Chapter 11
Industrial Structure and Trade in the Global Economy—Businesses without Borders
Fundamental Issues

1. How do economies of scale help to explain a nation’s specialization in inter-industry trade?

2. How do economies of scale and product variety provide an explanation for intra-industry trade?

3. In what way can foreign direct investment affect international trading patterns?

4. What are alternative industry structures, and how does industry structure matter in the global economy?
5. Why do companies engage in cross-border mergers and acquisitions, and how do international market linkages complicate measuring the degree to which a few large firms may dominate markets?

6. How do governments regulate international merger and acquisition activities?
Industrial Organization and International Integration

• Industrial Organization
  ➢ The study of the structures of and interactions among firms and markets.

• Why Study Industrial Organization?
  ➢ The significant growth of intra-industry trade that primarily entails the international exchange of goods or services that are close substitutes.
Economies of Scale and International Trade

• **Long-run Average Cost**
  - The ratio of a firm’s total production cost to its output when the firm has sufficient time to vary the quantities of all factors of production.

• **Economies of Scale**
  - A reduction in long-run average cost induced by an increase in a firm’s output.
    - Specialization in the use of factors of production due to an increase in the scale of production
    - The savings advantage of physical processes that produce more output with proportionately fewer inputs.
Figure 11-1  A Hypothetical Long-Run Average Cost Curve for an Aircraft Industry
Economies of Scale and International Trade (cont’d)

• Diseconomies of Scale
  ➢ An increase in long-run average cost caused by an increase in a firm’s output.

• Minimum Efficient Scale
  ➢ The size at which a firm or industry minimizes its long-run average cost over a time frame in which quantities of all factors of production may be adjusted.
Figure 11-2
Demand, Production, and Pricing at a Monopolistically Competitive Firm
Product Variety, Imperfect Competition, and Intra-industry Trade

• Theory of Imperfect Competition
  ➢ When firms sell products that are not identical yet are substitutable, they are said to be imperfectly competitive firms.
  ❖ Any single perfectly competitive firm that sells products identical to those of other firms has no incentive to set a price that differs from the market price, because setting a price above the market price induces its customers to buy the other identical product.
Types of Foreign Direct Investment

• Horizontal Foreign Direct Investment
  ➢ Establishment of a foreign subsidiary of a multinational firm that produces a good or service that is similar to the one the firm produces in its home country.

• Vertical Foreign Direct Investment
  ➢ Establishment of a foreign subsidiary of a multinational firm that produces components that are assembled elsewhere or uses components produced elsewhere to assemble the firm’s final product.
Product Variety, Imperfect Competition, and Intra-industry Trade (cont’d)

• Monopolistic Competition

  ➢ An industry structure with a relatively large number of firms, easy entry or exit, and similar but not identical firm products.

  ➢ In the short run, a firm can earn a positive economic profit, which means that its total revenue can exceed the opportunity cost of being part of that industry instead of another industry.

  ➢ In the long run, the total revenue earned by a firm in a monopolistically competitive industry just covers the opportunity cost of remaining in the industry.
Trade Effects of Foreign Direct Investment

- Foreign Direct Investment
  - Horizontal investment is used as a means of avoiding barriers to trade within other nations.
  - Vertical investment allows firms to transfer components from facilities in one nation to another.

- First-Mover Advantage
  - A barrier to entry arising from the ability of the initial firm in an industry to develop marketing advantage by identifying its own product as the industry product.
Globalization and Industry Structure

• Barriers to Entry

➢ Any factors inhibiting entrepreneurs from instantaneously founding a new firm.
  ❖ The presence of significant economies of scale.
  ❖ Exclusive ownership of a relatively large portion of a key resource used to produce a good or service.
  ❖ Differences among products that help explain monopolistic competition.
  ❖ Governmental sanctioning government-sponsored firms or by establishing licensing requirements for an industry and then restricting the number of licenses.
Alternative Forms of Imperfect Competition

• Oligopoly
  - An industry structure in which a few firms are the predominant suppliers of the total output of an industry
  - Their pricing and production decisions (strategic pricing) are interdependent (oligopolistic interdependence).

• Monopoly
  - An industry that consists of a single firm.
Figure 11-3: The Effects of Intra-Industry Trade under Monopolistic Competition

Price and Cost per Unit

Output

$P_N$, $P_T$, $Q_N$, $Q_T$, $D_T$, $D_N$, $LRATC$
Figure 11-4 Comparing Monopoly with Perfect Competition with Constant Marginal Cost

Price and Cost per Unit

- Consumer Surplus under Monopoly
- Consumer Surplus under Perfect Competition
- Supply under Perfect Competition

$P_M$, $P_{PC}$, $Q_M$, $Q_{PC}$, $MC = ATC$, $MR$, $D$
**Figure 11-5  Domestic Dumping by a Foreign Monopoly**

(a) **Domestic Market**

(b) **Foreign Market**

- Foreign Market:
  - Price and Cost per Unit
  - $Q_f^1$, $Q_f^1 + (Q_d^2 - Q_d^1) = Q_f^2$

- Domestic Market:
  - Price
  - Quantity
  - $p_d^1$, $p_d^2$

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Assessing Market Concentration and Its Effects

• Concentration Ratio
  - The share of total industry sales by the top few firms.

• Herfindahl–Hirschman index
  - The sum of the squares of the market shares of each firm in an industry.

• Relevant Market
  - The true economic marketplace taking into account the availability of all products that directly constrain product prices for individual producers.
Antitrust in an Evolving Global System

• Antitrust Laws
  ➢ Statutes designed to achieve benefits of competition for consumers and producers.

• Price Discrimination
  ➢ Charging different consumers different prices for identical goods or services, or charging the same consumer different prices for the same good or service depending on number of units that the consumer purchases.
Antitrust in an Evolving Global System (cont’d)

• Predatory Pricing
  ➢ A situation in which a firm sets artificially low prices intended to induce competitors to leave the industry and to dissuade potential rivals from entering the industry.

• Industrial Policies
  ➢ Government policies intended to promote the development of specific national industries.
### Questions and Problems- 10)

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<tr>
<td><strong>Firm</strong></td>
<td><strong>Sales</strong></td>
<td><strong>%</strong></td>
<td><strong>%^2</strong></td>
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<tr>
<td>1</td>
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**Table Key:** Sales are in millions of units of the national currency; % denotes percentage of domestic and foreign share of total domestic sales, rounded to the nearest tenth of one percentage point; %^2 denotes squared percentage of market share of sales, rounded to the nearest whole number.

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