

Introduction to Economics, Scarcity, Choice, and Opportunity Cost

Topic 1: Introduction to Economics, Scarcity, Choice, and Opportunity Cost

1. Introduction & Learning Outcomes

Economics is the study of how individuals, businesses, and societies allocate scarce resources among competing uses to satisfy unlimited human wants. In the KASNEB CPA Foundation curriculum, understanding core microeconomic and macroeconomic principles provides the theoretical backbone for managerial decision-making, financial analysis, budgeting, and corporate strategy.

Learning Outcomes

By the end of this study session, candidates should be able to:

1. Define economics and distinguish between microeconomics and macroeconomics.
 2. Differentiate between positive and normative economics.
 3. Analyze the triad of fundamental economic problems: scarcity, choice, and opportunity cost.
 4. Construct and interpret the Production Possibility Frontier (PPF), illustrating efficiency, inefficiency, opportunity cost, and economic growth.
 5. Identify the basic economic systems (command, free-market, and mixed economies) and examine Kenya's mixed economy structure.
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2. The Scope and Methodology of Economics

2.1 Microeconomics vs. Macroeconomics

Economics is traditionally partitioned into two primary branches:

Dimension	Microeconomics	Macroeconomics
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Level of Analysis	Individual economic units (households, single firms, specific markets).	The aggregate economy as an interconnected whole.
Core Focus	Determination of relative prices, consumer utility, and production costs.	National income (GDP), inflation, unemployment, balance of payments, and fiscal policy.
Key Theories	Consumer theory, theory of the firm, market structure dynamics.	Keynesian income determination, monetary policy, business cycle fluctuations.
Kenyan Context Example	Pricing of milk by Brookside Dairy or tea supply decisions by KTDA smallholders.	The Central Bank of Kenya's benchmark Central Bank Rate (CBR) and national inflation targets.

2.2 Positive vs. Normative Economics

- **Positive Economics:** Deals with objective facts and cause-and-effect relationships without subjective value judgments. It answers questions such as "*What is?*", "*What was?*", or "*What will happen if...?*".
 - *Example:* "An increase in the excise duty on petroleum fuels increases freight and transport costs across Kenya."
- **Normative Economics:** Involves ethical value judgments and opinions regarding what ought to be. It cannot be tested or verified solely with empirical evidence.
 - *Example:* "The government should subsidize agricultural fertilizer to ensure food security for low-income rural households."

3. The Central Economic Problem: Scarcity, Choice, and Opportunity Cost

3.1 The Economic Triad

1. **Scarcity:** Resources (factors of production: Land, Labour, Capital, and Entrepreneurship) are finite and insufficient to produce all goods and services demanded by society.

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2. **Choice:** Because of scarcity, agents must select which wants to satisfy and which to forgo. Economists assume rational economic agents make choices using a **Scale of Preference**—a list of unsatisfied wants arranged in descending order of priority.
3. **Opportunity Cost:** The real cost of any decision is the value of the next best alternative sacrificed.

UNLIMITED WANTS + LIMITED RESOURCES
?
SCARCITY
?
CHOICE (Scale of Preference)
?
OPPORTUNITY COST (Next Best Forgone)

3.2 Worked Example: Opportunity Cost in Capital Budgeting

A Kenyan enterprise, *Nairobi Tech Logistics Ltd*, has a capital budget surplus of KSh 12,000,000 and evaluates three mutually exclusive opportunities:

- **Option A:** Install automated warehousing robotics generating an estimated annual net return of KSh 2,400,000 (20%).
- **Option B:** Fleet expansion of electric delivery vans yielding KSh 2,100,000 (17.5%).
- **Option C:** Invest in high-yield Treasury Bills returning KSh 1,800,000 (15%).

If the enterprise selects **Option A**, the opportunity cost of that decision is the net return of **Option B** (KSh 2,100,000), which represents the highest-valued forgone alternative, not the sum of all alternatives.

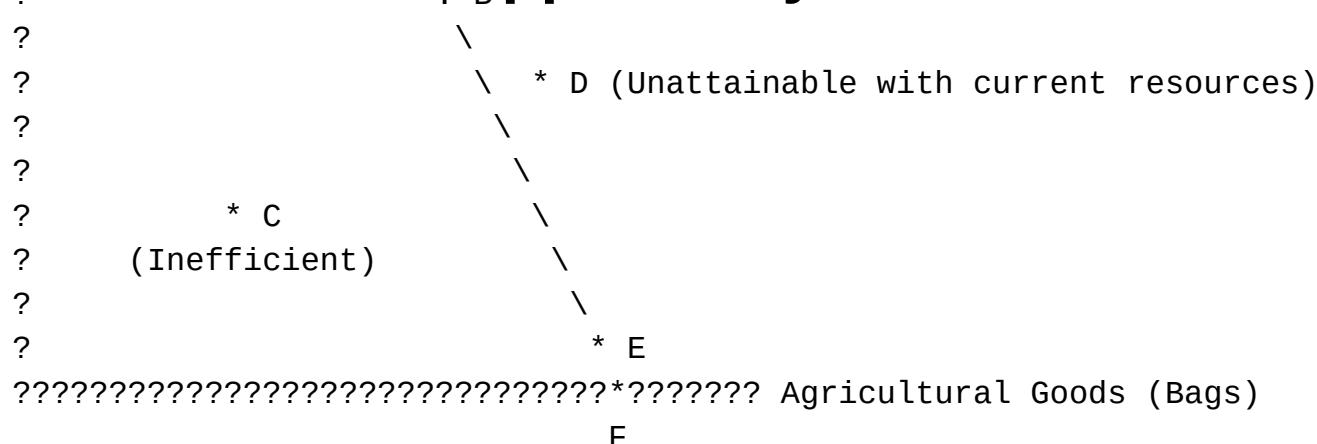
4. The Production Possibility Frontier (PPF)

The Production Possibility Frontier (PPF) or Curve (PPC) is a graphical representation of the maximum combination of two goods or services that an economy or firm can produce given available resources and constant technology.

4.1 Visual Representation of the PPF

Manufactured Goods (Units)

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4.2 Interpreting Points on the PPF

1. **Points on the Frontier (A, B, E, F):** Represent **productive efficiency**. Full employment of all productive resources and optimal technology utilization.
2. **Points Inside the Frontier (Point C):** Represent **productive inefficiency** or underutilization of resources (e.g., structural unemployment or idle factory capacity).
3. **Points Outside the Frontier (Point D):** Represent **unattainable output** combinations given the current resource endowment and existing technology. Point D can only be achieved through **economic growth** (outward shift of the PPF via technological advancements, capital accumulation, or labor force expansion).

4.3 The Law of Increasing Opportunity Costs

Because economic resources are not completely adaptable to alternative uses, shifting resources from one sector (agriculture) to another (manufacturing) incurs increasingly larger sacrifices. This gives the PPF its characteristic **concave (bowed-out)** shape relative to the origin.

5. Economic Systems

Every society must resolve three fundamental questions:

1. *What to produce and in what quantities?*
2. *How to produce (labor-intensive vs. capital-intensive techniques)?*

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3. For whom to produce (income distribution mechanism)?

Feature	Free Market Economy	Command / Planned Economy	Mixed Economy (Kenya)
Resource Ownership	Private individuals and corporations.	State / Government owns all means of production.	Coexistence of private sector and state enterprises.
Resource Allocation	Invisible hand of the price mechanism (demand & supply).	Central planning agency directives.	Market forces guided by regulatory frameworks, taxation, and public spending.
Motive	Profit maximization and self-interest.	Social welfare and state objectives.	Private profit motive combined with social safety nets and public goods provision.
Key Limitation	Market failures, monopolies, inequality, undersupply of public goods.	Bureaucratic inefficiency, lack of consumer choice, shortages.	Risk of government failure alongside market failure.

6. Key Takeaways & Exam Summary

1. **Scarcity is Universal:** Scarcity applies to both developed and developing economies; wants exceed finite resources.
2. **Opportunity Cost is Non-Monetary:** It measures real sacrifices (the next best alternative forgone).
3. **The PPF Illustrates 4 Core Principles:** Scarcity (unattainable region), Choice (selecting a point), Opportunity Cost (the slope of the curve), and Efficiency (points on the boundary).
4. **Bowed-out Shape:** The marginal rate of transformation increases due to imperfect resource substitutability across sectors.