ASSESSING VERTICAL MARKET RESTRICTIONS: ANTITRUST RAMIFICATIONS OF THE TRANSACTION COST APPROACH

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Whether troublesome antitrust issues are posed when vertical restraints are placed on distributors by manufacturers has long been disputed. Although economic analysis is needed to assess the ramifications of such restraints, this analysis comes in a variety of forms and does not speak with one voice to these issues. Defective economic reasoning predictably leads to results that are inimical to economic efficiency and sound public policy. Such was the case when franchise restrictions were held anticompetitive in *United States v. Arnold, Schwinn & Co.*[1]

This Article develops the argument that failure to make express allowances for transaction cost considerations is responsible for mistaken public policy in this area.[2] The transaction cost approach applies symmetrically both to an assessment of the efficiency gains, if any, arising from vertical restraints and to an evaluation of the strategic purposes and effects, if any, that accompany such restraints. After developing the justifications for, and occasional anticompetitive effects of, vertical market restrictions, I will suggest guidelines for federal antitrust policy. Part I outlines the general transaction cost approach and concludes that antitrust enforcement agencies and the courts should assume that vertical market restrictions are efficiency-enhancing unless certain structural conditions exist within the industry. Part II discusses strategic behavior and the structural characteristics of industries needed to support strategic outcomes. Vertical restraints pose troublesome antitrust issues only when these

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1 388 U.S. 365 (1967).

2 For a discussion of the transaction cost approach, see note 5 *infra*. The transaction cost approach is especially helpful in the context of vertical market relations. *See* Phillips, Schwinn *Rules and the "New Economics" of Vertical Relations*, 44 ANTITRUST L.J. 573 (1975) (transaction cost theory is the "New Economics" of vertical market relations).

conditions exist. Part III examines the development of American distribution systems late in the nineteenth century and concludes that efforts to economize on transaction costs played a central role in the forward integration of certain manufacturers into distribution. Part IV applies my economic analysis to the facts and law of *Schwinn* and concludes that failure to recognize and make allowances for transaction costs is what led to public policy error. Part V contrasts the premises of alternative approaches to vertical restrictions with those of the transaction cost approach. The legal principles derivable from the transaction cost approach are summarized in part VI. When evaluated in light of these proposed legal principles, the Supreme Court's recent decision in *Continental T.V., Inc. v. GTE Sylvania Inc.*[3] can be seen to rest on much sounder ground than did the *Schwinn* decision.

I. Economizing on Transaction Costs

A. *Background*

The relevant unit of economic analysis differs, depending upon the behavior under examination. When the purpose is to explain alternative modes of organization, the fundamental unit of analysis is the transaction.[4] Such an approach recognizes that neither firms nor markets come in predetermined shapes. Rather, both evolve in active juxtaposition to one another. Strategic purposes aside, the object of that evolution is to reach a complementary configuration that economizes on transaction costs.[5] This elementary way of studying economic practices and institutions has only recently been introduced into antitrust economics.[6] Both major and minor errors of enforcement can be attributed to its previous neglect. Its neglect has had especially serious consequences in the area of vertical market relations.

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[3] 433 U.S. 36 (1977).

[4] *See* Commons, *Institutional Economics*, 21 Am. Econ. Rev. 648 (1931).

[5] *See* Williamson, *Economies as an Antitrust Defense Revisited*, 125 U. Pa. L. Rev. 699, 723 (1977) [hereinafter cited as *Economies Defense*]. This oversimplifies somewhat, in that it takes technology as given. Strategic purposes aside, the more general purpose of economic organization is to devise arrangements that economize on the sum of production and transaction costs.

The basic tenets of the transaction cost approach are stated succinctly in Williamson, *The Economics of Antitrust: Transaction Cost Considerations*, 122 U. Pa. L. Rev. 1439, 1442-43 (1974) [hereinafter cited as *Transaction Cost Considerations*].

[6] *Transaction Cost Considerations, supra* note 5, at 1442-43.

I have examined the vertical integration of successive production stages from a transaction perspective elsewhere.[7] The argument may be summarized in the following conclusions: (1) vertical integration in production is explained primarily by transaction cost considerations rather than technological determinancy;[8] (2) although vertical integration commonly yields transaction cost savings, strategic consequences that pose antitrust concerns occasionally arise;[9] (3) antitrust enforcement ought to be more discriminating and restrict its attention to cases in which strategic effects arguably appear;[10] and (4) although vertical integration serves to overcome some of the disabilities to which interfirm trading is subject, the successive integration of additional transactions eventually engenders operating limitations of its own.[11]

This Article deals with vertical market relations between the production and distribution stages. Each of the conclusions reached in my study of the vertical integration of production holds true when the production-distribution nexus is assessed. Some specific differences should be recognized, however, and it is instructive to examine the interface between production and distribution on its own terms. Two novel problems, neither of which is present when integration occurs in intermediate product markets, arise when a firm considers forward integration into distribution.

First, final consumers are ordinarily much less well informed than industrial buyers. Specific efforts to "assist" consumers, sometimes taking the form of product differentiation, may be warranted and observed on this account. Second, but for vertical restrictions, distributors' efforts to promote local profitability objectives can sometimes impair the integrity of the distributorship system. This is often subsumed under the heading of "free rider" effects,[12] but the more general phenomenon is that of subgoal pursuit[13] with adverse systems consequences.

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[7] *See* O. WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS 82-131 (1975); Williamson, *The Vertical Integration of Production: Market Failure Considerations*, 61 AM. ECON. REV. 112 (1971).

[8] *See* O. WILLIAMSON, *supra* note 7, at 82-105; Williamson, *supra* note 7, at 112-17.

[9] *See* O. WILLIAMSON, *supra* note 7, at 106-16; Williamson, *supra* note 7, at 117-19.

[10] *See* O. WILLIAMSON, *supra* note 7, at 115-16.

[11] *See id.* 117-31.

[12] *See* note 26 *infra*.

[13] By "subgoal pursuit" I refer to efforts to promote local or individual goals to the possible detriment of global or system objectives.

To be sure, subgoal pursuit is responsible for the "ideal" outcomes attributed to competitive markets. The independent pursuit of profit by each of the parties is what the proverbial invisible hand is all about. How is it that competition between a group of distributors handling a common brand is any less valued than competition between autonomous firms selling rival brands? If competition yields social benefits in one context, why not in the other? The uncritical extension of competitive reasoning from the interfirm context to the manufacturer-distributor nexus is doubtlessly responsible for much of the confusion in the vertical restraints arena.

After setting out the principal behavioral assumptions upon which the transaction cost approach is based, I advance the argument below that organizational innovations normally indicate attempts to realize efficiency gains. This, however, is merely a presumption: it can be rebutted in individual instances when certain strategic conditions are shown.[14]

B. *Bounded Rationality and Opportunism*

Bounded rationality and opportunism are the central behavioral assumptions upon which the transaction cost approach is based. Bounded rationality, which should not be confused with irrationality, refers to a condition in which human agents are "*intendedly* rational, but only *limitedly* so." [15] Put differently, it refers to rationality in the ordinary, dictionary sense of the term—"agreeable to reason; not absurd, preposterous, extravagant, foolish, fanciful, or the like; intelligent, sensible" [16]—rather than in the hyperrational sense in which it is commonly used in microeconomics textbooks.[17] Thus, economic agents who are boundedly rational are able to receive, store, retrieve, and process only a limited amount of information. Such agents are routinely overwhelmed by the amount of information supplied to them in relation to their capacity to use it effectively. Accordingly, the economics of attention is an important but generally neglected item on the research agenda.[18]

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[14] *See* text accompanying notes 27-31 *infra.*

[15] H. SIMON, ADMINISTRATIVE BEHAVIOR xxiv (2d ed. 1961).

[16] WEBSTER'S NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE 2066 (2d ed. 1959).

[17] *See* Simon, *Rationality as Process and as Product of Thought*, AM. ECON. REV., May, 1978, at 1, 2-3.

[18] *See id.* 13. Simon argues that attention, *i.e.*, our capacity for considering and processing a given piece of information, is the scarce resource, not information. Calling for procedural means of focusing attention in a rational and productive way,

Opportunism extends the usual motivational assumption of self-interest to make allowance for self-interest with guile. Thus, whereas bounded rationality suggests decisionmaking less complex than the usual assumption of hyperrationality, opportunism suggests calculating behavior more sophisticated than the usual assumption of simple self-interest. Opportunism refers to "making false or empty, that is, self-disbelieved threats or promises," [19] cutting corners for undisclosed personal advantage, covering up tracks, and the like. Although it is a central assumption, it is not essential that all economic agents behave this way. What is crucial, however, is that *some* agents behave in this fashion and that it is costly to sort out those who are opportunistic from those who are not.

It has long been recognized that opportunism poses economic problems in the context of public goods,[20] in the trading of information,[21] and in insurance markets.[22] But recognition that opportunism is a pervasive economic problem has taken much longer to develop. Peter Diamond observed just seven years ago that the usual assumption is that economic agents do not lie, cheat, or steal. Instead, their actions are overt and agreements are binding.[23] Reliance upon simple self-interest, however, has been changing. More recently, Jack Hirshleifer observed that the key question "for the viability of a pattern of exchange . . . is control of cheating," [24] and

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he notes that "[i]n a world where attention is a major scarce resource, information may be an expensive luxury, for it may turn our attention from what is important to what is unimportant." *Id.* Bounded rationality should also be distinguished from the "least reasonable man" approach, which some marketing specialists associate with the Federal Trade Commission's approach to advertising. *See* Cunningham & Cunningham, *Standards for Advertising Regulation*, J. MARKETING, October, 1977, at 92. The focus of that approach is on "'the public—that vast multitude which includes the ignorant, the unthinking, and the credulous, who in making purchases, do not stop to analyze, but are governed by appearances and general impressions.'" *Id.* (quoting Florence Mfg. Co. v. J.C. Dowd & Co., 178 F. 73, 75 (2d Cir. 1910)); *see* Charles of the Ritz Distribs. Corp. v. FTC, 143 F.2d 676, 679 (2d Cir. 1944). To be sure, when the hazards are severe and communication difficult, a cautious standard such as this has merit. Presumably, however, these are the exceptions rather than the rule: a reasonable-man standard normally ought to apply.

[19] E. GOFFMAN, STRATEGIC INTERACTION 105 (1969).

[20] *See, e.g.*, Samuelson, *The Pure Theory of Public Expenditure*, 36 REV. ECON. & STATISTICS 387 (1954).

[21] *See, e.g.*, ARROW, *Economic Welfare and the Allocation of Resources for Invention*, in NATIONAL BUREAU OF ECONOMIC RESEARCH, THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS 609, 614-16 (1962).

[22] K. ARROW, ESSAYS IN THE THEORY OF RISK-BEARING 142 (1971).

[23] Diamond, *Comments*, 1 FRONTIERS OF QUANTITATIVE ECONOMICS 29, 31 (M. Intriligator ed. 1971).

[24] Hirshleifer, *Economics from a Biological Standpoint*, 20 J.L. & ECON. 1, 27 (1977).

Steven Salop characterizes the Rational Economic Man as one who "choose[s] to tell the truth or misrepresent according to the relative profits of the two strategies, unencumbered by any moral bounds." [25] This is a remarkable transformation in the brief span of seven years.

Given both bounded rationality and opportunism, the following organizational design problem must be faced by the firm and recognized by society: the need to organize transactions in such a way as to economize on bounded rationality while simultaneously safeguarding the transactions in question against opportunism. What is especially interesting about the production-distribution interface is that the manufacturer is concerned not only with the bounded rationality of the immediate parties, but with that of the ultimate consumer as well. Devising transactions that economize on the information needs of consumers is thus a major consideration. Opportunism is also of concern in two respects. The manufacturer is concerned both that the integrity of the distribution system be protected against free riders [26] and that the quality of his product not be debased. Although these are commonly interrelated, it is useful to address each separately. If hazards of either kind are observed, vertical market restrictions may be warranted.

C. *The Presumption that Vertical Market Restrictions Normally Enhance Efficiency*

A transaction cost analysis applies at each separate stage of activity in the production and distribution of a good or service. Whether each separate stage is autonomous or not is unimportant. In principle, each could be and market contracts could be used to bring activity at successive interfaces into adjustment. Such a proliferation of contracts can be costly, however. The basic presumption of the transaction cost approach is that successive interfaces are organized in a manner that economizes on transaction costs. Such

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[25] S. Salop, Parables of Information Transmission in Markets 6-7 (April, 1978) (unpublished discussion paper no. 21, Center for the Study of Organizational Innovation, University of Pennsylvania).

[26] An example of a free rider is a retailer who sells a product promoted by one of his competitors. He benefits from the promotion, but because it has cost him nothing, he can sell the product at a lower price than the competitor who promotes it. Territorial restrictions imposed by the manufacturer may prevent this free riding, thus encouraging retailers to push the manufacturer's product. For a discussion of the free rider phenomenon in the context of resale price maintenance, see R. POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE 149-50, 160, 185 (1976); Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86 (1960).

an approach is consistent with the common law tradition for assessing economic activity.[27]

Antitrust doctrine typically maintains a more skeptical posture. Given the legal system's reliance on the adversary process, it is not surprising that a former chief of the Antitrust Division of the Justice Department should observe, "I approach territorial and customer restrictions not hospitably in the common law tradition, but inhospitably in the tradition of antitrust law." [28] The major problem with this orientation, which has been the prevailing one, is that the contestants have played the enforcement game entirely on the inhospitability tradition's turf.[29] Rather than affirmatively arguing the case in terms of transaction cost economies, defendants have mainly argued that there are no ill effects.[30] As a consequence of this preoccupation with (real or imagined) anticompetitive effects, the affirmative defenses based on the transaction cost economies underlying many vertical market restrictions have gone undeveloped. *United States v. Arnold, Schwinn & Co.*[31] is an example.

I believe that the common law tradition is based on sound premises and that, confronted with a novel organizational arrangement, the immediate reaction of antitrust enforcement agencies and the courts should not be to attribute anticompetitive purpose and

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[27] For some recent views on the presumption of efficiency in the common law, see Rubin, *Why is the Common Law Efficient?*, 6 J. LEGAL STUD. 51 (1977); Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J. LEGAL STUD. 65 (1977). Richard Posner consistently emphasizes efficiency in his wide-ranging and influential studies of the law. *See, e.g.*, R. POSNER, ECONOMIC ANALYSIS OF LAW (1972).

[28] The quotation is attributed to Donald Turner (at a time when he was assistant attorney general in charge of the antitrust division) by Stanley Robinson. 1968 N.Y. ST. B. ASS'N, ANTITRUST LAW SYMPOSIUM 29.

[29] Robert Bork makes a similar point, noting the significance of a recent shift in the Supreme Court's orientation in Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36 (1977):

> The present misshapen look of antitrust doctrine is due in large measure to the Supreme Court's habit of regarding business efficiency as either irrelevant or harmful . . . . The point is that insufficient regard for efficient methods of production and distribution meant that hardly any business practice challenged could survive. The sole benefit the practice might confer was ruled out of court, and only possible dangers were considered. . . .
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> The Court's *Sylvania* opinion not only counted efficiencies in favor of a challenged business practice but did so in a sophisticated way . . . . This approach—concern for consumer welfare and an intelligent inquiry into the efficiency potential of challenged business practices—is capable of altering the entire corpus of antitrust jurisprudence, which now stands in considerable need of repair.

Bork, *Vertical Restraints: Schwinn Overruled*, 1977 SUP. CT. REV. 171, 172 (1978).

[30] *E.g.*, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

[31] 388 U.S. 365 (1967).

intent.[32] Instead, they should inquire whether efficiency gains can plausibly be associated with the arrangement under consideration. Only when this exercise has been completed should the issue of anticompetitive abuse be raised.

The principal reason for maintaining an efficiency presumption is that this presumption accords with reality. As set out in the following section, anticompetitive effects can appear only if rather special structural conditions exist. When these are present, vigilance is warranted. Maintaining a general attitude of inhospitability, however, encourages the enforcement agencies to behave in a counterfactual way and interpret innocent and beneficial developments in a suspect and even hostile manner.

An efficiency presumption is needed to remedy the distortions that earlier traditions have introduced into the enforcement process. However, although presumptions reflect central tendencies and provide framework, they are also subject to challenge. This brings us to matters of strategic purpose and oligopolistic relations.

II. Possible Anticompetitive Effects: Strategic Behavior and Oligopolistic Interdependence

Practices that ordinarily are unobjectionable and indeed arguably are efficient should under some sets of circumstances come under further scrutiny and perhaps be proscribed. Specifically, vigilance is warranted in situations in which the behavior in question promotes strategic purposes or oligopolistic interdependence. The distinction between these two effects is this: activities of a strategic kind serve to disadvantage small rivals and potential entrants in circumstances in which actual competition is attenuated; the creation of oligopolistic interdependence, by contrast, entails efforts to maintain compliance and avoid mutually disadvantageous interfirm rivalry among established oligopolists. Thus, whereas strategic behavior is directed outward, to discipline actual and potential rivals, oligopolistic interdependence focuses inward, the concern being rivalry among major, established firms.

A. *Strategic Behavior and Impediments to Entry*

My discussion of strategic behavior is selective rather than comprehensive. It deals only with circumstances in which vertical re-

[32] An extreme example of this inventive proclivity to emphasize anticompetitive effects, even to the extent of regarding simple efficiency as an anticompetitive advantage, is the argument of the Federal Trade Commission in Foremost Dairies, Inc., 60 F.T.C. 944, 1084 (1962).

strictions can serve as impediments to entry. Predatory pricing, preemptive investment, strategic research and development, and other types of strategic behavior are neglected—although these are all members of the same family.[33]

1. The Views of Bork and Posner

Robert Bork contends, and I agree, that much antitrust mischief has resulted from loose use of the phrase "barriers to entry." [34] In order to avoid continuing abuse, Bork suggests that business practices hereafter be classified as efficiency enhancing or predatory.[35] Provided that allowance is made for the possibility that behavior that is efficient in one context can be exclusionary when used by firms with large market shares, I am prepared to accept this approach. Inasmuch as Bork expressly acknowledges that exclusionary behavior should be examined in contingent terms,[36] there would appear to be no serious conceptual differences between us. Our views do diverge, however, due to the narrowness with which he defines exclusionary practices.

Although Bork at one point concedes that a dominant firm can disadvantage a rival by disrupting optimal distribution patterns,[37] he develops the case in rather circumscribed terms and thereafter argues that there is "nothing to the notion that an established firm might integrate vertically in order deliberately to raise the capital requirements of entry."[38] The "instances of deliberate predation" [39] that expressly concern him are boycotts,[40] individual refusals to deal,[41] and predation through government processes.[42] He believes that all vertical restraints are unqualifiedly lawful.[43]

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[33] *See* Salop, *Strategic Entry Deterrence*, 69 AM. ECON. REV. — (1979); Spence, *Entry, Capacity, Investment and Oligopolistic Pricing*, 8 BELL J. ECON. 534 (1977); Williamson, *Predatory Pricing: A Strategic and Welfare Analysis*, 87 YALE L.J. 284 (1977).

[34] R. BORK, THE ANTITRUST PARADOX 310 (1978).

[35] *Id.* 160, 329.

[36] *Id.* 156-57. Bork cites the exclusive dealing agreement as an example of a practice that manifests a very weak possibility of predation and a very strong probability of efficiency. Although his view of the lawfulness of the practice is clear, it implicitly recognizes the possibility of exceptions. "[T]he law cannot properly see predatory behavior in *all* unilaterally enforced changes in patterns of distribution." *Id.* 156 (emphasis added).

[37] *Id.* 156-58.

[38] *Id.* 323.

[39] *Id.* 329.

[40] *Id.* 330-44.

[41] *Id.* 344-46.

[42] *Id.* 347-64.

[43] *Id.* 288; Bork, *supra* note 29, at 173-80, 181-82.

Richard Posner also cautions against excessive concern with entry barrier claims. Thus he counsels that "[a] barrier to entry is commonly used . . . to mean anything which a new entrant must overcome in order to gain a foothold in the market, such as the capital costs of entering the market on an efficient scale. This is . . . meaningless . . . since it is obvious that a new entrant must incur costs to enter the market, *just as his predecessors . . . did previously.*" [44]

2. A Different View

For the reasons set out below, I am not persuaded that capital market impediments cannot arise because of vertical restraints or that the cost conditions facing early and later entrants are equal. I should make clear, however, that my differences with Bork and Posner arise only in dominant firm industries and, possibly, in collusive oligopolies. In other circumstances, efforts to behave strategically will be self-defeating. Accordingly, concern over strategic behavior vanishes in industries characterized by neither dominant firms nor tight oligopolies.

To illustrate that a capital market impediment can arise as a result of vertical integration, posit an industry with two stages, a production stage and a distribution stage. Assume that the industry is equally efficient whether or not these stages are integrated.[45] In addition, assume that manufacturing (stage I) is monopolized and that the monopolist has integrated forward into distribution (stage II). Finally, assume that a potential entrant with experience in manufacturing, but none in distribution, subsequently develops a rival product that it can manufacture at a competitive cost. The question to be addressed is whether this rival is disadvantaged by the monopolist's earlier decision to integrate.

Assessing this will be facilitated by comparing the conditions facing the potential entrant under the following nonintegrated and integrated alternatives:

> (1) [T]he monopolistic stage I producer is not integrated, in which case the prospective new entrant can enter at stage I only and utilize the facilities of stage II producers . . . (suitably expanded if necessary), [or] . . . (2) the monopolistic stage I producer is integrated into stage II so that either (a) the new entrant himself comes in at both stages or (b)

[44] R. POSNER, *supra* note 26, at 59 (emphasis added).

[45] It should be noted that vertical integration could be a less efficient mode of structuring transactions but might be adopted nonetheless because of strategic incentives.

> independent new entrants appear simultaneously at both stages. If Bork . . . [is] correct, the cost of capital ought to be independent of these conditions.
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> To contend that the terms of finance are the same under 2(a) as they are under 1 implies that the capital market has equal confidence in the new entrant's qualifications to perform stage II activities as it does in firms that are already experienced in the business. Except in circumstances where experienced firms are plainly inept, this is tantamount to saying that experience counts for nought. This, however, is implausible for transactions that involve large, discrete rather than small, but recurring commitments of funds. Although transactions of the latter type can be monitored reasonably effectively, on the basis of ex post experience, this is much less easy for transactions of the large, discrete variety—which are the kind under consideration here. Reputation, which is to say prior experience, is of special importance in establishing the terms of finance for transactions that involve large, discrete commitments of funds.[46]

The problems are worse, moreover, if the 2(b) scenario unfolds. As compared with condition 1, would-be stage II entrants are presumably penalized both for lack of experience and because nonconvergent expectations[47] pose more serious problems in the 2(b) context. The latter argument is that the flexible or expanded capacity of existing stage II processors can accommodate new entry at stage I much more easily than if simultaneous new entry by independent distributors at stage II is required. Problems with interdependent investments by new independent entities arise because of differing perceptions of the market, incentive differences, and because interfirm intentions may be difficult to signal. These hazards are presumably reflected in the cost of capital. As a consequence, neither of the type 2 scenarios is on a parity with the type 1 condition. Bork's unrestricted claim that vertical integration

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[46] O. WILLIAMSON, *supra* note 7, at 111.

[47] Firms' expectations converge, creating equilibrium in a market as a whole, when every firm bases its expectations on the same set of events and signals, and comes to the same conclusions. Whether or not such market equilibrium can be achieved depends on several factors, among them the degree of interdependence among the firms, the level of certainty about the future, the number of variables to be considered, the capacity of firms to adapt to change, and the amount of information available to the firms. *See* Malmgren, *Information, Expectations and the Theory of the Firm*, 75 Q.J. ECON. 399, 405-11 (1961); Williamson, *supra* note 7, at 120.

cannot influence the cost of capital, and hence the conditions to entry, is evidently overstated.[48]

Consider now the cost issue that Posner addresses. As he puts it, the issue appears to be whether early entrants are somehow able to *avoid* costs that later entrants incur. He claims they are not, with which contention I agree. But this does not reach the question whether timing differences can give rise to differential *cost bearing* consequences. This is related to, but goes beyond, the matter of differential capital costs discussed above.

Whether potential entrants will be disadvantaged by prior integration depends on (1) the importance of learning-by-doing, (2) the degree to which learning-by-doing economies are shared by employer and employee, (3) the ease with which specialized human assets can be bid away, and (4) the degree to which prices track costs.[49] Assuming that prices track the current costs of the least-cost supplier in a fairly regular way and that it is difficult to bid specialized human assets away from current employers in effective team configurations, potential entrants will be more severely disadvantaged by prior integration the more important that learning-by-doing economies are and the less completely these learning economies are appropriated by employees.

The upshot is that decisions to integrate into activities that require investments in idiosyncratic human or physical assets can affect the subsequent ease of entry. Whether the argument has antitrust significance, however, depends on the circumstances. For one thing, the conditions of entry are relatively unimportant if actual competition is already effective. Even where this is problematical, an *additional* entry impediment because of integration can be said to exist only to the extent that access through established distribution channels is impracticable. This, in turn, depends on the size of the residual (nonintegrated) market and on whether sales through the distribution channels of integrated firms are realistic. The subset of industries warranting close antitrust scrutiny, from both actual competition and market access points of view, reduces to industries characterized by dominant firms and tight oligopolies that have comprehensively integrated into distribution.

Even here, the question whether forward integration or vertical restrictions yield net benefits should be addressed. Are the benefits

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[48] *See* Caves & Porter, *From Entry Barriers to Mobility Barriers: Conjectural Decisions and Contrived Deterrence to New Competition*, 91 Q.J. ECON. 241, 246-47 (1977) (vertical integration may raise the capital-cost entry barrier).

[49] *See* O. WILLIAMSON, *supra* note 7, at 216-17.

great or slight in relation to the anti-competitive consequences? The results of this inquiry can vary depending on the industry's stage of development. Thus, economic benefits realized immediately after the restraint has been effected may not continue indefinitely. Put differently, although "administered distribution" may be needed to ensure viability at an early stage in an industry's development, a more mature industry may be able to support the requisite distribution system without the same need for restraints on forward integration. Thus, although forward integration may represent an effort to realize private gains with resulting economies at one stage, it may constitute an unneeded restraint at a later stage and indeed may serve strategically to disadvantage rivals if it is continued.

Although the above argument is primarily couched in terms of vertical integration, I also refer to vertical restrictions. The scope of the latter term should be qualified. Among exclusive dealing, territorial restrictions, and customer restrictions, only the first of these vertical restrictions constitutes a possible entry impediment, and this only under the special circumstances of structural dominance or tight oligopoly.[50]

More generally, except as oligopolistic interdependence is promoted,[51] I am persuaded by Bork's arguments that territorial and customer restraints should not be proscribed.[52] Manufacturers will introduce these only as they are expected to attenuate subgoal pursuit and promote efficiency.[53] But what of the possibility that exclusive dealing has objectionable effects other than that of impeding entry? If it does, under what circumstances do these effects occur and what are the ramifications for antitrust enforcement?

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[50] I have defined a dominant firm industry as one in which the market share of the largest firm is at least sixty percent and entry into the market is not easy. Tight oligopoly is less easy to characterize. It is mainly apt to appear in mature, highly concentrated industries producing homogeneous products under uniform cost conditions and having significant barriers to entry. The reasons why oligopolistic interdependence is difficult to sustain in other circumstances is traceable to the transaction costs of reaching and policing collusive agreements. *See generally* O. WILLIAMSON, *supra* note 7, at 234-47.

[51] *See* text accompanying notes 57-62 *infra.*

[52] *See* note 40 *supra.*

[53] Preston observes that "customer-territorial restrictions considered alone . . . do not contribute to the weakening of the interbrand competition in final markets or serve as barriers to entry." Preston, *Restrictive Distribution Arrangements: Economic Analysis and Public Policy Standards,* 30 L. & CONTEMP. PROB. 506, 520 (1965). Furthermore, "[t]he case against customer-territorial restrictions where suppliers are profitable or relatively large appears to rest on an association between these restrictions and parallel limitations on the range of products marketed by a distributor, *i.e.,* exclusive dealing." *Id.* 520-21 (footnote omitted).

Suppose that entry is unaffected but that exclusive dealing benefits some customers (for example, by permitting a product to be effectively differentiated) but simultaneously disadvantages others. For instance, comparison shopping is often facilitated by side-by-side examination; exclusive dealing precludes this. Marginal customers who wish to establish whether differentiation warrants a price premium will, if confronted by exclusive dealing, be less able to make informed judgments easily. How should this be evaluated?

Or suppose that, although the restraint itself negligibly affects the condition of entry, other factors impede entry and widespread use of the restraint effectively precludes customers who *know* that they place little value on the additional services (which are not offered separately under exclusive dealing restrictions) from obtaining the product without services included.

Bork meets these types of objections with the argument that when the "technology of distribution . . . [does] not allow the preferences of both groups of customers to be met, . . . the manufacturer will choose to satisfy the larger number," which he regards as the efficient thing to do.[54] Actually, I would expect that manufacturers would service the more profitable subset—which recent scholarship discloses commonly will be, but need not be, the larger market.[55] More troublesome is the possibility that the use of a profitability calculus to decide what mix of products to offer may be at variance with welfare gains, even when the decision is to service the larger market.

However, inasmuch as such defects in the product mix calculus are difficult to ascertain in practice and since exclusive dealing does not obviously bias such choices adversely, it seems prudent to separate exclusive dealing restraints from the product variety issue. Accordingly, except as entry impediments result, a policy of permissiveness with respect to exclusive dealing restraints would normally appear to be warranted.[56]

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[54] Bork, *supra* note 29, at 181.

[55] *See* Dixit & Stiglitz, *Monopolistic Competition and Optimum Product Diversity*, 67 AM. ECON. REV. 297 (1977); Spence, *Product Differentiation and Welfare*, 66 AM. ECON. REV. 407 (1976).

[56] Note that, directly or indirectly, all of the above issues depend on transaction-cost considerations. Thus, investors demand a premium to invest in new enterprises because (1) it is costly to assess the merits of the investment proposal (the relevant data cannot be displayed and evaluated costlessly) and (2) there are hazards of opportunism. The idiosyncrasies of human assets also reflect a condition of information impactedness in which inexperienced firms are disadvantaged. Comparison shopping has advantages because the characteristics of rival products cannot be described adequately in objective terms to allow abstract comparisons to be made. This is a reflection of bounded rationality. And nonseparable offers of product and

B. *Oligopolistic Interdependence and the Regularization of Price*

Although Posner is unconcerned with strategic (outward-directed) uses of vertical restrictions, he argues that such restrictions can be used to strengthen a dealer cartel.[57] This is worrisome, however, only when a "manufacturer ha[s] a very large market share or . . . [when] all or most of the manufacturers in the market imposed uniform restrictions on their dealers so that (in either case) the dealers had a monopoly position in a genuine economic market." [58] In all other circumstances, vertical restrictions evidently pose no antitrust concerns.

Although I agree that the issue of dealer cartels warrants antitrust scrutiny, the possibility that vertical restrictions can be used to consolidate a *manufacturer* cartel is to me more troublesome. Thus, even if, contrary to Bork, dealer cartels are not easy antitrust enforcement targets,[59] I question whether dealers are often in a position to impose restrictive terms on unwilling manufacturers. When they are not, we can be confident that manufacturers will not knowingly adopt strategies the effect of which is to transfer money from their pockets to those of their retailers.[60] Observed restrictions can thus be assumed to promote manufacturer interests.

The more troublesome possibility to which I refer—that vertical restrictions can be used to support manufacturer cartels—hinges on the proposition that regularizing exchange commonly serves to stabilize frangible associations. A crucial operating concern of a manufacturers' cartel is to devise signals whereby adherence to the cartel policy can be inferred with confidence. The elimination of false moves or ambiguous actions which, if misinterpreted, would cause the cartel to unravel, is of special importance.

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service are made because manufacturers are unable to price-discriminate fully and cannot rely on customers to reveal true preferences accurately—manifestations of bounded rationality and opportunism, respectively.

[57] Posner, *The Rule of Reason and the Economic Approach: Reflections on the* Sylvania *Decision*, 45 U. CHI. L. REV. 1, 17 (1977).

[58] *Id.* Posner would use a "rule of reason" approach "to isolate, and condemn, restrictions that are imposed nominally by the manufacturer but are in fact desired for monopolistic purposes by dealers using the manufacturer as their enforcement agent." *Id.*

[59] R. BORK, *supra* note 34, at 292-93. In disposing of the "dealer cartel objection" to his proposal that all vertical restraints be held lawful, Bork argues not only that dealer cartels are not difficult to uncover, but also that manufacturer-imposed restraints, affecting only intrabrand competition, are of limited, if any, use to a dealer cartel. *Id.*

[60] *See* Bork, *supra* note 29, at 188.

The avoidance of pricing ambiguity is especially critical. When retail outlets are owned or extensively controlled by manufacturers, retail price changes can normally be assumed to reflect manufacturers' intent. By contrast, the responsibility for pricing changes is less clear where dealers are fully autonomous agents. To the extent that pricing latitude among such dealers makes it more difficult for manufacturers to reach cartel agreements because ex ante confidence in the subsequent execution of agreements is lacking, efforts to remove "unwanted" degrees of freedom can be anticipated. The same is true when, despite agreement, price variability creates suspicion that cartel members are defecting, which in turn may cause the cartel to unravel.

Bork argues that the manufacturer cartel objection to vertical restrictions is "insubstantial" and "applies only to resale price maintenance." [61] I would characterize it somewhat differently. Although I agree that regularizing price is the main antitrust concern, vertical restraints other than resale price maintenance can be used to promote pricing discipline. The use of vertical restrictions to tighten oligopolistic interdependence is likely to be attractive, however, only in industries with homogenous products.[62] It is noteworthy, moreover, that an economies justification for such restrictions is difficult to provide in homogeneous product markets. Accordingly, the burden of justifying vertical restrictions in homogeneous, oligopolistic industries rests heavily on the firms employing them. The normal efficiency presumption is unwarranted in such circumstances.

III. Aspects of the Historical Development of American Distribution Systems

Alfred Chandler, Jr.'s recent monograph [63] describing marketing developments during the late nineteenth century provides strong support for the proposition that transaction costs are sufficiently significant to affect the structure of industries, sometimes motivating firms to integrate forward from manufacturing into the retail stage. In the following subsections Chandler's findings concerning effi-

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[61] R. Bork, *supra* note 34, at 294.

[62] *See* Newman, *Strategic Groups and the Structure-Performance Relationship*, 60 Rev. Econ. & Statistics 417 (1978). For a discussion of the problems associated with effecting tight interdependence in oligopoly, see O. Williamson, *supra* note 7, at 234-47.

[63] A. Chandler, The Visible Hand: The Managerial Revolution in American Business (1977).

ciency-enhancing and strategic behavior will first be described, then analyzed from a transaction cost perspective.

A. *Efficiency and Forward Integration*

1. Chandler's Findings

Chandler's description of forward integration into distribution by American manufacturers distinguishes between the developments of infrastructure and the induced distributional response. The appearance of the railroads and the telegraph and telephone systems in the latter part of the nineteenth century permitted wider geographic areas to be served in a reliable and timely way. The "reliability and speed of the new transportation and communication" permitted greater economies of scale to be realized in factory organization.[64] These economies of scale at the factory level were latent—in the sense that the technology was there waiting to be exploited. Because it is not manufacturing cost but delivered cost that matters, however, it became profitable to realize these scale economies only when a low-cost distribution system appeared. That is, so long as transportation expenses were great, the most efficient way to serve markets was by dispersing factories.

Once the new transportation and communication infrastructure was in place, the stage was set for the distributional response. A crucial question was how to devise a *coordinated* manufacturing-distribution response. In principle, both stages could have remained autonomous: manufacturers could have remained specialized and built larger-scale plants while specialized distributors could have responded simultaneously, either on their own initiative or by contract, by assembling the requisite distribution network. In many industries, however, "existing marketers were unable to sell and distribute products in the volume they were produced . . . . Once the inadequacies of existing marketers became clear, manufacturers integrated forward into marketing." [65] An administrative override was evidently needed.[66]

Not all industries integrated forward, however, and those that did integrate forward did not do so to the same extent. Some industries linked manufacturing only with advertising and wholesaling; retail integration was not attempted. Nondurable industries that had recently adopted continuous process machinery—

[64] *Id.* 245.

[65] *Id.* 287.

[66] For an interesting treatment of vertical integration forward into distribution in the sale of gasoline, see D. TEECE, VERTICAL INTEGRATION AND VERTICAL DIVESTITURE IN THE U.S. OIL INDUSTRY 40-44 (1976).

cigarettes, matches, cereals, and canned goods are examples—were in this category.[67] More ambitious and interesting were producer and consumer durables that required "specialized marketing services—demonstration, installation, consumer credit, after-sales service and repair," services that existing middlemen "had neither the interest nor facilities to provide." [68] Examples here included sewing machines, farm machinery, office machines, and heavy electrical equipment.

2. A Transaction Cost Interpretation

The new transportation and communication infrastructure permitted manufacturers to serve larger markets in a low-cost way. The ramifications of these infrastructural developments on plant size are displayed in Figure 1.[69]

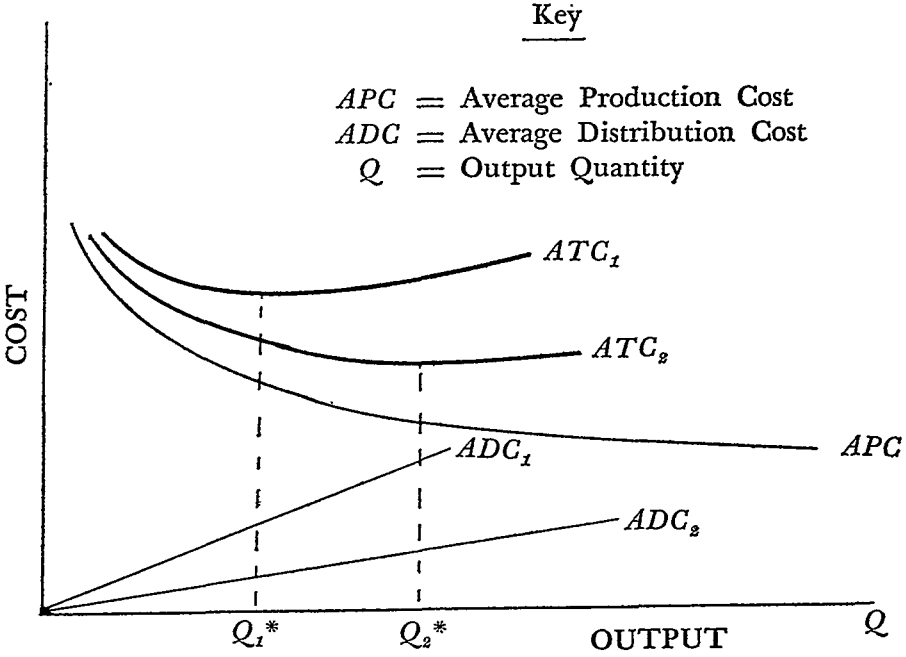

FIGURE 1

[67] "Such entrepreneurs found that the existing marketers were unable to move their goods quickly enough or to advertise them effectively enough to keep their high-volume production facilities operating steadily." A. CHANDLER, *supra* note 63, at 287.

[68] *Id.* 288.

[69] F. SCHERER, A. BECKENSTEIN, E. KAUFER, AND R. MURPHY, THE ECONOMICS OF MULTIPLANT OPERATION: AN INTERNATIONAL COMPARISON STUDY (1975).

The *APC* curve shows the average cost of production as plant size increases. These average costs decrease over a wide range due to assumed economies of scale. The curve ADC_1 shows the original average distribution cost of delivering products from a plant. This curve increases throughout because greater sales require marketing to a larger geographic region. The curve ADC_2 shows the average distribution cost after the new infrastructure is put in place. It is everywhere lower than ADC_1, but also rises throughout. ATC_1 and ATC_2 are average total cost curves: these are given by the vertical summation of *APC* with ADC_1 and ADC_2, respectively. Average total costs reach a minimum at Q_1^* *and* Q_2^*, where Q_2^* is necessarily larger the Q_1^*, given the stipulated shift in average distribution costs. An increase in plant scale and the extension of service to larger geographic markets are thus indicated.

Problems of implementation, however, are not addressed by this cost curve apparatus. How are the linkages between manufacturing and distribution to be forged? They are not created automatically. If existing middlemen respond in a slow and faltering way to the opportunities that the new transportation and communication infrastructures afford, the stage is set for someone, in this instance the manufacturers, to experiment with new organizational structures.

The issues here are of a transaction cost rather than of a production cost kind. Although a definitive analysis of the "inadequacies of existing marketers" [70] reported by Chandler would require further research, I conjecture that these distributional difficulties are due to a failure of "convergent expectations" [71] coupled with the hazards posed by small numbers supply relations between autonomous parties.[72] Convergent expectations problems are mainly attributable to bounded rationality. It was difficult for marketers who were accustomed to operating in a local market regime to perceive the opportunities that awaited them. And there was no obvious way to signal these opportunities by relying upon decentralized pricing.[73] Moreover, even if manufacturers and distributors had both perceived the opportunities that the new transportation and communication infrastructure afforded, and if each responded in-

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[70] A. CHANDLER, *supra* note 63, at 287.

[71] *See* Malmgren, *supra* note 47, at 405-11.

[72] For a discussion of these transaction cost issues, see O. WILLIAMSON, *supra* note 7, at 86-95.

[73] *See* Malmgren, *supra* note 47.

dependently in reliance upon the other, problems of divergence would arise if each recorded or interpreted the data differently. Such divergent expectations would exist, moreover, at both an aggregate and a disaggregate level.

In principle, manufacturers could have taken the initiative and effected convergent expectations by contract. Coordination by contract is costly, however, where the two parties are bargaining in an unfamiliar situation and the hazards of contracting are great. The hazards to which I refer have been discussed elsewhere in the context of idiosyncratic exchange.[74] Such problems arise when investments in specialized human and/or physical assets are required in order that the transaction be completed in an economical way. With respect to the issues of concern to Chandler, the problems were especially severe when the mass production and sale of consumer or producer durables was contemplated. Distributors here would have to be induced to make specialized (product- and brand-specific) investments and, once made, manufacturers and distributors would thereafter often be dealing with each other in what, essentially, was a bilateral exchange arrangement.[75] Given the hazards of opportunism that arise in such circumstances, both parties were reluctant to rely on autonomous contracting to accomplish the investments and govern a continuing exchange relation.

Forward integration by manufacturers into distribution was the organizational response to these contracting difficulties. Not only were profits realized in the process, but social cost savings resulted. Absent reasons to believe otherwise, net social as well as net private gains accrue when such organizational innovations appear.

B. *Strategic Behavior and Forward Integration*

1. Chandler's Findings

Chandler assigns long-lasting entry consequences to the forward integration decisions of American manufacturers described above. Thus he observes:

> The administrative networks built to integrate the new processes of production and distribution gave the pioneer-

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[74] O. WILLIAMSON, *supra* note 7, at 60-64; Wachter & Williamson, *Obligational Markets and the Mechanics of Inflation*, 9 BELL J. ECON. 549, 556-57 (1978).

[75] *See* O. WILLIAMSON, *supra* note 7, at 89-95.

> ing enterprises their greatest competitive advantage. Although capital intensive in terms of the ratio of capital to labor inputs, the new machinery was not that expensive. The absolute cost of entry [into manufacturing] was not high, nor in most industries were patents a barrier to entry . . . .
>
> The most imposing barrier to entry in these industries was the organization the pioneers had built to market and distribute their newly mass-produced products. A competitor who acquired the technology had to create a national and often a global organization of managers, buyers, and salesmen if he was to get the business away from the one or two enterprises that already stood astride the major marketing channels. Moreover, where the pioneer could finance the building of the first of these organizations out of cash flow, generated by high volume, the newcomer had to set up a competing network before high-volume output reduced unit costs and created a sizeable cash flow.[76]

2. A Transaction Cost Interpretation

Four things are noteworthy about Chandler's conclusions. First, entry barriers of the conventional kinds were not, in his judgment, significant. Second, the main barriers were attributable to the linking of manufacturing with distribution. Third, late entrants were at a disadvantage with respect to early entrants not because the latter were able to avoid costs but because of the differential cost-bearing consequences of later entry. This is precisely the matter of temporal cost differences discussed above.[77] Finally, although the linking of manufacturing and distribution arguably had strategic consequences, the original decisions to integrate were not motivated by a strategic purpose. Rather, the resulting entry effects appear to be unintended spillovers.

Such unintended spillovers should be contrasted with predatory pricing or predatory investment, in which a punitive or preemptive

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[76] A. CHANDLER, *supra* note 63, at 298-99.

[77] *See* text accompanying notes 34-56 *supra*.

The essence of Chandler's argument is that a "first mover" advantage can affect the conditions of entrance later faced by others. A general discussion of this phenomenon can be found in my book *Markets and Hierarchies: Analysis and Antitrust Implications*. O. WILLIAMSON, *supra* note 7, at 34-35.

purpose is clear and an antitrust issue is sharply posed. Should the consequences of benign historical decisions also come under antitrust scrutiny? In addition, should antitrust law attempt to effect remedies for such consequences?

As to the first question, it seems clear that any development, historical or otherwise, that contributes significantly to the creation of durable dominant firms or collusive oligopolies should be identified and analyzed—lest it be unnecessarily repeated. But whether the law should attempt to undo unwanted outcomes that are attributable to once-lawful responses to business opportunities is a more difficult matter. This problem involves a tension between two fundamental values.

The affirmative case for legal intervention is based on the premise that, except when lawful patents are involved or when intervention would result in diseconomies, durable monopoly power of any kind results in direct and indirect economic losses. The direct losses include simple allocative efficiency decrements, due to the excesses of prices over costs, and the reduced vigor of intra-industry rivalry (which may impair both process and product innovation). Indirect losses are of an intergenerational kind, in which later generations find that opportunity sets are sharply circumscribed by earlier events.

The opposing argument is that penalizing winners is contrary to the spirit of an enterprise system and will impair incentives to innovate. Presumably, however, the strength of these arguments weakens as the period over which monopolistic results remain unchallenged lengthens. Whether the gains from intervention exceed the losses after only five years of uncontested dominance is perhaps doubtful. But indefinite insularity is not obviously optimal. Twelve to fifteen years of unchallenged dominance might well be reasonable,[78] though even this is subject to dispute. Dominant firm outcomes simply pose an unhappy public policy dilemma—a dilemma which is made more acute when such outcomes are attributable to preemptive signaling and investment.[79]

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[78] At a discount rate of 15 percent, the discounted values of a dollar earned 12 or 15 years in the future are 19 and 12 cents, respectively. At a twenty percent discount rate, the corresponding present values drop to 11 and 7 cents. The present value of a project that earns K dollars per year in perpetuity is $7.1K$ if discounted at fifteen percent and $5.5K$ if discounted at twenty percent. Eighty percent of these values are realized during the first 11½ and 9 years, respectively. Claims that investment incentives are sharply curtailed if monopoly outcomes are, at some point, subject to challenge should come to terms with this arithmetic.

[79] *See* Spence, *Investment Strategy and Growth in a New Market*, 10 BELL J. ECON. _ (1979).

IV. A Transaction Cost Critique of the *Schwinn* Decision

The law of vertical restrictions appears to be tentative and unsettled.[80] Its protean character is apparent in the Supreme Court's inconsistent application of legal principles and standards in three cases: *White Motor Co. v. United States*,[81] *United States v. Arnold, Schwinn & Co.*,[82] and *Continental T.V., Inc. v. GTE Sylvania Inc.*[83] Of these, *Schwinn* best reflects the hazards of grounding legal decisions in defective economic reasoning. Although *Sylvania* made progress toward remedying some of the mischief created by *Schwinn*, I believe further progress can be made if the transaction cost attributes of vertical restriction cases are developed. The transaction cost approach to antitrust issues applies broadly,[84] and powerfully illuminates matters relating to vertical integration and vertical restraints.[85] With the expectation that systematic criticism of past mistakes aids the process of creating better antitrust law, in this section I will discuss the efficiency and strategic aspects of vertical restraints like those found in *Schwinn*. One of the reasons why inhospitable economic reasoning of the kind that prevailed in *Schwinn* has since been discredited is the growing realization that transaction cost issues that were suppressed then are central—both to *Schwinn* and to a broader understanding of economic organization.

A. *Transaction Cost Efficiencies*

Suppose that a producer has a distinctive good or service and perceives that the public, or some part thereof, will be prepared to purchase it, possibly by paying a premium above the price of substitutes, if the producer can (1) create recognition for the attributes that distinguish the item, (2) maintain quality control with respect to these attributes, and (3) maintain cost control such that the price at which the product will recover its full costs is not prohibitive.

[80] *See* Bork, *supra* note 29, at 171; Goldberg, *The Law and Economics of Vertical Restrictions: A Relational Perspective* (1978) (unpublished paper on file with the University of Pennsylvania Law Review).

[81] 372 U.S. 253 (1963).

[82] 388 U.S. 253 (1967).

[83] 433 U.S. 36 (1977).

[84] *See Transaction Cost Considerations, supra* note 5, at 1439.

[85] D. Teece, *supra* note 66, at 7-25; Liebeler, *Integration and Competition*, in Vertical Integration in the Oil Industry (E. Mitchell ed. 1976); Phillips, *supra* note 2. Phenomena that other approaches regard with puzzlement, or even hostility, fall naturally into place when vertical relations issues are cast in contracting terms and the properties of alternative contracting modes are examined with respect to their transaction cost attributes.

Specifically, assume that the distinctive item in question is a bicycle, that distinctiveness takes the form of quality and service, and that the brand name of the bicycle is Schwinn.

If customers were fully knowledgeable or could be apprised without cost of all relevant attributes of all products, Schwinn could simply announce that it was supplying a bicycle that had these properties, the announcement would be registered among potential buyers, customers could verify that these conditions existed (though verification is a redundant operation in a world of complete knowledge), and those who valued the attributes could judge whether the premium was justified. Product differentiation in a world of unbounded rationality would thus proceed in a smooth and faultless manner.

Consumers, however, do not have these high-powered attributes: their capacity to receive, store, recover, and process information is limited. In the light of these limitations, not only does Schwinn face the problem of transmitting its distinctive qualities, but it faces the problem of having its image believed. Thus, if consumers are occasionally misled, in that they are sometimes told one thing and learn to their dismay that it is incorrect, and if instances of fraud or deception are not known without cost to other potential buyers, so that reputations are not instantly and accurately updated, consumers will be wary when sellers apprise them that their brand has "superior" qualities.

In a market of boundedly rational consumers, Schwinn is faced with three interrelated information problems. First, it needs to bring to the attention of consumers the distinctive attributes that it purports to supply. Second, it needs to provide an institutional infrastructure that will prevent these attributes from being degraded. Third, it needs to accomplish both of these goals in an economical fashion.

Assume that it is uneconomical for Schwinn to mount a massive advertising campaign in which to proclaim the superiority of its product. In addition, assume that, because quality and service are related attributes, Schwinn determines that the most effective way to accomplish its product differentiation objectives is to distribute through authorized dealers who agree, as a condition of franchising, to provide specified minimum services (advertising, assembly, maintaining a stock of bicycles and replacement parts, providing qualified repair personnel, and the like). Inasmuch as these services are costly to provide, Schwinn bicycles sold and serviced by authorized dealers will be priced at a premium, other things

being equal.[86] Assume further that Schwinn's product differentiation efforts will be vitiated if this set of minimum services is not reliably provided.[87] Assume finally that Schwinn's franchise program is successful in that, with appropriate franchisee constraints, the image appeals to a sufficient number of customers to make it viable.

Several economic questions now arise. First, which customers will be attracted by such an image? Second, why might Schwinn want to prevent nonfranchised sales? Third, will Schwinn integrate forward into retailing if vertical restraints are not permitted? Each of these poses transaction cost issues.

With respect to customer appeal, the buyers that will be attracted by Schwinn will presumably be those for whom the opportunity cost of time is great or who are relatively inept at self-assembly and service. Thus, high-priced lawyers and other consultants who bill clients on an hourly basis will pay several times the going rate for a haircut, by patronizing barber shops that cut hair by appointment, rather than joining the queue at a wait-your-turn establishment.[88] The argument generalizes to the procurement of consumer durables. Time is economized if the customer does not have to search for a brand possessing the requisite properties and is easily able to locate and visit an outlet where the brand is stocked. And additional time is saved if the item comes pre-assembled, is reasonably trouble-free, and is reliably serviced at convenient outlets.

Such a brand of bicycle will also be attractive to customers who, though their unit opportunity cost of time may be below average, are particularly inept at self-assembly and repairs. In this situation, despite low unit costs, the total opportunity cost is great—because this is the product of unit cost and time expended. Thus, two classes of customers will respond positively to the Schwinn image: those who are inept and those who, although capable, have a high per-unit opportunity cost of time.

This merely establishes, however, that franchised sales of Schwinn bicycles will appeal to some customers. It does not reach the question whether Schwinn should sell to all comers, allowing dealers to determine whether or not to offer the set of services that

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[86] Furthermore, the premium will also increase to the extent that Schwinn incurs additional expense at the manufacturing stage in order to accomplish its quality objectives.

[87] Possible causes of this problem are discussed below.

[88] *See* Becker, *A Theory of the Allocation of Time*, 75 ECON. J. 493 (1965).

would qualify them as franchisees. Were Schwinn to do this, customers who have the above-described attributes would presumably go to the franchised outlet; those who do not could go elsewhere. Because in a world of unbounded rationality more degrees of freedom—in this instance, more methods of merchandising—are necessarily better than less, the natural policy inclination would be to let consumers decide the question for themselves.

Several justifications, however, can be articulated in support of franchise restrictions: first, the Schwinn quality image may be debased without sales restraints; second, even if quality images are not impaired, the viability of franchises may hinge on sales restraints; third, the costs of enforcing the distribution contracts are increased in a mixed distribution system.[89] The quality image of Schwinn turns partly on objective considerations: Schwinn bicycles bought from authorized dealers come with an assured set of sales and service attributes. But the image may also be affected by information exchanged by word of mouth. If potential customers are told, "I bought a Schwinn bike and it was a lemon," but are not advised that the bicycle was bought from a discount house and was misassembled, and that Schwinn's guarantees were thereby vitiated, customer confidence in Schwinn is easily impaired. Put differently, quality reputation may be preserved only if goods and services are sold under conditions of constraint.[90] Note in this connection that the incentive to invest in commercial reputation, by surrounding transactions with institutional infrastructure, occurs only in a world of bounded rationality.[91]

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[89] Although arguably not applicable to the *Schwinn* case, a fourth justification can be based on unfair allocation of demonstration costs: customers might shop for Schwinn bicycles at the franchised dealer—deciding on what model, features, etc., to buy—and then make their purchase at the discount house, where the costs of demonstration are largely avoided. This may be a more serious concern when more expensive items, such as automobiles, are being marketed.

[90] The fact that twenty percent of Schwinn's authorized sales were made by outlets—B.F. Goodrich, hardware and department stores—which did not provide service might be taken as "proof" that the above hazard is insubstantial. *See* Brief for the United States at 43-44, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967). But there are three mitigating considerations: (1) while twenty percent nonserviced sales may be permissible, forty percent may not be; (2) the outlets described have reputation attributes rather different from discount houses, and hence may "stand behind" sales more completely; and (3) business judgment on such matters is entitled to a certain degree of undisputed respect.

[91] True attributes are presumably known or can be ascertained without cost in a world of unbounded rationality. If this boggles the mind, the reader is encouraged to examine the once-for-all time-cum-environmental bidding procedures in J.E. Meade's *The Controlled Economy*. J.E. MEADE, THE CONTROLLED ECONOMY (1971).

Even if the quality image of franchise sales is unimpaired by nonfranchise selling, the commercial viability of franchisees, which hinges on volume considerations, should be examined. Suppose that it is determined that a franchised dealer needs to sell a minimum number of bicycles in order to break even. Suppose further that Schwinn carefully locates its franchisees cognizant of these break-even needs.[92] Finally, suppose that the system is initially viable but that discount sales subsequently appear. Marginal franchise operators shortly thereafter become nonviable. As a consequence, the assurance of convenient Schwinn service outlets is jeopardized. Customer interest declines and other viable franchisees become marginal. This deterioration, taken together with the impaired quality image described above, creates the risk that the franchise mode will become nonviable, and customers for whom such differentiation yields net gains will be able to deal only in the undifferentiated market.

The third justification for franchise restrictions involves policing costs. The argument here is that it is less costly to police simple systems than it is to police more complicated ones. Causality (responsibility) is difficult to trace (attribute) in complex systems. If few "excuses" can be offered, fewer veracity checks have to be made. Although I do not suggest that this was a major consideration for Schwinn, it could be relevant to the design of other marketing systems. Again this is a problem only in a world of bounded rationality, because frictionless systems are self-policing.

Consider finally whether Schwinn will integrate forward into retailing if restrictions on sales to nonfranchised outlets are prohibited. If Schwinn's costs of integrated sales were identical with those of its franchisees, this presumably would occur. There are several reasons, however, to believe the case to be otherwise. First, franchised dealers were not exclusively engaged in the sales and service of Schwinn bicycles; other brands were also handled.[93] Also, many franchisees engaged in nonbicycle sales. Assuming that multiple brand and multiple product sales are necessary for distributors to break even, forward integration would require Schwinn

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[92] This is altogether to be expected. Franchisors will ordinarily auction off franchise locations where greater than competitive returns are expected unless such auctions are costly to run.

[93] Schwinn required its franchisees to display Schwinn bicycles "with position equal to and as prominent as that of any competitive bicycle." Brief for Arnold, Schwinn & Co., Appendix 1, at 57 n.89, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

to engage in unwanted and possibly unavailable sales activities.[94] Diversification into other products with which Schwinn had no expertise or familiarity is the unwanted activity. Stocking other brands, moreover, might pose difficulties of availability, as other bicycle manufacturers might suspect, with cause, that their brands would be slighted and demeaned if sold by Schwinn employees.

Furthermore, even if disabilities of these kinds did not exist, the question still remains whether Schwinn could provide incentives for managers of integrated sales outlets that prompt performance equal to that when franchising is used. Both carrot and stick considerations must be addressed. The incentive disabilities associated with bureaucratic modes of organization [95] stand as a further impediment to forward integration by Schwinn.

The upshot is that if the worst consequences obtain (namely that the franchise system collapses, Schwinn is unable to integrate forward economically, and the Schwinn brand image vanishes), prohibiting franchise restraints gives rise to real economic losses of the kind shown in Figure 2. The demand curve for Schwinn bicycles is here given by $p_2 = g(q_2;\overline{p}_1)$, where $\overline{p}_1$ is the price at which other bicycles sell (which is taken as given). The curve AC_2^I is the average cost of sales and service for franchised outlets. As drawn, franchising just breaks even (covers all of its costs, including a fair rate of return) at a price and quantity of p_2^*, q_2^*, respectively. Assuming that the costs of supplying nondifferentiated bicycles are not increased by Schwinn franchising, the net welfare gains (losses) realized by offering (withdrawing) the Schwinn brand will be given by the shaded consumer surplus region.

B. *The Absence of Strategic Effects*

Having established the transaction cost efficiencies that may be derived from a restrictive franchise arrangement, the next step of the analysis involves an inquiry whether the franchise system promotes anticompetitive effects. Specifically the question is whether Schwinn, by itself or in conjunction with other large bicycle manufacturers, introduced vertical restraints that placed rivals or cus-

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[94] Alternatively, Schwinn could run the distribution stage at a loss. However, it is doubtful that profits from manufacturing would be sufficient to cover these losses. *See* text accompanying notes 15-26 *supra*. For a discussion of the disincentives to integrate forward into distribution, see Preston, *Restrictive Distribution Arrangements: Economic Analysis and Public Policy Standards*, 30 L. & CONTEMP. PROB. 506, 512 (1965).

[95] *See* O. WILLIAMSON, *supra* note 7, at 118-29.

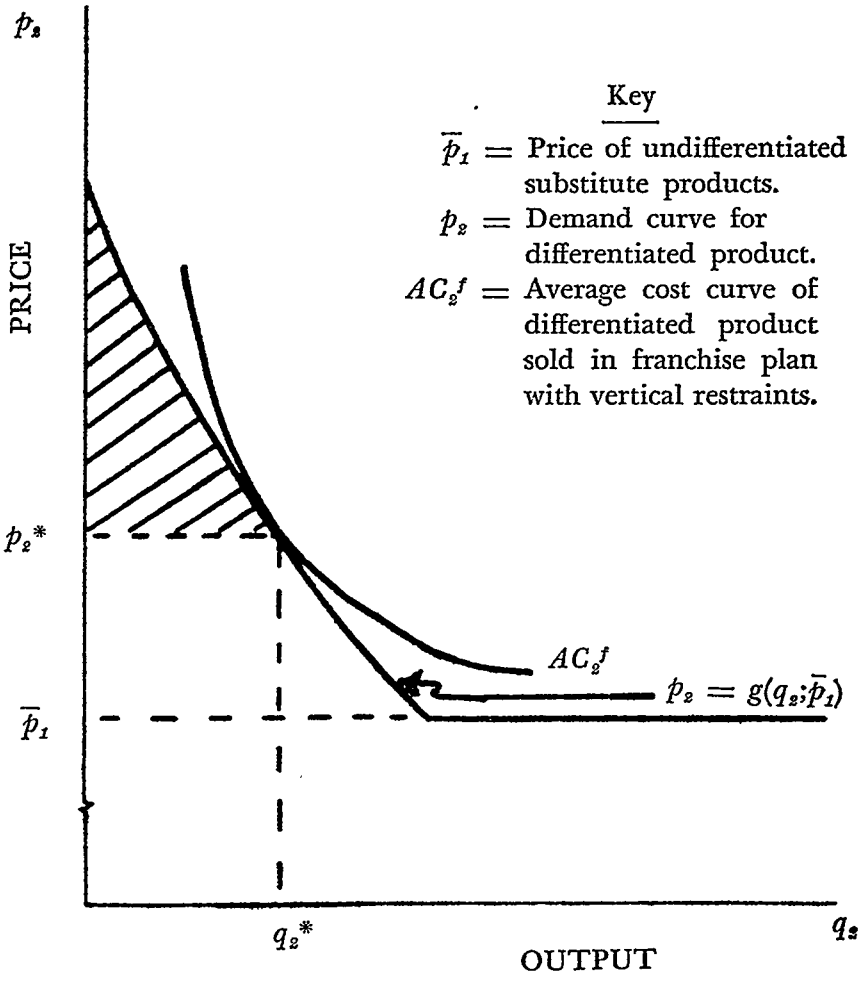

FIGURE 2

tomers at a strategic disadvantage.[96] The government plainly regarded these restraints as anticompetitive and its jurisdictional statement advanced the following theory of the case:

> In industries in which products are highly differentiated, a particular brand — like Schwinn bicycles — often has a market of its own, within which [intrabrand] competition is highly important to the consumer and should be

[96] The Supreme Court recognized the relevancy of such an inquiry in White Motor Co. v. United States, 372 U.S. 253, 263 (1963) ("economic and business stuff" out of which restraints arose and their "actual impact" are relevant to determining the existence of an antitrust violation).

> preserved . . . . Schwinn's strenuous efforts to exclude unauthorized retailers from selling its bicycles suggest that, absent these restraints, there would be a broader retail distribution of these goods with the resulting public benefits (including lower price) of retail competition.[97]

Similar views were repeated in the government's brief:

> The premise of the Schwinn franchising program is that Schwinn is a distinctive brand which commands a premium price — that it enjoys, in other words, a margin of protection from the competition of other brands. To the extent that this premise is sound, it is clear that the only fully effective control upon the retail price of Schwinn bicycles is that imposed by competition among Schwinn dealers and distributors.[98]

The government also disclosed the animosity with which it regarded product differentiation:

> Either the Schwinn bicycle is in fact a superior product for which the consumer would willingly pay more, in which event it should be unnecessary to create a quality image by the artificial device of discouraging competition in the price of distributing the product; or it is not of premium quality, and the consumer is being deceived into believing that it is by its high and uniform retail price. In neither event would the manufacturer's private interest in maintaining a high-price image justify the serious impairment on competition that results.[99]

And the government expressed its view about the merits of vertical integration as compared with vertical restraints:

> Even if the threat to integrate were not wholly lacking in credibility in the circumstances of this case, we would urge that it was not a proper defense to the restraint of trade charge. In the first place, a rule that treats manufacturers who assume the distribution function themselves more leniently than those who impose restraints on independent distributors merely reflects the fact that, although integration in distribution may sometimes benefit the econ-

[97] Jurisdictional Statement for the United States at 14, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

[98] Brief for the United States at 26, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

[99] *Id.* 47.

> omy by leading to cost savings, agreements to maintain resale prices or to impose territorial restrictions of unlimited duration or outlet limitations of the type involved here have never been shown to produce comparable economies.[100]

The government's views on product differentiation and franchise restraints thus can be reduced to the following three propositions: (1) differentiated products can be classed as those for which a price premium is warranted and those for which such a premium is not; (2) whether differentiation is real or contrived, intrabrand price competition is essential to the protection of consumer interests; and (3) although vertical integration sometimes yields economies, the same cannot be said for vertical restraints. Each of these premises is significantly flawed and for that reason the government's anticompetitive effect argument should have failed.[101]

The government's first premise, that it is "unnecessary to create quality images" for products that are objectively superior to those of rivals, depends upon an assumption of unbounded rationality. Plainly, however, customers are not endowed with perfect cognitive processes. Accordingly, efforts to "assist" customers and thereby economize on bounded rationality, have merit. Reliability images serve this purpose. Inasmuch as the Schwinn franchising program did not entail exclusive dealing, neither actual rivals nor potential rivals could be said to have experienced any adverse effects. Suppose, however, for purposes of argument, that exclusivity had been involved. The matter of anticompetitive effect then turns on Schwinn's market share and the conditions of entry. The government's brief, however, is devoid of any attention to market structure.

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[100] *Id.* 50.

[101] Posner, who "briefed and argued the *Schwinn* case for the government," contends that his analysis of the issues at that time "reflected the then prevailing thinking of the economics profession on restricted distribution." Posner, *supra* note 57, at 3. Although I agree that there was (and is) economic thinking congenial to the views set out in the *Schwinn* brief, I would hesitate to characterize it as that of the economics profession. Inasmuch as the brief is inexplicit about the sources of its economic reasoning (Preston's is the only economics article dealing with vertical restraints that is cited in the brief, Brief for the United States at 49, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967), and Preston expressly discusses a series of legitimate economic purposes that can be served by vertical restraints, *see* Preston, *supra* note 53, at 507-19), because Telser's work on the rationality of restraints was in the public domain at that time, *see* Telser, *supra* note 26; Telser, *Abusive Trade Practices: An Economic Analysis*, 30 L. & CONTEMP. PROB. 488 (1965), and because I expressly took exception with the brief while it was in preparation, Posner's attribution may sweep too broadly.

The simple facts are these: Schwinn's market share, which had been twenty-two percent in 1951, the year before it introduced its disputed marketing program, fell steadily in the decade that followed, dropping to thirteen percent in 1961.[102] Schwinn plainly was not a dominant firm at any time during this interval.

What then of the possible existence of a tight oligopoly in which the main firms all employed exclusive franchising? Although concentration in the bicycle industry was in the high-moderate range in 1951, the four firm concentration ratio then being sixty-three percent, the decade following was one of intense competition. Foreign imports, which accounted for eight percent of the market in 1951, rose to a high of forty percent in 1955. The escape clause to the GATT agreements was invoked in August, 1955,[103] and bicycle imports thereafter dropped—remaining in the neighborhood of thirty percent in the years that followed.[104]

Not only did the market share of the four largest firms fall sharply over this interval, but there was considerable shifting of market shares among them. Schwinn, which was the largest firm with twenty-two percent of the market in 1951, dropped to second place with thirteen percent of the market in 1961. AMF, the second place firm in 1951 with sixteen percent of the market, dropped to third with eight percent of the market in 1961. The third place firm in 1951, Columbia, dropped to fifth place in 1961, the respective market shares being twelve and five percent. However,

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[102] The following table shows the market shares of the four largest firms and of foreign imports in the bicycle industry during the period of 1951 to 1961:

Market Shares of Four Largest Domestic Producers and of Foreign Imports, 1951-1961

	Four Largest Domestic Producers	Foreign Imports
	%	%
1951	63	8
1953	52	22
1955	34	40
1957	46	28
1959	49	28
1961	49	30

Source: Brief for Arnold, Schwinn & Co., Appendix 1, at 8, n.21, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

[103] General Agreement on Tariffs and Trade, Oct. 30, 1947, art. XIX, 61 Stat. pts. 5 & 6, T.I.A.S. No. 1700. The escape clause was invoked by the United States on August 19, 1955, to raise the rate of duties on bicycles imported into the United States. GATT Doc. L/433 (1955), *reported in* GENERAL AGREEMENT ON TARIFFS AND TRADE, ANALYTICAL INDEX 104 (2d rev. 1966).

[104] Brief for Arnold, Schwinn & Co., at 5 n.15, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

Murray, the fourth place firm in 1951, jumped from a twelve percent position to a twenty-two percent position in 1961, taking over first place in the process.[105] Four established bicycle producers were acquired during the decade, two of them by AMF, a large, diversified producer of consumer and industrial products.[106] The record thus discloses active competition among extant domestic producers and with foreign rivals.

Finally, the government's third premise that intrafirm restraints (vertical integration) are less objectionable than interfirm restraints, because vertical integration often yields offsetting economies that do not accrue when interfirm relations are restrained, is simply naive. As developed above,[107] vertical market restrictions in this and other markets can often yield economies. Furthermore, vertical integration is not a cost panacea.[108] The hostility of the government to interfirm trading restrictions reflects a bias in favor of bureaucratic, as opposed to market, modes of organization that is not only unwarranted but inimical to social welfare.

In summary, the franchise restrictions which Schwinn introduced not only had a plausible efficiency justification, but, in addition, no anticompetitive effects could possibly be attributed to them. They were not part of an exclusive dealing program; Schwinn's market share was too small, by itself, to warrant antitrust concern even if exclusivity had been involved; rivals did not engage in franchising, much less exclusive dealing; and the bicycle market was characterized by active competition. Where actual competition is and arguably will continue to be effective, concern over potential competition is misplaced. The government's case against Schwinn was wholly fanciful.

V. Approaches Alternative to the Transaction Cost Approach

With the exception of the inhospitability tradition referred to above, the leading alternatives to the transaction cost approach are partly or mainly complementary to it. None, however, deals as comprehensively with the central issues posed by vertical restrictions, and hence none is an adequate substitute.

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105 *See* note 102 *supra.*

106 Brief for Arnold, Schwinn & Co., at 2 n.5, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

107 *See* text accompanying notes 12-30 & 86-94 *supra.*

108 *See* O. Williamson, *supra* note 7, at 82-131.

A. *The Inhospitability Tradition*

Proponents of the inhospitability tradition eschew reliance on common law reasoning and emphasize real or imagined effects instead.[109] Not only is there no presumption that business practices are ordinarily motivated by efficiency purposes, but this possibility is not even actively considered. Instead, attention is focused on the possibility that some anticompetitive effect, however remote, might be connected with the practice in question. This type of orientation and reasoning is hostile to an enterprise mode of organization and commonly results in bad public policy arguments and outcomes.[110]

B. *The Populist Approach*

The populist approach favors attention to fairness and relies little on economic analysis. Some of those who advocate the populist approach seem to regard economic analysis as not merely unhelpful but ill-advised. Thus the populist approach has been characterized by Professor Sullivan as one that regards allocative efficiency as "useless as a guide to antitrust policy." [111] Values other than efficiency are instead assigned a decisive role:

> During the eighty-odd years that antitrust has been with us, there have been ebbs and flows of interest in enforcement, all correlated with other developments in national life. The values which, until very recently, have shown themselves most strongly in the expression of policy have been populist in origin, and have had such aims as the transfer of wealth and power from industrial interests to agrarian ones, the decentralization and dispersion of economic and related political power, the preservation of a commerce and industry open to entry by small entrepreneurs, the reduction of prices, and the prohibition of unfair competitive tactics.[112]

Sullivan's argument against the use of partial equilibrium welfare economics is that considerations of "second best" demonstrate that efficiency claims are pointless.[113] The reduction of price

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109 *See* text accompanying note 28 *supra.*

110 *See, e.g.*, United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967); Brown Shoe Co. v. United States, 270 U.S. 294 (1962).

111 Sullivan, Book Review, 75 COLUM. L. REV. 1214 (1975).

112 *Id.*

113 Sullivan's premise is that "[t]he standard theoretical demonstration of the allocative efficiency of a competitive market as contrasted to a monopolized market . . . has no welfare implications except as part of a general equilibrium analysis." Sullivan, *supra* note 111, at 1219 (footnote omitted). Thus, "[t]he theoretical

distortions in one sector when they remain in others is "just as likely to . . . make allocations worse—or to leave allocations as bad as they are" as it is to yield an efficiency gain.[114]

Although this is a common interpretation of the second best literature,[115] it is not a correct one. To demonstrate that a local correction can yield a global loss in the face of distortions elsewhere is an existence argument. It says nothing about likelihood, which is a much stronger statement. Sullivan's leap from an existence to a likelihood claim is unwarranted. As Baumol points out, the policy importance of second best qualifications turns on the strength of interdependence: "[A] great many interrelationships within the economy are weak enough to be ignored. Thus, for all practical purposes, the demand for most goods is likely to be dependent only on the demands for a few other items. . . . It may, then, be possible to partition the economy more effectively than some might have suspected."[116] Strong interaction effects then can be taken expressly into account, and elsewhere the second best qualification deserves the weight that lawyers label "de minimis."

Additionally, Sullivan's comments appear to be restricted entirely to price distortions (due to "monopolies, cartels, tariffs, and distorting taxes"[117]). But allocative inefficiency is more apt to arise with respect to cost concerns, such as diseconomies of scale, failure to operate assets in a least cost way, and the incurring of

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conclusion that consumer welfare (as measured by the aggregate amounts consumers will pay for goods and services) will be improved when a monopoly market is converted (without loss of scale economies) into a competitive one is warranted only if it is presupposed, first, that all other industries are already competitively organized, and, second, that there exist no other deviations from optimality . . . ." *Id.* 1219. From this premise Sullivan reasons that

> [a]bsent the simultaneous fulfillment of all conditions of optimum allocation . . . *economic theory tells us nothing about how to improve resources allocations.* . . . Economics simply provides no basis on which to say, for example, that ending monopoly in the shoe industry or ending a price cartel in the electrical equipment industry (or doing both of these things) will improve resource allocations and increase aggregate welfare. Given the persistence of other deviations (other monopolies, cartels, tariffs, and distorting taxes), there is no basis for assuming that doing away with any one or more deviations from optimality would improve efficiency at all.

Id. 1220 (emphasis in original).

[114] Sullivan, *supra* note 111, at 1220 (emphasis added).

[115] As Bork notes, the theory of second best "does not address itself to the probability of the bad result, but merely states it as a possible outcome." R. BORK, *supra* note 34, at 113. Consequently, to take the "possibility of second best as destroying the rationality of the consumer welfare basis of the law (which it does not) and therefore freeing the courts to evolve new rules on other social and political values . . . is little short of preposterous." *Id.* 114.

[116] Baumol, *Informed Judgment, Rigorous Theory and Public Policy*, 32 S. ECON. J. 137, 144 (1965).

[117] Zeckhauser, *Procedures for Valuing Lives*, 23 PUB. POL'Y 419, 446 (1975).

significant transaction costs. Organizational changes that give rise to cost savings in any of these respects will, if not accompanied by offsetting price distortions, invariably yield social gains. Thus Sullivan both overstates the weight to be assigned to second best arguments in evaluating relative price distortions and makes no allowance for allocative efficiency analysis in the matter of cost savings.

A further problem with this approach is that it easily links up with the inhospitability tradition, in which anticompetitive purpose is found lurking behind every business initiative. The populist approach has the advantage, however, of calling attention to the merits of process in a way that other approaches do not. Although this last is often disregarded, it is the distinctive strength of the populist orientation. As Richard Zeckhauser observes in his discussion of "The Importance of Process," "[m]any analysts dismiss too quickly the significance of having an equitable and widely accepted process." [118] For many societal decisions, "the procedure by which the decision is made may be as important as the actual dollar numbers employed. . . . [Consequently] monies available for other goods may give a wholly unrealistic impression of welfare. How people feel about the society in which they are living matters a tremendous amount." [119]

To be sure, process values are not easily quantified and even the qualitative aspect may be disputed. When one is close to the margin, however, process considerations can frequently be used to break ties. Moreover, in circumstances in which fairness is thought to be a central issue, process values ought to be assigned even greater weight. Lest arguments in favor of dispersed economic power be used or manipulated irresponsibly, however, claims of this kind ought to be reserved for circumstances in which they are plainly important. Again, *Brown Shoe Co. v. United States* illustrates the hazards of relying on such arguments when the facts of a case are inapposite.[120]

C. *The Structure-Conduct-Performance Approach*

The structure-conduct-performance approach also complements the transaction cost approach. Recall that although the transaction cost approach employs an efficiency presumption, this

[118] *Id.*

[119] *Id.* 459.

[120] 370 U.S. 294 (1962).

can be rebutted by a showing of strategic purpose and effect.[121] The latter showing requires a demonstration that the industry in question is characterized by a dominant firm or collusive oligopoly. This entails an examination of conventional structure and conduct relations.

The preoccupation of the structure-conduct-performance paradigm with technological features, however, has been self-limiting. Vertical integration, which is principally a transaction cost phenomenon, remained a puzzle for so long precisely because of this technological orientation.[122] For this reason, the structure-conduct-performance paradigm served to reinforce the orientation of the inhospitability tradition—because if transaction cost economies are unimportant, the suspicion that novel business practices are motivated by anticompetitive purposes is easy, indeed natural, to entertain. Recent contributions to this approach,[123] however, have moved away from this technological orientation.

D. *New Modeling Approaches*

Opportunism was, until recently,[124] mainly disregarded in formal models of economic processes, but this has been changing. A convergence between the transaction cost issues that I emphasize and formal strategic analysis seems to be developing. How far this convergence will go remains to be seen. My sense accords with Simon, who argues that "qualitative institutional analysis, in which discrete structural alternatives are compared" can frequently proceed by relying on "only rather modest and simple applications of mathematical analysis." [125] At the same time, however, I am both encouraged and greatly impressed by the quality of rigorous modeling that is being done on the matter of strategic behavior. Even if formal analysis merely confirms qualitative institutional arguments, it is useful to express the same arguments in different languages. And frequently I expect that formal models will yield sharper and sometimes additional implications.[126]

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121 *See* text accompanying notes 27 & 28 *supra.*

122 *See* Liebeler, *supra* note 85.

123 *See, e.g.,* Caves & Porter, *supra* note 48.

124 *See* text accompanying note 19 *supra.*

125 Simon, *supra* note 17, at 6-7.

126 *See, e.g.,* Dixit & Norman, *Advertising and Welfare,* 9 BELL J. ECON. 1 (1978); Nelson & Winter, *Forces Generating and Limiting Concentration Under Schumpeterian Competition,* 9 BELL J. ECON. 524 (1978); Schmalensee, *Entry Deterrence in the Ready-to-Eat Breakfast Cereal Industry,* 9 BELL J. ECON. 305 (1978).

E. *The Nonstrategic Tradition*

What I refer to as the nonstrategic tradition is the important stream of antitrust research that traces its origins to Aaron Director's teaching and research at the University of Chicago. Prominent examples are Bork and Bowman and, more recently, Posner. As I have indicated elsewhere, antitrust specialists in law and economics owe an everlasting debt to this tradition, which has insisted that complex policy matters be assessed in a tough-minded economic fashion in which the rudimentary issues are stated in stark microeconomic terms. Logical errors of less rigorous antitrust reasoning have been exposed in the process and a deeper appreciation for the economic benefits of purportedly anticompetitive practices has been manifested.

The principal problems that I find in this approach are that its proponents often disregard transaction costs and rarely concede that strategic considerations sometimes operate. These are clearly interrelated: if transaction costs are zero or negligible, strategic intentions are beside the point, because they can have no effect, and the simple microtheory model applies. Examples of this "friction-free" approach are Bowman's views on price discrimination [127] and Bork's views on vertical market restrictions.[128]

With respect to price discrimination, the friction-free view is that, perverse elasticity conditions excepted, allocative efficiency gains will result if a monopolist is permitted to price discriminate.[129] The argument depends on the assumption that discrimination, in whatever degree attempted, is costless to effectuate. Once allowance is made for the transaction costs of discovering differential valuations among customers and enforcing restrictions against resale (so that there can be no arbitrage), however, this allocative efficiency claim is much more problematical.[130] Simple sensitivity to bounded rationality (which explains the inability of the monopolist to assess differing customer valuations without cost) and the hazards of opportunism (whence the need to police against resale) are the missing ingredients in the friction-free tradition.

The possibility that vertical restraints and strategic objectives are linked is also resisted by the nonstrategic tradition.[131] Although

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[127] *See generally* W. BOWMAN, PATENTS AND ANTITRUST LAW: A LEGAL AND ECONOMIC APPRAISAL (1973).

[128] R. BORK, *supra* note 34, at 280-98.

[129] *See* W. BOWMAN, *supra* note 127, at 111-13.

[130] For an elaboration, see O. WILLIAMSON, *supra* note 7, at 113.

[131] *See* text accompanying notes 34-44 *supra*.

Bork acknowledges that exclusionary purposes occasionally operate, his discussion of these matters reduces them to insignificance.[132] A broader view in which transaction costs are expressly acknowledged demonstrates that strategic behavior may occur in a wider range of circumstances than his discussion discloses. If the logic of this broader view is adopted—under which the possibilities of human asset and capital market frictions of the kinds that I describe are admitted—the question then is whether Bork's position on the lawfulness of vertical restrictions ought to prevail because the frictions that I describe are quantitatively unimportant and too insubstantial to influence the enforcement of the law on vertical restrictions. My response to this is as follows: (1) I have attempted to delimit the objectionable subset of restrictive practices more carefully than had been done previously; (2) as a consequence, Bork and I differ in a serious way only with respect to the use of exclusive dealing in dominant firm industries; (3) I am not persuaded that the effects of the frictions that I discuss are insubstantial in this context, and Chandler's historical survey suggests otherwise; and (4) until the transaction cost attributes of these markets are studied more fully and the basis for my concerns and Chandler's are expressly allayed, the discriminating application of the law along the lines that I propose is the prudent posture to take.

VI. Conclusion

Antitrust is an interdisciplinary field that is best served by acknowledging that a deeper understanding of the issues will result by addressing the subject from several points of view. The economic approach that I favor, especially for dealing with vertical market relations, is the transaction cost approach. The principal points of this Article and the legal principles that result from the systematic application of transaction cost analysis to vertical restraints are summarized below.

A. *Economic Implications of the Transaction Cost Approach*

1. As with the integration of successive intermediate product market stages, vertical restrictions between manufacturing and distribution are primarily to be understood in transaction cost terms.

2. Despite striking similarities, there are also important differences between these two types of vertical relationships. The dif-

[132] R. Bork, *supra* note 34, at 320-24.

ferences arise because the interests of final consumers as well as those of distributors have to be considered in designing the interface between manufacturing and distribution.

3. Contrary to the inhospitability tradition, contractual constraints can and often do serve legitimate economic purposes. Specifically, vertical constraints may be needed lest subgoal pursuit by the individual parts destroy the viability of the system.

4. Contrary to the inhospitability tradition, product differentiation can and often does promote consumer welfare. The feasibility of differentiation, moreover, may depend on the use of constraints at the manufacturer-distributor nexus.

5. The principal hazard that should concern the antitrust enforcement agencies in enforcing the law on vertical restrictions is if restraints are introduced with the strategic purpose and effect of disadvantaging rivals. Exclusive dealing restraints by dominant firms or tight oligopolies can have this effect.

6. Economies defenses should be entertained before exclusive dealing restrictions are prohibited.

7. Whether one is interested in assessing the vertical relations that govern a specific interface, as in *Schwinn,* or in understanding the historical evolution of vertical relations, such as the transformation that occurred in response to infrastructural changes late in the nineteenth century, the same microanalytic approach in which transaction costs are featured should apply.

That the errors that appeared in the government's jurisdictional statement and brief in *Schwinn* are not repeated today suggests to me that antitrust law has made real progress. I submit, moreover, that this is partly because there is now a greater sensitivity to transaction cost considerations.[133]

B. *Legal Implications of the Transaction Cost Approach*

Federal agencies charged with enforcing antitrust law should rely on the foregoing economic principles when implementing en-

133 Turner and Posner were both instrumental in persuading the Supreme Court to reverse itself in Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36 (1977). Posner's reservations with the *Schwinn* doctrine appeared in 1977. *See* Posner, *supra* note 57. Turner participated in an amicus brief with attorneys for the Motor Vehicle Manufacturers Association. The brief argues, among other things, the "the 'new economics of vertical relations' is increasingly illuminating the economies that can be achieved by manufacturer influence on dealer practices." Motion for Leave

forcement policy. Vertical market restrictions should be assumed to be efficiency-enhancing unless specific structural characteristics exist within the industry. Exclusive dealing is the only vertical restraint posing the threat of strategic hazards. Absent the existence of a dominant firm or a tight oligopoly within an industry,[134] vertical restrictions of all kinds, exclusive dealing included, should be assumed to promote transaction costs economies.

When the industry is characterized by a dominant firm or tight oligopoly, antitrust agencies and courts should subject exclusive dealing constraints, but not other vertical restrictions, to close scrutiny to ascertain whether they create barriers to entry. A firm in such a situation should not be charged with nor found to have committed an antitrust violation if it can affirmatively show that nontrivial transaction cost economies are created by the vertical restraint under scrutiny.[135]

Finally, uniform reliance on vertical restrictions of any kind—on price, territories, customers, or exclusive dealing—in industries marked by tight oligopolies should be subject to close scrutiny to determine whether the restriction regularizes trade and promotes greater interdependence. Again, firms in such a situation should not be charged with nor found to have committed an antitrust violation if they can affirmatively demonstrate that nontrivial transaction cost economies are achieved by the vertical restraint under scrutiny.

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to File Brief and Brief for Motor Vehicle Manufacturers Association as Amicus Curiae, at 24, Continental T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36 (1977) (quoting Phillips, *supra* note 2, at 574) (footnote omitted).

134 *See* note 50 *supra.*

135 A rigorous demonstration of these economies is not apt to be feasible. But more than a showing that some economies are plausibly realized should be required. For a discussion of economies as an antitrust defense, see generally Williamson, *Economies Defense, supra* note 5.

Note that Posner proposes an output test—"did the manufacturer's output increase or decrease after imposing the restriction?"—to get at these issues. Posner, *supra* note 57, at 19. (An equivalent test would be to examine the effect on price.) Ordinarily, however, I would expect that output and price effects would be distributed over time and confounded by many other factors. The elaborate econometric investigation that Posner contemplates to sort these out does not appear to me to be feasible.

The basic issues, if exclusive dealing is to be prohibited, are what transaction cost economies does exclusive dealing promote and whether the sacrifice of these will be significant. These matters ought ordinarily to be amenable to examination in qualitative and crude quantitative terms.