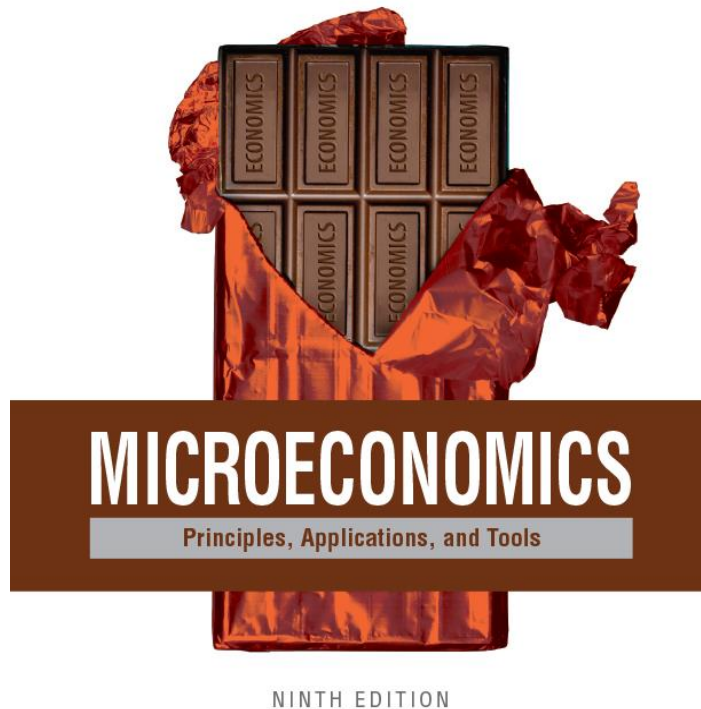


# Microeconomics: Principles, Applications, and Tools

NINTH EDITION

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## Chapter 3

### Exchange and Markets

The nation of Latvia is located on the shore of the Baltic Sea, and since the 14<sup>th</sup> century has been a major commercial hub between west and east

# Learning Objectives

- 3.1** Use opportunity cost to explain the rationale for specialization and trade.
- 3.2** Explain how markets allow specialization and trade.
- 3.3** List the roles of government in a market economy.

# 3.1 COMPARATIVE ADVANTAGE AND EXCHANGE

## Specialization and the Gains from Trade

### PRINCIPLE OF OPPORTUNITY COST

The opportunity cost of something is what you sacrifice to get it.

TABLE 3.1 Productivity and Opportunity Costs

	Fred		Kate	
	<i>Coconuts</i>	<i>Fish</i>	<i>Coconuts</i>	<i>Fish</i>
Output per day	2	6	1	1
Opportunity cost	3 fish	1/3 coconut	1 fish	1 coconut

# 3.1 COMPARATIVE ADVANTAGE AND EXCHANGE

## Comparative advantage

The ability of one person or nation to produce a good at a lower opportunity cost than another person or nation.

- Fred has a comparative advantage in producing fish.

His opportunity cost of fish is one-third coconut per fish, compared to 1 coconut per fish for Kate

- Kate has a comparative advantage in coconuts.

Her opportunity cost of coconuts is 1 fish per coconut, compared to 3 fish per coconut for Fred.

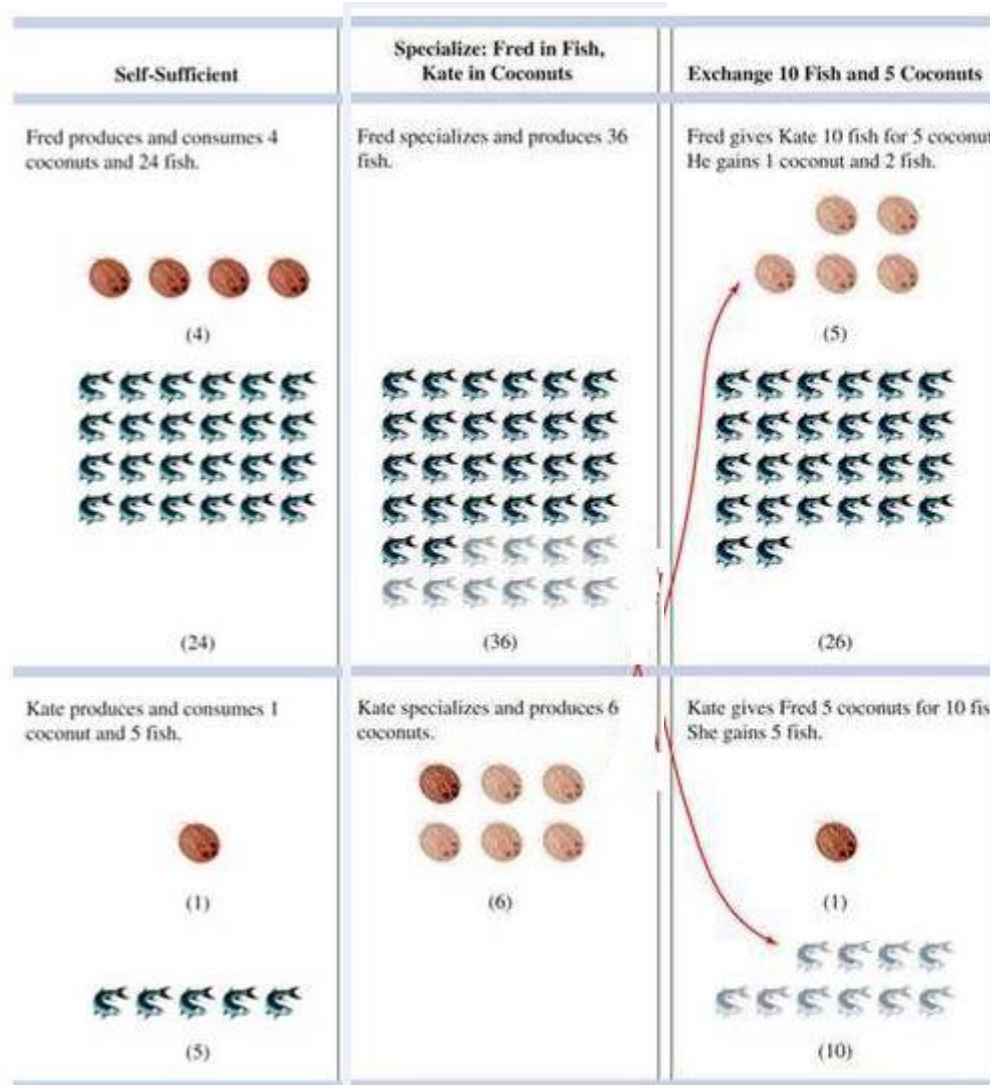


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# 3.1 COMPARATIVE ADVANTAGE AND EXCHANGE

## PRINCIPLE OF VOLUNTARY EXCHANGE

A voluntary exchange between two people makes both people better off.

## Comparative Advantage versus Absolute Advantage

- **Comparative advantage**

The ability of one person or nation to produce a good at a lower opportunity cost than another person or nation.

- **Absolute advantage**

The ability of one person or nation to produce a product at a lower resource cost than another person or nation.

Specialization and exchange are possible because of  
***comparative advantage***

# 3.1 COMPARATIVE ADVANTAGE AND EXCHANGE

## The Division of Labor and Exchange

In his 1776 book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Adam Smith noted that specialization actually increased productivity through the division of labor.

Smith listed three reasons for productivity to increase with specialization, with each worker performing a single production task:

1. *Repetition*. The more times a worker performs a particular task, the more proficient the worker becomes at that task.
2. *Continuity*. A specialized worker doesn't spend time switching from one task to another. This is especially important if switching tasks requires a change in tools or location.
3. *Innovation*. A specialized worker gains insights into a particular task that lead to better production methods.

# Adam Smith:

# The Wealth of Nations

## Adam Smith (1723- 1790)

- Scottish philosopher and economist
- The Wealth of Nations (1776) first work of modern economics
  - Free market economic theory
    - Prices of goods and services determined by market forces
    - Free of government intervention
  - Division of labor
  - *The Invisible Hand*
    - Rational self-interest and competition lead to economic prosperity
    - An individual acting in his own self-interest unintentionally promotes the good of society
  - Warned of the dangers of collusion and monopolies

# Comparative Advantage and International Trade

- **Import**

A product produced in a foreign country and purchased by residents of the home country.

- **Export**

A product produced in the home country and sold in another country.

# APPLICATION 1

## Absolute Disadvantage and Comparative Advantage in Latvia

### APPLYING THE CONCEPTS #1: What is the rationale for specialization and trade?

- Latvia in the 1990s was much less productive than nations in the European Community. The question is, Why would a member of the EC, whose workers are more productive than Latvian workers in the production of all goods, buy any products from Latvia?

	EC: Saw Timber	EC: Grain	Latvia: Saw Timber	Latvia: Grain
Output	1200	200	200	10
Opportunity Cost	1/6 Grain	6 Saw timber	1/20 Grain	20 Saw timber

- Although the EC has an absolute advantage in both products, it has a comparative advantage (a lower opportunity cost) in grain: the opportunity cost of one unit of grain is 6 units of saw timber in the EC, compared to 20 units of saw timber in Latvia. Latvia has a comparative advantage in saw timber: the opportunity cost is 1/20 units of grain in Latvia, compared to 1/6 units of grain in the EC.
- Based on the notion of comparative advantage, we know that both the EC and Latvia can be made better off if the EC produces grain in exchange for saw timber produced by Latvia.

# Outsourcing

When a domestic firm shifts part of its production to a different country, we say the firm is *outsourcing* or *offshoring*.

Some recent studies of outsourcing have reached a number of conclusions:

- The loss of domestic jobs resulting from outsourcing is a normal part of a healthy economy, because technology and consumer preferences change over time.
- The jobs lost to outsourcing are at least partly offset by jobs gained through *insourcing*, jobs that are shifted from overseas to the United States.
- The cost savings from outsourcing are substantial, leading to lower prices for consumers and more output for firms. The jobs gained from increased output at least partly offset the jobs lost to outsourcing.

## 3.2 MARKETS

- **Market economy**

An economy in which people specialize and exchange goods and services in markets.

Although it appears that markets arose naturally, a number of social and government inventions have made them work better:

- **Contracts** specify the terms of exchange, facilitating exchange between strangers.
- **Insurance** reduces the risk entrepreneurs face.
- **Patents** increase the profitability of inventions, encouraging firms to develop new products and production processes.
- **Accounting rules** provide potential investors with reliable information about the financial performance of a firm.

# 3.2 MARKETS

## Virtues of Markets

Under a market system, decisions are made by the millions of people who already have information about consumers' desires, production technology, and resources. These decisions are guided by prices of inputs and outputs.

Prices provide signals about the relative scarcity of a product and help an economy respond to scarcity.

The market system works by getting each person, motivated by self-interest, to produce products for other people.

### **Centrally planned economy**

An economy in which a government bureaucracy decides how much of each good to produce, how to produce the good, and who gets the good.

## 3.2 MARKETS

### The Role of Entrepreneurs

**Entrepreneurs play a key role in a market economy.**

- Prices and profits provide signals to entrepreneurs about what to produce.
- If a product becomes popular, competition among consumers to obtain it will increase its price and increase the profits earned by firms producing it.
- Entrepreneurs will enter the market and increase production to meet the higher demand, switching resources from the production of other products.
- As entrepreneurs enter the market, they compete for customers, driving the price back down to the level that generates just enough profit for them to remain in business.

# APPLICATION 2

## The Market for Meteorites

### APPLYING THE CONCEPTS #2: Why do markets develop?

- When a meteoroid, a chunk of debris in the solar system, enters the earth's atmosphere it becomes a meteor, and if a meteor reaches the ground and survives impact, it becomes a meteorite.
- The market for meteorites is highly organized. Meteorites have been hitting the earth for millions of years, and they can still be found in many desert areas. In Morocco, people bring meteorites picked up in the desert to local dealers, who then sell them to the public through websites and eBay. And there are professional meteorite hunters, who listen for news of meteorite showers and then travel to the landfalls to gather fresh meteorites.
- The market price of meteorites varies from a few dollars per gram for the most common types to Hundreds of dollars per gram for the rarest, including objects that originated from Mars and the moon.

# 3.3 MARKET FAILURE AND THE ROLE OF GOVERNMENT

Although markets often operate efficiently on their own, sometimes they do not.

**Market failure** occurs when a market doesn't generate the most efficient outcome.

There are several sources of market failure and possible responses by government. Here is a preview of the topics:

- Pollution.
- Public goods.
- Imperfect information.
- Imperfect competition.

# 3.3 MARKET FAILURE AND THE ROLE OF GOVERNMENT

## Government Enforces the Rules of Exchange

- To facilitate exchange, the government helps to enforce contracts by maintaining a legal system that punishes people who violate them. This system allows people to trade with the confidence that the terms of the contracts they enter will be met.
- In the case of consumer goods, the implicit contract is that the product is safe to use. The government enforces this implicit contract through product liability or tort law.
- The government disseminates information about consumer products.
- The government uses antitrust policy to foster competition.

# 3.3 MARKET FAILURE AND THE ROLE OF GOVERNMENT

## Government Can Reduce Economic Uncertainty

- Given the uncertainty of market economies, most governments fund a “social safety net” that provides for citizens who fare poorly in markets.
- Of course, there are private responses to economic uncertainty. For example, we can buy our own insurance to cover losses.
- Some types of insurance, however, are unavailable in the private insurance market. As a result, the government steps in to fill the void.

# APPLICATION 3

## Property Rights and Urban Slums

### **APPLYING THE CONCEPTS #3: What is the role of government in a market economy?**

- One role of government is to About 10 percent of the world's population lives in urban squatter settlements, with little security in housing. A household that occupies public land could be relocate at any time, and would lose all f its immobile possessions including a dwelling.
- One policy option is property titling, that is, granting ownership of a dwelling to its occupant. The person who owns a dwelling reaps all the benefits of regular repair and maintenance, including any increase in market value.
- Granting property rights increases the incentive for property maintenance.
- A study in Peru showed evidence that urban property titling increases investment in housing repair and maintenance.

# Learning Objectives

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# KEY TERMS

**Absolute advantage**

**Centrally planned economy**

**Comparative advantage**

**Export**

**Import**

**Market economy**

# Questions?

