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Antitrust Enforcement and the Modern Corporation

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My discussion of policy issues and research opportunities in industrial organization is principally concerned with issues where the analyses of firm and market structures overlap, with special attention to matters that fall within the ambit of antitrust enforcement. I take the position that a re-examination of the implicit assumptions of conventional firm and market models is needed if antitrust analysts are accurately to assess the properties of the modern corporation and the markets within which it operates. I suggest, in this connection, that an "institutional failures" orientation—to include an assessment of the failures of internal organization (administrative processes) as well as failures of product and capital markets—can usefully be adopted by students of antitrust economics.

Among the matters that come under review are the influence of product market failures (of both conventional and unconventional sorts) on the dominant firm condition and on vertical integration. Failures in the capital market as these relate to conglomerate organization are also examined. But no discussion of firm and market structures is complete without calling attention to the limits of internal organization. Markets, after all, do not fail absolutely, but only in relation to some nonmarket alternative (Arrow, 1969, p. 48). Focusing, as I attempt to, on the transactional relations that occur within and between firms and markets makes especially evident that internal organization and market processes can, for many purposes, usefully be regarded as substitutes.

The differences between this and the usual industrial organization approach warrant explication. It is not, I think, a caricature to say that the internal organization of the firm, including the allocation of functions between firms and markets, is of concern to traditional analysis

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mainly as this can be said to influence "market power" and "offensive business conduct." By contrast, I treat the question of organizational design as intrinsically interesting and inseparably associated with efficiency considerations. Firms become devices for alleviating market frictions (failures) by internalizing activities that might otherwise be performed by the market. The limitations of firms for these purposes, while real, are a function of organization form. The study of organizational innovations, consequently, is a matter of special interest. Altogether, the approach that I am advocating is one of "transactional analysis of a comparative-institutional sort." While there is no essential conflict between this and "market power analysis" of the usual variety (indeed they ought to be regarded as complements), the research programs suggested by each are quite different.

I conclude that an incomplete treatment of the dominant firm problem in economics has led to an incorrect characterization of the monopoly problem by the law, and that antitrust has been undiscriminating in its treatment of both vertical and conglomerate structures. In more numerous respects than are generally recognized, vertical integration and conglomerate organization permit transactional failures (in the product and capital markets, respectively) to be attenuated.

I. DOMINANT FIRM INDUSTRIES

Issues

Antitrust is on its most familiar ground when dealing with conventional monopoly problems that take the form of horizontal market power. The underlying economic theory here is thought to be relatively well developed and its applications obvious. Still, neither the courts nor the enforcement agencies have been prepared seriously to challenge preexisting market power that takes the form of a dominant firm.

As the law is currently interpreted, dominance does not constitute a Section 2 monopoly violation if the structure in question is attributable to "a superior product, business acumen, or historic accident." [1] Although, in practice, the courts may never explicitly entertain defenses to dominance along any of these lines, merely to offer them in principle has enforcement significance: the enforcement agencies are precluded from using any of these hypothetical defenses as an affirmative reason for bringing a case. That, in these circumstances, dominant firm com-

[1] United States v. Grinnell Corp., 384 U.S. 563, 571 (1966).

plaints rely mainly on alleged conduct offenses is only to be expected. This often reduces them, however, to contrived cases, and legitimate issues are suppressed.

Evaluation

Dominant firm industries will be defined, provisionally, to be industries for which the output of the dominant firm has persistently exceeded 60 per cent of the industry total. The dominant firms in such industries will ordinarily enjoy supernormal rates of return—at least potentially if not actually.[2] Two issues are especially relevant in assessing the dominant firm condition: How did dominance develop? What remedies, if any, ought to be invoked?

The usual assumption, implicit if not explicit, in most treatments of the dominant firm issue is that "competition works"—at least in the limited sense that extant and potential rivals can be relied upon to perform self-policing functions by responding appropriately to opportunities for private gain. But for circumstances in which economies of scale are large in relation to the market, patent protection exists, or illegal practices are employed, persistent dominance with monopoly returns is not to be expected. Still, reference by the Court to business acumen and historic accident defenses reveals a chink in the workability argument that just possibly warrants closer attention. Ought differential expertise and chance event effects to be regarded as manifestations of market failure, and what are the policy implications?

It is proposed here that differential expertise in amounts sufficient to support dominance be regarded as a failure in the market for managerial talent. This can take either of two forms. First, the requisite talents may simply be scarce. Thus although it is usually assumed that the supply of managerial talent is quite adequate (Kaysen and Turner, 1959, pp. 9, 117), at least occasionally this may not be true. Marschak, in a related context, puts the issue as follows: "There exist almost unique, irreplaceable research workers, teachers, administrators; just as there exist unique choice locations for plants and harbors. The problem of unique or imperfectly standardized goods . . . has been neglected by the textbooks" (1968, p. 14). The possibility that the dominant firm has gained ascendancy because of the inimitable quality of its management at least warrants consideration.

[2] Sometimes these firms may be run slack, in which case reported profit will not disclose the full supernormal profit potential.

This is not, however, the only possibility. The dominant firm may have displayed no special management expertise but existing and potential rivals, on which the responsibility for self-policing functions devolves, may have been uncommonly inept. Persistent ineptitude of this sort is an indication that the self-policing functions of rivalry have lapsed. Such discreditable performance on the part of principal rivals during critical formative stages of an industry's development will be referred to as *default failure.*

Whether, however, a default failure outcome is more than a hypothetical possibility—to be conceded in principle but not observed in practice—is perhaps to be doubted. Relevant in this connection is the experience of the diesel locomotive industry, where an argument not only can but has been advanced that the dominance by General Motors in diesel locomotive manufacture is to be explained by default failure among the steam locomotive firms.[3] Although this record needs to be more thoroughly developed and documented, I find the evidence more than suggestive that General Motors' dominance of this industry was the result of ineptitude on the part of the steam locomotive manufacturers and imperceptiveness among potential rivals.

Consider now the historic accident defense. Dominance that results from an unusual run of luck will be referred to as *chance event failure.* The dominant firm and its rivals may be performing in a fully creditable (yet unexceptional) manner, but the dominant firm is thrust ahead by an unusual sequence of fortuitous events.

The extensive literature on stochastic determinants of firm size is relevant in this connection. The usual and simplest assumption here is that all firms in an industry prospectively have access to identical mean growth rates, with actual rates being assigned at random from a common probability distribution. In the absence of serial correlation, a firm that experiences high growth in one period may easily "draw" a low growth rate in the next; no special advantage need obtain. Occasionally, however, a firm may enjoy an unusual run of luck; a series of supernormal growth rates are strung together. Where this happens, the lucky firm can be thrust into a position of dominance. Moreover, the dominance outcome, once realized, may not easily be undone by continued application of the same stochastic mechanism: "Once the most fortunate firms

[3] See the testimony, including exhibits, of C. R. Osborne in *A Study of the Antitrust Laws,* Hearings before the Senate Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, 84th Cong., 1st Sess., Part 8, December 9, 1955, Washington, D.C., 1956, pp. 3948–97.

climb well ahead of the pack, it is difficult for laggards to rally and rectify the imbalance, for by definition, each firm—large and small—has an equal chance of growing by an equal percentage amount" (Scherer, 1970, p. 127). If indeed the variance in growth rates declines as an industry matures and technical progress slackens, the prospect that a dominant firm outcome once established will subsequently be upset (in any short period of time) by chance market processes is correspondingly impaired.

As a policy matter, it would seem appropriate to regard both default and chance event failures that result in dominance as indications that the self-policing properties of the market, in these respects, have broken down. Intervention by the government on grounds of "residual responsibility" to restore a more competitive outcome is arguably appropriate. New bases upon which to rest a Section 2 violation that do not rely exclusively or primarily on conduct offenses would in this way become available to the enforcement agencies. Moreover, structural relief, where either default or chance event failures are established (and countervailing considerations do not obtain), is presumably warranted. Altogether, more assertive antitrust enforcement toward the dominant firm industries would emerge.

It might be noted that Turner (1969) has recently reached a similar policy conclusion concerning dominant firm industries—albeit on somewhat different grounds. Turner appeals to "reasonableness" considerations in suggesting that, but for scale economy or unexpired patent defenses, "it is appropriate to put a time limit on continuing monopoly power that rests in part on earlier success, regardless of how the early success was achieved" (p. 1219). The advantage of the present argument is that implementing such a proposal is more attractive where significant default or chance event failures can be shown to have occurred.

The position of Posner (1969, pp. 1596–98) on persistent monopoly can also be assessed in the light of the above argument. Posner objects to Section 2 dissolution proceedings as a means for dealing with persistent dominance on the grounds that monopoly positions not supported by scale economies, predatory behavior, superior skill, or forgone monopoly gains will *usually* be eliminated by market processes. One can agree, especially if the time horizon stipulated is sufficiently long. If, however, a dominant firm position, once secured, may be undone by unassisted market processes only with difficulty, a policy of waiting for self-correcting measures to be effective in a market where the dominance outcome has resulted from chance event or default failures is, perhaps, excessively passive. Unusual measures may be indicated when the unusual event obtains.[4]

Research Opportunities

However one comes out on the policy ramifications of the argument, it is a matter of scientific interest that a series of *focused* industry studies of the dominant firm industries be conducted. Can default or chance event failures reasonably be established, or is the dominant firm outcome invariably to be attributed to scale economies, unexpired original patents, or illegal conduct? The matter can be approached directly, by examining both the properties of the decisions taken by the dominant firm's principal rivals (default failure) and the stochastic experience of the industry (chance events),[5] and indirectly, by assessing the conventional scale economy, patent, and conduct conditions. But for nontrivial scale economy, patent, or conduct effects, or unless management superiority claims can be supported, default or chance event failures are presumably to be inferred. Claims of management superiority are difficult to evaluate in any simple way, but the study of organizational innovations, with special attention to changes in organization form, may sometimes permit indirect inferences to be made. [See in this connection Chandler (1966) and Williamson (1970).]

None of this requires that the relief question be reached. If, however, as a policy matter, the question of dissolution is seriously to be considered, it is further necessary to examine both the human and physical assets in the dominant firm. Should a study reveal that the requisite managerial and technical capabilities are impacted, in the sense that these cannot easily be assembled by unassisted market processes, any

[4] Posner argues elsewhere that inasmuch as "a recent study [Brozen's (1970)] found that a high level of concentration in an industry tends to dissipate by natural forces within an average period of 10 years . . . [and since] the average length of a divestiture proceeding in a monopolization case involving a major regional or national market is 8 years, . . . it seems unlikely that administrative methods of deconcentration will work significantly more rapidly than the market" (1970, p. 417, n. 50). The argument has merit but relies heavily on average market tendencies which, in the particular cases of very high concentration that we are concerned with here, may be unwarranted. It also takes prevailing judicial practices as given, despite reform proposals concerning this matter [see, for example, the Neale Task Force Report (1969)].

[5] Examination of unanticipated technical and market developments as well as product life cycle effects are relevant to an assessment of chance event failures.

dissolution effort ought presumably to attempt to transfer human as well as physical capital in amounts sufficient to assure viability.

II. VERTICAL INTEGRATION [6]

Issues

The study of vertical integration has presented difficulties at both theoretical and policy levels of analysis. Vertical integration has never enjoyed a secure place in value theory because under conventional assumptions it is an anomaly: If the costs of operating competitive markets are zero, "as is usually assumed in our theoretical analysis" (Arrow, 1969, p. 48), why integrate?

Policy interest in vertical integration has been concerned mainly with the possibility that integration can be used strategically to achieve anticompetitive effects. In the absence of a more substantial theoretical foundation, vertical integration, as a public policy matter, is typically regarded as having dubious if not outright antisocial properties. Technological interdependencies (as in flow process operations) or, possibly, observational economies, constitute the principal exceptions.

There is, nevertheless, a distinct unease over the argument. This is attributable, probably, to a suspicion that the firm is more than a simple efficiency instrument, in the usual scale economies and efficient factor proportions senses of the term, but also possesses coordinating potential that sometimes transcends that of the market. It is the burden of the present argument that this suspicion is warranted.

Evaluation

That product markets have remarkable coordinating properties is, among economists at least, a secure proposition. That product markets are subject to failure in various respects and that internal organization may be substituted against the market in these circumstances is, if somewhat less familiar, scarcely novel. A systematic treatment of market failure as it bears on vertical integration, however, has not emerged.

Partly this is attributable to inattention to internal organization: The remarkable properties of firms that distinguish internal from market coordination have been neglected. But the fragmented nature of the market failure literature as it bears on vertical integration has also contributed to this condition; the extensive variety of circumstances in

[6] The argument in this section relies extensively on Williamson (1971).

which "internalization" (the substitution of internal organization for the market) is attractive tends not to be fully appreciated.

The properties of the firm that commend internal organization as a market substitute would appear to fall into three categories: incentives, controls, and what may be referred to broadly as "inherent structural advantages." In an incentive sense, internal organization attenuates the aggressive advocacy that epitomizes arm's length bargaining. Interests, if not perfectly harmonized, are at least free of representations of a narrowly opportunistic sort; in any viable group, of which the firm is one, the range of admissible intraorganizational behavior is bounded by considerations of ostracism. In circumstances, therefore, where protracted bargaining between independent parties to a transaction can otherwise be anticipated, internalization becomes attractive.

Perhaps the most distinctive advantage of the firm, however, is the wider variety and greater sensitivity of control instruments that are available for enforcing intrafirm in comparison with interfirm activities. Not only is the firm able to perform more precise own-performance evaluations (both contemporaneous and *ex post*) than can a buyer, but its reward and penalty instruments (which include selective use of employment, promotion, remuneration, and internal resource allocation processes) are more refined. Moreover, when conflicts develop, the firm possesses a comparatively efficient conflict resolution machinery.

To illustrate, fiat is frequently a more efficient way to settle minor conflicts (say, differences of interpretation) than is haggling or litigation. *Inter*organizational conflict can be settled by fiat only rarely, if at all. For one thing, the parties would have to agree on an impartial arbitrator, an agreement which itself might be costly to secure. Also rules of evidence and procedure would have to be established. If, moreover, the occasion for such interorganizational settlements were to be common, the form of organization converges in effect to vertical integration, with the arbiter becoming a manager in fact if not in name. By contrast, *intra*organizational settlements by fiat are common (Whinston, 1964, pp. 410–14).

The firm may also resort to internalization on account of defects in the prevailing institutional arrangements. The dysfunctional consequences of faulty property rights specifications, for example, may be overcome by common ownership. Also the firm may offer a more efficient communication network.

The firm, however, also experiences genuine limitations in relation to the market. Mainly on account of bounded rationality and greater confidence in the objectivity of market exchange in comparison with bureaucratic processes, market mediation is generally to be preferred over internal supply in circumstances in which markets may be said to "work well." Therefore the question is, when may markets be expected to display defects—which brings us to the matter of market failure.

This aspect of the argument has been developed at some length elsewhere.[7] It reduces to the following series of propositions: the substitution of internal organization for product market exchange becomes relatively more attractive (1) as contractual incompleteness risks become great, (2) as the risks of strategic misrepresentation in interfirm transactions increase, and (3) where market exchange suffers from what may be referred to as "intrinsic inefficiency," especially as this bears on the convergence of expectations. Small numbers of traders, product complexity, and technical and market uncertainties exacerbate these conditions and thereby encourage the internalization of transactions.

Typically, the conclusion of the conventional analysis of vertical integration—which focuses principally on market power considerations—is that, but for flow process operations where materials handling economies are said to be available, the sources of cost saving from integration are "unclear." Transactional analysis, by contrast, reveals that vertical integration may permit the realization of transactional economies over a much wider class of activities. The critical point, as a policy matter, is that in consideration of the variety of circumstances in which product market failures can occur and the potentially attractive properties that internal organization possesses as a market substitute, the a priori case for vertical integration is much more extensive than is commonly realized. If, therefore, contrary to the usual assumptions, vertical integration between successive stages of production often permits real cost savings, its economic consequences in this respect cannot be regarded with indifference. Vertical merger guidelines,[8] which make no apparent allowance for these effects but focus exclusively on the potential anticompetitive consequences of vertical integration, may, accordingly, warrant reconsideration.

Research Opportunities

The argument above, assuming that it is correct, by no means exhausts the issues that vertical integration raises. For one thing, a

[7] The interested reader is referred to Williamson (1971).

[8] See the *Merger Guidelines of the Department of Justice, 1968;* see also Stigler (1968, pp. 302–304).

parallel treatment of the sources and consequences of the failures of internal organization as they relate to vertical integration is needed.[9] In addition, the above argument requires qualification in that it applies strictly to the vertical integration of production. Although much of it may have equal relevance to backward integration into raw materials and forward integration into distribution, I conjecture that the affirmative case for vertical integration may often be less compelling where control over raw materials or distributional channels is involved and that the anticompetitive potential of vertical integration into either of these stages is especially great. A more discriminating approach toward vertical mergers—depending not merely on market shares but also on the stage of economic activity affected and the absolute size of the organization—could easily emerge.

Also relevant to an understanding of vertical integration is the study of intermediate forms of market organization that fall between full integration and arm's length bargaining. Such an investigation may be especially productive in revealing the limits of the firm as an integrating device. The franchise system is of special interest, both in organizational and antitrust terms. What are the incentive and other properties that make it an attractive form of organization? In what types of circumstances does this occur? What contractual limitations (customer, product, territorial, etc.) facilitate efficient exchange and might reasonably be allowed, and when do such limitations have anticompetitive effects? Distinguishing pecuniary price from "full price" [in the sense of Becker (1965)] may be essential for assessing the monopolistic consequences of such restrictions.

The argument could also be brought to bear on historic trends toward vertical integration (including disintegration) in individual industries. Are these developments mainly to be explained by reference to

[9] Of special interest in this connection is the matter of foreclosure. It is often said that vertical integration poses an antitrust problem because nonintegrated firms are foreclosed from securing business that would otherwise be open to competition. Unfavorable market power and unfair competition effects are said to obtain. The economic rationale for these claims has frequently been unclear, however; other students of vertical integration have expressed doubts that foreclosure has any unfavorable economic effects whatsoever. I submit that distinguishing between economic and bureaucratic rationality may help to clarify the issues. Behavior that appears to lack merit, and consequently is dismissed when regarded in economic terms, may not be so bizarre when evaluated as a bureaucratic phenomenon. This distinction between economic and bureaucratic rationality may also be useful in examining other business conduct practices. It is elementary that, where opportunity sets are large, bureaucratic preferences may govern.

technical scale economies and diseconomies [cf. Stigler (1951)], or by the interfirm versus intrafirm *transactional approach* proposed here [and originally advocated by Coase (1937)]? Have recent developments in the study of transactional costs and market failures, together with an emerging appreciation of the properties of firms that commend internal organization as a product market substitute, now made it possible to apply transactional analysis to explain historic trends in vertical integration and related firm and market structures effectively? Put differently, is transactional analysis a research strategy whose time has come?

III. CONGLOMERATE ORGANIZATION

Issues

Industrial organization specialists have been actively concerned with the conglomerate phenomenon at least since Edwards's 1955 treatment of the subject. As Edwards saw it, conglomerate bigness gave rise to monopoly power in subtle but significant ways. Stocking, however, in commenting on the various and diffuse effects described by Edwards, found that most of the alleged anticompetitive consequences could be traced to original monopoly power of a conventional sort. He conceded, nevertheless, that the conglomerate corporation posed significant institutional issues for which conventional theory was inadequate (Stocking, 1955, pp. 358–59).

The dialogue has continued, most recently being a subject for high-level regulatory review in connection with the Merger Guidelines of the Department of Justice, two Presidential Task Force reports dealing with current antitrust problems, and a Federal Trade Commission Staff Report. The emphasis throughout, both in the earlier literature as well as the more recent policy treatments of the issue, has been on the alleged anticompetitive consequences of the conglomerate form of organization.

Such a narrow focus is perhaps appropriate if, as an efficiency matter, the distribution of functions between firms and markets can be regarded with indifference; the principal issues then can be reduced to an application of basic (or extended) monopoly theory to the particular circumstances at hand. If, however, internalization often has significant effects on efficiency, such an approach is arguably too narrow.[10]

[10] I have argued elsewhere that organizational innovation, of which the conglomerate is a recent manifestation, often has had (and can be expected to have) remarkable efficiency consequences (Williamson, 1970). The argument, as

Evaluation

Whereas vertical integration involves the substitution of administrative for market processes in response to product market failures, the conglomerate can be regarded mainly as a substitution of internal for market organization in response to failures in the capital market.[11] The capital market has two general functions to perform: funds metering and the supply of incentives, of both reward and penalty types. The extent to which the capital market is engaged in funds metering, however, is severely limited by prevailing retained earnings practices. Baumol concludes from his study of this function that "the stock market is only infrequently given the opportunity to discipline directly the vast majority of the nation's leading corporations" (Baumol, 1965, p. 76).[12] An examination of the incentive properties of the capital market also reveals defects. The external relation that the capital market bears to the firm places it at a serious information disadvantage and thus, because of high imputation costs, limits the efficacy of selective reward procedures. This external relation also prevents the capital market from intervening selectively to correct local conditions. Management displacement, which is an extreme corrective response, incurs significant original and secondary costs.

The conglomerate internalizes both incentive and metering functions. As an internal control mechanism with constitutional authority, expertise, and low-cost access to the requisite data, it is able both to employ additional reward and penalty instruments and to exercise these in selective and preventative ways that are unavailable to an external control agent. As a funds-metering instrument, the conglomerate

it applies to the transformation of the enterprise from a unitary to a multidivisional form at least, is supported by the application of a priori theory to the problems of managing complex, hierarchical, human organizations; by Alfred Chandler, Jr.'s, historical survey of early twentieth century corporate developments (Chandler, 1966); by natural selection considerations; and by a casual review of the conspicuous evidence.

[11] The extent to which this substitution can be expected to be efficacious depends on the internal structure of the firm and the control apparatus employed. The argument here is restricted to divisionalized conglomerate organizations in which strategic decision-making functions (including resource allocation) are assigned to a strong general office and in which a sensitive internal control apparatus has been assembled. For an elaboration, see Williamson (1970).

[12] Also relevant in this connection is the Baumol *et al.* (1970) article concerning marginal rates of return to alternative sources of funds. The finding that very low rates of return are associated with internal sources of capital reinforces the argument in the text that the funds-metering function of the capital market is incompletely realized.

(ideally) assigns cash flows on the basis of prospective yields instead of allowing them to be retained by the sectors from which they originate. In both these respects, therefore, the conglomerate (potentially at least) [13] can be regarded as a miniature capital market. In the absence, therefore, of countervailing considerations not already reflected in current merger policy toward conglomerates, and assuming that the enforcement of the merger statutes with regard to horizontal and vertical combinations is to remain severe, a more sympathetic attitude toward conglomerate organization would seem to be warranted. Not only are the immediate efficiency gains in funds metering and the supplying of incentives to be valued, but an active market for corporate control (Manne, 1965) is also promoted.

Recent policy proposals concerning conglomerates,[14] however, appear to give no weight to these factors. Based on alleged reciprocity and cross-subsidization dangers together with expressed concern over potential competition effects, enforcement criteria have been tentatively advanced which, if implemented, would relieve several hundred large firms from the forces of competition in the capital market, forces which probably ought to be supported rather than suppressed. Protective efforts by the enforcement agencies to defeat takeover efforts where members of the "business establishment" are the target firms are similarly suspect.[15] Exclusive antitrust concern with competition in the product market (narrowly regarded), to the neglect of competition in the capital market, can result in a perversion of the enforcement process. If, as I have argued elsewhere (1970, pp. 145–50), conglomerate mergers pose genuine public policy issues (in both economic and sociopolitical respects) mainly in a systems sense involving acquisitions by already giant-sized firms, the indicated delimitation of conglomerate merger enforcement is to direct it explicitly toward the giant-sized subset.

Of course not all firms in the giant-sized subset would be affected either by a dominant firm program of the sort suggested in section I or by a tougher policy toward mergers involving giant-sized enterprise. Unless other economic grounds are advanced, therefore, or unless antitrust were to expand its scope to include noneconomic considerations, many giant-sized enterprises would elude the antitrust enforcement net. For those who take the position that antitrust should not be converted into

[13] See the qualifications in Williamson (1970, Chap. 10).

[14] Especially the Neale Task Force Report (1969) and the FTC Staff Study (1969).

[15] For an illustration, see Williamson (1970, pp. 100–102, 171).

an instrument for reconstituting firm size for sociopolitical reasons, such an escape is altogether appropriate. However one comes out on this matter, it is relevant to observe that antitrust is not the only policy instrument that can be brought to bear. The voluntary divestiture programs that some large corporations have recently been observed to engage in are of special interest in this regard.[16]

Some, perhaps many, of these voluntary divestitures have been undertaken in response to pressing cash needs in the face of high interest rates. Others, however, may well have been undertaken out of recognition that large size and proliferating variety eventually result in diseconomies. The parent organization is induced on this account voluntarily to split off some of its operating divisions—either as independent economic entities, as spinoffs (in which some financial interest is retained), or for acquisition by others. This process of "mitosis" represents a variety of organizational self-renewal that warrants a sympathetic public policy response. Not only does it promise operating efficiencies, and on this account alone is to be valued, but it also serves to relieve legitimate sociopolitical concerns over wealth concentration tendencies in the largest corporations.

Research Opportunities

As a research matter, an effort to categorize conglomerate merger activity according to motive and effect is needed. The discussion above emphasizes economic efficiency dimensions of the conglomerate, but it is clearly a more complex phenomenon than that. Many of these issues relate more to tax and securities regulations than to industrial organization per se and might therefore better be pursued by other specialists. A full treatment of the conglomerate phenomenon nevertheless requires that these other factors be assessed.

Of greater interest to industrial organization specialists is the influence of internal structure on performance. Studies of the effects of industry structure on performance are part of the core commitment of industrial organization; cross-sectional studies relating industry structure to performance are common. It is proposed here, however, that the internal structure of the firm (organization form) be introduced as an explanatory variable and that the conglomerate be regarded less as a distinctive organization form itself than as a diversified manifestation of

[16] See *Forbes,* May 15, 1970, pp. 214–20; also *Business Week,* August 15, 1970, pp. 86–87.

either the multidivisional or free-form structure (Williamson, 1970, pp. 142–43, 162).

Although the analysis of organization form itself is at a very primitive stage of development (and, consequently, only the crudest variety of classification scheme exists),[17] it would be interesting to examine the influence of internal structure on performance in the following respects: comparative growth and profit rates among rival firms; marginal rates of return to alternative sources of funds; evidence relating to slack (internal efficiency), perhaps especially in relation to business conditions; evidence relating to internal operating practices, such as cross-subsidization; evidence bearing on "offensive" marketing practices, such as reciprocity.[18] It is probably essential, for the purposes of such studies, to make allowance for firm size effects.

Of related interest is the historical evolution of the multidivision form. Chandler (1966) traces much of this in descriptive terms, but a more formal assessment of this organizational innovation, including its diffusion, would seem indicated. Which firms with what characteristics have been first to employ multidivisionalization in their respective industries, and what factors explain the degree of rapidity with which imitation by rivals has occurred?

An effort to discover the quantitative significance of organizational innovation as it affects aggregate growth rates would be ambitious but not necessarily intractable. What fraction of the residual term in conventional growth models can reasonably be imputed to organizational developments?

Also of interest in this regard is the link between technical and organizational innovation. In what respects have developments of the organizational innovation type altered the locus of technical innovative activity and with what performance consequences? To what extent and in what circumstances does technical innovation take an interorganizational rather than intraorganizational route? Is interfirm exchange—in which different firms with distinctive attributes participate in the inven-

[17] The following structural distinctions would seem appropriate from the outset: unitary form, multidivision form, free form, and "other." For a discussion, see Williamson (1970). The need to create additional categories may be evident as the study of internal structure proceeds.

[18] Again, the distinction between economic and bureaucratic rationality referred to in footnote 9 may be useful. There are bureaucratic reasons to expect performance in these respects to vary systematically with organization form, while the conventional theory of the firm is mainly silent on these matters.

tion, development, and final supply stages—really viable? What factors impair its effective operation, and what are the policy implications? [19]

The purpose, locus, frequency, and magnitude of voluntary divestiture efforts need more thoroughly to be documented. Also, consideration ought to be given to means by which to supply incentives that make voluntary divestiture more attractive; this may indeed be the most promising approach to the bigness per se issue. At a minimum, existing tax disincentives to voluntary divestiture ought to be reviewed. Freeing the market for corporate control ought also to be considered as a means by which to encourage very large firms to trim their operations when excessive size and variety are reached; anxious to forestall takeover, otherwise passive firms may be induced voluntarily to exercise restraint. The limits of competition in the capital market in this respect, however, need more fully to be assessed.

The multinational corporation might also be examined in an institutional failures context. To what extent is it a response to alleged imperfections in the capital market? What organizational structures have evolved to support this form of operation, and what limitations (organizational failures) does it experience? What present and potential antitrust problems are posed, and is a corresponding multinational extension of the antitrust enforcement machinery indicated? Even if many of the projections of "world dominance" by multinational corporations are regarded as unrealistic—in that they reflect insufficient appreciation of the limits of internal organization—serious public policy issues may, in individual instances at least, nevertheless be posed.

IV. CONCLUSIONS

It is argued that the study of firm and market structures, and the application of antitrust policy thereto, can benefit from a more systematic examination of the sources and consequences of market failure and by a more thorough assessment of the powers and limits of internal organization. More specifically, product market failure analysis ought to admit to the possibility of default and chance event failures—especially with reference to dominant firm industries. Similarly, the "transactional" limitations that interfirm exchange is subject to warrant explication as these bear on vertical integration. The substitution of internal organization against failures in the capital market, especially as this relates to an

[19] For an elaboration of the issues discussed in this paragraph, see Turner and Williamson. Also see Nelson, Peck, and Kalachek (1967).

assessment of conglomerate organization, likewise deserves attention. The influence of organization form on enterprise performance, and of organizational innovation in general, also merit study. Of particular public policy interest is the possibility of inducing or otherwise supporting voluntary divestiture by giant-sized enterprises.

A survey of the literature on the modern corporation reveals that industrial organization specialists have mainly been bystanders. Partly this is to be explained by the prevailing opinion that the industry, not the firm, is the relevant unit of analysis. But however correct this may be for some purposes, it is less obviously true in others. If one of the most remarkable attributes of American capitalism is its adaptive capacity to invent efficient and viable organization forms in response to changing technological, market, and organizational conditions, to characterize the system in conventional industry terms, to the neglect of internal organization, easily misses much of what accounts for its most significant accomplishments.

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