## Principles of Economics

## Chapter 1

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## After studying this chapter, you will be able to:

- Define economics and distinguish between microeconomics and macroeconomics.
- Explain the KEY questions of economics
- Explain the key ideas that define the economic way of thinking.


## Definition of Economics

- For individuals, they may:
- Buy an I-phone
- Buy a laptop
- Live in well-equipped, spacious, and comfortable home
- Go to a good university, ....etc

The choices we make depend on the incentives we face.

## Definition of Economics

- For government, they should provide:
- Security
- Infrastructure (e.g., roads)
- Building schools
- Health services


The choices depend on the incentives we face.

## Definition of Economics

## incentives

The Prices works as incentives

A lower price encourage buyers to buy more

> A lower price discourage sellers to sell more

Demand increases
Supply decreases

## Definition of Economics

$>$ we want more than we can get (unlimited needs).
$>$ Our inability to satisfy all our wants is called scarcity.
$>$ Because we face scarcity, we must make choices.
$>$ The choices we make depend on the incentives we face.
$>$ An incentive is a reward that encourages an action or a penalty that discourages an action.

## Definition of Economics

Economics is the social science that studies the choices that individuals, businesses, governments, and entire societies make as they cope with scarcity and the incentives that influence those choices.

Economics divides in to main parts:

- Microeconomics
- Macroeconomics


## Definition of Economics

Microeconomics is the study of choices that individuals and businesses (firms) make, the way those choices interact in markets, and the influence of governments.

Examples of microeconomics:
$>$ The factors that affect the production of good x (computers)
$>$ How firms achieve profits or losses?
$>$ What are the firm's cost of production?
$>$ How prices affect our willingness to buy a good?

## Definition of Economics

Macroeconomics is the study of the performance of the national and global economies.

Examples of macroeconomics:
$>$ The factors that affect
Unemployment

- exchange rate

Inflation

- interest rates

Output growth

- investment

Money supply

## Choice and the key Economic Questions

- How do choices result in determining what, how, and for whom goods and services get produced?
- What, How, and For Whom?

1. What?

Goods and services are the objects that used to satisfy human wants.

- Goods are physical objects such as cell phones and cars
- Services are tasks performed for people such as education, health, banking, ... etc


## Choice and the key Economic Questions

- Agriculture
and manufacturing is a small percent of production in rich countries such as the USA and a large percent of production in poorer countries such as China.
- Most of what is produced in the United States is services.


## 1. What?


$\square$ Agriculture $\square$ Manufacturing $\square$ Services

## Choice and the 3 key Economic Questions

## 2. How?

Goods and services are produced by using productive resources or factors of production.

Factors of production are grouped into four categories:

- Land
- Labor
- Capital
- Entrepreneurship


## 2. How?

- Land : the "gifts of nature" or "natural resources" that we use to produce goods and services
- Labor: the work time and work effort that people devote to producing goods and services.
- Capital: tools, instruments, machines, buildings, and other constructions that firms use to produce goods and services
- Entrepreneurship: is the human resource that organizes land, labor, and capital to produce the product.


## Choice and the key Economic Questions

## 3. For Whom?

- Who gets the goods and services depends on the incomes that people earn.
- People with large incomes can buy a wide range of goods and services.
- People with small incomes have fewer options and can afford a smaller range of goods and services.
- Land earns rent.
- Labor earns wages.
- Capital earns interest.
- Entrepreneurship earns profit.

To be continued

## Choice and the key Economic Questions

## Can the Pursuit of Self-Interest Promote the Social Interest?

Self-Interest: A choice is in your self-interest if you think that choice is the best one available for you.

Social Interest: A choice is in the social interest if it leads to an outcome that is the best for society as a whole.

- There is no clear answer for the question as it is under argument


## What is the difference between scarcity and poverty?

- Does scarcity means poverty?
- Could attain all of their goals if they were as rich as Bill Gates?
- The role of time as a constraint


## The Economic Way of Thinking

Six key ideas define the economic way of thinking:

- A choice is a tradeoff.
- People make rational choices by comparing benefits and costs.
- Benefit is what you gain from something.
- Cost is what you must give up to get something.
- Most choices are "how-much" choices made at the margin.
- Choices respond to incentives.


## The Economic Way of Thinking

1. A Choice is a Tradeoff

- The economic way of thinking places scarcity and its implication, choice, at center stage.
- You can think about every choice as a tradeoff-an exchange-giving up one thing to get something else.
- On Saturday night, will you study or have fun?

You can't study or have fun at the same time, so you must make a choice.

Whatever you choose, you could have chosen something else. Your choice is a tradeoff.

## The Economic Way of Thinking

## Examples of tradeoff

- Education and training: A student remaining in school for another two years to complete a degree will need to forgo a significant amount of leisure time. But by doing so, he will be better educated and will be more productive. As a society, we trade off current production for greater future production.
- Research and development: Factory automation brings greater productivity in the future, but means smaller current production. As a society, we trade off current production for greater future production.


## The Economic Way of Thinking

## 2. Making a Rational Choice

A rational choice is one that compares costs and benefits and achieves the greatest benefit over cost for the person making the choice.

Only the wants of the person making a choice are relevant to determine its rationality.

The idea of rational choice provides an answer to the first question: What goods and services will be produced and in what quantities?

The answer is: Those that people rationally choose to buy!

## The Economic Way of Thinking

How do people choose rationally?
The answers turn on benefits and costs.
3. Benefit: What you Gain

The benefit of something is the gain or pleasure that it brings and is determined by preferences

Preferences are what a person likes and dislikes and the intensity (or strength) of those feelings.

## The Economic Way of Thinking

## 4. Cost: What you Must Give Up

The opportunity cost of something is the highest-valued alternative that must be given up to get it.

What is your opportunity cost of joining university?
Opportunity cost has two components:

1. The things you can't afford to buy because you paid tuition fees, books, transportation...., etc. (the alternative may be a new cell phone or a new laptop)
2. The things you can't do with your time if you spend at the university.(the alternative may be starting a job and


## The Economic Way of Thinking

## 5. How Much? Choosing at the Margin

To make a choice at the margin, you evaluate the consequences of making small changes in an activity incremental (marginal) changes

- The benefit from doing a small change in an activity is marginal benefit.
- The opportunity cost of doing a small change in an activity is marginal cost.
- If the marginal benefit exceeds its marginal cost, your rational choice is to do more of that activity.

If homework assignments grades are increased from 5\% to 15\%, the marginal benefit of completing homework assignments has increased and more students will do the homework.

## Study Plan Problems And Applications.

Apple Inc. decides to make iTunes freely available in unlimited quantities.
a. How does Apple's decision change the opportunity cost of a download?
b. Does Apple's decision change the incentives that people face?
c. Is Apple's decision an example of a microeconomic or a macroeconomic issue?

- Apple's decision decreases the opportunity cost of a tune as you can get the tune for free.
- it increases people's incentives to buy an iPod.
- It is a microeconomic decision because it affects a single company and a single market.


## Study Plan Problems And Applications.

3. Explain how the following news headlines concern self-interest and the social interest.
b. McDonald's Moves into Salads

McDonald's decision to serve salads is a decision made by the firm for its self interest. The social interest is affected because more people will eat salads rather than other fast food.
c. Food Must Be Labeled with Nutrition Information

The is made to achieve the social interest. This decision is not made by any one single firm and so does not (necessarily) reflect anyone's self interest.

