

A STUDY OF EXCLUSIONARY COALITIONS:
THE CANADIAN SUGAR COMBINATION, 1887–1889

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The standard account of exclusionary conduct features a monopolist that excludes its rival by coercing a customer or supplier. 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, making use of 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 combination 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 coalition, 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 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 illustrates two points of intersection between exclusion and 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.

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), 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, and issued a report summarizing its findings.

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).

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 for coalitions with a vertical element, a more appealing approach is to allege parallel vertical contracts under Section 1 of the Sherman Act and aggregate their collective foreclosure effect.

I. SUGAR IN THE 1880s

To set up our discussion of the Canadian sugar coalition, we begin with a summary of analogous and roughly contemporaneous conduct in the U.S. sugar industry, which was dominated by the American Sugar Refining Company (American). The contrast between the two illustrates the additional 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, which 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 was a substantial consumer outlay and accounted for about 40 percent of the retail grocery business.³

American was formed in 1887 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 to 95 percent.⁵ The

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) (discussing congressional testimony about the trust). Much of this account follows Zerbe.

⁵ A significant part of this expansion was the absorption of a competitor called Spreckels. In 1891, American acquired a 45% interest in Spreckels' Philadelphia refinery and gained control of the remaining stock shortly thereafter. 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 waged a price war in California. See CESAR J. AYALA, *AMERICAN SUGAR KINGDOM: THE PLANTATION ECONOMY OF THE SPANISH CARIBBEAN, 1898–1934*, at

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 of a hub-and-spoke arrangement.⁶ The resulting arrangement was a form of resale price maintenance (RPM). Each participating wholesaler resold sugar to retailers at or above a minimum price specified in its contract with American. The minimum price was set equal to American's price to wholesalers. American enforced the RPM arrangement by paying a rebate to compliant wholesalers.⁷ Punishing noncompliance in this way, with American's help, was likely easier and more effective than wholesaler price fixing without such assistance.

However, it was hardly obvious that serving as a coordinating agent for the wholesalers was in American's interest. Ordinarily, American would expect a downstream cartel to harm its upstream business. It took the wholesalers several attempts to convince American 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 did not enjoy the benefits of exclusion for free; it compensated the wholesalers for their trouble. In return, wholesalers benefited from American's service in enforcing the cartel. The result was an exclusionary coalition featuring a trade of collusion for exclusion that was mutually beneficial for American and the wholesalers.

33, 37 (1991); Zerbe, *supra* note 4; David Genesove & Wallace P. Mullin, *Predation and Its Rate of Return: The Sugar Industry, 1887–1914*, 37 RAND J. ECON. 47 (2006).

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

⁷ Marvel & McCafferty, *supra* note 3, at 366; EICHNER, *supra* note 3, at 192.

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 prices might suggest the willingness of some wholesalers to defect from enforcement of a boycott.

¹⁰ Zerbe, *supra* note 4, at 368. 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. See Genesove & Mullin, *supra* note 5 (providing a quantitative account). 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 *id.* 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, 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, Canadian sugar was an unbranded commodity product and a substantial consumer expenditure,¹¹ just as in the United States. The production and distribution chain was the same as well: refiners processed the sugar, which was distributed by wholesalers and sold by retail grocers to consumers. Refiners faced import competition from Glasgow, Liverpool, and other European trade centers,¹² though high tariffs sheltered domestic industry to a substantial degree.

Canadian refining was less concentrated than in the United States. In 1887, four refiners shared the market,¹³ each with a single facility.¹⁴ The wholesale business was highly competitive and fragmented. For example, in Ottawa and Quebec, two provinces accounting for about three-quarters of Canada's population,¹⁵ there were around 100 wholesalers and

¹¹ See Vincent Geloso, *Collusion and Combines in Canada, 1880–1890*, at 5, SCANDINAVIAN ECON. HIST. REV. (2019) (citing Robert Francis John Barnett, A Study of Price Movements and the Cost of Living in Kingston, Ontario for the Years 1865 to 1900, at 66 (1963) (unpublished M.A. thesis, Queen's University)), doi.org/10.1080/03585522.2019.1679246 (reporting that sugar represented about 4 percent of consumer expenditures during this period).

¹² American Sugar likely faced a similar threat.

¹³ The four refiners in operation were the Canada Sugar Refining Company in Montreal, Quebec, the St. Lawrence Refining Company (also in Montreal), the Moncton Sugar Refining Company in Moncton, New Brunswick, and the Nova Scotia Sugar Refinery in Halifax, Nova Scotia. See REPORT, *supra* note 1, at 11 (testimony of George Lightbound, wholesaler) (listing these four); *id.* at 54 (testimony of George Drummond, president of Canada Sugar) (similar); Marvel & McCafferty, *supra* note 3, at 366 (concluding that there were four Canadian refineries). In 1888, the Woodside refinery in Halifax reopened after a hiatus. See REPORT, *supra* note 1, at 21 (testimony of George Lightbound) (referring to a second refinery in Halifax expected to open “in a month or two”).

¹⁴ See REPORT, *supra* note 1, at 54 (testimony of George Drummond) (discussing capacity of the Canada Sugar refinery, capacity of the “Halifax” refinery (in context, a reference to the Nova Scotia Sugar Refinery), existence of one refinery in Moncton, and halt in production at the St. Lawrence refinery due to a fire). Drummond agreed, in response to a question, that the reopening of St. Lawrence would bring the number of refineries to five (rather than four). See *id.* The fifth refinery is likely the Woodside refinery in Halifax, which opened during 1888. See *supra* note 13.

¹⁵ LIBRARY AND ARCHIVES CANADA, CENSUS OF CANADA, 1891, www.bac-lac.gc.ca/eng/census/1891/Pages/about-census.aspx (reporting results of Canada's 1891 census, which counted 2.1 million and 1.5 million people in Ontario and Quebec, respectively, out of a total population of 4.8 million).

perhaps more.¹⁶ Wholesalers complained of “demoralization” due to price cutters.¹⁷ Retailers threatened to displace the wholesalers by buying directly from the refiners. Direct purchases put additional pressure on wholesale margins, particularly in larger cities where grocery chains were starting to emerge.¹⁸

In response to these pressures, wholesalers in the two provinces formed the Dominion Grocers Guild.¹⁹ By 1887, the Guild reportedly included nearly all of the wholesalers within this territory.²⁰ The express purpose of the Guild, reflected in its articles of incorporation, was to establish and enforce a price-fixing arrangement for sugar.²¹ The Guild had plans to expand its focus beyond sugar to other grocery products, such as tobacco, starch, and baking powder.

One might have expected the Guild to enforce price fixing through expulsion of noncompliant members. However, mere expulsion was probably ineffective.²² Indeed, a wholesaler selling unbranded commodity sugar might well prefer to stay outside the cartel and freely undercut its price.²³ 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.²⁴

Instead, the Guild sought the help of the refiners. As in the United States, Canadian wholesalers traded exclusion for collusion. The Guild helped the refiners exclude import

¹⁶ 98 entities signed an agreement among wholesalers discussed in more detail below. *See* REPORT, *supra* note 1, at 4; *see also id.* at 501–02 (Exhibit 1, “Sugar Agreement: Names of Subscribers”). The signatories included 14 firms that were both wholesale and retail dealers, and subsequently removed from the agreement. A few distributors were not part of the agreement, so 100 is a rough estimate.

¹⁷ *See* William J. Ashley, *The Canadian Sugar Combine*, in SURVEYS HISTORIC AND ECONOMIC 361, 365 (1900) (summarizing and expressing sympathy with this view).

¹⁸ Larger retail grocers likely had a similar effect in the United States.

¹⁹ The Guild was also known as, and originally formed as, the Wholesale Grocers Association of Montreal.

²⁰ REPORT, *supra* note 1, at 3 (Committee Report) (noting the 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) (stating that the Guild claimed to “represent[t] 93 per cent. of the trade of Canada,” without specifying whether this claim referred to sugar value, sugar volume, or the number of wholesalers).

²¹ *See* REPORT, *supra* note 1, at 507 (Exhibit 7, “Constitution and By-Laws of the Wholesale Grocers’ Association of Montreal”) (establishing a 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).

²² The record is silent on the perceived effectiveness of potential enforcement.

²³ Even if differentiated at the wholesale level, the temptation to undercut would have been present, but likely somewhat muted by lower consumer cross-price elasticities.

²⁴ This is despite discussions prior to 1886 about the desirability of fixing prices. *See* REPORT, *supra* note 1, at 101 (testimony of Edgar Wills, Secretary of the Dominion Grocers Guild).

competition and possibly other entrants by buying sugar exclusively from the refiners.²⁵ In return, the refiners supported the Guild’s maintenance of a wholesaler cartel. Figure 1 summarizes the combination.

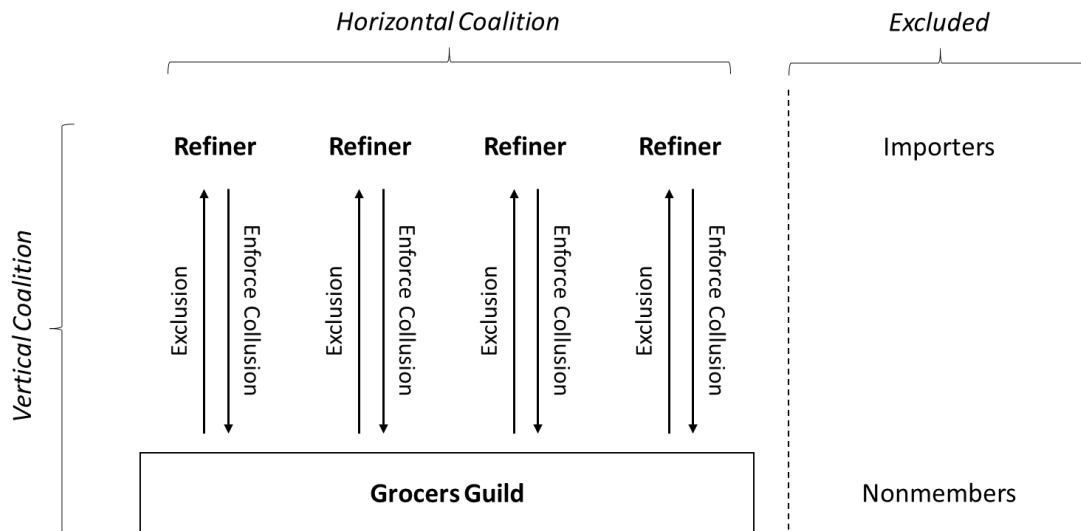


FIGURE 1: THE CANADIAN SUGAR COMBINATION

The House of Commons inquiry, conducted by a Select Committee, revealed the origin and key details of the combination. 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.²⁶ After several meetings among the wholesalers to discuss a combination, a meeting at the Windsor Hotel in Montreal was arranged in April 1887 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

²⁵ See *id.* 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.”). As discussed below, the Guild also helped enforce the refiners’ adherence to the combination.

²⁶ *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 later²⁷

The resulting combination provided the means to enforce the wholesaler cartel and to set the cartel price. Enforcement rested upon the refiners' surcharge for Guild nonmembers. The surcharge of a quarter-cent per pound was substantial, comparable in size to the wholesalers' margin.²⁸ The Guild made decisions about adherence to cartel pricing and provided updated lists of compliant wholesalers to the refiners.

The surcharge gave teeth to the threat of Guild expulsion, which could now be used to keep wholesalers in line. Moreover, the arrangement punished defecting wholesalers at little cost to Guild members, in contrast to traditional punishments implemented by means of a price war. The surcharge also applied to retailers and thereby protected Guild members from direct purchases.

The wholesalers' cartel price was calculated based on a refiner price that refiners reported on a weekly basis to the Guild.²⁹ The wholesalers added a specified increment—three-eighths of a cent per pound—to arrive at the wholesale price.³⁰ This margin was lower than the level described in the written agreement entered into by Guild members, which mandated a minimum margin of one-half cent.³¹ However, the written agreement apparently was not followed. The Select Committee's report dismissed the one-half cent margin as a mere proposal by the Guild.³²

²⁷ *Id.* at 11–12.

²⁸ As explained *infra*, compliant wholesalers earned margins of one-quarter to three-eighths of a cent per pound. For comparison, the overall wholesale price was around 7 cents. Later revisions of the agreement 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).

²⁹ *See id.* at 97–98 (testimony of George Childs, wholesaler) (describing the reporting process); *id.* at 503–04 (Exhibit 4, “Sugar Agreement”) (similar). For refiner price changes of a quarter-cent or more, the base price was updated more quickly. *See id.* at 97–98 (testimony of George Childs). The reporting process varied over time. At one point, each refiner made a report, and if the reports differed, an average was taken. *Id.* at 98–99. Eventually, reporting duties were delegated to a single refiner. *Id.* (“We wrote to the other refiners and . . . they agreed to establish their prices on the basis of the Canada Sugar Refinery.”).

³⁰ This increment applied to orders of less than 15 barrels; for larger orders, the increment was one-eighth cent less. *See id.* at 98 (testimony of George Childs) (“If we pay seven, we sell it in lots of 15 barrels at say, seven and a quarter and in lesser lots we sell it at seven and three-eighths.”).

³¹ This margin applied to small orders; for larger orders, the minimum margin was one-eighth cent less. *Id.* at 503 (Exhibit 4, “Sugar Agreement”) (“Scale of minimum advance to be as follows: Under 15 brls . . . 1/2 c. per lb.[.] 15 brls. and over in one sale . . . 3/8 c. per lb.”); *id.* at 16–18, 21 (testimony of George Lightbound) (describing wholesaler margins in similar terms).

³² *Id.* at 4 (Committee Report) (“The advance proposed and contended for by the Guild was higher, viz., under 15 barrels 1/2 cent per pound advance, and for larger quantities 3/8 cent advance.”).

The lower margin was set at the behest of the refiners. According to the Select Committee report, the refiners insisted upon a maximum three-eighths cent margin as a condition for entering the combination.³³ In other words, the refiners appear to have insisted upon maximum resale price maintenance as a form of self-protection against excessive wholesaler price increases. The potential role of maximum RPM appears to have been missed in earlier accounts, which have characterized the refiners' role as ordinary RPM,³⁴ perhaps because the underlying testimony is murky on this point.³⁵

Wholesalers clearly benefited from the combination, most obviously by securing enforcement of their cartel. A further benefit was exclusion. The surcharge to nonmembers not only secured compliance among wholesalers, but also placed retailers who purchased directly at a competitive disadvantage.³⁶

The benefit for refiners is less clear. The Guild's promise to buy only from participating refiners may have been effective in limiting export competition, beyond the heavy tariffs already in place. It is doubtful that the promise deterred entry by domestic refiners, given the likelihood and expectation that new refiners would be accommodated and added to the combination.³⁷ Refiners may have feared ruinous competition among the wholesalers and the prospect of taking on the burden of distribution.³⁸ In any event, the downside to the

³³ This was the maximum for small orders; for large orders, the maximum was one-eighth cent less. *See id.* at 4 (Committee Report) ("These agreements were made by the [r]efiners on the condition that not more than 1/4 cent per pound advance should be charged on granulated by the wholesale, to the retail dealer, on lots of 15 barrels or over, and 3/8 cent advance on smaller lots. This they stipulated with the Guild should be the maximum profit.").

³⁴ *See, e.g.,* L.A. Skeoch, *Canada, in* RESALE PRICE MAINTENANCE: A COMPARATIVE AMERICAN-EUROPEAN PERSPECTIVE 23, 25, 27 (B.S. Yamey ed., 2008 paperback ed.) (describing sugar combination as one of the first documented RPM arrangements in Canada); Marvel & McCafferty, *supra* note 3, at 366 (describing sugar combination as RPM).

³⁵ Although the report clearly described maximum RPM, testimony from George Drummond, the president of Canada Sugar, did not. At some points, he described maximum RPM. *See* REPORT, *supra* note 1, at 39 (testimony of George Drummond) ("They are bound not to charge more than that."); *id.* at 42 ("The first proposal came with a request that if we agree that we shall not charge more than a certain price will you do so and so."). At others, he described a minimum resale price. *See id.* at 38 ("minimum charge"); *id.* at 39 (agreeing that the agreement was about a "minimum advance"). And at others, he described a fixed charge. *See id.* at 37 ("[B]y the original agreement they agreed that the advance they should make should be so much on the price, whatever we gave them. They stated to me what the advance was. The very reasonable character of that advance was an element in that original agreement."); *id.* at 39 (describing the agreement as a "fixed advance"); *id.* at 40 (stating that wholesalers "are not to charge any less or any more"); *id.* at 41 (agreeing that wholesalers "just sell at the agreed upon advance").

³⁶ 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.").

³⁷ In fact, one refiner, probably the soon-to-open Woodside refinery in Halifax, had already indicated just such a plan. *See id.* at 14 (testimony of George Lightbound) ("The owners of a refinery recently started again or revived has signified their intention of going into the combination also.").

³⁸ *See* Geloso, *supra* note 11, at 11 (citing statements by George Drummond to this effect).

refiners from wholesaler cartelization was limited by the maximum RPM provision, which capped wholesaler margins at a relatively low level.

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 of toil and honourable dealing, and rich in valuable experience and public confidence, are threatened with extinction.³⁹

This critique was part of the basis for passage of the Competition Act of 1889.⁴⁰ Despite the new legislation, anticompetitive conduct in the industry appears to have persisted.⁴¹

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 economic principle 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

³⁹ *Id.* at 5 (Committee Report).

⁴⁰ 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). After 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).

⁴¹ 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. *See also* *Atl. Sugar Refineries Co. v. Att'y Gen.*, [1980] 2 S.C.R. 644 (Can.) (acquitting refiners of conspiracy to fix prices).

firms. The joint efforts may be either horizontally or vertically related. We then apply the economics of horizontal and vertical coalitions to the facts of the Canadian combination.

Our typology provides a map to some relatively uncharted waters. As Michael Whinston noted in 2006, the problem of mutually beneficial exclusion is understudied.⁴² Although Whinston concluded that “[f]urther study of multiseller/multibuyer models should be a high priority,”⁴³ 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.⁴⁴

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.⁴⁵ 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.⁴⁶

⁴² MICHAEL D. WHINSTON, LECTURES ON ANTITRUST ECONOMICS 177 (2006).

⁴³ *Id.*

⁴⁴ Steven C. Salop & David T. Scheffman, *Raising Rivals' Costs: Recent Advances in the Theory of Industrial Structure*, 73 AM. ECON. REV. (PAPERS & PROC.) 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.

⁴⁵ An extensive economics literature seeks to understand the conditions for successful predation. For an introduction, see W. KIP VISCUSI, JOHN M. VERNON & JOSEPH E. HARRINGTON, *ECONOMICS OF REGULATION AND ANTITRUST* 305–16 (4th ed. 2005); Louis Kaplow, *Recoupment, Market Power, and Predatory Pricing*, 82 ANTITRUST L.J. 167, 185–92 (2018). 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).

⁴⁶ 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 preyed 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.⁴⁷ 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.⁴⁸ The key insight of this argument is that, for the customer, the gains from trade with a more efficient entrant are higher, which provides an opening for the entrant.

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.⁴⁹ 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 percent of customers to purchase from it. For any given customer, if enough other customers (at least 80 percent of the total) 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 does depend 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.

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.⁵⁰ 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

⁴⁷ 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. Elec. Arts Inc.*, 633 F. Supp. 2d 976, 980 (N.D. Cal. 2009) (describing plaintiff's allegation that the maker of "Madden NFL" videogame improperly excluded rivals by acquiring exclusive rights to NFL trademarks).

⁴⁸ *See* ROBERT J. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 306–07 (1978) (discussing this point in the context of the *Standard Fashion* case).

⁴⁹ *See* WHINSTON, *supra* note 42, at 139. Whinston spells out additional conditions: that the parties are symmetrically informed as to all relevant features of the negotiating environment, and lump-sum payments are feasible.

⁵⁰ This is an example of the sort of "contracting externality" that lies at the heart of many of the economic models in this area.

analysis is complicated by competition among the retailers, which reduces their gains from facilitating entry.⁵¹ An illustrative case is *United States v. Dentsply International Inc.*⁵² In this case, a manufacturer of artificial teeth with a 75 to 80 percent 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 because dental laboratories, the purchasers of false teeth, strongly prefer to replace lost or broken false teeth in dentures with those from the same brand.⁵³ As a result, the size of an incumbent's installed base is a significant determinant of its 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.

In both the pricing and exclusionary contract strategies discussed thus far, the manufacturer does not share the benefits of exclusion with others. Aside from the manufacturer, no party prefers the exclusion of the manufacturer's rival. Hence, to the extent that consumers are complicit, it is because they have capitulated to threats or accepted an equilibrium outcome.

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 combination. 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.

⁵¹ 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 a 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.

⁵² 399 F.3d 181 (3d Cir. 2005).

⁵³ 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).

Given that entry threatens cartel stability, it is natural that a cartel should add exclusionary practices to its concerted effort to fix prices or otherwise enhance collective profitability.⁵⁴ 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.⁵⁵ This conduct has a direct analog to the single-firm predatory pricing discussed in Part II.A.

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 rivals⁵⁶ and denial of membership to a joint venture.⁵⁷ 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.⁵⁸ 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.⁵⁹

Even without any explicit agreement, moreover, parallel exclusion by multiple firms can block or slow would-be entrants.⁶⁰ Parallel exclusion is a pervasive issue, raised in the

⁵⁴ 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).

⁵⁵ 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 1879–1929*, 47 J. INDUS. ECON. 41, 62 (1999) (concluding that high-status entrants were more likely to be accommodated).

⁵⁶ *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); *E. 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).

⁵⁷ *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).

⁵⁸ *Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 486 U.S. 492, 495–96 (1988).

⁵⁹ *Id.* at 496–97.

⁶⁰ 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

context of many important oligopolies,⁶¹ including airlines,⁶² consumer goods,⁶³ entertainment,⁶⁴ health care,⁶⁵ and telecommunications.⁶⁶

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

wide-ranging inquiries into oligopoly structure, untethered to a particular theory of anticompetitive effect. "Shared monopolization" would be more accurate.

⁶¹ 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).

⁶² *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).

⁶³ For example, baby formula in Israel (OECD, *HEARING ON OLIGOPOLY MARKETS: NOTE BY ISRAEL* 4–5 (2015), [www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD\(2015\)17&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD(2015)17&docLanguage=En) (white paper prepared for OECD)), beer in Germany (*Stergios Delimitis v. Henninger Bräu 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).

⁶⁴ 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)).

⁶⁵ 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)).

⁶⁶ 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 Ordovery, 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), hraunfoss.fcc.gov/edocs_public/attachmatch/DA-11-1955A2.pdf (AT&T acquisition of T-Mobile licenses) (Wireless Telecommunications Bureau Docket No. 11-65)).

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 among the incumbents. 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.”⁶⁷ When new parents came home from the hospital, they typically stayed with the same brand. The Israeli antitrust authority concluded that the contracts collectively foreclosed entry, and imposed remedies designed to promote entry.⁶⁸ 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 with one another.⁶⁹

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 form a cartel. 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 each refiner’s 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 refiner price for use by Guild members in setting the wholesale price.⁷⁰ 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 accept whatever was decided.⁷¹ The refiners also apparently discussed the Guild’s proposal among

⁶⁷ OECD, HEARING ON OLIGOPOLY MARKETS: NOTE BY ISRAEL, *supra* note 63, at 4.

⁶⁸ *Id.* The remedy required, among other things, that each hospital must have at least two suppliers.

⁶⁹ See Hemphill & Wu, *supra* note 60, at 1226, 1237 (making this point); see also LOUIS KAPLOW, COMPETITION POLICY AND PRICE FIXING 125–73 (2013) (discussing a “paradox of proof”).

⁷⁰ 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). Notwithstanding the frequent uniformity of reported prices and eventual delegation of price reporting to a single refiner, see *supra* note 29, the Select Committee concluded that there was no agreement as to the actual price charged by the refiners. See 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”); see also *id.* at 97–98 (testimony of George Childs) (characterizing the reported price as merely “the starting point” for actual sales, stating that refiners “are quite at liberty to sell at a less price or higher. They don’t bind themselves to anything at all,” and describing the reported price as “only a nominal thing”). The import of this conclusion is unclear in light of the evidence, discussed *infra*, that the refiners had an understanding to reduce production.

⁷¹ *Id.* at 11 (testimony of George Lightbound) (noting attendance by Drummond from the Canada Sugar Refining Company, two individuals from the 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).

themselves before any decision was made.⁷² Finally, there was evidence that the refiners had an “understanding” to each reduce production under certain conditions.⁷³

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 typically good for consumer welfare.⁷⁴

A large economic literature identifies conditions under which exclusion by a horizontal coalition is successful, reaching a wide range of results that are highly dependent on particular modeling assumptions.⁷⁵ One point of consensus is that maintenance of the exclusionary equilibrium is easier where the strategy is simple and invariant to changes in market conditions, and compliance is easy to observe. That is likely true of a refiner’s decision to surcharge.

Moreover, the refiners’ exclusionary equilibrium had an additional enforcement mechanism. The Guild supplied the refiners with punishment against defection by promising to buy only from compliant refiners. It was therefore in the interest of each refiner to support

⁷² *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).

⁷³ *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.”).

⁷⁴ By contrast, if exclusion is socially desirable, a different analysis is needed. *See generally* Barak D. Richman, *The Antitrust of Reputation Mechanisms: Institutional Economics and Concerted Refusals to Deal*, 95 VA. L. REV. 325 (2009) (arguing that exclusionary coalitions of New York diamond merchants are procompetitive).

⁷⁵ 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 a 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 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 a single critical point).

the combination rather than suffer the costs of noncompliance. If every other refiner were to act according to its unilateral agreement with the Guild, and given the broad membership of the Guild, there might be little reason for an individual refiner to act differently. Indeed, each refiner might prefer to be the only one doing business with Guild members. Then all Guild business would go to that refiner, and entry at the refiner level still would be deterred.⁷⁶

C. VERTICAL COALITIONS

As discussed above, the Canadian sugar combination 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 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 enters into 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 form of duress, and 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 retailer's provision of exclusionary services to the manufacturer may itself simultaneously produce a flow of benefits to the retailer. 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 John Asker and Heski Bar-Isaac⁷⁷ building on the established proposition that many vertical

⁷⁶ In other words, compliance might be 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 combination, since a defecting wholesaler (or nonparty retailer purchasing directly) could secure supply from a nonparty refiner.

⁷⁷ John Asker & Heski Bar-Isaac, *Raising Retailers' Profits: On Vertical Practices and the Exclusion of Rivals*, 104 AM. ECON. REV. 672 (2014).

restraints exist to incentivize service provision by retailers.⁷⁸ The vast majority of the literature assumes that this service 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). The key point is that an alignment of manufacturer and retailer interests is not necessarily beneficial to consumers. 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, recall the American Sugar coalition. 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. Moreover, the rebate paid to wholesalers represented rents that were effectively transferred from American to its downstream partners.

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 refiners or wholesalers, it is better to preserve what profits exist and share them in such a way as to perpetuate their existence, rather than to see them dissipated through entry and competition.

With respect to the Canadian sugar combination, the centrality of the vertical coalition is reflected in the details of its formation. When the wholesale Guild met with the 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 benefited—indeed, one

⁷⁸ 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); 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).

wholesaler testified that he was injured by expulsion from the Guild.⁷⁹ 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.⁸⁰

As suggested in Part I, the wholesalers' main alternative to dealing with the refiners was not to buy from someone else, but to exit from the distribution of sugar.⁸¹ 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 as a mere statement of business reality.

III. ANTITRUST ENFORCEMENT

The facts of the Canadian sugar combination provide a useful prism for thinking about different doctrinal approaches to exclusionary conduct. As a thought experiment, transplant the coalition to the United States, and imagine that an excluded refiner challenged its exclusion as a violation of U.S. antitrust law. The plaintiff might allege one or more unlawful restraints of trade under Section 1 or improper maintenance of monopoly under Section 2.

The point of this thought experiment is not to second-guess the judgments of Canadian legislators considering these questions in the late 1880s. Instead, our intention is to use an important and rich set of facts to explore the strengths and limitations of current U.S. doctrine.

⁷⁹ 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.”).

⁸⁰ *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).

⁸¹ As one distributor testified:

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 . . . 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.

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.

Id. at 97 (testimony of George Childs).

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, 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 of excluding independent programmers.⁸² Although bundling by programmers is widespread, the plaintiff only sued one programmer. This approach has an important downside, in that it impedes presentation of the cumulative effect of parallel exclusion.

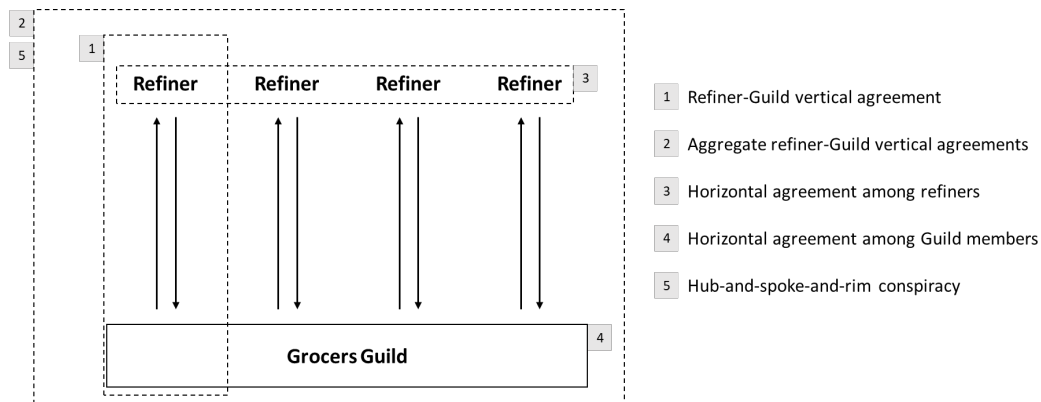


FIGURE 2. ENFORCEMENT APPROACHES

The Canadian sugar combination had the unusual feature that *each* agreement between a refiner and the Guild arguably secured the Guild’s promise to purchase only from compliant 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 in practice 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.⁸³

⁸² See Cablevision Complaint, *supra* note 64.

⁸³ For example, in *Woman’s Clinic, Inc. v. St. John’s Health System, 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 the conduct of another provider, who was not sued by the plaintiff, increased the exclusionary effect. The court barred the evidence. *Id.* at 864–65.

Limiting suit to a single firm also invites defendants to argue that the widespread adoption of a particular practice establishes that it is benign. For example, in a recent case alleging anticompetitive bundling by two distributors of surgical supplies, the court accepted the defendants' argument that "bundle-to-bundle" competition was an efficient practice.⁸⁴ However, widespread adoption may reflect parallel exclusion rather than efficiency.⁸⁵ Consistent with this point, the Supreme Court has noted that industry-wide RPM "should be subject to more careful scrutiny," not less,⁸⁶ although it is unclear whether this statement was meant to apply to exclusion strategies.⁸⁷

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 the 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 1.⁸⁸ The leading case here is *Standard Stations*.⁸⁹

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

⁸⁴ See *Suture Express, Inc. v. Owens & Minor Distribution, Inc.*, 851 F.3d 1029, 1041–44 (10th Cir. 2017).

⁸⁵ Cf. WHINSTON, *supra* note 42, at 178 (industry-wide nature of particular conduct might not demonstrate procompetitiveness).

⁸⁶ 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").

⁸⁷ 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.

⁸⁸ See *Hemphill & Wu*, *supra* note 60, at 1245–48 (discussing case law). We omit discussion of a further option, which is to allege collective monopolization (without conspiracy) under Section 2. See *id.* at 1236–40.

⁸⁹ *Standard Oil Co. v. United States (Standard Stations)*, 337 U.S. 293, 309 (1949) (discussing exclusion by a group of suppliers acting "collectively, even though not collusively").

sufficient market power to support liability.⁹⁰ This approach removes from the analysis an assessment of the collective effect of parallel exclusion. Even in Europe, where collective dominance is expressly recognized as a basis for liability, there is reluctance to aggregate. For example, consider *Magill*, perhaps the best known European refusal to deal case.⁹¹ 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, the Commission argued that each firm had a dominant position.⁹² Reflecting this, *Magill* is generally remembered as a single-firm dominance case, and the collective effect of the 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 deal 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 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.⁹³

⁹⁰ See, e.g., *In re Visa Check/Mastermoney Antitrust Litig.*, 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).

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

⁹² Case 89/205/EEC—*Magill TV Guide/ITP, BBC & RTE*, Comm'n Decision, 1989 O.J. (L 78) 43, ¶ 22.

⁹³ *Will v. Comprehensive Accounting Corp.*, 776 F.2d 665, 669 (7th Cir. 1985) (Easterbrook, J.).

Despite the awkward fit,⁹⁴ under current doctrine a coerced contract satisfies the agreement requirement.⁹⁵ 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.⁹⁶

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 to exclude among the refiners might not work. After all, the Select Committee apparently concluded that there was no refiner conspiracy. This is a common problem. Parallel exclusion cases sometimes collapse where plaintiffs fail to allege and prove an agreement among the excluders.⁹⁷ The consequence is that cases turn on the happenstance of provable agreement rather than the economic effect of the exclusion.

⁹⁴ 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).

⁹⁵ *Will*, 776 F.2d at 670 (“unwilling compliance’ satisfies the joint action requirement of § 1”) (citing *Perma Life Mufflers v. Int’l 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.”).

⁹⁶ 6 AREEDA & HOVENKAMP, *supra* note 95, ¶ 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 94, at 1800, 1819–21 (concluding that coerced purchasers do not have antitrust liability for tying).

⁹⁷ 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 was alleged and no single carrier had enough market power to trigger the quasi per se rule applicable to certain ties).

To be sure, 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.⁹⁸ 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 strategy 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.⁹⁹ The evaluation of the mobile providers’ conduct has emphasized 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-

⁹⁸ 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.

⁹⁹ See Paolo Siciliani, *Collective Dominance and Refusal to Supply: Closing the Gap in Article 82?*, 54 ANTITRUST BULL. 683, 694–96 & nn.42–44 (2009) (describing alleged refusals in France, Ireland, and Spain, and elsewhere). Cf. Telefonica Brasil S.A., Annual 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).

interest.”¹⁰⁰ Commentators have similarly urged regulators to focus on whether the decisions to exclude are interdependent or instead unilateral.¹⁰¹

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.¹⁰² 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.¹⁰³

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 agreement 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 competition from Amazon.¹⁰⁴ 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.

¹⁰⁰ Eur. Comm’n, 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 an incentive to defect).

¹⁰¹ See, e.g., Siciliani, *supra* note 99, at 701 (noting that conduct is lawful if “collective dominance” is 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”).

¹⁰² Compare Duarte Brito & Pedro Pereira, *Mobile Virtual Network Operators: Beyond the Hyperbolae*, COMPETITION POLY INT’L, Spring 2007, at 271, 276–77 (describing a 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. INDUS. 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) (unpublished manuscript), ssrn.com/abstract=2034217 (reaching a similar result and summarizing related literature).

¹⁰³ 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.

¹⁰⁴ *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).

This brief tour reveals the existence of significant enforcement gaps, particularly a reluctance to recognize the collective foreclosure effect of multiple vertical agreements and an excessive attention to the existence of a provable horizontal agreement. At the same time, our discussion reveals a silver lining in the assessment of complex coalitions. With increasing complexity, the likelihood increases that even if the conduct falls through a gap in one approach, it will be caught by one of the others.

IV. CONCLUSION

The Select Committee’s investigation of the Canadian sugar combination concluded that it “tend[ed] to produce and propagate all the evils of monopoly.”¹⁰⁵ It was, in the words of one witness, “the greatest conspiracy this country has ever seen.”¹⁰⁶ 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.”¹⁰⁷

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 (at the refiner level) for collusion (at the wholesale level). 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,

¹⁰⁵ REPORT, *supra* note 1, at 5 (Committee Report) (describing the sugar coalition among several others).

¹⁰⁶ *Id.* at 30 (testimony of J.A. Mathewson, wholesaler).

¹⁰⁷ *Chi. Bd. of Trade v. United States*, 246 U.S. 231, 238 (1918).

the sugar coalition resembles exclusion-for-exclusion trades in the production and distribution of oil, movies, news, and fashionable apparel.¹⁰⁸ Further examination is warranted of the interplay between different types of anticompetitive conduct and its role in real-world cases.

¹⁰⁸ See Elizabeth Granitz & Benjamin Klein, *Monopolization by “Raising Rivals’ Costs”: The Standard Oil Case*, 39 J.L. & ECON. 1, 2 (1996) (describing a trade of exclusion favoring Standard Oil in exchange for cartel ringmaster services benefiting railroads and exclusion of a competing pipeline); Barak Orbach, *Interstate Circuit and (Other) Antitrust Myths 53* (2018) (unpublished manuscript) (characterizing *Interstate Circuit v. United States*, 306 U.S. 218 (1939), as a trade of exclusion benefiting certain movie producers—a ban on double features—in exchange for exclusion benefiting certain exhibitors in the form of a price floor); 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 the Associated Press and Western Union); *Fashion Originators’ Guild of Am., Inc. v. FTC*, 312 U.S. 457, 463 (1941) (describing an arrangement in which retailers helped fashion designers to exclude copyists, and designers helped retailers to exclude competing sales outlets).