Unit 1: Introduction to Economic Methods

- Nature and Scope of Economics, Economic Models, and Assumptions in Economic Analysis

Nature of Economics

- Economics as a Science: Positive (what is) & Normative (what ought to be)
- Economics as a Social Science: Studies human behavior and social interactions
- Study of Scarcity and Choice: Limited resources vs. unlimited wants
- Study of Wealth and Welfare: Views by Adam Smith, Marshall, Robbins, Samuelson

Scope of Economics

- Microeconomics: Individual units – households, firms, markets
- Macroeconomics: Whole economy – income, inflation, growth
- Central Problems: What, how, for whom to produce; growth & stability
- Key Fields: Consumption, Production, Exchange, Distribution, Public Finance, International & Development Economics

Positive vs. Normative Economics

- Positive Economics: Explains facts & cause-effect (e.g., money supply → inflation)
- Normative Economics: Value-based judgments (e.g., government should reduce inequality)

Role of Models in Economics

- Simplify and analyze complex real-world activities
- Models are theoretical frameworks showing variable relationships
- Examples: Demand-Supply, Circular Flow

Characteristics of Economic Models

- Simplification of reality
- Built on assumptions (ceteris paribus)
- Abstract & predictive
- Testable through data

Types of Economic Models

1. Descriptive – show structure (e.g., Circular Flow)
2. Theoretical – explain behavior (e.g., Consumer choice)
3. Mathematical – use equations (e.g., Qd = a - bP)
4. Computational – simulations (e.g., climate effects)

Functions of Economic Models

- Explain economic relationships
- Predict outcomes
- Guide decision-making
- Facilitate communication

Importance of Economic Models

- Simplify complexity
- Test theories
- Aid policy formulation
- Educate and forecast

Limitations of Economic Models

- Over-simplification
- Unrealistic assumptions
- Unpredictable shocks
- Data limitations

Examples of Economic Models

- Demand and Supply
- Keynesian Income-Expenditure
- IS-LM
- Solow Growth Model

Assumptions in Economic Analysis

- Narrow focus and simplify complexity
- Basis for theory building and testable predictions
- Types: Behavioral, Technical, Institutional

Simplification in Economic Analysis

- Abstraction – focus on key elements
- Use of Models – diagrams, equations, graphs
- Ceteris Paribus – isolate variable effects
- Levels: Micro (households/firms) & Macro (aggregates)

Merits of Simplification & Assumptions

- Clarity and focus
- Predictive and policy relevance
- Flexibility for evolving theories

Limitations and Criticisms

- Unrealistic assumptions (e.g., perfect rationality)
- Risk of oversimplification
- Policy misuse
- Dynamic realities

Balancing Realism and Simplification

- Balance simplicity & realism
- Friedman: predictive accuracy matters more than realistic assumptions
- Good models explain & predict effectively

Conclusion

- Economics studies human behavior under scarcity using models and assumptions.
- Models simplify and explain, assumptions clarify focus.
- Balance between realism and simplification ensures usefulness of analysis.