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Corporate Governance and the Plight of Minority Shareholders in the United States before the Great Depression

Naomi R. Lamoreaux and Jean-Laurent Rosenthal

> The promoters . . . had their reasons for celebration. . . . [T]hey had set up the Crédit Mobilier, into whose chest the gains from contracts for the whole Union Pacific building had flowed. . . . The proceeds from government bonds, security sales, and sales of lands and town sites had all been swallowed up in the mounting costs of building or in other ways. For this work the directors of the Union Pacific had ingeniously contracted with themselves at prices which rose from \$80,000 to \$90,000 and \$96,000 a mile, twice the maximum estimates of engineers. . . . Hence the jubilation of the Union Pacific ring. For what profits could they have awaited, if they had confined themselves purely to trafficking in freight or passengers through the empty prairies?
> —Matthew Josephson (1934, p. 92)

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4.1 Introduction

The Crédit Mobilier manipulation was a spectacular scandal. Directors of the Union Pacific Railroad had organized their own construction company and had awarded themselves contracts to build the transcontinental line. Although historians have long debated whether this arrangement yielded participants an exorbitant rate of return,[1] there is no doubt contemporaries thought it did. Even so, what made headlines was less this siphoning off of profits than the involvement of the federal government, which had granted the Union Pacific extensive tracts of public lands and also loans to finance construction. According to charges in the newspapers, the "railroad ring" had handed out shares in Crédit Mobilier to influential congressmen, buying political influence in order to forestall inconvenient scrutiny as well as to secure additional federal largesse (Josephson 1934; Bain 1999).[2]

The hoopla that surrounded these revelations of bribery has obscured for modern observers the extent to which conflicts of interest, like those at the heart of the Crédit Mobilier scandal, were endemic to corporations at the time. Although cases rarely made headlines unless they involved companies, such as major railroad or telegraph lines, that were important to the public welfare,[3] the legal record from the late nineteenth and early twentieth centuries suggests that directors of corporations large and small frequently negotiated contracts with other companies in which they had a financial interest,[4] elected themselves to corporate offices at lucrative salaries that they themselves set,[5] arranged mergers that earned themselves

1. Compare, for example, the accounts in Josephson (1934) and Bain (1999) with those of Kirkland (1961) and Summers (1993).

2. Intriguingly, details of the Crédit Mobilier manipulation had been reported in the press since at least 1869, but attracted little attention until the *New York Sun,* which opposed the reelection of President Ulysses S. Grant, broke the bribery story in September, 1872 (Bain 1999, pp. 599–600, 602, 627–28, 676).

3. Examples include "The Telegraph Combination," *New York Times,* August 22, 1877, p. 8; "More Trouble for Gould: Metropolitan Stockholders to Have an Inning," *New York Times,* November 5, 1882, p. 7; "He Shot Me Like a Dog," *New York Times,* December 29, 1883, p. 4; "Accused of Conspiracy: A Blow at Jay Gould and his Friends," *New York Times,* March 3, 1885, p. 2; "The Pennsylvania Interested: The Fight for the Cincinnati, Hamilton and Dayton," *New York Times,* May 3, 1885, p. 2.

4. For examples of cases involving such contracts, see *Smith v. Poor,* 40 Me. 415 (1855); *March v. Eastern Railroad,* 40 N.H. 548 (1860); *Flint and Pere Marquette Railway v. Dewey,* 14 Mich. 477 (1866); *Ashhurst's Appeal,* 60 Pa. 290 (1869); *Brewer v. Boston Theatre,* 104 Mass. 378 (1870); *Faulds v. Yates,* 57 Ill. 416 (1870); *European and North American Railway Co. v. Poor,* 59 Me. 277 (1871); *Kelly v. Newburyport and Amesbury Horse Railroad,* 141 Mass. 496 (1886); *Warren v. Para Rubber Shoe Co.,* 166 Mass. 97 (1896); and *Burden v. Burden,* 159 N.Y. 287 (1899). See also the much more extensive list of cases in Marsh (1966) and Mark (2003).

5. For examples of cases involving charges of excessive compensation, see *Dunphy v. Traveller Newspaper Association,* 146 Mass. 495 (1888); *Brown v. De Young,* 167 Ill. 549 (1897); *Von Arnim v. American Tube Works,* 188 Mass. 515 (1905); *Abbott v. Harbeson Textile Co.,* 147 N.Y.S. 1031 (1914); *Cole v. Wells,* 224 Mass. 504 (1916); *Almy v. Almy, Bigelow & Washburn,* 235 Mass. 227 (1920).

impressive capital gains while leaving other shareholders in the lurch,[6] and engaged in a wide variety of other actions from which they benefited at the expense of their associates. Examples included lending themselves corporate funds, issuing themselves additional shares of stock, and settling lawsuits against their companies that they had helped to bring in the first place.[7]

Following the conventions of this volume, we label this behavior fraud rather than corruption because it did not involve the use of government resources for private gain. Nonetheless, we would like to emphasize that, in the case of corporations, such a distinction would not have made much sense prior to the 1850s. Indeed, at the beginning of the nineteenth century, corporations were still regarded as quasi-governmental institutions. Businesspeople who wanted to form them had to seek special permission from the state, which tended only to be granted for projects deemed to be in the public interest, and many corporations obtained part of their capital stock from state treasuries. As the utility of the corporate form for ordinary business purposes became increasingly apparent, however, pressure mounted on legislatures to make the form more widely available—to prevent a favored few from engrossing its benefits. State governments responded to these political pressures first by making it easier to secure a special charter, and then (around the middle of the nineteenth century) by passing general incorporation laws that routinized the whole process, enabling anyone who so desired to form a corporation by fulfilling some standard requirements, filing a form, and paying a fee. In the process, the corporation lost its public character and came to be thought of as a wholly private institution (Hurst 1970; Maier 1993; Bloch and Lamoreaux 2004; Wallis 2005).

Despite this privatization, fraudulent extractive behavior by controlling shareholders in corporations potentially undermined the security of investors' property rights in much the same way as did corrupt extractive behavior by government officials. Like citizens, moreover, minority shareholders had only limited ability to protect themselves against abuse. Stan-

6. For examples of cases involving such charges, see *Peabody v. Flint,* 88 Mass. 52 (1863); *Converse v. United Shoe Machinery,* 185 Mass. 422 (1914); and *Bonner v. Chapin National Bank,* 251 Mass. 401 (1925). For a more extensive list of cases, see Carney (1980). These kinds of manipulations were more likely to make the newspapers, as, for example, when the directors and controlling shareholders of the Brush Electric Company of Cleveland, Ohio, arranged to sell their stockholdings to businessmen who controlled the Thomson-Houston Electric Company for $75 a share. The par value of the stock was $50, and its market price was estimated at that time to be $35. Minority shareholders were outraged that they were not included in the deal. *New York Times,* January 21, 1890, p. 1.

7. For examples of cases involving such charges, see *Hersey v. Veazie,* 24 Me. 9 (1844); *Smith v. Hurd,* 53 Mass. 371 (1847); *Abbott v. Merriam,* 62 Mass. 588 (1851); *Leslie v. Lorillard,* 110 N.Y. 519 (1888); *Continental Securities v. Belmont,* 133 N.Y.S. 560 (1912); *Dunlay v. Avenue M Garage & Repair Co.,* 253 N.Y. 274 (1930). A less venal example involved Col. Elliott F. Shepard, who bought control of the Fifth-Avenue Transportation Company for religious reasons in order to stop the running of stages on Sundays, evoking protests from minority shareholders who objected to the loss of revenues. *New York Times,* May 10, 1888, p. 5.

dard corporate governance rules based on the principle of one vote per share meant that shareholders who possessed enough stock to decide elections were effectively dictators.[8] If the majority pursued policies that members of the minority thought were wrongheaded or detrimental to their interests, there was little that the latter could do. Minority shareholders could not make the majority change their policies. Nor could they force a dissolution of the enterprise. Nor could they easily exit by selling their equity. In the case of publicly traded firms, they would only be able to sell off their holdings at a price discounted to reflect the majority's behavior; in the case of closely held corporations, often the only buyers for their shares were the same majority shareholders with whom they were in conflict.[9]

The intriguing puzzle is that, despite these problems, businesspeople kept forming corporations and minority shareholders kept investing in them. George Heberton Evans, Jr., has counted the number of corporate charters granted in a sample of key states and found a steady rise between the Civil War and the Great Depression. Indeed, the increase was so steep that Evans's index of incorporations (1925 = 100) had a value of only about 5 in 1870. In Ohio, for example, the number of charters increased from an average of 305 per year during the 1870s to 1,166 per year from 1895 to 1904, to 4,047 per year during the 1920s.[10] Although the growth was most rapid in the smallest size categories of firms, investors were increasingly willing to risk their savings in large corporations as well. As early as the 1870s, the authorized capital of new Ohio corporations valued at over $1 million averaged $37.6 million per year. The Ohio figures for later decades are not as informative because large corporations were increasingly choosing to organize first in New Jersey and then in Delaware. In New Jersey, the authorized capital of firms valued at over $1 million averaged $928.4 million per year from 1895 to 1904, and in Delaware, the comparable annual average was $18,814.2 million by the 1920s (Evans 1948, appendix 3). Moreover, as Mary O'Sullivan has shown, relative to gross domestic product (GDP) the value of new corporate equity issues on the New York Stock Exchange rose between the late nineteenth and early twentieth centuries to levels that, even without the boom years of the late 1920s, were higher than those in the second half of the twentieth century,

8. For a more extensive discussion of the importance of these rules, see Lamoreaux and Rosenthal (2005) and Lamoreaux (2004), which show that the courts made it difficult for firms in the United States to adopt nonstandard governance rules. For a comparison of voting rules in U.S. corporations with those in corporations in other countries, see Dunlavy (2004).

9. By the mid-twentieth century, it was becoming increasingly common for shareholders to protect themselves with buyout agreements. Even this remedy could be ineffective, however, if the majority prevented the corporation from accumulating the necessary surplus or manipulated the book value of the enterprise. It could also impose a costly burden on the firm (Hornstein 1950; Hillman 1982).

10. The trend seems to have been unaffected by the imposition of the income tax in 1916, which subjected investors in corporations to double taxation.

when the Securities and Exchange Commission protected investors in publicly traded corporations (O'Sullivan 2004).

The sheer magnitude of these numbers would seem to indicate that fear of expropriation did not significantly deter investment in corporations during this period. These numbers are not the whole story, however, for large numbers of partnerships were also formed during these years. Reliable data are not available until 1900, when the Census of Manufacturers reported information on organizational form, but at that time, 67 percent of all U.S. manufacturing establishments owned by more than one person were organized as partnerships and only 29 percent as corporations, with the remaining 4 percent consisting mainly of cooperatives (U.S. Census Office 1902, p. 503).[11] Although partnerships on average were significantly smaller than corporations (the census valued the total product of partnerships at $2.57 billion, as opposed to $7.73 billion for corporations), their numerical dominance is highly suggestive. The literature has generally treated partnerships as an inferior organizational form, one that mainly had utility for law firms and other similar businesses that depended on specialized human capital for their success (Alchian and Demsetz 1972; Gilson and Mnookin 1985; Grossman and Hart 1986; Hart 1995; Cai 2003; Blair 2003; Rebitzer and Taylor 2004).[12] The high proportion of partnerships in the manufacturing sector raises the question of whether businesspeople were deliberately choosing a suboptimal form in order to avoid the governance problems associated with corporations.

We address this question by exploring the decision to organize a new firm as a corporation or a partnership. In sections 4.2 and 4.3, we show that the legal rules governing these two forms meant that each alternative was subject to a different organizational problem. In the case of partnerships, the ability of any member of the firm to force a dissolution meant that partners were potentially subject to disruption. In the case of corporations, the power that controlling shareholders possessed to make decisions unilaterally meant that they could capture more than their fair share of the enterprise's returns. We develop a simple model of these alternative problems and show that the willingness of investors to participate in corporations, as opposed to partnerships, was affected by the extent to which their returns could be expropriated by controlling shareholders. We also show that investors' willingness to join a partnership, rather than not participating in

11. Economy-wide counts are not available until after 1916, when the Internal Revenue Service began to collect the income tax. In 1920, there were approximately 314,000 corporations in the United States, compared to about 241,000 partnerships, but it is likely that these figures greatly understate the total number of partnerships because all corporations, however small or unprofitable, were required to file tax returns, whereas partnerships only had to file if their income exceeded the threshold for the tax (U.S. Internal Revenue Service 1922, pp. 8–10).

12. For a rare contrary example of an article arguing for the superiority of partnerships over corporations, see Ribstein (2005).

the enterprise at all, was a function of the probability that a dispute among the partners would lead to a premature dissolution of the firm.

In section 4.4 we explore the limits that the legal system placed on the share of profits that controlling shareholders could engross. We find that, if anything, these restraints became laxer over the course of our period. Nonetheless, we argue, this change probably had little adverse effect on the pace of economic growth. The implication of our model is that organizational problems would only dissuade investors from putting their funds in firms whose expected returns were low. Because there was an abundance of good, highly profitable projects in the United States during the late nineteenth and early twentieth centuries, investors willingly participated in the formation of large numbers of new enterprises, including an increasing number of corporations.

4.2 Partnerships and the Problem of Untimely Dissolution

Under Anglo-American common law, partnerships were not legal persons and thus had no existence or identity that was independent of the specific individuals who formed them. Each partner possessed full ownership rights and, without consulting the other partners, could enter into contracts that were binding on the firm so long as those contracts were within the scope of the firm's normal business activities. Not only was this right to act unilaterally in and of itself a potential source of conflict within the firm, but it also meant that partners (all of whom were unlimitedly liable for the firm's debts) faced obligations that were beyond their control or perhaps even beyond their knowledge. Because businesspeople hesitated to enter into such relationships unless they could extricate themselves when their partners proved untrustworthy, partnerships typically existed "at will." That is, any member of the firm could force a dissolution simply by deciding that he or she no longer wanted to be part of the enterprise.[13]

As a result, partnerships potentially suffered from what we call the problem of untimely dissolution. Because each partner had full ownership rights and could act without consulting the others, there was a high probability that disagreements would arise that might induce one member of the firm to dissolve the enterprise. Such disagreements were potentially costly. At the very least, they might disrupt the functioning of what otherwise had been a profitable enterprise. More ominously, they might require the liquidation of firm-specific assets at prices below their value had the enterprise been able to continue. Because dissolution was so potentially costly, the at-will character of partnerships also created opportunities for

13. There are a number of treatises detailing the law of partnership during this period, but see especially Story (1859) and Gillmore (1911).

holdup. That is, a partner could attempt to extract a greater share of the firm's revenue just by threatening dissolution.[14]

Although partners could in theory contract around this problem by stipulating that the firm continue for a fixed period time, there was considerable uncertainty in the late nineteenth century about whether the courts would enforce such agreements (Gilmore 1911, pp. 571–73). For example, some courts refused to allow dissolution if the complaining party was the source of the dissension. In the words of an Illinois justice, "it would be inequitable to allow [such a person] advantage from his own wrongful acts," especially because "the results flowing from the premature dissolution of a partnership might be most disastrous to a partner who had embarked his capital in the enterprise" and who had been innocent of any "wrongful act or omission of duty" (*Gerard v. Gateau,* 84 Ill. 121 [1876]). Similarly, in *Hannaman v. Karrick,* a Utah justice insisted that a partner should not be "allowed to ruin the business of the firm from mere caprice, or of his own volition, without cause, and in violation of his agreement, and sacrifice the entire object of the partnership" (9 Utah 236 [1893]).

Other courts, however, refused to enforce the continuation of a partnership on the grounds that "it is a rule in equity that the court will not decree a specific performance where it has no power to enforce the decree" (Mechem 1920, pp. 196–98). As the Connecticut Supreme Court of Errors declared in *Morris v. Peckham* (51 Conn. 128 at 133 [1883]), "partnership articles will not be enforced . . . even where a time is fixed" because it was beyond the bench's power to ensure that all members of a firm performed their duties on an ongoing basis.[15] Moreover, many judges thought that it made little sense to force a partner to continue the association against his or her will because "no partnership can efficiently or beneficially carry on its business without the mutual confidence and co-operation of all the partners" (*Karrick v. Hannaman,* 168 U.S. 328 at 336 [1897]). Indeed, some

14. To give an early example, E. I. Dupont's partner, Peter Bauduy, attempted to boost his share of the firm's income by demanding to count as part of his contribution to capital a note he had endorsed for the benefit of the enterprise. Bauduy threatened dissolution and "could not be pacified" except by a new contract in which he "exacted from the concern some extra compensation and advantages." See "Answer of Eleuthere Irénée Dupont made in his own name as well as in behalf of Mess. E. I. Dupont de Nemours & Co. to the bill filed in chancery by Peter Bauduy against him and the said concern," 1817, Special Papers, Bauduy Lawsuit (Part I) (1805–1828), Longwood Mss., Box 45, Accession Group 5, E. I. du Pont de Nemours & Co., Series C, Hagley Library Manuscript Collections, Wilmington, Del.

For a more general discussion of holdup in partnerships, see Bodenhorn (2002). Bodenhorn argues that individuals mitigated this problem by selecting as partners individuals of similar age, productivity, and capital. We do not deny that businesspeople adopted a variety of strategies to reduce the likelihood of holdup, but the large number of dissolution suits in the legal record and the short life span of most partnerships suggests that the problem of untimely dissolution was very real.

15. In this particular case the duration of the contract at stake was not clear, but the judge declared the principle in the broadest possible terms. See also *Buck v. Smith,* 29 Mich. 166 (1874).

courts worried that restrictions on dissolution might themselves be pernicious and went so far as to declare that the right to dissolve a partnership at will could not be contracted away. Quoting an early New York decision, for example, the Michigan Supreme Court asserted that "there can be no such thing as an indissoluble partnership." To rule otherwise would be to expose a member of the firm to the opportunism of his or her associates. "The power given by one partner to another to make joint contracts for them both is not only a revocable power, but a man can do no act to divest himself of the capacity to revoke it" (*Solomon v. Kirkwood,* 55 Mich. 256 [1884], citing *Skinner v. Dayton,* 19 Johns. 513 [N.Y. 1822]).

The remedy that courts promoting this view offered to partners who had been victimized by threats of untimely dissolution was to sue for breach of contract rather than force a continuation of the firm. A partnership agreement was thus to be treated like any other contract: it could "be broken at pleasure, subject however to responsibility in damages" (*Solomon v. Kirkwood,* 55 Mich. 256 at 260 [1884]). Objecting to this position, the Utah court complained that such a remedy could never provide "complete justice" to the aggrieved party, for not only was "this mode of redress . . . usually slow and unsatisfactory," but the resulting "damages, in many cases, must necessarily prove to be utterly inadequate to compensate for the destruction of a profitable and growing business" (*Hannaman v. Karrick,* 9 Utah 236 at 241–42 [1893]).[16] Although this criticism had considerable merit, it did not carry the day. Indeed, it was the contrary view—that the only difference "so far as concerns the right of dissolution by one partner" between partnerships at will and those for specified terms was that "in the former case, the dissolution is no breach of the partnership agreement, and affords the other partner no ground of complaint," whereas in the latter "such a dissolution before the expiration of the time stipulated is a breach of the agreement, and as such to be compensated in damages" (*Karrick v. Hannaman,* 168 U.S. 328 [1897])[17]—that came to dominate and was enshrined in the Uniform Partnership Act (UPA) in the second decade of the twentieth century (Richards 1921).

The net effect of the enactment of UPA was to establish with greater certainty the principle that all partnerships, even those established for a fixed

16. Although in principle the injured party would be compensated forgone profits (see cases ranging from *Bagley v. Smith,* 10 N.Y. 489 [1853], to *Zimmerman v. Harding,* 227 U.S. 489 [1913]), the courts were necessarily conservative in estimating uncertain future profits (*Ramsay v. Meade,* 37 Colo. 465 [1906]).

17. Although partnerships were normally matters of state rather than federal law, this case had been appealed to the U.S. Supreme Court when Utah was still a territory under federal authority. In such matters, unlike constitutional issues, the Supreme Court did not make law for the nation, but the decision of such a prestigious court carried enormous weight. Justice Horace Gray's opinion in the case is particularly interesting because he went out of his way to criticize the Utah judge's view of partnerships, even though he admitted that it was not necessary for the adjudication of the appeal for him "to express an opinion upon this point."

term, were dissolvable at will. By defining some attempts to end partnerships prematurely as illegitimate breaches of contract punishable by an award of damages, the new legal rules did put limits on partners' ability to increase their wealth by holding each other up. Short of a systematic study of damage awards at the lower-court level, there is no way of knowing exactly what these limits were in actual practice or whether they had a significant effect on partners' behavior. We do know, however, that to the extent that a partner was able to make the case that another member of the firm was at fault or that general dissension among the partners made continued operation impossible, she or he would be able to escape damages entirely. Even courts that had been reluctant to dissolve partnerships before the expiration of their terms consistently asserted this rule. Hence the Utah judge in *Hannaman v. Karrick* admitted that "where there is such a breach between the partners as to render continuance impossible, or when dissension has dispelled the hopes, prospects, and advantages which induced its formation, or if for any just cause the partnership ought to be dissolved before the expiration of the term, then a court of equity is competent to grant relief" (9 Utah 236 [1893]). Similarly, the Illinois judge acknowledged in *Gerard v. Gateau* "that such embittered relations may exist as would render it impracticable to conduct the business, and justify a decree dissolving the partnership, admits of no discussion, on principle as well as upon authority" (84 Ill. 121 [1876]). Serious dissension among partners was, and always had been, grounds for dissolving a firm.

4.2.1 A Simple Model of Partnerships

In order to obtain a better understanding of the consequences of the at-will character of partnerships for businesspeople's willingness to participate in otherwise profitable enterprises, we model the partnership form of organization as suffering from the probability that a disagreement or holdup attempt among the partners would lead to an untimely dissolution of the firm. Imagine a firm whose total return per unit of capital is R, where $R > 1 + r$, the market rate of interest. We assume there is no asymmetric information. We also assume that a firm consists only of an entrepreneur and an investor, each of whom contributes capital ($K = K_E + K_I$). We relax this last assumption later on in order to consider explicitly the case where large-scale enterprises must raise capital from a greater number of investors.

If the firm is organized as a partnership, the two participants face costs associated with the probability that an otherwise successful enterprise will be forced to dissolve. We take this probability (d) to be given exogenously for each firm by the prevailing legal rules and by the existence of social institutions, such as the family or the community, that help govern relations among partners. If the firm is forced to dissolve, we assume that it must sell its assets on the cheap and that the return to the firm will be αR. We assume further that α is less than 1 and that it is the same for all firms. That is, in order to keep the analysis simple, we assume that firms differ only in the magnitude of the profits they can earn and in their dissolution probabilities. If the firm is organized as a partnership, then, its return on capital, R_P, is

$$R_P = (1 - d)R + d\alpha R.$$

Both the entrepreneur and the investor earn the same return as the firm. ($R_{PE} = R_{PI} = R_P$, where R_{PE} and R_{PI} are the returns to the entrepreneur and to the investor respectively.) Both, therefore, face the same participation constraint. That is, they will participate in the enterprise only if they expect to be able to earn at least as much as they could in the market—that is, $1 + r$:

$$R_{PE} = R_{PI} = (1 - d)R + d\alpha R > 1 + r$$

The implications of these participation constraints are apparent if we take α and r as given. As figure 4.1 illustrates, for each R there is a unique d^* (represented by the top upward-sloping curve) above which no partnerships will be formed.

As this analysis suggests, the partnership form is socially inefficient because the expected return that a firm can earn if it organizes as a partnership is below the return that could be earned if there were no problem of untimely dissolution. Because of this organizational cost, if the partner-

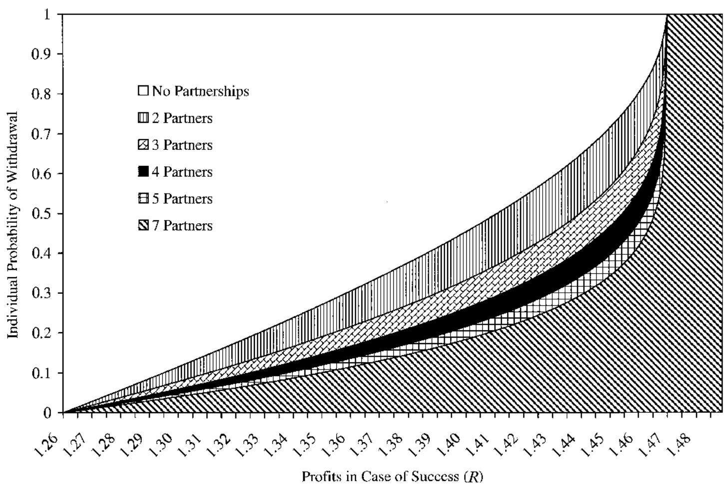

Fig. 4.1 How profit rates and the probability of withdrawal affect whether partnerships will form

Note: The probability of dissolution is $1 - (1 - d)^n$, where d is the individual probability of withdrawal and n is the number of partners. The values of R are illustrative only. Once $R = (1 + r)/\alpha$, partnerships are feasible irrespective of the number of partners. In our example $(1 + r)/\alpha = 1.47$.

ship were the only available form that businesspeople could choose, many firms that would be socially valuable would not form. The situation, moreover, is even worse if we relax our assumption that the firm consists of only two partners. If we assume that each member of the firm has an independent probability (d) of forcing a dissolution, then the probability that no dispute will occur is $(1 - d)^n$, and the probability of untimely dissolution, D, equals $1 - (1 - d)^n$, where n is the number of partners. As figure 4.1 shows, the more partners there are, the more likely it is that profitable business opportunities will go unrealized. By extension, projects that require large amounts of capital, and thus many investors, are unlikely to be undertaken as partnerships.

4.3 Corporations and the Problem of Minority Oppression

This unsatisfactory situation captures the essential details of the U.S. business environment in the early nineteenth century. By mid-century, however, most states had responded to the problem of untimely dissolution in partnerships by providing businesspeople with an alternative organizational form: the corporation. Unlike partnerships, corporations were by definition legal persons whose existence was in no way dependent on the ongoing participation of the people who founded them. Indeed, the identity of each and every one of a corporation's members could change without affecting the continuance of the enterprise (Freund 1896).[18]

Corporations solved the problem of disagreements among members of the firm by making the controlling shareholders effectively dictators. But this solution itself was potentially a source of problems. Because the only members of a corporation who could make decisions were officers who had been duly elected by the shareholders, any coalition that determined the election of officers also controlled the firm. This coalition could then use its power to benefit its members at the expense of other shareholders. Although the latter were only limitedly liable for the enterprise's debts and thus, in most cases, stood to lose no more than their investments, they had no means of preventing the controlling shareholders from expropriating some of their share of the returns.[19]

18. Of course, if an associate who had critical human capital withdrew, the business might be more likely to fail. Hence, corporations too were potentially subject to holdup. But we assume that this problem was small for corporations compared to partnerships and ignore it in our subsequent analysis.

19. We should point out that we are less concerned here with the specific legal forms that firms took than with the trade-off between these two transaction costs—untimely dissolution and minority oppression. We do not wish to deny that special types of partnerships did emerge (and were recognized by the courts) that had many features of corporations. Joint-stock companies are the most important example. But because the joint-stock company had disadvantages—for example, it was difficult to secure full limited liability—it was relatively rarely used once the corporate form became readily available. Similarly, businesspeople in the

We conceive of this problem of minority oppression as the main cost associated with the corporate form. Whereas we modeled the return to an investor in a partnership as a function of the profitability of the enterprise and the probability of untimely dissolution, we model the return to an investor in a corporation as a function of the profitability of the enterprise and the extent of these private benefits of control. Before we describe the two alternatives more formally, we offer a historical example as evidence that our stylized version of these two organizational forms captures the way both businesspeople and the courts thought about the choice between partnerships and corporations: the case of *Burden v. Burden,* decided by the New York Court of Appeals in 1899 (159 N.Y. 287).

The disputants in the case were brothers who had inherited an iron factory from their father in 1871. The brothers operated the business as a partnership for the next ten years but increasingly disagreed about its management until, by 1881, their relationship had deteriorated to the point where, in the words of the court, they "ceased to hold any personal conversation with each other and discussed their grievances in written communications only" (159 N.Y. 287 at 295). Finally, James A. Burden, the brother who had been trained as an ironmaster, decided that he could no longer bear the conflict and determined to force either a dissolution of the firm and a division of the property or the reorganization of the firm as a corporation that he would control. His brother, I. Townsend Burden, reluctantly agreed to the latter option, and the business was incorporated as the Burden Iron Company. James held 1,000 shares in the new concern and Townsend, 998. The remaining two shares went to James's associate, John L. Arts, who held a managerial position in the enterprise. In other words, in order to avoid the costs of dissolving a profitable enterprise, Townsend consented to become a minority shareholder in a corporation controlled by his brother. Although he continued to receive half of the profits that the firm paid out in dividends, he was completely frozen out of the management.

Townsend brooded over this outcome for three and a half years and then sued in equity, complaining that his lack of influence in the company had enabled his brother and Arts to run it in a way that was detrimental to his interests. In particular, he charged that "James and Arts [had] combined and conspired together, in violation of their duties as trustees, to the great damage of the Burden Iron Company, and to build up and sustain their own private interests" (159 N.Y. 287 at 306). Both the trial court and the

United States had the option of organizing their firms as limited partnerships, but the legislation regulating this option was so restrictive, and the courts so strict in their interpretation, that few were formed. Because the overwhelming majority of businesses in the United States organized either as ordinary partnerships or as corporations, it is this choice that we model. See Lamoreaux and Rosenthal (2005). For an extended discussion of the inadequacies of joint-stock companies and other variants of partnerships relative to corporations in Britain in the late eighteenth and early nineteenth centuries, see Harris (2000). For a similar analysis of the U.S. case up to the 1920s, see Warren (1929). See also Blair (2003).

appeals court were unsympathetic. Writing for the latter, Justice Bartlett acknowledged that "the plaintiff is doubtless quite right when he insists that he has been ignored in the management of the Burden Iron Company, and has no control, save to vote his stock, over properties of great value in which his interest is nearly one-half." But, he pointed out, Townsend "apparently fails to appreciate that his troubles are inherent in the situation." He had voluntarily agreed to give his brother control in order to prevent the untimely dissolution of an enterprise that was profiting them both. Generalizing from Townsend's situation, Bartlett explained that "the plaintiff is in the position of all minority stockholders, who cannot interfere with the management of the corporation so long as the trustees are acting honestly and within their discretionary powers." The plaintiff, he declared, "must submit" (159 N.Y. 287 at 308).

4.3.1 Modeling the Choice between Partnerships and Corporations

Given these starkly posed differences between partnerships and corporations, we return to our basic two-person model and make several additional assumptions. First, because it now matters who owns the largest share of the firm's equity, we assume that the entrepreneur owns more and has control of the firm—that is,

$$K = K_E + K_I \text{ and } K_E > K_I.$$

Second, we assume that the entrepreneur's control allows her to steal some fraction (ω) of the firm's profits, where the magnitude of ω is exogenously determined, in large measure by the legal system (which defines the boundary at which "private benefits of control" become fraud), but also by social institutions, such as the family or the community, that help govern relations among members of the firm. Finally, we assume that stealing affects only the distribution and not the level of the firm's profits, so that the return to a corporation is same as the return to the firm, which is greater than the return to a partnership.

$$R_C = R > R_P$$

Under these assumptions, so long as she can earn at least $1 + r$, the entrepreneur will always want to organize the firm and always as a corporation, because the return to a corporation is higher than that to a partnership and because her ability to steal earns the entrepreneur even more. The investor, however, will only be willing to invest in a corporation under the following conditions:

$$R_{CI} = R(1 - \omega) > 1 + r$$

Taking α, ω, and r as fixed, then this participation constraint implies there is a unique R^* such that investors will only participate in corporations if $R \geq (1 + r)/(1 - \omega) = R^*$.

If $R < R^*$, then firms will only form if they can be organized as partnerships. But entrepreneurs and investors will only be willing to organize partnerships to exploit otherwise attractive opportunities if the probability of untimely dissolution is not too high. That is,

$$R_P = (1 - d)R + d\alpha R > 1 + r.$$

If $R \geq R^*$, then corporations will be organized if the entrepreneur has the power to choose the form of organization, but for some range of R there will be a conflict between the preferences of the investor and those of the entrepreneur. Investors will prefer to organize the firm as a corporation if $R_{CI} > R_{PI}$. That is,

$$(1 - \omega)R > [1 - d(1 - \alpha)]R.$$

In other words, the investor prefers a corporation if

$$d > \frac{\omega}{1 - \alpha}.$$

The resulting distribution of organizational forms is displayed in figures 4.2 and 4.3. In figure 4.2 we hold ω fixed and allow d to vary. The vertical line indicates R^*, the threshold value of R below which corporations cannot form, and the upward-sloping line, $d^*(R)$, demarcates the boundary above which partnerships cannot form. Similarly, in figure 4.3 we fix d and allow ω to vary. In this case, R^* refers to the threshold value below which partnerships do not form (variation on the vertical axis does not affect

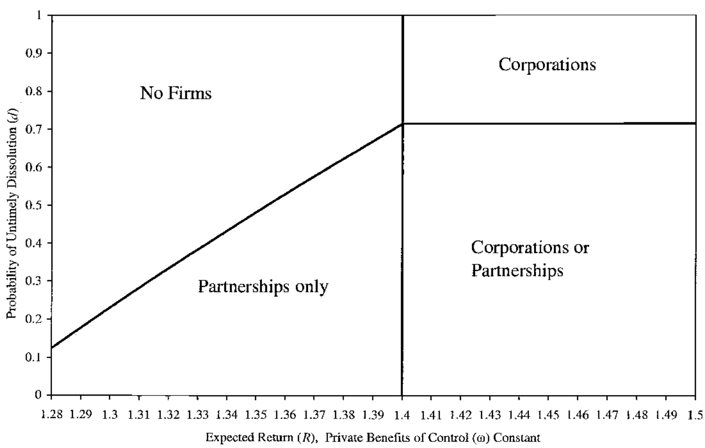

Fig. 4.2 The choice of organizational form as a function of the probability of dissolution, holding private benefits of control constant

Note: $d^*(R)$ is the line that separates the "no firms" area from the "partnership" area. The values of R and d are illustrative only. In this example, R^* (the expected return needed to form a corporation) is 1.4.

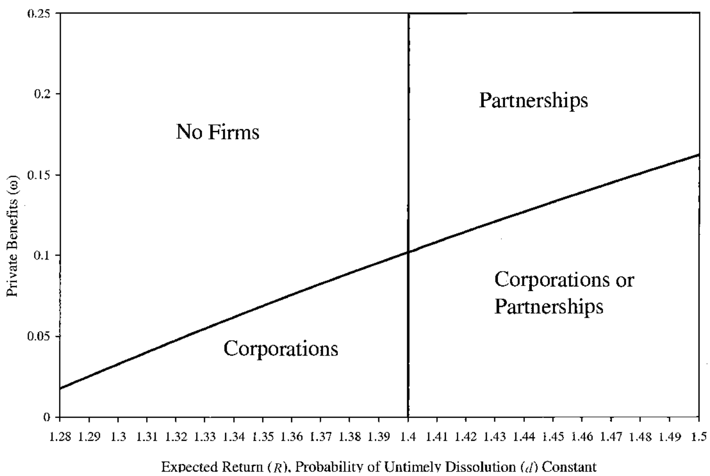

Fig. 4.3 The choice of organizational form as a function of the extent of private benefits of control, holding the probability of dissolution constant

Note: $\omega^*(R)$ is the line that separates the "no firms" area from the "corporations" area. The values of R and d are illustrative only. In this example, R^* (the expected return needed to form a corporation) is 1.4.

them), and the upward-sloping line, $\omega^*(R)$, defines the feasible area for corporations.

The figures underscore two important implications of our model. First, in equilibrium there is likely to be a demand for both organizational forms. Second, some firms do not form simply because of organizational difficulties. If ω is big, there will be a large range of firms for which profits are too low to induce investors to participate in a corporation. Whether or not these firms form depends on the magnitude of d. Clearly, therefore, it would be efficient to reduce d and even more salutary to reduce ω; in societies with high transaction costs of these types, improvements in institutions hence can have an important impact on growth. Nonetheless, it should be noted that the firms that do not form are those with relatively low returns. For firms with high enough returns, organizational difficulties are a nuisance but do not affect entry.

4.3.2 Extensions of the Model

In this section, we consider two extensions of the model: the case where the entrepreneur is poor and so owns less of the firm than the investor; and the case where there are more than two members of the firm. In an appendix, we consider a third possibility—that equity shares are endogenous and distinguishable from investment shares. There we consider the possibility that the entrepreneur could increase her profit by reducing the investor's equity stake until his return approached that of the market. We also consider the possibility that the entrepreneur could increase the range of profits over which the investor was willing to participate in a corporation by offering him a higher equity stake in order to raise his return. As we show, the entrepreneur would be constrained in pursuing this second strategy by her need to maintain control. Therefore, the closer her initial share to 50 percent, and the higher ω, the more likely the enterprise would organize as a partnership.

Suppose that the entrepreneur is the owner of a scarce asset (for example, an invention), but that she is poor, so $K_E < K_I$. This reversal does not change the model so far as partnerships are concerned, because for partnerships the participation constraint is the same for both the entrepreneur and the investor and does not depend on their respective ownership shares. For corporations, however, the change in relative equity stakes means that the investor will now have control. As a result, the investor's return will always be greater than that of the entrepreneur, and it is now the entrepreneur's participation constraint that binds. Because the entrepreneur's participation constraint is identical to that of the investor in the original model, reversing the relative equity stakes of the entrepreneur and investor does not alter the boundary of the region where corporations are feasible. It can, however, alter the entrepreneur's choice of organizational form when both partnerships and corporations are feasible and dissolution costs are low. In particular, if the entrepreneur gets to choose the form of organization and $R \geq R^*$ and $d \leq \omega/(1-\alpha)$, she will now opt for a partnership instead of a corporation. The partnership is less socially efficient than the corporation, but it is the only way, in the environment that we have constructed, for the entrepreneur to protect herself from the expropriation that loss of control entails. The consequence is that she, the investor, and society will have to bear the costs associated with untimely dissolution in partnerships.

Suppose now that there are multiple investors in the corporation. If the entrepreneur retains control (that is, if the entrepreneur owns a majority of the stock in her own right or is part of a binding coalition that collectively owns a majority share), then the analysis is the same as in the basic model. If there is a controlling coalition but the entrepreneur is not a member of it, then the case is like that of the poor entrepreneur just described (though as the number of members of the firm grows large, and therefore partnerships become comparatively more costly, one would expect the entrepreneur instead to insist on membership in the governing coalition). In other words, the only significant deviation from our model occurs in situations where there is no predetermined group or individual that has control. We can conceive of this case theoretically by imagining that every member of the firm, including the entrepreneur, has an equal chance *ex ante* of being part of the governing coalition. Because everyone is equally likely to end up in a situation where she or he can extract private benefits of control, everyone has the same expected return, which is equal to the firm's return. This type of corporation would always be chosen over a partnership.

The entrepreneur, however, would always prefer to be sure that she would be part of a controlling coalition, because in that way she could obtain the private benefits that derive from control. If the relationship between the entrepreneur and the other members of the coalition was such that contractual guarantees of the group's stability were needed, there was a readily available mechanism in the form of a voting trust. Moreover, there was little uncertainty about the enforceability of such contracts, because voting trusts repeatedly were upheld by the courts.[20] One might expect, therefore, to find coalitions formed to control firms wherever profits were high enough to induce outside investors to participate. Where profits were too low to attract participation, one would expect the entrepreneur to forgo her certainty of control rather than form a less efficient partnership. Such forbearance, however, would only be feasible if there were at least three principals. If there were just two, one would inevitably have control, and the only solution to minority oppression would be a partnership.

4.4 Trends in the Limits on Private Benefits of Control

As we have already seen, despite the costs potentially imposed on investors by majority shareholders' private benefits of control, increasing numbers of corporations were formed during the late nineteenth and early twentieth centuries, and increasing numbers of investors willingly purchased their shares. One possible explanation for these trends is that the legal system placed additional constraints on the ability of controlling shareholders to deflect returns in their direction—that is, reduced the magnitude of ω. As we shall see, however, the changes that occurred during this period in the legal rules governing corporations appear to have worked in the opposite direction.

Just as the courts recognized that there was a problem of holdup in partnerships, they understood that minority shareholders in corporations were vulnerable to exploitation by the majority. But they faced two important problems that prevented them from offering the former much in the way of protection. The first was that minority shareholders did not have standing under the common law to redress their grievances by suing corporate officers and directors who abused their positions. Corporations were legal persons, and as a result, only they and not their shareholders could initiate

20. See, for example, *Brown v. Pacific Mail Steamship Co.,* 4 F. Cas. 420 (1867); *Faulds v. Yates,* 57 Ill. 416 (1870); *Brightman v. Bates,* 175 Mass. 105 (1900); and *Manson v. Curtis,* 223 N.Y. 313 (1918).

legal action.[21] Although abusers who were in positions of control were unlikely to allow themselves to be sued by their corporations, this problem was relatively easily surmounted by granting minority shareholders the right under certain circumstances to pursue a case in their own names in a court of equity, rather than at common law. The key precedent was *Robinson v. Smith* (3 Paige 222 [1832]), in which New York's chancellor explicitly extended to business corporations principles of trusteeship that had previously been used to protect beneficiaries of charitable entities. The chancellor posited that the directors of a corporation were equivalent to trustees and that the stockholders, having a joint interest in the corporation's property, were "cestui que trusts." Declaring that equity courts never permit wrongs "to go unredressed merely for the sake of form," he indicated that the stockholders might, after demonstrating that the corporation was controlled by those who were abusing their trust, file a bill in their own names, "making the corporation a party defendant."[22]

The second and more difficult problem that the courts faced was to protect minority shareholders without undermining the legal differences between corporations and partnerships—that is, without creating a situation in which disagreements among members of the firm could disrupt the functioning of corporations as easily as they did partnerships. For this reason, the courts were very conservative in defining what constituted an abuse of trust by those in control. For example, they quickly settled on the principle that shareholders could not sue officers and directors of corporations simply because they pursued policies that the former thought were wrongheaded or disadvantageous. Such disagreements were matters of business judgment and, as such, beyond the purview of the courts. Hence, when Thomas A. Edison sought to force the Edison United Phonograph Company to adhere to his own sense of how the business should be conducted by suing in equity to have the directors removed or, failing in that, to have the corporation dissolved, the court rebuffed his request: "No rule of law is better settled than that which declares that, so long as the directors of a corporation keep within the scope of their powers and act in good faith and

21. This principle underpinned the decision of Chief Justice John Marshall of the U.S. Supreme Court in *Dartmouth College v. Woodward* (17 U.S. 518 [1819]). Massachusetts Supreme Court Justice Lemuel Shaw explicitly articulated its implications for minority shareholders in *Smith v. Hurd* in 1847: "The individual members of the corporation, whether they should all join, or each severally, have no right or power to intermeddle with the property or concerns" of the firm. They also have no power to "call any officer, agent or servant to account." If there was an injured party, it was the corporation, the legal person whose rights were at stake, and only the corporation itself could take action to redress the damage (53 Mass. 371 at 384–87). For a similar English case, see Franks, Mayer, and Rossi, forthcoming.

22. For a more complete discussion of this case, as well as the *Dartmouth College v. Woodward* and *Smith v. Hurd* decisions, see Bloch and Lamoreaux (2004). That there was a similar trend in English law can be seen from the cases cited in *Robinson v. Smith* and also in the later U.S. Supreme Court decision *Dodge v. Woolsey,* 59 U.S. 331 (1856).

with honest motives, their acts are not subject to judicial control or revision" (*Edison v. Edison United Phonograph Co.,* 52 N.J. Eq. 620 [1894]). Unless the directors had clearly exceeded their statutory powers, the courts were unwilling to intervene in the affairs of a solvent corporation without compelling evidence that those in control had engaged in fraudulent or illegal acts that had inflicted serious damage on the corporation or its shareholders. Moreover, the burden of proof was on the shareholders bringing the suit. As the Massachusetts Supreme Court explained in the oft-cited case of *Dunphy v. Traveller Newspaper Association,* "it is always assumed until the contrary appears, that [directors] and their officers obey the law, and act in good faith towards all their members" (146 Mass. 495 at 497 [1888]).

That this interpretation of the *Robinson v. Smith* precedent operated to increase the magnitude of ω—that is, the private benefits that controlling shareholders could extract from their associates—is suggested by the changing way in which courts responded to situations in which directors had conflicting interests. There was a long-established principle of law that contracts tainted by conflicts of interest were voidable. This rule was an absolute one and applied to contracts that otherwise seemed completely reasonable, so that even though "the contract could not have been let on better terms, . . . the principle of law applicable to such a contract renders it immaterial . . . whether there has been any fraud in fact, or any injury to the company" (*Flint and Pere Marquette Railway Company v. Dewey,* 14 Mich. 477 [1866] at 487–88). Moreover, there is no question that the principle applied to corporations, as the U.S. Supreme Court emphatically affirmed in 1880 in *Wardell v. Railroad Company,* a case that arose as a result of a contract that officers of the Union Pacific Railroad had negotiated with a coal company that they themselves had organized. Writing for the court, Justice Field declared:

> Directors of corporations, and all persons who stand in a fiduciary relation to other parties, and are clothed with power to act for them, are subject to this rule; they are not permitted to occupy a position which will conflict with the interest of parties they represent and are bound to protect. They cannot, as agents or trustees, enter into or authorize contracts on behalf of those for whom they are appointed to act, and then personally participate in the benefits. (103 U.S. 651 [1880] at 658)

In this particular case, however, the action to void the contract was taken in the name of the corporation, whose directors had never formally approved it (the agreement had been drawn up and executed by the railroad's executive committee and had not been submitted to the board). Hence, the justices did not have to consider what the outcome of their decision would have been if the suit had been brought by a minority shareholder. The cases

Field cited in his decision suggest the outcome might well have been different,[23] and, indeed, there is evidence that state courts had for some years been applying what was in effect a reasonableness standard in such circumstances. For example, in the frequently cited case of *Hodges v. New England Screw Company,* the Rhode Island Supreme Court refused to invalidate the sale of assets by one corporation to another that was controlled by essentially the same people, determining that the plan was "judicious, and for the interest of the Screw Company" (1 R.I. 312 [1850] at 343). Moreover, the very next year after its *Wardell* decision, the U.S. Supreme Court established in the case of *Hawes v. Oakland* what was in effect a reasonableness standard. A stockholder victimized by such a conflict of interest could "sustain in a court of equity in his own name" only in the case of

> a *fraudulent* transaction completed or contemplated by the acting managers, in connection with some other party, or among themselves, or with other shareholders as will result in *serious injury* to the corporation, or to the interests of the other shareholders; Or where the board of directors, or a majority of them, are *acting for their own interest, in a manner destructive* of the corporation itself, or of the rights of the other shareholders; Or where the majority of shareholders themselves are *oppressively and illegally* pursuing a course in the name of the corporation, which is in violation of the rights of the other shareholders. (our emphasis, *Hawes v. Oakland,* 104 U.S. 450 [1881] at 460)[24]

As the phrases we italicized indicate, in order to secure the intervention of the courts, minority shareholders had to demonstrate that the actions taken by those in control were both fraudulent and seriously injurious.

Not only did the courts burden complaining shareholders with the task of proving that a contract tainted by conflict of interest was unreasonable, but there is evidence that they tended to give the controlling group the benefit of the doubt on the grounds that its members were unlikely deliberately to take actions that eroded the value of their own stock. Hence, the Rhode Island court asserted in the case of *Hodges v. New England Screw Company,* "we are the more confirmed in [our conclusion that the sale of assets was appropriate], when we recollect that the directors owned a large majority

23. For example, *Flint and Pere Marquette Railway v. Dewey* was brought by a corporation whose directors had ratified a contract proposed by the company's president without knowing that the president stood to profit from the arrangement. In its decision, the court raised the possibility that the contract might possibly be construed as binding if it had been ratified by the board "after a full explanation and knowledge of their interest and of all the circumstances" (14 Mich. 477 [1866] at 487).

24. In this decision the Supreme Court was deliberately qualifying a more liberal standard that it had articulated in the 1856 case of *Dodge v. Woolsey,* 59 U.S. 331. The qualification was a response to a flood of lawsuits that the earlier decision had stimulated and hence a good example of how the courts attempted to balance, on the one hand, their effort to limit the extent of the private benefits of control with, on the other, their desire not to encourage rent seeking by minority shareholders. For further discussion of these cases, see Bloch and Lamoreaux (2004).

of the capital stock of the Screw Company, and could not reduce the plaintiff's stock, without, at the same time, and in the same proportion, reducing the value of their own" (1 R.I. 312 [1850] at 343–44). Similarly, in *Faud v. Yates,* the Illinois Supreme Court found nothing wrong with a partnership agreement entered into by three stockholders of the Chicago Carbon and Coal Company. Collectively the three held a majority of the corporation's stock, and their agreement committed them to cast their votes in a block so that they could control the election of the board of directors. The partnership also leased the company's coal lands and operated its mines. In the view of the court, "The record wholly fails to disclose any injury to the other shareholders—any waste of the property," and therefore there was no reason to invalidate the agreement. But the court went even further and asserted that there was no conflict of interest involved because the incentives of the partners and of other shareholders were aligned. The partners, according to the court, "had a double interest to protect,—their interests as shareholders, and their interests as lessees. . . . As shrewd, skillful and prudent men, they were desirous of increasing the investment, and making the stock more valuable. Their interests were identical with the interests of the minority shareholders" (57 Ill. 416 [1870] at 420–21).

The courts were willing to intervene in cases where conflicts of interest led to contracts that were demonstrably fraudulent. This willingness placed limits on ω, but it is important to underscore that the shift was from a situation in which the courts would always permit such contracts to be voided to one in which complaining shareholders had to clear significant hurdles in order to obtain redress. It is difficult to get a precise idea of how high the hurdles were in actual practice without systematically studying the dispensation of cases at the lower-court level. We can, however, obtain some sense of the standards the courts applied from the case law. For example, one way in which plaintiffs could make the case that contracts tainted by conflicts of interest were fraudulent was to submit evidence that the resulting payments were substantially in excess of market levels. Hence Townsend Burden lost his case against his brother James in part because he was unable to show that James had paid too much for iron ore purchased from another company that he controlled. The trial court concluded that there was no evidence that these purchases were "made in bad faith or with any intent to defraud," but to the contrary that they had saved the Burden Iron Company money (*Burden v. Burden,* 159 N.Y. 287 [1899] at 306).

Even with such proof, complaining stockholders were in a much stronger position if they could also show that the controlling group had knowingly behaved improperly. Otherwise, their grievance was liable to be dismissed because the courts agreed that "mere errors of judgment are not sufficient as grounds for equity interference; for the powers of those entrusted with corporate management are largely discretionary" (*Leslie v.*

Lorillard, 110 N.Y. 519 at 532 [1888]). In *Brewer v. Boston Theatre,* the plaintiffs were able to make their case that several of the directors were fraudulently extracting profits from the corporation by showing that the latter had deliberately concealed their involvement in contracts from the other members of the board (104 Mass. 378 [1870]). Similarly, in *Almy v. Almy, Bigelow and Washburn,* the plaintiff was able to document that, after she had refused to sell them her stock, the controlling shareholders had tried to force her out of the company by, among other things, voting excessive salaries "to each and every member of the board, except the plaintiff Almy," as well as voting themselves other "gifts and gratuities" (235 Mass. 227 [1920] at 233).

As these last cases suggest, the courts did intervene in corporations and punish controlling shareholders who exploited their position to the detriment of other owners. Before they were willing to act, however, judges demanded compelling evidence of misdeeds. In *Flint and Pere Marquette Railway v. Dewey,* the Michigan Supreme Court had warned that if self-dealing contracts "were held valid until shown to be fraudulent and corrupt, the result, as a general rule, would be that they must be enforced in spite of fraud and corruption" (14 Mich. 477 at 488). That prophesy was borne out by the late nineteenth century. Although ω was bounded, it was positive and nontrivial. Moreover, its magnitude seems if anything to have increased during this period.

4.5 Conclusion

Partnerships and corporations each suffered from a different organizational problem. Because partnerships effectively existed only at the will of each of the members of the firm, they suffered from the potentially costly problem of untimely dissolution. That is, disagreements among members of a firm could lead one of the partners to withdraw from the enterprise, disrupting the operations of an otherwise profitable business and perhaps necessitating the liquidation of firm-specific assets. This problem may have grown worse over the course of the late nineteenth and early twentieth centuries because changes in the legal rules underscored the at-will character of partnerships, establishing with greater certainty the principle that all partnership contracts, even those for fixed terms, were revocable. The greater the number of partners, the greater the problem. Indeed, if partnerships had been the only available organizational form during this period, it is likely that it would have been extremely difficult to raise equity in the sums necessary for large-scale capital-intensive enterprises.

But partnerships were not the only available organizational form. By the mid-nineteenth century businesspeople in most states could readily organize their enterprises as corporations instead. Although disagreements among members of the firm could and did arise in corporations as well as in partnerships, the rules of corporate governance gave controlling shareholders what were in effect dictatorial powers. Majority shareholders could ignore the complaints of the minority if they so chose, and the latter had little choice but to grin and bear it. Members of the minority could not impose their will on the controlling shareholders, nor could they force a dissolution of the enterprise. This protection against untimely dissolution, however, came at a significant cost, for the same dictatorial authority that allowed the majority to disregard the views of the minority also gave controlling shareholders the power to expropriate more than their fair share of the company's earnings.

Although the media periodically published dramatic revelations of shenanigans by groups in control of corporations (aside from the Crédit Mobilier scandal, perhaps the most famous was Charles Francis Adams's *Chapters of Erie* [Adams and Adams 1871]), there appears to have been no major groundswell for reform until fallout from the 1929 stock market crash provoked Congress to create the Securities and Exchange Commission in 1934. Even then, however, the legislation applied only to large publicly traded corporations, and minority investors in privately held firms remained largely unprotected. There is some evidence that, by the 1930s, judges had become more receptive to shareholders' complaints than was the case earlier (Marsh 1966; Mark 2003), but major changes in the status of investors in private corporations would only come during the post–World War II period, when states began to revise their general incorporation statutes in ways that increased the ability of shareholders in close corporations to protect themselves contractually. During the third quarter of the century, many states also passed legislation granting shareholders new legal remedies against majority oppression and other similar ills (O'Neil 1978; Hillman 1982), and yet another wave of legislation at the end of the twentieth century provided small businesses with access to alternative organizational forms, most notably the limited liability partnership (LLP) and the limited liability company (LLC)—forms that potentially mitigated the contracting problems associated with both corporations and partnerships (Lamoreaux and Rosenthal 2005).

If protecting outside investors was unequivocally a good thing, one might expect the law to have evolved much more quickly in ways that increased minority shareholders' ability to defend themselves against expropriation by those in control of corporations. As we have seen, however, the changes that occurred in the law appear to have had precisely the opposite effect during the late nineteenth and early twentieth centuries. Because judges were intent on preventing disputes among members of the firm from disrupting the operation of corporations the way they did partnerships, they were not willing to allow disgruntled shareholders easy access to the courts. In fact, rather than give shareholders a legal weapon to use against corporate officers and directors, judges preferred to emasculate the long-standing common-law rule that contracts in which one party had a conflict of interest were voidable per se.

Although we have no way of estimating the magnitude of the private benefits that controlling shareholders could extract from their corporations without running afoul of the law, the legal record suggests that they were quite high. If they were low, moreover, we should have observed a steep decline in the number of partnerships during this period. Not only was there no such fall, but large numbers of partnerships continued to be formed. At the same time, the number of corporations also evinced a steady rise, as did investors' willingness to put their money in corporations.[25] Given that d and ω were both probably increasing rather than decreasing, the high rate at which firms were forming during the late nineteenth and early twentieth centuries is most likely attributable to the availability of large numbers of good (high-profit) projects. Everything that we know about this period of U.S. history—the rapid population growth, fall in transportation and communications costs, settlement of the continent, discovery of raw material resources, and dramatic pace of technological change—suggests that attractive entrepreneurial opportunities were indeed abundant. Many of these opportunities required capital in amounts sufficient to exploit economies of scale, making it especially important to have access to a form that would not suffer disruption as the number of investors increased. To the extent that these large projects also yielded returns that were high relative to government bonds or other similar assets, the private benefits of control that majority shareholders were able to extract were more an annoyance than a serious deterrent to investors. The Great Depression of the 1930s would dramatically alter this calculus, disrupting the legal equilibrium of the late nineteenth and early twentieth centuries and setting the economy off on a new path of institutional change, one whose outcome would be a set of statutes and precedents that were much more solicitous of the rights of minority investors. Perhaps not surprisingly, the number of corporations relative to partnerships would significantly increase.

25. Although newspaper announcements and other similar sources indicate that large numbers of partnerships as well as corporations were forming during this period, there are no data that enable us to measure trends in the relative numbers of partnerships and corporations before the income tax was imposed in 1916. The counts of the number of partnerships and corporations that the Internal Revenue Service published in its annual reports, *Statistics of Income,* indicate that the number of partnerships relative to corporations decreased in the 1920s, held stable in the 1930s, increased in the 1940s, and decreased in the 1950s. Only the last of these trends probably represented a significant shift in the businesspeople's preferred organizational forms. The others probably owed more to changes in tax levels that forced more (or less) partnerships to file returns. Corporations had to file regardless of whether they owed taxes, but partnerships did not.

Appendix

The Case of Endogenous Equity Stakes

The assumption that investment and equity stakes are identical seems reasonable in light of what we know about business practices in the nineteenth-century United States. It is also justifiable on theoretical grounds. If two members of a firm are similar in all respects except for the relative size of their investments, Nash bargaining would lead them to split the equity according to their contributions. The assumption of equal investment and equity stakes does, however, have two important implications. The first is that the investor earns above-market returns in nearly all of the firms that form. Hence, the entrepreneur could increase her profit if she could reduce the investor's equity stake until his return approached that of the market. Second, some firms that do not form could have done so if the entrepreneur had been able to offer the investor a higher equity stake in order to raise his return. In this appendix, we explore the consequences of relaxing the assumption of equal equity and investment stakes so that the entrepreneur can make a take-it-or-leave-it offer to the investor.[26] We assume throughout that $K_E > K_I$. Henceforth, E_E will be the equity stake of the entrepreneur, and E_I the equity stake of the investor.

In a partnership, the investor and the entrepreneur earn the same return on equity. Setting the investor's equity stake so that his participation constraint binds exactly implies that the investor's equity stake should be $E_{PI} = E_I(1 + r)/R_{PI}$, where $R_{PI} = [1 - d(1 - \alpha)]R$. Given K_I, allowing the entrepreneur to adjust equity stakes endogenously will mean that the investor's stake will decline as R increases, all other things being equal. Allowing such adjustments, however, has no effect on entry decisions for partnerships. Indeed, if $d < d^*(R)$, $R_{PI} < 1 + r$. But because $R_{PE} = R_{PI}$, $R_{PE} < 1 + r$, and the entrepreneur will not want to enter. Hence, investors in a partnership *never* have an equity stake that is larger than their investment stake.

In corporations, returns per unit of equity are not the same for the investor and for the entrepreneur because the latter enjoys the benefits of control. Setting the investor's equity stake so that his participation constraint binds exactly implies that $E_{CI} = E_I(1 + r)/R_{CI}$, where $R_{CI} = (1 - \omega)R$, or $E_{CI} = E_I(1 + r)/R(1 - \omega)$. As in the case of partnerships, when $R > R^*$, investors earn above-market returns, so allowing entrepreneurs to set equity stakes would lead to declining shares for investors as R increases. Un-

26. This change allows us to examine more complicated bargains than simple Nash bargaining. Nevertheless, we do not go so far as to allow side contracts to eliminate problems of minority oppression in corporations. The empirical record (particularly the persistence of large numbers of partnerships in all sectors of the economy and the extent of the litigation over minority oppression) simply will not support such a modification.

like the case of partnerships, however, entrepreneurs can affect entry decisions by varying equity stakes. Because the entrepreneur enjoys the benefits of control, some firms do not form because the investor's return would be less than the market's, even though the firm's return would have been greater than the market's. In these cases, the entrepreneur can transfer some of her return to the investor by increasing his equity stake just enough to encourage participation. There is, however, an important constraint on this strategy: the entrepreneur must not lose control. This constraint implies that, holding r, α, ω, K_I, and K_P fixed, there will be a unique R^{*m} below which corporations will not form. Because $R^{*m} < R^*$, allowing the entrepreneur to set equity stakes will increase the range of profits over which corporations form.

The entrepreneur wants to transfer just enough equity to the investor to make him indifferent between participating in the firm and investing in the market. If the investor's equity stake becomes larger than one half, he gains not just additional income rights but also the private benefits that come with control. This nonlinearity makes the entrepreneur's problem difficult when K_I is close to $K/2$. If the profitability of the firm (R) is too low, the entrepreneur may find it difficult to satisfy the investor's participation constraint if she forms a corporation. That is, as the firm's return rises, the equity stake that has to be given to the investor in exchange for a given contribution declines. Conversely, as ω increases, because the entrepreneur's private benefits of control increase, the investor must get a larger share of the equity for a given contribution in order to satisfy his participation constraint. This larger share in turn makes it more difficult for the entrepreneur to ensure that she retains control. Hence, the comparative advantage of the partnership form increases when the two members of the firm have relatively even investment stakes. When the cost of untimely dissolution is low, the entrepreneur will form a partnership instead.

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