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CHAPTER 1

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**Mergers, acquisitions, and leveraged  
buyouts: an efficiency assessment**

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*Oliver E. Williamson*

... men in general, and within limits, wish to behave economically, to make their activities *and their organization* “efficient” rather than wasteful. This fact does deserve the utmost emphasis; and an adequate definition of the science of economics... might well make it explicit that the main relevance of the discussion is found in its relation to social policy, assumed to be directed toward the end indicated, of increasing economic efficiency, of reducing waste.

(Knight, 1941; emphasis added)

The implications of mergers, acquisitions, and leveraged buyouts are herein examined with reference to the efficiency purposes to which Frank Knight refers above. That Knight, or any other economist, should refer favorably to efficiency is hardly novel. But there is much more to the statement than a mere affirmation of efficiency. Contrary to the main tradition, Knight asserts that the manner in which economic activity is organized really matters. He furthermore treats organizational efficiency in very primitive terms: the reduction of waste.

The prevailing opinion – at the time Knight advanced these views and over the next thirty years – was that technology was largely determinative of economic organization. It was therefore customary to characterize business firms, whatever their size and configuration, as production functions. The considerable merits of this framework notwithstanding, it was also responsible for serious omissions: “How easy it is for an inefficient manager to dissipate the differentials on which profitability rests, and that it is possible, *with the same techni-*

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*cal facilities*, to produce with a great variety of costs, are among the commonplaces of business experience which do not seem to be equally familiar in the study of the economist” (Hayek, 1945, p. 523; emphasis added).

The possibility that the internal organization of the firm – hierarchical structure, incentive and control apparatus – had a significant bearing on economic efficiency was ignored or dismissed. Hybrid forms of organization (tie-ins, joint ventures, reciprocity, franchising, and the like) were regarded mainly as efforts to acquire and perfect monopoly. The alternative point of view to which Ronald Coase (1972) forcefully referred and that I adopt here is that the internal organization of firms and recourse to hybrid forms of organization can and often do have significant efficiency ramifications.

To be sure, economic organization is sometimes deflected from efficiency and/or serves other purposes. The study of complex systems is nonetheless facilitated by distinguishing primary or main purposes from secondary or ancillary purposes. Knight maintains that efficiency is the core purpose. This article embraces that view.

Efficiency analysis can take several forms. Knight proposes that a very primitive form of efficiency be examined: the reduction of waste. This contemplates movement toward, rather than along, an efficiency frontier. Comparative analysis, rather than optimality analysis, thereby suffices. Coase’s remarks on choice among alternative forms of organization are plainly in this spirit (1964, p. 195; emphasis added):

Contemplation of an optimal system may suggest ways of improving the system, it may provide techniques of analysis that would otherwise have been missed, and, in special cases, it may go far to providing a solution. But in general its effect has been pernicious. It has directed economists’ attention away from the main question, *which is how alternative arrangements will actually work in practice*. It has led economists to derive conclusions for economic policy from a study of an abstract model of a market situation. . . . Until we realize that we are choosing between social arrangements which are all more or less failures, we are not likely to make much headway.

Section I considers horizontal and vertical mergers from the efficiency perspective. Acquisition issues are addressed in the context of organization form in Section II. The efficiency ramifications of leveraged buy-outs are examined in Section III. Leading organizational innovators in each of the above respects are briefly discussed in Section IV. Qualifications to the main case are sketched in Section V. Concluding remarks follow.

## I Horizontal and vertical mergers

Possible efficiency benefits of horizontal and vertical mergers and some of the little noted bureaucratic costs of internal organization are discussed here. Conglomerate mergers are treated under the heading of acquisitions in Section II.

### A Horizontal mergers

The theory of the firm-as-production-function makes express provision for economies of scale. Orthodox analysis has thus always conceded the possibility that scale economies might be realized by combining two firms that are producing the same good or service. It was once widely believed, however, that mergers that simultaneously yielded economies and market power would preponderately lead to an adverse social outcomes. To suggest that economies might justify a merger of large firms was dismissed with the observation that even small adverse market power effects would normally swamp any possible efficiency benefits.

That intuition, when processed through the basic partial equilibrium apparatus of applied welfare economics,<sup>1</sup> turned out to be incorrect. What I have referred to as the “naive tradeoff model” disclosed that large market power effects were needed to offset the welfare benefits of small cost savings (Williamson, 1968, 1977).

To be sure, there are a number of qualifications to that result (Williamson, 1968, 1977; Fisher and Lande, 1983). The main point, however, to which I want to call attention is that a dramatic reversal in efficiency thinking has progressively developed over the past twenty years. Not only are real economies of all kinds now affirmatively valued by the antitrust enforcement agencies, but the possibility of using economies as an antitrust defense has actually been introduced into the Antitrust Merger Guidelines.<sup>2</sup> The earlier disdain<sup>3</sup> if not hostility for efficiency and efficiency reasoning has thus been reversed.

1 The basic postulates of partial equilibrium welfare economics are set out in Arnold Harberger (1971, p. 785) see also Williamson (1977, pp. 703–4).

2 The 1984 Merger Guidelines of the Department of Justice state that “some mergers that the Department otherwise might challenge may be reasonably necessary to achieve significant net efficiencies. If the parties to the merger establish by clear and convincing evidence that a merger will achieve such efficiencies, the Department will consider those efficiencies in deciding to challenge the merger” (U.S. Department of Justice 1984 Merger Guidelines, Sec. 3.5). I think this appropriate at an administrative level but have grave reservations that a full-blown economies defense should be permitted in a

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*B Vertical mergers*

That horizontal mergers might sometimes be justified by cost savings was granted reluctantly. But since no such economies of scale could be ascribed to vertical combinations, the prevailing antitrust skepticism for the merits of these was thought to be soundly based. Vertical mergers were thus widely regarded as overreaching and driven by monopoly purpose.<sup>4</sup>

To be sure, the applied price theory tradition made provision for exceptions. But these were narrow and limited. The principal exceptions were these: (1) vertical integration might be justified as a way by which to correct factor proportions distortions that occur when a monopolized input is sold to a downstream variable proportions production technology, and (2) vertical integration is sometimes a source of cost savings when successive production stages are tightly linked by a “physical or technical aspect.” The first of these was argued by Lionel McKenzie (1951) and has been elaborated and qualified since (Blair and Kaserman, 1983). The second was argued by Joe Bain (1968, p. 381):

... the cases of clear economies of integration generally involve a physical or technical integration of the processes in a single plant. A classic case is that of integrating iron-making and steel-making to effect a saving in fuel costs by eliminating a reheating of iron before it is fed to a steel furnace. Where integration does not have this physical or technical aspect – as it does not, for example, in integrating the production of assorted components with the assembly of those components – the case for cost savings from integration is generally much less clear.

Vertical integration unattended by such special physical or technical conditions was thus thought to be of dubious merit (e.g., a device to evade sales taxes) if not outright anticompetitive.

Coase had long resisted an applied price theory approach to industrial organization in favor of a broader view. Rather than invoke a monopoly explanation upon observing a nonstandard organizational form or unfamiliar business practice, he counseled that scholars and others should “inquire whether it may not be the case whether the practice in question is a necessary element in bringing about a competitive situation. If this

court if the department decides to challenge a merger and the case is brought to trial. (Permitting the respondent to present economies to the court as a part of its rationale for a merger could, however, have salutary effects [Williamson, 1968, pp. 113–14; 1977, pp. 727–29].)

3 For pertinent statements of the earlier tradition, see Williamson (1985, pp. 286–87, 366–69).

4 See Williamson (1986) for references to the ruling opinions.

were done, I suspect that a good deal of supposed monopoly would disappear” (Coase, 1972, p. 68).

An effort to reformulate the vertical integration issue along the transaction cost lines that Coase had much earlier advanced (1973) was even then taking shape (Williamson, 1971). That technology was the proximate cause for vertical integration was disputed by adopting a comparative contracting approach to economic organization. Why not use *autonomous* contracting to replicate the *very same* efficient factor proportions that McKenzie associated with unified ownership? Bain’s characterization of vertical integration in technological terms was likewise subjected to reexamination: Why not neutralize the “technical or physical aspects” on which Bain relied by locating successive *autonomous* stages in cheek-by-jowl relation to each other and thereafter mediating the supply of molten ingot by interfirm contract? The superiority, or not, of intrafirm as compared with interfirm contracting thus became the object of analysis.

Not only did this comparative contracting approach to economic organization go beyond the particulars to which McKenzie and Bain referred, but it had general application to backward, lateral, and forward integration. Subsequent research revealed, moreover, that the key features of economic organization – in intermediate product markets, labor markets, capital markets, regulation, and the like – were variations on the very same underlying transaction-cost economizing theme. The basic strategy for deriving refutable implications was this: Assign transactions (which differ in their attributes) to governance structures (the costs and competencies of which differ) in a discriminating (mainly transaction-cost economizing) way. A very different rationale for vertical integration and other nonstandard or unfamiliar business practices emerged.

These matters are dealt with in detail elsewhere. Suffice it to observe here that

1. the most important single attribute that is responsible for bilateral dependency, which is the contracting condition that is fundamentally responsible for vertical integration, is the condition of asset specificity (Williamson, 1971, 1975, 1985; Klein, Crawford, and Alchian, 1978);
2. the predictions of the transaction cost approach to firm and market organization are broadly consonant with the data;<sup>5</sup> and

5 See Williamson (1985, Chapter 5) for a review of the evidence. Also see David Levy (1985). The evidence supports the following: (a) vertical integration out of manufacturing into distribution is *selective* and reflects transaction-cost economizing principles; (b) the same is true of backward vertical integration into raw materials and lateral

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3. antitrust enforcement regarding vertical integration has been progressively reshaped and now reflects transaction-cost economizing principles.<sup>6</sup>

That vertical and horizontal mergers are sometimes supported by a broader efficiency rationale than was previously admitted does not, however, imply that all such mergers are unproblematic. Vigilance with respect to the strategic purposes sometimes served by such mergers – whereby actual and potential entrants are disadvantaged without redeeming social benefits – is needed.<sup>7</sup> Strategic purposes are viable, however, only if severe structural preconditions (mainly high concentration coupled with high hurdles to entry) are satisfied. The upshot is that efficiency reasoning, of which transaction-cost economics is a part, plays a much more prominent role in industrial organization than was the case ten or twenty years ago – when the technology/monopoly predispositions were ruling. Regarding efficiency, rather than monopoly or technology, as the “main case” has played a major role in this transformation.

*C The costs of bureaucracy*

Although it is widely agreed that vertical integration is sometimes mistaken, there is nevertheless a deep puzzle as to why integration should ever be the source of added costs. Thus if a buyer acquires a supplier, simply instruct the (now integrated) supply stage to repeat all of the good things that it had been doing in the preacquisition condition. Only on those few occasions when autonomous trading gives rise to conflict is the authority that inheres in unified ownership exercised to effect a superior outcome. The integrated firm can thus everywhere do as well as the nonintegrated (by replicating), and it sometimes does better (by selective intervention). According to this scenario, integrated firms can do everything that nonintegrated firms can do and more.

Unpacking the puzzle “Why is not all production carried out in one

integration into components; (c) the premise that more integration is always superior to less is mistaken.

6 Both the Merger Guidelines and merger enforcement have been reshaped during the past twenty years. Thus whereas the 1968 Vertical Merger Guidelines were very restrictive, the current guidelines have been relaxed and substantially reflect transaction-cost reasoning (Williamson, 1986). Also, whereas there were 441 preliminary investigations of vertical mergers in 1968 (and only fifty-one horizontal merger investigations) under the then prevailing inhospitality orientation, in 1984 there were but seven preliminary investigations of vertical mergers (and 108 horizontal) (Johnson and Smith, 1968, p. 16).

7 See Williamson (1985, Chapter 14) for a discussion.

big firm?" (Coase, 1937, p. 340) requires that the *added* costs of internal organization be discovered. These added costs take several forms, of which the following are the most important:<sup>8</sup> (1) replicating marketlike incentives within internal organization (a) gives rise to asset malutilization and (b) is incomplete because it is predictably degraded by accounting manipulation; (2) internal organization is subject to a series of bureaucratic distortions; and (3) internal organization supports politicking, especially at investment renewal intervals. The upshot is that "selective intervention" is a fiction. The coordination benefits of internal organization are unavoidably attended by offsetting costs. Only, therefore, in circumstances where nontrivial benefits from integration are in prospect is a decision to take a transaction out of the market and organize it internally warranted.

Transaction cost reasoning is thus symmetrical in that it serves to display the leading costs as well as the leading benefits that accrue to vertical integration. Although much more needs to be done before the bureaucratic failure literature can be thought to operate on a parity with the market failure literature, where the latter has been in progress for thirty and more years, a start has been made to redress this condition.

## II Acquisitions

Albeit arbitrary, I treat mergers as voluntary and reserve the term *acquisitions* for efforts to secure control over a corporation that have an imposed or involuntary character.<sup>9</sup> What are the instruments for bringing about involuntary transfers of control? In order of historical appearance, these are (1) the proxy contest, (2) the takeover contest, and (3) the leveraged buyout. The first two will be examined here. Section 3 deals with leveraged buyouts.<sup>10</sup>

Although, in principle, all three of these techniques for effecting a change of control were continuously available – in that there were no

8 These are elaborated in Williamson (1985, Chapter 6). For a discussion in which ownership differences are more strongly featured, see Sanford Grossman and Oliver Hart (1986).

9 To be sure, some mergers are agreed to "voluntarily" only because target managements perceive that a refusal to merge will result in a contest for control that they wish to avoid (often because they expect to lose it). Accordingly, the target firm management strikes a deal and decides to "cooperate." Many acquisitions that are not publicly contested are more appropriately assigned to the involuntary category as a result.

10 The leveraged buyout need not be used as a takeover technique. It may merely be a form of changing (rationalizing) the capital structure – by substituting debt for equity and concentrating control in the process. With or without a challenge to incumbent management, the leveraged buyout is a recent financial innovation.



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legal impediments to any, and none required any technological innovation – the last two appeared only in the past quarter of a century. Prior to the appearance of these, the proxy contest was the only instrument for challenging incumbent managements.

The proxy contest is akin to a political campaign. The incumbents have their slate of candidates for the board of directors. The insurgents offer a rival slate. The insurgents claim that the incumbents have botched the job and “promise” to do better. The incumbents claim that they have done well, especially in view of trying economic circumstances, and state that the insurgents’ promises are not to be believed.

Proxy contests are costly. Given the difficulties of evaluating claims of incompetence and the fact that promises of superior performance upon award of control are not backed by credible commitments, few proxy contests were ever waged, and, of these, few were won.<sup>11</sup> In the colorful language of Oswald Knauth, incumbent managements had to “fail obviously and even ignominiously before the dispersed forces of criticism [became] mobilized for action” (1948, p. 45). The Berle and Means query “have we any justification for assuming that those in control of a modern corporation will also choose to operate it in the interests of the stockholders?” (1932, p. 121) was thus poignant.

Many economists evidently believe, however, that it is unrewarding to entertain the hypothesis of managerial discretion.<sup>12</sup> If investors part with their money voluntarily, then wherein can it ever be said that they are “victimized” by abuses of managerial discretion?<sup>13</sup> To maintain, however, that “pricing out” supports unrestrained laissez-faire is a “triumph of [free market] ideology over theory and fact” (Stiglitz, 1985, p. 134).

A curious schizophrenia characterizes much of the antimanagement literature. Focusing on any given time, enthusiasts of laissez-faire capitalism deny that managerial discretion is a problem. Over time, however, they point with pride to the development of new techniques that have brought managerial discretion under more effective control.<sup>14</sup>

To be sure, the earlier condition may have been irremediable: The corrective instruments to which investors earlier had access could have been, indeed arguably were, fully deployed. But it is inconsistent to

11 During the period 1956–60, only nine out of twenty-eight proxy contests for control were fully successful (Hayes and Taussig, 1967, p. 137).

12 Many of the main papers in the 1982 conference *Corporations and Private Property*, which papers are published in the June 1983 issue of the *Journal of Law and Economics*, view the Berle and Means query as misguided if not absurd.

13 This appears to be Robert Hessen’s criterion (1983, p. 288).

14 This material is taken from Williamson (1985, pp. 320–21).



Assessing mergers, acquisitions, and buyouts

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employ the *very same* neoclassical model – whereby the firm is characterized as a production function to which unrestricted profit maximization is continuously ascribed – at both the earlier and later dates. A conception of the firm in which opportunities for managerial discretion are expressed as a function of the control instruments is needed instead. Such a conception leads to greater respect for successive organizational innovations that have superior control properties and that attenuate managerial discretion.

Managerial discretion can take numerous forms, some very subtle. Individual managers may run slack operations; they may pursue subgoals that are at variance with corporate purposes; they can engage in self-dealing. Such distortions become more severe where there is logrolling. These and other manifestations of managerial discretion were well-known to Berle and Means, Edward Mason (1959), and other observers of the corporate scene. What went unnoticed, however, was the vast transformation of the corporate form between 1930 and 1960 and the consequences that had on managerial discretion. The earlier, centralized, functionally organized, unitary (or U-form) structure of the corporation was progressively supplanted by the multidivisional (or M-form) structure.

The M-form innovation had several effects on corporate performance (Williamson, 1985, Chapter 11). For one thing, the shift from a functional to a divisional form served to rationalize decision making. The confusion of purposes that characterized the U-form firm, where causality and responsibility were difficult to trace, was supplanted by a divisionalized structure where separability among quasi-autonomous parts was emphasized. Sharper definition of purpose and economies of informational cost resulted.

Disengaging the general office from operating affairs also improved incentives. What had been short-run, partisan involvements by the top executives who had previously been heads of functional activities (e.g., manufacturing, marketing, finance) gave way to longer-run, strategic decision making. Not only did the general office give greater weight to overall enterprise objectives in relation to functional subgoals, but a competence to monitor the performance of the divisions, allocate resources to higher-valued uses, and use internal incentives and controls in a more discriminating way was successively perfected. The M-form organization thereby attenuated managerial discretion in what had previously been U-form firms.

These internal checks on managerial discretion do not, however, imply its elimination. Rather, the argument is comparative. Albeit in reduced and deflected degree, managerial discretion can be expected to

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continue. Interestingly, however, the M-form innovation had unanticipated systems consequences that served further to attenuate managerial discretion. These additional checks on managerial discretion operated through competition in the capital market.<sup>15</sup>

It has often been noted that tender offers increasingly replaced proxy contests as a takeover technique beginning in the late 1950s.<sup>16</sup> What explains this? Gregg Jarrell and Michael Bradley contend that the costs of proxy contests were increased by new regulations.<sup>17</sup> Takeovers are thus explained as the response to a regulation-induced change in the relative price of the methods for gaining control.

That is an interesting hypothesis, but it would be more compelling if proxy contests actually had been widely and successfully used to challenge incumbent managements before those rule changes. As noted above, however, proxy contests were never numerous and were usually unsuccessful. Moreover, although the regulation of proxy contests could encourage greater reliance on a takeover, why should a switch to this (previously inferior) device be associated with a larger number of contests for corporate control and a greater degree of success?

In principle, takeover by tender offer was always feasible. I submit that the reason why it was not employed earlier is that a corporate structure conducive to takeover was not yet in place. Specifically, reorganization of the corporation from a functionally departmentalized to a divisionalized structure had profound consequences for corporate control. Conceiving of the firm as a governance structure rather than as a production function is the key to understanding the phenomenon of takeover by tender offer.

The main advantage of an M-form firm over a U-form enterprise in takeover respects is the ability of an M-form acquirer to “digest” its acquisition. The acquired firm is normally assigned profit center status and thereafter becomes subject to the corporation’s internal incentive, control, and resource-allocation processes. The firm does not attempt to integrate comprehensively the new assets with the old. Inasmuch as

15 Henry Manne’s classic treatment (1965) of the market for corporate control is germane.

16 As Greg Jarrell and Michael Bradley observe, “Cash takeover bids were very rare in the United States prior to the 1960’s, but they burst onto the financial scene in the mid-1960’s, a period of much corporate conglomeration” (1980, p. 371, n. 1).

17 They cite the work of Peter Dodd, who “associated the sudden emergence of cash tender offers as a takeover device with the successive expansions in 1955 and 1964 (Securities Acts Amendment) by the SEC of its rules governing proxy contests. . . . These changes in proxy rules increased insurgents’ costs of assuming corporate control via the proxy and, therefore, increased usage of the cash tender offer to achieve a change in management” (Jarrell and Bradley, 1980, p. 371, n. 1).