The Art and Science of Economic Analysis

The Economic Problem: Scarce Resources, Unlimited Wants

Economics is about making choices. The problem is that wants or desires are virtually unlimited while the resources available to satisfy these wants are scarce.  A resource is scarce when it is not freely available, when its price exceeds zero.  Economics studies how people use their scarce resources in an attempt to satisfy their unlimited wants.

Resources:  The inputs, or factors of production, used to produce the goods and services that humans want. Resources are divided into four categories:

1.         Labor: Human effort, both physical and mental

2.         Capital: Physical capital: Manufactured items (tools, buildings) employed to produce goods and services.

-Human capital: Knowledge and skills people acquire to enhance their labor productivity.

3.         Land: All natural resources

4.         Entrepreneurial ability: The talent, combined with the willingness to take risks, of an individual who decides to combine resources and produce.

Payments for resources: Labor - wage; capital - interest; land- rent; entrepreneurial ability- profit.

Goods and Services: Resources are combined to produce goods and services.

-A good is something we can see, feel, and touch (i.e., corn). It requires scarce resources to produce and is used to satisfy human wants.

-A service is not tangible but requires scarce resources to produce and satisfies human wants (i.e., haircut).

-A good or service is scarce if the amount people demand exceeds the amount available at a price of  zero. Goods and services that are truly free are not the subject matter of economics. Without scarcity, there would be no economic problem and no need for prices.

Economic Decision Makers: There are four types of decision makers:

1.         Households

2.         Firms

3.         Governments

4.         The rest of the world

Their interaction determines how an economy’s resources are allocated.

Markets:

Goods and services are exchanged in the product markets.

Labor, land, capital, and entrepreneurial ability are exchanged in the resource markets.

Rational Self-Interest

-Economics assumes that individuals, in making choices, rationally select alternatives they perceive to be in their best interests.

-Rational refers to people trying to make the best choices they can, given the available information.

-People try to minimize the expected cost of achieving a given benefit or maximize the expected benefit achieved with a given cost.

Choice Requires Time and Information: Time and information are scarce and valuable. Rational decision-makers acquire information as long as the expected marginal benefit from the information is greater than its expected marginal cost.

Economic Analysis Is Marginal Analysis

-Economic choice is based on a comparison of the expected marginal cost and the expected marginal benefit of the action under consideration.

-Marginal means incremental, additional, or extra.

-A rational decision maker will change the status quo as long as the expected marginal benefit is greater than the expected marginal cost.

Microeconomics and Macroeconomics

Microeconomics: The study of individual economic choices (e.g., your economic behavior).

Macroeconomics: The study of the performance of the economy as a whole.

The Science of Economic Analysis

The Role of Theory: An economic theory is a simplification of economic reality that is used to make predictions about the real world. An economic theory captures the important elements of the problem under study.

The Scientific Method: A four-step process of theoretical investigation:

1.         Identify the question and define relevant variables.

2.         Specify assumptions:

-Other-things-constant assumption: Focuses on the relationship between the variables of interest, assuming that nothing else of importance will change.

-Behavioral assumptions: Focus on how people will behave (i.e., in their rational self-interest).

3.         Formulate a hypothesis, a statement about how key variables relate to each other.

4.         Test the hypothesis. Compare its predictions with evidence. The theory is then either rejected, accepted or modified and retested.

Normative vs. Positive

-A positive economic statement concerns what is; it can be supported or rejected by reference to facts.

-A normative economic statement concerns what should be; it reflects an opinion and cannot be shown to be true or false by reference to the facts.

Predicting Average Behavior: The task of an economic theory is to predict the impact of an economic event on economic choices and, in turn, the effect of these choices on particular markets or on the economy as a whole. Economists focus on the average, or typical, behavior of people in groups.

Some Pitfalls of Faulty Economic Analysis

-The fallacy that association is causation: The fact that one event preceded another or that two events occurred simultaneously does not mean that one caused the other.

-The fallacy of composition: The incorrect belief that what is true for the individual or part is true for the group or whole.

-The mistake of ignoring secondary effects: (unintended consequences of policy)