Robert Bork and Vertical Integration: Leverage, Foreclosure, and Efficiency

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Vertical integration occurs when a firm produces or uses something internally that it might otherwise purchase from or sell to others. For example, an automobile manufacturer that produces its own engines is vertically integrated “upstream” into a source of supply. If it also owns some of its retail sales stores, it is said to be vertically integrated “downstream” into distribution.

Robert H. Bork wrote extensively about vertical integration, and defended it as nearly always procompetitive. When Bork began to write about vertical integration in the 1950s, the courts feared that a vertically integrated parent company might “force” its subsidiary to deal with the parent. Bork noted that this analysis improperly assumed a market limited to the subsidiary.\(^1\) The alternative theory of vertical integration that Bork presented a quarter century later in his seminal book, *The Antitrust Paradox*, was beguilingly simple: If vertical integration creates efficiencies, then a vertically integrated firm would have cost advantages over unintegrated rivals. This might deter entry, but only as a result of increased competition. And, if vertical integration did not create any efficiencies, then it would not impede entry. Either way, vertical integration would not harm the competitive process. Bork drew similar conclusions about all forms of vertical integration, including vertical mergers and vertical integration by contract—mainly exclusive dealing, resale price maintenance, and tying.

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I. BORK AND THE HISTORICAL TREATMENT OF VERTICAL INTEGRATION

One might imagine a close relationship between the rise of large integrated firms in the United States and the growth of legal hostility toward vertical integration. The development of vertically integrated firms occurred much earlier, however, and generally in a policy regime that was relatively benign. Standard Oil, Ford Motor Company, United States Steel, International Harvester, and other vertically integrated firms all developed prior to the 1920s. A 1911 antitrust decree broke up Standard Oil but said little about Standard’s vertical integration.2 For two decades following that decision, the lower courts were favorably inclined toward vertical integration in the petroleum industry.3 In 1920, the Supreme Court refused to condemn a vertical merger involving United States Steel.4 International Harvester, which became the largest producer of agricultural implements in the early 20th century, initially acquired and operated its own coal mines, steel mills, railroads, and forest land for producing lumber.5

Bork began writing about vertical integration and antitrust policy upon graduating from law school at the University of Chicago in 1953. His first article on the subject, Vertical Integration and the Sherman Act, published a year later, noted a recent increase in antitrust attacks on vertical integration, but argued that these attacks had been happening since the early 1900s.6 At the time Bork was writing, there was plenty of judicial hostility toward vertical integration. But Bork considerably overstated his case about the period prior to the 1930s. He found a few early decisions that condemned vertical integration as predatory or monopolistic when the defendant was a dominant firm, and extrapolated from those.7 For example, United States v. Corn Products Refining Co. introduced the “price squeeze” theory of harm. The court

5 See Fed. Trade Comm’n, Causes of the High Prices of Farm Implements 672–75 (1920); see generally International Harvester, FORTUNE, Aug. 1933, at 21.
6 Bork, Vertical Integration, supra note 1, at 157 n.2 (1954) (citing Hale, supra note 4, at 923; Comment, Vertical Forestalling Under the Antitrust Laws, 19 U. CHI. L. REV. 583, 584 (1952); Alfred E. Kahn, A Legal and Economic Appraisal of the “New” Sherman and Clayton Acts, 63 YALE L.J. 293, 341 (1954)).
concluded that the defendant, a vertically integrated wholesaler, charged competing makers of corn syrup a wholesale price so high that they could not compete with the defendant’s own downstream resale prices.\textsuperscript{8} The court condemned this “squeeze” as a type of predatory pricing, but did not enjoin the vertical integration itself.\textsuperscript{9} And, in the 1920s, the Federal Trade Commission challenged Kodak’s acquisitions of distributors and retailers. The Supreme Court agreed that the acquisitions were unlawful but disapproved the FTC’s order of divestiture.\textsuperscript{10}

During the same period, however, the Supreme Court wholeheartedly approved vertical integration that was not found to be part of a monopolization scheme. In the 1920 \textit{United States Steel} decision, for example, the Court criticized the lower court for “underestimat[ing] the influence of the tendency and movement to integration, the appreciation of the necessity or value of the continuity of manufacture from the ore to the finished product.”\textsuperscript{11} While perhaps that tendency was not a “necessity, it had certainly became a facility of industrial progress.”\textsuperscript{12} Indeed, the perceived failure of the Supreme Court to apply the Sherman Act to block vertical integration through mergers was the reason that Congress amended Section 7 of the Clayton Act in 1950 so as to make it apply to vertical mergers.\textsuperscript{13}

Bork also discussed three decisions in which the Supreme Court condemned railroads with dominant positions in their service areas when they either bought large anthracite coal reserves or entered into exclusive dealing contracts, presumably to raise the costs of unintegrated rival railroads.\textsuperscript{14} For Bork, the railroad cases demonstrated the logical fallacy that a vertically integrated firm could increase its monopoly returns by charging a high price to unintegrated rivals—in this case, coal producers who did not own their own railroads. “The argument is that any rate the independents paid for transportation was a real cost to them, whereas the amount of the rate was a matter of indifference to the railroad owned coal companies because, in effect, they

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\textsuperscript{8} \textit{Corn Products}, 234 F. at 986–89.
\textsuperscript{9} \textit{Id.} at 1012–13.
\textsuperscript{11} United States v. U.S. Steel Corp., 251 U.S. 417, 442 (1920).
\textsuperscript{12} \textit{Id.}
\textsuperscript{13} \textit{See H.R. REP. NO. 81-1191, at 10–12 (1949); see also 4 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶ 902–903 (3d ed. 2008); 4A id. ¶ 1002; Brown Shoe Co. v. United States, 370 U.S. 294, 316–23 (1962) (summarizing the legislative history).}
paid the rate to themselves.”15 That is, Bork believed that in the railroad cases
the Supreme Court had relied on a fallacious leverage theory that vertical
integration could increase monopoly profits by permitting a firm to monopo-
lize two vertically related markets.

The railroad cases were idiosyncratic, however, largely because railroads
were common carriers, typically with exclusive routes and subject to more
oversight than ordinary business. Further, the principal concern was not lever-
age, but foreclosure. In the 1920 United States v. Reading Co. exclusive deal-
ing decision, the Court discussed the “Commodities Clause” of the Interstate
Commerce Act, as revised in 1906.16 That provision was intended to limit a
widespread railroad practice of integrating vertically into coal, timber, or
other commodities near their lines and then transporting these at lower rates
than railroad companies charged to competing sellers of the same commodi-
ties.17 The Supreme Court indicated that it was using the antitrust laws to
close a “gap” in the Commodities Clause, which prohibited railroad owner-
ship of commodities but not contractual arrangements.18 The Court concluded
that both ownership and exclusive contracting led to the same prohibited
result.19

In sum, it is hard to make out a case that use of the Sherman Act against
railroad vertical integration in the 1920s represented anything more than the
dominant view that railroads were specialized entities capable of creating bot-
tlenecks in markets where they were dominant, and thus requiring greater
government management. Further, the Sherman Act was a useful aid to the
Interstate Commerce Act in this task.

Through the 1920s, judicial attitudes toward vertical integration were more
benign than Bork suggested. This view was largely consistent with the eco-
nomics literature, which was quite favorable toward vertical integration prior
to the Great Depression. Economists generally emphasized that vertical inte-
gration leads to production cost savings and, to a lesser extent, savings in
transaction costs.20 The belief that vertical integration had much to do with
economy and little with monopoly dominated the thought of both the classical
political economists and early neoclassical economics. Adam Smith wrote lit-
tle about vertical integration as such, except to observe that bigger markets

15 Bork, Vertical Integration, supra note 1, at 166.
17 Act of June 29, 1906, § 1, 34 Stat. 584 (1906). See Leon Carroll Marshall, The Commodi-
ties Clause, 17 J. POL. ECON. 448 (1909); see also 1 Isaiah Leo Sharfman, The Interstate
Commerce Commission 42–43 (1931).
18 Reading, 253 U.S. at 43.
19 Id. at 60–62.
20 See Herbert Hovenkamp, The Opening of American Law: Neoclassical Legal
Thought ch. 12 (forthcoming 2014).
tend to permit greater division of labor. As a result, he concluded that in larger markets firms tend to purchase relatively more from specialty providers and provide relatively less for themselves.\textsuperscript{21} That observation was later interpreted by George Stigler as an argument that smaller markets were more conducive to vertical integration.\textsuperscript{22} Alfred Marshall’s magisterial \textit{Principles of Economics} likewise said remarkably little about vertical integration.\textsuperscript{23} Thirty years later, near the end of his life, Marshall wrote a much less influential book, \textit{Industry and Trade}, which was a descriptive account of industrial organization in various areas of enterprise.\textsuperscript{24} Most of this book attributed vertical integration to production cost savings or firms’ needs to control the quality of their inputs. However, Marshall did anticipate the view that product differentiation would yield greater vertical integration as inputs for manufactured products became more specific to the brand.\textsuperscript{25}

The same benign attitude prevailed among economists in the United States. Writing in 1925, Lawrence Frank defined vertical integration as “the functional coordination of one or more units in each of the several successive stages of production, so that they are all operated as a single, unified industrial process.”\textsuperscript{26} One of the most astute observers of vertical integration was Columbia economist John Maurice Clark, who rejected the “leverage” or “double monopoly profit” theory of vertical integration in 1923 in his book on the economics of fixed costs.\textsuperscript{27} By that time, the “leverage” theory had already entered Supreme Court discourse, but through patent cases rather than cases involving vertical integration or tying.\textsuperscript{28}

Clark observed that while integration was “commonly thought of as a way of getting two profits instead of one,” that observation could really mean no more than that firms seek out opportunities to earn profitable returns by expanding their business.\textsuperscript{29} Clark noted, however, that this fact did not explain why a firm would expand vertically rather than into differently related or even unrelated businesses. He concluded that vertical integration succeeds when


\textsuperscript{22} George J. Stigler, \textit{The Division of Labor Is Limited by the Extent of the Market}, 59 J. Pol. Econ. 185, 185 (1951).

\textsuperscript{23} Alfred Marshall, \textit{Principles of Economics} (1890).

\textsuperscript{24} Alfred Marshall, \textit{Industry and Trade: A Study of Industrial Technique and Business Organization; and of Their Influences on the Condition of Various Classes and Nations} (1919).

\textsuperscript{25} Marshall, supra note 24, at 147–48, 156, 373–81, 559–61.

\textsuperscript{26} Lawrence K. Frank, \textit{The Significance of Industrial Integration}, 33 J. Pol. Econ. 179, 179 (1925).

\textsuperscript{27} J. Maurice Clark, \textit{Studies in the Economics of Overhead Costs} (1923).

\textsuperscript{28} See infra text accompanying notes 67–68.

\textsuperscript{29} Clark, supra note 27, at 136.
the entrepreneur’s “knowledge of his own business will help him to produce just the kinds of material which that business needs to use.”30 In addition, Clark concluded, vertical integration arises when firms require greater reliability in the supply of inputs. The inputs “can be more carefully suited to the needs of the user than they would be if the two were independent concerns . . . .”31 “Another thing that is saved is all the work of negotiation, bargaining, haggling, stimulating demand (on the part of the seller), testing qualities (on the part of the buyer), and much of the other work of buying and selling . . . .”32 In short, Clark’s theory was that vertical integration produced savings in both production costs and transaction costs. Clark also suggested, however, that a firm that already had a monopoly position in one market might use that power as a “fulcrum” to obtain monopoly power in a vertically related market.33 In a chapter on price discrimination, Clark said nothing about its relationship to vertical integration.34

One important dissenting voice in the 1920s was John R. Commons, a leading American institutionalist.35 Commons, one of the more scholarly of the institutionalists, believed vertical integration to be inherently monopolistic.36

While Bork exaggerated the degree of hostility toward vertical integration prior to the 1930s, by the time he was writing in the 1950s, both the economic theory and the law had become far more critical of the phenomenon. The change resulted greatly from the Great Depression, which bankrupted thousands of small unintegrated firms and produced a political firestorm of campaigning against vertically integrated enterprises such as chain stores.37 The theory evolved as well, driven in considerable part by the publication of economist Edward Chamberlin’s The Theory of Monopolistic Competition.38 Chamberlin’s principal focus was product differentiation, which he believed led to excessive vertical integration.39 In addition to Chamberlin, University of Chicago economist Henry Simons argued in 1934 that vertical integration should be permitted only “so far as clearly compatible with the maintenance

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30 Id. at 137.
31 Id.
32 Id.; see also Lewis H. Haney, Integration in Marketing, 10 Am. Econ. Rev. 528 (1920).
33 CLARK, supra note 27, at 140.
34 See id. at 416–33.
35 The institutionalists were economists who rejected many of the rational actor assumptions that drove mainstream marginalist analysis. They exercised a powerful influence on legal policy even after they were all but ousted from mainstream economics. HOVENKAMP, OPENING OF AMERICAN LAW, supra note 20, ch. 7.
36 See, e.g., JOHN R. COMMONS, LEGAL FOUNDATIONS OF CAPITALISM 270 (1924).
37 HOVENKAMP, OPENING OF AMERICAN LAW, supra note 20, ch. 12.
38 EDWARD CHAMBERLIN, THE THEORY OF MONOPOLISTIC COMPETITION (1933).
39 Id. at 123.
of real competition.”\textsuperscript{40} Arthur R. Burns, who spent most of his career at Columbia University, argued in his 1936 book, \textit{The Decline of Competition}, that excessive vertical integration was a principal cause of noncompetitive market performance.\textsuperscript{41}

These views came to dominate the antitrust and intellectual property policies of the Second New Deal. Beginning with former Assistant Attorney General Thurman Arnold in the late 1930s, U.S. antitrust policy dramatically shifted from tolerance to a drastic attack on both ownership vertical control via the law of monopolization and mergers, and contractual vertical control via tying, exclusive dealing, and resale price maintenance.\textsuperscript{42} By the late 1930s and 1940s, vertical integration was widely perceived as almost inherently monopolistic. For example, Temporary National Economic Committee monographs from the early 1940s on the petroleum and motion picture industries found vertical integration to be responsible for monopolistic exclusion of smaller firms.\textsuperscript{43} Yale law professor Eugene Rostow, writing about the oil industry in 1948, proclaimed that vertical integration “is the basic means of achieving and maintaining monopolistic control over price.”\textsuperscript{44} And, in 1949, Northwestern University antitrust scholar Corwin Edwards argued that vertical integration was a significant bottleneck on the economy and proposed legislation that would regulate the amount of vertical control.\textsuperscript{45}

These concerns were also reflected in the major antitrust cases of the era, such as \textit{United States v. Yellow Cab Co.} in 1947\textsuperscript{46} and \textit{United States v. Paramount Pictures, Inc.} in 1948,\textsuperscript{47} as well as the 1945 \textit{United States v. Aluminum Co. of America (Alcoa)} decision, which condemned a vertically integrated dominant firm for engaging in a price squeeze by underselling unintegrated rivals.\textsuperscript{48} In \textit{United States v. Columbia Steel Co.}, the government went so far as to argue that vertical integration by large firms should be unlawful when the

\textsuperscript{40} Henry C. Simons, \textit{A Positive Program for Laissez-Faire} 20–21 (1934), reprinted in \textit{Economic Policy for a Free Society} (1948).


\textsuperscript{42} Hovenkamp, \textit{Opening of American Law}, supra note 20, ch. 15.


\textsuperscript{44} Eugene V. Rostow, \textit{A National Policy for the Oil Industry} 71–76, 117 (1948).

\textsuperscript{45} Corwin D. Edwards, \textit{Maintaining Competition} 130 (1949).

\textsuperscript{46} 332 U.S. 218 (1947).

\textsuperscript{47} 334 U.S. 131 (1948).

\textsuperscript{48} 148 F.2d 416, 437–38 (2d Cir. 1945); see Erik N. Hovenkamp & Herbert Hovenkamp, \textit{The Viability of Antitrust Price Squeeze Claims}, 51 Ariz. L. Rev. 273 (2009).
integrated components threatened to deal with each other to the exclusion of independent rivals, but the Supreme Court rejected that argument.\(^4^9\) The House Report on the 1950 Celler-Kefauver amendments to Section 7 criticized that decision, however,\(^5^0\) and in *United States v. E.I. du Pont de Nemours & Co.*, the Supreme Court changed its mind, concluding that self-dealing between vertically related components of a firm could be anticompetitive to the extent it made the market unavailable to unintegrated rivals.\(^5^1\) The Court accepted the government’s theory that *du Pont* “formed the combination with General Motors with the intention of getting a preference in the trade of General Motors.”\(^5^2\) The result, of course, was that vertical integration tended to be unlawful in precisely the circumstance where it was most valuable—mainly, where the integrated firm used internal transfers to avoid the costs of the market.

Influenced by Chamberlin, economists from the Harvard economics department and from the law school developed an influential “structuralist” approach to industrial organization and an antitrust policy that was suspicious of vertical integration. Joe S. Bain, a leading Harvard School structuralist economist in the 1950s, argued strenuously that vertical integration increased entry barriers, particularly when scale economies differed at two levels of production.\(^5^3\) His 1959 textbook, *Industrial Organization*, repeated and expanded these claims.\(^5^4\) Professor Carl Kaysen’s and Professor Donald Turner’s influential book, *Antitrust Policy*, also published in 1959, acknowledged that vertical integration in competitively structured markets must be explained by cost savings, but they were not sanguine about integration in concentrated or dominated markets.\(^5^5\) Although they did not recommend a per se rule, they did find a strong link between integration and monopoly control.\(^5^6\) These views were reflected in the 1968 Merger Guidelines, the first set of government merger guidelines, written under Turner’s direction and promulgated by the Antitrust

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\(^{5^0}\) H.R. REP. No. 81-1191, at 11 (1949).


\(^{5^3}\) JOE S. BAIN, BARRIERS TO NEW COMPETITION: THEIR CHARACTER AND CONSEQUENCES IN MANUFACTURING INDUSTRIES 142–66, 212 (1956). While Bain received his Ph.D. at Harvard under Edward Mason, he spent most of his career at the University of California, Berkeley.

\(^{5^4}\) JOE S. BAIN, INDUSTRIAL ORGANIZATION 168–69, 357–58 (1959).

\(^{5^5}\) CARL KAYSEN & DONALD F. TURNER, ANTITRUST POLICY: AN ECONOMIC AND LEGAL ANALYSIS (1959).

\(^{5^6}\) Id. at 120, 124–26.
Division just as he was returning to Harvard. The 1968 Guidelines concluded that “integration accomplished by a large vertical merger will usually raise entry barriers or disadvantage competitors to an extent not accounted for by, and wholly disproportionate to, such economies as may result from the merger.”

Bork published his first article on vertical integration just as the prevailing views were going in the opposite direction from his own. A few qualifying observations are necessary, however. First, while the predominant attitude toward vertical integration after the 1930s was skeptical or negative, the theory as expressed by economists was generally focused on foreclosure rather than leverage, as discussed below.

Second, Ronald Coase was the one dissenting voice that all sides of the argument ignored, including Bork. Coase published his now famous essay, The Nature of the Firm, in 1937, just as the American post-New Deal critique of vertical integration was getting underway. At the time, Coase was still teaching at the London School of Economics. He immigrated to the United States in 1951 and was a yet little known professor at SUNY Buffalo in 1954, when Bork published his first vertical integration article. Coase then went to the University of Virginia in 1958, where he wrote The Problem of Social Cost, and to the University of Chicago in 1964. In his 1937 article, Coase argued that one could use the basic tools of marginalist analysis, which he borrowed from Alfred Marshall, to explain on a decision-by-decision basis when a firm produces something for itself and when it buys from others. Using the market is costly, Coase observed, just as internal production is costly. Consequently, a firm bent on maximizing profits makes each make-or-buy decision by comparing payoffs at the margin. The theory has nothing whatsoever to do with monopoly and applies to small and large firms alike.

Nearly all economists and antitrust writers in the 1950s ignored Coase. For example, Bain’s 1959 Industrial Organization text has a lengthy treatment of

61 Coase, The Nature of the Firm, supra note 59, at 386–87 (“[A] definition of a firm may be obtained which is not only realistic in that it corresponds to what is meant by a firm in the real world, but is tractable by two of the most powerful instruments of economic analysis developed by Marshall, the idea of the margin and that of substitution, together giving the idea of substitution at the margin.”).
vertical integration, much of it hostile, and never mentions Coase. Nor does Kaysen and Turner’s Antitrust Policy. Bork did not cite Coase in his 1954 article on vertical integration. The extent to which Coase’s article on the firm went unrecognized is quite extraordinary. In 1942, economist Kenneth E. Boulding, who was to become an important public intellectual, published an article entitled The Theory of the Firm in the Last Ten Years, a period that included Coase’s 1937 publication date. Boulding mentioned a short piece by Coase on monopoly pricing, which was published in the same year as The Nature of the Firm, but he did not cite Coase’s more important essay. In a 1949 article on vertical integration and antitrust policy, economist Morris A. Adelman cited Coase’s article for the proposition that vertical integration transfers resources from one division to another without a market, but took nothing else away from Coase. The balance of his article was concerned with harms resulting from leverage and foreclosure.

II. LEVERAGE AND FORECLOSURE THEORIES

As discussed above, critics of vertical integration have largely focused on two primary theories of alleged harm, leverage and foreclosure. The line between the two is often blurred.

A. LEVERAGE

“Leverage” is the idea that a company can extract additional profits from its dominant position in a product or service by “extending” that position in some way. The idea originated in nineteenth century decisions developing the “first sale,” or patent exhaustion doctrine, which postulated that by imposing restraints on a patented good after it was sold, a patent holder could leverage its position to extract revenues beyond what the Patent Act authorized. In its 1863 decision Bloomer v. Millinger, the Supreme Court held that patentees “are entitled to but one royalty for a patented machine.” This “double royalty” or “leveraging” critique has been a prominent part of first sale jurisprudence ever since.

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63 Kaysen & Turner, supra note 55, at 120–27, 256, 296.
65 Id. at 796 (citing R.H. Coase, Some Notes on Monopoly Price, 5 Rev. Econ. Stud. 17 (1937)).
66 Morris A. Adelman, Integration and Antitrust Policy, 63 Harv. L. Rev. 27, 29 n.3 (1949) (quoting Coase, The Nature of the Firm, supra note 59, at 389) (“[T]he distinguishing mark of the firm is the supersession of the price mechanism.”).
Justice Brandeis explicitly imported this leveraging theory into tying doctrine in his 1931 opinion for the Court in *Carbice Corp. of America v. American Patents Development Corp.* The Court in that case refused to enforce a tie between the defendant’s ice box and its unpatented dry ice on the theory that the defendant was trying improperly to obtain a second royalty “from the unpatented supplies” used with its patented ice box and thereby “monopolize the commerce in a large part of the unpatented materials used in its manufacture.” Any harm in this case could not have come from foreclosure of the dry ice market. Dry ice—frozen carbon dioxide—was an unpatentable commodity produced at that time in virtually every town in the United States as a refrigerant for mechanical ice boxes.

Thurman Arnold placed his imprimatur on the leverage theory in his 1940 book, *The Bottlenecks of Business*, written while Arnold was head of the Antitrust Division. Arnold critiqued *Ethyl Gasoline Corp. v. United States*, a government resale price maintenance action against a firm that placed its Ethyl antiknock compound into gasoline in a .023 percent solution and then imposed a resale price on the gasoline itself. As a result, Arnold complained, Ethyl “required only one gallon of this patented fluid” to control the price of “forty-two hundred gallons of unpatented gasoline.”

In the 1940s, the *Carbice/Ethyl* leveraging rationale was imported into antitrust policy at the behest of the government, where it was used to justify a per se rule against tying arrangements. The rule was applied in cases where the tied products were unpatentable commodities, such as salt, where foreclosure was not even conceivable. The perceived harm was thought to flow mainly from excessive prices, not from exclusion of rivals.

By the early 1950s when Bork was writing, this form of leverage was considered by at least some economists to be a logical fallacy. Because price and output are determined by consumer demand, any upstream monopolist of a single stage could obtain all available monopoly profits, and one could not enlarge monopoly profits by monopolizing a second stage as well. Charging more at one stage would require an offsetting reduction at a different stage, or

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70 BOHANNAN & HOVENKAMP, CREATION WITHOUT RESTRAINT, supra note 68, at 261–64.
73 ARNOLD, supra note 71, at 26; see also Ethyl, 309 U.S. 436; HOVENKAMP, OPENING OF AMERICAN LAW, supra note 20, ch. 10.

the monopolist would no longer be maximizing profits. Ward Bowman Jr.’s well-known article on tying, *Tying Arrangements and the Leverage Problem*, which offered this critique of the leverage fallacy, was not published until three years after Bork’s article. Bork presented the critique as well, but he observed that the critique did not originate with him either. It could be traced back to at least Myron Watkins, a New York University economist who had observed in the late 1930s that

> [T]he sale or lease of one article upon condition that a stipulated quantity or number of another article or articles be bought or leased from the same concern imposes a handicap, other things being equal, upon the distribution of the first article. . . . Under freely competitive conditions, therefore, the adoption of the policy of the tying contract would tend to hinder distribution of one product as much as it fostered distribution of the other or “tied” product. There could be no advantage in the employment of such a policy not offset by a commensurate disadvantage.

As noted previously, John Maurice Clark also critiqued the theory in his 1923 book, *Studies in the Economics of Overhead Costs*. Bowman added some useful illustrations that for complementary goods, consumers’ willingness-to-pay depends on the value that they attribute to the combination. Assuming a combination is already being sold at its profit-maximizing price, a firm can increase the price of one element only with a corresponding decrease in the price of the other. In addition, Bowman explained variable proportion ties as price discrimination devices, reflecting observations that Professor Aaron Director and former Attorney General Edward H. Levi had made a year earlier.

Like many of these other commentators, Bork rejected the leverage theory. In *The Antitrust Paradox*, Bork examined the case of a vertical merger between a monopoly firm upstream and another one downstream. He applied the same double monopoly profit analysis to conclude that a firm that owned this double monopoly would assess exactly the same markup as two firms that operated separately. Bork explained, “Though he now holds both manufacturing and retailing, the monopolist is still factoring the same consumer de-

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78 See supra text accompanying notes 27–34.


mand and the same costs at both levels. The maximizing price to consumers, therefore, remains the same. In sum, Bork fully rejected the “leverage” or “double monopoly profit” theory of potential harm from vertical integration.

B. FORECLOSURE

“Foreclosure” theories of harm differ from leverage theories by treating vertical integration as a tool for restricting the opportunities of unintegrated rivals. A number of prominent commentators rejected the leveraging theory but nonetheless accepted foreclosure theories of harm. For example, the discussion of vertical integration in Kaysen and Turner’s book on antitrust policy was entirely focused on the use of vertical integration to create bottlenecks that foreclosed entry, such as Alcoa’s acquisition of all known bauxite supplies or sites for power stations.

By contrast, members of the Chicago School typically rejected both leverage and foreclosure theories, concluding that they were really two variations of the same thing; there is no point in using vertical integration to foreclose competitors if you cannot leverage your position in one market to obtain more monopoly profits in a vertically related market.

Bork seems to have agreed with this view. He observed that a vertical merger would cause realignment of purchasing patterns, but not higher prices. He found “foreclosure” only to the extent that the vertical merger reduced costs, thus excluding less efficient unintegrated rivals. Some commentators had suggested that vertical integration forecloses rivals by forcing two-level entry. But Bork responded by arguing that two-level entry is no more difficult than single level entry, provided that capital markets are efficient. Other commentators, including Judge Richard Posner, later found Bork’s complete lack of concern about strategic entry deterrence to be extreme and unrealistic.

The Chicago School’s and Bork’s real objection to the Harvard School in the 1950s and 1960s was not to the double monopoly profit leverage theory, which the Harvard School never espoused. Rather, it was to the Harvard School’s position on the likelihood of foreclosure, which in turn depended on views regarding the ubiquity, height, and anticompetitive effects of barriers to

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81 Id.
82 KAYSEN & TURNER, supra note 55, at 120–21.
83 BORK, ANTITRUST PARADOX, supra note 80, at 232–33.
84 Id. at 236–37. See also his related critique of Areeda. Id. at 239–41 (discussing PHILLIP E. AREEDA, ANTITRUST ANALYSIS: PROBLEMS, TEXT, CASES 675–76 (2d ed. 1974)).
85 BORK, ANTITRUST PARADOX, supra note 80, at 241.
entry, as well as to the role that vertical integration might play in increasing them. One might agree fully that vertical integration will not enable a firm to earn double monopoly profits, thus rejecting leverage, but still believe that vertical integration could increase the duration of monopoly. The seriousness of this problem depends largely on one’s views of the threat posed by entry barriers, and Bork treated it as negligible. For example, The Antitrust Paradox contains no sustained discussion of the role of intellectual property rights in limiting entry or mobility, except for a brief mention of Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp. and improper infringement actions. Bork’s chapter on entry barriers in The Antitrust Paradox viewed these barriers as virtually nonexistent, remarking, “They are ghosts that inhabit antitrust theory.” He then rejected virtually every source of entry barriers that the reigning literature recognized, including product differentiation, brand recognition and advertising, capital requirements, and dealership networks.

Mainstream economic thinking today is not nearly as hostile toward vertical integration as it was when Bork began writing on this topic. Indeed, today most vertical integration is viewed as economically beneficial and competitively benign. Nevertheless, many writers recognize that there can be exceptional cases in which vertical integration can facilitate the exercise of market power by making entry or rival expansion more costly, riskier, and thus less likely. Further, these risks exist in connection with all forms of vertical integration, whether by new entry, merger, or exclusionary contracting, including tying and exclusive dealing.

Bork himself modified his position on entry barriers, at least for a time. In the late 1990s, he consulted for Netscape in the Antitrust Division’s challenge to Microsoft’s exclusionary practices directed mainly against that firm—a decision that provoked caustic criticism from some of Bork’s acquaintances at places such as the Cato Institute. Recalling the case, he later described Bill

88 Id. at 310, 329.
89 Id. at 312–14.
90 Id. at 314–20.
91 Id. at 320–24.
92 Id. at 324–29.
93 See 3B Areeda & Hovenkamp, supra note 13, ¶ 756a (discussing ownership vertical integration); 11 Herbert Hovenkamp, Antitrust Law ¶ 1803 (3d ed. 2011) (discussing contractual integration); see, e.g., Comcast Cable Commc’ns, LLC v. FCC, 717 F.3d 982 (D.C. Cir. 2013).
Gates’s attempt to tie Microsoft Windows to Internet Explorer as a way “to leverage the [Windows] asset to make people use IE instead of [Netscape] Navigator.”

He gave full credence to the theory that Microsoft could use a form of leverage, using the Windows operating system as a fulcrum for creating a decisive advantage in its own web browser, Internet Explorer.

However, near the end of his life, in an article commissioned by Google and co-authored with Gregory Sidak, Bork returned to a more traditional Chicago-style critique of leveraging theory, castigating the idea that Google could use leverage from its position in the general search market to obtain additional profits in downstream markets. Bork and Sidak also cited the elimination of double marginalization as an argument favoring vertical integration.

Even Bork’s own strident anti-structuralism had its limits. He perceived Microsoft as a structural monopolist in its Windows operating system, not likely to be upset by market forces. In contrast, Google search operated in a competitive market with frequent entry and easy ability of consumers to switch.

III. VERTICAL INTEGRATION BY CONTRACT

In 1965, Bork finally cited Coase’s The Nature of the Firm in arguing that vertical integration by ownership and vertical integration by contract are economically equivalent forms of conducting business. Bork used the term “contract integration.” Three years later, he cited Coase’s article again for the proposition that resale price maintenance is simply a form of contract integration.

Bork’s writing about tying arrangements, exclusive dealing, and resale price maintenance were generally consistent. He came close to advocating


98 Bork & Sidak, supra note 97, at 675.

99 In full disclosure, the author has also consulted both against Microsoft and for Google.


rules of per se legality for all of them, just as he did for ownership vertical integration.

Bork viewed intrabrand restraints (resale price maintenance and vertical territorial or customer divisions) as posing a threat of collusion, but nothing more.102 His second article in a series on price fixing and market definition offered an elaborate taxonomy of the “free rider” problem, which he saw as pervasive in markets where independent dealers traded in a common brand.103 The principal threat to competition that he acknowledged was that intrabrand restraints could facilitate collusion by manufacturers.104

Bork paid little attention to what today seems to be the more pervasive problem, which is downstream collusion by dealers or limitations on competition among dealers imposed by a single powerful dealer.105 This may be because he believed so strongly that dealer level entry barriers are virtually nonexistent.106 Notwithstanding Professor Lester Telser’s famous query why manufacturers might want fair trade107 or legalized resale price maintenance (RPM), throughout history, most of the political urge for RPM has come from retailers and other small dealers rather than manufacturers.108

In addition, Bork’s view that contractual restraints were nothing more than a form of vertical integration may have blinded him to some of the collective action problems that distinguish contractual restraints from ownership restraints. Even if they have price-setting authority, wholly owned retail subsidiaries of a common parent generally lack the incentive collectively to reduce output and fix prices in a way that robs their supplier parent of profits. They share the same bottom line. With independent dealers the calculus is different, however, and downstream price fixing can enrich dealers even as it impoverishes suppliers. Simply put, contractual distribution restraints are an instance of vertical integration, but they are also both something less and something


104 E.g., Bork, Resale Price Maintenance and Consumer Welfare, supra note 101, at 950.

105 See 8 AREEDA & HOVENKAMP, supra note 13, ¶ 1604. On the use of RPM to facilitate dealer collusion in the early 20th century, see HOVENKAMP, ENTERPRISE AND AMERICAN LAW, supra note 41, at 340–47.

106 See BORK, ANTITRUST PARADOX, supra note 80, at 324–29.

107 Telser, supra note 103.

108 See HOVENKAMP, OPENING OF AMERICAN LAW, supra note 20, at ch. 12.
Contracts are rarely so complete that they deprive independent dealers of every possibility of collective action adverse to their supplier.

Prior to *The Antitrust Paradox*, Bork wrote relatively little about tying and exclusive dealing—much less than about intrabrand restraints. *The Antitrust Paradox* contains full chapters on each, however.\(^{109}\) Already in his 1954 article he acknowledged that tying can be used for one of two purposes: “(1) Price discrimination; [or] (2) gaining a monopoly of a product that is complementary to another product of which a monopoly is already held.”\(^{110}\) The price discrimination rationale, which Bork did not elaborate upon, preceded Bowman’s article by three years, but Bork attributed the observation to Aaron Director, which is where Bowman read it as well.\(^{111}\)

Similar to his position on vertical integration generally, Bork’s attitude toward both tying and exclusive dealing was heavily driven by his conception of entry barriers. He concluded categorically that exclusive dealing and requirements contracts “are forms of vertical integration.”\(^{112}\) He was severely critical of the Supreme Court’s *Standard Oil Co. of California v. United States*\(^{113}\) and *FTC v. Brown Shoe Co.*\(^{114}\) decisions for condemning exclusive dealing on small market shares and with no apparent understanding about how the exclusivity was being used.\(^{115}\) He concluded that “precisely the same theory” governs exclusive dealing and vertical mergers.\(^{116}\)

Bork’s principal argument that exclusive dealing is not exclusionary is that dealers would not agree to exclusivity simply to give their profits to someone else. If an equally efficient alternative supplier were present, dealers would prefer competitive rather than monopolized output.\(^{117}\) Bork also argued that relatively short-term contracts with large numbers of dealers would be unlikely to cause competitive harm because the contracts would come up frequently for rebidding, constantly creating new opportunities for competition.\(^{118}\) After a relatively quick survey of the case law and literature, he concluded categorically, “The truth appears to be that there has never been a case

\(^{109}\) *Bork, Antitrust Paradox*, supra note 80, at 299–309 (discussing exclusive dealing); 365–81 (discussing ties).

\(^{110}\) Bork, *Vertical Integration*, supra note 1, at 196 n.129.

\(^{111}\) *Id.* Bowman also acknowledged Director as the source of his explanations for tying. See Bowman, *Tying Arrangements*, supra note 76, at 19 n.d1; *see also* Robert H. Bork & Ward S. Bowman, Jr., *The Crisis in Antitrust*, 65 Colum. L. Rev. 363, 366 (1965) (acknowledging Director’s influence).

\(^{112}\) *Bork, Antitrust Paradox*, supra note 80, at 299.

\(^{113}\) 337 U.S. 293 (1949).

\(^{114}\) 384 U.S. 316 (1966).

\(^{115}\) *Bork, Antitrust Paradox*, supra note 80, at 299–300.

\(^{116}\) *Id.* at 303.

\(^{117}\) *Id.* at 304–05.

\(^{118}\) *Id.* at 306.
in which exclusive dealing or requirements contracts were shown to injure competition.119

On tying, Bork wrote The Antitrust Paradox just as the Supreme Court was becoming more critical about its per se tying rule, which it had been applying aggressively since the late 1940s.120 United States Steel Corp. v. Fortner Enterprises, Inc. (Fortner II), the Supreme Court’s first call for a closer look at ties that took power and anticompetitive effects seriously, preceded The Antitrust Paradox by one year.121 Also preceding Bork’s Paradox was Posner’s highly critical but more balanced approach in his 1976 book, Antitrust Law, which Bork did not cite in his discussion of tying.122 Bork’s chapter on tying thoroughly eviscerated the Supreme Court’s per se rule against ties, particularly its failure to take market power requirements seriously.123 He also related tying law’s “separate products” requirement to efficiency, an idea that the Supreme Court rejected a few years later in its Jefferson Parish Hospital District v. Hyde decision124 but that has continued to find traction in antitrust writing.125

Bork’s dominant theory of tying was that it was a form of price discrimination or nondiscriminatory metering of use—a possibility he had initially raised in 1954.126 He also noted the possibility that tying could achieve “economies of scale,” which really referred to transaction cost savings attending joint provision; tying “may cut selling costs or internal administrative costs, or it may be less expensive to combine service calls and call on customers for other purposes.”127 Finally, Bork recognized that “technological interdependence” might justify certain ties and wondered “whether this justification for tying is not worthy of more respect than it has been accorded.”128

119 Id. at 309.
121 United States Steel Corp. v. Fortner Enters., Inc. (Fortner II), 429 U.S. 610 (1977).
123 Bork, Antitrust Paradox, supra note 80, at 368–70.
125 See, e.g., Herbert Hovenkamp, Federal Antitrust Policy: The Law of Competition and Its Practice §10.5e (4th ed. 2011); see also Jack Walters & Sons Corp. v. Morton Bldg., Inc., 737 F.2d 698, 703 (7th Cir. 1984) (relating the “separate products” requirement to “rather obvious economies of joint provision”).
126 See Bork, Antitrust Paradox, supra note 80, at 376–78; Bork, Vertical Integration, supra note 1, at 196 & n.129. Bork also recognized rate regulation avoidance as a possible rationale. See Bork, Antitrust Paradox, supra, at 376.
127 Bork, Antitrust Paradox, supra note 80, at 378–79.
128 Id. at 380.
IV. CONCLUSION

Bork’s thinking about antitrust policy was much more original in the 1950s and 1960s than it became later, when he popularized the Chicago School approach to antitrust law in *The Antitrust Paradox*. Nevertheless, that book was a tour de force, combining ideas that originated with both himself and others, both inside and outside the Chicago School. He was a master of simple statement, and his book brought his own theory of antitrust to large numbers of people who had little grasp of technical economics. On the other side, his simplicity has made him an easy and frequent target for critics.

Today, the simple views expressed in *The Antitrust Paradox* often seem anachronistic—perhaps because it accomplished its goals so successfully. But antitrust itself has shifted focus. Bork’s book is populated by antitrust defendants such as *Brown Shoe*, *Standard Stations*, *Sealy*, *Topco*, *Schwinn*, and *Sylvania*. These were all low-tech firms, or at least the antitrust dispute arose in areas unrelated to technology. The most common antitrust cases in the 1970s involved product differentiation, distribution, and dealers in physical goods. In the 35 years since *The Antitrust Paradox* was written, the focus of antitrust litigation has moved into intellectual property rights, technology and innovation, information systems, and networks. While much of what Bork said may still apply, it often does so less categorically. That may explain why Bork was willing to “switch sides” in the *Microsoft* litigation; he saw a new kind of market that raised possibilities for exploitation that markets for the distribution of physical products did not offer.

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129 Bork’s antitrust scholarship was cited three times by the Supreme Court prior to the publication of *The Antitrust Paradox*. See Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 56, 66 n.8, 69 n.9, 70 n.10 (1977); United States v. Topco Assocs., 405 U.S. 596, 609 n.10 (1972); FTC v. Procter & Gamble Co., 386 U.S. 568, 597, 604 (1967) (Harlan, J., concurring). However, the Supreme Court has cited *The Antitrust Paradox* 17 times, most recently in *Leegin*. Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877, 889, 914 (2007).