

CHAPTER

15

Oligopoly and Antitrust Policy

Chapter Goals

- Explain the distinguishing characteristics of oligopoly.
- Distinguish two models of oligopoly.
- Describe two empirical methods of measuring market structure.
- Explain what antitrust policy is and give a brief history of it.

The Distinguishing Characteristics of Oligopoly

An **oligopoly** is a market structure in which there are only a few firms and firms explicitly take other firms' likely response into account.

- Made up of a small number of firms in an industry.
- Firms explicitly must take into account the expected reaction of other firms.
- Oligopolistic firms are mutually interdependent.
- Oligopolies can be collusive or noncollusive.

Firms may engage in **strategic decision making** where each firm takes explicit account of a rival's expected response to a decision it is making.

Models of Oligopoly Behavior

There is no single model of oligopoly behavior.

An oligopoly model can take two extremes:

- The **cartel model** is when a combination of firms that acts as if it were a single firm.
- The **contestable market model** is a model of oligopoly in which barriers to entry and exit, not market structure, determine price and output decisions.

The Cartel Model

A **cartel** is *a combination of firms that acts as if it were a single firm*; a cartel is a shared monopoly.

If oligopolies can limit the entry of other firms, they can restrict profit to a level that maximizes profits for the cartel

Output quotas are assigned to individual member firms so that total output is consistent with joint profit maximization

Each member must hold its production below what would be in its own interest were it not to collude with the others.

Implicit Price Collusion

Explicit (formal) collusion is illegal in the United States while implicit (informal) collusion is permitted.

Implicit price collusion exists when multiple firms make the same pricing decisions even though they have not consulted with one another.

Sometimes the largest or most dominant firm takes the lead in setting prices and the others follow.

Why Are Prices Sticky?

One characteristic of informal collusive behavior is that prices tend to be sticky – they don't change frequently.

Informal collusion is an important reason why prices are sticky.

Another is the kinked demand curve.

- If a firm increases price, others won't go along, so demand is very elastic for price increases.
- If a firm lowers price, other firms match the decrease, so demand is inelastic for price decreases.

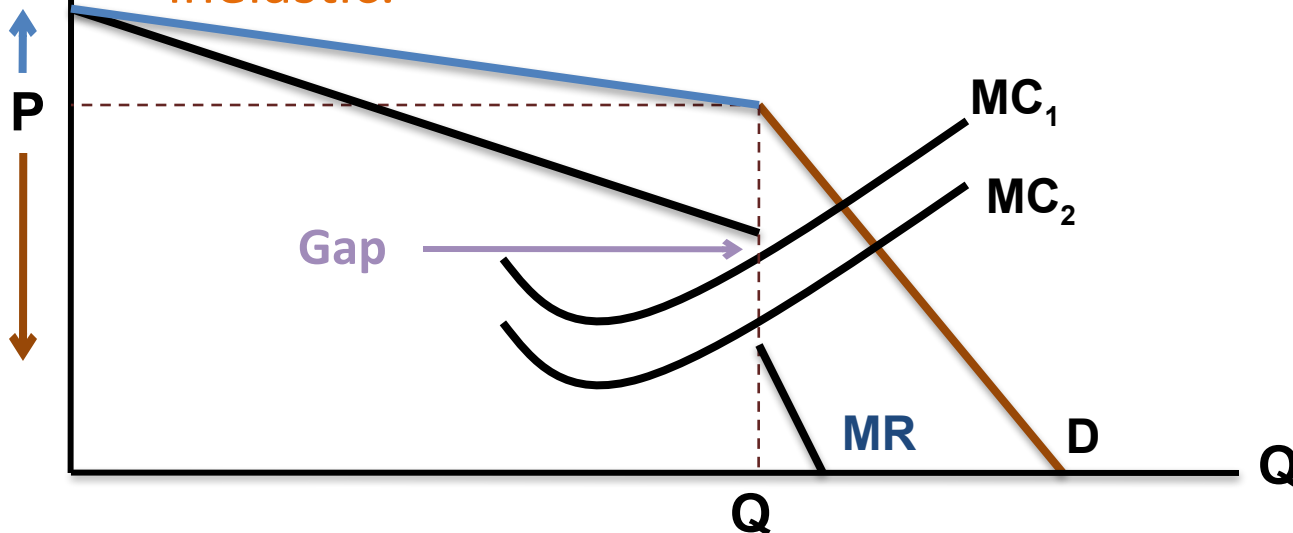
The Kinked Demand Curve Graph

If P increases, others won't go along, so D is elastic.

A gap in the MR curve exists.

P A large shift in marginal cost is required before firms will change their price.

If P decreases, other firms match the decrease, so D is inelastic.



The Contestable Market Model

The **contestable market model** is a *model of oligopoly in which barriers to entry and barriers to exit, not the structure of the market, determine a firm's price and output decisions.*

Even if the industry contains only one firm, it will set a competitive price if there are no barriers to entry.

Much of what happens in oligopoly pricing is dependent on the specific legal structure within which firms interact.

Comparing Contestable Market and Cartel Models

Oligopoly markets lie between these two extremes.

1. The cartel model is appropriate for oligopolists that collude, set a monopoly price, and prevent market entry.
2. The contestable market model describes oligopolies that set a competitive price and have no barriers to entry.

Both models use strategic pricing decisions where firms set their price based on the expected reactions of other firms

New Entry as a Limit on the Cartelization Strategy

The threat of outside competition limits oligopolies from acting as a cartel.

The threat will be more effective if the outside competitor is much larger than the firms in the oligopoly.

Comparison of Market Structures

	<i>Monopoly</i>	<i>Oligopoly</i>	<i>Monopolistic Competition</i>	<i>Perfect Competition</i>
<i>No. of firms</i>	One	Few	Many	Almost infinite
<i>Barriers to entry</i>	Significant	Significant	Few	None
<i>Pricing decisions</i>	$MC = MR$	Strategic pricing	$MC = MR$	$MC = MR = P$
<i>Output decisions</i>	Most output restriction	Output restricted	Output restricted, product differentiation	No output restriction
<i>Interdependence</i>	No competitors	Interdependent decisions	Each firm independent	Each firm independent
<i>LR profit</i>	Possible	Possible	None	None
<i>P and MC</i>	$P > MC$	$P > MC$	$P > MC$	$P = MC$

Classifying Industries and Markets in Practice

An industry seldom fits neatly into one category or another.

One way to classify markets in practice is by its cross-price elasticity.

Cross-price elasticity measures the responsiveness of the change in demand for a good to a change in the price of a related good.

Goods with a cross-price elasticity of 3 or more can be regarded as belonging to the same market.

The North American Industry Classification System

North American Industry Classification System (NAICS) is an industry classification system that categorizes industries by the type of economic activity and groups firms with like production processes.

Two Digit Sectors		Three to Six Digit Sectors	
23	Construction		
42	Wholesale Trade		
51	Information	51 – Information 511 – Publishing Industries (except Internet) 5111 – Newspaper, Periodical, Book, and Directory Publishers 51111 – Newspaper Publishers	
61	Educational Services		

Empirical Measures of Industry Structure

The **concentration ratio** is the value of sales by the top firms of an industry stated as a percentage of total industry sales.

The Herfindahl index is the sum of the squared value of the individual market shares of all firms in the industry.

Because it squares market shares, the Herfindahl index gives more weight to firms with large market shares than does the concentration ratio measure.

Concentration Ratios and the Herfindahl Index

Industry	Four Firm Concentration Ratio	Herfindahl Index
Poultry	46	773
Soft drinks	52	896
Breakfast cereal	78	2,999
Soap and detergent	38	664
Men's footwear	44	734
Women's footwear	64	1,556
Pharmaceuticals	34	506
Computer equipment	49	1,183
Burial caskets	73	2,965

Conglomerate Firms and Bigness

Neither the four-firm concentration ratio nor the Herfindahl index gives a complete picture of corporations' bigness because many firms are conglomerates.

Conglomerates are huge corporations whose activities span various unrelated industries.

Oligopoly Models and Empirical Estimates of Market Structure

The cartel model fits best with empirical measurements of market concentration because it assumes that the structure of the market is directly related to the price a firm charges.

- It predicts that oligopolies charge higher prices than monopolistic or perfect competitors.

The contestable market model gives less weight to the empirical estimates of market structure.

- Markets that look oligopolistic could be highly competitive.

Antitrust Policy: Judgment by Performance or Structure?

Antitrust policy is the government's policy toward the competitive process.

There are two competing views of competition:

1. **Judgment by performance:** We should judge the competitiveness of markets by the performance (behavior) of the firms in the market.
2. **Judgment by structure:** We should judge the competitiveness of markets by the structure of the industry.

Standard Oil: Judging Market Competitiveness by Performance

The Standard Oil Trust used its monopoly power to close refineries, raise prices, and limit the production of oil.

- *Sherman Antitrust Act of 1890*: a law designed to regulate the competitive process.
- In 1911, the U.S. Supreme Court determined that Standard Oil controlled 90% of the market, that it was a monopoly, and guilty because of “unfair business practices.”
- The resolution was to break up Standard Oil into small companies.
- *Clayton Antitrust Act of 1914*: identified specific practices as illegal and monopolistic.

Standard Oil: Judging Market Competitiveness by Performance

The structure/performance distinction was also used in a case involving U.S. Steel in 1920.

- The Supreme Court ruled that although U.S. Steel controlled a majority of the market and was a structural monopoly, it was not a monopoly in performance.
- U.S. Steel had not used unfair business practices to become a monopolist. It was not in violation of antitrust law.
- Unlike Standard Oil, U.S. Steel was not required to break up into small companies.

The ALCOA Case: Judging Market Competitiveness by Structure

Judgment by performance was the primary criterion governing antitrust policy until 1945.

- Aluminum Company of America (ALCOA): the only producer of aluminum in the United States, but did not use unfair business practices to become a monopolist.
- ALCOA used its knowledge of the market to expand its capacity before competitors could enter the market.
- The courts focused on the structure of the market and ruled ALCOA to be in violation of antitrust laws.

Judging Markets by Structure or Performance: The Reality

Judging by structure is practical though seemingly unfair.

If a firm is competing so successfully that all the other firms leave the industry, the successful firm will be a monopolist.

Judging by performance, each action of a firm must be analyzed on a case-by-case basis, which is difficult to do.

Structure and performance criteria have ambiguities. There are no definitive criteria for judging whether a firm has violated the antitrust statutes.

The Role of Antitrust in Today's Economy

Antitrust enforcements has followed the political winds. They generally reflect prevailing ideology and politics.

Over the past decades the long run trend has been a reduction in the number of antitrust cases brought before the courts.

Three causes for the decline in antitrust enforcement:

- Antitrust laws are known and prevent monopoly actions from occurring,
- Globalization has changed American ideology, and
- The rate of technological change has increased.

The Role of Antitrust in Today's Economy

Discussion of antitrust as involved how to make existing antitrust laws relevant to the new companies such as Facebook, Google, Uber and Amazon.

New types of antitrust remedies:

- Breaking up the companies less likely.
- Allowing consumers to retain control over their data.
- Modern remedies need to be in a dynamic context.
- Requiring platform marketplaces such as Amazon to be responsible for the legality of the goods and the conduct of the firm.

Chapter Summary (1 of 3)

The two distinguishing characteristics of an oligopolistic market: there are a small number of firms and firms engage in strategic decision making.

A contestable market theory of oligopoly judges an industry's competitiveness more by performance and barriers to entry than by structure.

Cartel models of oligopoly concentrate on market structure.

An oligopolist's price will be somewhere between the competitive price and the monopolistic price.

Chapter Summary (2 of 3)

The North American Industry Classification System (NAICS), concentration ratios, and the Herfindahl index are used to classify industries and markets in practice

A Herfindahl index is the sum of the squares of the individual market shares of all firms in an industry.

Antitrust policy is the government's policy toward the competitive process.

There is a debate about whether markets should be judged on the basis of structure or on the basis of performance.

Chapter Summary (3 of 3)

Judgment by performance is judging the competitiveness of markets by the behavior of firms in that market. Judgment by structure is judging the competitiveness of markets by how many firms operate in the industry and their market shares

Antitrust enforcement has declined over the past 40 years due to changes in ideology, the advent of globalization, and advances in technology. Structural changes in the economy have not eliminated the need for antitrust policy; they have changed the type of policies required to ensure competition.