



Lecture 25-26

- **Introduction to monopolistic competition and oligopoly**
- **Monopolistic competition**
- **Oligopoly**
 - Cournot
 - Stackelberg
 - Bertrand



Monopolistic Competition

- **Main difference from perfect competition:**
Products are differentiated
- **Key characteristics:**
 - Firms compete by selling highly but not perfect substitutable products
 - Free entry and exit
- **Equilibrium:**
 - Short-Run vs. long-run (Figure 12.1)
 - Economic efficiency (Figure 12.2)
 - Example 12.1



Cournot Competition

- **Nash equilibrium:**
 - Each firm is doing the best it can given what its competitors are doing
 - Reaction functions/curves
- **Cournot model:**
 - Two firms compete over output
 - Simultaneous choice of production
 - Residual demand and reaction curve
- **Example: (Figure 12.4)**
 - $P = 30 - Q$, $MC = 0$
 - Reaction curve: $Q = 15 - 1/2 Q'$
 - Equilibrium: $Q = Q' = 10$




Stackelberg Competition

- **Leader-Follower game:**
 - Firm 1 moves first
 - Two-period game: backward induction
- **Example:**
 - Firm 1 takes into consideration Firm 2's reaction curve
 - Commitment and threat
 - Capacity



Bertrand Competition

- **Assumptions:**
 - Two firms compete over prices
 - Simultaneous choice of prices
- **Homogeneous products:**
 - $P = MC$
- **Differentiated products:**
 - $Q = 12 - 2P + P'$
 - Equilibrium (Figure 12.6)
- **Competition vs. Collusion:**
 - Prisoners' Dilemma and cartels



Exercises

- Q1
- Q2
- Q3
- Q4
- Q5
- Q7

