

Chapter 1: Ten Principles of Economics

The word *economy* comes from the Greek word “*okonimos*”, which means the one who manages the household. In a lot of ways, economies have much in common with households. Scarcity of resources, roles, chores, allocation, etc.,

Economics - is the study of how society manages its scarce resources.

Principle 1) People face trade-offs

- There ain't no such thing as a free lunch.

Principle 2) Cost of something is what you give up to get it

- Opportunity cost

Principle 3) Rational people think at the margin

- Marginal differences in choices

Principle 4) People respond to incentives

Principle 5) Trade can make everyone Better off

Principle 6) Markets are usually a good way to organize economic activity

Principle 7) Governments can interfere with markets

Principle 8) Standard of living depends on ability to produce goods and services

Principle 9) Prices rise when the government prints too much money

Principle 10) Society faces short trade-off between inflation and unemployment

Accompanying Lecture Notes

Micro

- What individuals consume
- How Markets work
- What strategies companies employ

Macro

- National or Global concerns, like
- Unemployment
- Government policies

Econometrics (statistics)

- Graduate level studies
- Making economics more empirical rather than theoretical

Factors of Production

- Raw Materials
- Labor
- Human Capital – skills, intellect
- Physical Capital – tools, machinery
- Entrepreneurship – sales & marketing

A Production Possibility Curve lets the analyst know which production outputs are possible given the circumstances.

We say a combination of product 1 and product 2 is efficient, if

- All factors of production are used.
- All factors are used in their most productive employment.

Chapter 2: Thinking like an Economist

As we use models to examine various economic issues throughout this book, we will see that all the models are built with assumptions. Just as a physicist begins the analysis of a falling marble by assuming away the existence of friction, economists assume away many of the details of the economy that are irrelevant for studying the question at hand.

Circular-flow diagram – how the economy is organized and how participants in the economy interact with each other. The inner loop represents the flows of inputs and outputs. The outer loop represents the corresponding flow of dollars. This is useful to keep in mind when thinking about how the pieces of the economy fit together.

Accompanying Lecture Notes

Production Possibility Curve

- 1) Opportunity Cost
- 2) Marginal Principle
 - a. Total Cost
 - b. Fixed Cost/Variable cost
 - c. Marginal Cost
- 3) Diminishing Return

Opportunity Cost – the cost of foregoing your next best opportunity. Sometimes when we choose an opportunity, we give up other opportunities which have costs associated.

- Accountant – explicit and precise costs.
- Economist – Accounting costs + Opportunity costs

Marginal Principle – Used to maximize profits.

- Costs
 - o Fixed Costs (FC) Do NOT change with quantity.
 - o Variable Costs (VC) DO change with quantity.
 - o Quantity (Q) the amount we produce.
 - o Total Costs (TC) fixed costs + variable costs

- o Marginal Costs (MC) the change in total cost when we produce ONE additional unit.
- Marginal cost is the slope along the total cost curve (approximately)
- MC will always have an opposite curve than the TC curve. Convex or concave. If the TC is a straight line than so is the MC curve.

$$\text{Percentage change in price} = \frac{P2 - P1}{P1} \times 100$$

P2 & P1 = Price 1 and Price 2

Slope intercept - $Y = MX + B$ (Y = vertical axis. X = horizontal axis. M = slope. B = Y intercept)

$$M = \frac{\text{vertical change}}{\text{Horizontal change}} = \frac{\text{Rise}}{\text{Run}} = \frac{Y2 - Y1}{X2 - X1}$$

Need these two for exams. Practice problem. P1 = \$30 Q1 = 60
P2 = \$20 Q2 = 80

- 1) Calculate percentage change in price
- 2) Find the equation of the slope

Price is the vertical axis, quantity is the horizontal axis.

For exam, be able to differentiate between Fixed Costs and Variable Costs.

TR = total revenue

MR = the change in TR when we sell 1 additional unit

Profit (abbreviated as pi Π) -

Marginal Principle - the optional level of an activity occurs where MR = MC

Q* = where MR intercepts with MC

You never want MR to be less than MC

Diminishing Returns - increasing a production input eventually results in diminishing increases in output. **Only occurs in the short run.**

Short-run - the time period in which at least one production input is fixed.

Long-run - the time period in which all production inputs are adjustable.

Chapter 3 Interdependence and the Gains From Trade

Economists use the term comparative advantage when describing the opportunity cost of two producers. The producer who gives up less of other goods to produce good X has the smaller opportunity cost of producing good X and is said to have a comparative advantage in producing it. In our example, the farmer has a lower opportunity cost of producing potatoes than the rancher: An ounce of potatoes costs