

Chapter 1:

Economics: the study of how society uses (allocates) its scarce resources. (land, labor, time)

Scarcity: we can't do everything; demand exceeds supply and you must make choices between alternatives while facing trade-offs.

Incentive: something that induces a person to act

Marginal changes: Small incremental adjustments to a plan of action

Externality: the impact of one person's actions on the well being of a bystander

Inflation: an increase in the overall level of prices in the economy

Principles of individual decision-making:

1. People face trade-offs because of scarcity, i.e., allocation of time and budget
2. Cost of doing something: what you have to give up to get it
 - a. Opportunity cost: forgone most valued alternative
 - b. Net benefit: benefits - costs
 - i. Example: expensive kidney transplants to save 100 children vs. buying more ambulances to save many lives
3. Rational people compare costs and benefits @ the margin
 - a. Ex: Should I study for an hour? Benefits: higher grade, Cost: time
 - b. MB: marginal benefit, MC: marginal cost
 - c. If $MB > MC$, you do it. If $MC > MB$, you don't do it
 - d. Ex: mandatory attendance rules
4. People respond to incentives
 - a. You have to look at behavioral response
 - b. Ex: seatbelt laws
5. People generally benefit from trade (interdependence)
6. Markets are generally good ways to organize economic activity, i.e., determine the allocation of resources
7. Not always, i.e., government can sometimes improve on market outcomes

Micro vs. Macro Economics:

- Micro: individual decision-making units (firms, consumers)
- Macro: aggregates, price level (macrocosms)

Positive (how the economy works) vs. Normative economics (what we should do)

Ex: minimum wages go up and unemployment of unskilled workers goes up

Graphing: $y = f(x)$

Slope: $y_2 - y_1 / x_2 - x_1$

Positive slope: x up, y up or x down and y down

Negative slope: x up, y down or x down and y up

PROBLEM SETS PART 1:

3. You were planning to spend Saturday working at your part-time job, but a friend asks you to go skiing. What is the true cost of going skiing? Now suppose you had been planning to spend the day studying at the library. What is the cost of going skiing in this case?

- If you are thinking of going skiing instead of working at your part-time job, the cost of skiing includes its monetary and time costs, which includes the opportunity cost of the wages you are giving up by not working. If the choice is between skiing and going to the library to study, then the cost of skiing is its monetary and time costs including the cost of getting lower grades in your courses.

4. You win \$100 in a basketball pool. You have a choice between spending the money now or putting it away for a year in a bank account that pays 5% interest. What is the opportunity cost of spending the \$100 now?

- If you spend \$100 now instead of saving it for a year and earning 5 percent interest, you are giving up the opportunity to spend \$105 a year from now.

7. The Social Security system provides income for people over age 65. If a recipient of Social Security decided to work and earn some income, the amount he or she receives in Social Security benefits is typically reduced.

a. How does the provision affect people's incentive to save while working?

- The provision of Social Security benefits lowers an individual's incentive to save for retirement. The benefits provide some level of income to the individual when he or she retires. This means that the individual is not entirely dependent on savings to support consumption through the years in retirement.

b. How does the reduction in benefits associated with higher earning affect people's incentive to work past age 65?

- Since a person gets fewer after-tax Social Security benefits the greater his or her earnings are, there is an incentive not to work (or not work as much) after age 65. The more you work, the lower your after-tax Social Security benefits will be. Thus, the taxation of Social Security benefits discourages work effort after age 65.

Chapter 2:

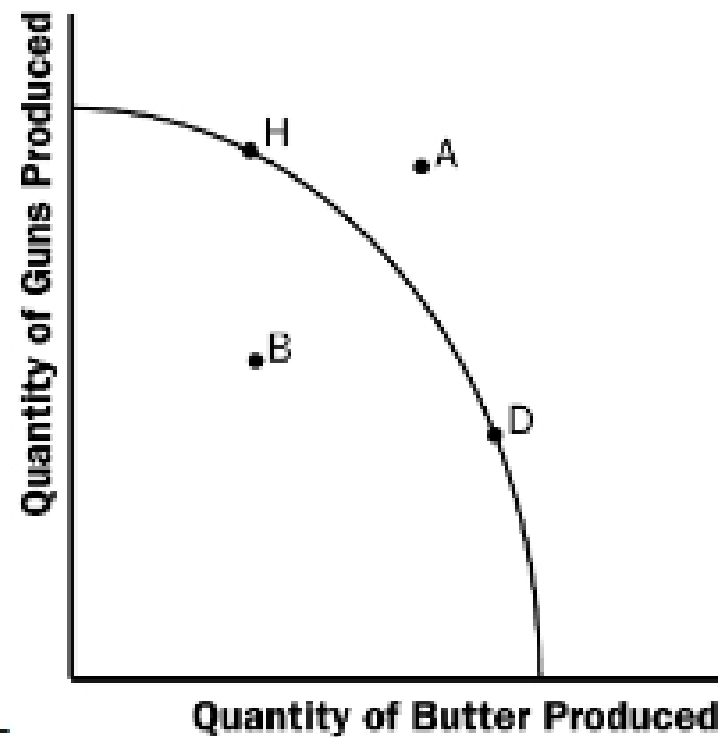
Economic model: systematic explanation: making assumptions to focus on essentials
Scarcity and choice (Productions Possibilities Frontier, PPF) maximum output level of goods

- a point in shaded area is efficient, not using to an advantage
- points on PPF line is full utilization of resources
- points outside are unobtainable

PROBLEM SETS PART 2:

2. Imagine a society that produces military goods and consumer goods, which we will call "guns" and "butter."

a. Draw a PPF for guns and butter. Using the concept of opportunity cost, explain why it most likely has a bowed out shape.



- Figure 6 shows a production possibilities frontier between guns and butter. It is bowed out because the opportunity cost of butter depends on how much butter and how many guns the economy is producing. When the economy is producing a lot of butter, workers and machines best suited to making guns are being used to make butter, so each unit of guns given up yields a small increase in the production of butter. Thus, the frontier is steep and the opportunity cost of producing butter is high. When the economy is producing a lot of guns, workers and machines best suited to making butter are being used to make guns, so each unit of guns given up yields a large increase in the production of butter. Thus, the frontier is very flat and the opportunity cost of producing butter is low.

- b. Show a point that is impossible for the economy to achieve. Show a point that is feasible but inefficient.
 - Point A is impossible for the economy to achieve; it is outside the production possibilities frontier. Point B is feasible but inefficient because it is inside the production possibilities frontier.
- c. Imagine that the society has two political parties, called the Hawks (who wants a strong army) and the Doves (who want a smaller military). Show a point of the PPF that the Hawks might choose and what the Doves might choose.
 - The Hawks might choose a point like H, with many guns and not much butter. The Doves might choose a point like D, with a lot of butter and few guns.
- d. Imagine that an aggressive neighboring country reduces the size of its military. As a result, both the Hawks and the Dove reduce their desired production of guns by the same amount. Which party would get the bigger "peace dividend," measured by the increase in butter production?
 - If both Hawks and Doves reduced their desired quantity of guns by the same amount, the Hawks would get a bigger peace dividend because the production possibilities frontier is much flatter at point H than at point D. As a result, the reduction of a given number of guns, starting at point H, leads to