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A STUDY OF EXCLUSIONARY COALITIONS:
THE CANADIAN SUGAR COALITION, 1888–1889

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ABSTRACT

In this paper we examine exclusion accomplished by a coalition of firms—frequently, a coalition of suppliers and customers—that share the benefits of exclusion. As a particular historical example, we study the Canadian sugar industry of the 1880s, which was controlled by a complex coalition of refiners and wholesalers. We assess the incentives and conduct of the parties as revealed in the records of a House of Commons inquiry into anticompetitive practices in the industry. Drawing upon this example, we identify and evaluate several doctrinal approaches to establishing antitrust liability for anticompetitive exclusionary coalitions.

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A STUDY OF EXCLUSIONARY COALITIONS: THE CANADIAN SUGAR COALITION, 1888–1889

John Asker and C. Scott Hemphill

The standard account of exclusionary conduct features a monopolist that coerces a customer or supplier in order to exclude the monopolist's rival. Often, however, the matter is not so simple. In this article we examine exclusion accomplished by a coalition of firms—frequently, a coalition of suppliers and customers—that share the benefits of exclusion. The coalition is held together by an interlocking lattice of explicit agreements and parallel conduct.

We examine this subject through the lens of a particular historical example. In the late 1880s, the Canadian sugar industry was controlled by a complex coalition of refiners and wholesalers. Our analysis assesses the incentives and conduct of the parties, drawing upon the records of a House of Commons inquiry into anticompetitive practices in the sugar industry.[1] Aside from its value as an illustration of exclusionary coalitions, studying the Canadian sugar scheme is also of historical interest. The inquiry led directly to passage of the world's first modern antitrust law, the Competition Act of 1889.[2]

Drawing upon our analysis of the Canadian sugar scheme, we offer a typology of exclusionary coalitions. *Horizontal coalitions* consist of competitors engaged in parallel exclusion of their rivals. *Vertical coalitions* of sellers and buyers (for example, manufacturers and wholesalers) eschew coercion in favor of sharing the benefits from exclusion of rivals. As we

[1] The House of Commons charged a Select Committee to investigate anticompetitive practices in the distribution of sugar and other commodities. *See* HOUSE OF COMMONS OF CAN., REPORT OF THE SELECT COMMITTEE TO INVESTIGATE AND REPORT UPON ALLEGED COMBINATIONS IN MANUFACTURES, TRADE AND INSURANCE IN CANADA, 22 J. HOUSE COMMONS app. 3 (1888), http://parl.canadiana.ca/view/oocihm.9_07171_22_2/161 [hereinafter REPORT]. The committee met 26 times between March and May 1888, examining 62 witnesses.

[2] An Act for the Prevention and Suppression of Combinations formed in Restraint of Trade, S.C. 1889, c 41 (Can.). For additional detail, see Michael Bliss, *Another Anti-Trust Tradition: Canadian Anti-Combines Policy, 1889–1910*, 47 BUS. HIST. REV. 177, 179–81 (1973); Brian Cheffins, *The Development of Competition Policy, 1890–1940: A Re-Evaluation of a Canadian and American Tradition*, 27 OSGOODE HALL L.J. 449, 453 (1989); Charles Paul Hoffman, *A Reappraisal of the Canadian Anti-Combines Act of 1889*, 39 QUEEN'S L.J. 127, 132–35 (2013).

explain, the Canadian sugar coalition had both horizontal and vertical elements. We connect our typology to existing economic theories about how exclusion of a rival may be accomplished.

Our examination reveals two distinct ways in which exclusion intersects with collusion. First, competitors may *collude to exclude*. For example, a price-fixing cartel may pursue exclusionary conduct because entry threatens cartel stability, and thus exclusion helps to protect the cartel's ill-gotten gains. But such conduct is hardly limited to cartels. Rivals may engage in parallel, often interdependent exclusionary conduct without any provable agreement among them.

Second, though less frequently recognized, a group of competitors might instead *trade exclusion for collusion*. That is, the colluding competitors engage in exclusion for the benefit of a supplier or customer, rather than themselves. In exchange, the competitors receive assistance with their collusive project.

We identify and assess several doctrinal approaches to establishing antitrust liability for anticompetitive exclusionary coalitions. The approaches differ in the degree to which they reflect or omit important economic features of the coalitions. Some coalitions are challenged as the action of a single excluder, an approach that ignores the collective economic effect of a horizontal coalition. Others are litigated as horizontal conspiracies, an approach that unduly elevates the formal question of agreement over the economic substance of the coalition's effects. We argue that a more appealing approach, for coalitions with a vertical element, is to allege parallel vertical contracts under Section 1, and aggregate their collective foreclosure effect.

This Article proceeds in three parts. Part I offers an extended account of the Canadian sugar coalition and compares it to the well-studied example of U.S. sugar. Part II presents a typology of horizontal and vertical exclusionary coalitions. Part III assesses various doctrinal approaches to the evaluation of exclusionary coalitions.

I. SUGAR IN THE 1880S

To set up our discussion of the Canadian sugar coalition, we begin with a summary of contemporaneous conduct in the more familiar U.S. sugar industry, which was dominated by the American Sugar Refining Company

("American"). The contrast between the two illustrates the added economic and doctrinal issues that arise when the market is controlled by a complex exclusionary coalition.

A. UNITED STATES

In the 1880s, the chain of production and distribution for sugar had three steps. Refineries sold refined sugar to wholesalers, who resold the sugar to retail grocers. The retail grocery business during this period was quite different from a modern supermarket. Sugar and most other products were unbranded. With the exception of tea and coffee, where branding was just starting to emerge, quality assurance came from the local grocer's reputation. Grocers sold sugar, and the vast majority of other products, out of bulk bins. Sugar accounted for about 40 percent of the retail grocery business.[3]

American was formed in 1887 as a means to control the price and output of refined sugar in the United States.[4] Twenty-seven refineries were part of the trust. By 1892, after a wave of consolidation, American's share of U.S. refining capacity had climbed from 80% to 95%.[5] The wholesale trade, by contrast, was fiercely competitive. In response, the wholesalers tried and failed to fix the price they charged to retailers. In 1891, wholesalers in New York and New England tried a different tack, and approached American to serve as the hub in a hub-and-spoke arrangement.[6] The wholesalers agreed to resell sugar to retailers only at a fixed price equal to the price charged by American to all wholesalers, a form of resale price maintenance (RPM). The wholesalers' compliance with RPM was enforced by means of a rebate,

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[3] Howard P. Marvel & Stephen McCafferty, *The Welfare Effects of Resale Price Maintenance*, 28 J.L. & ECON. 363, 366 (1985) (citing ALFRED S. EICHNER, THE EMERGENCE OF OLIGOPOLY: SUGAR REFINING AS A CASE STUDY 191 (1969)).

[4] *See* Richard Zerbe, *The American Sugar Refinery Company, 1887–1914: The Story of a Monopoly*, 12 J.L. & ECON. 339, 349 (1969) (reporting congressional testimony by an American trustee). Much of this account follows Zerbe.

[5] A significant part of this expansion was the absorption of a competitor called Spreckels. In 1891, American, via its members, acquired a 45% interest in Spreckels' Philadelphia refinery, and shortly after gained control of the remaining stock. In addition, the Californian interests of American and Spreckels merged to form the Western Refining Company. Prior to this, American had approached Spreckels seeking to coordinate activities and, upon this offer being declined, had entered into a price war in California. *See* CESAR J. AYALA, AMERICAN SUGAR KINGDOM: THE PLANTATION ECONOMY OF THE SPANISH CARIBBEAN, 1898–1934, at 33, 37 (1991); Zerbe, *supra* note 4.

[6] *See* EICHNER, *supra* note 3, at 191–92.

paid by American to compliant wholesalers, and furnished a significant source of profit for such wholesalers.[7]

It was hardly obvious that serving as a coordinating agent for the wholesalers was in American's interest. Ordinarily, downstream cartelization could be expected to harm American's upstream business. It took several attempts by the wholesalers to convince the trust that such an arrangement might be beneficial. In 1895, the wholesalers were finally successful when they offered American what Richard Zerbe has called a "threat and a bribe."[8] The threat was that wholesalers would boycott American if it refused to serve as a hub, amounting to a threat to accommodate entry by other refiners.[9] The bribe was exclusivity: the wholesalers would buy sugar from American and no one else. Exclusivity conferred a benefit upon American, raising a barrier to entry for prospective entrants (which included both entrants into domestic refining and imports of refined sugar).[10]

This arrangement differs from the standard story in which a monopolist coerces customers (or suppliers) to accomplish exclusion. American didn't enjoy the benefits of exclusion for free; it paid the wholesalers for their trouble. In return, wholesalers benefited in multiple ways: American agreed to serve as an effective ringmaster and provided a rebate for compliance. The result is an exclusionary coalition, featuring a trade of collusion for exclusion that was mutually beneficial for American and the wholesalers.

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[7] Marvel & McCafferty, *supra* note 3, at 366; EICHNER, *supra* note 3, at 192. Punishing defections with American's assistance was likely easier than price fixing.

[8] Zerbe, *supra* note 4, at 368.

[9] The potency of a boycott threat is unclear, and we are unaware of evidence on this point. The wholesalers' difficulty in fixing price might suggest the willingness of some wholesalers to defect from enforcement of a boycott.

[10] American's efforts to exclude rivals extended far beyond its arrangement with the wholesalers. For example, in the late 1890s American entered into a vicious fight with Arbuckle, a coffee wholesaler that sought to enter the sugar refining business after losing patience with the high price charged by American for sugar that Arbuckle sought to package and wholesale. In addition to its deals with existing wholesalers, American also entered the coffee business in retaliation and started a price war. Ultimately, American and Arbuckle settled their differences and formed a cartel in 1901. American also entered contracts with railroads that were alleged to have exclusionary effect. *See* Zerbe, *supra* note 4, at 359–61, 369, for an authoritative account.

B. CANADA

American's exclusionary conduct fits the standard story in an important respect. American was the dominant refiner in the market, with a market share that at times exceeded 90 percent. One might reasonably ask whether a similar outcome is possible in the absence of dominance. To answer this question, one need only look north to Canada.

In the 1880s, the production and distribution chain in Canada was the same as the United States: refineries processed the sugar, which was distributed by wholesalers, and sold by retail grocers to consumers. Retailers posed a threat to wholesalers in the form of direct purchases from the refiners, an opportunity that was probably shared by larger retail grocers in the United States. The main difference was that Canadian sugar refining was relatively fragmented compared to the United States, with four major refiners rather than one.[11]

Direct purchases by retailers put pressure on wholesale margins, particularly in larger cities where grocery chains were starting to emerge. In response, the wholesalers formed the Dominion Grocers Guild (Guild).[12] By the late 1880s, the Guild reportedly accounted for nearly all of the wholesalers in Ontario and Quebec.[13] The express purpose of the Guild, reflected in its articles of incorporation, was to establish and enforce a price-fixing scheme for sugar.[14] The Guild had plans to expand its focus beyond sugar to other grocery products, such as tobacco, starch, and baking powder.

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[11] *See* REPORT, *supra* note 1, at 11 (testimony of George Lightbound, wholesaler) (listing the Canada Sugar Refining Company, St. Lawrence Refining Company, Moncton refinery, and Nova Scotia refiner in Halifax, and agreeing with query that these were the only refineries "in operation"); Marvel & McCafferty, *supra* note 3, at 366 (concluding that there were four Canadian refineries); *see also* REPORT, *supra* note 1, at 54 (testimony of George Drummond, president of Canada Sugar Refinery) (describing larger number of refineries, some of which were not in operation).

[12] The Guild was also known as, and originally formed as, the Wholesale Grocers Association of Montreal.

[13] REPORT, *supra* note 1, at 3 (Committee Report) (noting Guild's claim to represent "over 95 per cent. of the wholesale dealers in groceries" in Ontario and Quebec); *see also id.* at 14 (testimony of George Lightbound) (noting Guild's claim to refiners that Guild "represented 93 per cent. of the trade of Canada," without clarifying whether this figure referred to sugar value, sugar volume, or the number of wholesalers).

[14] *See id.* at ex. 7, art. xv (Constitution and By-Laws of the Wholesale Grocers' Association of Montreal) (establishing three-person committee "whose duty it shall be to revise and fix lowest selling prices on any article" designated by unanimous agreement of Guild members).

One might have expected the Guild to enforce price fixing through expulsion. However, expulsion from the Guild was likely an ineffective tool for enforcement.[15] Indeed, a wholesaler might well prefer to stay outside the cartel. Sugar was an unbranded commodity product, in Canada as in the United States, leaving noncomplying members free to undercut the cartel price with impunity.[16] In any event, price fixing among the wholesalers offered no solution to the problem of direct purchases by retailers, which would bypass wholesalers with or without a price-fixing agreement. It is hardly surprising, then, that the Guild did not attempt to fix prices on its own.[17]

Instead, the Guild sought the help of the refiners. The refiners had problems of their own, being vulnerable to import competition from Glasgow, Liverpool, and other European trade centers.[18] Just as with American, the Canadian refiners therefore stood to benefit from exclusion.

As in the United States, the wholesalers proposed to trade exclusion for collusion. The Guild would help the refiners exclude import competition by buying sugar exclusively from the refiners.[19] In return, the refiners would assist the Guild's effort to maintain a wholesaler cartel, by charging nonmembers a higher price, including retailers making direct purchases. Figure 1 summarizes the scheme.

[15] The record is silent on the perceived effectiveness of potential enforcement.

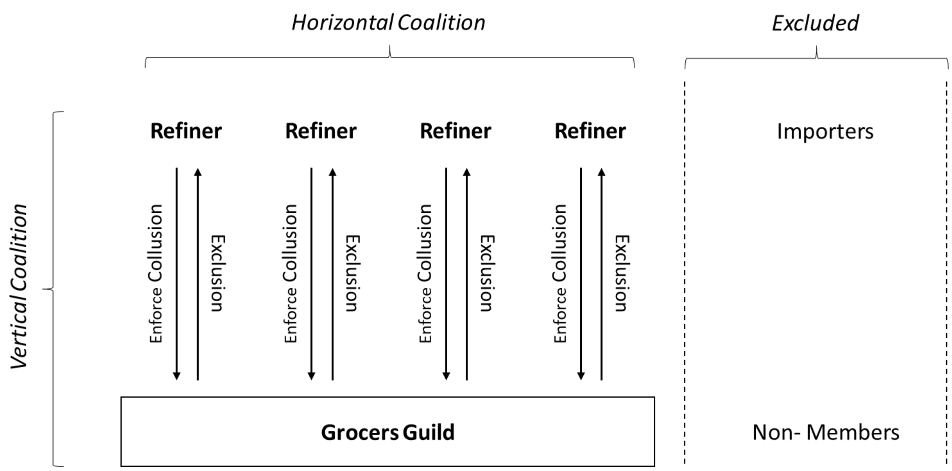
[16] Even if differentiated, the temptation to undercut would have been present, but likely somewhat muted by lower consumer cross-price elasticities.

[17] This is despite discussions prior to 1886 about the desirability of fixing prices. *See supra* note 1, at 101 (testimony of Edgar Wills, Secretary of the Dominion Grocers Guild).

[18] American Sugar presumably faced a similar threat.

[19] *See* REPORT, *supra* note 1, at 36 (testimony of George Drummond) ("Q. That [the agreement] would throw upon you [the refiners] the selling of the sugar all through the Dominion? A. They [the Guild] said that would be the effect.").

Figure 1. The Canadian Sugar Coalition



The House of Commons inquiry revealed important details of the arrangement. George Lightbound, an early Guild member, explained that "[t]he sugar combination did not originate, as many people have supposed, with the refiners," but instead with the Guild.[20] After several meetings among the wholesalers to discuss a combination, a meeting at the Windsor Hotel in Montreal was arranged between the wholesalers and the refiners. Lightbound explained:

> At that meeting the refiners were told that the Wholesale Guild had attempted to arrange the combination amongst themselves; that there were certain merchants . . . who for reasons of their own did not see their way to coincide with that style of doing business and wished to have the liberty of conducting their business in a way that suited themselves. The refiners were then asked to discriminate against these wholesale grocers who would not become parties to the combination . . . . The refineries after discussing the matter amongst themselves agreed to charge those . . . who were not members of the combination, a quarter of a cent a pound more than for what they

[20] *Id.* at 11 (testimony of George Lightbound). Lightbound presented himself as an outsider to the Guild and resulting agreement. However, this assertion was misleading. As explained by George Childs, another Guild member, Lightbound had been an active Guild member but quit in protest because he preferred an agreement with narrower geographic scope.

> would sell the same sugar to the members of the guild. Well, this came into force some ten days later . . . .[21]

The refiners' agreements to surcharge nonmembers gave teeth to the threat of Guild expulsion. Expulsion was now a credible threat of punishment that could be used to maintain the wholesaler cartel. In contrast to the traditional threat of a price war, the arrangement punished defecting wholesalers at little cost to Guild members.

The fine details of the Canadian exclusionary coalition differed from the United States coalition. In the United States, American imposed RPM by directly setting the wholesaler price charged to retailers. In Canada, the Guild was not subject to RPM. The Guild, rather than the refiners, set the wholesale price, monitored compliance, and decided whether to expel a wholesaler from the Guild. We emphasize this difference because some commentators have interpreted the Canadian arrangement as an RPM scheme.[22]

The House of Commons inquiry once again has the details. The refiners reported a refinery price to the Guild,[23] which added a pre-determined

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[21] *Id.* at 11–12. This account describes the original agreement. Subsequent revisions increased the price disadvantage to nonmembers. Nonmembers lost a customary discount for early payment, and a surcharge was applied not only to white granulated sugar—the primary object of the arrangement—but also to the price of inferior yellow sugar. Later revisions also introduced bundling, whereby nonmembers were required to purchase yellow sugar in a 2:1 ratio to white granulated sugar. *See id.* at 3–5 (Committee Report).

[22] *See, e.g.*, L.A. Skeoch, *Canada*, *in* RESALE PRICE MAINTENANCE: A COMPARATIVE AMERICAN-EUROPEAN PERSPECTIVE 23, 25, 27 (B.S. Yamey ed., first paperback ed. 2008) (1966) (describing Canadian sugar combination as an RPM scheme); Marvel & McCafferty, *supra* note 3, at 366 (same).

[23] Notwithstanding this report of a single price, there was no agreement as to price among the refiners. *See, e.g.*, REPORT, *supra* note 1, at 4 (Committee Report) ("There was no evidence of any combination amongst the several Refiners or any of them to fix uniform prices at which they should sell . . . ."); *id.* at 97 (testimony of George Childs, wholesaler) ("The standard fixed [by the refiners] is just taking the starting point. For instance, the refiners although they give you that price, they are quite at liberty to sell at a less price or higher. They don't bind themselves to anything at all.").

Sometimes the refiners reported the same price. *Id.* at 98 ("Q. Have all the companies the same price? A. Yes, for that purpose they seem to unite, but you can buy sometimes cheaper from one than from the other."). Even so, the report for purposes of Guild price-setting left the refineries free to vary their price. *Id.* ("Q. Then the refiners agree personally to fix the same price? A. Yes. It would be just as well to do so as it was only a nominal thing."). Where the refineries reported different prices, initially an average was taken. *Id.* at 99 ("Q. For instance, the refiners give three prices? A. We would take these three prices and average it, and take that as a basis."). Eventually, reporting duties margin to yield the members' wholesale price to retail grocery customers. The refiners provided weekly price information, as described by a Guild member who oversaw this part of the scheme:

> We simply go to the refinery and ask their price, and if it is one-eighth, then one-eighth is at once telegraphed to all the guilds that this is the price [i.e., the refinery price to wholesalers] for the week. . . . [I]f an advance of a quarter of a cent or a decline takes place, we telegraph the guild that the price has advanced or declined.[24]

Overall, the Canadian scheme was more like an ordinary price-fixing scheme, rather than RPM, as the refiners did not fix the price charged by wholesalers.

A further benefit of the arrangement for Canadian wholesalers, beyond collusion, was exclusion. The surcharge to nonmembers not only secured compliance among wholesalers, but also placed retailers who purchased directly at a competitive disadvantage.[25]

This arrangement persisted for at least a year. The Select Committee's verdict was unsparing, concluding that the sugar combination was

> obnoxious to the public interest, in limiting competition, in enhancing prices, and by the familiar use of its growing and facile powers tending to produce and propagate all the evils of monopoly. Certain dealers are refused admission into its ranks, others are admitted and afterwards expelled, others again are placed under its ban, who, from conscientious scruples or in a spirit of independence, refuse to join them. Merchants who have been buyers on equal terms and with equal facilities as other merchants, suddenly find themselves under the power of this combination . . . . Thus establishments, which in some cases are the growth of half a century

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were delegated to a single refinery. *Id.* ("We wrote to the other refiners and they said they agreed to establish their prices on the basis of the Canada Sugar Refinery.").

[24] *Id.* at 97 (testimony of George Childs). Smaller changes were not communicated. *Id.* at 97–98.

[25] For example, a major retailer testified that it had purchased directly from the refiners for about a decade, at the refiner's usual selling price, but then its price rose under the agreement. *See id.* at 83 (testimony of Walter Paul, retail grocer) ("The loss in my business resulting from this sugar agreement will be nearly $1,000 a year, besides the very unpleasant thing of being compelled to buy sugar where I do not want to.").

> of toil and honourable dealing, and rich in valuable experience and public confidence, are threatened with extinction.[26]

This critique was part of the basis for passage of the Competition Act of 1889.[27] Despite the new legislation, anticompetitive conduct by the Guild appears to have persisted.[28]

II. FORMS OF EXCLUSION

The Canadian sugar case is complex, with multiple refiners and wholesalers engaging in, and enjoying the benefit of, exclusionary conduct. The case illustrates that while exclusionary problems are usually conceptualized in the context of a dominant firm, no law of nature (or economics) dictates that only one firm should be enthusiastic about excluding a potential rival, or that only one firm should reap the resulting benefits.

To impose some order on complex and diverse fact patterns, in this Part we offer a typology of exclusionary coalitions. We distinguish between exclusionary conduct with a single beneficiary, and exclusion that entails some form of mutually beneficial cooperation between firms. The joint efforts may be either horizontally or vertically related.

Our typology provides a map to some relatively uncharted waters. As Michael Winston noted in 2006, the problem of mutually beneficial exclusion is understudied.[29] Although Whinston concluded that "[f]urther

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[26] *Id.* at 5 (Committee Report).

[27] When the bill was introduced in the House of Commons, the introducing member pointed to the Select Committee's investigation as "conclusively" demonstrating the "necessity of this Bill." 27 OFFICIAL REPORT OF THE DEBATES OF THE HOUSE OF COMMONS OF THE DOMINION OF CANADA (Feb. 6, 1889) (statement of N. Clarke Wallace). At the bill's second reading in the Senate, the reading member stated that the bill was "based on" the resulting committee report. DEBATES OF THE SENATE OF THE DOMINION OF CANADA 1889, at 621 (Apr. 26, 1889) (statement of Lachlin McCallum). Post-enactment, the Senate debated amendments, during which the report was referred to extensively and the sugar combination was discussed at length. *See* DEBATES OF THE SENATE OF THE DOMINION OF CANADA 1890, at 712–54 (May 7, 1890).

[28] In R. v. Beckett (1910), 20 O.L.R. 401 (Can. Ont. Sup. Ct. J.), the Guild was acquitted of allegations of conspiracy "to unduly limit the facilities in producing, manufacturing, supplying, and dealing in sugar" and other commodities. Notwithstanding the acquittal, the evidence reported in the opinion suggests that the Guild's anticompetitive conduct continued into at least the 1900s.

[29] MICHAEL D. WHINSTON, LECTURES ON ANTITRUST ECONOMICS 177 (2006).

study of multiseller/multibuyer models should be a high priority,"[30] the literature has remained small, with empirical evidence lagging behind theory.

A. SINGLE-FIRM EXCLUSION

As a point of departure, we begin with the case of exclusionary conduct that is undertaken by and benefits a single firm. This case is the primary focus of economic analysis and legal doctrine. Such exclusion can be accomplished either through purely unilateral conduct or with the (reluctant) assistance of agents such as purchasers. We consider these possibilities in turn.[31]

An example of unilateral exclusion is predatory pricing, wherein the predator sets a price so low as to induce a rival to exit the market.[32] Limit pricing is a related pricing strategy that arises when the rival has yet to establish any presence in the market. Both forms of pricing are exclusionary, in that they have the ultimate goal of securing the long-term position of the incumbent manufacturer. Neither predatory pricing nor limit pricing requires enduring contracts between the manufacturer and its customers.[33]

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[30] *Id.*

[31] Steven C. Salop & David T. Scheffman, *Raising Rivals' Costs: Recent Advances in the Theory of Industrial Structure*, 73 AM. ECON. REV. 267, 267–68 (1983), and Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs To Achieve Power over Price*, 96 YALE L.J. 209, 223–24 (1986), draw a distinction between exclusionary practices that reduce rivals' revenues (predation and similar strategies) and those that raise rivals' costs (the focus of their analyses). The approach therein is a useful and alternative way to characterize the economic forces at play in models of exclusion with a single beneficiary.

[32] An extensive economics literature seeks to understand the conditions for successful predation. For an overview, see W. KIP VISCUSI, JOHN M. VERNON & JOSEPH E. HARRINGTON, ECONOMICS OF REGULATION AND ANTITRUST 305–16 (4th ed. 2005). An influential test for predation, requiring pricing below average variable costs, was first proposed in Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697 (1975). Some discounting practices straddle the line between predatory pricing and exclusionary contracts. *See* C. Scott Hemphill & Philip J. Weiser, *Beyond* Brooke Group: *Bringing Reality to the Law of Predatory Pricing*, 127 YALE L.J. 2048, 2074–77 (2018) (arguing that price-cost test should not be applied to loyalty discounts).

[33] Predation might be used not as a means of exclusion, but instead as a means to extort payments from a rival. For example, in the 1830s, Cornelius Vanderbilt predated against passenger boat competitors, extracting payments in exchange for dropping his attack. *See* T.J. STILES, THE FIRST TYCOON: THE EPIC LIFE OF CORNELIUS VANDERBILT 99–104 (2009) (describing this conduct).

Alternatively, the manufacturer may foreclose entry by entering into exclusionary contracts with customers.[34] A substantial literature about exclusive dealing explains the feasibility of exclusion by contract. This literature is a reaction to the Chicago School argument that a more efficient entrant can overcome an exclusive contract, as such an entrant can pay the customer to break the contract, cover any liquidated damages, yet still earn a profit.[35] The key insight of this argument is that, for the customer, the gains from trade with a more efficient entrant are higher, allowing the entrant to break open the market.

However, the argument only works in a specific set of circumstances. One key condition is that the joint returns from the outcome of a negotiation between the manufacturer and customer do not depend on the outcome of any other negotiations.[36] When this condition does not hold, exclusion may be feasible and profitable for the incumbent, even when faced with a more efficient entrant.

For instance, when an entrant requires a minimum scale to enter, customers can be induced to not deal with the entrant. Suppose the entrant, to meet some fixed cost, needs 20% of customers to purchase from it. For any given customer, if more than 80% of other customers agree to purchase exclusively from the incumbent, then the value to the incumbent of this customer agreeing to exclusivity is zero. Whether or not this customer agrees to exclusivity, the potential entrant will not achieve necessary scale. This is a violation of the condition, in that the return from signing an exclusive contract with any given customer depends on the proportion of other customers that have also signed. As a result, it will take only a nudge from the incumbent to make this customer agree to exclusivity. Moreover, if no single customer is large enough to deliver the scale needed by the entrant, the incumbent may be able to secure exclusivity as to all of them with only a nudge.

[34] Alternatively, when a scarce input is required for the production of a product, the downstream manufacturer may be able to use analogous strategies upstream, rather than downstream, to exclude a rival. *See, e.g.*, Pecover v. Electronic Arts Inc., 633 F. Supp. 2d 976, 980 (N.D. Cal. 2009) (describing plaintiff's allegation that maker of "Madden NFL" videogame improperly excluded rivals by acquiring exclusive rights to NFL trademarks).
[35] *See* ROBERT J. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 306–07 (1978), for an exposition in the context of the *Standard Fashion* case.
[36] *See* WHINSTON, *supra* note 29, at 139. Whinston spells out two other necessary conditions: that the parties are symmetrically informed as to all relevant features of the negotiating environment, and lump-sum payments are feasible.

Paradoxically, in this example, the customers would be better off coordinating to permit entry and thereby realize the gains from trade from dealing with a more efficient supplier. It is precisely the failure to coordinate that the incumbent seeks to exploit.[37] Customers end up doing something that is not in their best interest, for little or no compensation. To this extent, the excluding firm is engaged in a form of coercion.

In the simplest setting, the customer is a final consumer. When the manufacturer instead sells to a retailer or other intermediary, a similar exclusionary outcome can arise. The analysis is complicated by competition among the retailers, which reduces their gains from facilitating entry.[38] An illustrative case is *United States v. Dentsply Int'l Inc*.[39] In this case, a manufacturer of artificial teeth with a 75% to 80% market share forced dealers to purchase from it exclusively, thereby excluding rivals. Central to the manufacturer's hold over the dealers was an (arguably implicit) threat to cut them off if they accommodated a competitor. This threat was acted on in several instances.

Dentsply's threat of termination was effective as, in the market for false teeth, there is a strong inclination on the part of the purchaser, a dental laboratory, to replace lost or broken false teeth in dentures with those from the same brand.[40] As a result, the size of an incumbent's installed base is a significant determinant of their value to the wholesaler. It follows that, in this particular market, the threat of termination for noncompliance with Dentsply's desire for effective exclusivity was a potent means to bring the wholesalers on board.

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[37] This is an example of the sort of "contracting externality" that lies at the heart of many of the economic models in this area.

[38] *See, e.g.*, John Simpson & Abraham L. Wickelgren, *Naked Exclusion, Efficient Breach, and Downstream Competition*, 97 AM. ECON. REV. 1305, 1306 (2007) (identifying circumstances under which monopolist can exclude if competition among buyers is sufficiently strong); Jose Miguel Abito & Julian Wright, *Exclusive Dealing with Imperfect Downstream Competition*, 26 INT'L J. INDUS. ORG. 227, 228 (2008) (similar). On the other hand, if a retailer is able to serve many final consumers, entry is feasible even if only a few retailers accommodate entry. This effect can offset the reduction-in-gains effect discussed in the text.

[39] 399 F.3d 181 (3d Cir. 2005).

[40] United States' Proposed Findings of Fact and Conclusions of Law at 36, United States v. Dentsply Int'l, Inc., 277 F. Supp. 2d 387 (D. Del. 2003) (No. 99-005) (summarizing trial testimony that repairs require the same brand as original dentures).

The pricing and exclusionary contract strategies share an important property—that the manufacturer does not share the benefits of exclusion with others. Hence, to the extent that consumers are complicit, it is via either capitulation to threats or acceptance of equilibrium outcomes. Aside from the manufacturer, no party prefers the exclusion of the manufacturer's rival.

B. HORIZONTAL COALITIONS

The single beneficiary case is familiar and relatively well understood, but it is a poor fit for complex real-world facts like those observed in the Canadian sugar scheme. One difference is that there are multiple horizontal excluders—for example, the four Canadian refiners, as well as the members of the wholesale Guild.

It is generally recognized that exclusion can be undertaken by multiple competing firms, whether as a tight cartel, multiple firms acting on their own, or something in between. Further, when similarly situated firms are all engaging in exclusion in some joint fashion, then it is natural to expect that they all derive some individual benefit from the endeavor. Thus, when a coalition of competitors engages in the exclusion of a rival, typically all members of the coalition benefit from the resulting reduction in competition.

Often, exclusion by horizontally situated firms is the result of an explicit agreement. Indeed, some express agreements to exclude are an outgrowth of ordinary cartel behavior. Given that entry threatens cartel stability, it is natural that a cartel should add exclusionary practices to any concerted effort to price fix or otherwise enhance collective profitability.[41] A colorful historical example is shipping cartels in the 1800s that pooled resources to sustain predatory price wars against nonmembers that attempted to compete on cartel-controlled routes.[42] This conduct has a direct analog to the single-firm predatory pricing discussed in Part II.A.

[41] Margaret C. Levenstein & Valerie Y. Suslow, *What Determines Cartel Success?*, 44 J. ECON. LITERATURE 43, 74–75 (2006) (describing exclusionary practices, particularly by enlisting the aid of government, as a means to ensure cartel stability).

[42] *See* Fiona Scott Morton, *Entry and Predation: British Shipping Cartels 1879–1929*, 6 J. ECON. & MGMT. STRATEGY 679, 692 (1997) (describing transfer payments between cartel members to redistribute the burden of a price war); *see also* Joel M. Podolny & Fiona M. Scott Morton, *Social Status, Entry and Predation: The Case of British Shipping Cartels*

Sometimes the mechanism of cartel enforcement also secures exclusion, without any separate exclusionary conduct. For example, enforcement of the Guild's cartel by means of a surcharge not only discouraged defections but also countered the threat from direct purchases by retailers.

The express horizontal agreement to exclude need not arise from a cartel. Such exclusion is analyzed under various headings, such as boycotts directed at rivals[43] and denial of membership to a joint venture.[44] A famous example is the campaign by makers of steel conduit—a kind of pipe used to carry electric wiring through a building—against the adoption of plastic polyvinyl chloride conduit.[45] Plastic interests sought inclusion in the National Electric Code, an essential step toward wide-scale adoption. In response, steel interests packed a meeting of the standard-setting body responsible for the Code and voted to reject a proposal to adopt plastic conduit.[46]

Even without any explicit agreement, moreover, parallel exclusion by multiple firms can block or slow would-be entrants.[47] Parallel exclusion is a pervasive issue, raised in the context of many important oligopolies,[48]

1879–1929, 47 J. INDUS. ECON. 41, 62 (1999) (concluding that high-status entrants were more likely to be accomodated).

[43] *E.g.*, Radiant Burners, Inc. v. Peoples Gas Light & Coke Co., 364 U.S. 656 (1961) (per curiam), concerning an association of manufacturers who denied quality certification to a competing manufacturer; Fashion Originators' Guild of Am., Inc. v. FTC, 312 U.S. 457 (1941), involving an association of dress manufacturers who agreed not to sell to retailers who bought from competing manufacturers of "knockoff" clothing; and Eastern States Retail Lumber Dealers' Ass'n v. United States, 234 U.S. 600 (1914), regarding an association of lumber dealers who agreed among themselves not to buy from wholesalers who competed by selling directly to customers.

[44] *E.g.*, Associated Press v. United States, 326 U.S. 1 (1945); United States v. Terminal R.R. Ass'n, 224 U.S. 383 (1912).

[45] Allied Tube & Conduit Corp. v. Indian Head, Inc., 486 U.S. 492, 495–96 (1988).

[46] *Id.* at 496–97.

[47] *See generally* C. Scott Hemphill & Tim Wu, *Parallel Exclusion*, 122 YALE L.J. 1182 (2013). Sometimes the terms "shared monopoly" or "collective dominance" are used in reference to such conduct, but these terms are misleading. Both terms are too broad, because they lump together parallel exclusion with non-exclusionary price elevation. "Shared monopoly" also carries an unfortunate historical association with wide-ranging inquiries into oligopoly structure, untethered to a particular theory of anticompetitive effect. "Shared monopolization" would be more accurate.

[48] *See id.* at 1194–95 (collecting examples); Nicolas Petit, *The Oligopoly Problem in EU Competition Law*, *in* HANDBOOK ON EUROPEAN COMPETITION LAW: SUBSTANTIVE ASPECTS 259, 338–40 (Ioannis Liannos & Damien Geradin eds., 2013) (collecting European cases).

including airlines,[49] consumer goods,[50] entertainment,[51] health care,[52] and telecommunications.[53]

As discussed in Part III, the existence of a horizontal agreement among the excluders matters for its treatment under prevailing antitrust doctrine. Yet the economic importance of agreement is not as stark as it might appear to the doctrinally oriented antitrust practitioner. With or without agreement, the firms need some way to settle upon and then enforce the exclusionary pattern.

The main difference is in how firms settle upon the pattern. When exclusion is based on an explicit agreement, the parties can design the nature of their exclusionary conduct through discussion. By contrast, a pattern of conduct giving rise to parallel exclusion may be arrived at through a mutual understanding of each firm's incentives. Each firm thinks through its strategic options and those of its rivals and chooses conduct in its self-

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[49] *E.g.*, TRANSP. RESEARCH BD., NAT'L RESEARCH COUNCIL, ENTRY AND COMPETITION IN THE U.S. AIRLINE INDUSTRY: ISSUES AND OPPORTUNITIES 109–23, 171–77 (1999).

[50] For example, baby formula in Israel (OLIGOPOLY MARKETS: NOTE BY ISRAEL 4–5 (2015), http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD(2015)17&docLanguage=En (white paper prepared for Organisation for Economic Co-operation and Development)), beer in Germany (Stergios Delimitis v. Henninger Br-iu AG, 1991 E.C.R. I-935, ¶¶ 8-27), and ice cream in Ireland (Van den Bergh Foods Ltd. v. Comm'n, 2003 E.C.R. II-4653, 4667, 4691–92, 4702–03).

[51] For example, film (United States v. Paramount Pictures, 334 U.S. 131, 153–54, 156–59 (1948); United States v. Loew's, 371 U.S. 38, 48–50 (1962)), video programming (Amended Complaint at 56–58, 63, Cablevision Sys. Corp. v. Viacom Int'l Inc., No. 13-1278, 2013 WL 4828947 (S.D.N.Y. July 16, 2013) [hereinafter Cablevision Complaint]), and video distribution (United States v. AT&T Inc., No. 17-2511, 2018 WL 2930849, at *65–67 (D.D.C. June 12, 2018)).

[52] For example, physician services (Woman's Clinic, Inc. v. St. John's Health Sys., Inc., 252 F. Supp. 2d 857, 866–67 (W.D. Mo. 2002)), medical devices (Genico, Inc. v. Ethicon, Inc., No. 5:04-CV-229, 2006 WL 7134667, at *3–4 (E.D. Tex. Mar. 23, 2006)), and medical supplies distribution (Suture Express, Inc. v. Owens & Minor Distribution, Inc., 851 F.3d 1029, 1041–44 (10th Cir. 2017)).

[53] For example, local fixed line (Bell Atl. Corp. v. Twombly, 550 U.S. 544, 553–54 (2007)), long distance fixed line (Marius Schwartz, *Discussant Comments on Papers by Andrew Joskow, Daniel Rubinfeld, and Janusz Ordover and Margaret Guerin-Calvert*, 16 REV. INDUS. ORG. 219, 220 (2000)), mobile handset technology (TruePosition, Inc. v. LM Ericsson Tel. Co., 844 F. Supp. 2d 571, 579–82 (E.D. Pa. 2012)), mobile handsets (*In re* Wireless Tel. Servs. Antitrust Litig., 385 F. Supp. 2d 403, 426 (S.D.N.Y. 2005)), and mobile wireless services (FCC, STAFF ANALYSIS AND FINDINGS 43, 50, 56 (2011), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-11-1955A2.pdf (AT&T acquisition of T-Mobile licenses) (Wireless Telecommunications Bureau Docket No. 11-65)).

interest, understanding that other firms will also be acting in their self-interest, given the actions of everyone else.

These equilibrium incentives may be strong or weak, clear or obscure. When the incentives are sufficiently strong and clear, parallel exclusion may be accomplished without explicit agreement. Consider, for example, the set of exclusive contracts with hospitals entered into by two Israeli baby formula manufacturers with a "lion's share of the market."[54] When new parents came home from the hospital, they typically stayed with the same brand. The Israeli antitrust authority concluded that exclusivity collectively foreclosed entry, and imposed remedies designed to promote additional entry.[55] Where, as in the baby formula example, there are few firms, and the exclusionary strategy is simple to devise and execute, there may be less need for manufacturers to engage in risky communication.[56]

The Canadian sugar coalition illustrates the difficulty in identifying an explicit agreement to exclude. Among the members of the wholesalers' Guild, there was a clear, explicit horizontal agreement to cartelize. Equally clear was the explicit understanding between the Guild and each refiner. By contrast, the nature of the understanding among the refiners is hard to characterize. Were they acting in concert in dealing with the Guild, or is their conduct more properly cast as unilateral?

The Select Committee apparently concluded that each refiner made its own separate agreement with the Guild to surcharge nonmembers and to report a refinery price for use by Guild members in setting a wholesale price.[57] That conclusion is debatable, given evidence of communication among the refiners. At the crucial meeting between refiners and the Guild discussed above, three refiners attended, with an absent fourth refiner agreeing to

[54] OLIGOPOLY MARKETS: NOTE BY ISRAEL, *supra* note 50, at 4.
[55] *Id.* The remedy required, among other things, that each hospital must have at least two suppliers.
[56] *See* Hemphill & Wu, *supra* note 47, at 1226, 1237 (making this point); *see also* LOUIS KAPLOW, COMPETITION POLICY AND PRICE FIXING 125–73 (2013) (discussing "paradox of proof").
[57] *See* REPORT, *supra* note 1, at 4 (Committee Report) ("[T]he *several* agreements between them and the Guild were confined to the imposition of differential prices and terms against outsiders.") (emphasis added). This conclusion is not necessarily contradicted by the fact that, once the arrangement was underway, the refiners collectively delegated the dissemination of refinery price information to a single refiner (the Canada Sugar Refinery). *See supra* note 23. Moreover, the record is clear that the refiners did not conspire to set their own prices.

accept whatever was decided.[58] The refiners also apparently discussed the Guild's proposal among themselves before any decision was made.[59] Finally, there was evidence that the refiners had an "understanding" to each reduce production under certain conditions.[60]

Whether or not the refiners agreed to exclude, they faced the further question of enforcement. Here, the refiners faced a potential collective action problem. Whenever exclusion involves some costly effort—here, abstaining from selling to Guild nonmembers at an attractive price—a firm prefers to freeload on the work of others. The resulting underproduction of effort is bad for the excluders, though likely good for consumer welfare. A large economic literature identifies conditions for the underproduction of exclusion, reaching a wide range of results that are highly dependent on particular modeling assumptions.[61]

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[58] *Id.* at 11 (testimony of George Lightbound) (noting attendance by Drummond from Canada Sugar Refining Company, two individuals from St. Lawrence Refining Company, and a representative of "the Moncton refinery"; in addition, "they had a letter from the president of the Nova Scotia refinery at Halifax" accepting whatever decision was reached).

[59] *Id.* at 11–12 (testimony of George Lightbound ("The refiners *after discussing the matter amongst themselves* agreed to charge those who were not members of the Wholesale Grocers' Guild, or, rather, those who were not members of the combination, a quarter of a cent a pound more than for what they would sell the same sugar to the members of the guild.") (emphasis added).

[60] *Id.* at 53 (testimony of George Drummond) ("Have you any arrangements as to production among refiners? A. Yes, there was an understanding entered into whereby if the production exceeded the demand that we would cut down equally, that would reduce the production.").

[61] An early contribution is B. Douglas Bernheim, *Strategic Deterrence of Sequential Entry into an Industry*, 15 RAND J. ECON. 1, 1–4 (1984). *See also* Michael Waldman, *Noncooperative Entry Deterrence, Uncertainty and the Free Rider Problem*, 54 REV. ECON. STUD. 301, 301–02 (1987) (identifying public good problem when oligopolists are unable to collude on investment in entry deterrence); Joseph E. Harrington, *Oligopolistic Entry Deterrence Under Incomplete Information*, 18 RAND J. ECON. 211, 212–17 (1987) (modeling free riding in a cost signaling game); Michael H. Riordan & Richard P. McLean, *Industry Structure with Sequential Technology Choice*, 47 J. ECON. THEORY 1, 1–3 (1989) (identifying free riding in a model of sequential entry); Kyle Bagwell & Garey Ramey, *Oligopoly Limit Pricing*, 22 RAND J. ECON. 155, 165–67 (1991) (positing coordination problem for multiple firms engaged in predatory pricing); MICHAEL L. KATZ & STEVEN C. SALOP, USING A BIG FOOTPRINT TO STEP ON COMPETITION: EXCLUSIONARY BEHAVIOR AND THE SBC-AMERITECH MERGER 37–44 (1998) (submission to Federal Communications Commission) (Common Carrier Bureau Docket No. 98-141) (arguing that exclusion by an incumbent local exchange carrier in one region creates uncaptured exclusionary benefits for other regional incumbents; thus, a merger of incumbents increases the incentive to deter entry). Papers concluding that exclusion is not underproduced, under particular modeling assumptions, include Richard Gilbert & Xavier Vives, *Entry Deterrence and the Free*

One point of consensus is that maintenance of the exclusionary equilibrium is easier where the strategy is simple, invariant to changes in market conditions, and compliance is easy to observe. That is likely true of the Canadian refiners' agreements to surcharge. Moreover, the refiners' exclusionary equilibrium had an additional enforcement mechanism, in the form of the Guild's promise to buy only from surcharging refiners. Thus, a unilateral decision to cease surcharging would result in a loss of business from Guild members.

It was in the interest of each refiner to support the arrangement suggested by the Guild, and so individually benefit from the suppression of any entry in Dominion markets. If every other refiner were to act according to their unilateral arrangement with the Guild, and given the broad membership of the Guild, there seems little reason for an individual refiner to do anything other than operate in the same way. Indeed, to the extent that the Guild members really would only purchase from refiners with whom they had an agreement, each refiner might prefer to be the only one with whom the Guild had any agreement. Then, all the Guild business would go to that refinery, and entry (at the refiner level) would be just as hampered. That is, to the extent that the Guild could enforce the commitment to purchase only from refiners that are part to the agreement, an individual refiner would rather the other refiners were not party to agreements with the Guild.[62]

C. VERTICAL COALITIONS

As discussed above, the Canadian sugar scheme featured horizontal coalitions at two levels—an explicit agreement among Guild wholesalers, plus parallel conduct among the refiners. In addition, the horizontal coalitions were linked by vertical agreements between each refiner and the

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Rider Problem, 53 REV. ECON. STUD. 71, 81 (1986) (showing overproduction of entry deterrence in a quantity-setting model); Eric Rasmussen, *Entry for Buyout*, 36 J. INDUS. ECON. 281, 292–93 (1988) (concluding that oligopoly is better than monopoly at deterring "entry for buyout" strategy); Michael Waldman, *The Role of Multiple Potential Entrants/Sequential Entry in Noncooperative Entry Deterrence*, 22 RAND J. ECON. 446, 451 (1991) (concluding that there is no underinvestment if the return to deterrence happens at single critical point).

[62] Indeed, under these circumstances, compliance was a dominant strategy. That said, having one or more refiners outside the arrangement could well have been a significant problem for the sustainability of the Guild's price-fixing scheme, since a defecting wholesaler could secure supply from a nonparty refiner. Thus, while enforcement might seem to be the Guild's problem, rather than a refiner's, the ultimate stability of the whole enterprise might suffer were some refiners not party to the scheme.

Guild. The vertical structure of the collective exclusionary effort is one of its defining features.

In the pursuit of exclusion, coordination among vertically related firms is common. When vertically related firms contribute to exclusion, it is sometimes unclear which firms benefit. As a leading example, consider the use of downstream agents, such as retailers. When an upstream monopolist reaches exclusive contracts with retailers, it secures their assistance in achieving exclusion. The common presumption, illustrated by *Dentsply*, is that the retailers must be coerced into the act. Much of the case law focuses on the setting in which this assistance is provided under some notion of duress. On this view, the only firm benefiting from exclusion is the upstream monopolist.

But sometimes, retailers are willing partners in the exclusionary conduct. What looks like coercion at first blush might be more comfortably characterized as congenial persuasion. Indeed, taking this further, the very thing that leads a retailer to provide services to the manufacturer in the form of excluding a rival may reflect a flow of benefits that the retailer enjoys as a consequence. Helpfully, the very fact that exclusion, in its canonical anticompetitive form, protects monopoly rents means that there is an accumulation of benefits accruing that are available to be shared.

Specifically, by refusing to deal with a rival manufacturer, retailers can protect the monopoly position of an incumbent manufacturer. This increases the rents that accrue at the manufacturer level in the industry. To protect this flow of rents in the future, the manufacturer shares them with retailers. By providing retailers with a stake in the profits created by excluding a rival of the manufacturer, the retailers now have an interest in preserving the monopolized industry structure.

This point arises in various ways in the literature, including a recent article by Asker and Bar-Isaac.[63] The authors build on the proposition, explored by Bowman, Telser, Klein and Murphy, and others, that many vertical restraints exist to incentivize service provision on the part (usually) of retailers.[64] The vast majority of the literature assumes that this service

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[63] John Asker & Heski Bar-Isaac, *Raising Retailers' Profits: On Vertical Practices and the Exclusion of Rivals*, 104 AM. ECON. REV. 672 (2014).

[64] *See* Ward Bowman, *The Prerequisites and Effects of Resale Price Maintenance*, 22 U. CHI. L. REV. 825, 840–43 (1955) (explaining RPM as a means to pay retailers for service provision); Lester Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86, 89–96 (1960) (defending RPM as a means to induce service provision by retailers); and

increases consumers' willingness to pay, and thus is beneficial to both consumers (by increasing consumption value) and manufacturers (by increasing demand, and hence available profits). Asker and Bar-Isaac point out that an alignment of manufacturer and retailer interests is not necessarily beneficial to consumers, and show that retailers can provide benefits to manufacturers that, while benefiting the upstream manufacturer, are inimical to the interests of consumers.

The actual implementation of a scheme like this may take many forms. Asker and Bar-Isaac focus their discussion on the use of lump-sum transfers between an upstream manufacturer and the downstream gatekeeper retailers that perform the service of excluding a potential rival. After developing this base case, they note that a variety of vertical restraints can serve to dampen competition between retailers, and effectively transfer rents from an upstream firm to downstream gatekeepers. Compared to purely financial payments, nonfinancial transfers may be just as effective, but harder for regulators to identify.

As an example, consider the American Sugar scheme from the introduction. The wholesalers provided a valuable service to American by buying exclusively from American and thereby hampering the entry of rival refiners. This service, in isolation, did not serve the interests of the wholesalers. However, the wholesalers received something in return, in the form of American's policing of wholesaler RPM, which reduced competition among the wholesalers. The rebate paid to wholesalers represented rents that were effectively transferred from American to the wholesalers.

As a consequence of their resulting share in the monopoly profits, the wholesalers had little interest in seeing those rents dissipated by entry at the refiner level and so were well incentivized to retard entry. The point is potentially general for industries in which rigorous competition otherwise exists at every point in the supply chain. For all parties, whether refiner or wholesaler, it is better to preserve what profits do exist and see that they are shared in such a way as to perpetuate their existence, rather than to see them dissipated through entry and competition.

Benjamin Klein & Kevin Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L. & ECON. 265, 267 (1988) (arguing that RPM induces dealer performance where an explicit contract is infeasible by conferring a quasi-rent on performing dealers).

With respect to the Canadian sugar scheme, the centrality of the vertical coalition is reflected in the details of its formation. When the wholesale Guild met with the four refiners, it was clear that all parties sought to reach some mutually beneficial arrangement. The Guild and refiners recognized the existence of gains from trade, much as in an ordinary commercial negotiation, albeit one for which the objective was to realize benefits via the suppression of the competitive process.

The weight of the evidence suggests that this was a mutually beneficial arrangement, rather than coercion of either wholesalers or refiners. Wholesalers benefitted—indeed, one wholesaler testified that he was injured by expulsion from the Guild.[65] Refiners seemed happy to be in league with the Guild as well. Although one wholesaler adverted to the possibility that the refiners had been coerced, perhaps through a boycott, in the same breath he acknowledged the refiners' countervailing power.[66] The wholesalers' main alternative to dealing with the refiners was not to buy from someone else, but exit from the distribution of sugar:

> Q. Did you say it would be necessary to go out of the sugar business[?]
> A. I think that I have already mentioned that at the meeting at the Windsor Hotel we made that proposal that they might take the distribution of it [sugar] into their own hands.
> . . .
> Q. That settled the matter?
> A. Yes.
> . . .
> Q. You gave them to understand that your decision was that they might take the distribution of sugar into their own hands?
> A. We were quite willing that they should do so.

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[65] REPORT, *supra* note 1, at 24 (testimony of Patrick Baskerville, wholesaler) ("Q. Has it been an injury to your business to be deprived of the right to purchase sugar at the refinery? A. Yes, it has been an injury. To continue our wholesale business we could not get along without it.").

[66] *Id.* at 28 (testimony of George Lightbound) ("Q. They [the Guild] put the screw on the refiners? A. The individual refiners were probably coerced, but the refiners in the first place had a clear position. They might have said: "Gentlemen, we cannot do it." What could the merchants do? They could not get the sugar anywhere else."). For other suggestions of a boycott by the Guild, see *id.* ("Q. Under the wholesale grocers. They put themselves in that position because the wholesale grocers can boycott them. While on the one hand the wholesale grocers are dictating terms to the retailer, they are on the other hand dictating terms to the refiners? A. Yes."); *id.* at 97 (testimony of George Childs); *id.* at 110 (testimony of Charles Hebert, wholesaler).

> Q. That is taking them by the throat, saying that they have to sell their own sugar or consent to your offer?
> A. I have yet to learn that a statement of that kind is taking anyone by the throat.[67]

The prospect of the wholesalers' exit—thus leaving refiners and retailers with the burden of distribution—is not well described as coercion of refiners, but instead a mere statement of business reality.

III. ANTITRUST ENFORCEMENT

There are several doctrinal approaches to exclusionary coalitions. In this Part, we assess how well each of them matches the relevant economic facts.

As a thought experiment, transplant the Canadian sugar coalition to the United States, and imagine that an excluded refiner challenges the coalition as a violation of U.S. antitrust law. The plaintiff has three alternatives: to allege exclusion by a single firm, a set of unlawful vertical agreements, or an anticompetitive horizontal agreement among the refiners or wholesalers (or both). We consider these options in turn.

A. SINGLE VERTICAL AGREEMENT

The simplest approach is to sue a single refiner—presumably the largest—under Section 2, alleging that the refiner is a monopolist that improperly excluded refiner competition through its deal with the Guild. The model here is *Dentsply*. For a monopoly like American Sugar, Section 2 might work well. By contrast, targeting a single Canadian refiner under Section 2 has the obvious problem that the case fails if, as seems likely with multiple refiners, no single firm is a monopolist.

Given that each refiner's exclusion was accomplished through vertical contract, a related strategy is to sue under Section 1 and thereby avoid the need to prove a monopoly. (Figure 2 depicts this and other options discussed in this Part.) Singling out one firm for a Section 1 suit is a relatively common tactical choice in parallel exclusion cases. For example, a recent U.S. suit challenged a television programmer's practice of selling channels to cable distributors only in a bundle, which had the alleged effect

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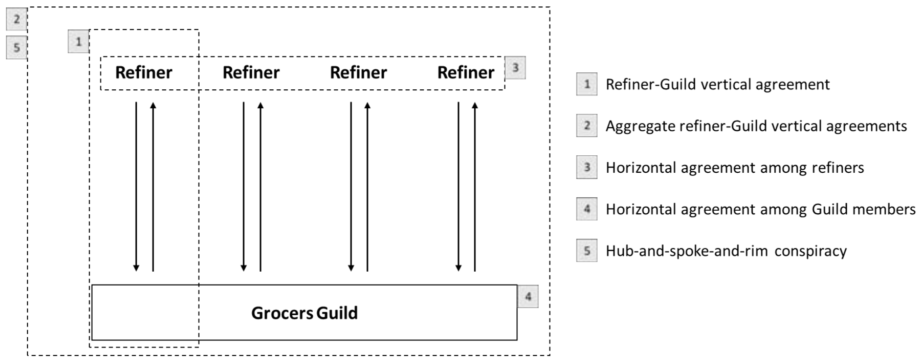
[67] *Id.* at 97 (testimony of George Childs).

of excluding independent programmers.[68] Although bundling by programmers is widespread, the plaintiff only sued one programmer. However, this approach has an important downside, in that it impedes presentation of the cumulative effect of parallel exclusion.

Figure 2. Enforcement Approaches



The Canadian sugar arrangement has the unusual feature that *each* agreement between a refiner and the Guild arguably secured the Guild's promise not to purchase from outside the set of four refiners. Thus, unlike other parallel exclusion scenarios, suing over just one contract might suffice to open up a full analysis of the degree of foreclosure. However, how that would play out is not entirely clear. There remains a risk that the court might decline to accept evidence about the exclusionary effect of firms that are not sued.[69]

Limiting suit to a single firm also invites defendants to argue that the widespread adoption of a particular practice shows that it is innocuous. For example, in a recent case alleging anticompetitive bundling by two distributors of surgical supplies, the court accepted defendants' argument that "bundle-to-bundle" competition was an efficient practice.[70] However, widespread adoption may reflect parallel exclusion rather than efficiency.[71]

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[68] *See* Cablevision Complaint, *supra* note 51.

[69] For example, in *Woman's Clinic, Inc. v. St. John's Health Sys., Inc.*, 252 F. Supp. 2d 857 (W.D. Mo. 2002), a health care provider alleged exclusion by a rival, and sought to present evidence that another provider's conduct, not sued by the plaintiff, increased the exclusionary effect. The court barred the evidence. *Id.* at 864–65.

[70] *See* Suture Express, Inc. v. Owens & Minor Distribution, Inc., 851 F.3d 1029, 1041–44 (10th Cir. 2017).

[71] *Cf.* WHINSTON, *supra* note 29, at 178 (industry-wide nature of particular conduct might not demonstrate procompetitiveness).

Consistent with this point, the Supreme Court has noted that industry-wide RPM "should be subject to more careful scrutiny," not less,[72] although it is unclear whether this statement was meant to apply to exclusion strategies.[73]

This is a general point. Examining in isolation a single firm's conduct, or even more narrowly its contract with a single customer or supplier, can lead the analysis astray. The incremental effect of a single firm's action, holding others' actions constant, may appear harmless. Moreover, the action might be a best response (even disregarding its exclusionary effect) to the conduct of other firms. Such an action, viewed on a standalone basis, might therefore seem consistent with "competition." And yet the overall equilibrium in which multiple firms take the same act might be quite detrimental.

B. MULTIPLE VERTICAL AGREEMENTS

A second approach is to challenge multiple vertical contracts under Section 1. The plaintiff could sue all of the refiners and allege that the cumulative effect of their contracts with the Guild, considered together, foreclosed the plaintiff from the market. This approach would allow the court to take account of the collective effect of multiple excluders. The viability of an aggregation claim has been recognized in the specific context of multiple vertical contracts challenged under Section 1.[74] The leading case here is *Standard Stations*.[75]

However, as a doctrinal matter, aggregation is by no means automatic. Even where multiple excluders are sued, U.S. courts sometimes consider whether

[72] *See* Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877, 897 (2007) (quoting Frank Easterbrook, *Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L.J. 135, 162 (1984), for the proposition that "every one of the potentially-anticompetitive outcomes of vertical arrangements depends on the uniformity of the practice").

[73] The Court's statement was general and did not distinguish exclusion from the collusion concerns also raised by RPM. Elsewhere, the Court discussed exclusion-based theories of RPM only by reference to a single "powerful manufacturer or retailer." *Id.* at 893.

[74] *See* Hemphill & Wu, *supra* note 47, at 1245–48 (discussing case law). We omit discussion of yet another option, alleging collective monopolization (without conspiracy) under Section 2. *See id.* at 1236–40.

[75] Standard Oil Co. v. United States, 337 U.S. 293, 309 (1949) (discussing exclusion by group of suppliers acting "collectively, even though not collusively").

each of them has sufficient market power to support liability.[76] This approach removes from the analysis an assessment of the collective effect of parallel exclusion. Even in Europe, where collective dominance is expressly recognized, there is reluctance to aggregate. For example, consider *Magill*, perhaps the best known European refusal to deal case.[77] Three TV channels each denied access to the channel's copyrighted listings, at the expense of an entrant seeking to build a TV guide. The Commission sued them all. Rather than alleging that the channels *collectively* possessed a dominant position, an available option under European law, the Commission argued that *each* firm had a dominant position.[78] Reflecting this, *Magill* is generally remembered as a single-firm dominance case, and the collective effect of a horizontal coalition is overlooked.

In an important respect, vertical coalitions, such as the refiners' contracts with the Guild, are a surprisingly good fit for Section 1. To see why, consider the paradigmatic case of exclusion accomplished through vertical contract discussed in Part II.A. A major feature is coercion of a customer or supplier. For example, in the standard account of exclusive dealing, the dealer accepts the arrangement for fear of being excluded and thereby placed at a competitive disadvantage. Coercion is also central to tying cases. One prerequisite for application of the quasi-per se rule is that the buyer is "forced" to accept the seller's conditional sales contract.

Section 1 is an awkward fit for assessing agreements secured through coercion. Section 1 requires concerted action in restraint of trade, and its primary focus is cooperative conduct. Coerced conduct is the opposite of cooperative. Judge Easterbrook has identified the resulting tension:

> Section 1 of the Sherman Act prohibits any "contract, combination . . . , or conspiracy, in restraint of trade . . . ." The plaintiffs therefore needed to prove some cooperative undertaking. Establishing the necessary combination in a tying case requires exceeding subtlety, because the substantive theory of tying law depends on coercion to take two products as a package. . . . As a linguistic matter, proof that the buyer took both products in a package against his will negates

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[76] *See, e.g.*, *In re* Visa Check/Mastermoney Antitrust Litigation, No. 96-CV-5238, 2003 WL 1712568, at *3–4 (E.D.N.Y. Apr. 1, 2003) (considering Visa and MasterCard individually to assess whether each has sufficient market power to support tying liability).

[77] Joined Cases C-241/91 P and C-242/91 P, Radio Telefis Eireann (RTE) & Indep. Television Pubs. Ltd (ITP) v Comm'n, 1995 E.C.R. I-743.

[78] Commission Decision 89/205/EEC, Magill TV Guide/ITP, BBC & RTE, 1989 O.J. (L 78) 43, ¶ 22.

> the existence of a "contract, combination, or conspiracy." . . . Tying is not cooperation among competitors, the focus of § 1, it is aggressive conduct akin to monopolization under § 2 of the Sherman Act.[79]

Despite the awkward fit,[80] under current doctrine, a coerced contract satisfies the agreement requirement.[81] That result raises a further issue: is an innocent coerced contractual counterparty also subject to antitrust liability? The answer appears to be yes, at least as to exclusive dealing.[82]

Exclusionary coalitions are a comparatively better fit. Vertical coalitions offer benefits to both parties to the vertical contract. They are cooperative, rather than coerced, consistent with the core meaning of Section 1. In this setting, suing the contractual counterparty does not raise any concern about undue liability to an innocent party.

C. HORIZONTAL AGREEMENT

A third approach is for the plaintiff to allege a horizontal agreement to exclude. There are two candidates for horizontal agreement: among the refiners and among the wholesalers. Proving an agreement among the refiners might not work. After all, the Select Committee's apparently concluded that there was no refiner conspiracy. This is a common problem. Parallel exclusion cases sometimes collapse where plaintiffs fail to allege

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[79] Will v. Comprehensive Accounting Corp., 776 F.2d 665, 669 (7th Cir. 1985) (Easterbrook, J.).

[80] *See, e.g.*, Christopher R. Leslie, *Unilaterally Imposed Tying Arrangements and Antitrust's Concerted Action Requirement*, 60 OHIO ST. L.J. 1773, 1797–99 (1999) (arguing that Section 1 should not apply to unilaterally imposed ties).

[81] *Will*, 776 F.2d at 670 ("'unwilling compliance' satisfies the joint action requirement of § 1") (citing Perma Life Mufflers v. International Parts Corp., 392 U.S. 134 (1968)); 6 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1408d, at 58 (4th ed. 2017) ("The precedents are numerous that a §1 conspiracy arises when an unwilling dealer, to avoid termination by its supplier, promises to buy a second commodity, to deal exclusively, or to restrict resales. . . . [T]he legal convention of treating express promises in the vertical context as §1 contracts or conspiracies is well established, notwithstanding an unwilling dealer.").

[82] 6 AREEDA & HOVENKAMP, *supra* note 81, ¶ 1408d, at 58–59 (noting and criticizing potential liability for exclusive dealing). Christopher Leslie concludes that the result is different for tying. Leslie, *supra* note 80, at 1800, 1819–21 (concluding that coerced purchasers do not have antitrust liability for tying).

and prove an agreement among the excluders.[83] The consequence is that cases turn on the happenstance of provable agreement rather than the economic effect of the exclusion.

To be clear, the presence of such an agreement can be probative of anticompetitive effect. Observed communications may reflect efforts to coordinate or enforce parallel exclusion. However, this is a one-sided test.[84] When agreement is absent, it does not follow that anticompetitive effect is missing as well, any more than insisting that a murder conviction is possible only when the police find a smoking gun. An undue focus on agreement allows some anticompetitive conduct to slip through the cracks.

Insisting upon horizontal agreement among the excluders might make sense if the exclusion were impossible to set up and enforce without communication. This argument has been advanced in the context of oligopolistic pricing—that without communication, the prisoner's dilemma is too hard to overcome. But exclusion is often different. Often the strategy is simple, defection is readily observable, and punishment is credible, all without communication. The Canadian sugar coalition illustrates these points. As noted in Part II.B, the scheme was simple and easy to follow, and given the prospect of punishment by the Guild, there was little incentive to defect. Under the circumstances, the existence of a horizontal agreement among the refiners is, from an economic perspective, beside the point.

An undue focus on horizontal agreement among the excluders also shifts focus away from the more important question of competitive effects. This shift is visible in the concern of European telecommunications regulators that incumbent mobile service providers have refused to sell capacity to competing "virtual" networks. This issue has arisen in France, Ireland, and Spain.[85] The evaluation of the mobile providers' conduct has emphasized

[83] *See, e.g.*, SD3, LLC v. Black & Decker (U.S.) Inc., 801 F.3d 412, 426–37 (4th Cir. 2015) (assessing alleged parallel exclusion by table saw manufacturers to exclude new safety technology, and allowing claims to proceed only to the extent that a conspiracy among the excluders was plausibly alleged); *In re* Wireless Tel. Servs. Antitrust Litig., 385 F. Supp. 2d 403, 426 (S.D.N.Y. 2005) (alleging parallel exclusion by wireless carriers to tie handsets to service, and dismissing where no conspiracy among the excluders alleged and no single carrier had enough market power to trigger the quasi per se rule).

[84] Even if a horizontal agreement among alleged excluders is established, its import may be unclear on particular facts. For example, the parties might have been expressly coordinating to achieve a procompetitive end.

[85] *See* Paolo Siciliani, *Collective Dominance and Refusal to Supply: Closing the Gap in Article 82?*, 54 ANTITRUST BULLETIN 683, 694–96 & nn.42–44 (2009) (describing challenges in France, Ireland, and Spain, among others). *Cf.* Telefonica Brasil S.A., Annual

the presence of collective dominance, which in turn considers whether the incumbents reached a "tacit agreement" to exclude as opposed to "each operator acting unilaterally in its own self-interest."[86] Commentators have similarly urged regulators to focus on whether the decisions to exclude are interdependent versus unilateral.[87]

If showing a unilateral incentive to exclude tends to exonerate the conduct, then the analysis will inevitably focus on the details of the strategic interaction of the excluders. The outcome turns upon the fine details of whether the decision to exclude is a dominant strategy, the outcome of a repeated prisoner's dilemma, or something else. The answer is often not straightforward.[88] But more important, the answer to this question is of only secondary interest in answering the central question of harm to competition. The mobile virtual networks example illustrates a general point—that the analysis of game-theoretic strategic interaction can be a troublesome distraction in answering the economic question of anticompetitive effect.[89]

A horizontal conspiracy *among the wholesalers*, by contrast, can be easily established. The Select Committee recognized that Guild members had agreed to form a cartel and exclude their competitors. Such a conspiracy might also implicate each refiner, as a vertically related agent that helped to enforce the arrangement among the wholesalers. In the ebooks case, *United States v. Apple*, a similar argument was used to conclude that Apple was part of an exclusionary coalition with book publishers to limit ebooks

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Report F-82 (Form 20-F) (Mar. 20, 2013) (describing Administrative Proceeding 08012.008501/2007-91 in Brazil, alleging that three mobile incumbents each set a high termination fee for out-of-network calls, thereby impeding other networks).

[86] EUROPEAN COMMISSION, ACCESS AND CALL ORIGINATION ON PUBLIC MOBILE TELEPHONE NETWORKS IN SPAIN 5 (2006) (offering comments on Case ES/2005/0330); *see also id.* at 7 (emphasizing presence or absence of incentive to defect).

[87] *See, e.g.*, Siciliani, *supra* note 85, at 701 (noting that conduct lawful if "collective dominance" not satisfied); *id.* at 718 (urging inquiry into "whether the observed refusal is a rational and independent decision consistent with a firm's unilateral incentives").

[88] *Compare* Duarte Brito & Pedro Pereira, *Mobile Virtual Network Operators: Beyond the Hyperbolae*, COMPETITION POL'Y INT'L, Spring 2007, at 271, 276–77 (describing prisoners' dilemma among incumbents), *with* Janusz Ordover & Greg Shaffer, *Wholesale Access in Multi-Firm Markets: When Is It Profitable to Supply a Competitor?*, 25 INT'L J. IND. ORG. 1026, 1043–44 (2007) (identifying circumstances where joint refusal to supply is supported in a one-shot game) *and* Izak Atiyas, Toker Doganoglu & Firat Inceoglu, Economics of Collective Refusals to Supply 2–4, 28–29 (Mar. 4, 2012), http://ssrn.com/abstract=2034217 (unpublished manuscript) (reaching similar result and summarizing related literature).

[89] By contrast, it may be that serious modeling is needed to articulate the but-for world against which the competitive effects of conduct can be judged.

competition from Amazon.[90] Indeed, to the extent that the wholesalers' conduct is unlawful per se, *Apple* suggests that each refiner's role as a hub in a "hub-and-spoke-and-rim" conspiracy would expose the refiner to per se liability.

IV. CONCLUSION

The Select Committee's investigation of the Canadian sugar coalition concluded that it "tend[ed] to produce and propagate all the evils of monopoly."[91] It was, in the words of one witness, "the greatest conspiracy this country has ever seen."[92] Hyperbole aside, the coalition of refiners and wholesalers clearly harmed competition, and it is unsurprising that the combination prompted Canada to pass the Competition Act in response.

It is striking that this formative episode of exclusionary conduct diverges from well-worn ideas about coercion by a dominant firm. Moreover, a careful examination of the conduct cuts against the strong focus of contemporary doctrine upon the presence or absence of horizontal agreement. We suggest a shift in focus toward the economic effect of the conduct, and away from difficult questions of exactly who agreed with whom, as opposed to conducting business to unilateral advantage. Such an approach is consistent with antitrust's longstanding focus on "whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition."[93]

The Canadian sugar coalition also illustrates behavior at the intersection of two strands of the economic literature, namely exclusionary conduct and cartel conduct. The lattice of agreements and parallel behavior observed in this coalition represent a trade of exclusion for collusion. And, given the refiners' support of exclusion at the wholesale level, even more than that: a trade of exclusion for collusion and exclusion. The coalition ultimately supported three distinct competitive harms. In this respect, the sugar coalition resembles Granitz and Klein's account of a trade between Standard Oil and the railroads: exclusion (favoring Standard over other

[90] United States v. Apple Inc., 791 F.3d 290, 321–25 (2d Cir. 2015) (including vertical hub in a horizontal conspiracy and applying per se liability to both).
[91] REPORT, *supra* note 1, at 5 (Committee Report) (describing the sugar coalition among several others).
[92] *Id.* at 30 (testimony of J.A. Mathewson, wholesaler).
[93] Chi. Bd. of Trade v. United States, 246 U.S. 231, 238 (1918).

suppliers) in exchange for collusion (among the railroads, with Standard serving as ringmaster) and more exclusion (of a competing pipeline).[94] Further examination is warranted of the interplay between different types of anticompetitive conduct.

[94] *See* Elizabeth Granitz & Benjamin Klein, *Monopolization by "Raising Rivals' Costs": The Standard Oil Case*, 39 J.L. & ECON. 1, 2 (1996); *see also* MENAHEM BLONDHEIM, NEWS OVER THE WIRES: THE TELEGRAPH AND THE FLOW OF PUBLIC INFORMATION IN AMERICA, 1844–1897, at 108 (1994) (describing exclusion-for-exclusion trade between Western Union and Associated Press).