

ECON 101: Principles of Economics I

Lecture Note 11

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Lecture 11: Making Decisions

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Opportunity cost and decisions

Explicit cost - cost that involves actually laying out money

Implicit cost - does not require an outlay of money

Together, these two make up **opportunity costs**

Example: What is the opportunity **cost** of an additional year of school?

- Tuition (explicit): 47000
- Books (explicit): 1200
- Computer (explicit): 1500
- Forgone salary (implicit): 55000

Total opportunity cost = $47000 + 1200 + 1500 + 55000 = 104700$

* Not benefit, consider cost only in this case

Capital

Capital of a business is the value of its assets:

- Equipment
- Buildings
- Tools
- Inventory
- Financial assets

Implicit cost of a capital - the opportunity cost of the capital used by a business; the income the owner could have realized from that capital if it had been used in its next best alternative way.

Accounting profit vs economic profit

Accounting profit - revenue minus the explicit costs

Economic profit - revenue minus the opportunity cost (explicit cost + implicit cost) of its resources

Economic profit = accounting profit - implicit cost

Example: Kathy's Kopy Shoppe

Kathy used to manage a FedEx Kinko's but now is considering opening her own copy shop

- Revenue: 10000
- Explicit cost: 65000
- Accounting profit: 35000
- Implicit costs of business:
 - Implicit cost of capital: 3000
 - Forgone salary: 34000
- **Economic profit: -2000**

Sunk cost - A cost already incurred and NOT recoverable

Imagine you have a date for Friday ...

Hoping to be proactive, you buy two nonrefundable movie tickets in advance (\$11 each)

Later that day, you and your date are talking and your date tells you that their perfect first date is spending the evening talking and getting to know one another more

What do you do?

- ❖ Economists consider both Explicit costs and Implicit costs when making decisions.
 - **Explicit cost** - cost that involves actually laying out money
 - **Implicit cost** - does not require an outlay of money
 - **Opportunity Costs** = Explicit Costs + Implicit Costs
- ❖ This means that economists calculate profit differently when making decisions.
 - **Accounting Profit** = Revenues – Explicit Costs
 - **Economic Profit** = Revenues – Opportunity Costs
 - Accounting Profit > Economic profit, since Accounting profit considers fewer costs
- ❖ Sunk costs are a type of cost that economists ignore.
 - **Sunk cost** – a cost that has already been incurred and is not recoverable.

Behavioral Economics

Recall, Kathy of Kathy's Kopy Shoppe.

- Economic Profit was -2000
- The model suggests Kathy should NOT open her business.
- What if Kathy opens her store anyway?

Behavioral Economics studies why people sometimes make less-than-perfect choices

Rational vs Irrational

A person is considered rational if they choose the available option that leads to the outcome they most prefer.

- Not necessarily the highest economic payoff.

Rational Three reasons why people might prefer a lower economic payoff:

- Concerns about fairness
- Bounded rationality
- Risk aversion (avoid risk)

Irrational (Why might a person choose an option that results in a less preferred outcome?)

- Misperceived opportunity costs (ex: save gas, drive less distance)
- Being Overconfident (ex: stock market, stock manager)
- Unrealistic Expectations about Future Behavior (ex: retirement)
- Counting dollars unequally (ex: using credit card vs using cash)
- Loss aversion (ex: place some additional value on a stuff that make us do not want to give it up)
- Status Quo Bias (ex: paying for subscriptions but not using them)

Why use rational models?

If people are irrational, why do we use models that assume rationality?

- The models are far simpler to construct and estimate.
- The predictions are still very robust.
- Natural market incentives can encourage rational behavior.

- ❖ An individual makes a rational choice if they choose their most preferred outcome.
 - This may not be the highest economic payoff due to *concerns about fairness, bounded rationality, or risk aversion*.
- ❖ Most people will make at least a few irrational decisions in their lives due to a variety of reasons.
- ❖ Majority of economic models assume all decision makers are rational.
 - Although imperfect this allow us to construct simple hypothetical scenarios that still result in good predictions.