generate a _______ effect that raises output. (Linked to SLO 2.6)
8. Progressive taxation reduces _______ by imposing higher rates on higher incomes. (Linked to SLO 2.6)
9. Policy effects may take time to materialise due to _______ lags. (Linked to SLO 2.7)

Short-Answer Questions

10. Define the fiscal multiplier and explain the mechanism of the multiplier effect. (Linked to SLO 2.1)

11. Distinguish between spending, taxation, and transfer multipliers with examples. (Linked to SLO 2.2)

12. Explain how the marginal propensity to consume influences the size of the multiplier. (Linked to SLO 2.3)

13. Distinguish between progressive, proportional, and regressive tax systems with examples. (Linked to SLO 2.4)

14. Explain how taxation can be used as a stabilisation tool during inflation and recession. (Linked to SLO 2.5)

15. Describe how governments use multipliers in fiscal policy to stimulate or restrain economic activity. (Linked to SLO 2.6)

16. Identify two challenges in applying multipliers and taxation models effectively. (Linked to SLO 2.7)

Long-Answer Questions

17. Analyse the factors influencing the size of fiscal multipliers, including MPC, openness, capacity utilisation, and crowding out. (Linked to SLO 2.3)

18. Evaluate the effectiveness of different tax systems (progressive, proportional, regressive) in achieving redistribution and stabilisation. (Linked to SLO 2.4, SLO 2.5)

19. Discuss how governments use multipliers and taxation models in policy-making, and assess the challenges they face in implementation. (Linked to SLO 2.6, SLO 2.7)

Answers to Concept Check Questions

Objective Questions

1. National.
2. Disposable.
3. Larger.
4. Disposable.
5. Disposable.
6. Aggregate.
7. Multiplier.
8. Inequality.
9. Time.

Short-Answer Questions

10. A fiscal multiplier measures the change in national income resulting from government spending, taxation, or transfers. The multiplier effect occurs because one person's spending becomes another person's income, which is spent again, creating a chain reaction.

11. Spending multiplier: effect of government expenditure on national income. Taxation multiplier: effect of tax changes on disposable income. Transfer multiplier: effect of transfers on consumption and output.

12. A higher MPC increases the multiplier effect because households spend more of their additional income, generating further rounds of spending.

13. Progressive tax: higher rates on higher incomes (e.g., income tax). Proportional tax: same rate for all incomes (e.g., flat tax). Regressive tax: heavier burden on lower incomes (e.g., sales tax on necessities).

14. During inflation, higher taxes reduce disposable income and demand. During recession, tax cuts increase disposable income and stimulate demand.

15. Governments increase spending during recessions to generate multiplier effects and reduce spending during inflation to dampen demand.

16. Challenges include time lags in policy effects, uncertainty about multiplier size, political constraints, and weak tax enforcement.

Long-Answer Questions

Q17: Factors influencing multiplier size

- *Basic response:* The multiplier size depends on MPC, openness of the economy, capacity utilisation, and crowding out.
- *Value-added response:* Beyond these, structural issues such as informal markets, fiscal credibility, and global linkages also matter. For example, in open economies, import leakages reduce multiplier effects, while strong domestic demand amplifies them.

Q18: Effectiveness of tax systems

- *Basic response:* Progressive taxes reduce inequality, proportional taxes treat all incomes equally, and regressive taxes burden lower-income groups.
- *Value-added response:* Outstanding learners can assess how progressive taxes stabilise consumption, proportional taxes maintain simplicity, and regressive taxes may worsen inequality. Effectiveness depends on enforcement, design, and integration with broader fiscal policy.

Q19: Governments using multipliers and taxation models

- *Basic response:* Governments use multipliers to stimulate or restrain demand and taxation to redistribute income and stabilise the economy.
- *Value-added response:* Beyond the basics, challenges include political resistance, time lags, and uncertainty in multiplier estimates. Effective policy requires balancing growth, equity, and stability while ensuring fiscal sustainability.

Answers to Pilot Questions

Part 2.1: The Concept of Fiscal Multipliers

- Change in national income from government action.
- One person's spending becomes another person's income.
- Effect of tax changes on disposable income.
- Marginal propensity to consume is high.
- Government borrowing reduces private investment.

Part 2.2: Taxation Models and Income Determination

- Reducing or increasing disposable income.
- Income after paying taxes.
- Imposes higher rates on higher incomes.
- Reduce aggregate demand.
- Reduce incentives to work.

Part 2.3: Policy Applications of Multipliers and Taxation

- Stimulate or restrain economic activity.
- Reduce inequality.
- Encourage investment in targeted sectors.
- Time lags in implementation.
- Reduce effectiveness of taxation policies.

References and Attributions

Course Document ECO 204: *Introduction to Macroeconomics II*. Internal university course outline.

Textbook References

- Mankiw, N. G. (2019). *Macroeconomics* (10th ed.). New York: Worth Publishers.
- Lipsey, R., & Chrystal, A. (2015). *Economics* (13th ed.). Oxford: Oxford University Press.

Open Educational Resources (OERs)

- OpenStax. (2016). *Principles of Macroeconomics*. Houston: Rice University. Available under Creative Commons Attribution Licence.
- CORE Economics Project. (2022). *The Economy: Economics for a Changing World*. London: CORE Project. Available under Creative Commons Attribution Licence.

Illustrations and AI Prompts All figures, tables, and boxes in Series 2 were either conceptual diagrams or AI-generated placeholders. Attribution notes are provided below:

- *Figure 2.1: Circular flow of income with multiplier effect* Prompt: "Create a diagram of the multiplier effect showing government spending leading to increased income and repeated rounds of spending." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.

- *Table 2.1: Comparison of spending, taxation, and transfer multipliers* Prompt: "Generate a table with three columns: spending multiplier, taxation multiplier, transfer multiplier, listing definitions and examples." Attribution: AI-generated table using Microsoft Copilot tools.
- *Box 2.1: Factors influencing multiplier size* Prompt: "Create a text box listing MPC, openness, capacity utilisation, and crowding out as factors affecting multiplier size." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 2.2: Taxes, disposable income, and aggregate demand* Prompt: "Create a diagram showing how taxes affect disposable income and aggregate demand." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 2.2: Progressive, proportional, and regressive tax systems* Prompt: "Generate a table with three columns: progressive tax, proportional tax, regressive tax, listing definitions and examples." Attribution: AI-generated table using Microsoft Copilot tools.
- *Box 2.2: Taxation as a stabilisation tool* Prompt: "Create a text box explaining how taxation is used to stabilise the economy during inflation and recession." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 2.3: Government use of multipliers in fiscal policy* Prompt: "Create a diagram showing government spending during recession leading to multiplier effect and higher output." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 2.3: Taxation policies for redistribution and growth* Prompt: "Generate a table listing taxation policies: progressive tax, tax incentives, reduced taxes on essentials, with their economic effects." Attribution: AI-generated table using Microsoft Copilot tools.
- *Box 2.3: Challenges in applying multipliers and taxation models* Prompt: "Create a text box listing time lags, uncertainty, political constraints, and implementation issues as challenges." Attribution: AI-generated summary using Microsoft Copilot tools.

Course code: ECO 204

Course title: Introduction to Macroeconomics ll

Course credit load: 2 Units

Series 1: Government Functions and Economic Policies

Series 2: Fiscal Multipliers and Taxation Models

Series 3: Money, Banking System, and Financial Roles

Series 4: Income and Trade Policy Measures

Series 5: External Sector: International Trade and Exchange Rates

Series Outline

Part 1: Nature and Functions of Money

- 3.1.1 Definition and Characteristics of Money
- 3.1.2 Functions of Money (Medium of Exchange, Store of Value, Unit of Account, Standard of Deferred Payment)
- 3.1.3 Types of Money (Commodity, Fiat, Fiduciary, Electronic)
- 3.1.4 Role of Money in Modern Economies

Part 2: The Banking System

- 3.2.1 Structure of the Banking System (Central Bank, Commercial Banks, Development Banks)
- 3.2.2 Functions of Commercial Banks (Deposit, Lending, Payment Services)
- 3.2.3 Role of Central Bank in Monetary Stability
- 3.2.4 Regulation and Supervision of Banks

Part 3: Financial Institutions and Roles

- 3.3.1 Non-bank Financial Institutions (Insurance, Pension Funds, Microfinance)
- 3.3.2 Financial Intermediation and Capital Formation
- 3.3.3 Role of Financial Institutions in Economic Development
- 3.3.4 Challenges Facing Financial Institutions (Technology, Regulation, Globalisation)
- Here’s a well-rounded **Introduction for Series 3: Money, Banking System, and Financial Roles (ECO 202)**:

Introduction

Money and financial institutions form the backbone of modern economies. Without a reliable medium of exchange, efficient banking systems, and strong financial intermediaries, economic activity would be fragmented and unstable. This Series explores the nature and functions of money, the structure and roles of the banking system, and the wider financial institutions that support economic development.

We begin by examining the **definition, characteristics, and functions of money**, highlighting its evolution from commodity forms to electronic transactions in today's digital age. Next, we turn to the **banking system**, focusing on the dual roles of commercial banks and central banks in maintaining monetary stability, facilitating payments, and supporting credit creation. Finally, we broaden the scope to include **non-bank financial institutions** such as insurance companies, pension funds, and microfinance organisations, analysing their contributions to capital formation and economic growth.

Throughout this Series, emphasis is placed on the **practical applications of financial systems**, including how they respond to challenges such as technological change, regulatory pressures, and globalisation. By the end, learners will appreciate the critical role played by money and financial institutions in sustaining economic activity and promoting development.

Series Learning Outcomes

By the end of this Series, learners should be able to:

- **SLO 1** define money, describe its essential characteristics, and explain its core functions in economic activity.
- **SLO 2** distinguish between different types of money (commodity, fiat, fiduciary, electronic) and evaluate their roles in modern economies.
- **SLO 3** explain the structure of the banking system, including the roles of central banks, commercial banks, and development banks.
- **SLO 4** analyse the functions of commercial banks in deposit mobilisation, lending, and payment services.
- **SLO 5** evaluate the role of the central bank in maintaining monetary stability through regulation of money supply, inflation control, and interest rate management.
- **SLO 6** assess the importance of regulation and supervision in ensuring the stability and efficiency of the banking system.
- **SLO 7** identify and describe the functions of non-bank financial institutions such as insurance companies, pension funds, and microfinance organisations.

Part 1: Nature and Functions of Money

3.1.1 Definition and Characteristics of Money

Money is anything that is generally accepted as a medium of exchange and serves as a measure of value. For an item to function as money, it must possess certain characteristics: durability, portability, divisibility, uniformity, limited supply, and acceptability.

Example: Paper currency and coins are widely accepted because they meet these characteristics, unlike perishable goods such as yams or tomatoes.

In-text question (ITQ): One key characteristic of money is that it must be ________, meaning it can withstand wear and tear.

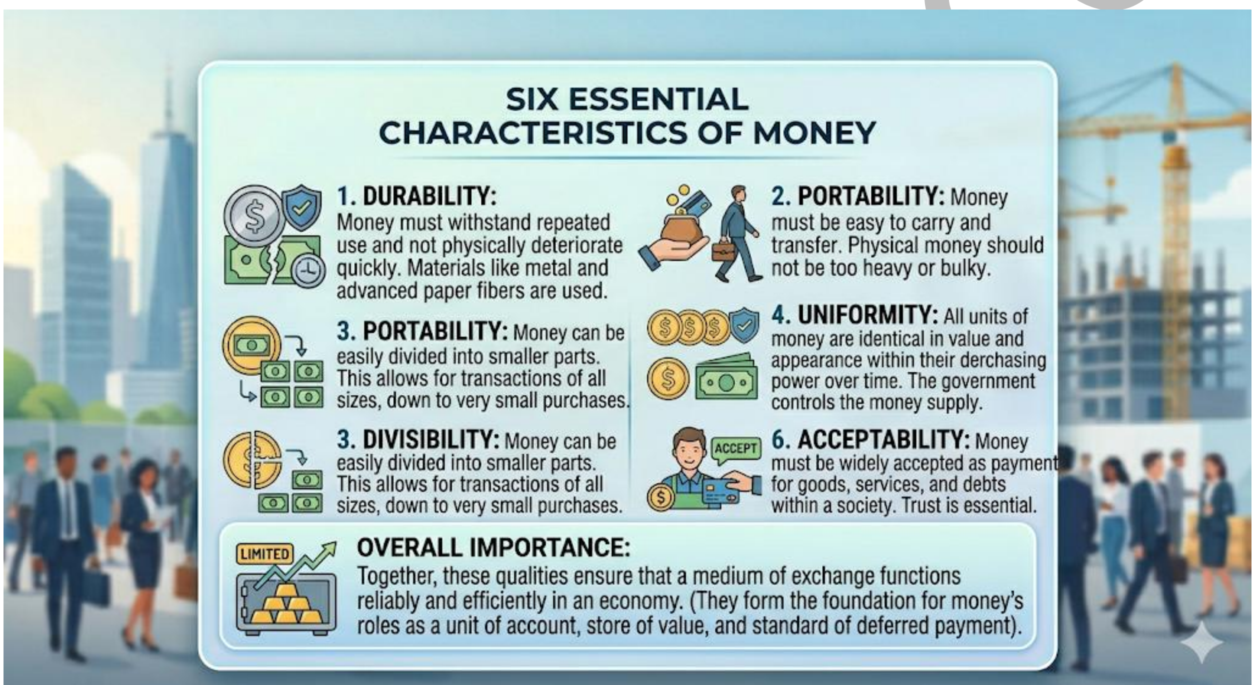


***Figure 3.1 Placeholder:** Illustration of characteristics of money.* Caption: Characteristics of money in modern economies

3.1.2 Functions of Money in the Economy

Money performs four primary functions:

- **Medium of exchange:** Facilitates trade by eliminating the inefficiencies of barter.
- **Unit of account:** Provides a common measure for valuing goods and services.
- **Store of value:** Preserves purchasing power over time.
- **Standard of deferred payment:** Enables contracts and transactions to be settled in the future.

Example: Salaries paid in naira serve as a unit of account, while savings in a bank preserve value for future use.

In-text question (ITQ): When money is used to settle debts payable in the future, it serves as a ________.

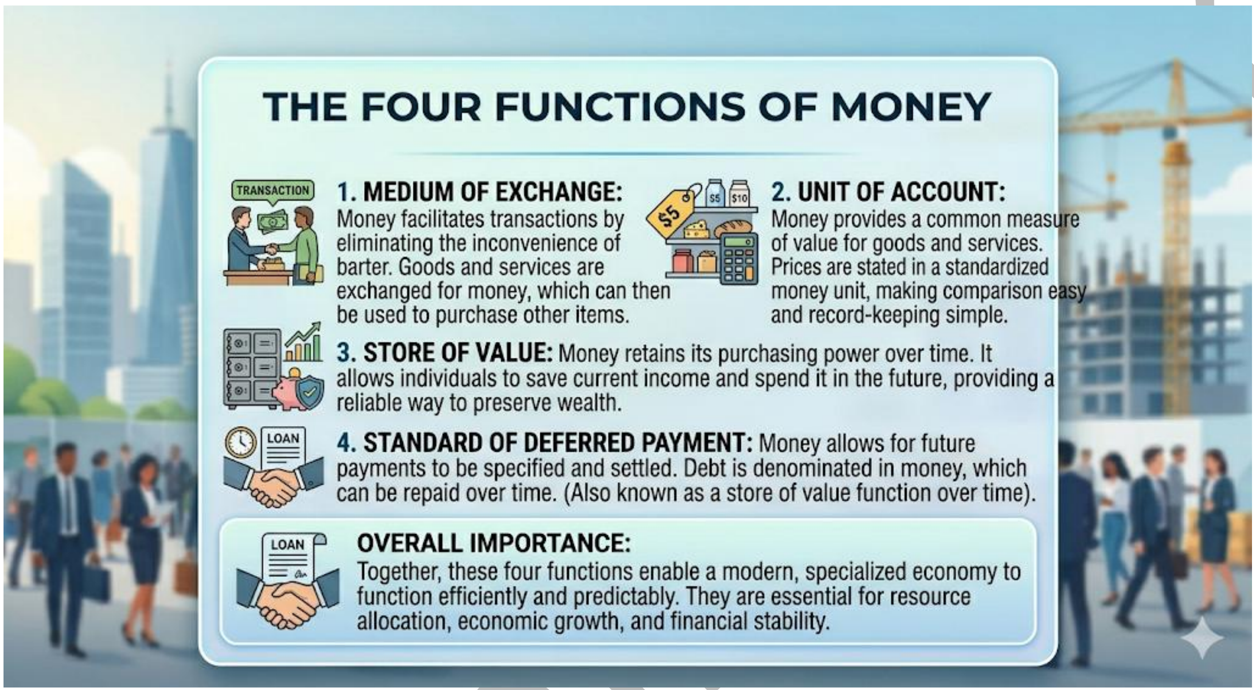


Figure 3.2 Placeholder: *Diagram showing four functions of money.* Caption: Functions of money in the economy.

3.1.3 Types of Money: Commodity, Fiat, and Electronic

- **Commodity money:** Items with intrinsic value, such as gold or salt.
- **Fiat money:** Currency issued by government decree, without intrinsic value.
- **Electronic money:** Digital forms of money, including debit cards, mobile payments, and cryptocurrencies.

Example: Bitcoin is a form of electronic money, while gold historically served as commodity money.

In-text question (ITQ): Currency notes issued by government decree are examples of ________ money.

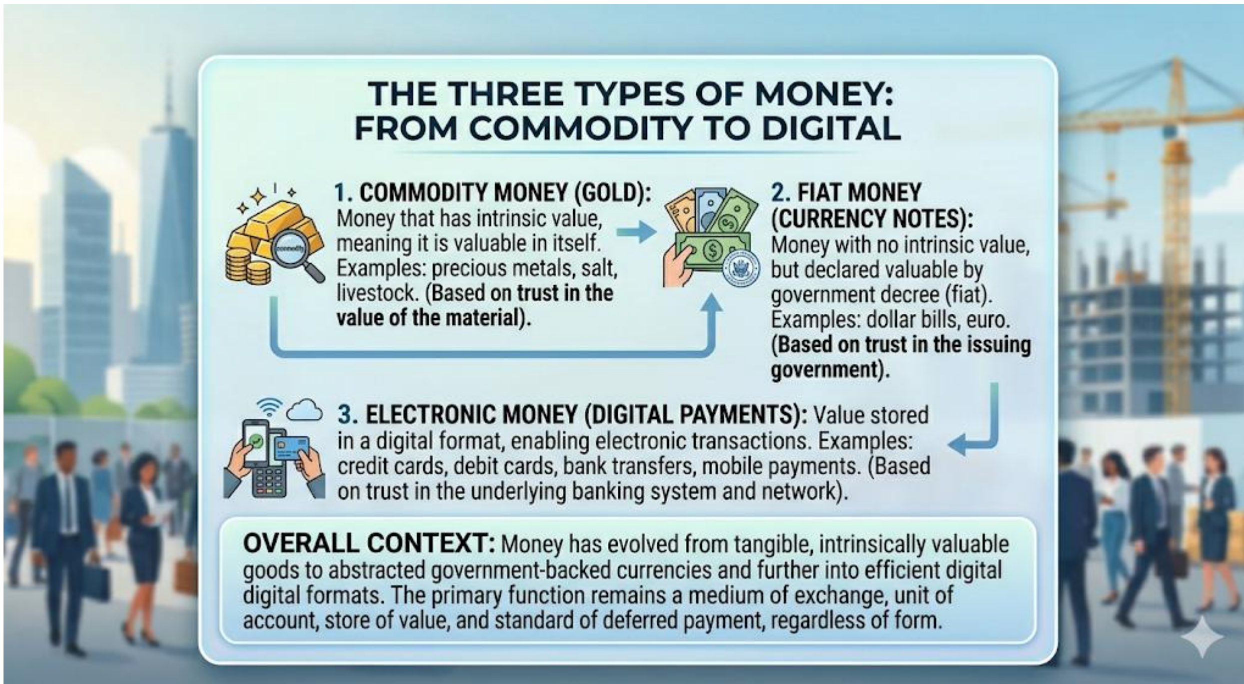


Figure 3.3 Placeholder: *Illustration of types of money.* Caption: Commodity, fiat, and electronic money.

3.1.4 Role of Money in Facilitating Exchange

Money simplifies transactions by acting as a common denominator, reducing transaction costs, and enabling specialisation and division of labour.

Example: A tailor can specialise in sewing clothes and use money earned to buy food, rather than bartering directly with a farmer.

In-text question (ITQ): Money reduces transaction costs and enables ________ in production.

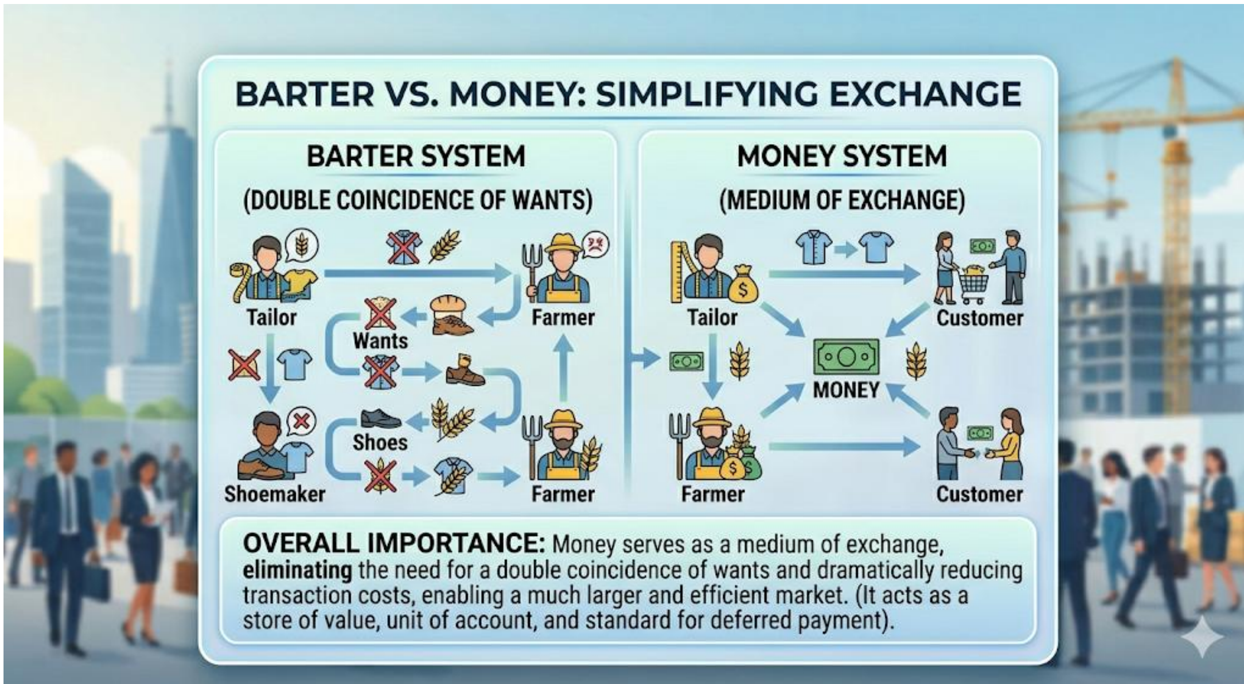


Figure 3.4 Placeholder: *Illustration of money facilitating exchange.* Caption: Role of money in facilitating exchange.

Pilot Questions 3.1

1. Define money and list its key characteristics.
2. State the four primary functions of money.
3. Distinguish between commodity money and fiat money.
4. Give two examples of electronic money.
5. Explain how money facilitates exchange compared to barter.

Part 2: The Banking System

3.2.1 Structure of the Banking System

The banking system is the network of institutions that provide financial services to individuals, businesses, and governments.

Key Components:

- **Central Bank**: The apex institution responsible for monetary policy, currency issuance, and financial stability (e.g., Central Bank of Nigeria).
- **Commercial Banks**: Institutions that accept deposits, provide loans, and facilitate payments.

- **Development Banks**: Specialised institutions that provide long-term financing for infrastructure and industrial projects.

ITQ: The apex institution responsible for monetary policy is the _______.

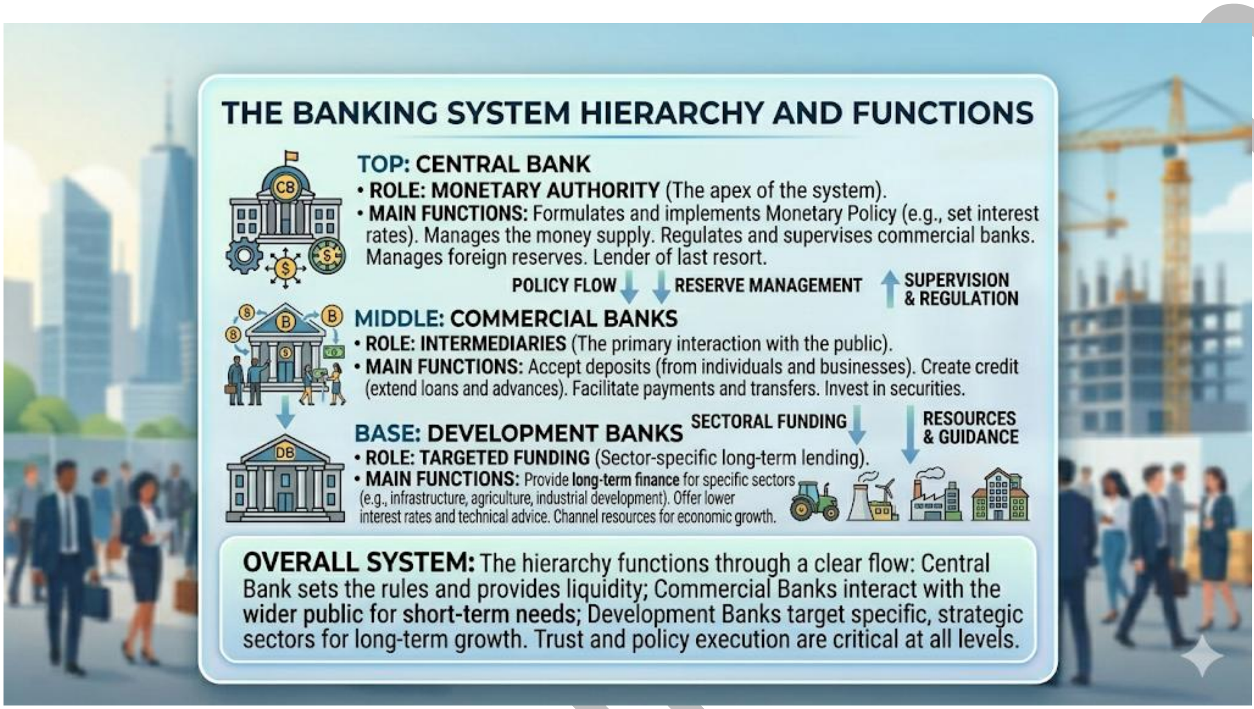


Figure 3.3: *Structure of the Banking System*

3.2.2 Functions of Commercial Banks

Commercial banks are the backbone of financial intermediation.

Major Functions:

- **Accepting Deposits**: Savings, current, and fixed deposits.
- **Lending and Credit Creation**: Loans to individuals and businesses; creation of money through lending.
- **Payment and Settlement Services**: Facilitating transfers, issuing cheques, debit cards, and online payments.
- **Financial Advisory Services**: Guiding customers on investments and savings.

ITQ: When banks provide loans, they also create _______ in the economy.

Service	Definition	Examples	Economic Impact
Deposits	The act of placing money into a financial institution (like a bank) for safekeeping, to earn interest, or for future use. The institution essentially borrows this money from the depositor.	Savings accounts, checking accounts (current accounts), certificates of deposit (CDs), money market accounts.	**Fuels Investment:** Deposited funds are the primary source for bank loans, which fund business expansion and infrastructure. **Facilitates Transactions:** Checking accounts are essential for the smooth flow of payments in the economy. **Preserves Wealth:** Provides a safe haven for savings, contributing to overall financial stability. **Impacts Money Supply:** The total amount of deposits influences the overall money supply and inflationary pressures.
Lending	The act of allowing an individual or entity (the borrower) to borrow	Personal loans, mortgages, car loans, business loans (lines of	**Drives Economic Growth:** Enables businesses to invest in new projects, hire

Service	Definition	Examples	Economic Impact
	money from a financial institution (the lender) with the agreement that it will be repaid, usually with interest, at a later date.	credit), credit cards, student loans.	workers, and expand operations, which boosts GDP. **Stimulates Consumer Spending:** Allows individuals to purchase large-ticket items (homes, cars, education) that they might not otherwise afford immediately. **Facilitates Resource Allocation:** Directs capital to where it is most needed and where it can generate the highest returns. **Can Lead to Instability:** Excessive lending can contribute to asset bubbles and financial crises if not properly managed.

Service	Definition	Examples	Economic Impact
Payment Services	A range of services that facilitate the transfer of funds between a payer (sender) and a payee (receiver). These services make transactions more efficient and secure than using physical cash.	Wire transfers, Automated Clearing House (ACH) transfers, credit card processing, debit card payments, online payment platforms (PayPal, Stripe), mobile wallets.	**Boosts Economic Efficiency:** Reduces transaction costs and the time it takes to settle payments, which increases overall economic productivity. **Expands Commerce:** Enables online and international transactions, opening up new markets for businesses. **Enhances Convenience:** Provides consumers with safe and easy ways to pay for goods and services. **Generates Transaction Data:** The data from these payments provides valuable insights into consumer behavior and economic trends.

Service	Definition	Examples	Economic Impact
Advisory Services	Expert financial and investment advice provided by financial institutions or independent advisors to individuals or businesses. These services help clients make informed decisions about their money.	Investment planning, retirement planning, estate planning, portfolio management, risk management advice, corporate financial advisory (e.g., on mergers and acquisitions).	**Improves Financial Well-being:** Helps individuals and families make better decisions about saving, investing, and retirement, leading to greater financial security. **Guides Corporate Strategy:** Advises businesses on major financial decisions (investments, financing, M&A) that can significantly impact their long-term growth and competitiveness. **Supports Market Efficiency:** Disseminates financial information and expertise, which helps capital markets operate more efficiently. **Mitigates Financial Risks:** Helps clients identify and manage various financial

Service	Definition	Examples	Economic Impact
			risks, contributing to individual and systemic stability.

Table 3.2: *Functions of Commercial Banks*

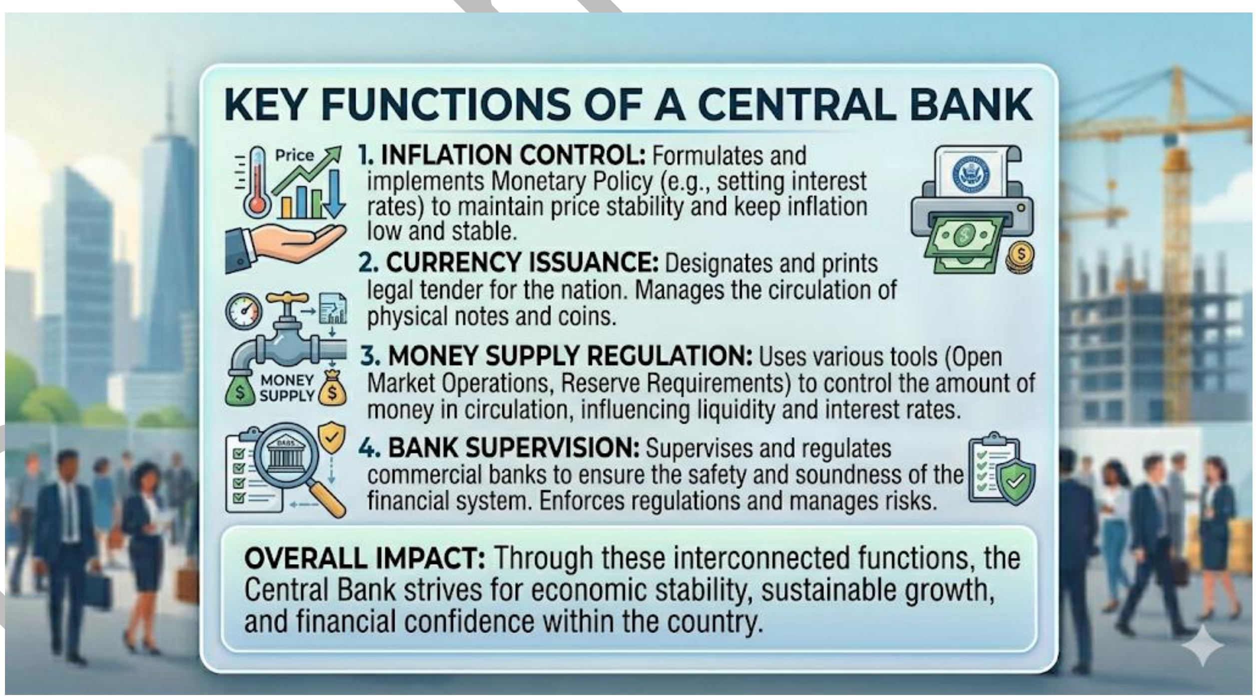
3.2.3 Role of Central Bank in Monetary Stability

The central bank ensures stability in the financial system.

Core Roles:

- **Controlling Inflation**: Adjusting interest rates and money supply.
- **Issuing Currency**: Ensuring trust in legal tender.
- **Regulating Money Supply**: Using tools like open market operations, reserve requirements.
- **Supervising Banks**: Ensuring compliance with regulations.

ITQ: The central bank controls inflation by adjusting _______ rates.



Box 3.2: *Central Bank Functions*

3.2.4 Regulation and Supervision of Banks

Banking regulation ensures stability and protects depositors.

Regulatory Measures:

- **Capital Adequacy Requirements**: Ensuring banks hold sufficient reserves.
- **Liquidity Ratios**: Maintaining ability to meet withdrawals.
- **Consumer Protection**: Safeguarding depositors and borrowers.
- **Anti-Money Laundering (AML)**: Preventing illegal financial activities.

ITQ: Regulations that ensure banks hold sufficient reserves are called _______ requirements.

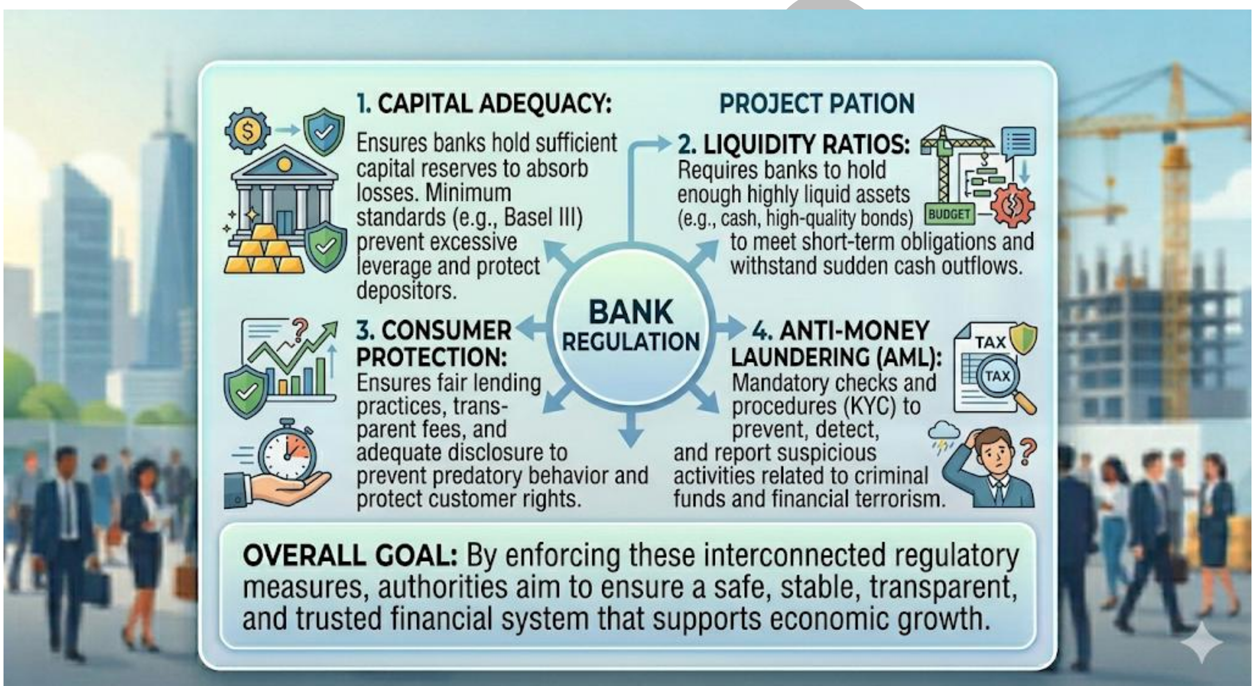


Figure 3.4: *Bank Regulation and Supervision*

Pilot Questions (Part 2)

1. The apex institution in the banking system is: a) Commercial bank b) Development bank c) Central bank d) Cooperative society
2. Accepting deposits is a function of: a) Central bank b) Commercial bank c) Development bank d) Insurance company
3. The central bank controls inflation by adjusting: a) Tax rates b) Interest rates c) Exchange rates d) Wages

4. Capital adequacy requirements ensure: a) Banks hold sufficient reserves b) Banks increase lending c) Banks reduce deposits d) Banks avoid supervision
5. Payment and settlement services are provided by: a) Development banks b) Commercial banks c) Central banks only d) Non-bank institutions

Part 3: Financial Institutions and Roles

3.3.1 Non-bank Financial Institutions

Non-bank financial institutions (NBFIs) complement banks by offering specialised financial services.

Examples:

- **Insurance Companies**: Provide risk coverage and compensation against losses.
- **Pension Funds**: Mobilise long-term savings for retirement security.
- **Microfinance Institutions**: Offer small loans and savings facilities to low-income groups.
- **Investment Firms**: Facilitate securities trading and portfolio management.

ITQ: Pension funds mobilise long-term savings for _______ security.

Industry	Definition	Examples	Role in Economy
Insurance	A contract (policy) in which an individual or entity receives financial protection or reimbursement against losses from an insurance company. The company pools clients' risks to make payments more affordable for the insured.	**Life Insurance:** Prudential Financial, MetLife **Property & Casualty Insurance:** State Farm, Liberty Mutual	**Risk Management:** Mitigates financial impact of unforeseen events for individuals and businesses. **Capital Accumulation:** Collects premiums and invests them, providing a significant source of long-term capital.

Industry	Definition	Examples	Role in Economy
		Health Insurance: UnitedHealth Group, Anthem **Reinsurance:** Swiss Re, Munich Re	**Investment:** Major institutional investors in stocks, bonds, and other assets. **Systemic Stability:** Helps prevent large-scale financial disruption from catastrophic events.
Pension Funds	A pool of assets forming an independent legal entity that are bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits.	**Defined Benefit (DB) Plans:** CalPERS (California Public Employees' Retirement System), NYSLRS (New York State and Local Retirement System) **Defined Contribution (DC) Plans:** 401(k) and 403(b) plans	**Retirement Security:** Provides steady income for individuals in their retirement years. **Long-Term Capital:** One of the largest sources of long-term investment capital globally.

Industry	Definition	Examples	Role in Economy
		(though often managed by other firms) **Sovereign Wealth Funds (with pension roles):** Norway's Government Pension Fund Global	**Investment:** Significant impact on financial markets through large-scale, long-term asset allocation. **Economic Stability:** Can help cushion market volatility due to their long investment horizon.
Microfinance	Financial services provided to low-income individuals or groups who typically lack access to traditional banking services. Includes microcredit, microsavings, and microinsurance.	**Grameen Bank (Bangladesh)** **Kiva (non-profit crowdfunding)** **SKS Microfinance (now Bharat**	**Financial Inclusion:** Extends financial services to unbanked and underbanked populations. **Poverty Reduction:** Helps small-scale entrepreneurs start or expand businesses, creating jobs and income.

Industry	Definition	Examples	Role in Economy
		Financial Inclusion - India) **Compartamos Banco (Mexico)**	**Economic Empowerment:** Particular focus on empowering women and marginalized groups. **Local Economic Development:** Stimulates economic activity in underserved communities.
Investment Firms	Entities that pool money from multiple investors to purchase securities and other assets. Includes asset management companies, mutual funds, hedge funds, and private equity firms.	**Asset Management:** BlackRock, Vanguard, Fidelity Investments **Private Equity:** Blackstone Group, KKR	**Capital Allocation:** Directs investment capital to productive businesses and projects. **Market Liquidity:** Enhances the smooth operation of financial markets through continuous buying and selling.

Industry	Definition	Examples	Role in Economy
		Hedge Funds: Bridgewater Associates, Citadel **Mutual Funds:** American Funds, T. Rowe Price	**Investment Opportunities:** Provides individual and institutional investors with access to diversified portfolios and professional management. **Price Discovery:** Plays a role in determining the market value of various assets.

Table 3.3: *Types of Non-bank Financial Institutions*

3.3.2 Financial Intermediation and Capital Formation

Financial institutions act as intermediaries between savers and borrowers.

Process:

- Collect savings from households.
- Channel funds into productive investments.
- Facilitate capital formation, which drives economic growth.

ITQ: Financial intermediation channels household savings into _______ investments.

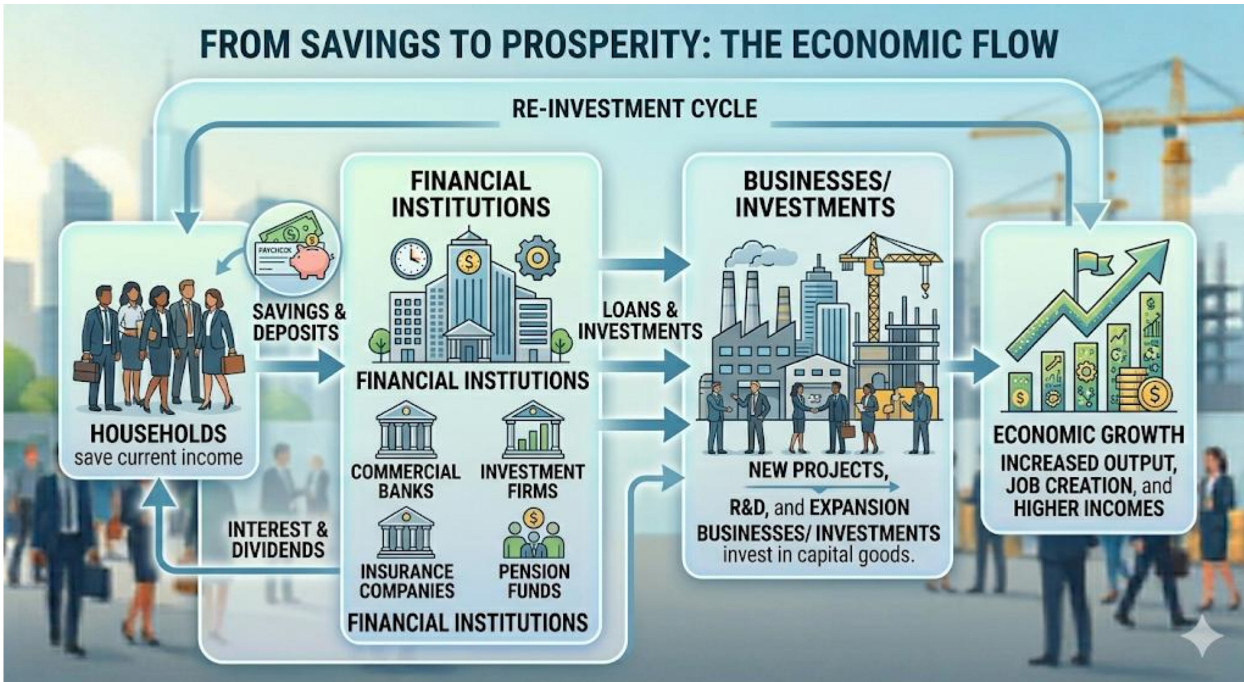


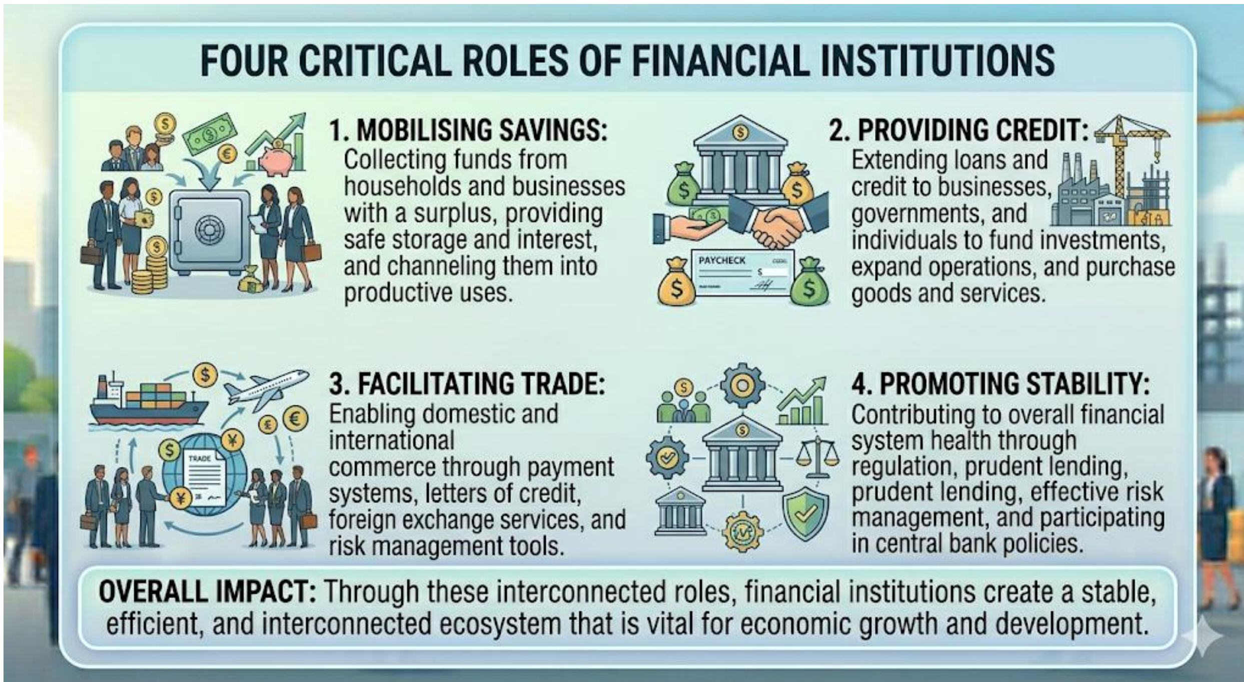
Figure 3.5: *Financial Intermediation Process*

3.3.3 Role of Financial Institutions in Economic Development

Financial institutions are critical for development:

- **Mobilising Savings**: Encouraging households to save.
- **Providing Credit**: Financing businesses and infrastructure.
- **Facilitating Trade**: Offering payment and settlement systems.
- **Promoting Stability**: Reducing risks through insurance and regulation.

ITQ: Financial institutions promote stability by reducing _______ through insurance.



Box 3.3: *Roles in Development*

3.3.4 Challenges Facing Financial Institutions

Modern financial institutions face several challenges:

- **Technological Change**: Digital banking, fintech, and cybersecurity risks.
- **Regulatory Compliance**: Meeting capital adequacy and anti-money laundering standards.
- **Globalisation**: Increased competition and exposure to international shocks.
- **Economic Instability**: Inflation, recession, and political risks.

ITQ: One major challenge facing financial institutions today is _______ change.

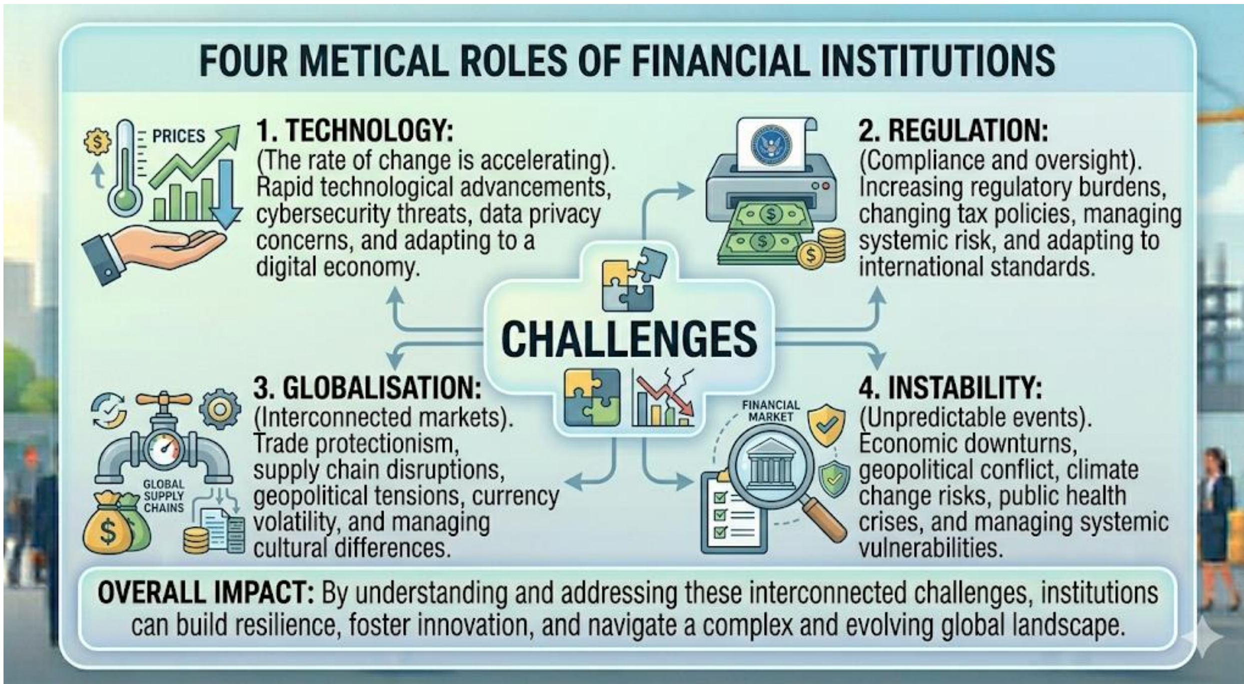


Figure 3.6: *Challenges Facing Financial Institutions*

Pilot Questions (Part 3)

1. Insurance companies are examples of: a) Commercial banks b) Non-bank financial institutions c) Central banks d) Development banks
2. Financial intermediation channels savings into: a) Consumption b) Productive investments c) Imports d) Government revenue
3. Pension funds contribute to: a) Short-term lending b) Retirement security c) Currency issuance d) Inflation control
4. Financial institutions promote stability by: a) Increasing inflation b) Reducing risks through insurance c) Eliminating savings d) Avoiding regulation
5. A major challenge facing financial institutions today is: a) Technological change b) Lack of deposits c) Elimination of credit d) Reduced globalisation

Series Summary

This Series explored the foundations of money, the structure of the banking system, and the broader roles of financial institutions in economic development. We began by defining money, examining its characteristics, functions, and types, and highlighting its central role in modern economies. We then analysed the banking system, focusing on the functions of commercial banks, the stabilising role of central banks, and the importance of regulation and supervision. Finally, we broadened the scope to non-bank financial institutions, explaining their contributions to financial intermediation, capital formation, and economic development, while also addressing the challenges they face in a rapidly changing global environment. By the end of this Series, learners should understand how money and financial institutions underpin economic activity and stability.

Glossary of Terms

- **Money**: Anything generally accepted as a medium of exchange and repayment of debts.
- **Fiat Money**: Currency declared legal tender by government without intrinsic value.
- **Commodity Money**: Money with intrinsic value (e.g., gold, silver).
- **Fiduciary Money**: Money based on trust (e.g., cheques, promissory notes).
- **Electronic Money**: Digital forms of money used in online transactions.
- **Central Bank**: Apex institution responsible for monetary policy and financial stability.
- **Commercial Bank**: Institution that accepts deposits, provides loans, and facilitates payments.
- **Development Bank**: Provides long-term financing for infrastructure and industrial projects.
- **Financial Intermediation**: Process of channeling savings into investments through financial institutions.
- **Capital Formation**: Accumulation of capital goods to increase productive capacity.
- **Non-bank Financial Institutions (NBFIs)**: Institutions like insurance companies, pension funds, and microfinance organisations that provide specialised financial services.
- **Inflation Control**: Central bank's role in stabilising prices by adjusting interest rates and money supply.
- **Capital Adequacy**: Regulatory requirement ensuring banks hold sufficient reserves.
- **Globalisation**: Integration of financial markets across borders, increasing competition and exposure to shocks.

Concept Check Questions [Series 3]

Objective Questions

1. One key characteristic of money is that it must be ________, meaning it can withstand wear and tear. (Linked to SLO 1)
2. When money is used to settle debts payable in the future, it serves as a ________. (Linked to SLO 1)
3. Currency notes issued by government decree are examples of ________ money. (Linked to SLO 2)
4. Money reduces transaction costs and enables ________ in production. (Linked to SLO 1)

5. The apex institution responsible for monetary policy is the _______. (Linked to SLO 3)
6. When banks provide loans, they also create _______ in the economy. (Linked to SLO 4)
7. The central bank controls inflation by adjusting _______ rates. (Linked to SLO 5)
8. Regulations that ensure banks hold sufficient reserves are called _______ requirements. (Linked to SLO 6)
9. Pension funds mobilise long-term savings for _______ security. (Linked to SLO 7)
10. Financial intermediation channels household savings into _______ investments. (Linked to SLO 7)

Short-Answer Questions

11. Define money and list its key characteristics. (Linked to SLO 1)

12. State and explain the four primary functions of money with examples. (Linked to SLO 1)

13. Distinguish between commodity money and fiat money with examples. (Linked to SLO 2)

14. Give two examples of electronic money. (Linked to SLO 2)

15. Explain how money facilitates exchange compared to barter. (Linked to SLO 1)

16. Describe the structure of the banking system, identifying the roles of central, commercial, and development banks. (Linked to SLO 3)

17. Explain how commercial banks create credit in the economy. (Linked to SLO 4)

18. Identify three functions of the central bank in maintaining monetary stability. (Linked to SLO 5)

19. List three examples of non-bank financial institutions and explain their roles. (Linked to SLO 7)

20. Identify two major challenges facing financial institutions today. (Linked to SLO 7)

Long-Answer Questions

21. Analyse the importance of money in modern economies, focusing on its functions and types. (Linked to SLO 1, SLO 2)

22. Evaluate the functions of commercial banks in deposit mobilisation, lending, and payment services, and their impact on economic growth. (Linked to SLO 4)

23. Discuss the role of the central bank in maintaining monetary stability, including tools used to regulate money supply and inflation. (Linked to SLO 5, SLO 6)

24. Assess the contributions of non-bank financial institutions to capital formation and economic development, and explain the challenges they face. (Linked to SLO 7)

Answers to Concept Check Questions

Objective Questions

1. Durable.
2. Standard of deferred payment.
3. Fiat.
4. Specialisation.
5. Central bank.
6. Credit.
7. Interest.
8. Capital adequacy.
9. Retirement.
10. Productive.

Short-Answer Questions

11. Money is anything generally accepted as a medium of exchange and measure of value. Characteristics: durability, portability, divisibility, uniformity, limited supply, acceptability.

12. Functions: medium of exchange (facilitates trade), unit of account (common measure), store of value (preserves purchasing power), standard of deferred payment (settles future debts).

13. Commodity money has intrinsic value (e.g., gold), fiat money is issued by government decree (e.g., currency notes).

14. Examples: debit cards, mobile payments, cryptocurrencies.

15. Money simplifies transactions, reduces costs, and enables specialisation, unlike barter which requires double coincidence of wants.

16. Structure: central bank (monetary policy, currency issuance), commercial banks (deposits, loans, payments), development banks (long-term financing).

17. By lending, commercial banks create deposits, expanding money supply and credit in the economy.

18. Functions: controlling inflation, issuing currency, regulating money supply, supervising banks.

19. Insurance companies (risk coverage), pension funds (retirement savings), microfinance institutions (financial inclusion).

20. Challenges: technological change (digitalisation, cybersecurity), globalisation (competition, shocks), regulatory compliance.

Long-Answer Questions

Q21: Importance of money

- *Basic response:* Money facilitates exchange, acts as a store of value, unit of account, and standard of deferred payment. Types include commodity, fiat, fiduciary, and electronic.
- *Value-added response:* Beyond these, electronic money and digital currencies are reshaping economies, enabling faster transactions and financial inclusion. The evolution of money reflects technological and institutional changes in modern economies.

Q22: Functions of commercial banks

- *Basic response:* Commercial banks accept deposits, provide loans, and facilitate payments, supporting economic activity.
- *Value-added response:* They also drive growth by mobilising savings, financing businesses, and enabling trade. However, excessive lending can cause instability, highlighting the need for regulation.

Q23: Role of central bank

- *Basic response:* The central bank maintains stability by controlling inflation, regulating money supply, and supervising banks.
- *Value-added response:* Tools include open market operations, reserve requirements, and interest rate adjustments. Central banks also act as lenders of last resort, ensuring systemic stability during crises.

Q24: Contributions of non-bank financial institutions

- *Basic response:* NBFIs mobilise savings, provide insurance, and support retirement security, contributing to capital formation.
- *Value-added response:* They also enhance financial inclusion and stability, but face challenges such as technological disruption, regulatory compliance, and global competition. Their role is increasingly vital in diversifying financial systems and supporting sustainable development.

Answers to Pilot Questions]

Part 3.1: Nature and Functions of Money

- Money is anything generally accepted as a medium of exchange and measure of value; key characteristics include durability, portability, divisibility, uniformity, limited supply, and acceptability.
- Medium of exchange, unit of account, store of value, and standard of deferred payment.
- Commodity money has intrinsic value (e.g., gold), while fiat money is issued by government decree (e.g., currency notes).
- Examples: debit cards, mobile payments, cryptocurrencies.
- Money simplifies transactions, reduces costs, and enables specialisation compared to barter which requires double coincidence of wants.

Part 3.2: The Banking System

- Central bank.
- Commercial bank.
- Interest rates.
- Banks hold sufficient reserves.
- Commercial banks.

Part 3.3: Financial Institutions and Roles

- Non-bank financial institutions.
- Productive investments.
- Retirement security.
- Reducing risks through insurance.
- Technological change.

References and Attributions

Course Document ECO 204: *Introduction to Macroeconomics II*. Internal university course outline.

Core Texts

- Mishkin, F. S. (2019). *The Economics of Money, Banking, and Financial Markets* (12th ed.). New York: Pearson.
- Hubbard, R. G., & O'Brien, A. P. (2021). *Economics* (7th ed.). Boston: Pearson.

- Levine, R. (2005). Finance and Growth: Theory and Evidence. In *Handbook of Economic Growth* (Vol. 1, pp. 865–934). Elsevier.

Open Educational Resources (OERs)

- OpenStax. (2016). *Principles of Economics*. Houston: Rice University. Available under Creative Commons Attribution Licence.
- CORE Economics Project. (2022). *The Economy: Economics for a Changing World*. London: CORE Project. Available under Creative Commons Attribution Licence.
- Khan Academy. (2023). *Money and Banking Lessons*. Available under Creative Commons Attribution Licence.

Illustrations and AI Prompts All figures, tables, and boxes in Series 3 were either conceptual diagrams or AI-generated placeholders. Attribution notes are provided below:

- *Figure 3.1: Characteristics of Money* Prompt: "Create a circular infographic with 'Money' at the centre, surrounded by six labelled segments: acceptability, durability, divisibility, portability, uniformity, stability of value." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Box 3.1: Functions of Money* Prompt: "Create a text box summarising the four functions of money with short definitions and one example each." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Table 3.1: Types of Money* Prompt: "Generate a table with four rows: commodity, fiat, fiduciary, electronic money. Columns: definition, examples, key features." Attribution: AI-generated table using Microsoft Copilot tools.
- *Figure 3.2: Role of Money in Modern Economies* Prompt: "Create a flow diagram with 'Money' at the centre, arrows pointing to trade, investment, government policy, and economic growth." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Figure 3.3: Structure of the Banking System* Prompt: "Create a hierarchical diagram showing the central bank at the top, commercial banks in the middle, and development banks at the base, with arrows indicating their functions." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 3.2: Functions of Commercial Banks* Prompt: "Generate a table with four rows: deposits, lending, payment services, advisory services. Columns: definition, examples, economic impact." Attribution: AI-generated table using Microsoft Copilot tools.
- *Box 3.2: Central Bank Functions* Prompt: "Create a text box listing central bank functions: inflation control, currency issuance, money supply regulation, bank supervision." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 3.4: Bank Regulation and Supervision* Prompt: "Create a diagram showing regulatory measures: capital adequacy, liquidity ratios, consumer protection, AML,

connected to a central node labelled ‘Bank Regulation’.” Attribution: AI-generated illustration using Microsoft Copilot graphic tools.

- *Table 3.3: Types of Non-bank Financial Institutions* Prompt: “Generate a table with four rows: insurance, pension funds, microfinance, investment firms. Columns: definition, examples, role in economy.” Attribution: AI-generated table using Microsoft Copilot tools.
- *Figure 3.5: Financial Intermediation Process* Prompt: “Create a flow diagram showing households → financial institutions → businesses/investments → economic growth.” Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Box 3.3: Roles in Development* Prompt: “Create a text box listing four roles of financial institutions: mobilising savings, providing credit, facilitating trade, promoting stability.” Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 3.6: Challenges Facing Financial Institutions* Prompt: “Create a diagram with a central node labelled ‘Challenges’ and branches for technology, regulation, globalisation, and instability.” Attribution: AI-generated illustration using Microsoft Copilot graphic tools.

Course code: ECO 204

Course title: Introduction to Macroeconomics ll

Course credit load: 2 Units

Series 1: Government Functions and Economic Policies

Series 2: Fiscal Multipliers and Taxation Models

Series 3: Money, Banking System, and Financial Roles

Series 4: Income and Trade Policy Measures

Series 5: External Sector: International Trade and Exchange Rates

Suggested Outline

Part 1. Foundations and Instruments of Policy

- Definition and scope of income policy
- Objectives of trade policy in different economies
- Wage controls and minimum wage legislation
- Taxation, redistribution, subsidies, and social transfers

Part 2. Trade Policy Tools

- Tariffs: types, objectives, and effects
- Quotas and import restrictions
- Export promotion measures (subsidies, incentives)

Part 3. Policy Impacts and Contemporary Issues

- Effects on domestic income distribution
- Balance of payments considerations
- Employment and inflation outcomes
- Globalization and trade liberalization
- Regional trade agreements (AfCFTA, ECOWAS)
- Policy challenges in balancing growth and equity

Part 4 Contemporary Issues And Reforms

Challenges of globalization

Regional integration and reforms

Policy reforms for equity and growth

Future directions in trade and income policy

Introduction

Trade and income policies are central to how governments shape economic outcomes, influence welfare, and manage international relations. In today's interconnected world, decisions about tariffs, subsidies, and redistribution measures directly affect not only domestic income distribution but also a nation's competitiveness in global markets. Understanding these policies equips learners with the tools to analyse how economies balance growth, equity, and stability, making this Series a vital component of ECO 204.

The aim of this Series is to provide you with a clear understanding of the instruments of income and trade policy, and to enable you to critically assess their impacts on economic performance and social welfare. By the end, you should be able to explain how these measures function, evaluate their effectiveness, and appreciate their role in shaping both national and international economic outcomes.

We shall commence this Series by examining the foundations and instruments of policy, focusing on income measures such as wage controls, taxation, and subsidies. Next, we will move on to trade policy tools, including tariffs, quotas, and export promotion strategies. Finally, we will wrap up by exploring policy impacts and contemporary issues, considering how these measures influence income distribution, employment, and trade relations, while also addressing challenges posed by globalisation and regional agreements.

Series Learning Outcomes

Upon completing this Series, you should be able to:

SLO 2.1 define the key concepts underpinning income and trade policy, including their objectives and scope,

SLO 2.2 explain the main instruments of income policy such as wage controls, taxation, and subsidies,

SLO 2.3 describe the principal trade policy tools including tariffs, quotas, and export promotion measures, and

SLO 2.4 analyse the impacts of income and trade policy measures on distribution, employment, and international trade relations, with reference to contemporary issues such as globalisation and regional agreements.

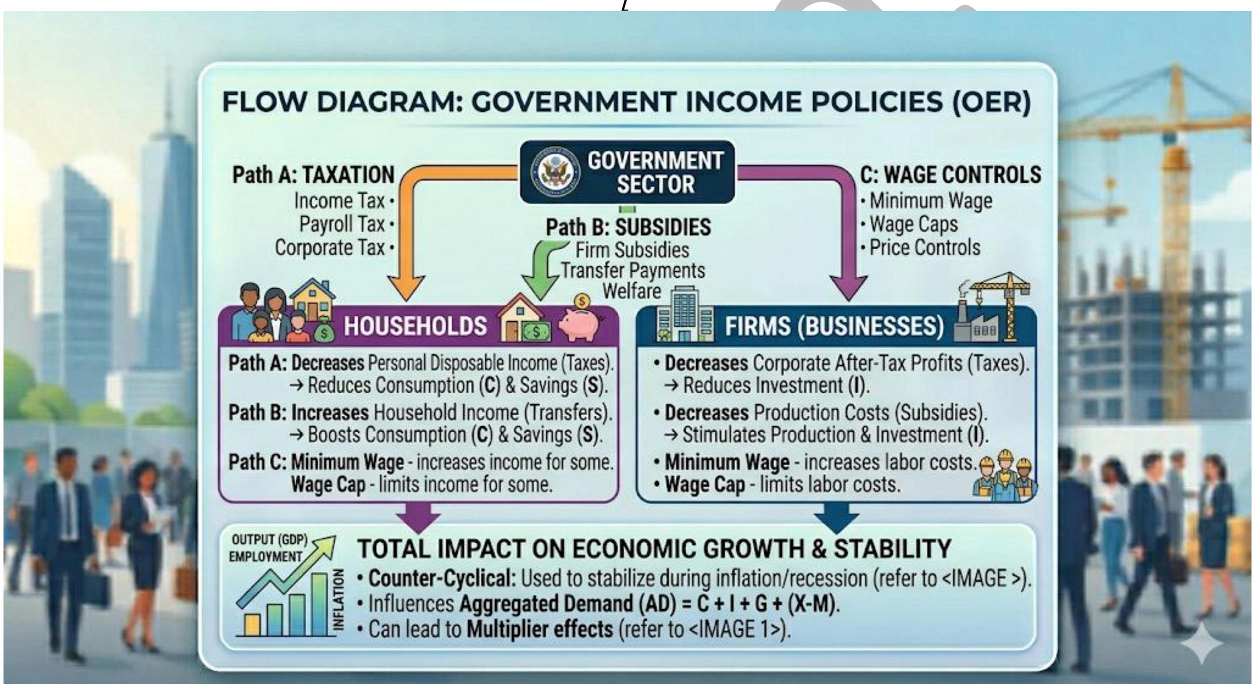
2.1 Foundations And Instruments Of Policy

2.1.1 Definition and scope of income policy

Income policy refers to deliberate government measures aimed at influencing the distribution of income within an economy. It encompasses strategies such as wage controls, taxation, and subsidies, all designed to promote fairness, stability, and growth. The scope of income policy extends from ensuring equitable wages to addressing poverty and inequality.

Fill in the blank: Income policy is a set of government measures designed to influence the ______ of income within an economy.

[



] Short description: Diagram showing the flow of income policy measures from government to households and firms. Caption: Figure 2.1 Flow of income policy measures

2.1.2 Objectives of trade policy in different economies

Trade policy is the set of laws, regulations, and practices that govern a country's trade with other nations. Its objectives vary depending on whether an economy is developed or developing. For developed economies, trade policy often focuses on protecting industries, maintaining competitiveness, and securing markets abroad. For developing economies, it emphasises promoting exports, safeguarding infant industries, and achieving balance of payments stability.

Fill in the blank: In developing economies, trade policy often aims to protect ______ industries and promote exports.

[

Image of cargo ships and containers symbolising international trade.

Plate 2.1 International trade flows

2.1.3 Wage controls and minimum wage legislation

Wage controls are government interventions that set limits on wage increases to prevent inflationary pressures. **Minimum wage legislation** establishes the lowest legal wage that employers can pay workers, ensuring a basic standard of living. These instruments are crucial for balancing fairness with economic stability.

Fill in the blank: Minimum wage legislation sets the ______ legal wage that employers can pay workers.

[

Country	Statutory Wage Rate (2026)	Typical Wage Structure	Est. Monthly Wage (Local Currency)	Est. Monthly Wage (USD)	Effective Date
Nigeria	₦70,000 / month	Monthly gross salary (including basic pay and allowances)	₦70,000	~$40 - $50	July 2024
Ghana	GH₵21.77 / day	National daily base rate; typically paid monthly.	~GH₵653	~$40 - $55	Jan 1, 2026
United Kingdom	£12.71 / hour	Hourly National Living Wage (for workers aged 21+)	~£2,203	~$2,700 - $2,800	April 1, 2026

Table 2.1 Examples of minimum wage levels in selected countries

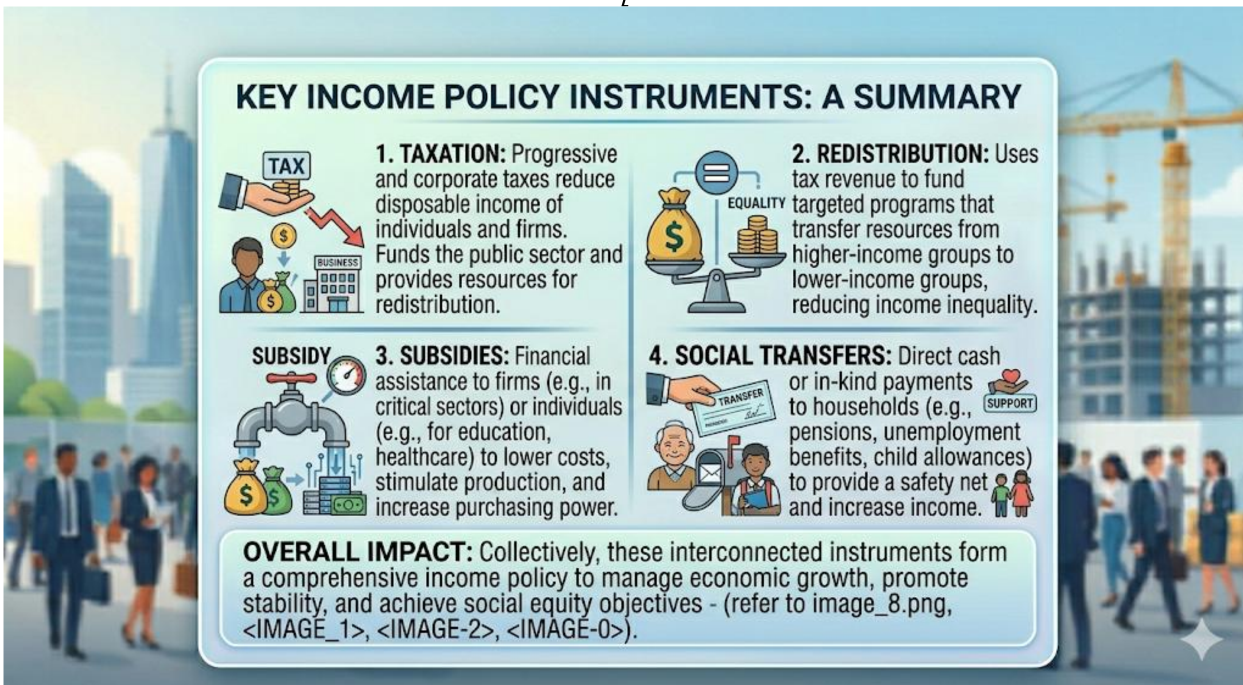
Comparative table showing minimum wage levels in Nigeria, Ghana, and the UK.

2.1.4 Taxation, redistribution, subsidies, and social transfers

Taxation is the compulsory levy imposed by governments to raise revenue. **Redistribution** refers to reallocating income through progressive taxes and welfare programmes to reduce inequality. **Subsidies** are financial supports provided to industries or households to lower costs or encourage production. **Social transfers** include pensions, unemployment benefits, and child allowances, which directly support vulnerable groups. Together, these instruments form the backbone of income policy.

Fill in the blank: Redistribution is achieved through progressive taxes and ______ programmes that reduce inequality.

[



Box 2.1 Selected instruments of income policy

Box summarising taxation, redistribution, subsidies, and social transfers.

Pilot Questions

1. Income policy is designed to influence: a) Trade flows b) Distribution of income c) Currency exchange d) Industrial output
2. Protecting infant industries is an objective of: a) Developed economies b) Developing economies c) Both developed and developing economies d) None of the above
3. Minimum wage legislation establishes: a) The highest wage employers can pay b) The lowest legal wage employers can pay c) The average wage in the economy d) The wage ceiling for executives
4. Redistribution is achieved through: a) Progressive taxation and welfare programmes b) Tariffs and quotas c) Wage controls only d) Export promotion measures
5. Subsidies are financial supports provided to: a) Governments only b) Industries or households c) Banks exclusively d) International organisations

2.2 Trade Policy Tools

2.2.1 Tariffs: types, objectives, and effects

Tariffs are taxes imposed on imported goods. They serve multiple purposes, including raising government revenue, protecting domestic industries, and influencing trade balances.

Fill in the blank: A tariff that is charged as a percentage of the value of imported goods is called an ______ tariff.

[

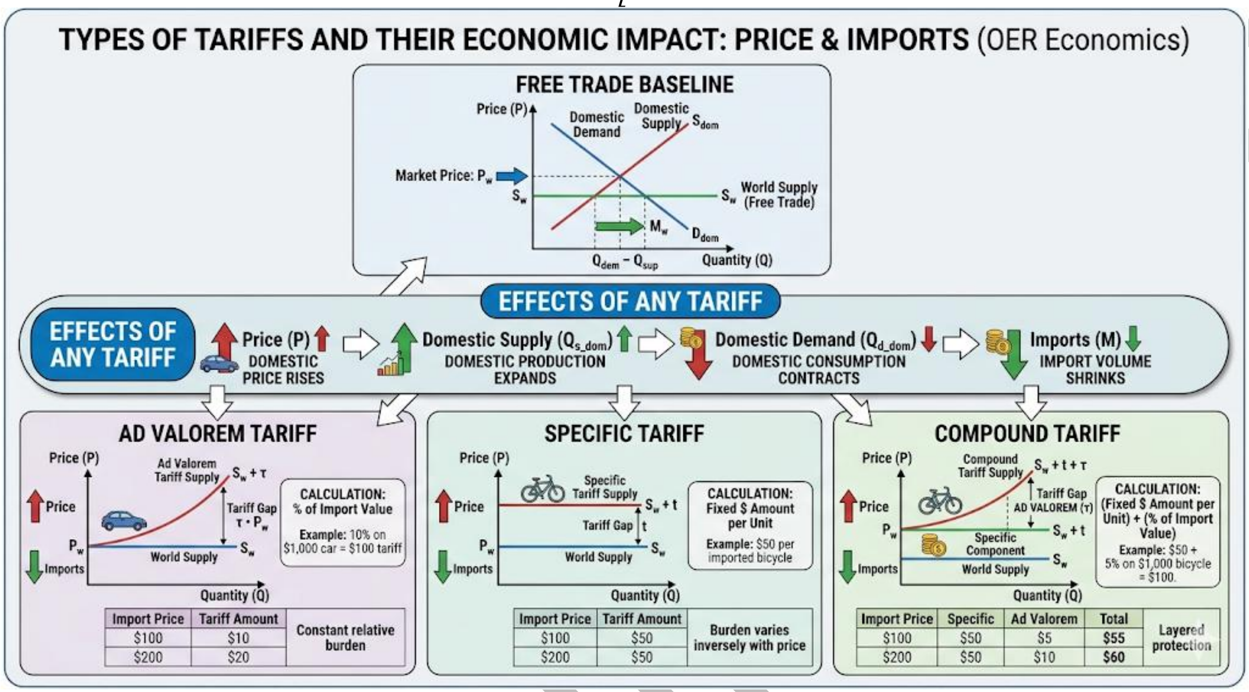


Diagram showing ad valorem, specific, and compound tariffs with arrows indicating their impact on prices and imports.

Figure 2.2 Types of tariffs and their effects

2.2.2 Quotas and import restrictions

Quotas are limits on the quantity of goods that can be imported during a specific period. They are used to protect domestic industries and manage trade balances. Import restrictions may also include licensing requirements or outright bans on certain goods.

Fill in the blank: A restriction that sets a maximum quantity of goods allowed into a country is called a ______.

[

Item	Type of Restriction	Purpose
Sugar	**Import Quota** (specifically an absolute quota or tariff-rate quota)	To protect domestic sugar producers from lower-priced foreign competition, stabilizing their income and market share. It can also be used to manage domestic supply and maintain certain price levels.

Item	Type of Restriction	Purpose
Textiles and Clothing	**Import Quota** (historically common, now largely phased out under WTO rules but some still exist under specific trade agreements)	To protect the domestic textile and apparel industry, which is often labor-intensive, from cheaper imports from developing countries with lower labor costs. This aims to preserve jobs and production in the sector.
Banned Goods (e.g., specific hazardous materials, ozone-depleting substances, endangered species products)	**Import Ban / Prohibited Import**	To protect public health, safety, and the environment. This prevents the entry of dangerous substances or goods that could cause harm, spread disease, or contribute to environmental degradation (e.g., banning asbestos to prevent health risks, or hazardous chemicals to protect against pollution).
Hazardous Materials (not completely banned, but tightly controlled)	**Non-Tariff Restriction / Strict Regulation** (e.g., specialized licenses, permits, labeling requirements, packaging standards)	To ensure that hazardous materials are imported, transported, handled, and used safely, minimizing the risk of accidents, environmental damage, or health hazards. Controls verify that importers meet safety standards and have the necessary expertise and facilities to manage the risks associated with these materials.

Table 2.2 Examples of import quotas and restrictions

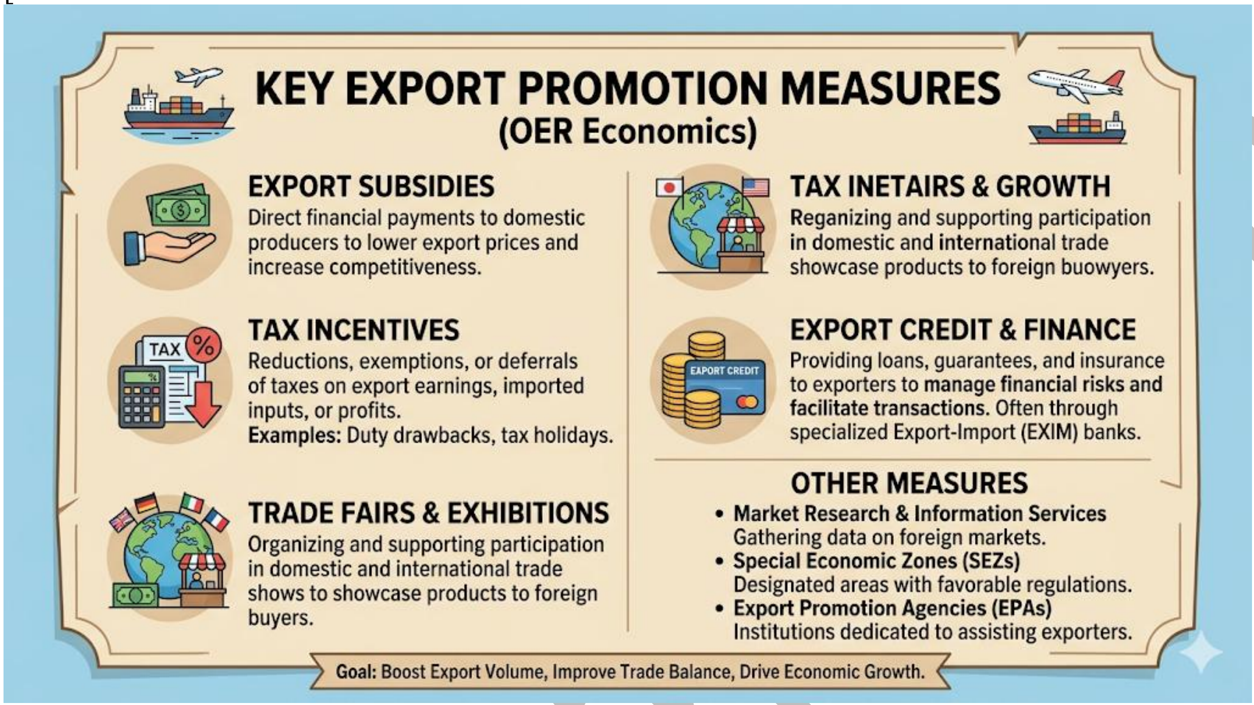
Comparative table listing examples of quotas (e.g., sugar, textiles) and restrictions (e.g., banned goods like hazardous materials).

2.2.3 Export promotion measures

Export promotion measures are policies designed to encourage domestic producers to sell goods abroad. These measures aim to increase foreign exchange earnings and strengthen competitiveness.

Fill in the blank: Financial support provided by governments to encourage firms to sell goods abroad is called an ______.

[



Box 2.2 Common export promotion measures

Box summarising export promotion measures such as subsidies, tax incentives, trade fairs, and credit facilities.

Pilot Questions

1. A tariff charged as a percentage of the value of imported goods is: a) Specific tariff b) Ad valorem tariff c) Compound tariff d) Import quota
2. A restriction that sets a maximum quantity of goods allowed into a country is: a) Tariff b) Quota c) Subsidy d) Tax incentive
3. Export subsidies are designed to: a) Discourage exports b) Encourage exports c) Increase imports d) Reduce domestic production
4. Licensing requirements for imports are examples of: a) Tariffs b) Quotas c) Import restrictions d) Export promotion measures
5. Tax incentives for export-oriented firms are a form of: a) Import restriction b) Export promotion measure c) Tariff policy d) Quota system

2.3 Policy Impacts And Contemporary Issues

2.3.1 Effects on domestic income distribution

Income and trade policies directly affect how wealth is shared among different groups in society. Tariffs may protect local jobs but raise consumer prices, while subsidies can support vulnerable households. Redistribution through taxation and transfers helps reduce inequality.

Fill in the blank: Redistribution through taxation and transfers helps to reduce ______ within society.

[

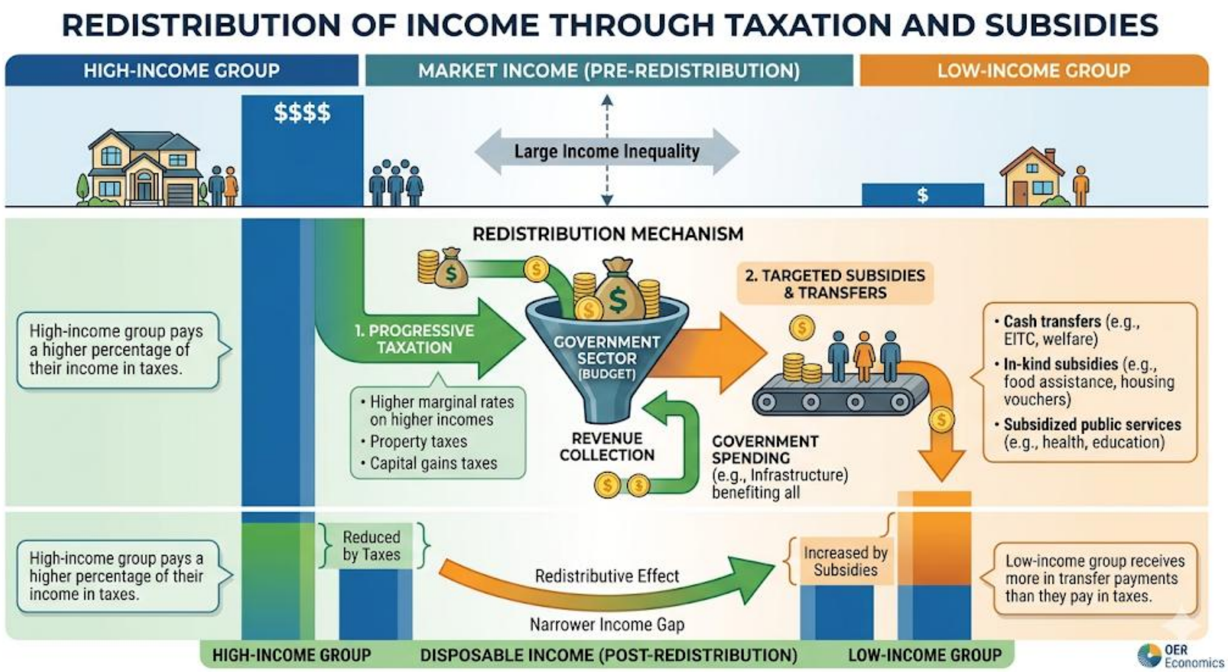


Diagram showing how taxation and subsidies redistribute income between high-income and low-income groups.

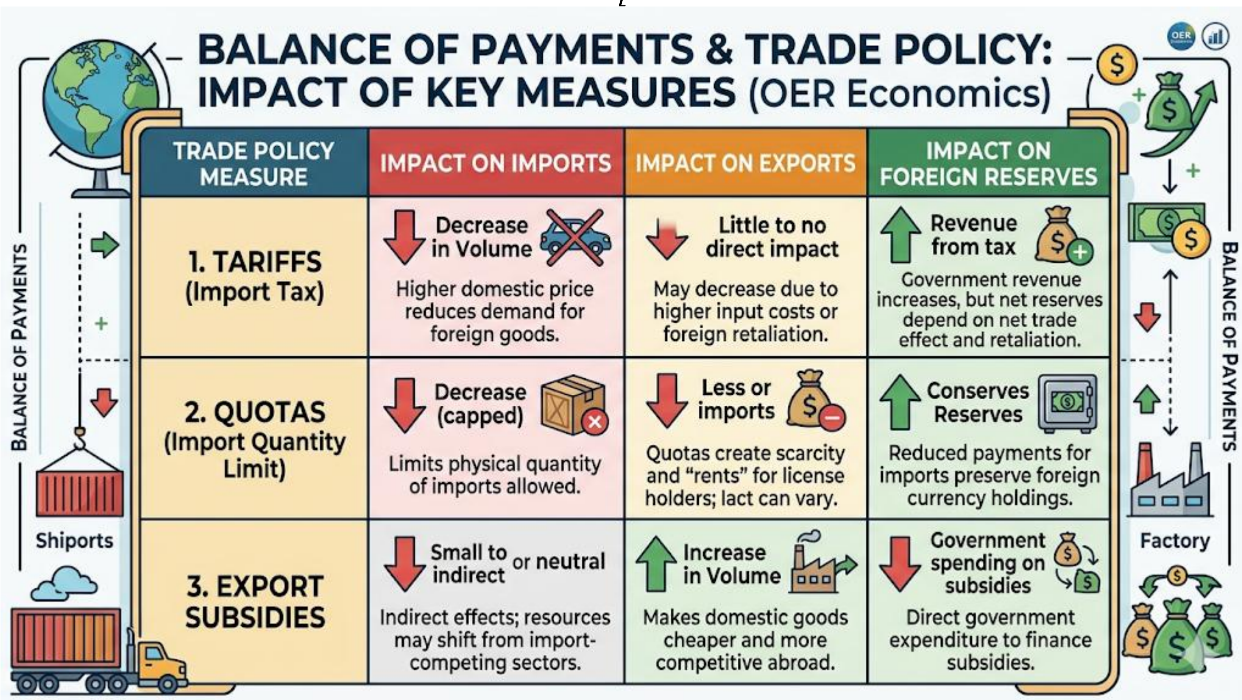
Figure 2.3 Effects of policy on income distribution

2.3.2 Balance of payments considerations

Trade policies influence a country's balance of payments. Tariffs may reduce imports, while export promotion measures increase foreign exchange earnings. A favourable balance of payments strengthens currency stability and economic growth.

Fill in the blank: Export promotion measures increase ______ earnings for a country.

[



BALANCE OF PAYMENTS & TRADE POLICY: IMPACT OF KEY MEASURES (OER Economics)

TRADE POLICY MEASURE	IMPACT ON IMPORTS	IMPACT ON EXPORTS	IMPACT ON FOREIGN RESERVES
1. TARIFFS (Import Tax)	Decrease in Volume Higher domestic price reduces demand for foreign goods.	Little to no direct impact May decrease due to higher input costs or foreign retaliation.	Revenue from tax Government revenue increases, but net reserves depend on net trade effect and retaliation.
2. QUOTAS (Import Quantity Limit)	Decrease (capped) Limits physical quantity of imports allowed.	Less or imports Quotas create scarcity and "rents" for license holders; lact can vary.	Conserves Reserves Reduced payments for imports preserve foreign currency holdings.
3. EXPORT SUBSIDIES	Small to indirect or neutral Indirect effects; resources may shift from import-competing sectors.	Increase in Volume Makes domestic goods cheaper and more competitive abroad.	Government spending on subsidies Direct government expenditure to finance subsidies.

Table 2.3 Impact of trade policies on balance of payments

Table comparing how tariffs, quotas, and export subsidies affect imports, exports, and foreign reserves.

2.3.3 Employment and inflation outcomes

Income and trade policies also affect employment levels and inflation. Wage controls may stabilise prices but limit wage growth. Tariffs can protect jobs in local industries, while subsidies may encourage production and reduce unemployment. However, excessive subsidies or wage increases can fuel inflation.

Fill in the blank: Wage controls are often used to stabilise ______ in the economy.

Image showing workers in a factory, symbolising employment outcomes of trade policies.

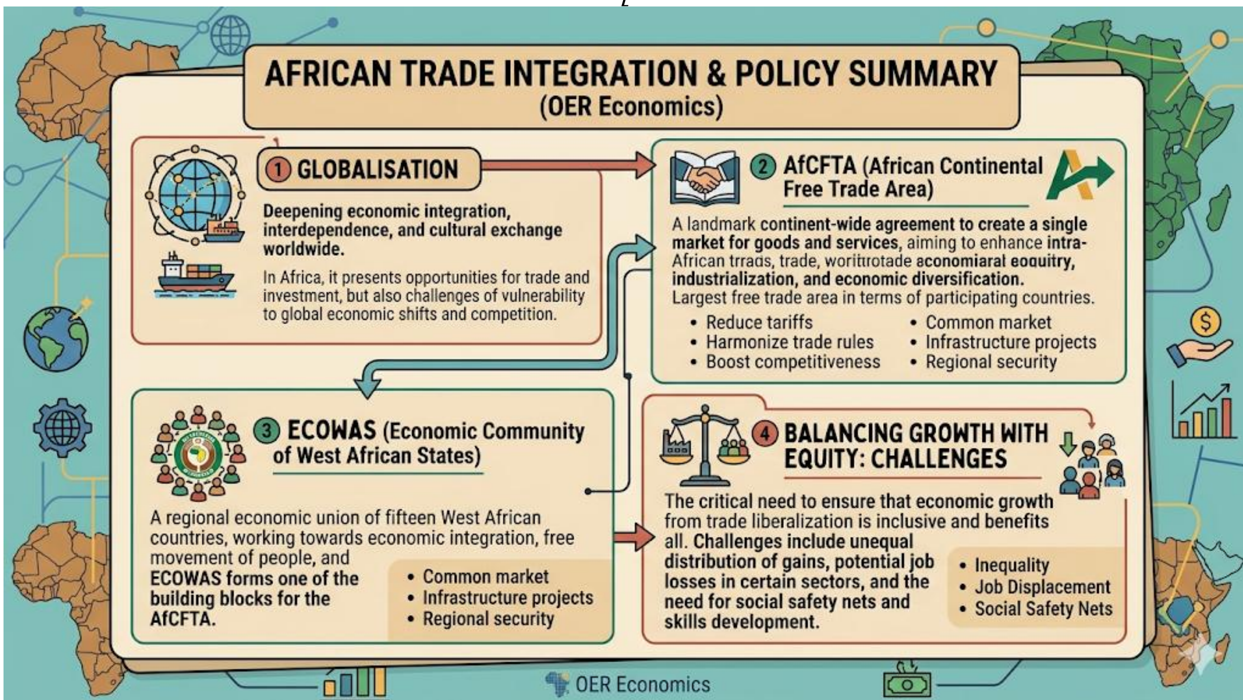
Plate 2.3 Employment outcomes of trade policies

2.3.4 Globalisation and regional agreements

Contemporary issues such as globalisation and regional trade agreements shape how policies are designed. Globalisation promotes free trade and integration, while regional agreements like AfCFTA and ECOWAS encourage cooperation among member states. These frameworks present opportunities for growth but also challenges in balancing equity and competitiveness.

Fill in the blank: Regional trade agreements such as AfCFTA and ECOWAS encourage ______ among member states.

[



Box 2.3 Contemporary trade policy issues

Box summarising globalisation, AfCFTA, ECOWAS, and challenges of balancing growth with equity.

Pilot Questions

1. Redistribution through taxation and transfers helps to reduce: a) Inflation b) Inequality c) Employment d) Exports
2. Export promotion measures increase: a) Imports b) Foreign exchange earnings c) Domestic inflation d) Wage ceilings
3. Wage controls are often used to stabilise: a) Employment b) Prices c) Exports d) Subsidies
4. Tariffs can protect: a) Domestic jobs b) Foreign reserves c) Globalisation d) Regional agreements
5. Regional trade agreements such as AfCFTA and ECOWAS encourage: a) Competition among nations b) Cooperation among member states c) Isolation from global markets d) Inflationary pressures

2.4 Contemporary Issues And Reforms

2.4.1 Challenges of globalisation

Globalisation has increased interdependence among nations, promoting free trade and integration. However, it also presents challenges such as unequal benefits, vulnerability to external shocks, and pressure on domestic industries. Policymakers must balance openness with protection of local interests.

Fill in the blank: Globalisation promotes free trade and ______ among nations.

[

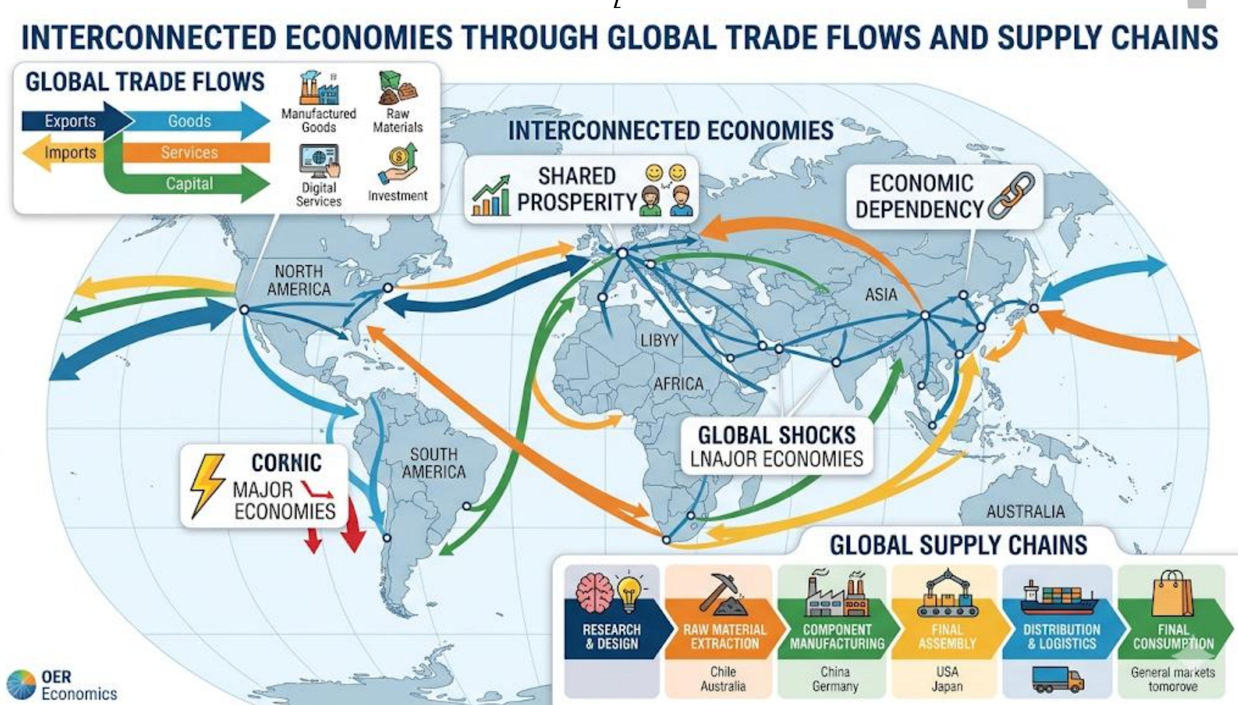


Diagram showing interconnected economies through trade flows and global supply chains.
Figure 2.4 Globalisation and interconnected economies

2.4.2 Regional integration and reforms

Regional trade agreements such as AfCFTA and ECOWAS aim to strengthen cooperation among member states. They promote larger markets, reduce trade barriers, and encourage reforms in customs and tariffs. These agreements also require harmonisation of policies to ensure fair competition and shared benefits.

Fill in the blank: Regional trade agreements reduce ______ barriers among member states.

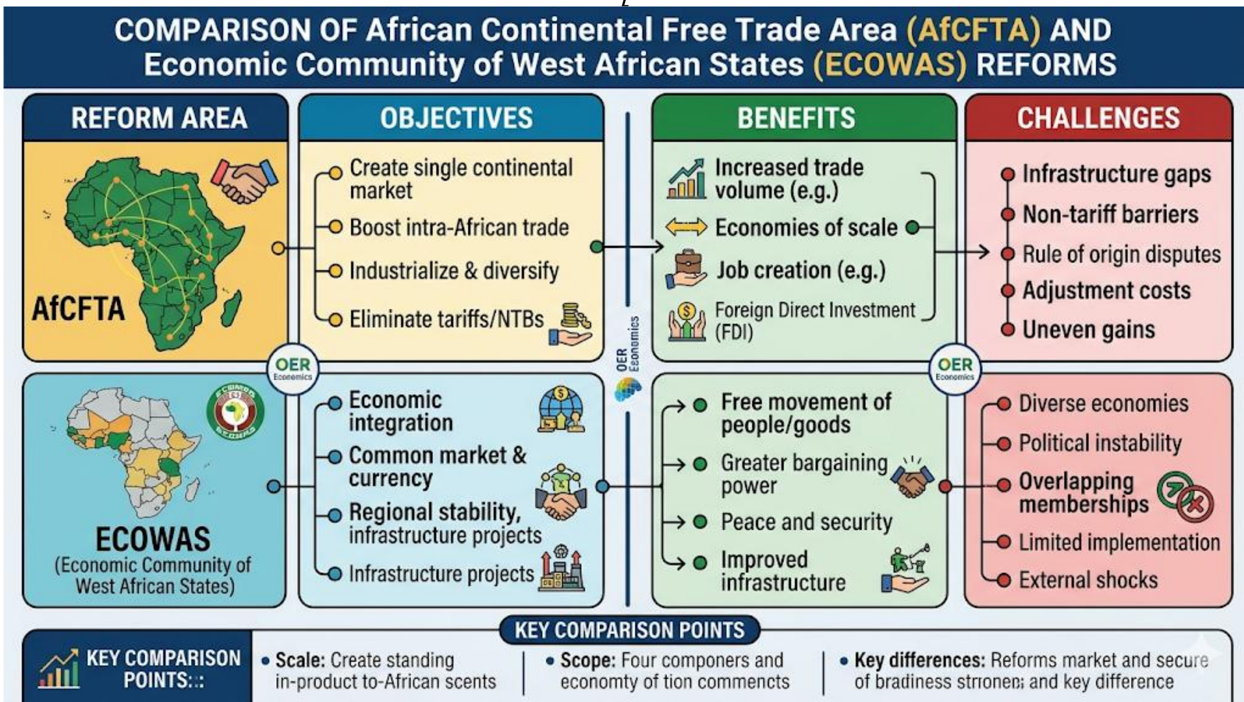


Table 2.4 Key features of AfCFTA and ECOWAS reforms

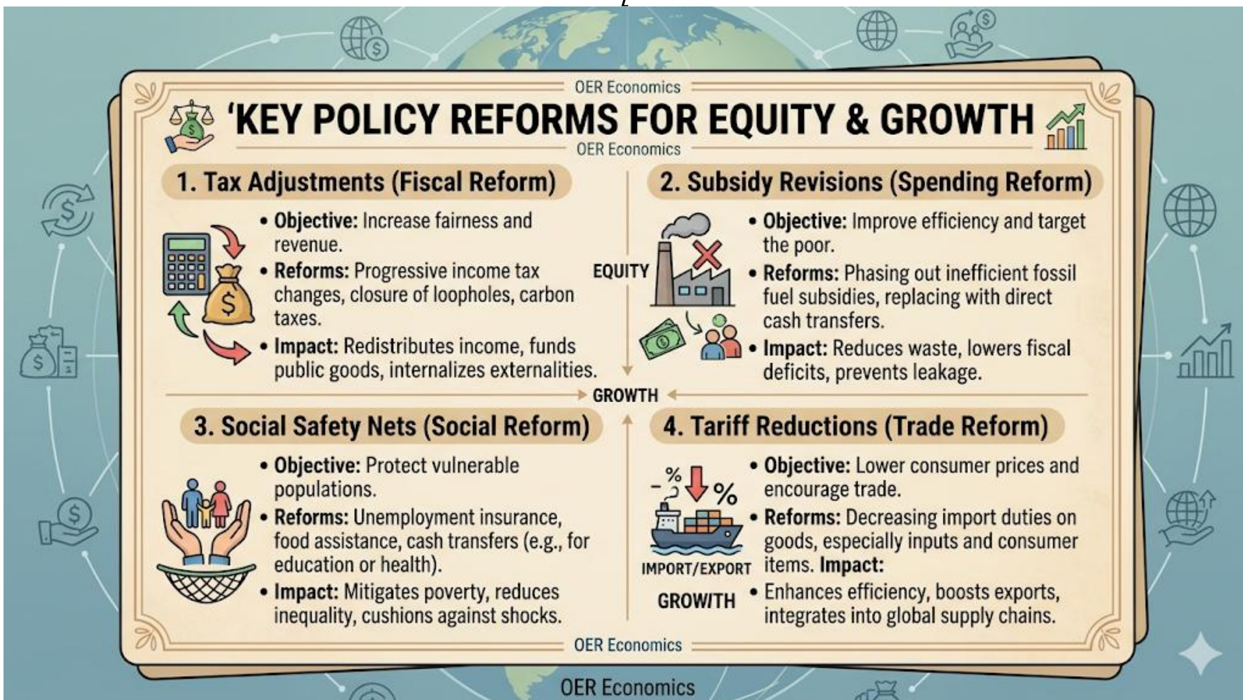
Table comparing AfCFTA and ECOWAS reforms, including objectives, benefits, and challenges.

2.4.3 Policy reforms for equity and growth

Governments often introduce reforms to balance growth with equity. These include revising tax systems, adjusting subsidies, and implementing social safety nets. Trade reforms may involve reducing tariffs, improving export incentives, and strengthening institutions to support competitiveness.

Fill in the blank: Revising tax systems and adjusting subsidies are examples of policy ______ for equity and growth.

[



Box 2.4 Selected policy reforms for equity and growth

Box summarising reforms such as tax adjustments, subsidy revisions, social safety nets, and tariff reductions.

2.4.4 Future directions in trade and income policy

The future of trade and income policy lies in adapting to technological change, digital trade, and sustainable development. Policymakers must address climate change, ensure inclusive growth, and harness innovation to remain competitive in global markets.

Fill in the blank: Policymakers must adapt trade and income policies to address ______ change and sustainable development.

[

Image showing digital trade and sustainable development symbols (technology, renewable energy, global markets).

Plate 2.4 Future directions in trade and income policy

Pilot Questions

1. Globalisation promotes: a) Isolation b) Free trade and integration c) Inflation d) Subsidy removal
2. Regional trade agreements reduce: a) Employment levels b) Trade barriers c) Inflationary pressures d) Tax revenues
3. Revising tax systems and adjusting subsidies are examples of: a) Trade restrictions b) Policy reforms c) Tariff measures d) Wage controls
4. Future trade and income policies must adapt to: a) Technological change and sustainable development b) Wage ceilings only c) Tariff increases only d) Currency devaluation
5. AfCFTA and ECOWAS reforms aim to: a) Increase trade barriers b) Strengthen cooperation among member states c) Reduce exports d) Limit globalisation

Series Summary

This Series has explored the purpose and relevance of income and trade policy measures, showing how governments use them to shape economic outcomes, promote fairness, and manage international relations. Starting with the foundations and instruments of policy, we examined income measures such as wage controls, taxation, subsidies, and social transfers. We then moved on to trade policy tools, including tariffs, quotas, and export promotion measures. Following that, we considered the impacts of these policies on income distribution, employment, inflation, and balance of payments, while also addressing contemporary issues such as globalisation and regional agreements. Finally, we briefly touched on reforms and future directions, highlighting the need for adaptation to global and technological change.

By connecting these discussions to the Series Learning Outcomes, you should now be able to define the key concepts of income and trade policy, explain the instruments of income policy, describe the principal trade policy tools, and analyse their impacts on domestic and international economic outcomes. This equips you with the knowledge and skills to critically evaluate how policy measures influence growth, equity, and competitiveness in today's interconnected world.

Glossary of Terms

Ad valorem tariff: A tariff charged as a percentage of the value of imported goods.

Balance of payments: A record of all economic transactions between a country and the rest of the world, including imports, exports, and financial flows.

Globalisation: The process of increasing interconnectedness among countries through trade, investment, technology, and cultural exchange.

Import quota: A restriction that sets a maximum quantity of goods allowed into a country during a specific period.

Income policy: Government measures designed to influence the distribution of income within an economy, such as wage controls, taxation, subsidies, and social transfers.

Minimum wage legislation: A law that establishes the lowest legal wage employers can pay workers, ensuring a basic standard of living.

Redistribution: The reallocation of income through progressive taxation and welfare programmes to reduce inequality.

Regional trade agreement: An arrangement between countries in a region, such as AfCFTA or ECOWAS, to reduce trade barriers and promote cooperation.

Subsidy: Financial support provided by governments to households or industries to lower costs or encourage production.

Tariff: A tax imposed on imported goods to raise revenue, protect domestic industries, or influence trade balances.

Trade policy: The set of laws, regulations, and practices that govern a country's trade with other nations, including tariffs, quotas, and export promotion measures.

Wage controls: Government interventions that set limits on wage increases to prevent inflationary pressures.

Concept Check Questions

Objective Questions

1. Income policy is designed to influence the ______ of income within an economy. (Linked to SLO 2.1)
2. Protecting infant industries is an objective of ______ economies. (Linked to SLO 2.1)
3. Minimum wage legislation establishes the ______ legal wage employers can pay workers. (Linked to SLO 2.2)
4. Redistribution is achieved through progressive taxation and ______ programmes. (Linked to SLO 2.2)
5. A tariff charged as a percentage of the value of imported goods is called an ______ tariff. (Linked to SLO 2.3)
6. A restriction that sets a maximum quantity of goods allowed into a country is called a ______. (Linked to SLO 2.3)
7. Wage controls are often used to stabilise ______ in the economy. (Linked to SLO 2.4)
8. Export promotion measures increase ______ earnings for a country. (Linked to SLO 2.4)
9. Regional trade agreements such as AfCFTA and ECOWAS encourage ______ among member states. (Linked to SLO 2.4)
10. Globalisation promotes free trade and ______ among nations. (Linked to SLO 2.4)

Short-Answer Questions

11. Define minimum wage legislation and explain its purpose. (Linked to SLO 2.2)

12. Identify two objectives of trade policy in developing economies. (Linked to SLO 2.1, SLO 2.3)

13. Explain how subsidies can affect employment levels. (Linked to SLO 2.2, SLO 2.4)

14. What is meant by redistribution in income policy? (Linked to SLO 2.1, SLO 2.2)

15. Describe how tariffs and quotas influence domestic industries. (Linked to SLO 2.3)

16. Explain the role of regional trade agreements in promoting cooperation. (Linked to SLO 2.4)

Long-Answer Questions

17. Discuss the impacts of tariffs and quotas on domestic industries and consumers. (Linked to SLO 2.3, SLO 2.4)

- *Basic response:* Tariffs protect industries but raise consumer prices; quotas limit imports but reduce consumer choice.
- *Value-added response:* They may also lead to trade disputes, efficiency losses, and long-term dependency on protectionist measures, affecting competitiveness globally.

18. Analyse the role of globalisation and regional agreements in shaping contemporary trade policies. (Linked to SLO 2.4)

- *Basic response:* Globalisation promotes integration and free trade, while regional agreements reduce trade barriers and encourage cooperation.
- *Value-added response:* Challenges include unequal benefits, vulnerability to external shocks, and the need for harmonisation of policies to ensure inclusive growth.

19. Evaluate how income policies such as taxation, subsidies, and social transfers influence domestic income distribution and employment. (Linked to SLO 2.1, SLO 2.2, SLO 2.4)

- *Basic response:* Taxation and transfers reduce inequality, subsidies lower costs and encourage production, and wage controls stabilise employment.
- *Value-added response:* Beyond these, poorly designed policies may distort markets, create fiscal burdens, or fuel inflation. Effective design balances growth with equity.

20. Assess the future directions of trade and income policy in adapting to technological change and sustainable development. (Linked to SLO 2.4)

- *Basic response:* Policies must adapt to digital trade, climate change, and sustainability goals.
- *Value-added response:* Outstanding learners can extend by evaluating how innovation, renewable energy, and inclusive growth strategies will reshape competitiveness and equity in global markets.

Answers to Concept Check Questions

Objective Questions

1. Distribution.
2. Developing.
3. Lowest.
4. Welfare.
5. Ad valorem.
6. Quota.
7. Prices.
8. Foreign exchange.
9. Cooperation.
10. Integration.

Short-Answer Questions

11. Minimum wage legislation sets the lowest legal wage employers can pay workers, ensuring a basic standard of living.

12. Objectives include protecting infant industries and promoting exports.

13. Subsidies lower production costs, encouraging firms to expand output and hire more workers.

14. Redistribution is the reallocation of income through progressive taxation and welfare programmes to reduce inequality.

15. Tariffs protect industries by raising import prices, while quotas limit the quantity of imports, safeguarding local producers.

16. Regional trade agreements reduce trade barriers and promote cooperation among member states, creating larger markets and shared benefits.

Long-Answer Questions

Q17: Tariffs and quotas

- *Basic response:* Tariffs protect domestic industries but raise consumer prices; quotas limit imports but reduce consumer choice.
- *Value-added response:* They may cause trade disputes, reduce efficiency, and harm international competitiveness, creating dependency on protectionist measures.

Q18: Globalisation and regional agreements

- *Basic response:* Globalisation promotes integration and free trade, while regional agreements reduce barriers and encourage cooperation.
- *Value-added response:* They also pose challenges such as unequal benefits, external shocks, and the need for harmonisation to ensure inclusive growth.

Q19: Income policies and distribution

- *Basic response:* Taxation and transfers reduce inequality, subsidies encourage production, and wage controls stabilise employment.
- *Value-added response:* Poorly designed policies may distort markets, create fiscal burdens, or fuel inflation. Effective design balances growth with equity.

Q20: Future directions

- *Basic response:* Policies must adapt to technological change, digital trade, and sustainability goals.
- *Value-added response:* Innovation, renewable energy, and inclusive growth strategies will reshape competitiveness, equity, and resilience in global markets.

Answers to Pilot Questions

Part 2.1: Foundations and Instruments of Policy

- Distribution of income.
- Developing economies.
- Lowest legal wage.
- Welfare programmes.
- Industries or households.

Part 2.2: Trade Policy Tools

- Ad valorem tariff.
- Quota.
- Encourage exports.
- Import restrictions.
- Export promotion measure.

Part 2.3: Policy Impacts and Contemporary Issues

- Inequality.
- Foreign exchange earnings.
- Prices.
- Domestic jobs.
- Cooperation among member states.

Part 2.4: Contemporary Issues and Reforms

- Free trade and integration.
- Trade barriers.
- Policy reforms.
- Technological change and sustainable development.
- Strengthen cooperation among member states.

References and Attributions

Textbook References

- Krugman, P., & Obstfeld, M. (2018). *International Economics: Theory and Policy* (11th ed.). Harlow: Pearson Education.
- Salvatore, D. (2019). *International Economics* (13th ed.). Hoboken: Wiley.
- Todaro, M. P., & Smith, S. C. (2020). *Economic Development* (13th ed.). Harlow: Pearson Education.

Open Educational Resources (OERs)

- OpenStax. (2016). *Principles of Economics*. Houston: Rice University. Available under Creative Commons Attribution Licence.
- CORE Economics Project. (2022). *The Economy: Economics for a Changing World*. London: CORE Project. Available under Creative Commons Attribution Licence.
- WTO. (2025). *Trade Policy Resources*. World Trade Organization. Available under Creative Commons Attribution Licence.

Illustrations and AI Prompts All figures, plates, tables, and boxes in Series 4 were either conceptual diagrams or AI-generated placeholders. Attribution notes are provided below:

- *Figure 2.1: Flow of income policy measures* Prompt: "Create a simple flow diagram showing government income policies (taxation, subsidies, wage controls) affecting households and firms." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Plate 2.1: International trade flows* Prompt: "Generate an image of cargo ships and containers representing global trade." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 2.1: Minimum wage levels in selected countries* Prompt: "Create a table comparing minimum wage levels in Nigeria, Ghana, and the UK." Attribution: AI-generated table using Microsoft Copilot tools.
- *Box 2.1: Selected instruments of income policy* Prompt: "Create a text box summarising taxation, redistribution, subsidies, and social transfers as income policy instruments." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 2.2: Types of tariffs and their effects* Prompt: "Create a diagram showing ad valorem, specific, and compound tariffs with arrows indicating their impact on prices and imports." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 2.2: Examples of import quotas and restrictions* Prompt: "Generate a table listing examples of quotas (sugar, textiles) and restrictions (banned goods like hazardous materials)." Attribution: AI-generated table using Microsoft Copilot tools.

- *Box 2.2: Common export promotion measures* Prompt: "Create a text box listing export promotion measures such as subsidies, tax incentives, trade fairs, and credit facilities." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 2.3: Effects of policy on income distribution* Prompt: "Create a diagram showing redistribution of income through taxation and subsidies between high-income and low-income groups." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 2.3: Impact of trade policies on balance of payments* Prompt: "Generate a table showing the impact of tariffs, quotas, and export subsidies on imports, exports, and foreign reserves." Attribution: AI-generated table using Microsoft Copilot tools.
- *Plate 2.3: Employment outcomes of trade policies* Prompt: "Generate an image of factory workers representing employment outcomes of trade policies." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Box 2.3: Contemporary trade policy issues* Prompt: "Create a text box summarising globalisation, AfCFTA, ECOWAS, and challenges of balancing growth with equity." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Figure 2.4: Globalisation and interconnected economies* Prompt: "Create a diagram showing interconnected economies through trade flows and global supply chains." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.
- *Table 2.4: Key features of AfCFTA and ECOWAS reforms* Prompt: "Generate a table comparing AfCFTA and ECOWAS reforms, listing objectives, benefits, and challenges." Attribution: AI-generated table using Microsoft Copilot tools.
- *Box 2.4: Selected policy reforms for equity and growth* Prompt: "Create a text box summarising reforms such as tax adjustments, subsidy revisions, social safety nets, and tariff reductions." Attribution: AI-generated summary using Microsoft Copilot tools.
- *Plate 2.4: Future directions in trade and income policy* Prompt: "Generate an image showing digital trade and sustainable development symbols such as technology, renewable energy, and global markets." Attribution: AI-generated illustration using Microsoft Copilot graphic tools.

Course code: ECO 204

Course title: Introduction to Macroeconomics ll

Course credit load: 2 Units

Series 1: Government Functions and Economic Policies

Series 2: Fiscal Multipliers and Taxation Models

Series 3: Money, Banking System, and Financial Roles

Series 4: Income and Trade Policy Measures

Series 5: External Sector: International Trade and Exchange Rates

Series Outline

Part 5.1 Foundations of International Trade

- 5.1.1 Meaning and importance of international trade
- 5.1.2 Theories of trade (absolute advantage, comparative advantage, modern theories)
- 5.1.3 Gains from trade and their distribution

Part 5.2 Instruments and Policies of Trade

- 5.2.1 Tariffs, quotas, and subsidies
- 5.2.2 Trade agreements and regional integration (e.g., AfCFTA, ECOWAS)
- 5.2.3 Protectionism versus free trade

Part 5.3 Exchange Rates and Balance of Payments

- 5.3.1 Definition and types of exchange rates (fixed, floating, managed)
- 5.3.2 Determinants of exchange rates
- 5.3.3 Balance of payments structure and policy implications

Part 5.4 Contemporary Issues and Reforms

- 5.4.1 Globalisation and its challenges
- 5.4.2 Currency crises and reforms
- 5.4.3 Future directions in trade and exchange rate policy

Introduction

International trade and exchange rates are central to how modern economies interact with one another. As countries become increasingly interconnected, the external sector plays a vital role in shaping growth, competitiveness, and stability. Understanding how trade flows and currency values are managed helps explain why nations pursue certain policies and how these decisions affect everyday life, from the prices of imported goods to the strength of local industries.

The aim of this Series is to equip you with the knowledge and skills to analyse the foundations of international trade, evaluate the instruments and policies used to regulate it, and understand the dynamics of exchange rates and balance of payments.

We shall commence this Series by exploring the meaning, importance, and theories of international trade, followed by a study of the instruments and policies that govern trade, including tariffs, quotas, and regional agreements. Next, we will examine exchange rates and the balance of payments, considering their determinants and policy implications. Finally, we will conclude with contemporary issues and reforms, focusing on globalisation, currency crises, and future directions in trade and exchange rate policy. This progression will provide you with a comprehensive understanding of the external sector and its relevance to economic development.

Series Learning Outcomes

Upon completing **Series**, you should be able to:

- **SLO 5.1** define the meaning and importance of international trade,
- **SLO 5.2** explain classical and modern theories of trade and the gains derived from them,
- **SLO 5.3** describe the main instruments of trade policy such as tariffs, quotas, and subsidies,
- **SLO 5.4** analyse the role of trade agreements and regional integration in shaping trade flows,
- **SLO 5.5** distinguish between different types of exchange rates and identify their determinants,
- **SLO 5.6** evaluate the structure of the balance of payments and its policy implications,
- **SLO 5.7** assess contemporary challenges such as globalisation, currency crises, and reforms, and
- **SLO 5.8** appraise future directions in trade and exchange rate policy in relation to sustainable development and competitiveness.

5.1 Foundations of International Trade

5.1.1 Meaning and importance of international trade

International trade refers to the exchange of goods and services across national borders. It allows countries to specialise in producing what they are most efficient at and to access products they cannot produce domestically. Trade is important because it promotes economic growth, increases consumer choice, and fosters global cooperation.

Fill in the blank: International trade refers to the exchange of ______ and services across national borders.

[

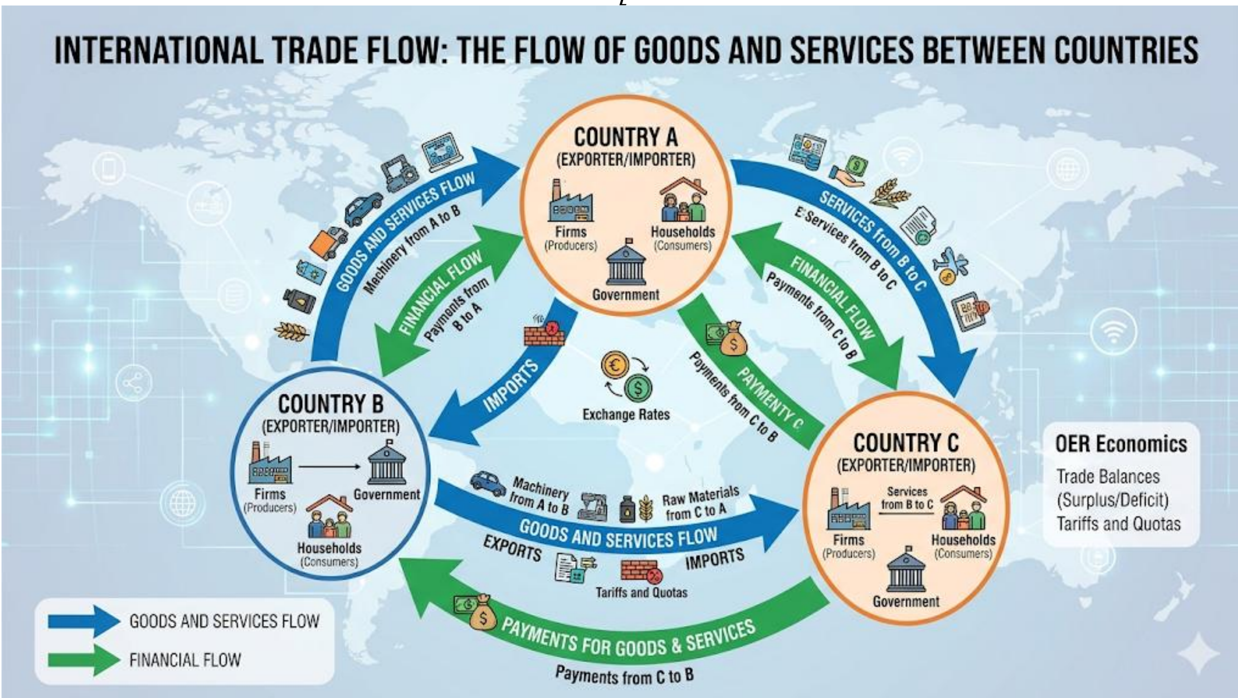


Diagram showing the flow of goods and services between countries.

Figure 5.1 Flow of international trade

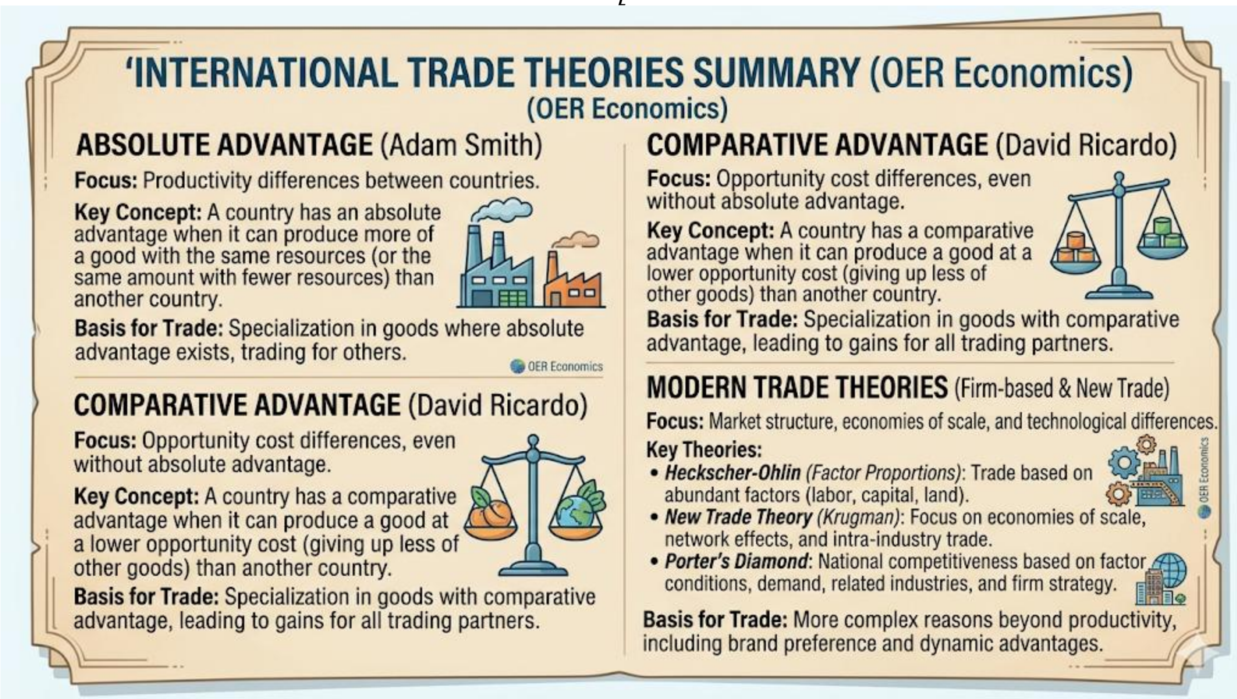
5.1.2 Theories of trade

Several theories explain why trade occurs:

- **Absolute advantage** (Adam Smith): Countries should specialise in goods they can produce more efficiently than others.
- **Comparative advantage** (David Ricardo): Even if one country is less efficient in producing all goods, it should specialise in those where it has the least disadvantage.
- **Modern theories**: These include factor endowment (Heckscher–Ohlin), economies of scale, and new trade theory, which highlight resources, technology, and market size.

Fill in the blank: The theory of comparative advantage was developed by ______ Ricardo.

[



Box 5.1 Key theories of international trade

Box summarising absolute advantage, comparative advantage, and modern trade theories.

5.1.3 Gains from trade and their distribution

Trade generates **gains** such as increased efficiency, wider product variety, and higher standards of living. However, these gains are not always evenly distributed. Some industries and workers benefit more than others, while others may face job losses or reduced competitiveness. Governments often use policies to manage these effects.

Fill in the blank: Trade generates gains such as increased efficiency and wider ______ variety.

[

Trade Gain	Example	Impact on Consumers	Impact on Producers	Impact on Government
Lower Prices	Increased competition from imported goods	**Positive:** Consumers can buy a wider variety of goods and services at lower prices.	**Mixed:** Some producers may benefit from lower input costs, while others may face reduced profits or market share.	**Mixed:** Governments may see increased tax revenue from a larger economy, but may also lose revenue from tariffs.

Trade Gain	Example	Impact on Consumers	Impact on Producers	Impact on Government
Higher Wages	Increased demand for exports	**Positive:** Consumers have more disposable income and can enjoy a higher standard of living.	**Mixed:** Some producers may experience increased profits and higher wages for their employees, while others may face higher labor costs.	**Positive:** Governments may see increased tax revenue from higher incomes.
Economic Growth	Expansion of international trade	**Positive:** Economic growth leads to job creation, higher wages, and a higher standard of living for all.	**Positive:** Economic growth leads to increased demand for goods and services, resulting in higher profits.	**Positive:** Economic growth leads to increased tax revenue from a larger economy.
Increased Innovation	Exposure to foreign ideas and technologies	**Positive:** Innovation leads to new and better products and services, making life easier and more enjoyable.	**Positive:** Innovation leads to increased productivity and higher profits.	**Positive:** Innovation leads to increased tax revenue from a more productive economy.
Greater Choice	Availability of goods from all over the world	**Positive:** Consumers have a wider variety of goods to choose from, making them more likely to find what they are looking for.	**Mixed:** Some producers may benefit from the opportunity to sell their products in a larger market, while others may face reduced profits or market share.	**Positive:** Governments may see increased tax revenue from a larger economy.

Table 5.1 Gains from trade and their distribution

Table showing examples of trade gains (efficiency, variety, growth) and how they are distributed among consumers, producers, and governments.

Pilot Questions

1. International trade refers to the exchange of: a) Goods and services across national borders b) Goods only within a country c) Services only within a region d) Capital within domestic markets

2. The theory of comparative advantage was developed by: a) Adam Smith b) David Ricardo c) John Maynard Keynes d) Karl Marx

3. Absolute advantage suggests that countries should: a) Specialise in goods they produce less efficiently b) Specialise in goods they produce more efficiently c) Avoid trade altogether d) Focus only on services

4. Trade generates gains such as increased efficiency and wider: a) Employment opportunities b) Product variety c) Tax revenues d) Wage levels

5. Gains from trade are: a) Always evenly distributed among all groups b) Sometimes unevenly distributed across industries and workers c) Only beneficial to governments d) Limited to consumers alone

5.2 Instruments and Policies of Trade

5.2.1 Tariffs, quotas, and subsidies

Tariffs are taxes imposed on imported goods, often used to protect domestic industries or raise government revenue. **Quotas** restrict the quantity of goods that can be imported, ensuring local producers maintain market share. **Subsidies** are financial supports given to domestic industries to lower production costs and encourage competitiveness. Together, these instruments shape trade flows and influence economic outcomes.

Fill in the blank: A tariff is a ______ imposed on imported goods.

[

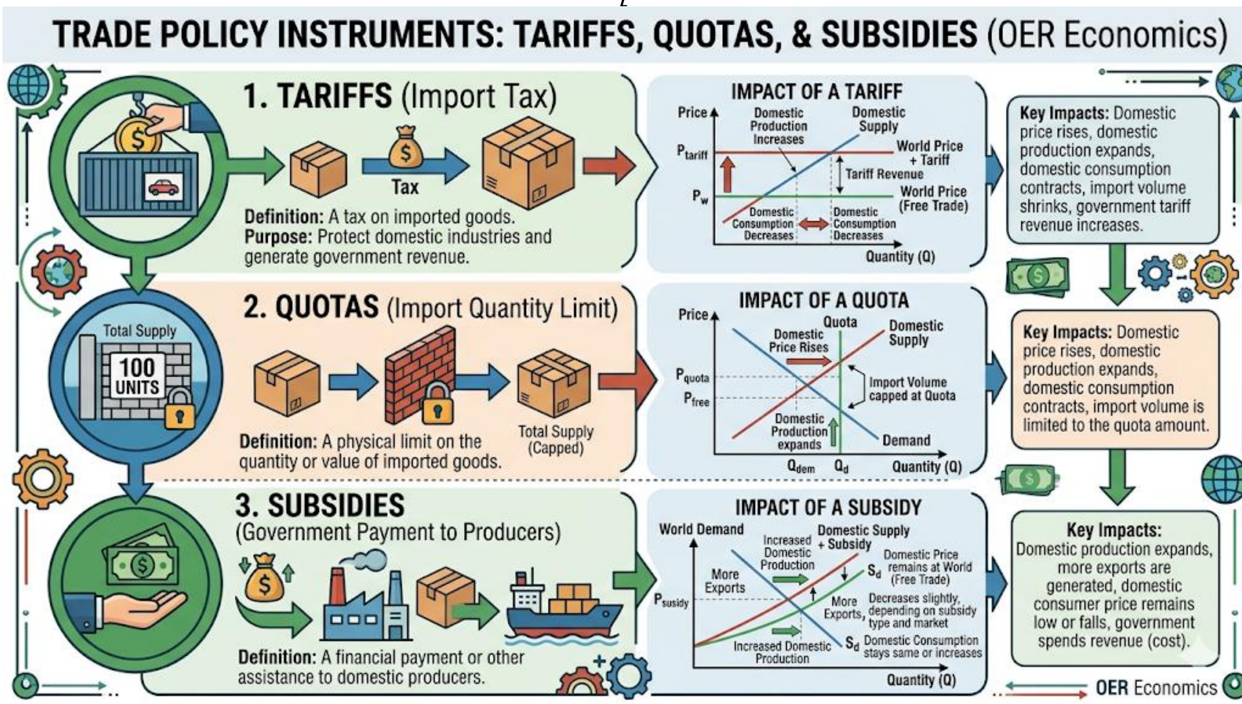


Diagram showing tariffs, quotas, and subsidies as trade policy instruments.

Figure 5.2 Instruments of trade policy

5.2.2 Trade agreements and regional integration

Countries often enter into **trade agreements** to reduce barriers and promote cooperation. Regional integration initiatives such as AfCFTA and ECOWAS aim to create larger markets, harmonise policies, and strengthen economic ties. These agreements encourage free trade among members while providing collective bargaining power in global markets.

Fill in the blank: Regional integration initiatives such as AfCFTA and ECOWAS aim to create larger ______.

[

Trade Agreement	Objectives	Benefits
AfCFTA (African Continental Free Trade Area)	• Create a single continental market for goods and services.	• Reduced consumer prices for goods and services.

Trade Agreement	Objectives	Benefits
	• Liberalize trade in goods and services by removing tariffs and non-tariff barriers. • Establish a continental customs union. • Promote industrial development and economic diversification. • Enhance competitiveness of African economies.	• Increased intra-African trade and investment. • Improved market access for businesses. • Stimulated economic growth and diversification. • Creation of a more favorable investment climate.
ECOWAS (Economic Community of West African States)	• Promote economic integration in all fields of activity. • Create a single market with free movement of people, goods, and capital.	• Increased regional trade and investment. • Free movement of people and factors of production.

Trade Agreement	Objectives	Benefits
	• Harmonize economic and financial policies. • Foster regional cooperation in various sectors. • Adopt a common currency.	• Enhanced economic and social development in member states. • More integrated regional financial and payment systems. • Strengthened collective bargaining power on the international stage.
COMESA (Common Market for Eastern and Southern Africa)	• Promote regional integration through trade. • Eliminate all trade barriers and establish a common external tariff. • Foster cooperation in all areas of economic activity.	• Expanded trade among member states. • Reduced trade costs. • Enhanced regional value chains. • Increased foreign direct investment.

Trade Agreement	Objectives	Benefits
	• Establish a common market with free movement of goods, labor, and capital. • Accelerate development in the region.	• Faster economic growth and development.
SADC (Southern African Development Community)	• Achieve development and economic growth, alleviate poverty. • Promote regional integration. • Maintain peace and security in the region. • Enhance standard of living. • Foster cooperation among member states.	• Stimulated economic growth and diversification. • Increased intra-regional trade. • Improved market access for businesses. • Regional integration in key sectors such as trade, investment, finance, and infrastructure. • Sustained peace and stability.

Trade Agreement	Objectives	Benefits
EAC (East African Community)	• Create a single economic union with a common customs territory, common market, monetary union, and a political federation. • Harmonize policies in various sectors. • Reduce trade costs and increase regional trade. • Enhance economic and social development.	• Reduced cost of doing business. • Faster regional trade growth. • Free movement of people, labor, goods, and capital. • Creation of a wider market for investors. • Increased competitiveness of EAC member states.
SACU (Southern African Customs Union)	• Maintain free trade among member states. • Have a common external tariff on imports from third countries.	• Free flow of goods within the customs union. • Increased trade among member states.

Trade Agreement	Objectives	Benefits
	• Protect the domestic industry in member states. • Facilitate development through regional trade.	• Improved economic development. • Joint policy formulation and implementation in trade-related areas.

Table 5.2 Examples of regional trade agreements

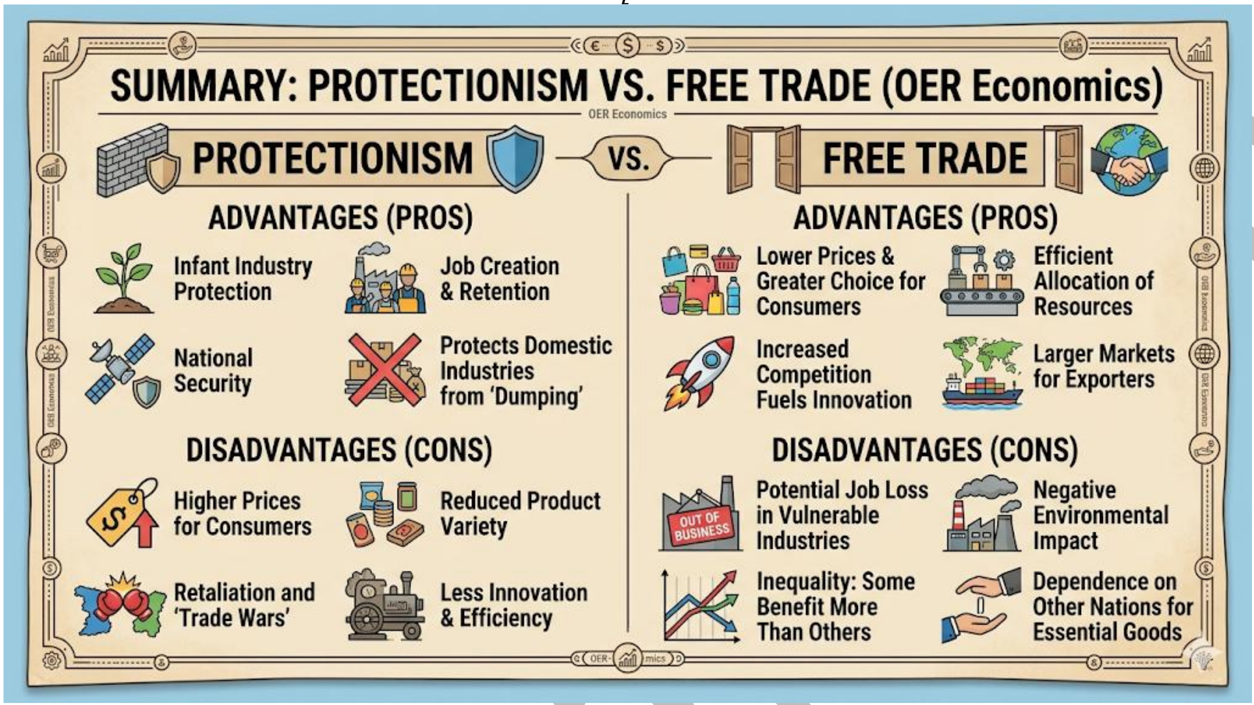
Table listing AfCFTA, ECOWAS, and other agreements, with objectives and benefits.

5.2.3 Protectionism versus free trade

Protectionism refers to policies that shield domestic industries from foreign competition, often through tariffs and quotas. While it can safeguard jobs and industries, it may reduce efficiency and consumer choice. **Free trade**, on the other hand, promotes open markets and competition, leading to efficiency gains and lower prices, but may expose weaker industries to challenges. Policymakers must balance these approaches depending on national priorities.

Fill in the blank: Protectionism often uses tariffs and ______ to shield domestic industries.

[



Box 5.2 Protectionism versus free trade

Box summarising the advantages and disadvantages of protectionism and free trade.

Pilot Questions

1. A tariff is a: a) Tax imposed on imported goods b) Subsidy for domestic producers c) Restriction on export quantities d) Agreement between countries
2. Quotas are designed to: a) Increase government revenue b) Restrict the quantity of imports c) Encourage free trade d) Subsidise exports
3. Regional integration initiatives such as AfCFTA and ECOWAS aim to create larger: a) Markets b) Tariffs c) Subsidies d) Taxes
4. Protectionism often uses tariffs and: a) Quotas b) Subsidies c) Free trade agreements d) Exchange rates
5. Free trade is associated with: a) Efficiency gains and lower prices b) Reduced consumer choice c) Increased protection of weak industries d) Higher government revenue from tariffs

5.3 Exchange Rates and Balance of Payments

5.3.1 Definition and types of exchange rates

An **exchange rate** is the price of one currency expressed in terms of another. It determines how much of one currency is needed to purchase another. There are different types:

- **Fixed exchange rate**: The value of a currency is pegged to another currency or a basket of currencies.
- **Floating exchange rate**: The value is determined by market forces of supply and demand.
- **Managed exchange rate**: A hybrid system where the government or central bank intervenes occasionally to stabilise the currency.

Fill in the blank: A floating exchange rate is determined by market ______ of supply and demand.

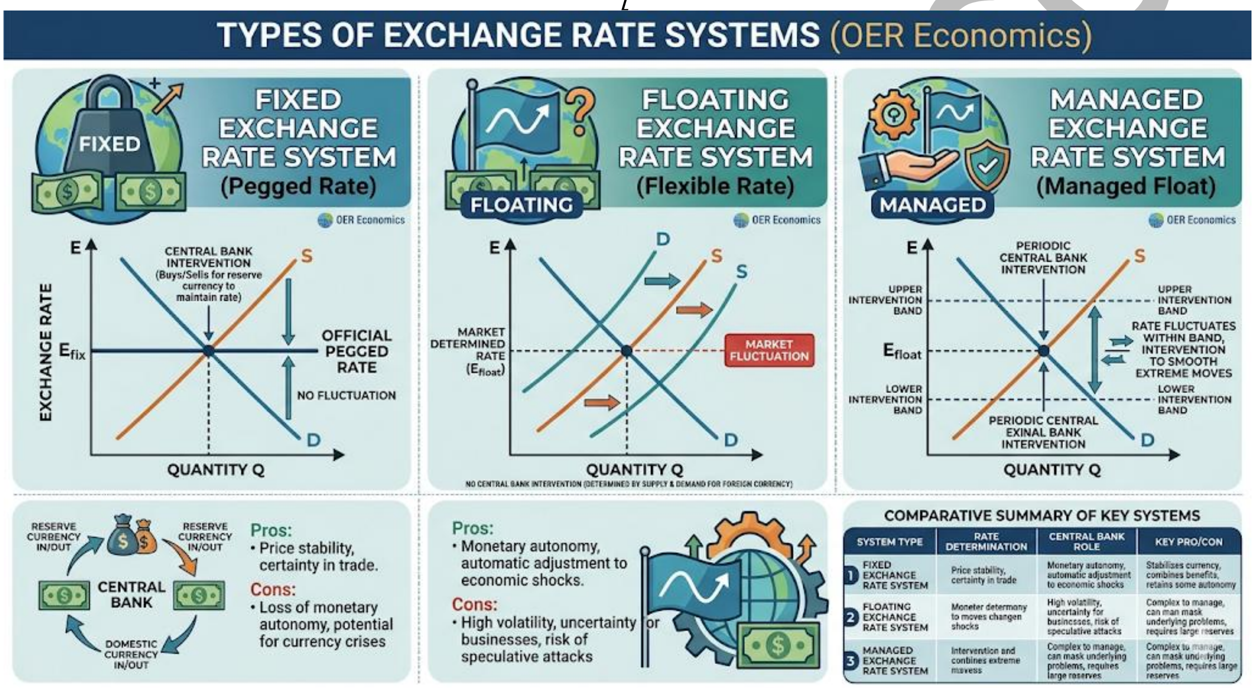


Diagram showing fixed, floating, and managed exchange rate systems.

Figure 5.3 Types of exchange rates

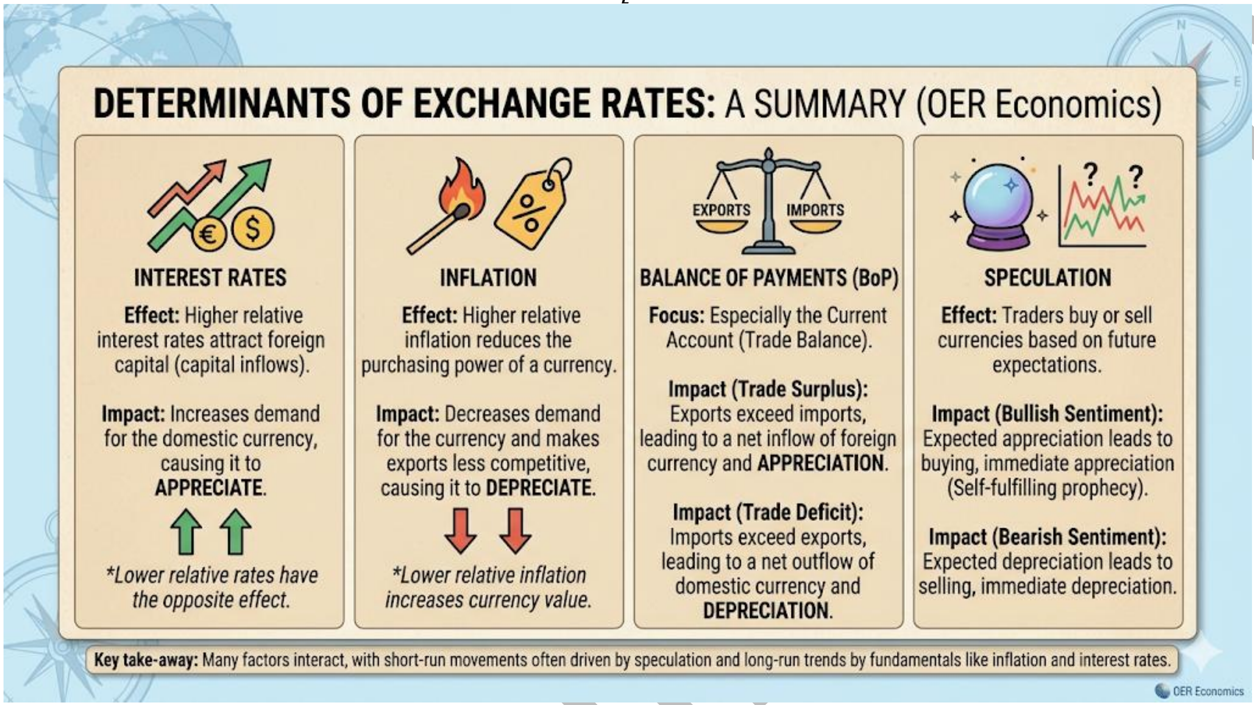
5.3.2 Determinants of exchange rates

Exchange rates are influenced by several factors:

- **Interest rates**: Higher interest rates attract foreign capital, increasing demand for the currency.
- **Inflation**: Lower inflation tends to strengthen a currency, while high inflation weakens it.
- **Balance of payments**: A surplus strengthens the currency, while a deficit weakens it.
- **Speculation and expectations**: Traders' perceptions of future economic performance can drive currency values.

Fill in the blank: Higher interest rates attract foreign ______, increasing demand for the currency.

[



Box 5.3 Key determinants of exchange rates

Box summarising interest rates, inflation, balance of payments, and speculation as determinants.

5.3.3 Balance of payments structure and policy implications

The **balance of payments (BOP)** is a record of all economic transactions between a country and the rest of the world. It has two main components:

- **Current account**: Records trade in goods and services, income, and transfers.
- **Capital and financial account**: Records investments, loans, and financial flows.

A surplus in the BOP strengthens the currency and reserves, while a deficit may lead to borrowing or policy adjustments. Governments use fiscal and monetary policies to correct imbalances and maintain stability.

Fill in the blank: The balance of payments has two main components: the current account and the ______ account.

STRUCTURE OF THE BALANCE OF PAYMENTS (BOP)

	DESCRIPTION & EXAMPLES	
COMPONENT	**CREDIT (+)**	**DEBIT (-)**
I. CURRENT ACCOUNT		
1. Trade in Goods	Export of goods like cars, wheat	Import of goods like oil, machinery
2. Trade in Services	Tourism, banking services to foreigners	Foreign travel, shipping services used
3. Primary Income	Wages/investment income from abroad	Wages/investment income paid to foreigners
4. Secondary Income	Gifts, grants from other countries	Foreign aid, remittances sent abroad
II. CAPITAL AND FINANCIAL ACCOUNT		
1. Capital Account	Capital transfers to domestic entities	Capital transfers to foreigners
2. Financial Account		
* *Direct Investment (FDI)*	Foreign factory built here	Domestic firm invests in foreign factory
* *Portfolio Investment*	Foreign purchase of domestic stocks/bonds	Domestic purchase of foreign stocks/bonds
* *Other Investment*	Borrowing from foreign banks	Lending to foreign banks
* *Reserve Assets*	Increase in official reserves	Decrease in official reserves
III. BALANCING ITEM (Errors & Omissions)		

Table 5.3 Structure of the balance of payments

Table showing current account (trade, income, transfers) and capital/financial account (investments, loans, reserves).

Pilot Questions

1. A floating exchange rate is determined by market: a) Government intervention b) Supply and demand c) Fixed rules d) Currency reserves

2. Which type of exchange rate system pegs the value of a currency to another currency or basket of currencies? a) Floating exchange rate b) Fixed exchange rate c) Managed exchange rate d) Speculative exchange rate

3. Higher interest rates attract foreign: a) Capital b) Imports c) Subsidies d) Tariffs

4. The balance of payments has two main components: the current account and the: a) Domestic account b) Capital and financial account c) Trade account d) Monetary account

5. A surplus in the balance of payments generally: a) Weakens the currency b) Strengthens the currency and reserves c) Reduces exports d) Leads to inflation

5.4 Contemporary Issues and Reforms

5.4.1 Globalisation and its challenges

Globalisation refers to the increasing interconnectedness of economies through trade, investment, technology, and cultural exchange. It has created opportunities for growth and integration but also challenges such as unequal distribution of benefits, vulnerability to external shocks, and pressure on weaker industries. Policymakers must balance openness with safeguards to ensure inclusive development.

Fill in the blank: Globalisation refers to the increasing ______ of economies through trade, investment, and technology.

[

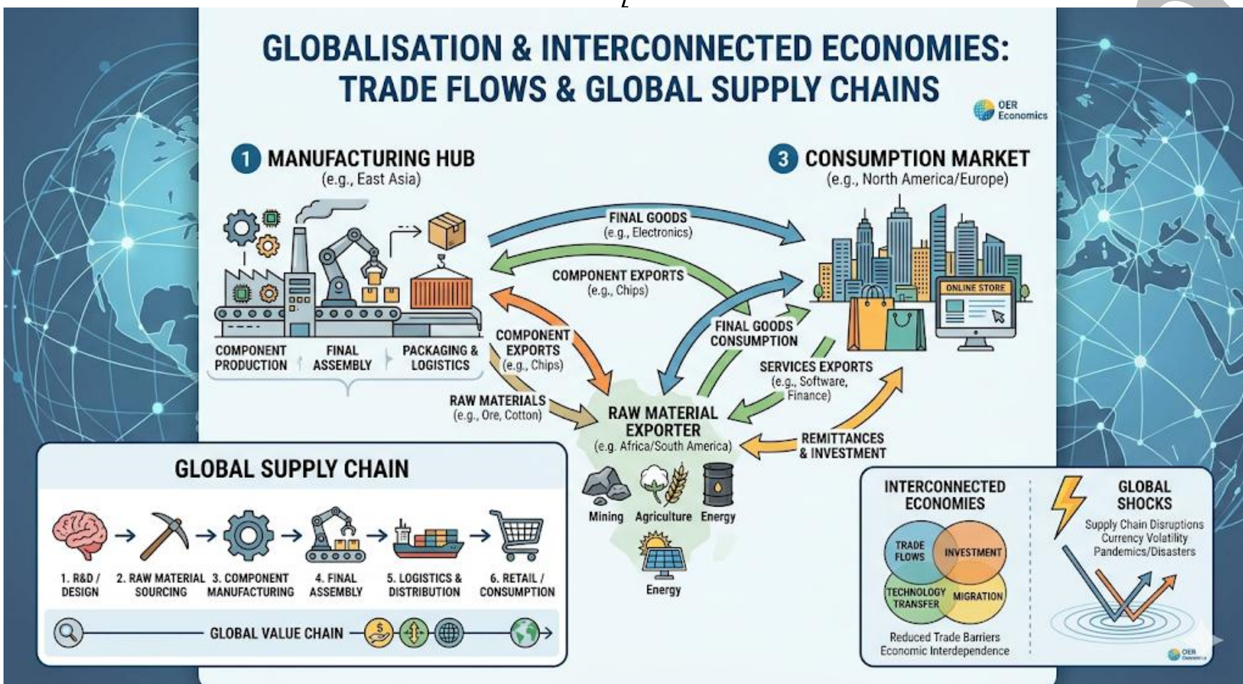


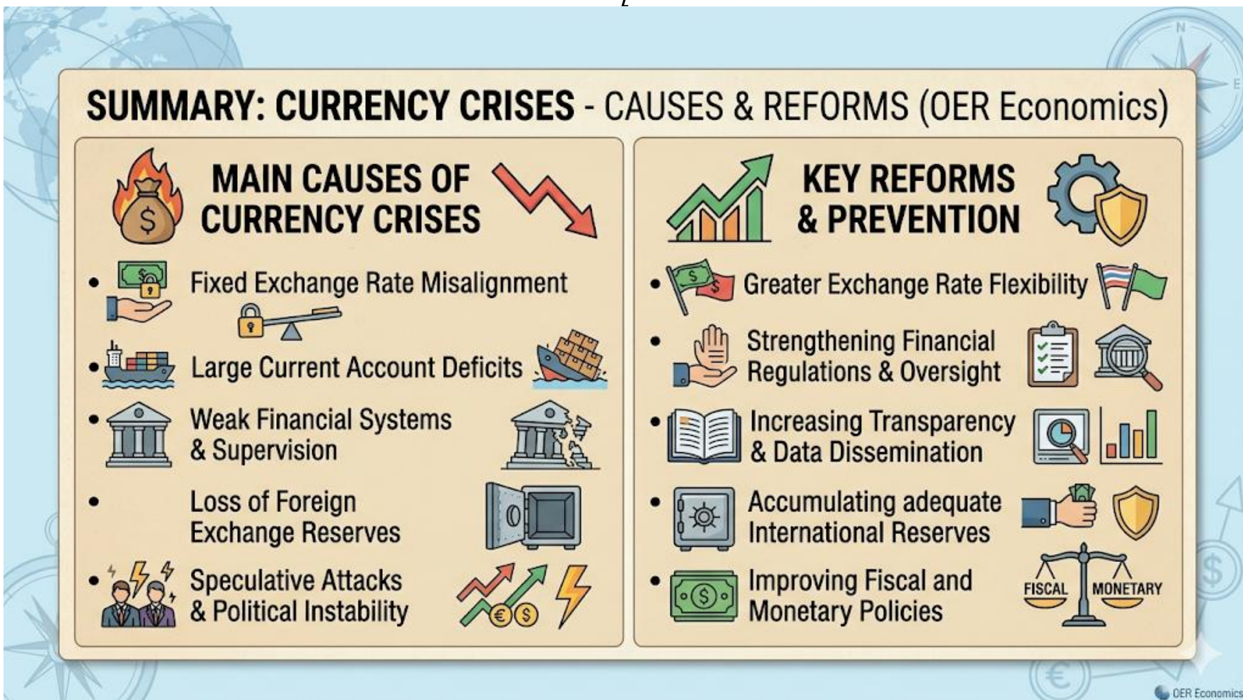
Diagram showing interconnected economies through trade flows and global supply chains.
Figure 5.4 Globalisation and interconnected economies

5.4.2 Currency crises and reforms

A **currency crisis** occurs when a rapid loss of confidence in a nation's currency leads to sharp depreciation, capital flight, and economic instability. Causes include unsustainable debt, weak reserves, and speculative attacks. Reforms such as strengthening institutions, diversifying reserves, and adopting flexible exchange rate policies can help prevent or mitigate crises.

Fill in the blank: A currency crisis occurs when there is a rapid loss of confidence in a nation's ______.

[



Box 5.4 Causes and reforms of currency crises

Box summarising causes (debt, reserves, speculation) and reforms (institutions, reserves, flexible policies).

5.4.3 Future directions in trade and exchange rate policy

Future directions in trade and exchange rate policy emphasise **digital trade**, **sustainable development**, and **regional cooperation**. Digital platforms are reshaping commerce, while sustainability goals require balancing growth with environmental responsibility. Regional agreements will continue to play a role in harmonising policies and strengthening competitiveness in global markets.

Fill in the blank: Future directions in trade emphasise digital trade, sustainable development, and regional ______.

[

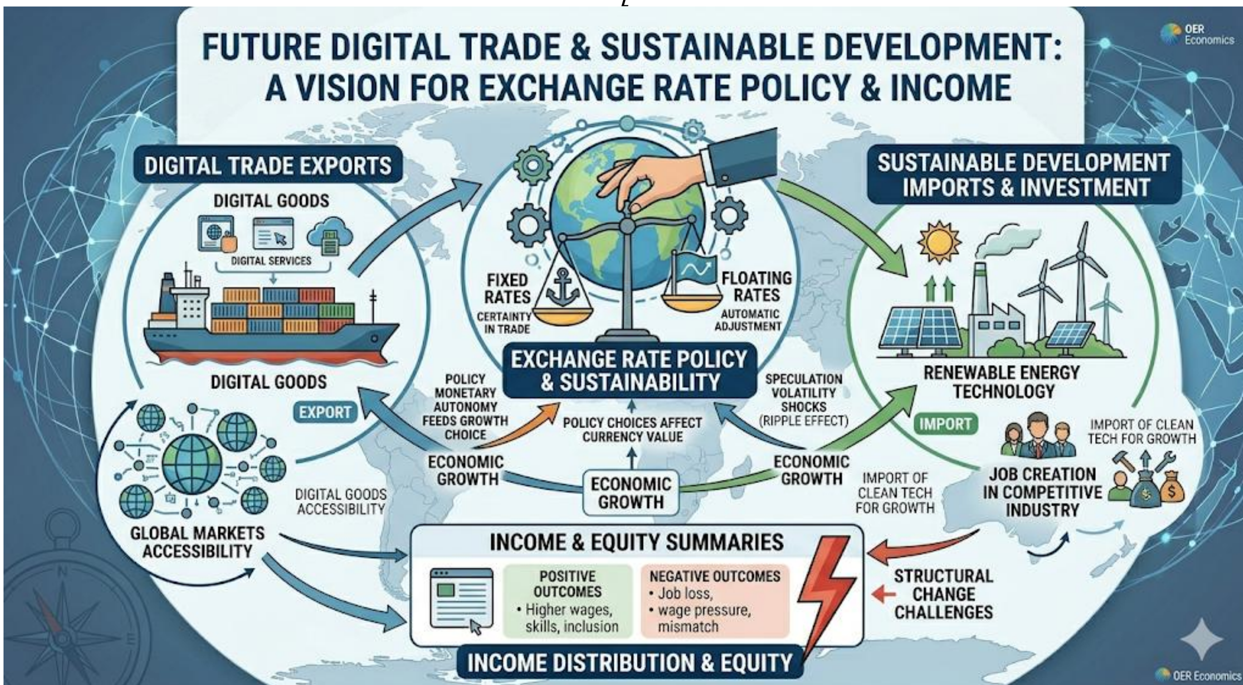


Image showing digital trade and sustainable development symbols such as technology, renewable energy, and global markets.

Plate 5.4 Future directions in trade and exchange rate policy

Pilot Questions

1. Globalisation refers to the increasing: a) Isolation of economies b) Interconnectedness of economies c) Protection of domestic industries d) Restriction of trade flows
2. A currency crisis occurs when there is a rapid loss of confidence in a nation’s: a) Government b) Currency c) Trade agreements d) Balance of payments
3. Which of the following is NOT a common cause of currency crises? a) Unsustainable debt b) Strong reserves c) Speculative attacks d) Weak institutions
4. Future directions in trade emphasise: a) Digital trade and sustainability b) Isolation and protectionism c) Higher tariffs and quotas d) Reduced regional cooperation
5. Regional agreements in future trade policy aim to: a) Harmonise policies and strengthen competitiveness b) Limit cooperation among nations c) Increase isolation of economies d) Reduce global integration

Series Summary

This Series has explored the external sector, focusing on international trade and exchange rates. We began by examining the meaning, importance, and theories of trade, highlighting how countries benefit from specialisation and the distribution of gains. We then moved on to the instruments and policies of trade, including tariffs, quotas, subsidies, and regional agreements such as AfCFTA and ECOWAS, while also considering the debate between protectionism and free trade.

Subsequently, we studied exchange rates and the balance of payments, looking at different exchange rate systems, their determinants, and the structure of the balance of payments with its policy implications. Finally, we addressed contemporary issues such as globalisation, currency crises, and future directions in trade and exchange rate policy, including digital trade and sustainability. By completing this Series, you should now be able to define, explain, analyse, and evaluate key aspects of international trade and exchange rates, as outlined in the Series Learning Outcomes (SLOs).

Glossary of Terms

Absolute advantage: The ability of a country to produce a good more efficiently than another country.

Balance of payments (BOP): A record of all economic transactions between a country and the rest of the world, including trade, income, and financial flows.

Comparative advantage: The principle that countries should specialise in producing goods where they have the least relative disadvantage.

Exchange rate: The price of one currency expressed in terms of another.

Globalisation: The increasing interconnectedness of economies through trade, investment, technology, and cultural exchange.

Managed exchange rate: A system where the government or central bank intervenes occasionally to stabilise the currency.

Protectionism: Policies that shield domestic industries from foreign competition, often through tariffs and quotas.

Quota: A restriction that sets a maximum quantity of goods allowed into a country during a specific period.

Subsidy: Financial support provided by governments to industries to lower costs and encourage production.

Tariff: A tax imposed on imported goods to raise revenue or protect domestic industries.

Glossary of Terms

Absolute advantage: The ability of a country to produce a good more efficiently than another country.

Balance of payments (BOP): A record of all economic transactions between a country and the rest of the world, including trade, income, and financial flows.

Comparative advantage: The principle that countries should specialise in producing goods where they have the least relative disadvantage.

Exchange rate: The price of one currency expressed in terms of another.

Globalisation: The increasing interconnectedness of economies through trade, investment, technology, and cultural exchange.

Managed exchange rate: A system where the government or central bank intervenes occasionally to stabilise the currency.

Protectionism: Policies that shield domestic industries from foreign competition, often through tariffs and quotas.

Quota: A restriction that sets a maximum quantity of goods allowed into a country during a specific period.

Subsidy: Financial support provided by governments to industries to lower costs and encourage production.

Tariff: A tax imposed on imported goods to raise revenue or protect domestic industries.

Answers to Pilot Questions

Part 5.1 Foundations of International Trade

1. Goods and services across national borders
2. David Ricardo
3. Specialise in goods they produce more efficiently
4. Product variety
5. Sometimes unevenly distributed across industries and workers

Part 5.2 Instruments and Policies of Trade

1. Tax imposed on imported goods
2. Restrict the quantity of imports
3. Markets
4. Quotas
5. Efficiency gains and lower prices

Part 5.3 Exchange Rates and Balance of Payments

1. Supply and demand
2. Fixed exchange rate
3. Capital

4. Capital and financial account
5. Strengthens the currency and reserves

Part 5.4 Contemporary Issues and Reforms

1. Interconnectedness of economies
2. Currency
3. Strong reserves
4. Digital trade and sustainability
5. Harmonise policies and strengthen competitiveness

References and Attributions

General Sources

- Open Educational Resources (OER) in Economics were consulted for definitions, examples, and suggested illustrations.
- Institutional style referencing follows APA guidelines for clarity and consistency.

Figures, Plates, Tables, and Boxes

- *Figure 5.1 Flow of international trade*: AI-generated using the prompt "Create a diagram showing the flow of goods and services between countries."
- *Box 5.1 Key theories of international trade*: AI-generated using the prompt "Create a text box summarising absolute advantage, comparative advantage, and modern trade theories."
- *Table 5.1 Gains from trade and their distribution*: AI-generated using the prompt "Generate a table showing examples of trade gains and their distribution among consumers, producers, and governments."
- *Figure 5.2 Instruments of trade policy*: AI-generated using the prompt "Create a diagram showing tariffs, quotas, and subsidies as trade policy instruments."
- *Table 5.2 Examples of regional trade agreements*: AI-generated using the prompt "Generate a table listing AfCFTA, ECOWAS, and other trade agreements with objectives and benefits."
- *Box 5.2 Protectionism versus free trade*: AI-generated using the prompt "Create a text box summarising the advantages and disadvantages of protectionism and free trade."
- *Figure 5.3 Types of exchange rates*: AI-generated using the prompt "Create a diagram showing fixed, floating, and managed exchange rate systems."

- *Box 5.3 Key determinants of exchange rates*: AI-generated using the prompt "Create a text box summarising interest rates, inflation, balance of payments, and speculation as determinants of exchange rates."
- *Table 5.3 Structure of the balance of payments*: AI-generated using the prompt "Generate a table showing the structure of the balance of payments with current account and capital/financial account entries."
- *Figure 5.4 Globalisation and interconnected economies*: AI-generated using the prompt "Create a diagram showing interconnected economies through trade flows and global supply chains."
- *Box 5.4 Causes and reforms of currency crises*: AI-generated using the prompt "Create a text box summarising causes and reforms of currency crises."
- *Plate 5.4 Future directions in trade and exchange rate policy*: AI-generated using the prompt "Generate an image showing digital trade and sustainable development symbols such as technology, renewable energy, and global markets."

Suggested OER Search Strings

- "international trade flow diagram OER economics"
- "international trade theories summary OER economics"
- "gains from trade distribution table OER economics"
- "tariffs quotas subsidies trade policy diagram OER economics"
- "AfCFTA ECOWAS trade agreements table OER economics"
- "protectionism vs free trade summary OER economics"
- "types of exchange rates diagram OER economics"
- "determinants of exchange rates summary OER economics"
- "balance of payments structure table OER economics"
- "globalisation interconnected economies diagram OER economics"
- "currency crisis causes and reforms summary OER economics"
- "future trade exchange rate policy digital sustainable OER image"