

Topic Coverage: Hubbard & O'Brien: Economics

## Trade-offs and Comparative Advantage

Textbook Chapter: Chapters 2 (Micro & Macro), 7 (Macro) and 9 (Micro)

MobLab Game: Comparative Advantage

Key Learning Objectives:

- The distinction between absolute and comparative advantage.
- Experience first hand the gains from specialization and trade.
- Differences in opportunity costs lead to mutually beneficial trade.

## Demand, Supply and Equilibrium

Textbook Chapter: Chapter 3 (Microeconomics & Macroeconomics)

MobLab Game: Competitive Market

Key Learning Objectives:

- The "invisible hand" of the market: how individual profit maximization leads to competitive market equilibrium.
- Price discovery: the equilibrium market-clearing price results from the valuations of different buyers and costs of different sellers.
- Gains from trade (i.e., consumer and producer surplus).
- Shifts in either supply or demand change equilibrium outcomes.

# Government Interventions in Competitive Markets

Textbook Chapter: Chapter 4 (Microeconomics)

MobLab Game: Competitive Market

**Key Learning Objectives:** 

- Government interventions (per-unit taxes, subsidies, price ceilings and floors) alter equilibrium outcomes.
- Equilibrium outcomes do not depend on whether buyers or sellers pay the tax.
- The difference between tax incidence and who pays the tax.
- Relative elasticities determine incidence of a tax or subsidy.
- Excess supply (price floors) and excess demand (price ceilings).
- The efficiency implications of government interventions.

#### **Externalities**

Textbook Chapter: Chapter 5 (Microeconomics) MobLab Game: Externalities w/Policy Interventions

Key Learning Objectives:

• With externalities, the equilibrium of a competitive market without interventions is inefficient.

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Microeconomics and Macroeconomics, both 5<sup>th</sup> editions.



• By reducing transactions, a tax can increase efficiency (total surplus) in a market with a negative externality, whereas a subsidy can increase surplus in a market with a positive externality.

### **Public Goods**

Textbook Chapter: Chapter 5 (Microeconomics) MobLab Game: Public Good: Discrete (Threshold)

Key Learning Objectives:

- Highlights the features of public goods: non-rival and non-excludable.
- Demonstrates the distinction between private and social benefits of public goods.
- Shows how individual profit maximization leads to the free-rider problem.

## Asymmetric Information (Adverse Selection)

Textbook Chapter: Chapter 7 (Microeconomics) and Chapter 5 (Macroeconomics)

MobLab Game: Market for Lemons

Key Learning Objectives:

- Experience in a market with asymmetric information.
- Asymmetric information may lead to adverse selection and market failure.

## Firms in Competitive Markets

Textbook Chapter: Chapter 12 (Microeconomics)

MobLab Game: Production, Entry & Exit

**Key Learning Objectives:** 

- Short-run profit maximization involves thinking at the margin.
- In the long-run equilibrium of a competitive market with identical firms, all firms earn zero economic profits.

# Oligopoly & Game Theory

Textbook Chapter: Chapter 14 (Microeconomics)

MobLab Game: Prisoner's Dilemma

Key Learning Objectives:

- Key features of games: payoff matrices, best responses and dominant strategies.
- Identification of the Nash equilibrium.
- The (sometimes) conflicting incentives of cooperation and self-interest.
- Repeated play may lead to more cooperative outcomes.

MobLab Game: Ultimatum Game

**Key Learning Objectives:** 

- Experience a sequential bargaining game.
- Norms such as fairness may result in behaviors that deviate from game theoretic predictions.

## **Monopoly Pricing**

Textbook Chapter: Chapter 15 (Microeconomics) MobLab Game: Cournot (with Group Size=1)



# Key Learning Objectives:

- Monopolies restrict output in order to increase price.
- The tension between the quantity price effects of increased output.

#### **Labor Markets**

Textbook Chapter: Chapter 17 (Microeconomics)

MobLab Game: Simple Labor Market

**Key Teaching Points:** 

• In a competitive labor market, equilibrium wage is equal to the value created by the last worker hired.

## Unemployment

Textbook Chapter: Chapter 9 (Macroeconomics)

MobLab Game: Simple Labor Market

**Key Teaching Points:** 

- Employment levels are determined by both the supply and demand of labor.
- Policies such as a minimum wage or unemployment insurance affect structural unemployment.

## Money and Banks

Textbook Chapter: Chapter 10 (Macroeconomics)

MobLab Game: Bank Run Key Learning Objectives:

- Highlights the underlying concept of fractional banking.
- Demonstrates the trade-off between profit and risk, and shows how bank runs may arise.
- Policy interventions, such as deposit insurance, can reduce the possibility of bank runs.