

Chapter 4

Ethics in the Marketplace



Bill Gates is retired CEO and founder of Microsoft Corporation, which was subject to government oversight until mid-2011 as the result of a judgment by a U.S. District Court that the company exercised its monopoly power by anti-competitive means to dominate the market for Web browsers.

Learning Objectives

- 4.1 Apply ethics to market competition
- 4.2 Outline the conditions that must be present to achieve ethical perfect competition
- 4.3 Evaluate monopoly competition in terms of ethical principles
- 4.4 Differentiate the ethical implications of oligopolistic and monopolistic competition.
- 4.5 Interpret how public policy is developed in relation to the effects of oligopoly

If free markets are justified, it is because they allocate resources and distribute commodities in ways that are just, that maximize the economic utility of society's members, and that respect the freedom of choice of both buyers and sellers. These ethical and moral aspects of a market system depend crucially on the competitive nature of the system. If firms join together and use their combined power to fix prices, drive out competitors

with unfair practices, or earn monopolistic profits at the expense of consumers, the market ceases to be competitive and the results are injustice, a decline in social utility, and a restriction of people's freedom of choice. This chapter examines the ethics of anticompetitive practices, the underlying rationales for prohibiting them, and the moral values that market competition is meant to achieve.

4.1: Applying Ethics to Market Competition

OBJECTIVE: Apply ethics to market competition

In view of the key role of competition in the American economy, it is surprising that anticompetitive practices are so common. A report on New York Stock Exchange companies showed that 10 percent of the companies had been involved in antitrust suits during the previous five years.¹ A survey of major corporate executives indicated that 60 percent of those sampled believed that many businesses engage in price-fixing.² One study found that in a period of two years alone, over 60 major firms were prosecuted by federal agencies for anticompetitive practices, and hundreds more were prosecuted by state officials.

Ethical Application

Anticompetitive Practices

Consider the following recent news stories on anticompetitive practices.

International Price-Fixing in the Auto Industry

Nine Japan-based companies and two executives have agreed to plead guilty and to pay a total of more than \$740 million in criminal fines for their roles in separate conspiracies to fix the prices of more than 30 different products sold to U.S. car manufacturers, the Department of Justice announced today. The department said that price-fixed automobile parts were sold to Chrysler, Ford, and General Motors, as well as to the U.S. subsidiaries of foreign companies including Honda, Mazda, Mitsubishi, Nissan, Toyota and . . . Subaru. More than 25 million cars purchased by American consumers were affected. . . . [T]he Antitrust Division's ongoing investigation into price fixing and bid rigging in the auto parts industry [has resulted in charges for 20 companies and 21 executives]. All 20 companies have either pleaded guilty or have agreed to plead guilty and have agreed to pay more than \$1.6 billion in criminal fines. Seventeen of the 21 executives have been sentenced to serve time in U.S. prisons or have entered into plea agreements calling for prison sentences.³

Price-Fixing in the Publishing Industry

The U.S. Supreme Court today denied Apple's petition for certiorari in *United States v. Apple Inc.*, making final lower court decisions that Apple orchestrated a price-fixing conspiracy with five major e-book publishers and substantially raised e-book prices. The Supreme Court's action triggers Apple's obligation to pay \$400 million to e-book purchasers under Apple's July 2014 agreement. . . . Most e-book

purchasers will receive reimbursement for the higher prices Apple's conduct caused them to pay through automatic credits at their e-book retailers. They will be able to apply these credits to future purchases. With the \$166 million previously paid by the conspiring publishers to settle claims against them, Apple's payment will bring to \$566 million the amount repaid to e-book purchasers overcharged as a result of Apple's and the publishers' illegal conspiracy. . . . On April 11, 2012, the department filed its civil antitrust lawsuit challenging Apple's orchestration of a price-fixing conspiracy with five e-book publishers. The lawsuit. . . alleged that Apple and the defendant publishers conspired to fix prices and end e-book retailers' freedom to compete on price, and that they succeeded in substantially increasing the prices that consumers paid for e-books.⁴

Price-Fixing in the Shipping Industry

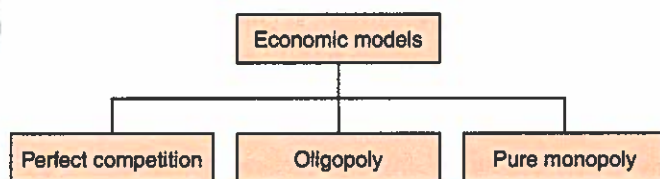
An employee of Japan-based Nippon Yusen Kabushiki Kaisha (NYK) pleaded guilty today [March 10, 2015] and was sentenced to 15 months in a U.S. prison for his involvement in a conspiracy to fix prices, allocate customers and rig bids of international ocean shipping services for roll-on, roll-off cargo, such as cars and trucks, to and from the United States and elsewhere, the Department of Justice announced today. . . . [Manager Susumu] Tanaka participated in the conspiracy from at least as early as April 2004 until at least September 2012. . . . Today's sentence is the third against an individual in the division's ocean shipping investigation, and the first against an individual from NYK. Three corporations have agreed to plead guilty and to pay criminal fines totaling more than \$136 million, including NYK, which has agreed to pay a criminal fine of \$59.4 million, pending court approval.⁵

Price-Fixing in the Real Estate Industry

Ten Eastern California real estate investors were sentenced yesterday for their participation in conspiracies to rig bids at public real estate foreclosure auctions in Eastern California, the Department of Justice announced. The primary purpose of the conspiracies was to suppress and restrain competition and to conceal payoffs in order to obtain selected real estate offered at San Joaquin County public foreclosure auctions at non-competitive prices. . . . "These defendants rigged foreclosure auctions to profit at the expense of mortgage holders and homeowners," said Acting Assistant Attorney General Renata Hesse of the Department of Justice's Antitrust Division.⁶

4.1.1: Three Economic Models

Before studying the ethics of anticompetitive practices, it is useful to have a clear understanding of the meaning of *market competition*, particularly of what we call *perfect competition*. Of course, we all have an intuitive understanding of competition: it is a rivalry between two or more parties trying to obtain something that only one of them can have. Competition exists in political elections, in football games, on the

Figure 4.1 Types of Economic Models

battlefield, and in courses in which grades are distributed “on the curve.” Market competition, however, involves more than mere rivalry between two or more firms. To get a clearer idea of the nature of market competition, we are going to look at three economic models—perfect competition, **pure monopoly**, and **oligopoly**—that describe three degrees of competition in a market (see Figure 4.1).

If you are lucky enough to have taken a course in basic economics, you may already have seen some of these models of market competition. However, your course in basic economics did not explain the ethical concepts related to these models of competition, particularly to the model of perfect competition. As we will see, the ethical concepts of utility, justice, and rights are closely tied to the model of perfect competition; that is, perfect market competition tends to result in just outcomes, to respect moral rights, and to satisfy utilitarianism (more precisely, perfectly competitive markets achieve a certain kind of justice, they satisfy a certain version of utilitarianism, and they respect certain kinds of moral rights). It is surprising and important that perfectly competitive markets have these three ethical features. Most nations of the world have embraced and tried hard to maintain competitive market systems precisely because competitive markets tend to maximize utility, because they are just, and because they respect people’s moral rights. If we are going to understand why market competition is morally desirable then, we will have to understand why market competition maximizes utility, produces justice, and respects human rights. However, to understand why perfect competition tends to have these results, we will need to understand how perfectly competitive markets operate. In particular, we have to understand how perfect competition tends to move toward an equilibrium point, and why this economic model results in markets that maximize utility, establish justice, and respect people’s moral rights.

Once we understand why perfectly competitive markets lead to these three moral outcomes, we will be able to see why markets and market behaviors that *depart* from perfect competition tend to diminish utility, tend to be unjust, and tend to violate people’s moral rights. That is, we will be able to see why departures from perfect competition tend to be morally defective. In turn, with that understanding, we should be able to see why it is unethical to engage in behaviors such as price-fixing and other anticompetitive activities that undermine or destroy market competition.

To truly understand the ethics of market behaviors, then, it is absolutely necessary to first understand why perfect market competition is morally desirable, which requires understanding some basic ideas of economics. There is, unfortunately, no shortcut path to a solid understanding of the ethics of markets and market behaviors. Any attempt to understand the ethics of, say, price-fixing, without a rudimentary understanding of some basic economic principles, will be superficial and easily dislodged when the opportunity to fix prices presents itself in real life. Without an understanding of some basic ideas of economics, we will not truly understand what is wrong with behaviors like price-fixing and can easily rationalize them. The news stories presented in “Ethical Application” indicate that price-fixing and other anticompetitive behaviors are surprisingly common among businesspeople. Part of the reason is because people involved in price-fixing conspiracies can often rationalize their behavior and say they did not think what they were doing was morally wrong.⁷ In fact, they often say they were just trying to be morally upright citizens by preventing “cut-throat competition” that would harm everyone, or that they were trying to establish a “reasonable return” or a “fair price” in the market, or that they were not trying to “gouge” consumers but just exercising their right to compete aggressively in a free enterprise economy. Without a good understanding of the ethics of market competition, it is easy to be taken in by such rationalizations which, after all, seem at first sight to make a lot of sense. However, as we will now see, with a firm understanding of the ethics of market competition, it will be clear that price-fixing and other anticompetitive practices are exactly the opposite of what these rationalizations claim.

4.2: Perfect Competition

OBJECTIVE: Outline the conditions that must be present to achieve ethical perfect competition

A market is any forum in which people come together to exchange ownership of goods, services, or money.

Markets can be small and very temporary (two friends trading clothes can constitute a tiny transient market) or quite large and relatively permanent (the oil market spans several continents and has been operating for decades).

A perfectly competitive free market is one in which no buyer or seller has the power to significantly affect the prices at which goods (we will use the term *goods* to include services and products) are being exchanged.⁸

Perfectly competitive free markets are characterized by the following seven defining features:

1. There are numerous buyers and sellers, none of whom has a substantial share of the market.
2. All buyers and sellers can freely and immediately enter or leave the market.
3. Every buyer and seller has full and perfect knowledge of what every other buyer and seller is doing, including knowledge of the prices, quantities, and quality of all goods being bought and sold.
4. The goods being sold in the market are so similar to each other that no one cares from whom each buys or sells.
5. The costs and benefits of producing or using the goods being exchanged are borne entirely by those buying or selling the goods and not by any other external parties.
6. All buyers and sellers are utility maximizers: each tries to get as much as possible for as little as possible.
7. No external parties (such as the government) regulate the price, quantity, or quality of any of the goods being bought and sold in the market.

The first two features are the basic characteristics of a “competitive” market because they ensure that buyers and sellers are roughly equal in power and none can force the others to accept its terms. The seventh feature is what makes a market qualify as a “free” market: It is one that is free of any externally imposed regulations on price, quantity, or quality. (So-called *free* markets, however, are not necessarily free of all constraints, as we see later in this chapter.) Note that the term *free enterprise* is sometimes used to refer to perfectly competitive free markets.

In addition to the seven defining features, competitive markets also need the following:

- an enforceable private property system (otherwise, buyers and sellers would not have any ownership rights to exchange)
- an underlying system of contracts (which allows buyers and sellers to forge agreements that transfer ownership)
- an underlying system of production (that generates goods or services whose ownership can be exchanged)

4.2.1: The Equilibrium Point and Moral Outcomes

In a perfectly competitive free market, the price buyers are willing to pay for goods rises when fewer goods are available, and these rising prices induce sellers to provide greater quantities of goods. Thus, as more goods are made available, prices tend to fall, and these falling prices lead sellers to decrease the quantities of goods they provide. These fluctuations produce a striking outcome: in a perfectly competitive market, prices and quantities always move toward what is called the *equilibrium point*.

The *equilibrium point* in a market is the point at which the amount of goods buyers want to buy equals the amount of goods sellers want to sell and at which the highest price buyers are willing to pay equals the lowest price sellers are willing to take. At the equilibrium point, every seller finds a willing buyer and every buyer finds a willing seller. Moreover, this surprising result of perfectly competitive free markets has an even more astonishing outcome: it satisfies three of the moral criteria—justice, utility, and rights. That is, perfectly competitive free markets achieve a certain kind of justice, satisfy a certain version of utilitarianism, and respect certain kinds of moral rights.

Why do perfectly competitive markets achieve these three surprising moral outcomes? The well-known supply and demand curves of economists can be used to explain the phenomenon. Our explanation proceeds in two stages:

- We examine why perfectly competitive free markets always move toward the equilibrium point.
- We examine why markets that move toward equilibrium in this way achieve these three moral outcomes.

4.2.2: The Mechanics of Perfectly Competitive Markets

A **demand curve** is a line on a graph indicating the most that consumers (or buyers) would be willing to pay for a unit of some product when they buy different quantities of those products. As we mentioned, the fewer the units of a certain product consumers buy, the more they are willing to pay for those units, so the demand curve slopes down to the right. A **supply curve** is a line on a graph indicating the prices producers must charge to cover the average costs of supplying a given amount of a commodity. See Figure 4.2 for sample demand and supply curves.

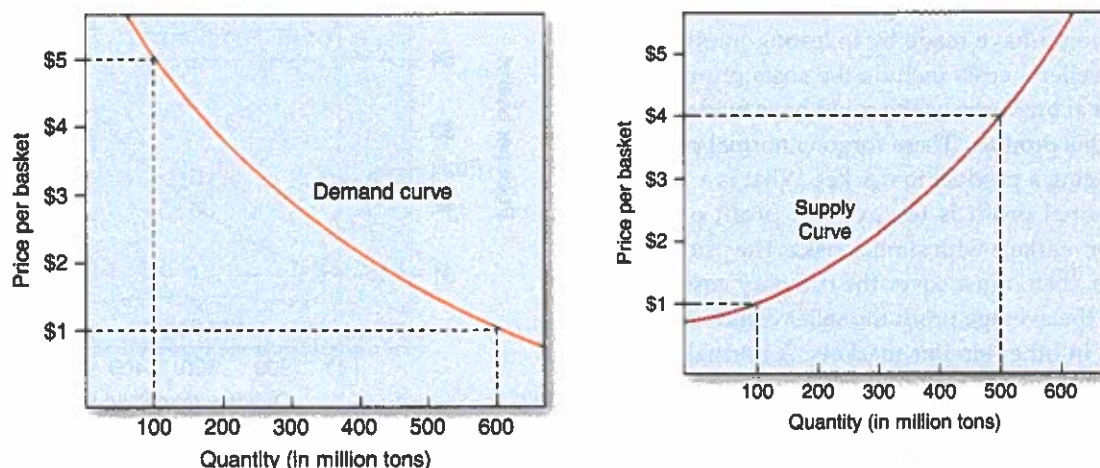
DEMAND AND THE PRINCIPLE OF MARGINAL UTILITY Notice that the demand curve slopes downward to the right, indicating that consumers are willing to pay less for each unit of a good as they buy more of those units; the value of each additional potato falls for consumers as they buy up more potatoes. Why is this? This phenomenon is explained by a principle we assume that human nature always follows—the so-called *principle of diminishing marginal utility*. This principle states that each additional item a person consumes is less satisfying than each of the earlier items the person consumed: the more we consume, the less utility or satisfaction we get from consuming more. The second pizza a person eats at lunch, for example, is much less satisfying than the first one; the third will be substantially less tasty than the second; while the fourth may be positively disgusting. Because of the principle of diminishing marginal utility, the more goods consumers purchase in a market, the less satisfying additional goods are to them and

Figure 4.2 Demand and Supply Curves for Potatoes

The demand curve and the supply curve for potatoes are depicted in these two graphs.

In the sample curve in the figure on the left, buyers are willing to pay \$1 per basket of potatoes if they buy 600 million tons of potatoes, but they are willing to pay as much as \$5 per basket if they buy only 100 million tons of potatoes. Notice that the demand curve slopes downward to the right, indicating that consumers pay less for each unit of a good as they buy more of those units.

In the sample curve in the figure on the right, for example, it costs farmers on average \$1 per basket to grow 100 million tons of potatoes, but it costs them \$4 per basket to grow 500 million tons. Beyond a certain point, the more units produced, the higher the average costs of producing each unit, and the curve slopes upward to the right.



the less value they place on each additional good. Thus, the buyer's demand curve slopes downward to the right because the principle of diminishing marginal utility ensures that the price consumers are willing to pay for goods diminishes as the quantity they buy increases.

The demand curve thus indicates the value consumers place on each unit of a product as they purchase more units. Consequently, if the price of a product were to rise above their demand curve, average buyers would see themselves as losers—that is, as paying out more for the product than what it is worth to them. At any point below the demand curve, they would see themselves as winners—that is, as paying out less for a product than what it is worth to them. Therefore, if prices should rise above the demand curve, buyers would have little motive to buy, and they would tend to leave the market to spend their money in other markets. However, if prices were to fall below the demand curve, new buyers would tend to flock into the market because they would perceive a chance to buy the product for less than what it is worth to them.

SUPPLY AND THE PRINCIPLE OF INCREASING MARGINAL COSTS Now, let us look at the other side of the market: the supply side. The supply curve rises upward to the right indicating that the more the seller produces for the market, the more the cost of producing each unit increases and so the higher the price he must charge to cover those increasing costs. At first sight, it may seem odd that producers or sellers must charge higher prices when they are producing large volumes than when producing smaller quantities. We are accustomed to thinking

that it costs less to produce goods in large quantities than in small quantities. However, the increasing costs of production are explained by a principle that we call the *principle of increasing marginal costs*. This principle states that, after a certain point, each additional unit the seller produces costs more to produce than earlier units. Why? Because of an unfortunate feature of our physical world: its productive resources are limited. A producer will use the best and most productive resources to make the first few goods and at this point, costs will decline as production expands. A potato grower farming in a valley, for example, will begin by planting the level fertile acres in the floor of the valley where the more acreage planted, the more the costs per unit decline. However, as the farm continues to expand, the farmer eventually runs out of these highly productive resources and must turn to using less productive land. As the acreage on the floor of the valley is used up, the farmer is forced to start planting the sloping and less fertile land at the edges of the valley, which may be rocky and may require more expensive irrigation. If production continues to increase, the farmer will eventually have to start planting the land on the mountainsides, and costs will rise even higher. Eventually, the farmer reaches a situation where the more that is produced, the more it costs to produce each unit because the farmer is forced to use increasingly unproductive materials. The predicament of the potato farmer illustrates the principle of increasing marginal costs: after a certain point, added production always entails increasing costs per unit. That is the situation illustrated by the supply curve. The supply

curve rises upward to the right because it depicts the point at which sellers must begin to charge more per unit to cover the costs of supplying additional goods.

The supply curve, then, indicates what sellers must charge per unit to cover the costs of bringing given amounts of a product to market. It is important to note that these costs include more than the ordinary costs of labor, materials, distribution, and so on. The costs of producing a product also include the profits sellers must make to motivate them to invest in producing this product and forgo the profits they could have made by investing in other products. So the seller's costs include the costs of production plus the normal profits he or she could have made but gave up to make this product. These forgone normal profits are a cost of bringing a product to market. What is a "normal" profit? A normal profit is the average profit one could make in other markets with similar risks. The prices on the supply curve, then, must cover the ordinary costs of production plus the average profit the seller could have made by investing in other similar markets. A normal profit is part of the cost of bringing a product to market.

The prices on the supply curve, then, represent the minimum producers must receive to cover their ordinary costs and make a normal profit. When prices fall below the supply curve, producers see themselves as losers: they are receiving less than what it costs them to produce the product (keep in mind that "costs" include ordinary costs plus a normal profit). Consequently, if prices fall below the supply curve, producers will tend to leave the market and invest their resources in other, more profitable markets. However, if prices rise above the supply curve, then new producers will come crowding into the market, attracted by the opportunity to invest their resources in a market where they can derive higher profits than in other markets.

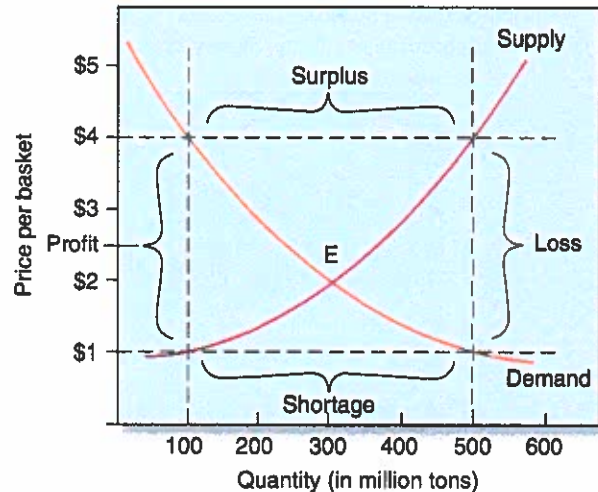
EQUILIBRIUM POINT: WHERE SUPPLY AND DEMAND CURVES MEET Sellers and buyers, of course, trade in the same markets, so their respective supply and demand curves can be superimposed on the same graph. Typically, when this is done, the supply and demand curves will meet and cross at some point. The point at which the supply and demand curves meet is the point of *equilibrium*. The point at which they meet is the point at which the price buyers are willing to pay for a certain amount of goods exactly matches the price sellers must take to cover the costs of producing that same amount (i.e., the "equilibrium price"). This point of intersection is indicated in Figure 4.3 by the letter E.

WHY THE MOVE TOWARD EQUILIBRIUM IN PERFECT COMPETITION? We mentioned that in a perfectly competitive free market, prices, the amounts supplied, and the amounts demanded all tend to move toward the point of equilibrium. Why does this happen? Notice in Figure 4.3 that if the price of potatoes rises above the point of equilibrium, say to \$4 per basket, producers will supply more

Figure 4.3 The Point of Equilibrium for Potatoes

The point at which the demand and supply curves meet is the equilibrium price for potatoes.

This point of intersection, E, at which the supply and demand curves meet, is called the *point of equilibrium* or *equilibrium price*. On the graph, the point of equilibrium is at \$2 per basket for 300 million tons.



goods (500 million tons) than at the equilibrium price level (300 million tons). However, at that high price, consumers will purchase fewer goods (only 100 million tons) than at the equilibrium price. The result will be a surplus of unsold goods ($500 - 100 = 400$ million tons of unsold potatoes). To get rid of their unsold surplus, sellers will be forced to lower their prices and decrease production. Eventually, equilibrium prices and amounts will be reached.

In contrast, if the price drops below the point of equilibrium in Figure 4.3, say to \$1 per basket, then producers will start losing money and so will supply less than consumers want at that price. The result will be an excessive demand and shortages will appear. The shortages will lead buyers to bid up the price. Subsequently, prices will rise and the rising prices will attract more producers into the market, thereby raising supplies. Eventually, again, equilibrium will reassert itself.

Notice also what happens in Figure 4.3 if the amount being supplied, say 100 million tons, for some reason is less than the equilibrium amount. The cost of supplying such an amount (\$1 per basket) is below what consumers are willing to pay (\$4 per basket) for that same amount. Producers will be able to raise their prices up to the level the consumer is willing to pay (\$4) and pocket the difference (\$3) as abnormally high profits (i.e., profits above the normal profit, which we defined earlier). The abnormally high profits, however, will attract more producers into the market, thereby increasing the quantities supplied and bringing about a corresponding decrease in the price consumers are willing to pay for the larger quantities. Gradually, the amounts supplied will increase to the equilibrium point, and prices will drop to equilibrium prices.

The opposite happens if the amount being supplied, say 500 million tons, is for some reason more than the equilibrium amount. Under these circumstances, sellers will have to lower their prices to the very low levels that consumers are willing to pay for such large amounts. At such low price levels, producers will leave the market to invest their resources in other, more profitable markets, thereby lowering the supply, raising the price, and once again reestablishing equilibrium levels.

At this point, you may be trying to think of an industry that fits the description of perfect competition we have just given. You will have some difficulty finding one. Only a few commodity markets, including agricultural markets such as grain and potato markets, come close to embodying the seven features that characterize a perfectly competitive market.⁹ The fact is that the model of perfect competition is a theoretical construct of the economist that characterizes only a few real-world markets. Although the model does not describe many real markets, as we will now see, it does provide us with a clear understanding of the moral advantages of competition and an understanding of why it is morally desirable to keep markets as competitive as possible.

Quick Review 4.1

Equilibrium in Perfectly Competitive Markets

Price and quantity move to equilibrium in a perfectly competitive market for the following reasons:

- If price rises above equilibrium, surplus appears and drives the price down to equilibrium.
- If price falls below equilibrium, shortage appears and drives the price up to equilibrium.
- If quantity is less than equilibrium, profits rise, attracting sellers who increase the quantity to equilibrium.
- If quantity is more than equilibrium, prices fall, driving sellers out, which lowers the quantity to equilibrium.

4.2.3: Ethics and Perfectly Competitive Markets

As we have seen, perfectly competitive free markets incorporate forces that inevitably drive buyers and sellers toward the point of equilibrium. In doing so, they achieve three major moral values:

1. They lead buyers and sellers to exchange their goods in a way that is just (in a certain sense of *just*).
2. They maximize the utility of buyers and sellers by leading them to allocate, use, and distribute their goods with perfect efficiency.
3. They bring about these achievements in a way that respects buyers' and sellers' right of free consent.

As we examine each of these moral characteristics of perfect competition, it is important to keep in mind that they are characteristics only of the perfectly competitive free market—that is, of markets that have the seven features we listed. Markets that fail to have one or the other of these features do not necessarily achieve these three moral values.

CAPITALIST JUSTICE To understand why perfectly competitive free markets lead buyers and sellers to make exchanges that are just, we begin by recalling the capitalist view of justice described in Chapter 2. According to the capitalist view of justice, benefits and burdens are distributed justly when individuals receive in return at least the value of the contribution they made to an enterprise: fairness is getting paid fully in return for what one contributes. It is this form of justice (and only this form) that is achieved in a perfectly competitive free market.

Perfectly competitive free markets embody capitalist justice because such markets necessarily converge on the equilibrium point, and the equilibrium point is the one (and only) point at which buyers and sellers on average receive the value of what they contribute.

There is only a single point at which the price and quantity of a good lies both on the buyer's demand curve (and is thus fair from the standpoint of the value the average buyer places on the goods) and on the seller's supply curve (and is thus fair from the standpoint of what it costs the average seller to produce those goods), and that point is the equilibrium point. Thus, the equilibrium point is the one and only point at which prices are just (in terms of capitalist justice), both from the buyer's and the seller's point of view. When prices deviate from the equilibrium point, either the average buyer or the average seller is unjustly getting less than he or she contributes, or else one or the other is unjustly getting more than he or she contributes: in either case, the outcome is unjust. However, as we saw, in perfectly competitive markets prices and quantities are either at the equilibrium point, or forces drive them back to the equilibrium point. The perfectly competitive market thus continually—almost magically—reestablishes capitalist justice for its participants by continually leading them to buy and sell goods at the one quantity and the one price at which each receives the value of what he or she contributes, whether this value is calculated from the average buyer's or the average seller's point of view.¹⁰

Quick Review 4.2

Justice in a Perfectly Competitive Market

- For the buyer, prices are just (capitalist justice) only on the demand curve.
- For the seller, prices are just (capitalist justice) only on the supply curve.
- Perfectly competitive markets move the price to the equilibrium point, which is on both supply and demand curves and so is just for both buyer and seller.

Seller's and Buyer's Perspective on What Is Just

Let's study how the mechanics of perfect competition delivers a just result from both the seller's and buyer's perspectives.

Interactive

Fair Price from the Seller's Perspective

Consider the matter, first, from the seller's point of view. The supply curve indicates the price producers must receive to cover what it costs them to produce given quantities of a good. Consequently, if prices (and quantities) fall below the seller's supply curve, consumers are unfairly shortchanging the seller because they are paying him less than the seller contributed to produce those goods in those quantities. (Ordinarily, the seller would not supply those goods if he is getting less for them than it costs him to make them, but the seller can be forced to sell them if, for example, he has already produced them and he will lose even more money if he fails to sell them at all.) On the other hand, if prices rise above the seller's supply curve, the average seller is unfairly overcharging consumers because they are being charged more than what the seller knows those goods are worth in terms of what it costs to produce them. Thus, from the standpoint of the seller's contribution, the price is fair (i.e., the price equals the costs of the seller's contribution) only if it falls somewhere on the seller's supply curve.

Fair Price from the Buyer's Perspective

UTILITY In addition to establishing a form of justice, competitive markets also maximize the utility of buyers and sellers by leading them to allocate, use, and distribute goods with perfect efficiency. To understand this aspect of perfectly competitive markets, we must consider what happens not in a single isolated market, but in an economy that consists of a system of many markets. A market system is perfectly efficient when all goods in all markets are allocated, used, and distributed in a way that produces the highest level of satisfaction possible from these goods.

- A perfectly competitive market encourages firms to use resources efficiently to keep costs low and profits high.
- A perfectly competitive market lets consumers buy the most satisfying bundle of goods, so it distributes goods in a way that maximizes utility.

HOW PERFECT COMPETITION IS PERFECTLY ETHICAL

Perfectly competitive markets also respect certain negative rights of buyers and sellers. First, in a perfectly competitive market, buyers and sellers are free (by definition) to enter or leave the market as they choose. That is, individuals are neither forced into nor prevented from engaging in a certain business, provided they have the expertise and the financial resources required.¹¹ Perfectly competitive markets thus embody the negative right of freedom of opportunity.

Second, in a perfectly competitive free market, all exchanges are fully voluntary. That is, participants are not

Quick Review 4.3

Utility in a Perfectly Competitive Market

- Prices in a perfectly competitive market attract resources when demand is high and drives them away when demand is low, so resources are allocated efficiently.

Four Ways of Achieving Efficiency

A perfectly competitive market system achieves efficiency in three main ways.

Interactive

Investing Resources

A perfectly competitive market motivates firms to invest resources in those industries where consumer demand is high and to move resources away from industries where consumer demand is low. Resources will be attracted into markets where high consumer demand creates shortages that raise prices above equilibrium, and they will flee markets where low consumer demand leads to surpluses that lower prices below equilibrium. The perfectly competitive market system allocates resources efficiently in accordance with consumer demands and needs; the consumer is "sovereign" over the market.

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forced to buy or sell anything other than what they freely and knowingly consent to buy or sell. In a competitive free market, all participants have full and complete knowledge of what they are buying or selling, and no external agency (such as the government) forces them to buy or sell goods they do not want at prices they do not choose in quantities they do not desire.¹² Moreover, buyers and sellers in a perfectly competitive free market are not forced to pay for goods that others enjoy. In a perfectly competitive free market, by definition, the costs and benefits of producing or using goods are borne entirely by those buying or selling the goods and not by any other external parties. Perfectly competitive free markets thus embody the negative right of freedom of consent.

Third, no single seller or buyer will so dominate the perfectly competitive free market that others are forced to accept

the terms or go without.¹³ In a perfectly competitive market, industrial power is decentralized among numerous firms so that prices and quantities are not dependent on the dictates of one or a few businesses. Perfectly competitive free markets thus embody the negative right of freedom from coercion.

Quick Review 4.4

Rights in a Perfectly Competitive Market

- A perfectly competitive market respects the right to freely choose the business one enters.
- In a perfectly competitive market, exchanges are voluntary, so it respects the right of free choice.
- In a perfectly competitive market, no seller exerts coercion by dictating the prices, quantities, or kinds of goods consumers must buy.

SUMMARY AND CAUTION The discussion so far, then, has shown that perfectly competitive free markets are perfectly ethical in three important respects:

1. Each continuously establishes a capitalist form of justice.
2. Together they maximize utility in the form of market efficiency.
3. Each respects certain important negative rights of buyers and sellers.

Several cautions are in order, however, when interpreting the moral features of perfectly competitive free markets.¹⁴

Quick Review 4.5

Perfectly Competitive Free Markets . . .

- Achieve capitalist justice (but not other kinds of justice, such as justice based on need)
- Satisfy a certain version of utilitarianism (by maximizing utility of market participants, but not of all society)

- Respect some moral rights (negative rights but often not positive rights)
- Can lead to ignoring the demands of caring and value of human relationships
- Can encourage vices of greed and self-seeking and discourage virtues of kindness and caring
- Can be said to embody justice, utility, and rights only if seven defining features are present

WRITING PROMPT

The Pros and Cons of a Perfectly Competitive Market

1. Explain the pros and cons of a perfectly competitive market from the standpoints of a market participant and a market outsider. Include an evaluation of the presence of justice, utility, and positive and negative rights.

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Ethical Imperfections of Perfectly Competitive Markets

Other Forms of Justice Excluded

Perfectly competitive free markets do not establish other forms of justice. Because they do not respond to the needs of those outside the market or those who have little to exchange, for example, they cannot establish a justice based on needs. Moreover, perfectly competitive free markets impose no restrictions on how much wealth each participant accumulates relative to the others, so they ignore egalitarian justice and may incorporate large inequalities.

Utility Not Necessarily Maximized

Positive Rights of Non-Participants at Risk

Demands of Caring Disregarded

Moral Character at Risk through Motivation for Profit

Capitalist Justice, Utility, and Negative Rights Must Be Present

4.3: Monopoly Competition

OBJECTIVE: Evaluate monopoly competition in terms of ethical principles

What happens when a free market (i.e., one without government intervention) ceases to be perfectly competitive? We begin to answer this question in this section by examining the opposite extreme of a perfectly competitive market: the free (unregulated) monopoly market. We then examine some less extreme varieties of noncompetition.

Ethical Application

The Operating System Monopoly Market

A contemporary example of a monopoly market is the worldwide market for operating systems for desktop personal computers (PCs). The market for operating systems for desktop PCs is dominated by Microsoft's Windows, which had a total global market share of 91 percent in 2015. While Microsoft does not hold 100 percent of this market, most observers characterize its control of the market as a monopoly. In November 1999, a U.S. District Court ruled that Microsoft was a monopoly, and in April 2000 it ruled that it had engaged in monopoly practices. Other companies that want to come into this market would have to overcome several barriers to entry:

- One barrier is sheer total cost and risk: today it costs more than \$10 billion to develop a new operating system like Windows, and it would be extremely risky for a company to gamble \$10 billion on the chance it might overcome Microsoft's dominance of the market.¹⁵
- A second barrier is economies of scale which occur when the amount of product a company makes has grown so large that it costs it less to make each unit of its products than it would cost any smaller firm. Since Microsoft makes and sells many more units of Windows and MS Office than its competitors, Microsoft's costs per unit (e.g., its research costs, its marketing and administrative costs, etc.) are lower than its competitors'.
- Another barrier is brand loyalty: if a company tried to take some of the 95 percent market share MS Office has, it would have to overcome the strong brand loyalty it commands, and this would require another large and risky investment in brand development.
- Yet another barrier is the "network effect," in which the value of a product increases as the number of users increases. Consumers prefer Windows over other operating systems such as Unix because there are many more software programs available for Windows than for Unix. The reason why there are many more programs for Windows is because software developers would much rather develop programs for Windows' many users than

for Unix's few users. So, the more Windows users there are, the more programs will be written for it, and the more valuable it is to users. An operating system such as Unix has a hard time competing with Windows because network effects continually make Windows more valuable to users than Unix.

- And, finally, we might note that some observers say that other companies are not eager to enter one of Microsoft's markets because it has a reputation of retaliating aggressively against companies that try to compete. That reputation serves as another barrier that keeps other companies away from Microsoft's markets.

Although few companies have global monopolies like Microsoft, numerous companies have local or regional monopolies; that is, monopolies over markets that serve specific geographical areas such as a city, a county, or a state. Examples of companies with local or regional monopolies include public utilities, cable companies, trash collectors, road construction companies, postal services, water supply companies, phone companies, and electrical power companies. Other companies have monopolies in small niche markets. Sirius XM Radio, for example, held 100 percent of the satellite radio market in 2015.

Quick Review 4.6 Monopoly Markets

- One dominant seller controls all or most of the market's product.
- The seller has the power to set the quantity and price of its products on the market.
- The seller can extract monopoly profit by producing less than equilibrium quantity and setting the price below the demand curve but high above the supply curve.
- High entry barriers keep other competitors from bringing more product to the market.

4.3.1: Monopoly Control and Profit

Monopoly markets are those in which a single dominant firm sells all or virtually all the product in the market and which new sellers cannot enter or have great difficulty entering because of barriers to entry. A seller in a monopoly market can control the prices (within a certain range) of the available goods. A monopoly seller, for example, can set prices above their equilibrium level—at, say, \$3. By limiting supply to only those amounts buyers will purchase at the monopolist's high prices (at 300 units in Figure 4.4), the monopoly firm can ensure that it sells all its products and reaps substantial profits from its business. The monopoly firm will, of course, calculate the price-amount ratios that will secure the highest total profits (i.e., the profit-per-unit multiplied by the number of units), and it can then fix its prices and production volume at those levels. At the turn of

Differences between a Monopoly Market and a Perfectly Competitive Market

We noted earlier that a perfectly competitive market is characterized by seven features. In a monopoly, two of these features are not present.¹⁶

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Dominant Seller

First, instead of "numerous sellers, none of whom has a substantial share of the market," the monopoly market has only one dominant seller, and that dominant seller has a substantial share of the market. Technically, a company must have 100 percent of the market to be a monopoly, but in practice a company with less than 100 percent of the market can be considered a monopoly; that is, a monopoly market can consist of a single dominant firm with, say, 90 percent of the market and dozens of other companies, each with less than 1 percent of the market. The key feature that determines whether a company has a monopoly is whether that one company has such control over a product that the company largely determines who can get some of the product and what the product will sell for.

Barriers to Entry

the century, for example, the American Tobacco Company, with a monopoly in the sale of cigarettes, was making profits equal to about 56 percent of its sales.

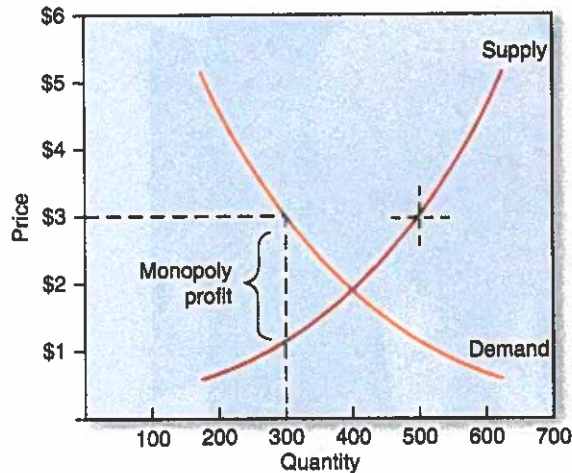
If entry into the market were open, of course, the excess profits reaped by monopolies would draw other producers into the market, resulting in an increased supply of goods and a drop in prices until equilibrium was attained. In a monopoly market, where "barriers to entry" make it virtually impossible or too costly for other firms to enter the market, this does not happen, and prices will remain high if the monopolist chooses to keep them high. As we have noted, barriers to entry can consist of legal barriers such as copyrights, patents, licenses, tariffs, quotas, grants, or other means by which government keeps new firms from entering a certain market. However, as our

discussion of Microsoft indicated, there are many other kinds of barriers to entry. They include long-term customer contracts that make it too hard for a new entrant to capture the customers of an established incumbent; low manufacturing costs that allow the established incumbent to threaten to lower prices and win a price war if a new firm tries to enter the market; high start-up costs, high fixed costs, high advertising costs, or high research and development costs that the new entrant will not be able to recover if the firm has to leave the market, thus making entry too risky (firms risk huge losses if they try to enter); and "network effects" that give an established company with many users an advantage that a new firm with few users will not have.

Will the monopolist necessarily choose to maximize its profits? If a seller sets its prices above what buyers are

Figure 4.4 Monopoly Profit

This graph illustrates fundamental conditions in a monopoly market. The monopoly firm is able to fix its output at a quantity that is less than the equilibrium quantity and at which demand is so high that it allows the firm to reap an excess monopoly profit by charging prices well above the supply curve and even above the equilibrium price.



willing to pay (i.e., above the demand curve), or if the seller's costs are higher than buyers can pay, of course, then even if it is the only seller in the market, it will not make a profit because few would buy its products. There are limits (i.e., the demand curve) to how much even a monopoly can charge. However, it is sometimes suggested that even when monopoly companies *can* make monopoly profits, they *actually* do not try to make monopoly profits.¹⁷ Although it is conceivable that the managers of a monopoly firm may

altruistically forgo potential profits and fix their prices at the equilibrium level—that is, the level that just gives them a normal rate of profit—this seems unlikely. It is difficult to see why a monopoly company would give up profits it could make for its shareholders. If a company has come to monopolize its market through legal means (perhaps it invented and now holds the patent on the only product known to be capable of meeting a consumer demand), then its monopoly profits are legal and shareholders will surely demand such profits.

4.3.2: Monopolists as Utility Maximizers

A legal monopolist might forgo some of its monopoly profits if government regulators force it to do so or if it is pressured to do so by an angry public. Drug company Burroughs Wellcome (now part of GlaxoSmithKline), for example, was pressured by angry activists to lower its price for AZT when it was the only treatment for AIDS. However, in the absence of any external regulatory authority (such as the government), or of any external public pressures, monopolists are utility maximizers like every other company in a market and will, therefore, seek to maximize their profits if they are able to do so. If a monopoly can, it actually will seek monopoly profits. Is there any empirical evidence to support this claim? An overwhelming amount of empirical statistical evidence shows that monopoly companies seek monopoly profits, although strong labor unions and executives can siphon off up to half of a company's monopoly profits as wages, benefits, salaries, and bonuses.¹⁸

On the Edge

Drug Company Monopolists and Profits

Drug companies in the United States are granted a patent on any new pharmaceutical drug they develop, which gives them a monopoly on that drug for 20 years. Not surprisingly, high monopoly profits (i.e., profits well beyond the average rate of profits in other industries) are characteristic of the pharmaceutical industry. During the 1970s and 1980s, drug companies listed in the Fortune 500 had average profit rates (as a percentage of revenues) that were double the average for all other industries in the Fortune 500.¹⁹ During the 1990s, drug company profit rates averaged four times the average profit rates of all other industries, and during the first decade of the

twenty-first century, drug company profit rates were about three times the average rates of all other manufacturing industries. Today their rate of profit remains higher than any other industry in the Fortune 500.²⁰ Drug companies say they need these profits to cover the costs of research for new drugs. However, drug companies spend only a small portion of their revenues—14 percent—on research. They hand out a larger portion of their revenues—17 percent—to shareholders as dividends, and they spend much, much more—31 percent—on advertising and administration. A study of drug manufacturing costs found that prescription drugs have markups of 5,000 percent, 30,000 percent, and 500,000 percent over the cost of their ingredients. The ingredients in 100 tablets of Norvasec, which sold for \$188, cost 14 cents; of Prozac, which sold for \$247, 11 cents; of Tenormin, which sold for \$104, 13 cents; of Xanax, which sold for \$136, 3 cents, and so on.²¹

Scenes from the Pharmaceutical industry

William Weldon, the CEO of Johnson & Johnson, and drug manufacturing.

Interactive



William Weldon is CEO of Johnson & Johnson, whose 2010 profits of \$13.3 billion were the highest in the U.S. pharmaceutical industry.



WRITING PROMPT

Your Views on the Drug Industry

1. Is the drug industry a good illustration of the market theories described in this chapter? Explain your answer.
2. What changes, if any, do you think we should make to U.S. drug patent laws? Explain.
3. How should the relationship between drugs and human life/health affect your views on drug industry monopoly profits? Explain.

The response entered here will appear in the performance dashboard and can be viewed by your instructor.

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4.3.3: Monopoly Competition and Ethics

How well does an unregulated monopoly market succeed in achieving the moral values that characterize perfectly competitive free markets? For the most part, not well. Unregulated monopoly markets can fall short of the three

values of capitalist justice, utilitarian efficiency, and respect for negative rights that perfect competition achieves.

The most obvious failure of monopoly markets lies in the high prices they enable the monopolist to charge and the high profits they enable the monopolist to reap—a failure that violates capitalist justice. Why do the high prices and profits the monopolist can command violate capitalist justice?

Capitalist justice says that what each person receives should equal the value of the contribution that person made. As we saw, the equilibrium point is the one (and only) point at which buyers and sellers each receive in return the value of what each contributes to the other, whether this value is determined from the average buyer's or the average seller's point of view. In a monopoly market, however, prices for goods can be set above the equilibrium level, and quantities can be set at less than the equilibrium amount. As a result, the seller can charge the buyer more than the goods are worth (from the average seller's point of view) because prices are more than the costs of making those goods. Thus, the high prices the seller can force the buyer to pay are unjust, and these unjustly high prices are the source of the seller's excess profits.

A monopoly market allows resources to be used in ways that will produce shortages of those things buyers

want and cause them to be sold at higher prices than necessary. The high profits in a monopoly market indicate a shortage of goods. However, because other firms are blocked from entering the market, their resources cannot be used to make up the shortages indicated by the high profits. This means that the resources of these other firms are deflected into other markets where they do less good because they may not have similar shortages. Moreover, the monopoly market allows the monopoly firm to set its prices well above costs instead of forcing the firm to lower its prices to cost levels. The resulting excess profits absorbed by the monopolist represent resources that are not needed to supply the amounts of goods it produces.

A monopoly market, then, is one that can, and generally will, deviate from the ideals of capitalist justice, economic utility, and negative rights. Instead of continually establishing a just equilibrium, the monopoly seller can impose unjustly

Further Injustice in Monopoly Markets

In addition to violation of capitalist justice, monopoly markets deviate from economic utility and force restrictions on negative rights.

Deviation from Economic Utility

A monopoly market does not encourage the monopolist to minimize the resources consumed to produce its goods. A monopoly firm has little incentive to reduce its costs because it knows its monopoly profits can more than cover all its costs, and for the same reason it has little incentive to find less costly ways to make its product, and little incentive to invest a great deal in innovation and in improving its product. Because profits are high anyway, there is little incentive for it to develop new technology that might give it a competitive edge over other firms, for there are no other competing firms.

Restrictions on Negative Rights

high prices on the buyer and can generate unjustly high profits for him or herself. Instead of maximizing efficiency, monopoly markets provide sellers incentives for waste, misallocation of resources, and profit-gouging. Instead of protecting the negative rights of freedom, monopoly markets create an inequality of power that allows the monopoly firm to dictate terms to the consumer. The producer then replaces the consumer as “sovereign” of the market.

Quick Review 4.7

Ethical Weaknesses of Monopolies

- They violate capitalist justice by charging more for products than producer knows they are worth.
- They violate utilitarianism by keeping resources out of monopoly market where shortages show more are needed and diverting them to markets without such shortages; and by removing incentives to use resources efficiently.
- They violate negative rights by forcing other companies to stay out of the market, by letting monopolists force buyers to purchase goods they do not want, and by letting monopolists make price and quantity decisions that consumers are forced to accept.

4.4: Oligopolistic Competition

OBJECTIVE: Differentiate the ethical implications of oligopolistic and monopolistic competition

Few industries are monopolies. Most major industrial markets are not dominated by a single firm, but more usually by a few—two, four, eight, or even more firms, depending on the market. Such markets lie somewhere on the spectrum between the two extremes of the perfectly competitive market with numerous sellers and the pure monopoly market with one dominant seller. Market structures of this

“impure” type are referred to as *imperfectly competitive markets*, of which the most important kind is the oligopoly.

In an oligopoly market, two of the seven features that characterize the purely competitive market are not present:

1. Instead of many sellers, there are only a few significant sellers. That is, most of the market is shared by a relatively small number of large firms that together can exercise some influence on prices. The firms controlling the oligopoly market may be only 2 or as many as 50, depending on the industry.
2. Other sellers are not able to easily enter the market. As with monopoly markets, barriers to entry may be due to the prohibitively high costs of starting a business in that industry, may be the result of long-term contracts that have tied all the buyers to the firms already in the industry, or may be due to enduring loyalties created by brand-name advertising.

4.4.1: Highly Concentrated Markets

Oligopoly markets, which are dominated by a few (e.g., three to eight) large firms, are said to be *highly concentrated markets*. Examples of such oligopoly markets are not hard to find because they include many of the largest manufacturing industries.

4.4.2: How Oligopolies Form

Although oligopolies can form in a variety of ways, the most common causes of an oligopolistic market structure are horizontal mergers.²²

A horizontal merger is simply the unification of two or more companies that were formerly competing in the same line of business.

If enough companies in a competitive industry merge, the industry can become an oligopoly composed of a few very large firms with low levels of competition.

Ethical Application

The Airline Oligopoly

The airline industry in the United States is now an oligopoly. However, during the late 1970s and 1980s, it consisted of several tiny local airlines plus about two dozen small and moderate-sized regional, national, and international airlines,

including Alaska, Jet America, Ozark, Trans World, Aircal, American, Braniff, Republic, Western, Delta, Eastern, Hawaiian, Pan American, Southwest, Charter One, New York Air, People Express, Continental, United, Empire, Piedmont, Pacific Southwest, US Air, and America West. In 1978, the airline industry was deregulated, which allowed new airlines to enter the market and let each airline charge what it wanted. Competition became intense, airfares fell, price wars were frequent, and three of the airlines went

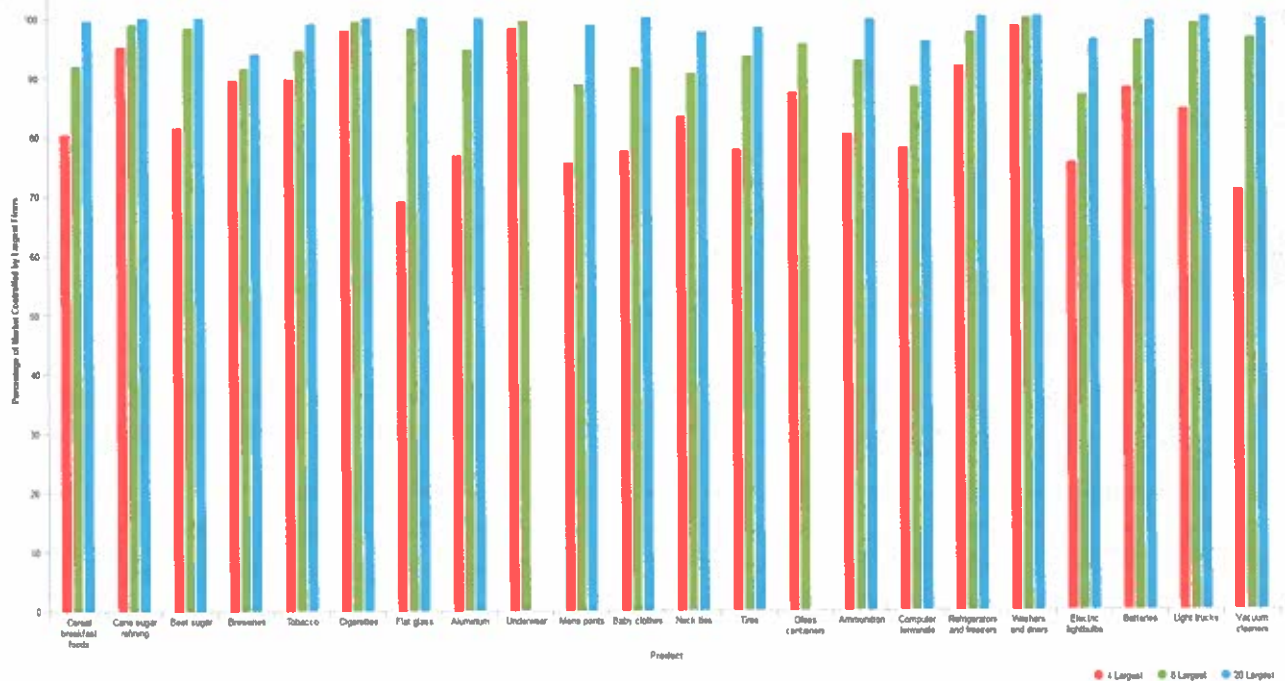
bankrupt (Braniff, Eastern, and Pan American). To reduce their intense rivalry, the airlines embarked on a series of mergers, and by the beginning of the twenty-first century, the two dozen U.S. airlines of the 1980s had combined into about a dozen: Alaska, Trans World, American, Republic, Northwest, Delta, Airtran, Southwest, Continental, United, US Airways, JetBlue, and America West. Competition remained fairly high, however, and over the next 15 years the airlines continued to consolidate. America West merged with US Airways, while Trans World merged with American. Then American and US Airways got together to form the largest airline in the United States (20 percent domestic market share). Airtran and Southwest merged to form the second largest (18 percent).

Republic merged with Northwest, and Northwest then merged with Delta to form the third-largest airline (17 percent). New York Air and People Express merged with Continental, which then joined United to form the fourth largest (15 percent). By 2015, the two dozen small and moderate-sized companies of the 1980s had combined to form an oligopoly with six major airlines: American, Delta, Southwest, United, JetBlue, and Alaska. As the airlines consolidated, competition gradually declined, and they began charging significantly higher fares. In 2009, an average domestic airline fare was \$310, and by 2015 it was almost \$400.²³ Airlines also began charging fees for meals, checked baggage, priority boarding, seat selection, returning items left onboard, making a reservation by phone, redeeming frequent flyer miles, etc.

Combined Market Shares of the Largest Firms in Highly Concentrated Oligopoly Industries

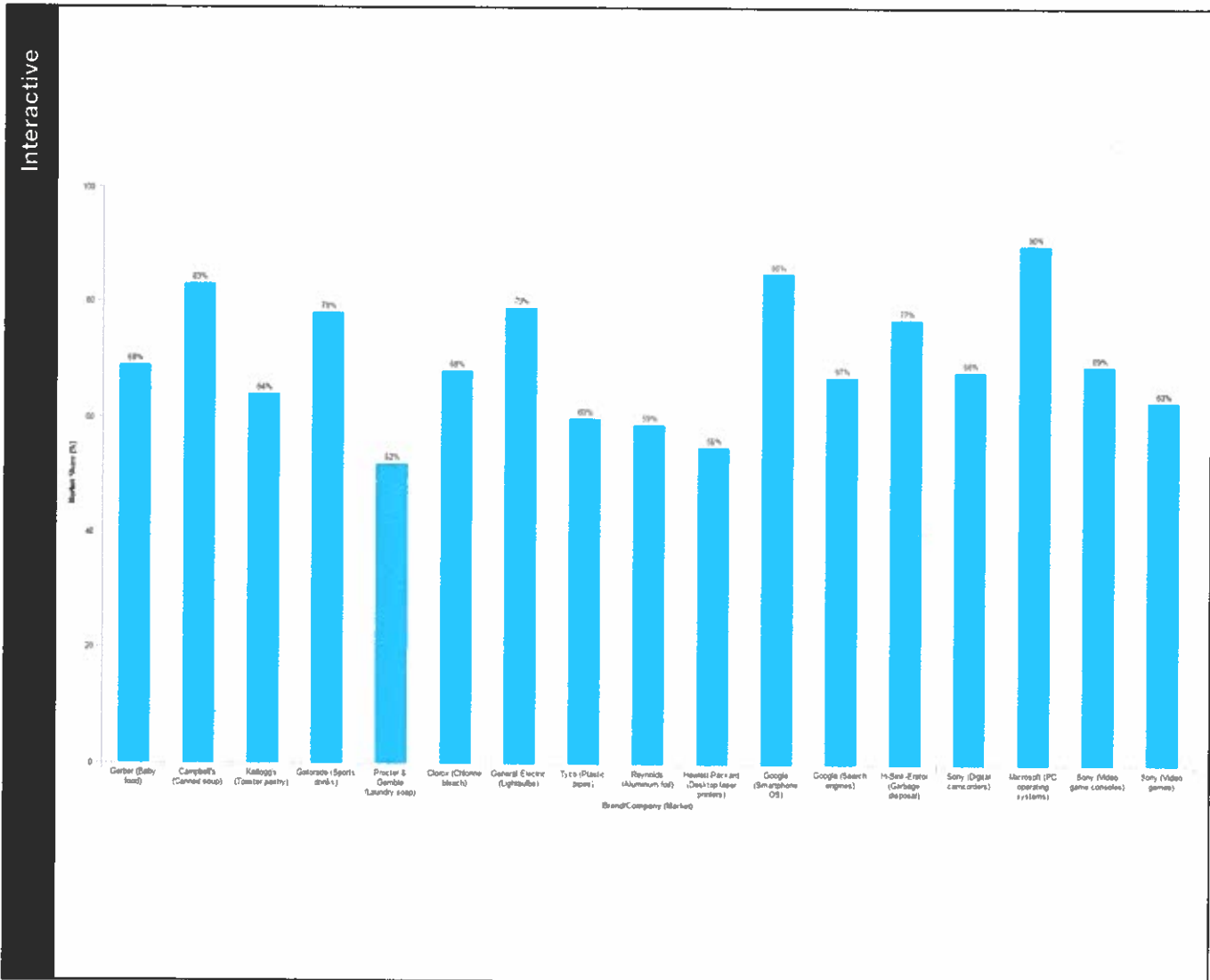
The following table shows several highly concentrated U.S. industries, as indicated by the large share of the market that the biggest firms control. The firms that dominate the highly concentrated U.S. industries tend, by and large, to be among the largest corporations in the United States.²⁴

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Dominant Brands and Companies in Oligopoly Markets

The following table lists several major corporations dominant in various oligopoly industries, together with the approximate market share controlled by these firms. The table includes many of the most well-known and largest U.S. firms operating in several of the most basic U.S. industries.²⁵



4.4.3: Effects of Oligopoly on Consumers and Markets

How do oligopoly markets affect consumers? As the history of the airline oligopoly suggests, consumers do not benefit when an industry consolidates into an oligopoly. Because a highly concentrated oligopoly has a relatively small number of firms, it is relatively easy for the managers of these firms to join forces and act as a unit. By explicitly or tacitly agreeing to set their prices at the same levels and to restrict their output accordingly, the oligopolists can function much like a single giant firm. This uniting of forces, together with the barriers to entry that are characteristic of oligopoly industries, can result in high prices and low supply levels that are very similar to those found

in monopoly markets. As a consequence, oligopoly markets, like monopolies, can do the following:

- fail to exhibit fair prices
- generate a decline in social utility
- fail to respect basic economic freedoms

It has been shown, for example, that generally the more highly concentrated an oligopoly industry is, the higher the profits it is able to extract from its customers.²⁶ Studies also have estimated that the overall decline in consumer utility as a result of inefficient allocation of resources in highly concentrated oligopoly industries ranges between 0.5 percent and 4.0 percent of the nation's gross national product, equal to between \$91 billion and \$725 billion in 2015.²⁷

In a market economy like ours, and like most of the world now has, competition is what business is about. Everything a company does is normally aimed at making products or providing services that consumers will want to buy from the company rather than its competitors. To succeed in that competition, a company has to provide consumers with products and services that are cheaper or better (or both) than competitors'. Companies normally prevail in this competition only if they can lower their costs below those of competitors (which lets them offer lower prices than competitors or make higher profits than competitors) or if they can develop products and services that are of higher quality than those of competitors. In either case, the company is competing in a way that ultimately benefits consumers and society. Best practices for success include the following:

- To cut costs, companies can make better and more efficient use of the resources they have.
- To improve their products, companies can continually innovate and offer consumers and society increasingly better products.

Cutting costs and improving quality are the normal and honest ways in which companies in market economies compete and, as we have seen, competitive markets are fair, socially beneficial, and respectful of people's negative rights. However, there are other ways to "compete" that are not aimed at lowering costs or improving quality, but instead aim at destroying competition itself. We are now going to turn to look at some of the specific ways in which employees and managers who operate in monopoly or oligopoly markets can manipulate the power they have in these markets to

- undermine competition and treat consumers unfairly
- violate rights
- diminish utility

That is, we are going to look at specific ways in which businesses can use their market power to unfairly harm consumers as well as competitors, instead of working at honestly lowering their costs and improving their products.

EXPLICIT AGREEMENTS AND OTHER ANTICOMPETITIVE TACTICS Prices in an oligopoly can be set at profitable levels through explicit agreements that restrain competition. The managers of the few firms operating in an oligopoly can meet and agree to act as a unit, for example, by charging the same price for their products. By uniting together, the oligopoly firms act like a single seller and, in effect, turn the oligopoly market into a monopoly. The greater the degree of market concentration present in an industry, the fewer the managers that have to be brought into the agreement, and the easier it is for them to fix their

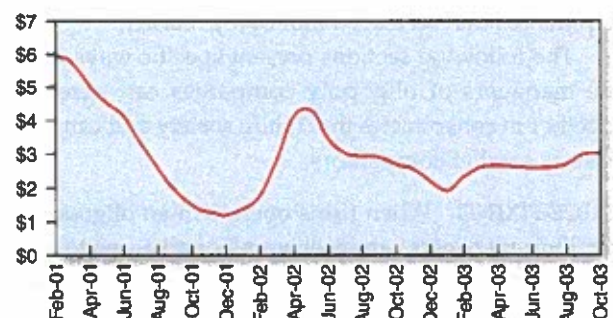
prices. Because such agreements reproduce the effects of a monopoly, they curtail justice, utility, and rights as discussed in the first sections of this chapter.

On the Edge

Fixing the Computer Memory Market

All PCs need memory chips, called DRAM for "dynamic random access memory," which are sold in units of gigabytes (Gb) or megabytes (Mb). The \$20 billion per year DRAM market is dominated by Micron, Infineon, Samsung, Hynix, and a few smaller companies who sell their DRAM to computer makers such as Dell, Compaq, Gateway, and Apple. In the late 1990s, the DRAM makers invested in bigger factories leading to a market glut, large inventories, and intense price competition. By February 2001, unsold inventories and a recession took DRAM prices into a steep fall (see Figure 4.5), dropping to about \$1 a unit by the end of 2001, a price well below manufacturing costs. In early 2002, while inventories were still high and the recession was in full swing, prices strangely rose and peaked at about \$4.50 a unit in April (see Figure 4.5). That month, Michael Dell of Dell Computers accused the companies of "cartel-like behavior," and the U.S. Department of Justice (DOJ) began to investigate the possibility of price-fixing. Prices now reversed, falling to \$2 by the end of 2002, about 20 to 40 percent below manufacturing costs. The DOJ later released a November 26, 2001, e-mail written by Kathy Radford, a Micron manager, in which she described plans by Micron, Infineon, and Samsung to move their prices upward in unison: "the consensus from all [DRAM] suppliers is that if Micron makes the move, all of them will do the same and make it stick." On September, 2004, Infineon pled guilty to "participating in meetings, conversations, and communications" with other DRAM makers during 2001 and "agreeing during those meetings, conversations, and communications" to "fix the prices for DRAM." Infineon paid the U.S. government \$160 million in fines. The DOJ announced it was investigating the other DRAM makers.²⁸

Figure 4.5 128 Mb DRAM Prices In the United States



WRITING PROMPT

Did DRAM Makers Engage in Cartel-Like Behavior?

1. Estimate the equilibrium price from the graph.
2. Who ultimately paid for any monopoly profits above the equilibrium price?
3. Did the companies do anything unethical? Explain.



The response entered here will appear in the performance dashboard and can be viewed by your instructor.

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4.4.4: Anticompetitive Strategies

We should note at least briefly that monopoly companies can also engage in anticompetitive behavior. For example, a company that has a monopoly in one market may try to use its power to create a monopoly in another market.

Ethical Application

Bundling Software

Microsoft, which monopolized the market for PC operating systems with Windows, was accused of trying to establish another monopoly in media players when it began to bundle Windows Media Player with each copy of Windows, so that a consumer could not buy Windows without also buying Windows Media Player. Somewhat disingenuously Microsoft protested that it was “giving Windows Media Player away for free.” Of course, Microsoft paid for the costs of developing the media player out of what consumers paid for its operating system, so part of what consumers were paying for Windows was really being used to pay for Windows Media Player.

If the justice, freedom, and social utility that competitive markets achieve are important values for society, then it is morally wrong for the managers of oligopoly companies to unite together in a collusive agreement. Only if markets function competitively will they exhibit the justice, freedom, and utility that justify their existence. These beneficial aspects of a free market are reaped by society only as long as managers of oligopoly firms refrain from agreeing to practices that recreate a monopoly market.

The following sections present specific ways in which the managers of oligopoly companies can agree to act together in conspiracies that injure society and can unfairly destroy smaller competitors.

PRICE-FIXING When firms operate in an oligopoly market, their managers can meet secretly and agree to set their prices at artificially high levels (i.e., at prices well above the supply curve and generally above the equilibrium price).

This activity is straightforward *price-fixing*, and it reproduces the effects of a monopoly. In 2010, for example, the managers of six companies—Sharp Corp., LG Display Co., Hitachi Displays Ltd., Epson Imaging Devices Corp., Chunghway Picture Tubes Ltd., and Chi Mei Optoelectronics—admitted they had put together a worldwide scheme to fix the prices of thin-film-transistor liquid-crystal display (TFT-LCD) panels, which serve as the screens for flat televisions, computer monitors, laptop screens, cell-phone displays, and media players. The managers confessed they got together several times in secret meetings in Japan, Korea, and the United States, where they discussed and agreed on the prices they would all charge for their TFT-LCD panels and agreed to limit the quantity of panels they would produce. By limiting their production, they created artificial shortages that let them raise their prices above the normal equilibrium level, thereby increasing their revenues even though throughout the period of the conspiracy their costs were constant and there was little competition on quality.²⁹ Through their price-fixing scheme, they defrauded their buyers out of hundreds of millions of dollars. When this price-fixing scheme was discovered, their companies had to pay \$860 million in fines, and those managers who were involved in the scheme were given jail sentences and fined thousands of dollars. In addition, each of their many direct buyers (e.g., television and cell-phone manufacturers) then had the legal right to sue these companies and recover *three times* the amount of money the managers overcharged them.

MANIPULATION OF SUPPLY Managers in an oligopoly industry do not have to agree to fix prices to recreate the effects of a monopoly market. Instead, they only need to agree to limit the quantity of goods they supply to the market at a level that is below the equilibrium quantity. Doing this will create a shortage because demand for the goods will be higher than the supply of goods (i.e., at the quantity they set, the demand curve is well above the supply curve). The shortages will make prices rise higher than the equilibrium prices that would result from free competition. This kind of conduct is called **manipulation of supply**. In June 2015, for example, several potato-growing companies and cooperatives agreed to settle a California lawsuit accusing them of agreeing to limit the number of acres of potatoes they planted so that the market price of potatoes would rise.³⁰ Between 2004—the year before their agreement began—and 2006, the average grower price of potatoes in the United States almost doubled, increased another 40 percent by 2008, and remained high except for a dip in 2009 and 2012.³¹ Note that manipulation of supply is often combined with price-fixing, as was the case in the global TFT-LCD price-fixing scheme described above.

MARKET ALLOCATION *Market allocation* (sometimes called “market division”) occurs when companies in an oligopoly divide up the market among themselves and each company agrees to sell only to customers within its own

part of the market and not enter the parts allocated to the other companies. Managers can divide up the market in one of three ways:

- by territory ("You get India and I get China.")
- by customers ("You sell to hospitals and I'll sell to doctors.")
- by time ("You have lower prices during the first half of the month, and I'll have lower prices during the second half.")

When markets are allocated among companies in this way, each section of the market has only one seller giving that company a monopoly in the section of the market allocated to it.

BID RIGGING Large buyers, especially government buyers, often ask companies to submit secret bids that indicate the quality of the product or service they are offering to sell and the price at which they will sell that product or service to the buyer. The buyer then chooses the seller that offers the best combination of quality and price. **Bid rigging** occurs when managers in an oligopoly market agree in advance which of them will submit the best or winning bid. The others may then not bid at all, or they may submit bids that they know are too high or that contain conditions they know the buyer will not accept. The sellers take turns offering the winning bid, or they may agree beforehand that whoever wins the bid will give each of the others a share of the buyer's business. Bid rigging, like price-fixing, eliminates competition. Because only one company will offer the buyer a satisfactory bid, the buyer unknowingly faces a monopoly and will get unfairly overcharged, while the companies can stop working at lowering their costs or innovating in quality.

EXCLUSIVE DEALING ARRANGEMENTS A firm institutes an *exclusive dealing arrangement* when it sells to a retailer on condition that the retailer will not purchase any products from competitors and/or will not do business outside of a certain geographical area. For several years, for instance, American Can Company would lease its can-closing machines (at low prices) only to those customers who agreed not to purchase any cans from Continental Can Company, its major competitor.³² Exclusive dealing arrangements tend to remove price competition between retailers who are selling the company's products, and to this extent they reduce competition. However, sometimes an exclusive dealing arrangement may give retailers an incentive to become more aggressive in selling the products of the company with which they have the exclusive dealing arrangement. In such cases, an exclusive dealing arrangement may actually increase competition between retailers selling the products of different companies. For this reason, managers who require their buyers to enter exclusive dealing arrangements must carefully examine their actions and determine whether their overall effect is to dampen or promote competition.³³

TYING ARRANGEMENTS A firm enters into a *tying arrangement* when it sells a buyer a certain good only on condition that the buyer agrees to purchase a certain other good from the firm. For example, Eastman Kodak Company makes photocopy machines and sells replacement parts to repair its machines. Kodak also sells repair services for its machines. When Kodak first began selling its photocopy machines, several small businesses stepped forward and began offering repair services for Kodak machines, often for less than Kodak charged for the same repair services.³⁴ So Kodak announced it would sell replacement parts only to those customers who also purchased their repair services from Kodak. Since other repair companies could not repair Kodak machines without the replacement parts, Kodak was able to effectively shut them out of the market even when they charged less for their services. Image Technical Services, Inc., and several other competing repair companies, sued Kodak for "tying" its services to its replacement parts. Image Technical Services won the case because, the court said, Kodak's monopoly of the supply of replacement parts gave it enough power to force buyers to also buy its repair services and to shut out other sellers of repair services, and this was an abuse of its market power. In effect, Kodak was using the monopoly it had in one market (the market for repair parts for its machines) to create a monopoly in another market (the market for repair services for its machines) and thereby, eliminate competition in two markets.

RETAIL PRICE MAINTENANCE AGREEMENTS If a manufacturer sells to retailers only on condition that they agree to charge a certain set retail price for its goods, it is engaged in *retail price maintenance agreements*. Until 2007, retail price maintenance was automatically judged to be an illegal anticompetitive practice because it forced retailers to stop competing on price. In 2007, however, the U.S. Supreme Court, in the case of *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, pointed out that retail price maintenance is not always anticompetitive. It is possible, the Supreme Court held, that by forcing retailers to maintain a certain price for its products, a manufacturer could, in some circumstances, actually increase competition. For example, forcing retailers to sell a product at a premium price may give retailers enough funds to provide extra services, and these extra services may make the product more competitive than the products of other sellers. Many economists, however, have disagreed with the Supreme Court and continue to hold that retail price maintenance generally reduces competition between retailers and removes from the manufacturer the competitive pressure to lower prices and cut costs.

PREDATORY PRICE DISCRIMINATION When a seller charges different prices to different buyers for identical goods or services, the seller is engaged in *price discrimination*. Price discrimination becomes *predatory price discrimination* when it is directed at destroying a competitor,

particularly when a company tries to eliminate a competitor by selling the product in the competitor's market (but not in other markets) for less than it cost to make it.

Predatory price discrimination was used by Continental Baking Company, the "predator," against Utah Pie Company, its "prey." Continental Baking Company operated in Salt Lake City, Utah, when it tried to drive out Utah Pie Company, a competitor that had entered the market and managed to take away much of the Salt Lake City business of Continental Baking Company. Continental retaliated by selling its pies to Salt Lake City stores for less than the cost of making the pies, and at prices that were much lower than those it sold to stores in other areas, all in an attempt to undercut Utah Pie Company's sales and run it out of business. The predator, in short, was selectively cutting its prices only in the areas where its prey was operating precisely in order to drive it out of the market and, thereby, create a local monopoly for itself. Although Continental sold its pies at a loss, it planned to make up for the loss by raising prices when Utah Pie Company was gone. The Supreme Court ruled that price discrimination is "unfair" and illegal when its effect is "substantially to lessen competition or tends to create a monopoly in any line of commerce." In addition, Continental's below-cost pricing was "predatory," since it was intended to drive a competitor out of business. Price discrimination aimed at reducing competition or creating a monopoly by driving competitors out of business, particularly with below-cost prices, said the court, is wrong unless the price differences are based on real differences in the company's costs of manufacturing, packaging, marketing, transporting, or servicing goods, or when the company is merely trying to match the lower prices of other competitors in the market.

Ethical Application

Rockefeller and Predatory Pricing

One of the most vicious examples of predatory pricing occurred in the late nineteenth century when John D. Rockefeller monopolized 91 percent of the oil refining industry by selectively cutting his prices in the local markets of his competitors, driving them into bankruptcy, and then buying them out.³⁵ In 1911, the U.S. Supreme Court ruled that "unfair methods of competition, such as local price cutting . . . to suppress competition" were illegal and broke up his "Oil Trust" into 34 separate companies.³⁶ Rockefeller's contemporary, James Buchanan Duke, also used predatory pricing to force 250 tobacco companies to become part of his "Tobacco Trust," and it too was broken up in 1911.³⁷ Read more on trusts in Module 4.5.

BRIBERY Many a company has secretly bribed government officials so they will purchase goods from the company and not its competitors. From 2001 to 2007, for example, Siemens Corporation paid \$1.4 billion in bribes to government officials in Venezuela, China, Russia, Argentina, Nigeria, and Israel to get them to purchase Siemens equipment instead of buying from competitors. The U.S. Foreign Corrupt Practices Act (FCPA) makes it a crime for a company operating in the United States to bribe foreign government officials to make a sale. Because of the FCPA and similar European laws, Siemens paid more than \$2.6 billion in fines.³⁸

When a company bribes government officials to make a sale, the market is no longer competitive, since the company no longer has to compete with other sellers. Instead, the bribe shuts competitors out of the market and serves as a barrier to entry. The bribing company becomes a monopoly seller and can engage in the unfairness and inefficiencies of monopolies: monopoly prices and shoddy quality. Moreover, the briber induces the government official to violate the moral obligation to act in his or her country's best interests. Government officials themselves, however, sometimes demand or "extort" a bribe from companies or threaten to harm a company unless it pays a bribe. Such extortion may mitigate a company's moral responsibility, but paying the bribe will still violate the FCPA. However, the FCPA allows payment of "petty" bribes to low-level officials (e.g., customs officials) who demand a bribe just to do their jobs.³⁹

PRESSURES AND INCENTIVES, OPPORTUNITIES, AND RATIONALIZATIONS We have looked at several ways in which managers and employees can inflict serious injuries on society by trying to reduce or eliminate the competition they face. Instead of competing honestly by working to lower their costs or improve the quality of their products and services, they try to establish, maintain, or expand a monopolistic market position. Why do managers engage in such wrongful behaviors when they risk going to jail and destroying their own careers and families? Under what conditions do employees or managers decide to engage in such behaviors? Sociologist Donald Cressey has argued that employees and managers tend to engage in "white collar" crimes such as price-fixing when the three components of the "fraud triangle" are present:

1. *Pressures and incentives:* The person is pressured or has strong incentives to engage in the wrongdoing.
2. *Opportunities:* The person sees an opportunity to engage in the wrongdoing.
3. *Rationalizations:* The person can rationalize his or her actions.⁴⁰

Pressures and incentives for fraud can consist of organizational pressures to achieve objectives, pressures from

peers, deteriorating business or market conditions, or more personal incentives such as medical bills, paying for an addiction, financial problems, or even simply greed. Opportunities arise under the following conditions:

1. When a person has the ability to carry out the crime
2. When a person is presented with circumstances that allow the crime to be carried out
3. When the risk of detection is low

Rationalizations, as we saw in Chapter 1, are the countless ways of framing or thinking about one's action so that it seems morally justified to oneself and/or others. For example, a wrongdoer may see participation in a fraud as an attempt to help his or her company, or an attempt to get a "fair" profit from customers. The wrongdoer may also see financial fraud as "what everyone does," as "borrowing" money he or she will pay back, or as something he or

she "deserves," or what "they" deserve, or something he or she will do "just this once."

In a detailed study of employees whose companies had been implicated in price-fixing arrangements, researchers Sonnenfeld and Lawrence found several industry and organizational factors that tended to lead individuals into price-fixing.⁴¹

The failure of top managers to deal with these industry and organizational factors can put significant pressures on individuals who are otherwise striving to do what is best for a company. One CEO describes the pressures that an irresponsible management can place on young new salespeople. According to the executive, young employees that are new to a company are particularly vulnerable. For example, suppose that a young salesman is married with two kids, has significant financial demands on him, and is worried about how secure his job is. The

The Fraud Triangle

The "fraud triangle" indicates that the most important factors that tend to lead to price-fixing are pressures and incentives, opportunities, and rationalizations.

Pressures and Incentives

1. *A crowded and mature market:* Mature industries are sometimes subject to oversupply because demand begins to fall or companies all increase production at the same time, or many new companies come into the market. As prices fall and revenues decline, middle managers can feel pressured to do something to halt their losses and may respond by allowing, encouraging, and even ordering their sales teams to engage in price-fixing.
2. *Undifferentiated products:* In some industries, the products of each company are so similar to those of the other companies in the industry that the companies have no choice but to compete on price alone. This situation can lead to periodic price wars or a continuous slide in prices that makes salespeople feel that the only way to keep prices from collapsing and to protect themselves and their jobs is by getting together with the salespeople of competitor companies and forging an agreement to fix prices.
3. *Personnel practices:* In some companies, managers are evaluated and rewarded solely or primarily on the basis of revenues and sales volume, so that bonuses, commissions, advancement, and other rewards are dependent on achieving these objectives. Such incentive systems send the message that the company demands they achieve these objectives any way they can, thereby making managers feel pressured to take any means, including price-fixing, to achieve their objectives.

rules of his new organization, like those of any organization, will have a certain degree of looseness and lack of clarity. So he might start to accept practices that may look somewhat questionable to him, but that he accepts because he feels that he may just not know enough about how the system works. Given the newness and uncertainty of his position, he will be forced to rely on what other sales people tell him. Suppose, further, that he is working in an industry that is in decline so that the market for his product is shrinking and its profit margins are falling. Lastly, suppose that he knows that there are any number of other people just like him who would like to have his job, and that his employer could easily hire to take his place if he doesn't succeed in selling enough of the product at a good enough price. In such a situation, the executive concludes, the young employee may find it very hard to resist engaging in questionable price-fixing or other kinds of anticompetitive behaviors.⁴²

Quick Review 4.8

The Fraud Triangle

- Pressures or strong incentives to do wrong, such as organizational pressure, peer pressure, company needs, personal incentives
- The opportunity to do wrong, which includes the ability to carry out a wrongdoing, being presented with circumstances that allow a wrongdoing, and having a low risk of detection
- The ability to rationalize one's action by framing it as morally justified

TACIT AGREEMENTS Although most of the forms of explicit market agreements enumerated above are illegal, price-setting in oligopolies is more often accomplished through some unspoken form of cooperation against which it is difficult to legislate. How does this take place? The managers of the major firms in an oligopoly can learn by hard experience that competition is not in their personal financial interests. Price-cutting competition, they find, will only lead to minimal profits. The firms in an oligopoly, therefore, may each come to the conclusion that cooperation is in the best interests of all. Each firm may then reach the independent conclusion that they will all benefit if, when one major firm raises its prices, all other firms set their prices at the same high levels. Through this process of "price-setting," all the major firms will retain their share of the market and will all gain by the higher price. For example, since the 1930s, the major tobacco companies have charged identical list prices for cigarettes. When one company decides it has a reason to raise or lower its cigarette prices, the other companies will always follow suit within a short period of time. The officials of these companies, however, have made no explicit

agreement to act in concert; without ever having talked the matter over among themselves, each realizes that all will benefit as long as they continue to act in a unified fashion. In 1945, incidentally, the U.S. Supreme Court found the dominant cigarette companies guilty of tacit collusion, but the companies reverted to identical pricing after the case was settled.

To coordinate their prices, some oligopoly industries will recognize one firm as the industry's **price leader**.⁴³ Each firm will tacitly agree to set its prices at the levels announced by the price leader, knowing that all other firms will also follow its price leadership. Because each oligopolist knows it will not have to compete with another firm's lower prices, it is not forced to reduce its margin of profit to the levels to which open competition would reduce them. There need be no overt collusion involved in this form of price-setting, only an unspoken understanding that all firms will follow the price leadership of the dominant firm and will not engage in the price-lowering tactics of competition.

Whether prices in an oligopoly market are set by explicit agreements or implicit understandings, it is clear that social utility declines to the extent that prices are artificially raised above the levels that would be set by a perfectly competitive market. Consumers must pay the unjust prices of the oligopolists, resources are no longer efficiently allocated and used, and the freedom of both consumers and potential competitors diminishes.

Quick Review 4.9

Unethical Practices in Oligopoly Markets

- Price-fixing
- Manipulation of supply
- Market allocation
- Bid rigging
- Exclusive dealing arrangements
- Tying arrangements
- Retail price maintenance agreements
- Predatory price discrimination

4.5: Oligopolies and Public Policy

OBJECTIVE: Interpret how public policy has developed in relation to the effects of oligopoly

Oligopolies are not a modern phenomenon. Toward the end of the nineteenth century, as we suggested above, many businesspeople began using anticompetitive practices to force competitors to sell out to them, eventually creating gigantic **trusts** that would then monopolize their markets, raise prices for consumers, cut prices for their suppliers such as farmers, and continually terrorize

their remaining competitors with predatory pricing. Businesspeople created trusts in the sugar, salt, whiskey, tobacco, and cottonseed oil industries. Earlier, competing railroads had been consolidated into huge enterprises by the so-called Robber Barons—Andrew Carnegie, Jay Gould, J. P. Morgan, and John D. Rockefeller. These gigantic trusts elicited the public's fear, suspicion, and hatred. Newspaper editorials and politicians railed against the unscrupulous ruthlessness with which the trusts ground down their competitors, monopolized crucial industries, and bullied the farmers who supplied them with raw materials. Intellectuals argued that the concentrated power of the trusts was dangerous and would give these businesses unfair political influence.

The rise of the trusts coincided with the Progressive movement, a political reform movement directed against big business abuses of power with the avowed aim of “busting” up the trusts. Responding to this movement, particularly the lobbying of struggling small farmers, the U.S. Congress in 1887 passed the Interstate Commerce Act to regulate the large railroad companies. Then, in 1890, Congress passed what was to become the most important single piece of antitrust legislation, the **Sherman Antitrust Act**. The two key sections of the act are as follows:

Section 1: Every contract, combination . . . , or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared illegal . . .

Section 2: Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony . . .

In the two decades following the passage of the Sherman Antitrust Act, little was done to enforce it. However, in 1908, the federal government filed suit against the Tobacco Trust, claiming that its ruthless tactics against competitors had violated the Sherman Antitrust Act. In a May 1911 decision, the Supreme Court agreed and ordered the Tobacco Trust to be broken up into 15 separate companies. Encouraged by the victory, the “trust busters” in government went on to successfully prosecute Standard Oil, DuPont, and other large trusts. The U.S. Supreme Court, in fact, went so far as to say that the Sherman Antitrust Act was “the Magna Carta of free enterprise, . . . as important to the preservation of economic freedom and our free-enterprise system as the Bill of Rights is to the protection of our fundamental personal freedoms.”⁴⁴

4.5.1: Interpretations of Sherman Antitrust Act

Since 1911, section 1 of the Sherman Antitrust Act has been interpreted as prohibiting competing companies from

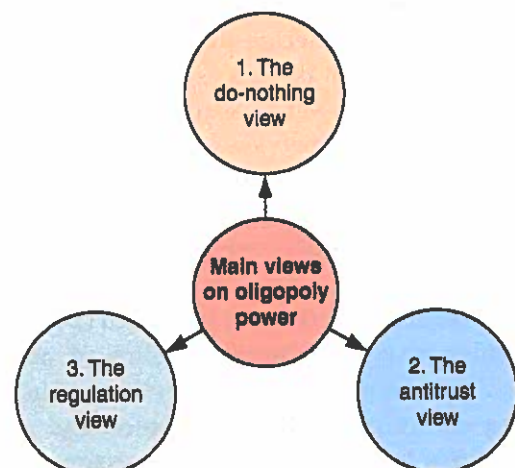
making agreements to fix prices, to divide up territories or customers, or to restrict the quantity of goods they bring to market. Section 2 has been interpreted as prohibiting a company that already holds a monopoly from using its monopoly power to maintain its monopoly or to extend its monopoly into other markets. Thus, the Sherman Antitrust Act does not prohibit a company from acquiring a monopoly through legitimate business dealings (e.g., having a better product, a shrewd strategy, or sheer luck). However, if a company that acquires a monopoly then tries to use its monopoly power to acquire a new monopoly, or to maintain its current monopoly, it is “guilty of a felony.” In 1911, the U.S. Supreme Court ruled that although some agreements between competitors could be “reasonable” and legal if they “promote competition,” nevertheless, certain agreements (including agreements to fix prices or quantities) were so inherently anticompetitive that they were always illegal.

The antitrust laws were expanded in 1914 by the Clayton Act, which prohibits price discrimination, exclusive dealing contracts, tying arrangements, and mergers between companies “where the effect may be to substantially lessen competition.” This latter section of the Clayton Act also gives the federal government the power to prohibit two companies from merging if the government believes that their merger will “substantially lessen competition.”

Although the United States has a long history of antitrust legislation, there is still a great deal of debate concerning what government should do about the power of oligopolies. Some have argued that the economic power held by oligopoly corporations is actually quite small and insufficient to affect society, whereas others have claimed that it dominates modern economies, and still others have argued that several social factors inhibit the use of this power. These differences have given rise to three main views on oligopoly power, which appear in Figure 4.6.

Let's look at each of these views in detail.

Figure 4.6 Three Main Views on Oligopoly Power



Examining Views on Oligopoly Power

The three main views on oligopoly power are the do-nothing view, the antitrust view, and the regulation view.^{45, 46, 47, 48, 49, 50}

The Do-Nothing View

Some economists hold that nothing should be done about the economic power held by oligopoly corporations because the power of large oligopoly corporations is actually not as large as it may first appear. Several arguments have been given to support this claim.

1. *Competition is between industries with substitutable products:* It is argued that although competition within industries has declined, it has been replaced by competition between industries with substitutable products. The steel industry, for example, is now in competition with the aluminum and cement industries. Consequently, although there may be a high degree of market concentration in a single industry like steel, a high level of competition is still maintained by its relation to other competing industries.
2. *Economic power of one corporation is restrained:* As economist John Kenneth Galbraith once argued, the economic power of any large corporation may be balanced and restrained by the "countervailing power" of other large corporate groups in society. Government and unions, for example, both restrain the power of big businesses. Although a business corporation may have a large share of an industrial market, it is faced by buyers that are equally large and equally powerful. A large steel company, for example, must sell to equally large automobile companies. This balance of power between large corporate groups, Galbraith claimed, effectively reduces the economic power any single corporate giant can exert.

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COMPETITIVE MARKET RELATIONSHIPS Which of the three views on oligopoly power is correct: the do-nothing view, the antitrust view, or the regulation view? Readers will have to decide this issue for themselves because at the moment there does not appear to be sufficient evidence to answer this question unequivocally. Whichever of these three views readers may find most persuasive, it is clear that the social benefits generated by free markets cannot be secured unless the managers of firms maintain competitive market relationships among themselves. The ethical rules prohibiting collusion are meant to ensure that markets are structured competitively. These rules may be voluntarily followed or legally enforced. They are justified insofar as society is justified in pursuing the utilitarian benefits, justice, and negative rights that free competitive markets can secure.

On the Edge

Oracle and PeopleSoft

Oracle Corporation makes extremely complicated and large customized software programs that can support thousands of simultaneous users and that are capable of administering the personnel records and financial records of very large businesses (called *enterprise software*). PeopleSoft and SAP were the only two other major competitors making such massive enterprise software. Oracle held 18 percent of the market in customized software capable of handling the personnel records of very large businesses, SAP held 29 percent, and PeopleSoft held 51.5 percent. Moreover, Oracle held 17 percent, SAP held 39 percent, and PeopleSoft held 31 percent of the market for customized software capable of managing the financial records of very large

businesses. On June 6, 2003, Oracle attempted a hostile takeover of PeopleSoft by offering to buy PeopleSoft's shares for \$5.1 billion, or \$16 a share. PeopleSoft's board of directors rejected Oracle's offer, and on June 18 Oracle raised its bid to \$6.3 billion, or \$19.50 per share. Then, on February 4, 2004, Oracle raised its offer to \$9.4 billion, or \$26 per share. PeopleSoft stock was by then selling for \$22 a share, and its board rejected the new offer. PeopleSoft also passed a "poison pill" provision by promising customers cash refunds of up to five times what they paid for their software if PeopleSoft were taken over by another company.

On February 26, 2004, the U.S. Department of Justice (DOJ) sued to block Oracle's bid, claiming the takeover would reduce the market's competitors from three to two and "such a reduction in competition is likely to result in higher prices, less innovation, and decreased support" for large business customers. Oracle challenged the government's definition of the "enterprise software market" as too narrow and asserted that if the market was defined as the market for all "business software," then there were many dozens of companies competing in the market and not just three. Moreover, Oracle claimed, large

companies such as Microsoft planned to enter the enterprise software market, and, anyway, large customers could negotiate low prices even when there were only two competing sellers in a market. On September 9, 2004, the court ruled in Oracle's favor against the DOJ, and Oracle shortly acquired PeopleSoft.⁵¹

WRITING PROMPT

Consider Market Concentration

1. Does an Oracle takeover of PeopleSoft leave the market too concentrated?
2. Do large companies do more good than bad?

The response entered here will appear in the performance dashboard and can be viewed by your instructor.

Submit

Web Resources

Readers who want to conduct online research on the market issues in this chapter might want to start with the American Antitrust Institute, which provides cases, articles, and links on price-fixing, mergers, vertical price restraints, and so on at their website (<http://www.antitrustinstitute.org>). The Federal Trade Commission (FTC) provides access to its antitrust decisions and proceedings (<http://www.ftc.gov>), and the U.S. Justice Department does the same (<http://www.usdoj.gov/atr/index.html>). Additional links and important legal cases relating to all of these issues can be found through the excellently organized and copious resources of Hieros Gamos (<http://hg.org/antitrust.html>), or through the American Bar Association (http://www.americanbar.org/groups/antitrust_law.html).

SHARED WRITING

Public Policy and Business Competition

1. What kind of public policy do you think the United States should have with respect to business competition? Develop moral arguments to support your answer (i.e., arguments showing that the kinds of policies you favor will advance the public welfare, or secure certain important rights, or ensure certain forms of justice).

A minimum number of characters is required to post and earn points. After posting, your response can be viewed by your class and instructor, and you can participate in the class discussion.

Submit

0 characters | 140 minimum

SHARED WRITING

Price-Fixing in a Foreign Country

1. In your judgment, should a U.S. company operating in a foreign country in which collusive price-fixing is not illegal obey the U.S. laws against collusion? Explain your answer.

A minimum number of characters is required to post and earn points. After posting, your response can be viewed by your class and instructor, and you can participate in the class discussion.

Submit

0 characters | 140 minimum

Case Study 4.1: Intel's Rebates and Other Ways It "Helped" Customers

On November 12, 2009, Intel Corp. gave Advanced Micro Devices (AMD) \$1.25 billion to settle a lawsuit AMD filed against it in 2005. Intel's CEO Paul Otellini said he agreed to pay \$1.25 billion to settle

AMD's lawsuit because he no longer felt the "time and money [spent fighting it] makes sense."¹ AMD's lawsuit accused Intel of being a monopoly and of using its monopoly power to unfairly keep computer companies from buying AMD's microprocessors. With about 70 percent of the market, Intel Corp. is the world's largest manufacturer of PC microprocessors—also called computer chips, microchips, or processors—tiny electronic devices that serve as the "brain" of a PC and carries out its basic operations. As

the world's second-largest maker of PC microprocessors, AMD is Intel's only real competitor, although it holds only about 20 percent of the PC processor market. It is difficult for other companies to get into the business of making PC microprocessors because of several "barriers to entry," which are as follows:

1. Intel and AMD hold the patents for making the kind of microprocessors almost all PCs use.
2. It costs several billion dollars to build facilities for making microprocessors.
3. Intel and AMD are so big and experienced that they can now make microprocessors for a lot less than a new company could, so if a new company tried to enter the market, its prices would likely not be competitive with Intel's or AMD's.

AMD was not the only one that had accused Intel of using monopoly power to stifle competition. On May 5, 2009, the European Commission fined Intel a record \$1.5 billion and said the company had used its monopoly power to unfairly block AMD from the market.² On November 4, 2009, New York Attorney General Andrew Cuomo sued Intel for harming New York's consumers by using its monopoly power to keep computer makers from buying better AMD microprocessors. In June 2008, South Korea's Fair Trade Commission ruled that Intel had used its monopoly power in violation of its antitrust laws. In 2005, Japan's Fair Trade Commission ruled that Intel had violated Japanese antitrust laws by paying companies to buy all or almost all of their processors exclusively from Intel.

A Strategic Mistake and a New Product

Many of the activities Intel was being blamed for originated in a strategic mistake the company made in the late 1990s, when it invested hundreds of millions of dollars developing a new type of microprocessor that would not use "x86 technology." x86 technology consists of certain instructions that are built into "x86 microprocessors." All microprocessors must contain instructions that allow them to "read" and run software programs like games, word processors, or web browsers. Because all x86 microprocessors contain the same instructions, the newest x86 microprocessors can generally read and use the same data and programs that ran on older x86 microprocessors. This means that when a customer who has been using a computer with an x86 processor buys a new computer with a more advanced x86 microprocessor, he or she does not have to throw away all his or her old programs and data because they will still work on the new computer.

This ability of each new generation of x86 microprocessors to run most of the programs that previous generations of x86 microprocessors could run is a major advantage for both consumers and businesses alike. However, from Intel's perspective, x86 microprocessors have a major disadvantage: AMD can legally make x86 microprocessors, so Intel is forced to compete with AMD. Intel's biggest nightmare was that AMD someday might come up with an x86 microprocessor that was faster and more powerful than any of Intel's and then take over the market.

So when it invested in a new generation of microprocessors in the 1990s, Intel decided to develop and patent a microprocessor that did not use x86 technology. Since Intel alone would hold the patent for this new non-x86 processor, AMD would be legally

barred from making it. With luck, Intel might eventually have the entire PC processor market to itself.

Intel called its new PC processor "Itanium," and it was faster and more powerful than all previous generations of PC processors. However, there was a problem. Since the Itanium processor did not use x86 technology, all software designed to run on current and older x86 processors would not work on the new Itanium unless the user first ran an "emulation" program that, in effect, forced Itanium to imitate an x86 processor. However, the emulation program slowed down the programs designed for x86 processors, sometimes to a frustrating crawl. Thus, when a consumer or business bought a new computer with the Itanium processor inside, its current software and data would not work well on the new computer. This issue was a major deterrent for buyers.

AMD had also developed a more advanced generation of PC processors during the 1990s. However, AMD decided to stick with the x86 technology so that its new processor could run software designed for x86 processors without using an emulation program. AMD called its new processor "Athlon." Since Athlon was not slowed down by an emulation program when it ran x86 programs, all x86 programs ran extremely fast and smoothly on computers equipped with AMD's new processor. AMD's Athlon could run x86 programs much faster and better than Intel's Itanium, and Athlon also used less electricity and sold for less than Itanium. Intel's worst nightmare had come true.

Actions and Reactions

When AMD and Intel marketed their new microprocessors in 1999, reviewers and users raved about AMD's fast and low-priced Athlon and heaped scorn on Intel's clunky Itanium. PC manufacturers flocked to put AMD's processor into their new computers, and AMD's market share grew from about 9 percent to about 25 percent of the PC processor market, while Intel's fell from 90 percent to 74 percent.

However, in 2003 and 2004, AMD's sales hit a wall. Computer manufacturers suddenly refused to buy AMD's processors. In 2002, Sony had put AMD's Athlon into 23 percent of its computers; by 2004, it had stopped using Athlon completely. NEC went from using Athlon in 84 percent of its desktop computers to using it in virtually none. Toshiba went from using it in 15 percent of its computers in 2000 to using it in none by 2001.³ Altogether, AMD's share of the Japanese PC processor market fell from 25 percent in 2002 to 9 percent in 2004.

What had happened? Tom McCoy, AMD's executive vice president for legal affairs, claimed in an article that the drop in orders for Athlon chips was "a matter of sheer exercise of monopoly power" by Intel.⁴ McCoy claimed that Intel paid the Japanese companies—Sony, NEC, and Toshiba—millions of dollars in "rebates" provided that they stopped buying AMD's microprocessors and used only Intel microprocessors inside their computers. However, McCoy claimed, these payments were not really rebates. A true rebate is a payment based on the number of products a customer purchases, and so it is in effect a discount that is paid after the customer buys the product (unlike a regular discount, which is subtracted from the price before the purchase). However, the payments Intel was giving computer makers, McCoy asserted, were not related to the number of processors they bought. Instead, Intel handed over

these payments when a company agreed to stop buying from AMD, regardless of the number of processors the company subsequently purchased.

Moreover, McCoy wrote, Intel threatened companies by warning them that if they did not stop using AMD's microprocessors, Intel might stop supplying them with any microprocessors at all. The threat was a powerful one because even if they used AMD's microprocessors on some of their top-quality computers, every computer manufacturer still depended on Intel for the microprocessors in all their other computers.⁵ Because of its small size, AMD could not provide the full range of microprocessors that the larger companies needed.

Convinced that Intel was using unfair and illegal means to block it out of the market, AMD sued Intel on June 27, 2005. Intel's general legal counsel, Bruce Sewell, responded to AMD's claims by arguing that the reason computer makers stopped buying AMD's microchips was because once they started using them in large numbers and running many different programs on them, they found AMD chips did not run the programs as fast as they had first appeared to. "When AMD has good parts, they do fine," said Sewell, "When AMD has lousy parts, they don't do so well. That's what a competitive market is all about."⁶

Sewell also defended Intel's rebates. If it is not wrong, he said, for a small company to build loyal customers by giving them more rebates when they agree to use your products exclusively, why should it be wrong for a larger company to do the same? Moreover, rebates in effect lowered the price of its computer chips, and what was wrong with that? Ultimately, didn't that benefit the consumer? Why was it so important to relate rebates to the number of units a customer buys? If Intel gave larger rebates to those companies that agreed to use its products exclusively, and smaller rebates to those companies that would not make the same commitment, what was wrong with that? Wasn't a company's agreement to use Intel as its exclusive supplier valuable to Intel, and so shouldn't Intel be allowed to reward that company with larger rebates than the discounts it offered other companies?

Because the AMD lawsuit was complicated and required gathering and reviewing a great deal of documentary evidence, it had still not gone to trial by the end of 2009. By then, however, AMD's allegations had convinced several foreign governments—including the European Union, South Korea, and Japan—that they should investigate Intel, and their investigations ended with substantial fines of Intel for violating antitrust laws. However, the United States did very little until, toward the end of 2009, the FTC sued Intel for "illegal monopolization," "unfair methods of competition," and "deceptive acts and practices in commerce."⁷

The Federal Trade Commission Lawsuit

The FTC said in its suit that its investigations had discovered what Intel's legal counsel Bruce Sewell had suggested: some software programs ran slowly on AMD's processors. The reason was not because AMD's processors were inherently slow. They had found that Intel had changed the programs sold by software companies so that their programs would not work well on computers using AMD's computer chips. All software companies use "compilers" to convert their programs into a form that will run on particular kinds of computer chips. The compilers are provided by the

companies that make the chips, in this case Intel and AMD, that are each supposed to provide compilers that will allow programs to run on both their processors. The FTC said that Intel changed its compilers in 2003 so that programs compiled with Intel's compilers would run fine on Intel processors, but would run slowly or poorly on AMD's. Without their knowledge, when software companies used Intel's compilers to process one of their programs, Intel's compiler secretly inserted bugs into the program that slowed it down when it ran on an AMD processor, but not on an Intel processor. Customers and reviewers blamed AMD's processor when their new programs did not run well on a computer that had an AMD chip inside.⁸

The FTC also claimed that Intel had provided software companies with "libraries" of software code that were also designed to trip up programs when they ran on AMD microchips. The software code the FTC was talking about were short bits of software that carry out certain frequently used, but routine operations on x-86 processors. Software engineers insert these short bits of code into their programs instead of writing them out each time they need them. Intel provided software engineers with "libraries" consisting of dozens of these bits of code. However, the FTC claimed, Intel changed the software codes in its library so they would not work well on AMD processors. Consumers and reviewers again blamed AMD's chips when a program containing Intel's codes did not run well on a computer that used an AMD microchips.⁹

The FTC also said that Intel had paid computer makers to boycott AMD's processors by giving them what Intel called "rebates." However, these payments required only that a company agree not to buy AMD processors and were unrelated to the amount of Intel processors the company bought. Computer manufacturer Dell, Inc., is a good example of how Intel paid computer makers to boycott AMD. Intel had begun making significant quarterly "rebates" to computer manufacturer Dell, Inc. in 2001, and Dell at that time stopped using AMD's processors, even though many of its customers said they wanted computers with AMD's processor.

Dell and Intel

Dell was founded in 1984 by its current CEO, Michael Dell. A student at the University of Texas at Austin at the time, Michael Dell began by selling computers out of his dorm room. By 2001, Dell had become the largest PC manufacturer in the world and held 13 percent of the worldwide PC market. The company finished 2001 with a net income of \$2.24 billion.

In 2002, according to a Dell memo, Dell's chief operating officer (COO) met with several Intel officials. Before the meeting, Dell's lead negotiator had explained what he expected Intel's officials would say to Dell's COO: "[w]ithout being blatant, [the Intel representative] will make it clear that Dell won't get more [payments] if we do [use] AMD [processors]. We'll get less, and someone else will get ours."¹⁰ During the meeting, Intel officials said they were willing to do "whatever it takes" to get Dell not to use any AMD processors in its computers. According to the memo, Intel agreed at the meeting that its quarterly payments to Dell "should increase from the \$70 million this quarter to \$100 million."¹¹ However, Dell had to continue to refuse to use AMD's processors.¹²

It was not difficult for Intel to pay the hundreds of millions of dollars it was giving Dell. Intel had unusually high profit margins of 50 percent that allowed it to accumulate \$10.3 billion of cash at the end of 2001, and by the end of 2005 it held \$14.8 billion of cash. In a February 2004 e-mail, Michael Dell remarked on Intel's profitability: "[Intel's] profits in the 2nd half of 2001 were \$1.397 billion on revenues of \$13.528 billion. In the 2nd half of 2003 they were \$4.885 billion on revenues of \$16.574 billion. In other words their sales went up 22.5% and their profits went up 350%! Or said another way, their revenues went up \$3.046 billion and their profits went up \$3.488 billion! Not even Microsoft can do that."¹³

Although many smaller companies started using AMD's chips, Dell feared retaliation from Intel if it tried to do the same. In an e-mail, a Dell executive noted that if "Dell joins the AMD exodus," the consequences would be costly for Dell. He noted that Intel's CEO and chairman "are prepared for jihad if Dell joins the AMD exodus. We [will] get ZERO MCP [payments] for at least one quarter while Intel 'investigates the details' there's no legal/moral/threatening means for us to apply and avoid this."¹⁴

Although Dell complained that its refusal to use AMD processors was hurting its sales, Intel kept Dell loyal throughout 2004 by increasing its quarterly payments to \$300 million per quarter, an amount equal to almost a third of Dell's quarterly net income and apparently enough to compensate Dell for any sales declines.

Dell continued to lose market share, and CEO Michael Dell became increasingly frustrated. On November 4, 2005, Intel's CEO, Paul Otellini, wrote an e-mail saying that he had just received "one of the most emotional calls I have ever, ever had with [Michael Dell]."¹⁵ Otellini noted:

[Michael Dell] opened by saying "I am tired of losing business" . . . he repeated it 3–4 times. I said nothing and waited. [He said] he has been traveling around the USA. He feels they are losing all the high margin business to AMD-based sku's [computers] . . . "Dell is no longer seen as a thought leader."¹⁶

A week later, Michael Dell sent an e-mail to Otellini complaining that "We have lost the performance leadership and it's seriously impacting our business in several areas."¹⁷ Otellini responded to Dell's complaints by pointing out how much Intel was paying Dell: "[W]e are [now] transferring over \$1 billion per year to Dell for meet comp efforts. This was judged by your team to be more than sufficient to compensate for the competitive issues."¹⁸ On November 25, Michael Dell wrote in an e-mail to Otellini: "None of the current benchmarks and reviews say that Intel based systems are better than AMD. We are losing the hearts, minds and wallets of our best customers."¹⁹

In spite of realizing that boycotting AMD's processors was hurting its revenues, Dell remained so loyal to Intel that in February 2006, Otellini joked that Dell's CEO was "[t]he best friend money can buy."²⁰ Intel continued to increase its payments to Dell through 2005 and 2006 until they reached a high of \$805 million a quarter in early 2006, an amount equal to 104 percent of Dell's net income per quarter that year.

In 2006, Dell finally broke away from its agreement to not use AMD processors. That year, it purchased Alienware, a computer manufacturer that made high-end gaming computers with AMD

microprocessors. In April of that year, Michael Dell sent an e-mail to his top executives, which said: "We have been looking at the situation for a long time, and have decided to introduce a broad range of AMD based systems into our product line to provide the choice our customers are asking for."²¹ In the second quarter of the year, perhaps testing Intel's reaction, Dell announced a single new line of high-end computers with AMD chips inside. That quarter its payments from Intel dropped to \$554 million. The next quarter Dell announced additional lines of PCs with AMD processors inside and Intel paid it only \$200 million.

Intel's board chairman told Intel's CEO that the company should respond harshly to Dell's actions: "I think you should reply in kind. Not a time for weakness on our part. Stop writing checks immediately and put them back on list prices [i.e., on prices with no discounts or rebates] asap."²² The next day, Intel CEO Otellini instructed his people as follows: "[W]e should be [pre]pared to remove all [payments] and related programs. Post haste . . . then we ought to enter negotiations."²³

Now subject to Intel's punishment, Dell received no more "rebates." In 2007, Dell's net income fell to \$2.58 billion, down from \$3.57 billion in 2006. The company recovered a bit in 2008, a year in which it posted a net income of \$2.95 billion, but then it began a downward slide to \$2.48 billion in 2009 and \$1.43 billion in 2010. Between 2001 and 2006, Intel had pumped an estimated total of about \$6 billion into Dell's income figures. Because Dell had not reported that most of its profits during those years were cash it was receiving from Intel, the U.S. Securities and Exchange Commission (SEC) accused Dell and its officers of deceiving investors, who had been told by the company that its high profits were due to its ultra-efficient management of its supply chain, its direct-sales strategy, its cost reduction initiatives, and the declining costs of computer parts.²⁴ Dell had become one of the most admired companies in America because it was falsely assumed that its strong profits were due to the company's management skills.

The Federal Trade Commission Settles

Intel pressured other big companies, like HP and IBM, into refusing to use AMD processors. Unlike Dell, HP and IBM did not agree to completely boycott AMD's processors. In HP's case, Intel got HP to agree to limit its purchases of AMD processors to 5 percent or less, and Intel agreed to give HP a "rebate" of \$130 million, spread out over a year.²⁵ IBM agreed to only use AMD processors in its "High Performance Computers."²⁶

The FTC's lawsuit against Intel never made it to court. On Wednesday, August 4, 2010, the FTC announced that without admitting guilt, Intel had agreed to settle the FTC's antitrust lawsuit. In a press release, the FTC wrote that under the settlement, Intel would be prohibited from the following:

"conditioning benefits to computer makers in exchange for their promise to buy chips from Intel exclusively or to refuse to buy chips from others; and retaliating against computer makers if they do business with non-Intel suppliers by withholding benefits from them."²⁷

In addition, Intel was prohibited from using its compilers or its libraries of software code to inhibit the ability of programs to run on competitors' microprocessors. Some observers argued that the

restrictions of the settlement no longer mattered since Intel had once again taken the lead in the x86 processor market and AMD was again a trailing competitor. In the first quarter of 2006, according to CPU Benchmarks, AMD's market share had climbed as high as 48 percent and Intel's had fallen to 51 percent. However, AMD's share dropped after that and by 2011, Intel had 71 percent of the x86 microprocessor market, while AMD was down to 25 percent.

WRITING PROMPT

Market Perspective on Intel

1. In your judgment, is Intel a monopoly? Did Intel use monopoly-like power; in other words, did Intel achieve its objectives by relying on power that it had due to its control of a large portion of the market? Explain your answers.
2. In your judgment, were Intel's rebates ethical or unethical? Explain your answer.
3. Was it unethical for Intel to use its compilers and its "libraries" of software code in the way it did, or were its actions permissible in a free market economy? Explain your answer.
4. Were Intel's rebates unethical? Explain why or why not.
5. In your view, did Intel violate either of the two key sections of the Sherman Antitrust Act? Explain.

The response entered here will appear in the performance dashboard and can be viewed by your instructor.

Submit

Case Notes

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2. *Ibid.*
3. Roger Parloff, "Intel's Worst Nightmare: Dwindling Market Share Isn't the No. 1 Chipmaker's only Problem, says *Fortune*'s Roger Parloff. It needs to Mount a Fierce Defense to AMD's Epic Antitrust Lawsuit," *Fortune*, November 16, 2006.
4. *Ibid.*
5. *Ibid.*
6. *Ibid.*
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8. *In the Matter of Intel Corporation, a Corporation, The United States of America Before the Federal Trade Commission*, Docket No. 9341, Complaint, December 16, 2009, paras. 56–61.
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10. *State of New York, by Attorney General Andrew W. M. Cuomo, Plaintiff, vs. Intel Corporation, a Delaware Corporation, Defendant*, Complaint in the United States District Court for the District of Delaware, November 3, 2009, para. 90, <http://www.ag.ny.gov/sites/default/files/pdfs/bureaus/antitrust/litigation/09-11-03%20Complaint.pdf>.
11. Roger Parloff, "Intel Settlement: The Power of Emails," *Fortune*, November 13, 2009.
12. *Ibid.*
13. *State of New York*, para. 27.
14. *Ibid.*, para. 105.
15. *Ibid.*, para. 135.
16. *Ibid.*
17. *Ibid.*, para. 136.
18. *Ibid.*
19. *Ibid.*, para. 137.
20. *Ibid.*, para. 139.
21. *Ibid.*, para. 141.
22. *Ibid.*, para. 142.
23. *Ibid.*, para. 143.
24. Justin Scheck and Kara Scannell, "SEC: Intel Cash Inflated Dell," *Wall Street Journal*, July 23, 2010.
25. *In the Matter of Intel Corporation*, para. 170.
26. *Ibid.*, para. 211.
27. Federal Trade Commission, "FTC Settles Charges of Anticompetitive Conduct against Intel," news release, August 4, 2010, <https://www.ftc.gov/news-events/press-releases/2010/08/ftc-settles-charges-anticompetitive-conduct-against-intel>.

Case Study 4.2: Archer Daniels Midland and the Friendly Competitors

By 1995, Archer Daniels Midland Company (ADM) had become one of the world's largest agricultural companies. ADM processes corn, wheat, soybeans, peanuts, and other oilseeds to make products used by the food, beverage, and chemical industries. Its global sales in 1994 were about \$13 billion. Since 1966, the company had been headed by Dwayne Andreas, a hard-driving executive who pushed the company toward greater productivity and rapid expansion. Dwayne brought in his son, Michael D. Andreas, who became the company's executive vice president of sales and marketing.

In early 1989, Dwayne and Michael Andreas decided that ADM should enter the lysine business. Lysine is an amino acid derived from corn that is used as an additive in animal feed because it promotes the growth of lean muscle. Because lysine is

an undifferentiated commodity, it is price sensitive—a characteristic that is normally indicative of a highly competitive market. However, Dwayne and his son had noticed that the world market in lysine was dominated by only three companies:

1. Ajinomoto (a Japanese company)
2. Kyowa (also Japanese)
3. Miwon (a Korean company)

Cheil, a Korean company, had plans to enter the market in 1991. The fact that there were only a handful of players supplying the market attracted the two Andreas: the market looked more like a staid gentlemen's club than an aggressive rivalry.

To manage ADM's entry into the lysine business, Dwayne and Michael Andreas hired an extremely bright and energetic young man named Mark Whitacre. Whitacre would run ADM's lysine business and would report to Michael Andreas. Only 32 years old, Whitacre had a B.S. and an M.S. in animal science from Ohio State University, had a Ph.D. in nutritional biochemistry from Cornell University, and had worked five years for Degussa, a

German chemical company. Married to Ginger Gilbert, his girlfriend since high school, where he had been senior class president, Whitacre now became president of ADM's new lysine division.²⁸ He thrived at ADM, where he enjoyed the absence of bureaucracy and the dynamic and quick moving "can-do" company culture. During his first few years, he later said, he "loved" his work and his new company. In fact, he said, he was "very proud" of the company and the way it was run, and felt "enthusiastic" and "excited" about what he was doing.²⁹

The Method

ADM started building its new \$100 million lysine production plant in September 1989 and finished in February 1991, a surprisingly short period of 17 months. Capable of producing 250 million pounds of lysine a year—enough to supply half of the annual worldwide demand—the new plant was the largest in the world. With the resources of ADM behind him, Whitacre could hire the best people from around the world to work for him in ADM's new lysine business.

When Whitacre began selling lysine, it was selling for \$1.30 a pound. ADM's large new plant, however, brought a huge volume of new product into the market, and prices quickly began to fall. (See Figure 4.7 for a timeline of meetings and prices in the lysine price-fixing case.) Whitacre felt that in order to get customers to buy from a newcomer, he had to price his product below established competitors. However, his tactic led to a disastrous and costly price war among the five companies in the industry. According to Whitacre, when he first brought ADM into the market and began selling lysine at prices slightly below the \$1.30 per pound at which it had previously been selling, a "tremendous price war" broke out. All the lysine companies began rapidly reducing their own prices, and the market price plummeted all the way down to 60 cents per pound. At that price, according to Whitacre, ADM was losing "a few million dollars" each month.³⁰

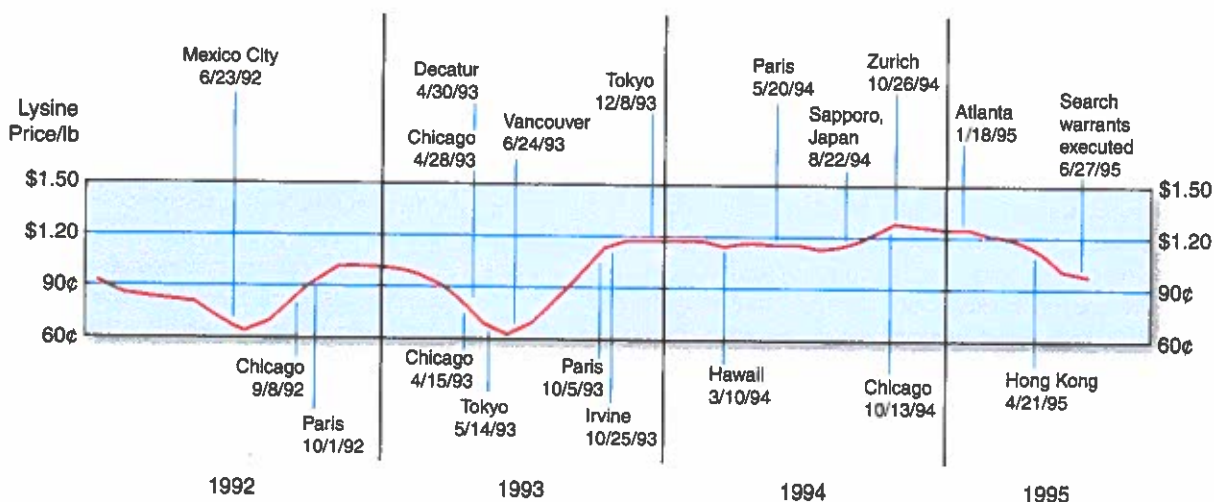
ADM was in fact losing about \$7 million a month. Managers at all five lysine-producing companies—all of whom were also losing money—felt the devastating situation could not continue. Whitacre knew something had to change or his new career would be over just as it was starting. Then, he learned that ADM

had a method of dealing with such situations. Terry Wilson, president of ADM's Corn Processing Division, had developed the "method" and then introduced it to the managers at other divisions of ADM. Michael Andreas talked with Whitacre and asked him to go and learn from Terry Wilson "how ADM does business."³¹ Whitacre began discussing his problems with Terry Wilson and learned that the company had often had to deal with tight markets. Wilson proposed that he and Whitacre meet with top managers of the other four companies producing lysine. He would show Whitacre what to do. A meeting was arranged, and on June 23, 1992, Wilson and Whitacre met in a Mexico City hotel with the managers of Ajinomoto and Kyowa, the two Japanese producers of lysine.³² Absent from the meeting were managers from the two Korean companies, Miwon and Cheil. Among them, however, ADM, Ajinomoto, and Kyowa controlled most of the world's lysine market.

The Customer Is the Enemy

During the June 1992 Mexico City meeting, Terry Wilson stood in front of a flip chart and asked the representatives of the companies how many million pounds of lysine each of them produced in a year in their plants. He wrote the quantities on the flip chart and added them together, including estimates for the two absent Korean companies. Wilson then turned the page over. He now asked the group for their estimates of how many million pounds of lysine were actually purchased each year in Europe, Latin America, Asia, and the United States. He wrote down these quantities and added them together on a second page. Finally, he compared the amounts on the two pages and pointed to "our problem": The total amount they were producing was 25 percent more than the total amount of worldwide demand. Wilson next multiplied their estimate of worldwide demand by 60 cents, the current price of a pound of lysine. He also multiplied their estimate of worldwide demand by \$1.30, the price the Japanese companies were maintaining before ADM had entered the market. The difference was \$200 million. Wilson declared that \$200 million was the amount that the five companies were giving away to their customers. This meant, he continued, that the benefits were going to their customers, not to the five competing companies who had each spent hundreds of millions of dollars

Figure 4.7 Timeline of Meetings and Prices in the Lysine Price-Fixing Case



building their plants. At ADM, Wilson said, "We believe the competitor is our friend and the customer is our enemy." Whitacre was listening. "We should be trusting," Wilson added, "and have competitive friendliness" among the companies.

Whitacre joined the conversation when Wilson and the representatives of the two Japanese companies turned to discussing a "target" price at which the companies could agree to sell lysine "if we stop the competition." The purpose of their meeting, it was noted, was to end the price war among them that had driven prices downward. Their aim could be achieved, however, only if all five companies agreed to sell lysine at the same price, without undercutting each other. The managers of the two Japanese companies volunteered to contact the two absent Korean companies and talk them into coming on board and joining their agreement. Toward the end of the meeting, the representative of Ajinomoto summed up the agreement: "[i]f the discussions [with the Korean companies] go smoothly, we will aim for prices at the level of \$1.05/lb [delivered] for North America/Europe . . . by October, and \$1.20/lb . . . in December."³³ Terry Wilson suggested that to hide the real purpose of any future meetings, they should form a "trade association" that would meet periodically with a fake public agenda. This, he said, was how ADM had arranged secret price-fixing meetings for other commodities the company produced.

After the meeting, Whitacre and Wilson flew home. Over the next few days, Mark gradually raised his prices as they had agreed. So did the other four companies, including the Koreans, who had evidently been talked into joining the agreement. In the United States, the price of lysine rose to \$1.05/lb by the end of the summer of 1992 (see Figure 4.7). For a while, Whitacre felt that the price wars had ended.

When Whitacre was contacted by managers of the four other lysine companies, he agreed they should all meet in Paris on October 1, 1992, to launch the newly formed International Amino Acid Producers Association. They published a fake agenda stating that they would discuss animal rights and other environmental concerns. However, they never discussed those topics. Instead, Whitacre and the other managers spent their meeting time congratulating themselves on the success of their earlier agreement and worked to reach a new agreement on future prices for each region of the world where they sold lysine.

Volume Agreement

After the Paris meeting, Whitacre realized they still had a problem. Instead of rising, the price of lysine stayed at \$1.05 through the end of 1992, and then began to gradually decline. The price fell through January, February, and March of 1993, and reached 70 cents by April (see Figure 4.7). In April, Whitacre met with Michael Andreas and Terry Wilson, and discussed scheduling an urgent meeting with the representatives of the other companies to talk about the deteriorating situation. Since Ajinomoto was the largest lysine producer, they decided to begin by meeting with officials of Ajinomoto. The meeting took place in Decatur and then continued in Chicago. At the meeting, Andreas and Wilson explained to the Ajinomoto managers that the major problem with their price-fixing agreement was that the five companies had not agreed to limit their production quantity. In the absence of any quantity agreement "from the supply side," each of the companies had tried to produce and sell as much lysine as it could. Together, they had flooded the market with more

product than was being demanded, and so could not hold to their price agreements. The only way to bring "stability" to the market was by controlling volume on the supply side. Unless volume is controlled, Wilson noted, "prices go down." The Ajinomoto representatives said they would think about it.

With prices still falling, Whitacre, Wilson, and the Ajinomoto officials again met—this time in Tokyo—on May 14, 1993, and they again discussed limiting the quantity they were producing in order to improve prices. At the meeting, Wilson explained that in other markets ADM had met with competitors, and each competitor had agreed to sell only a specific quantity of the product to ensure that their cumulative supply did not outstrip demand. Once specific volumes are allocated to each company, he pointed out, there is no need to even monitor prices because "[a]s long as the volume [of each company] turns out okay[,] [i]f they want to sell [their assigned volume] for less money, that's their business."³⁴ The Ajinomoto people were still hesitant.

Whitacre realized that an agreement to limit the volume of lysine each company could sell would require an agreement with all four companies, not just Ajinomoto. He was feeling increasingly stressed because by now the price of lysine had dropped to 60 cents a pound, so that ADM as well as the other companies were losing money (see Figure 4.7). He talked by phone with the managers of the other companies, and they agreed to meet on June 24, 1993, in Vancouver, Canada. That meeting only frustrated Whitacre. Although the managers again reached an agreement on prices, they quarreled over accepting restrictions on the amount each could sell because "everybody wanted a bigger share." Ajinomoto, especially, was still not willing to limit how much it could sell. They all agreed, however, to at least hold to their current levels of production and to raise their prices together to the newly agreed levels.

After the Vancouver meeting, Whitacre breathed a sigh of relief as he watched prices gradually move upward in tune with their agreement. The experience of the past several months, however, had convinced him that the companies would have to agree on a volume allocation if they were to hold the line on prices. On October 25, 1993, Andreas, Wilson, and Whitacre set up another meeting with officials of Ajinomoto in Irvine, California, so they could again try to hammer out a volume agreement. The representatives of the two companies finally agreed that in 1994 each company would limit itself to selling the same quantity it had sold in 1993, plus a certain amount of the quantity by which they estimated the industry would grow in 1994. If they did not stick to this agreement to limit their volumes, Michael Andreas warned, then ADM would use its huge lysine capacity to again flood the market and drive down prices for everyone, and "there becomes a free-for-all." The next step was to bring the other companies into their volume agreement.

On December 8, 1993, representatives of ADM, Ajinomoto, Kyowa, and Miwon met in Tokyo; Cheil was not represented at the meeting. In Tokyo, the companies agreed on prices for the coming quarter. More important, they finally also agreed to a schedule indicating the amount of lysine (in tons) that each could sell in each region of the world. They also agreed on a method of ensuring that none of them would be tempted to sell more than they were allowed to sell: if a company sold more than its allocated share, then at the end of the year, it would have to make amends by buying that amount of lysine from another company that had sold less than its allocated share. Moreover, every month

each company would send a report to an official at Ajinomoto, indicating the amount of lysine it had sold the previous month. These reports would be audited, and Ajinomoto would distribute the reports to the other companies.

A few months later, on March 10, 1994, the companies met in Hawaii where Cheil joined the group and also agreed to limit its sales volume to a specified amount. Now, at last all five companies had succeeded in reaching an agreement to set both their prices and their production volumes.

Whitacre and, sometimes, Wilson and Andreas, continued to meet once a quarter with top managers of Ajinomoto, Kyowa, Miwon, and Cheil for the rest of 1994 and through the first half of 1995. Lysine prices from December 1993 until April 1995 remained at about \$1.20 per pound in accordance with the agreements the companies had hammered out (see Figure 4.7).

The FBI Catches Up

The agreement ended abruptly on June 27, 1995, when FBI officials raided the offices of ADM and questioned Michael Andreas at his home about price-fixing in the lysine market. Andreas said that it was impossible to fix prices in the lysine industry and denied that ADM had ever exchanged price or production information with competitors. A few days later, however, the FBI revealed that in November 1992, it had convinced Mark Whitacre to become an FBI informer. Subsequently, when Whitacre attended price-fixing meetings, he had carried hidden audio or video recorders that had recorded the discussions among the companies. All the conversations among Andreas, Wilson, Whitacre, and the managers of Ajinomoto, Kyowa, Miwon, and Cheil had been recorded on audiotapes, and some had even been videotaped.

A month later came another surprise. It was revealed that while Whitacre was recording the price-fixing discussions between ADM and the competitors, he had secretly been taking money from ADM. Altogether, he had taken \$2.5 million from the company. Whitacre claimed that this sum was a "bonus" and that the company often let its executives pay themselves such bonuses under the table to avoid taxes.

Based on the tapes that Whitacre turned over to the FBI, ADM was indicted as a company for price-fixing and fined \$100 million. On July 9, 1999, Andreas and Wilson were each fined \$350,000 and given 20-month prison sentences for price-fixing, sentences the court reaffirmed on June 26, 2000. Whitacre, whose theft of money from ADM nullified the immunity agreement he had worked out with the FBI, was sentenced to nine years in prison for embezzlement plus 20 months for price-fixing and was forced to return the money he took. The managers of the Korean and Japanese companies that participated in the price-fixing meetings were fined \$75,000 each, but were granted immunity from serving time in prison in exchange for agreeing to testify against ADM and its executives. On July 6, 2000, the European Union fined ADM an additional \$46 million for fixing lysine prices in Europe.

Mark Whitacre spent eight and a half years in federal prison and was released on December 2006. He was given what he calls "a second chance" when Cypress Systems, Inc., a California biotechnology company, agreed to hire him. He is now COO for the company. He greatly regrets what he did. In a 2009 interview,

Whitacre said that "ego and greed" were behind his "poorly made decisions."³⁵ He had been trying so hard to win, he said, that "truth and ethics" had not mattered to him. "I cannot explain how I lost my way" he said. But he did.

WRITING PROMPT

Analyze ADM Price-Fixing

1. This chapter cites a number of factors that cause companies to engage in price-fixing. Identify the specific factors that you think were present in the ADM case and explain.
2. In your view, was Mark Whitacre to blame (i.e., morally responsible) for what he did? Were any of the obstacles to moral behavior operating in his situation?
3. According to the case, the ADM plant produced "250 million pounds of lysine a year—enough to supply half of the annual worldwide demand," so the worldwide demand for lysine was about 41.7 million pounds a month. Using figure 4.7, Estimate the equilibrium price for a pound of lysine during 1992–1995, and determine the monopoly profit the companies made per pound of lysine when they fixed the price at or about \$1.20 a pound. How much was the total monopoly profit the companies made worldwide during the months (in figure 4.7) that they seem to have successfully fixed the price at or about \$1.20 a pound? Explain fully the ethics of extracting this monopoly profit from buyers.

The response entered here will appear in the performance dashboard and can be viewed by your instructor.

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Case Notes

28. James B. Lieber, *Rats in the Grain* (New York: Four Walls Eight Windows, 2000), pp. 8–11.
29. Mark Whitacre and Ronald Henkoff, "My Life as a Corporate Mole for the FBI," *Fortune*, September 1995, pp. 52–59.
30. Ibid.
31. Ibid.
32. The times and contents of the discussions at the various meetings described here and in what follows are based on the sources above plus the following additional sources: *U.S. v. Michael D. Andreas, Mark E. Whitacre, and Terrance S. Wilson*, Brief for Appellee and Cross-Appellant United States of America, in the United States Court of Appeals for the Seventh Circuit, No. 99-3097, October 19, 1999, accessed June 5, 2004, <http://www.usdoj.gov/atr/cases/f3700/3757.htm>; and *USA v. Michael D. Andreas and Terrance S. Wilson*, Appeals from the United States Court for the Northern District of Illinois, Eastern Division, No. 96 CR 762, June 26, 2000, accessed June 6, 2004, <http://www.justice.gov/atr/cases/f220000/220009.htm>. Some details are also drawn from Angela Wissman, "ADM Execs Nailed on Price-Fixing," *Illinois Legal Times*, October, 1998, p. 1; Lieber, *Rats in the Grain*; and Kurt Eichenwald, *The Informant: A True Story* (New York: Random House, 2000).
33. *U.S. v. Michael D. Andreas, Mark E. Whitacre, and Terrance S. Wilson*, Brief for Appellee.
34. Ibid.
35. Feedinfo News Service, "Interview: Mark Whitacre-Lysine Cartel Whistleblower on Price-Fixing and Rebuilding his Life after Prison," June 13, 2009, accessed July 28, 2010, <http://www.feedinfo.com/console/PageViewer.aspx?page=1202114?public=yes>.

Summary

1. Although many companies engage in anticompetitive practices, such practices are unethical. To understand why anticompetitive practices are unethical requires an understanding of why market competition is desirable and of what happens when markets are not competitive.
2. A market is "perfectly competitive" when it consists of numerous buyers and sellers, none of whom can dictate prices, and each of whom is free to enter or leave the market. The demand curve of a market is a line indicating the price buyers are willing to pay for a unit of a product when a given quantity of the product is available. Prices on the demand curve are just (in terms of capitalist justice) for the buyer because they equal what the buyer believes the product is worth at each given quantity. The supply curve indicates the price sellers must get to cover the costs (including a normal profit) of supplying a given quantity of a product. Prices on the supply curve are just (in terms of capitalist justice) for the seller because they equal what the seller knows the value of the product is in terms of what it costs to produce it.
3. The point at which supply and demand curves cross is the equilibrium point, and it is the only point at which prices are just from both the buyer's and the seller's perspective. In a perfectly competitive market, prices continually move to this equilibrium point for the following reasons: if prices rose above equilibrium, surpluses would appear that would drive prices down to equilibrium; if prices fell below equilibrium, shortages would appear that would drive prices up to equilibrium; if the quantity of goods being sold were less than equilibrium, profits would rise, which would attract more sellers into the market, thereby increasing the quantity up to the equilibrium level; and if the quantity of goods being sold were more than equilibrium, prices would fall, which would drive sellers out, thereby bringing the quantity down to the equilibrium level.
4. In a perfectly competitive market, since prices and quantities always move toward the equilibrium point, they always move toward the point at which the price is just for both the seller and the buyer. In other words, a perfectly competitive market tends to produce just prices. Perfectly competitive markets also satisfy the utilitarian principle by allocating resources efficiently, pressuring companies to use their resources efficiently, and allowing consumers to efficiently purchase the most satisfying bundle of goods they can. Finally, perfectly competitive markets respect the rights of participants to freely choose the business they will enter, respect the rights of consumers to make their buying and selling decisions freely, and ensure that no single seller dictates the prices, quantities, or kinds of goods consumers must buy.
5. The opposite of a perfectly competitive market is the monopoly market. A monopoly market has no competition because there is only one seller and there are barriers to entry that keep other sellers out. The monopoly seller can limit the quantity of goods released into the market and can force prices to rise above the equilibrium point. In spite of the high monopoly profits, other sellers cannot enter the market to establish equilibrium because of the barriers to entry. Monopoly markets therefore can violate (capitalist) justice because they enable the monopoly seller to unjustly charge more for products than the monopolist knows they are worth. They also violate the utilitarian principle by creating shortages and by removing incentives to use resources efficiently. They also violate the rights of market participants by letting the monopolist dictate prices and quantities.
6. Imperfectly competitive markets are those with a few sellers and some barriers to entry. Because sellers in an imperfectly competitive market are few, they can join together to act as if they were a single seller (e.g., in an oligopoly). When they do so, they reproduce the effects of a monopoly market and so can violate justice, the utilitarian principle, and the rights of market participants. Some of the unethical anticompetitive practices that imperfectly competitive markets allow include price-fixing, manipulation of supply, market allocation, and bid rigging. Both imperfectly competitive markets and monopoly markets also allow tying arrangements and predatory price discrimination. The "fraud triangle" theory suggests that business people engage in these practices when they are pressured into them, when they have the opportunity to do so, and when they are able to rationalize their actions. Nevertheless, the Sherman Antitrust Act passed in 1890 makes these anticompetitive practices illegal and imposes heavy fines and jail sentences on companies and individuals who engage in them.
7. What should be done to prevent the unethical anticompetitive practices that monopoly markets and imperfectly competitive markets allow? There are three main views on this question. The do-nothing view holds that market forces exist that limit unethical anticompetitive practices, so nothing needs to be done about them. The antitrust view holds that when monopolies or large oligopoly firms become anticompetitive, they should be broken up into smaller, more competitive firms. The regulation view holds that large monopoly and oligopoly firms can be beneficial, so they should not be broken up but restrained by government regulations.

Chapter 5

Ethics and the Environment



Workers clean the beach after the BP Deepwater Horizon oil well exploded in the Gulf of Mexico on April 20, 2010.

Learning Objectives

- 5.1** Identify environmental threats related to the production of consumer goods
- 5.2** Examine the important ethical considerations of pollution control
- 5.3** Assess the approaches to internalizing the external costs of pollution
- 5.4** Evaluate the ethics related to the conservation of resources for future generations

The process of producing goods forces businesses to engage in exchanges and interactions with two main external environments: the natural environment and the consumer environment. It is from the natural environment that business ultimately draws the raw materials that it transforms into its finished products. These finished products are then externally promoted and sold to consumers.

Thus, the natural environment provides the raw material input of business, whereas the consumer environment absorbs its finished output. This chapter discusses the two basic issues related to the natural environment: pollution and resource depletion. We will evaluate the main environmental threats; identify ethical issues raised by pollution from commercial and industrial enterprises; and