Foundations of Economic Analysis and Explanation

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Learning Philosophy

Economics is the study of choice under scarcity. People make such choices, individually and collectively. Economics is a decision science disentangling incentives and constraints. Economics also instills a new language, a critical way of thinking, and a positive perspective of life. This course sketches the big picture first and then helps students connect the dots. The right way, and perhaps the "best" way, to learn Economics is to digest the topics intuitively, graphically, and quantitatively.

Classical Themes

This course introduces the foundations of economic analysis and explanation. It follows the classical themes of Adam Smith on the Wealth of Nations—trade and value. Starting from scientific methodology, the lectures highlight the economic ways of thinking (opportunity cost) and apply the key principles to a wide range of real world phenomena: Part I analyzes society and individuals—how society functions and individuals choose. Part II examines business and government—their decisions and policy effects. The final lecture reveals the nature of the market and its limitations.

Part I. Society and Individuals

1. Nature of Economics
2. The Opportunity Cost
3. Trade–Value–Utility
4. Consumer and Demand

Part II. Business and Government

5. Producer and Supply
6. Market and Welfare
7. Government Policies
8. The Nature of Market

Principles and Laws in Economic Science

1. Scientific Methodology: Fact (Data) → Theory (Model) → Test (Rejection) → Application
2. Rationality Postulate: Maximum Benefit at a Minimum Cost
3. Opportunity Cost: Minimum Opportunity Cost among all Choices
4. International Trade: Absolute Advantage and Comparative Advantage
   $OC_A=(P_A/P_B)_{Export}$ < Exchange Rate $_{A/B}$ = (P_A/P_B)*<$(P_A/P_B)'_{Import}=OC'_A$
5. Exchange Condition: O.C. of holding=UV_{Seller}<EV=Price<UV_{Buyer}=O.C. of selling
6. Benefit-Cost: Maximize Net Benefit = Total Benefit–Total Cost
7. Marginal Equalization: MB >= MC (optimize on the margin)
8. Optimality and Efficiency: 1) MB=MC; 2) Max{NB=TB-TC}
9. Public Decision & Policy Evaluation: Equity and Efficiency

The Laws of Consumption (DMU) and Production (DMP) & The Law of Demand & Coase Theorem