

CHAPTER 5

ANALYSIS OF COMPETITIVE EFFECTS

CHAPTER 5 ANALYSIS OF COMPETITIVE EFFECTS	1
I. PRICE FIXING AND MARKET DIVISION.....	2
A. Naked Price Fixing	2
B. Naked Market Division and Customer Allocation	3
C. Market Division in Non-Naked Joint Ventures	3
II. ANTICOMPETITIVE INCENTIVES IN EFFICIENT HORIZONTAL AGREEMENTS	4
A. Economies of Scale from Joint Production	6
B. Complementary Inputs for Production	6
C. Complementary Products for Consumers	7
D. Incentivization of Innovative Investments	8
E. Channeling of More Efficient Competition	8
F. Identification of the Orchestrator	9
G. Efficient Joint Facilities	10

The basic economic analysis of the likely competitive effects of collusive restraints is not particularly controversial. Agreements among competitors can have anticompetitive and/or procompetitive effects. Anticompetitive effects include higher prices, reduced quality and variety, and/or slower and weaker innovation. Anticompetitive harms might also arise if firms exchange competitively sensitive information, particularly current or recent prices and production levels. This information exchange conduct can lead to anticompetitive results, even if the individual firms set their prices and outputs “unilaterally” rather than through “coordination.” Harms can also occur if the firms agree to certain product standards. Indeed, if a group of environmentally activist firms agrees that each firm will adopt a higher-cost, less polluting technology that leads to higher prices that harm purchasers that agreement can violate Section 1 despite its “pro-social” motivation, even if the new technology leads the firms to earn lower profits.¹

Other collusive agreements can be efficient and procompetitive. Potential competitive benefits can include lower costs, higher quality, superior new products, and improved innovation (faster, better, or lower cost). These benefits can follow from joint production when there are economies of scale or differential costs among firms, from the sharing of technology, or from other information that allows each firm to reduce costs and/or create better product products. An agreement among competitors can also lead to enhanced competitive incentives, if, for example, they produce complementary products. Internalizing this “spillover effect” will lead to lower prices (what economists refer to as the *Cournot complements* effect).² Substitute products can be subject to this same effect if they tend to be purchased at the same time by consumers engaged in one-stop shopping, what might be termed

¹ See, for example, Daniel Francis, *Post-Profits Antitrust*, 135 YALE L.J. 194 (2025).

² The term for the equivalent effect in the pricing of vertically adjacent products (e.g., a manufacturer and a retailer that resells its product) is *elimination of double marginalization*.

transaction complements.³ This concept is the economic interpretation of the efficiency rationale for the agreement among music publishers to license their songs collectively in a bulk license in *BMI*.

Economic analysis of the overall competitive effect of agreements involves the integration and comparison of these harms and benefits. There is general consensus on what constitutes relevant economic evidence. The greatest disagreement among economists involves the interpretation and weight placed on the evidence produced and the likely predicted effects, based on each economist's subjective evaluation of the probabilities and his or her antitrust ideology.

The legal analysis involves several controversies regarding the evidentiary standards of proof and the allocation of those burdens between the two parties. These issues can be productively analyzed through the lens of decision theory, because the legal analysis necessarily involves making predictions about the effects of various categories of conduct, assessing the reliability of those predictions in light of the evidence presented, and determining the degree to which the courts should tilt their decisions to one side or the other. The resulting legal standards will be based on a combination of economic analysis, the interpretation of the judicial experience, and the Court's antitrust ideology.

The result of this exercise is that some conduct with potential collusive effects is treated as per se illegal, some conduct is condemned after a quick look, and other conduct must be evaluated under the full multi-step rule of reason. Section 1 is applied only when there is an agreement by two or more firms. Cartel agreements are considered the "supreme antitrust evil," according to the Court, but the evidentiary standard for establishing such an agreement is quite high. For agreements that fall short of naked cartelization, economic analysis indicates a number of ways in which courts' use of generalizations can permit significant economic harm from anticompetitive conduct.

I. Price Fixing and Market Division

A. Naked Price Fixing

A cartel is a conspiracy among competitors that attempts to collectively achieve and exercise market or monopoly power. A group of competitors might form a naked cartel for the sole purpose of setting the monopoly price and dividing up the monopoly profits by allocating customers or market shares among the cartel members, thereby harming consumers. *Addyston Pipe*⁴ and *Andreas*⁵ are illustrative cases. A naked buyer cartel might create a standard contract that entails lower input prices, as illustrated by *Mandeville Farms*.⁶

The undercover videos in *Andreas* show a cartel in action, with ADM and other firms agreeing to the cartel price but then having difficulty stabilizing it because each firm had the incentive to undercut the price in order to increase its sales above its allocated level. The videos also shows them finding a

³ Ian Ayres, *Rationalizing Antitrust Cluster Markets*, 95 YALE L.J. 1091 (1985).

⁴ *United States v. Addyston Pipe & Steel Co.*, 85 F. 271 (6th Cir. 1898), modified and affirmed, 175 U.S. 211 (1899).

⁵ *United States v. Andreas*, 216 F.3d 645 (7th Cir. 2000).

⁶ *Mandeville Island Farms, Inc. v. Am. Crystal Sugar Co.*, 334 U.S. 219 (1948).

solution: monitoring sales and providing side payments to firms that sold less than their allocation from the firms that sold more.

In the *Socony Vacuum*⁷ price-fixing case, the cartel members did not literally fix any prices. Instead, they agreed to purchase gasoline on the spot market, which raised the spot price. This conduct raised their costs. What made the scheme profitable was the fact that the higher spot rates raised the prices they charged their jobber customers, because the contracts with the jobbers specified that the contract prices would move up or down with the spot price. The higher spot price also raised the cost of independent gas stations that competed with the oil companies' owned and contracted stations, creating a second benefit of the scheme. Raising the spot price was an efficient way to raise the contract price. The oil companies were engaged in what amounted to collusive price manipulation.

B. Naked Market Division and Customer Allocation

Allocating customers or dividing up market segments can be an effective way to collude, because it reduces cartel monitoring costs. There is no need to reach a consensus on price or monitor the prices of the other cartel members. Once customers are allocated, a defection is easy to detect, because it involves a discrete act. However, side payments may still be required to reach the agreement.

*Palmer v. BRG*⁸ provides an example. After competition in offering bar review courses in Georgia for several years, HBJ withdrew and gave BRG an exclusive license to market HBJ's material in Georgia and to use its trade name (BAR/BRI); BRG agreed not to compete outside of Georgia. BRG was required to make a side payment to HBJ of \$100 per student enrolled by BRG plus 40 percent of the revenue above \$350. It is not clear what type of justification might have allowed the firms to escape per se condemnation. It is conceivable that the market was too small to support two courses, but in that case, competition could have continued until the less valuable course exited.

C. Market Division in Non-Naked Joint Ventures

*BMI*⁹ and *NCAA*¹⁰ involved joint ventures that had the alleged procompetitive benefits of creating new or superior products and reducing costs. Both ventures then engaged in a joint sales agency instead of independent competition by members.

Alternatively, a joint venture might engage in market division. *Topco*¹¹ involved a joint venture among a number of small supermarket chains to create a private label brand to enable them to better compete against the larger chains. As part of the agreement, the members agreed not to enter the geographic markets of the other brands. The Supreme Court treated the agreement as per se illegal.

This decision, nine years before *BMI*, was much criticized, on the grounds that the exclusive territories in the joint venture had procompetitive benefits that should have at least implied the need for a rule of reason analysis. The district court had rejected the government's case against Topco under the rule of reason, concluding that the Topco brand could not survive without the market

⁷ *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150 (1940).

⁸ *Palmer v. BRG of Georgia, Inc.*, 498 U.S. 46 (1990).

⁹ *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*, 441 U.S. 1 (1979).

¹⁰ *NCAA v. Board of Regents of the University of Oklahoma*, 468 U.S. 85 (1984).

¹¹ *United States v. Topco Associates*, 405 U.S. 596 (1972).

division of the exclusive territories and that “whatever anti-competitive effect these practices may have on competition in the sale of Topco private label brands is far outweighed by the increased ability of Topco members to compete both with the national chains and other supermarkets operating in their respective territories.”¹²

There were some territories in which the exclusivity did not apply, and two chains offered Topco products. Moreover, the Topco brand survived after the decision,¹³ raising the question of whether the district court erred. It does not appear that the Justice Department attempted to rebut the argument that the Topco brand would die absent the exclusive territories.¹⁴ Had it done so, and studied the nonexclusive territories, it could have tested whether elimination of the territorial restriction might have reduced the incentives of co-extensive chains to promote the brand. It could also have analyzed whether these nonexclusive territories were atypical and thus could not be generalized, as may have been the case, in that the incumbent association member had the ability to disapprove of the entry of a competing chain.

With modern eyes, it appears that the district court could have condemned the agreement because there were less restrictive alternatives that would have achieved the alleged competitive benefits with less, if any, adverse competitive effects. It may not have been necessary for the joint venture to apply a single brand name. Instead, it could have been limited to joint production of products that could have been sold under separate brand names by each of the chains. The incremental cost of the separate labels may have been trivial. A possible benefit of the common brand would have been the ability to engage in national advertising, which could be less expensive and possibly more effective than individual advertising by each chain. A factual question would have been whether there was such national advertising of the Topco brand.

II. Anticompetitive Incentives in Efficient Horizontal Agreements

Horizontal agreements can be efficient and procompetitive. The language of antitrust refers to such procompetitive agreements as “cooperative” rather than “collusive.”

Cooperation by competitors can have substantial potential effects on costs and quality, as discussed above. By cooperating in production or producing jointly, firms may also be able to combine complementary product methods or inputs to reduce costs and produce better products. Joint production in the same factory may allow them to achieve lower costs from economies of scale. An agreement among competitors to exchange technological information or engage in joint R&D might also be procompetitive. An agreement by steel producers to develop new lightweight steel could, for example, allow auto companies to replace some aluminum parts with the new steel products. If the firms produce and price their products separately, competition with aluminum would increase.

The fact that an agreement leads to production or efficiencies is not a guarantee that consumers would benefit in the end, however, as the parties have incentives and may have the ability to structure

¹² *Id.* at 605-606.

¹³ <https://www.topco.com>.

¹⁴ See the remarks of Carl Shapiro and Dennis Carlton in *Antitrust Hot Tub: Is Consumer Welfare in Hot Water?* ANTITRUST 19 (Summer 2022).

the agreement in a way that the efficiencies are not passed on to consumers. Indeed, it may be possible to structure the agreement to achieve higher prices than would occur absent the agreement.

The courts have focused on the prices charged to outsiders. *Terminal R.R. Association*¹⁵ was framed as a concerted refusal to deal case, because it focused on the exclusion of non-owners from what was considered an “essential facility.” The remedy required them to be given equal access. The Court did not mandate the level of fees, noting that the Interstate Commerce Commission (ICC) oversaw the rates charged.

The price of ASCAP’s blanket license was regulated by the district court under an earlier consent decree. *BMI*¹⁶ amounted to a joint facility that produced what the Court treated as a new product (unlimited access to any or all compositions in the repertoire) and engaged in joint selling and pricing (the blanket license), which the Court suggested could be procompetitive.

*Board of Regents*¹⁷ can be characterized as a joint production facility that produced a unique product (college football) and engaged in joint selling and pricing (the television contract). The Court prohibited the joint marketing on the grounds that it lacked. After rejecting the procompetitive efficiency justification for the joint marketing, it condemned the joint marketing as a naked restraint.

*American Needle*¹⁸ was similar. An agreement among NFL football teams to have a marketing joint venture with joint pricing was also struck down.

None of these cases involved analysis of the fees the venture charged to their members or whether those fees could have been used to facilitate cartelization of the market. *Topco*¹⁹ might be seen as an exception, in that the Court was willing to intervene with respect to the market division rules within the joint venture. In that matter, one member could not enter the territory of another members without permission. *Board of Regents*²⁰ was similar, in that the colleges were not permitted to compete for the broadcast of too many games. But neither of these cases raised the issue of fees charged by the venture to the members or fees one member paid to another member.

In *Board of Regents*, it was easy to separate the production and marketing aspects of the joint venture. As a result, a straightforward way to achieve the efficiency benefits while preventing cartelization was to allow the joint production but not the joint marketing of the rights or the associated appearance limitations. In other cases, this distinction may not be so simple. The joint production agreement may necessarily involve some sort of pricing (e.g., payments between members for intellectual property rights, inputs, or manufacturing services).

A key question for effective enforcement is whether the courts will intervene with respect to these types of internal prices. The next sections elucidate this set of issues with a series of scenarios in

¹⁵ *United States v. Terminal R. R. Association of St. Louis*, 224 U.S. 383 (1912).

¹⁶ *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*, 441 U.S. 1 (1979).

¹⁷ *NCAA v. Board of Regents of the University of Oklahoma*, 468 U.S. 85 (1984).

¹⁸ *American Needle, Inc. v. NFL*, 560 US 183 (2010).

¹⁹ *United States v. Topco Assocs., Inc.*, 405 U.S. 596, 609, n.10 (1972).

²⁰ *NCAA v. Board of Regents of the University of Oklahoma*, 468 U.S. 85 (1984).

which cooperation among competitors leads to efficiency benefits. It also presents ways in which the agreements might be structured to lessen effective competition.

A. Economies of Scale from Joint Production

Achieving scale economics by joint production creates efficiency benefits that can lead to higher consumer welfare if the structure ensures that the owners compete. Suppose a group of competing firms builds and jointly owns a factory to produce a key input at a low cost. Suppose the marginal cost of production of output at the factory is \$2, each firm has other marginal costs of \$2, and the monopoly output price for the product they sell to consumers is \$10. If the factory charges an internal wholesale price to the owners equal to its cost of \$2 per unit, competition between firms will lead to a perfectly competitive price of \$4. Such a price would be a boon to consumers, but it would also mean that firms would earn no profits.

The firms would have the incentive to structure the joint venture such that the factory would be a for-profit entity owned jointly by the firms, each of which would be entitled to share equally in the profits. The factory's profit-maximizing input price would be \$8, which would lead each of the owners to have total marginal costs of \$10 (the \$8 input price plus their \$2 other marginal costs), which would lead to a competitive market price of \$10. Although each firm would earn zero profits as a producer, the factory entity would earn per unit profits of \$6 (\$8 price minus \$2 costs) times the number of units sold, which could be paid out as an annual dividend to the two owners. In this case, consumers pay the monopoly price, and the owners earn monopoly profits.

This economic analysis raises the question of whether a court should intervene in this scenario and allow the joint venture but prevent it from setting the monopoly price. Antitrust courts are reluctant to get involved in price setting. The ASCAP consent decree in *BMI* and the level of educational benefits in *Alston* are famous exceptions.

B. Complementary Inputs for Production

If two firms own assets or produce inputs that are complementary to one another, cooperation by them can lead to lower-cost and/or higher-quality products. To see why, suppose that one baby food producer has unique access to high-quality ingredients and the other owns a lower-cost, state-of-the-art factory. By combining their production, the two firms can produce higher-quality products at lower cost.²¹ If the firms are two of many firms in a competitive baby food market, consumer welfare will rise, even if they jointly sell the products at an agreed-upon price. Even if the two firms are the only producers, consumers will gain if the firms continue to compete in the downstream product market. In this situation, however, antitrust law would require them to limit their cooperation solely to production and not set output prices jointly.

Even if they nominally compete, they might be able to effectively set monopoly food prices by recognizing their interdependence and common benefits from higher prices and escape the

²¹ This efficiency rationale was used in the proposed merger of Heinz and Beech-Nut. *FTC v. H.J. Heinz Co.*, 246 F.3d 708 (D.C. Cir. 2001), reversing *FTC v. H.J. Heinz Co.*, 116 F. Supp. 2d 190 (D.D.C. 2000). I consulted with the parties on this matter.

prisoner's dilemma, as introduced in the CoffeeStop example in Chapter 1 and analyzed in more detail in Chapter 5.

Suppose they are unable to set high output prices through conscious parallelism. In this case, the firms might attempt to eliminate effective competition by charging each other high input prices for their respective inputs. Suppose that firm A's marginal cost of the ingredients is \$1 and firm B's marginal cost of manufacturing is \$3, for a total of \$4, and the monopoly price of the baby food produced is \$10. In this case, the two firms would have an incentive to agree to an ingredient price of \$7 and a manufacturing services price of \$9. Both firms would have costs of \$10 (\$1 + \$9 for firm A and \$3 + \$7 for firm B), which would equal the monopoly price of \$10. Each firm would earn profits of \$6 on the sale of its input to the other firm and zero on downstream sales. If each has a 50 percent market share, profits per unit would be \$3 each.

C. Complementary Products for Consumers

A very different outcome occurs if two firms are selling complementary products to consumers. If two firms with market power to set prices above marginal cost sell complementary products (e.g., compatible hardware and software or hot dogs and buns), the jointly profit-maximizing pricing is lower than the standalone prices of each product, because the high price charged for one complementary product will reduce the demand for the other—the *Cournot complements effect*.²² Internalizing this adverse spillover effect by pricing jointly would lead to lower prices.

Consider next a more complex scenario, in which the final products of two firms are substitutes for some consumers but complements for others. When two firms price substitute products jointly, they have the incentive to set higher prices. When they price complementary products jointly, they have the incentive to set lower prices. Two patents could be complements for some uses and substitutes for others. Nondigital examples might be vanilla and chocolate ice cream, sofas and chairs, and treadmills and stationary bicycles.

In this scenario, the best outcome would be achieved if the firms were permitted to sell the two products together to customers who treated the two products as complements but required to compete in selling the products to consumers who treat them as substitutes. If this solution is infeasible, as might normally be the case, the benefits of allowing them to price jointly may either increase or decrease overall consumer welfare on balance. Even if overall welfare rises, the analysis is complex, because the winners and losers are different consumers.

Alternatively, if all consumers are similar and treat some of the products as substitutes and others as complements, the benefits of the joint pricing of the complements effect might dominate the harms from the joint pricing of the substitutes. This effect can be seen as the underlying economic rationale in *Board of Regents*, where the NCAA wanted to achieve “competitive balance” on the field by marketing their games jointly to the broadcasters and dividing up the proceeds among the competing colleges. The economic defense would be that the better competitive balance would lead to higher-quality games, which would lead to more viewers, so that the broadcasters would earn more advertising revenue that more than offset the higher prices of the broadcasting rights. In a consumer

²² The equivalent effect in the pricing of vertically adjacent products (e.g., a manufacturer and a retailer that resells its product) is termed *elimination of double marginalization*.

streaming market, the benefit to viewers from seeing better games would more than offset the higher subscription fee resulting from the joint pricing.

Another economic variant of this complementary products scenario arises if there are one-stop shop cost efficiencies from purchasing substitute products at the same time. These substitute products can be characterized as transaction complements.²³ If firms are permitted to jointly price these products, they may have the incentive to set lower rather than higher prices. This idea was the economic basis in *BMI* for permitting an agreement among music publishers to license their songs collectively in a bulk license. It raises the question of why the collectives did not set the blanket license price at the monopoly level. In this regard, the case was unusual, as the price of the blanket license was ostensibly regulated by the district court as a result of the earlier consent decree.

D. Incentivization of Innovative Investments

A different type of procompetitive efficiency benefit can occur if cooperation can facilitate increased investment. Consider, for example, a market with the potential for significant quality benefits from increased innovative investments. Allowing competitors to price jointly would harm consumers in the short run, but the higher profits would incentivize more investment by each firm to increase its sales at the expense of the other firms. The higher-quality products that result would benefit consumers in the longer run. Although this rationale has never been accepted in an antitrust case, it can be valid as an economic matter. A key legal problem would be whether one could distinguish between situations in which consumers would likely gain rather than lose on balance by permitting the collusion.

E. Channeling of More Efficient Competition

The same analysis applies to restricting price competition with the purpose of channeling the firms into nonprice competition. Consider a group of car dealers selling a new type of electric vehicle with complicated digital features. Allowing the firms to agree to higher prices could incentivize each of them to provide more sales assistance to customers, which could lead to improved consumer welfare despite the higher prices. No single dealer might be willing to provide these services if the others did not also do so, however, because it would bear higher costs, for which it would need to charge higher prices. It might not gain greater sales, because customers could learn about the features from this dealer but then purchase from another (lower-price) dealer that did not provide the services. This rationale is the classic free-rider rationale that the Court accepted in the *Sylvania*²⁴ and *Leegin*²⁵ vertical restraint cases.

A knotty conceptual issue raised by these free-rider arguments is distinguishing between situations in which a firm is “bad” free rider rather than a “good” competitor. After all, in some tautological sense, every entrant that benefits from the efforts of other firms—whether by imitating their product by selling its own differentiated product or by benefiting from consumers’ learning about its product

²³ Ian Ayres, *Rationalizing Antitrust Cluster Markets*, 95 YALE L.J. 1091 (1985).

²⁴ *Continental T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36 (1977).

²⁵ *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007).

from their experience or knowledge of other products—is taking a free ride.²⁶ This issue arises when a horizontal agreement, such as a joint venture, prevents certain activities that it characterizes as free riding.

In *General Leaseways*,²⁷ for example, the National Truck Leasing Association joint venture wanted to terminate General Leaseways because it violated the association's rules regarding exclusive territories and its prohibition of affiliation with other national leasing groups. Judge Posner noted that members were required to provide service to the customers of other lessors whose trucks needed service far from home. He rejected the idea that General Leaseways could be characterized as free riding on that service requirement because the service was not free. Each member set its own price for the service it provided.

F. Identification of the Orchestrator

*Sylvania*²⁸ and *Leegin*²⁹ accepted the free-rider efficiency rationale only when the agreement is orchestrated by the manufacturer rather than by the retailers themselves. If the agreements are made by the retailers, the Court apparently would have viewed them as per se illegal, as it did in *Topco*.³⁰ The argument for differential treatment in the vertical scenario is that if a manufacturer has the power to set the monopoly price for its own sake, it could simply raise the wholesale prices of the vehicles. If it instead used resale price maintenance (RPM), it must have been motivated by the higher sales flowing from these efficiency benefits, not the higher profits from higher prices and restricted output.

In *Leegin*, the Court also took the position that if the manufacturer was acting like the cartel ringmaster for a retailer cartel, that cartel could be detected. It suggested that detection could be facilitated by investigating whether the RPM was proposed by the retailers or the manufacturer. This belief was economically naïve, as the Court overlooked the fact that a sophisticated manufacturer might have the wherewithal to suggest the cartel arrangement to the retailers if it could share in the profits. More generally, it ignored the classic case of third-party cartel ringmasters.

To understand the role of a cartel ringmaster in a perhaps surprising scenario, consider Visa, MasterCard, and American Express. These three credit card companies require merchants to pay substantial fees when consumers pay with their cards. The companies then rebate some of those fees to cardholders, particularly cardholders who have rewards cards. These high fees lead to higher retail prices charged by the merchants to all customers, not just those who use credit cards, because the card network and some state laws prohibit surcharges and offering discounts for cash payments is viewed as awkward, confusing, and costly. As an economic matter, these credit card companies have

²⁶ Rebecca Haw Allensworth, *Monopoly Prizes* (working paper, March 2026) emphasizes this point in the case of monopolists facing competition, quoting the observation of Areeda and Hovenkamp that “free riding on the positive externalities created by others is everywhere, and society does little to eliminate it.” 8 PHILLIP AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* at 153.

²⁷ *General Leaseways, Inc. v. National Truck Leasing Association*, 744 F.2d 588 (7th Cir. 1984).

²⁸ *Continental T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36 (1977).

²⁹ *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007).

³⁰ *United States v. Topco Assocs., Inc.*, 405 U.S. 596, 609, n.10 (1972).

figured out a way to form buyer cartels for the favored wealthy consumers who obtain the large rebates. Yet in *American Express*, the Supreme Court did not view these card companies as buyer cartels. It pictured the situation as procompetitive competition for cardholders and “reputation building” by American Express.³¹

G. Efficient Joint Facilities

Suppose that a group of competitors creates a very low-cost cooperative production facility. Examples might be a stock exchange, farmers market, or a version of eBay jointly owned by its vendors. Fearing being attacked for price fixing, the venture might be set up as a pure cooperative with no restraints on pricing to consumers. But the venture would need to set up some sort of corporate structure to deal with collective concerns such as tort liability and to finance the construction and ongoing costs of the venture. If the venture and its members gain collective market power as a result of the breadth of its membership, it might also have the incentive to use aspects of the corporate structure to soften competition among the members.

Suppose that major book publishers joined together to create a collectively owned online storefront to compete with Amazon and that the venture were structured to provide a storefront in which individual publishers would compete independently and unilaterally set prices for their individual titles. Suppose that the collectively owned storefront were much better and lower cost than any of the publishers’ existing online stores and produces a superior product, in that the books of all the publishers are available in one place. Suppose the venture also offered ownership shares and access to any publisher that wished to join. Assume further that all publishers agreed to join and that all of them shut down their own online stores as redundant and inferior. To reflect this universal access, the group names the storefront and the venture AllBooks.

AllBooks would need to finance the construction and operating costs of the storefront. Suppose that it decides to allocate ownership shares based on each publisher’s average revenues over the past two years and finances the construction costs based on capital contributions by the owners in proportion to their ownership shares.

One publisher owner, the Eugene Debs Publishing Society (EDPS), proposes that the storefront be operated as a cost center—that is, the operating costs would be recovered with fees based on each publisher’s book sales, and any annual residual profits would be distributed (or losses recovered) through end-of-year dividend payments based on the publishers’ shares of AllBooks’ revenues during that year. The Ayn Rand Publishing Corporation (ARPC) proposes an alternative that the end-of-year dividends be based on ownership shares, not revenue shares. ARPC also proposes that to ensure a healthy publishing ecosystem, the storefront’s per book fees should be set in excess of expected costs. Suppose that AllBooks’ board of directors accepts ARPC’s two proposals.

Consider the following hypothetical antitrust case. A Section 1 complaint might specifically allege that under the ARPC provisions, AllBooks has the incentive to set supra-competitive per book fees that would lead the publishers to set supra-competitive retail prices. The complaint might allege that AllBooks should have adopted the EDPS cost center proposal, which would have led to more competitive retail prices. One might expect AllBooks to respond with a motion to dismiss on the

³¹ *Ohio v. American Express Co.*, 585 U.S. 529 (2018).

grounds that the joint venture is highly procompetitive, that no antitrust case has ever mandated that a legal joint venture must be operated as a cost center rather than a profit center, and that basing dividends on ownership shares is the norm in a market economy in which the owners invested in the construction of the production facility.

Who would win? The government's complaint would not allege that the joint venture is anticompetitive, only that its access fee and distribution methodology is anticompetitive. The fundamental competition issue is not based on the formalistic distinction between a cost center and a profit center. The key economic difference is that basing dividends on ownership shares rather than revenue shares would lead the publisher to set higher book prices.

AllBooks would have the incentive to set high percentage fees. These high fees would incentivize higher retail prices paid by consumers and high profits for AllBooks, which would then be distributed back to the publishers as dividends. The combination of ownership shares based on revenue shares and high per book fees is an effective cartelization device, in that it leads to the same competitive retail price result regardless of the level of the percentage fees. By contrast, basing dividends on ownership shares leads to supra-competitive retail prices.

Assuming there are dividends and that they are based on revenue shares, the dividends obtained by each publisher would exactly equal the gross fees collected from that publisher less the fixed costs of operating the storefront. The bottom-line result would be the same regardless of the percentage of revenue the fee entails, because the fee nets out to the share of the operating cost regardless of the percentage set, as the publisher's share of total fees collected would be equal to its share of total revenues earned through the store.

Suppose that this repayment would be anticipated by a rational publisher, so that it would not affect the profit-maximizing book price. Suppose there are 10 publishers, each with an ownership share of 10 percent and each selling \$1,000 worth of books and paying a fee equal to 10 percent, so that total fees are \$1,000 (\$100 per publisher times 10 publishers). Each publisher receives back gross dividends of \$100 (10 percent times \$1,000), the same amount it pays in fees. But what affects pricing incentives is the net marginal cost. If one publisher expect to sell \$100 more books, it will expect to pay \$10 more in fees.

By contrast, when the gross dividend is based on the publisher's ownership share, it depends only in a minor way on the publisher's own sales. As a 10 percent owner, it will receive an additional dividend of only \$1, leading to an incremental marginal cost of \$9 (\$10—\$1). Therefore, a higher percentage fee will increase the publisher's marginal cost proportionally and be passed on as a higher retail price. As a result, by setting a high percentage fee, the storefront can raise the marginal costs of all publishers, achieve a supra-competitive price (perhaps even equal to the monopoly price), and repay the profits as dividends. If the revenue shares end up equaling the profit shares, this mechanism is nothing but a shell game to cartelize the market and return the supra-competitive profits to the owners. Although the mechanics of this arrangement are complicated, the economic analysis is straightforward.

AllBooks might nevertheless win the case, because courts do not generally feel confident about regulating internal transfer prices. In *Terminal RR*,³² the Court relied on the ICC to do so. In *Trinko*,³³ it relied on the Federal Communications Commission (FCC) to do so. ASCAP's blanket license price in *BMI*³⁴ was an exception, as an earlier court had agreed to serve as a price regulator. In AllBooks, however, the court would not have avoided the fee-setting issue. Instead, it might have prohibited a structure that based the dividend level on the ownership share, requiring it to be tied to the revenue share.³⁵

The fundamental economic lesson of this hypothetical is that the internal transfer price for variable inputs produced by the venture will affect the owners' marginal costs and will therefore be passed on to consumers as higher prices. Creating joint facilities can thus be way to use the transfer price to achieve supra-competitive prices. Understanding how this hypothetical venture was structured can be useful in thinking through how other joint ventures might structure their agreement to avoid passing on efficiencies and instead achieving cartel prices.

³² *United States v. Terminal R. R. Association of St. Louis*, 224 U.S. 383 (1912).

³³ *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004).

³⁴ *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*, 441 U.S. 1 (1979).

³⁵ The ownership shares may differ from the revenue shares for a variety of reasons (such as some publishers joining late, after the venture was established).