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THE THEORY OF THE FIRM: INVESTOR COORDINATION COSTS, CONTROL PREMIUMS AND CAPITAL STRUCTURE

WILLIAM J. CARNEY*

I. INTRODUCTION

Business lawyers, both practicing and academic, spend much of their time and energies dealing with distributional disputes that arise (or may arise) among investors in firms.1 Expenditures of resources on such ques-

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* Charles Howard Candler Professor, Emory University Law School. I wish to thank Professors Howard E. Abrams, Peter H. Aranson, Fred S. Mchesney, all of Emory, John C. Coffee, Jr. of Columbia University, Jonathan R. Macey of Cornell University, Dean Henry G. Manne and Larry E. Ribstein of George Mason University, Morey W. McDaniel, Esq. of Union Carbide Corporation, and the participants in the New York University Law School Faculty Workshop and the Emory Law & Economics Workshop for their helpful comments on earlier drafts of this paper. Thanks are also due to Victoria Aranow, Emory Law School, 1986, for her assistance on the research for this paper. The responsibility for the errors that remain rests solely with the author.

1. I have traced the history of shareholder disputes over distributions in fundamental corporate changes, such as mergers and sales of all of the assets of a corporation, in Fundamental Corporate Changes, Minority Shareholders, and Business Purposes, 1980 Am. B. Found. Res. J. 69. I have long believed that much of A. A. Berle’s work was concerned not with what we now call agency costs (and when he called the separation of ownership and control), but with conflicts among co-investors. Unfortunately, Berle attributed many of these conflicts (or abuses, as he saw them) to management power, rather than to investor power, all of which he described as “control.” Thus, much of Chapter II, “Regrouping of Rights: Relative Legal Position of Ownership and Control,” in A. BERLE & G. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1933), deals with distributional issues. Chapter III deals with “Powers over the Routing of Earnings as Between Shares of Stock,” and covers such topics as the timing of dividends. Chapter IV deals with “Power to Alter the Original Contract Rights of Security Holders,” and covers charter and statute amend-
tions only confirm worst suspicions about lawyers: that lawyers earn their keep by facilitating rent-seeking, and ultimately rent dissipation.\(^2\) Those outside the legal profession generally view these “pie-splitting” issues as \textit{ex post} disputes among investors, which lawyers aid, abet, and even encourage.

One can view the entire law of equity, with its emphasis on \textit{ex post} “fairness” as little more than an attempt to create a doctrinal structure that allows disappointed participants in firms to renegotiate contracts through the courts. The entire structure of corporate law governing majority or dominant shareholders, involving such doctrines (or would-be doctrines) as “sale of control,” “unfairness” in takeout mergers, and the like, facilitates such renegotiations, or at least provides theories on which any investor, unhappy with a particular outcome, can base a lawsuit.\(^3\)

This view of what lawyers do is obviously unflattering, and only confirms Gilson’s characterization of outside views of business lawyers as a transaction cost, “part of a system of wealth redistribution from clients to lawyers . . . ,” in which investors are worse off at the end of the transaction by the amount both sides have spent on legal counsel.\(^4\)

\footnotesize{\begin{itemize}
\item[\(^3\)] See, e.g., Easterbrook & Fischel, \textit{Corporate Control Transactions}, 92 \textit{Yale L.J.} 698, 711 (1982):
\begin{quote}
A final reason why the gains from beneficial transactions may depend on unequal division is that sharing rules may lead to costly attempts to appropriate greater parts of the gains. The appropriation problem arises because most gain-sharing rules do not produce completely predictable results—it is difficult to determine the ‘fair’ price. If all investors are entitled to a ‘fair’ share of the bounty, each will find it advantageous to claim as much as possible and fight for his claim. He would spend as much as a dollar, on the margin, to claim another dollar of the benefits. It is possible for a substantial part of the gain to be frittered away, therefore, as claimants attempt to make the argument that they are entitled to more.
\end{quote}
\item[\(^4\)] Easterbrook & Fischel, supra note 2, at 703, n.17 (quoting Stigler, \textit{The Law and Economics of Public Policy: A Plea to the Scholars}, 1 \textit{J. Legal Stud.} 1, 4 (1972)).
\end{itemize}}

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Gilson has attempted a systematic description of how business lawyers bring value to a transaction, using the example of the business acquisition. In this paper I will argue that the entire exercise of worrying about distributions among investors is more than a rent-dissipation activity. One the contrary, it has real efficiency implications that lawyers have not yet expressed to economists, although many clients may well be aware of the value of these services. Unlike Gilson, I will focus not on the lawyer's role in reducing costs facing the firm, but on the nature of the costs themselves.

A. Purpose of the Paper

In this paper I develop a taxonomy of the general conflicts that can arise among investors within a firm. I describe them as “coordination costs,” because in part they involve issues of whether the preferences of multiple investors are so coordinated that the corporate actions selected are likely to be Pareto superior rather than Kaldor-Hicks efficient.

In the past many commentators have either confused these costs with agency costs or assumed them away. Conflicts among investors have often been confused with management misbehavior, or agency costs, at least by legal observers. The agency-cost literature focuses on the conflict between an owner and an agent. The initial examination of the subject dealt with the conflict between a single manager and an outside owner (or assumed away any problems associated with multiple owners of the firm), a useful simplification. Only recently has the relationship between dispersion of ownership and agency costs been explored in some

5. Id.

6. Efficiency may be measured by different criteria. A resource allocation is Pareto optimal when any movement from it that would make one party better off, leaves another party in a worse position. Cf. Coleman, Efficiency, Utility and Wealth Maximization, 8 Hofstra L. Rev. 509, 512-13 (1980). An allocation is Pareto superior to another if it places no one in a worse position, and if it improves at least one person’s welfare. Id. at 513. Kaldor-Hicks efficiency, on the other hand, involves trade-offs. A resource allocation is Kaldor-Hicks efficient with respect to another if, and only if, welfare gains to one group are not exceeded by welfare losses to another.

7. See, e.g., Cary, Federalism and Corporate Law: Reflections Upon Delaware, 83 Yale L.J. 663, 670 (1974), where the late Professor William L. Cary criticized Delaware law for creating a “favorable climate” for management by relaxing fiduciary standards and standards of fairness. As an example of decisions creating a favorable climate for management, he listed Sinclair Oil Co. v. Leiven, 280 A.2d 717 (Del. 1971), a case involving a dispute among shareholders about dividend levels. For a discussion of this case see infra text accompanying note 99.

This paper relaxes the simplifying assumption of monolithic ownership and begins the process of examining a richer theory of the firm. A complete theory of the firm must account not only for conflicts between agents and principals, but also for conflicts that may exist among co-owners. These conflicts present a discrete set of costs for the firm, separate and apart from agency costs.

The more complete description of coordination costs extends the theory of capital structure to complement, and at the same time to compete with, the agency-cost explanation. The agency-cost literature argues that complex capital structures are utilized to control agency costs, but that these structures also create conflicts among co-investors, exemplified by the well known stockholder-bondholder conflict. This paper does not deny that assertion, but it does claim that complex capital structures may also be used to control other investor conflicts. Viewed in this way conflicts among claim-holders are a cause as well as an effect of complex capital structures.

Previous writers have not extensively explored conflicts among co-investors, other than the stockholder-bondholder conflict. Indeed, some may doubt whether these conflicts affect the total value of the firm. Following the example of Smith and Warner, I construct two competing hypotheses, which I call the "Irrelevance Hypothesis" and the "Costly Contracting Hypothesis."12

The Irrelevance Hypothesis holds that conflicts among co-investors do

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10. The seminal work on agency costs is that of Jensen & Meckling, supra note 8. These authors attempt to explain the "ownership structure" of the firm—"namely the relative amounts of ownership claims held by insiders (management) and outsiders (investors with no direct role in the management of the firm)." Id. at n.1. This Article attempts to add to our understanding of the reasons for the complexity of the capital structures of individual firms, and of the contractual arrangements used to secure promises to various investors.

11. Jensen & Meckling, supra note 8 at 334-37.

not affect the value of the firm, because investors can eliminate them at zero marginal cost. This occurs because rational investors will choose to diversify their portfolios against other firm-specific risks, and will, in the process, protect themselves from being on the losing side in conflicts among investors.

The Costly Contracting Hypothesis holds that investor conflicts cannot be eliminated at zero marginal cost through diversification, but can be achieved through some combination of diversification and costly financial contracts. These contracts may take the form of capital structures or other agreements between investors and the firm, including decision rules, "shark repellents" and restraints on share transfers.

**B. The Nature of Coordination Costs**

I use the term "coordination costs" to describe the costs of: (1) divergent preferences for firm distributions and investments, whether of current income or of capital; (2) divergent preferences for risky projects; (3) opportunistic behavior by one co-owner or group of co-owners; and (4) investor actions to minimize these conflicts, including contracting and enforcement costs.

Investor differences are well known, and need not be elaborated here. They explain the diversity of financial instruments found in markets, but they do not explain why any single firm would choose a complex capital structure or other costly contracts. A brief review of differences in investor preferences is followed by an explanation of how preferences of investors within a single firm may change.

Investor preferences for savings versus consumption (and consequently, for firm reinvestment versus distribution) vary according to the

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15. See text infra at notes 102-170 and 175-180. These costs, in another setting, have been denominated "imposition costs." J. Buchanan & G. Tullock, The Calculus of Consent, 64-68 (1962). I do not use that term here because of its nonconsensual implications. Where the basis of the relationship is contractual, as in an investment, the costs can be said to be voluntarily assumed, at least in efficient markets where investors hold rational expectations. In addition to the costs described, these conflicts entail other costs similar to those associated with agency costs: transaction costs of bargaining to reduce the impact of these conflicts; bonding costs to assure compliance with the terms of the bargain; and monitoring costs to detect non-compliance and enforce the bargain. Indeed, they are sometimes identified as agency costs. Jensen & Smith, Stockholder, Manager, and Creditor Interests: Applications of Agency Theory in Recent Advances in Corporate Finance, 93 (E. Altman & M. Subrahmanyam eds. 1985).
individual's progress through the life cycle, according to Modigliani. Individual risk preferences also vary for a variety of reasons, idiosyncratic as well as systematic. Thus individuals with greater wealth or income should have a relatively stronger preference for risk (or weaker aversion) because the rate of decline in their personal marginal utility of money is lower than for less well-off individuals. Similarly, younger investors, with a greater portion of their income stream ahead of them, should be less risk averse than older investors. Finally, investors whose portfolios are less diversified should be more risk averse than others.

Self-selection, in terms of investing in firms with investors who possess similar sets of preferences, or in financial instruments containing contractual provisions that assure that certain preferences will be honored, can resolve initial conflicts. Investing in firms where all investors are at roughly the same stage in their life cycle and where changes in investor preferences are likely to all bear the same sign, if not precise magnitude, thus avoids conflicts over reinvestments. Although closely held firms can employ this process with relative ease, publicly held firms must announce and adhere to clearly stated policies about dividends and reinvestment in order to accomplish it.

Although this observation partially explains how investor interests are accommodated, it explains relatively little about the complexity of the capital structures of individual firms and the contract terms that are ob-


17. See, e.g., G. Stigler, THE THEORY OF PRICE 275-81 (3d 1966); see also infra text accompanying notes 171.

18. As wealth increases, the rate of change in the slope of the marginal utility curve for wealth declines, so that differences between the utility loss from losing a risky bet and the utility gains from winning decline. See generally J. WESTON & E. BRIGHAM, MANAGERIAL FINANCE 359-63 (6th ed. 1978).

19. Ohlson has observed that ex post unanimity permits only limited diversity in individuals' characteristics. Ohlson, Ex Post Stockholder Unanimity, 9 J. BANKING & FIN. 387 (1985). This article focuses on the response of investors and firms when that condition does not obtain.

served. If the initial accommodation of investor interests were the only concern, one would expect firms to set discrete policies and offer distinctive types of securities, not to employ complex capital structures. Complex capital structures and other costly contracts arise because the preferences of the investor group can change over time.

The initial unity of investor preferences concerning firm investment and distribution policies may diverge for a variety of reasons. First, it may have been illusory, the result of bounded investor rationality. Real differences may have been suppressed by the parties in order to avoid "queering the deal." Second, some investors may enter various phases of the life cycle before others. Some may reach retirement age, with its expected preference for consumption and an increase in risk aversion, while younger co-investors retain stronger preferences for reinvestment and risk. Increases (or decreases) in the wealth of individual investors in the firm can also alter their preferences for risk.

Conflicts may also occur because of the transfer of investment units, or exogenous events, such as a change in the firm's capital structure that generally increases the preferences of equity holders for risk, albeit at differential rates. Major one-time changes in firm wealth may also lead to changes in investor preferences for risk and consumption versus investment. Changes in firm wealth, for example, may have a major im-

21. Merton Miller has observed this in the context of the tax effects of debt:

There will be an equilibrium level of aggregate corporate debt . . . and hence an equilibrium debt-equity ratio for the corporate sector as a whole. But there would be no optimum debt ratio for any individual firm. Companies following a no-leverage or low leverage strategy (like IBM or Kodak) would find a market among investors in the high tax brackets; those opting for a high leverage strategy (like the electric utilities) would find the natural clientele for their securities at the other end of the scale. But one clientele is as good as the other. And in this important sense, it would still be true that the value of any firm, in equilibrium, would be independent of its capital structure, despite the deductibility of interest payments in computing corporate income taxes.


23. MODIGLIANI PAPERS, supra note 16.

pact on investor wealth, particularly in closely held firms or firms with a single dominant investor.25

In publicly held firms changes in the preferences of individual investors will generally lead investors experiencing the change to adjust their portfolios. If the affected investor also controls firm policies, a situation more commonly found in closely held firms, firm policies may change to maximize the welfare of the dominant investor. In such cases minority investors will be forced to make costly portfolio adjustments or, if such adjustments are not possible, live with the reduced utility resulting from the policy change.26

Following Klein, Crawford and Alchian, investments are described here as firm specific, and as sources of appriopriable quasi-rents that reflect the duration of the investment and the extent to which the invest-

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25. A one-time increase (or decrease) in firm wealth will have a disproportionate effect on the wealth of dominant and undiversified shareholders, that may not be shared by minority and perhaps more fully diversified investors. This creates an increased (or decreased) demand for firm investment. To the extent a one-time increase leaves the dominant investor even less diversified than before, his risk aversion may increase relative to that of his co-investors. A one-time decrease in the value of that investment increases diversification, and thus decreases that investor’s relative aversion to risky projects.

26. The exit option may not be available to minority investors in closely held firms, if active participation (as an agent) and consent of other agents is necessary for an investor to hold or transfer claims against the firm. Thus, although the minority holder’s investment might be more valuable to another investor, the transfer may not be possible. Unanimous consent requirements for the admission of new partners are examples of such exit restrictions; consent restraints on transfer of corporate shares are another. See, e.g., UNIF. PARTNERSHIP ACT, § 18(g) (requiring unanimous consent for admission of new partners). Larger partnerships may relax the rule. See, e.g., Day v. Sidley & Austin, 394 F. Supp. 986 (D.D.C. 1975) (majority vote for admission of new partners). Within limits, partners may have dissolution rights not generally available to shareholders. UNIF. PARTNERSHIP ACT, § 31(l)(b) (any partner may dissolve when no definite term or particular undertaking is specified). Consent restraints on the transfer of shares in the closely held firm are discussed in II F. O’Neal, close corporations ch. 7 (2d ed. 1971).

Although co-owners can make side payments to obtain consent to such transfers, such events seem rare. This may be partially explained by judicially created prohibitions against the sale of the vote. See, e.g., Brady v. Bean, 221 Ill. App. 279 (1921). In Brady, one stockholder’s objection to the sale of the business was overcome by a payment from the other stockholder, who was also a bondholder. The court held that the payment rendered the agreement to vote for the sale void.

Where consent to a transfer of shares is withheld, some courts may invalidate such restrictions as an unreasonable restraint on alienation, while others may imply an obligation not to withhold consent unreasonably. Compare Rafe v. Hindin, 29 App. Div. 481, 288 N.Y.S.2d 662 (1968) (restraint held invalid); with Carlson v. Ringgold County Mutual Tel. Co., 252 Iowa 748, 108 N.W.2d 478 (1961); and In re West Waterway Lumber Co., 59 Wash. 2d 310, 367 P.2d 807 (1962) (both holding that consent restraints contain an implied covenant that consent will not be unreasonably withheld). The general rule, however, is that such consent restraints are enforceable.
ment contract is fully contingent. Some co-investor conflicts involve post-contractual opportunistic behavior by one large investor or an investor coalition, such as the holders of one class of securities. These conflicts may involve attempts to transfer wealth from minority to majorities, or stockholder attempts to gain at the expense of bondholders. Attempted wealth transfers between or among stockholders frequently involve some form of self-dealing, or a bargain between majority and minority interests in which the minority feels overreached. Stockholder attempts to gain at bondholder expense generally involve increasing distributions to stockholders, increasing the firm’s debt to equity ratio, or selecting riskier projects for the firm, all of which inflict higher risks on bondholders.

C. The Structure of the Paper

Part II of the paper tests the Irrelevance Hypothesis. It consists largely of formal demonstrations that diversification can completely eliminate the cost of investor conflicts only if unrealistic assumptions are made. Diversification to protect against self-dealing transactions by dominant shareholders requires accurate predictions of the identity of raiders and targets, and disproportionate investments in them based on those predictions. In some publicly held firms and in all closely held firms diversification imposes increased agency costs, which considerably limits the extent of diversification.

This part of the paper observes that relatively small savings in coordination costs can explain elaborate capital structures and contractual re-

27. Klein, Crawford & Alchain, Vertical Integration, Appropriable Rents and the Competitive Contracting Process, 21 J. LAW & ECON. 297 (1978). These authors assume, however, that opportunism can occur only where productive assets are leased, and not where they are owned by the user. Id. at 302. This article demonstrates that the creation of separate claims on the firm’s future income stream creates new occasions for opportunism. The relationship between duration and risk is discussed infra text at notes 208-212.

28. See O. Williamson, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS, 26-30 (1975). Williamson describes such behavior as involving “self-interest seeking with guilt” and “making false or empty, that is, self-disbelieved, threats and promises’ in the expectation that individual advantage will thereby be realized.” Id. at 26 (citing I. GOFFMAN, STRATEGIC INTERACTION, 105 (1969).

Klein, Crawford & Alchian, supra note 27, expand the notion of opportunistic behavior to include post-contractual behavior where original promises are not necessarily disingenuous, but where the contractual period is long enough to allow potential gains from such behavior to arise by virtue of investments in specific assets.

29. See infra text accompanying notes 102-124, 134-152.

30. See infra notes 173-179.
sponses, where scale economies are substantial. This part also provides a positive explanation for the presence of control premiums and minority discounts, distinct from the agency cost explanation.31

Part III attempts to test the Costly Contracting Hypothesis by exploring in detail the nature of investor conflicts and contractual responses to them. I demonstrate that coordination costs provide an important explanation for the capital structure of firms, as well as for other contractual arrangements among co-investors, which the agency-cost hypothesis does not entirely explain.32 I argue that even where the unification of ownership and control minimizes agency costs, elaborate and costly contracts are used to control investor conflicts. The similarity of devices used in publicly held firms suggests that coordination costs, as well as agency costs, play an important role in explaining the structure of these firms. Again, following Smith and Warner, I offer qualitative rather than quantitative evidence for this proposition.33

Part IV explores the reasons why firms exist in the face of positive costs for joint investments. Investors gain the advantages of scale economies, diversification and outside monitoring, among others, in exchange for bearing the costs of conflict and opportunism. Klein, Crawford and Alchian explain the creation of some firms as a means of reducing the costs of opportunism, but this article observes that investments in firms often create other appropriable quasi-rents. These quasi-rents are presumably lower than those created by other forms of contracting. Where investment markets are not fully efficient, as in the case of closely held firms, bounded rationality may well play a role in explaining the creation of firms.

Part V discusses some implications of these costs for the ownership structure of firms. Certain kinds of contracts used in closely held firms are seen as substitutes for structural solutions employed in publicly held firms. The theory explains the relatively larger sums spent by co-owners in firms, such as partnerships and closely held corporations, where diversification does not satisfactorily resolve these conflicts; the relationship

31. See infra text accompanying notes 65-70.
32. The proof of these arguments is not offered in this Article; but an intuitive grasp of part of the proof can be obtained from the realization that participants in closely held enterprises, where agency costs presumably are lower than in larger firms, expend considerable resources on contracting with respect to ownership rights.
33. Smith & Warner, supra note 12, at 122; note that "... qualitative evidence ... is frequently employed in the social sciences and in particular [sic] the property rights/economic analysis of law literature. [citations omitted]"
between the duration of the claim and the extent of contracting; and why other devices, such as settling up and judicial intervention, play a larger role in open residual claims.

II. Can Diversification Eliminate the Costs of Joint Ownership?

In this section I reject the Irrelevance Hypothesis, which holds that investor conflicts are solved at zero marginal cost because activities such as diversification are undertaken for other reasons. Despite the fact that many such conflicts are resolved in this manner, in many cases this solution is neither complete nor costless.

The strong form of the argument in favor of the Irrelevance Hypothesis has been made by Easterbrook and Fischel. These authors have addressed the issue of unequal sharing of the gains from takeovers, where some shareholders receive a control premium, while others are "squeezed out" in a takeout merger after control is acquired. Easterbrook and Fischel argue that the possibility of diversification, not its exercise, justifies unequal sharing of gains from takeovers because diversification is available at "a remarkably low cost." They argue that "an investor with a reasonably diversified portfolio would be on the winning side of some transactions and the losing side of others." I assert that diversification is a less than complete solution for two reasons. First, agency and transaction costs of diversification may counsel against holding a fully diversified portfolio under some circumstances. Second, diversification will not provide a complete solution to problems of opportunistic behavior except under the most restrictive (and unrealistic) set of assumptions.

Even where diversification is a major part of the solution, capital structure and contract still perform a role. Where scale economies exist, a relatively small expenditure on contractual solutions can lead to elaborate capital structures and contracts. Assuming efficient capital markets and rational expectations, firms will bear the costs of investor conflicts not diversified away, and will seek contractual provisions designed to minimize their costs.

34. Easterbrook & Fischel, supra note 2, at 713 (1982).
35. Id. at 712. Though I reject the reasoning of Easterbrook and Fischel's arguments, I do not reject the conclusion, because investors are compensated ex ante for purchasing minority interests. See infra text accompanying notes 65-75.
36. This is so because investors (at least some, at the margin) have the option of sole ownership.
A. The Limited Role of Diversification

Modern portfolio theory counsels diversification to minimize the effect of variances in firm outcomes (non-systematic risk). Because rational investors will generally diversify for this reason, we must ask whether such diversification also eliminates coordination costs at zero marginal cost. Investors can generally expect to be on the winning side as frequently as the losing side of honest differences of opinion about firm investment and distribution policies. They therefore have little incentive to expend resources on such disputes. This argument has considerable power, and solves many of the problems described here. But diversification is not costless, and agency and other costs may lead to less than complete diversification under a variety of conditions. Furthermore, even costless diversification would not completely eliminate the expected costs of investor conflicts.

1. The Agency Costs of Diversification

In some cases diversification is obtained only at the price of increased agency costs. In firms where there is considerable latitude for management discretion, shareholder monitoring may help to control agency costs. Such firms generally exhibit some concentration of share ownership, which ameliorates the free rider problem of shareholder monitoring. These investors may rationally hold less than fully diversified portfolios, if gains from such monitoring exceed the gains from complete diversification.

The dominant stockholder, in a publicly held firm, who is able to determine the outcome of firm decisions, is not subject to the risks of losing arguments about firm policy. Nevertheless, other costs may prevent substantial minority interests in publicly held firms from fully diversifying. Large block owners may exist, if the firm has acquired privately held firms in exchange for restricted securities, the sale of which would result in substantial taxable capital gains. In other cases defeated bidders for

38. This is the argument in Easterbrook & Fischel, supra note 2, at 711-14.
40. The Securities Act of 1933, 15 U.S.C. § 77a et seq. (1982), may impose its own costs on
control retain substantial minority interests due to tax disincentives for resale or regulations prohibiting unregistered or short-swing sales.\textsuperscript{41} For all of these minority interests, diversification is neither a complete nor costless solution to the risks associated with disputes about firm policies.

2. Closely Held Firms and Agency Costs

In some firms high agency costs may make separation of ownership and control more costly than assuming the risk of having large holdings of residual claims in the hands of decision agents. Service firms, in which agents exercise considerable discretion about the quality and volume of output and labor input often exhibit this phenomenon.\textsuperscript{42} The Demsetz and Lehn thesis can be extended to closely held firms. Here minority holdings as well as majority interests may be relatively large, both as a percentage of firm ownership and of personal wealth. In such cases, agents will forego some diversification to combine ownership and control (or residual claims and decisionmaking) in a small number of agents. We observe this form in firms that lack significant economies of scale and do not require complex decision hierarchies to make use of specialized decision skills throughout the organization.\textsuperscript{43}

3. Bonding

Service industries may depend primarily upon the skills of firm agents, which are frequently developed at firm expense. Bonding continued delivery of an agent's services to the firm assures that individuals who develop such human capital devote it to the enterprise for a period sufficient to allow the employer to recover a return on its investment. Long-term employment contracts provide weak protection because it is often difficult to recover damages for breach.\textsuperscript{44} Investing capital in un-

\textsuperscript{41} Evidence of the presence of defeated bidders in firms appears from the development of so-called "standstill" agreements with holders of large blocks of shares in publicly held firms. See, e.g., Enterra Corp. v. SGS Associates, 600 F. Supp. 678 (E.D. Pa. 1985); Bialkin, The Use of Standstill Agreements in Corporate Transactions, in 13TH ANN. INST. SEC. REG. 33 (1982) and Fleischer, 1 TENDER OFFERS: DEFENSES, RESPONSES AND PLANNING 395-413 (1983).

\textsuperscript{42} Demsetz & Lehn, supra note 9.

\textsuperscript{43} Fama & Jensen, Agency Problems and Residual Claims, 26 J. LAW & ECON., 327, 333 (1983); McChesney, Team Production, Monitoring, and Profit Sharing in Law Firms: An Alternative Hypothesis, 11 J. LEGAL STUD. 379, 383 (1982).

\textsuperscript{44} On the difficulties of proving actual damages and on judicial treatment of liquidated dam-
marketable securities, whether through restricted stock options or securities that cannot be resold for a period of time, or in shares that are subject to contractual restraints on alienation, is one form of bonding that may persuade co-venturers to take the risk of investments in human capital.\textsuperscript{45} Such bonding will only be effective if the investment is non-trivial for employees. Managers in publicly held firms frequently receive a substantial share of their compensation in stock options and other stock-related forms. Such managers, who hold a substantial part of their capital, both financial and human, in the form of claims against the firm, are unlikely to be fully diversified.\textsuperscript{46}

4. \textit{Firm Specific Human Capital}

Employers may ask highly skilled managers or professionals to forego development of their general (and marketable) human capital in order to serve the firm, and develop human capital specific to the employer's needs.\textsuperscript{47} Although the investment portfolios of such managers may be

\textsuperscript{45} Thus an investment in unmarketable securities creates firm-specific capital and prevents agents from appropriating by early departure general human capital, created by employment with the firm.

\textsuperscript{46} Demsetz, supra note 9, at 388, notes the substantial size of directors' holdings in their firms. W. Lewellen, \textit{Management and Ownership in Large Firms}, 24 J. Fin. 299 (1969) finds that stock-based compensation for top executives was almost five times as great as wages. See also, Smith & Watts, \textit{Incentive Plans and Tax Effects of Executive Compensation Plans}, 7 \textit{Australian J. Mgt.} 139, 148 (1982). These authors point out that sales to managers of restricted shares exacerbate the problem. Id. Although resale restrictions may be part of the plan, id. at 142, the securities laws may also impose such restrictions, for example, restrictions on resale of unregistered securities and those held by "affiliates" (Securities Act of 1933, Rule 144, 17 C.F.R. Sec. 230.144 (1984)) and on sales by insiders (Securities Exchange Act of 1934, §§ 10(b) and 16(b), 15 U.S.C. §§ 78(j)(b), 78(p)(b) (1982)).

\textsuperscript{47} The "managing partner" of a law firm may face such a problem, with respect to practicing law (maintaining professional skills) or dealing with valued clients (maintaining client-specific relationships). Such a partner is often asked to forego these activities, and concentrate on internal firm management, which reduces mobility, and consequently, his or her bargaining power vis-a-vis co-partners. In other cases a manager may be bound to the firm by a long-term employment contract. See, e.g., In re Security Finance Co., 49 Cal. 2d 370, 317 P.2d 1 (1957) (agreement to work full time could only be altered by unanimous shareholder consent; corporate refusal to increase either salary or dividends justified dissolution). See generally Kraakman, \textit{Corporate Liability Strategies and the Cost of Legal Controls}, 93 Yale L.J. 857 (1984).
otherwise adequately diversified, this single major investment of their skills may result in suboptimal diversification. Thus they may have concerns over the sale or liquidation of the enterprise not shared by co-investors. Employers can address these concerns by adjusting agency compensation contracts (such as guaranteed severance payments) or by making other arrangements more directly related to investment contracts, such as decision rules for mergers and other business combinations. These choices evidence the relationship between firm-specific human capital and other types of capital investments in the firm.

5. The Stockholder—Bondholder Conflict

Wealth-transfer conflicts also arise between classes of investors in the firm. The stockholder-bondholder conflict is well documented in the finance literature. By increasing firm borrowings or distributions to shareholders, or by selecting projects riskier than the firm's pre-borrowing set, stockholders can increase their wealth at the expense of bondholders.

In order to protect themselves bondholders can diversify their holdings


If a manager is asked to invest in such firm specific human capital, shareholders may post a bond against their own opportunistic behavior (such as firing the manager) either by granting him a term employment contract, severance pay guarantees (even in the absence of a change in control) or by providing a pension plan with the manager's interest phased in over time to keep pace with the value of the investment in specific human capital. De Alessi & Fishe, supra note 20. "Defined Benefit" pension plans, where payments are generally based on the employee's years of service, represent such a solution. If coupled with lengthy vesting periods (now limited by ERISA), pension plans may provide a bond for the manager's good behavior. Restrictive decision rules for business combinations are discussed in text infra at notes 153-69.

49. Jensen & Smith, supra note 15, at 111-124; see also McDaniel, Bondholders and Corporate Governance, 41 BUS. LAW 413 (1986).

50. Jensen & Meckling, supra note 8, at 334-35; KLEIN & COFFEE, supra, note 22, at 209; Smith & Warner, supra note 12.
to include equity as well as debt.\textsuperscript{51} If all investors hold equal proportions of debt and equity, all incentives for wealth redistributions between classes are eliminated.\textsuperscript{52} Because some investors have strong preferences for fixed income and security, however, diversification through equity investments imposes costs. In addition, the transaction costs of converting equity claims into a steady income stream may not be trivial.\textsuperscript{53} Furthermore, equity investments are subject to market risk, which may impose significant costs upon a risk-averse investor.\textsuperscript{54} Diversification by bondholders also involves the same deficiency as it does for stockholders; the investor must hold equal portions of equity (the transferee) and debt (the transferor).\textsuperscript{55} Although bondholders can better manage this difficulty because these claims can be held in the same firm, costly portfolio adjustments will nevertheless be required when a firm issues additional classes of securities.\textsuperscript{56}

\section*{B. The Limited Power of Diversification}

\subsection*{1. Portfolios that Deviate from the Mean}

Even a fully diversified portfolio will not eliminate all coordination costs. An investor who selects a portfolio that deviates significantly from the mean in either payout policy or risk will be unable to maintain the desired performance by employing a “buy and hold” strategy. Changes in firm strategies and policies, which are random, tend toward a normal

\footnotesize
\textsuperscript{51} Jensen & Meckling, supra note 8, at 352-53, suggest that bondholders may obtain some protection by virtue of the fact that managers frequently hold fixed (salary) claims that align their interests with those of bondholders, although stockholders may realign their interests with claims on the upper tail of firm outcomes through the use of options and warrants.

\textsuperscript{52} Galai & Masulis, The Option Pricing Model and the Risk Factor of Stock, 3 J. FIN. ECON. 53 (1976). Such diversification appears in some leveraged buyouts in the form of “strip financing,” in which investors purchase approximately equal proportions of all classes of the issuer’s securities, and the securities are “stapled” together (so that transfer of separate classes is not permitted) to prevent later separation and development of conflicts. Jensen, The Takeover Controversy: Analysis and Evidence 4, 2 MIDLAND CORP. FIN. J. 6, 15 (Summer, 1986).

\textsuperscript{53} The literature dealing with dividend policy generally ignores these costs, on the assumption that transaction costs are low in efficient capital markets. But see De Alessi & Fishe, supra note 20.

\textsuperscript{54} See note 58, infra. One measure of the cost may be the cost of purchasing market index futures to hedge against market risk. Another is the difference between the risk-free treasury bond interest rate and the expected return on a stock portfolio.

\textsuperscript{55} See Cox, Compensation, Deterrence and the Market, 52 GEO. WASH. L. REV. 745, 749-51 (1984) for the formulation of this solution in the context of squeeze-outs of equity investors; the same formula applies to the solution of the stockholder-bondholder conflict.

\textsuperscript{56} But even this may not be possible, if stock is closely held and bonds are publicly traded, as in the case of finance subsidiaries of publicly held firms.
distribution, which in turn pushes the portfolio toward the mean.\textsuperscript{57} A high-bracket taxpayer, for example, may prefer a policy of zero dividends and total reinvestment, to achieve long-term capital gains. Over time, however, any changes in firm dividend policies must tend toward greater (than zero) dividend payments. An investor selecting a portfolio of firms that pay out their entire cash flow will necessarily experience a similar and opposite change, toward some reinvestment. Investors selecting a level of market risk that varies from a beta of one will also find that over time their portfolios will tend toward one.\textsuperscript{58}

2. Diversification and Dominance

Other disputes involve attempted wealth transfers from one group of investors to another within the firm, generally from minority shareholders to dominant shareholders. These transfers typically take the form of sales of the firm’s shares or assets to the majority interests or takeout mergers, all at bargain prices to the majority.\textsuperscript{59}

Because dominant stockholders in publicly held firms are frequently other publicly held firms, investors have an opportunity to be on the winning side in such instances.\textsuperscript{60} If all dominant stockholders were publicly held firms, the probability that investors would win as often as they would lose would be one. To the extent that dominant investors are not publicly held firms, diversification provides something less than symmetrical participation in the gains and losses from wealth transfers.\textsuperscript{61} Thus

\textsuperscript{57} See generally W. Hays, Statistics for the Social Sciences, 227-231 (2d ed. 1983).


\textsuperscript{59} The development of such behavior is traced in Carney, Fundamental Corporate Changes, Minority Shareholders and Business Purposes, 1980 Am. Bar Found. Res. J. 69 [hereinafter Business Purposes]. See also F. O’Neal & R. Thompson, O’Neal’s Oppression of Minority Shareholders (1985) [hereinafter Oppression]. In closely held firms, wealth transfers may also occur when dominant investors, who also perform agency functions, receive excessive salary and bonus payments. Such payments are treated here as coordination costs, rather than agency costs, because they arise by virtue of ownership control, rather than agency position.

\textsuperscript{60} Easterbrook & Fischel, supra note 2 at 713, argue that “the existence of diversification—not its employment—supports our argument for allowing the gains from corporate control transactions to be apportioned unequally.” This article does not dispute that gains from corporate control transactions ought to be allowed to be apportioned unequally. It simply demonstrates that diversification, though necessary to such an argument, is not sufficient. The article also demonstrates why rational investors may choose costly contracting as a partial solution to costs not fully dealt with through diversification.

\textsuperscript{61} The probability of equal participation on both sides of minority to majority wealth trans-
diversification is at best an imperfect solution to the wealth-transfer problem.

Even if all dominant investors were publicly held firms, diversification might not provide complete protection for another reason. Not only must the number of wins and losses be equal, but their magnitude must also be equal. James Cox has demonstrated that for diversification to provide such complete protection, the investor's interest in the parent company must represent the same percentage as the investment in the minority interest in the subsidiary.\(^6\)\(^2\) Put another way, the relevant interests for purposes of analysis are the transferor (the minority interest in the subsidiary) and the transferee (the dominant firm). Under these conditions, if we assume that a bidder owns a bare majority (fifty percent plus one share) in the subsidiary, an investor must own a percentage twice as large in the dominant firm as in the subsidiary in order to avoid a net wealth transfer.\(^6\)\(^3\) Under conditions of uncertainty about the identifiers, is a function of the probability that both firms are publicly held and available for investments by investors generally. This can be expressed as:

\[
\frac{\%B_p}{\%T_p} = \frac{.5}{1.0}
\]


63. Cox, supra note 55, at 750, explains this:

The Amount that the parent gains in an unfair freeze-out can be expressed as:

\[
G = X[(1-p)V]
\]

where:

- \(G\) = dollar amount of freeze-out gain
- \(X\) = percentage of the minority's value in firm misappropriated to parent in freeze-out
- \(p\) = percentage of stock owned by parent
- \(V\) = value of the firm

To express the freeze-out's effects, \(g\), in terms of a single stockholder, the stockholder's percentage of ownership of the firm, \(y\), must be reflected as a percentage of his share in the minority's interest in the firm, \(\frac{y}{1-p}\), so that:

\[
g = X[(1-p)V]\frac{y}{1-p}
\]

It can therefore be seen that \(\frac{yG}{1-p} = g\).

Although Cox describes these take-outs as "unfair," it might be more positive to describe them as opportunistic, in terms of taking advantage of contractual silence on questions of limiting the power

https://openscholarship.wustl.edu/law_lawreview/vol65/iss1/2
tity of bidders and targets such diversification is highly unlikely.

C. The Role of Liquidity: The Exit Option

Efficient markets characterized by rational investor expectations will promptly discount any changes in value of securities expected from changes in firm policies. Where these changes relate merely to general dividend or reinvestment policies, a one-time change will result in reduced utility of the securities to some present holders, accompanied by an increase in their utility to some prospective holders. Disappointed investors can sell to those who value the new policies more highly, with the sellers' only loss being the transaction costs of portfolio shifts. These costs can be substantial, if repeated adjustments are required over time. Investors in closely held firms where no market exists or where resale is contractually restricted, will suffer a once and for all loss.

Opportunism can decrease the desirability of the exit option. If stockholders engage in a set of actions riskier than bondholders contemplated, no prospective bondholders will bear more risk for the previously prevailing yield on the bonds. If a dominant investor appears in a firm that previously lacked one, prospective investors wary of a potential squeeze-out will discount minority shares accordingly. In both cases current investors suffer a once-and-for-all loss.

The size of the loss will depend not upon the liquidity of the investment but upon its duration. Thus losses on an issue of commercial paper are likely to be small, simply because any increased risk of default will be imposed for only a brief period before the claims must be paid off. The length of the investment period increases the expected variance of events that will influence firm policies toward distributions and risky investments. As the duration of the investment increases the expected variance of the exogenous events that can affect the firm's welfare also increases.64

of majority groups. To characterize them as "unfair" is a normative judgment about outcomes, in which some investors are disappointed by an outcome made possible through the contractual specification of property rights. This paper attempts only to describe the outcomes in a positive manner, without attempting such normative judgments.

I have already demonstrated that these outcomes can be (and frequently are) contractually precluded. In many cases, as where shark repellents are adopted by a corporation, contractual limits are placed on the power of future dominant stockholders. See Carney, Shark Repellents, supra note 9; Carney, Two-Tier Tender Offers supra note 9.

64. In bond markets, this is reflected in higher rates on long-term as opposed to short-term corporate debt. J. WESTON & E. BRIGHAM, Managerial Finance 827 (6th ed. 1978); R. Brealey
Losses on long-term debt, and on open-ended claims such as common stock, include expectations of reduced distributions or greater risk for a much longer period of time, and thus can consume a much greater proportion of the present value of the claim.

D. The Incidence of the Costs of Joint Ownership: Of Control Premiums and Minority Discounts

The prospect of wealth transfers in transactions that involve insufficient gains for winners to compensate losers is a costly one for investors generally. In efficient capital markets with rational expectations investors will demand compensation, in the form of increased yields, for expected coordination costs that cannot be costlessly diversified away. Thus the value of the firm would decline if a sole owner attempted to sell a minority interest in the firm, agency costs aside. This "minority discount" is well known in the legal and appraisal literature on closely held corporations. It thus becomes a real cost of raising outside funds for the firm.

Minority discounts and control premiums are not always perfectly symmetrical. Although symmetry may sometimes exist between minority losses and majority gains, dead weight losses can alter this relationship, either because gains to dominant investors are not sufficient to compensate minority owners for their losses, or because participants expend resources in resisting and furthering such transactions. Symmetry will not hold for other disputes over firm distribution and investment policies. In these cases the majority shareholder is no better off than when he was a sole owner of the firm. Minority owners, on the other hand, are worse off than if they were sole owners.

In efficient capital markets, where investors possess rational expectations, the minority discount and control premium should equalize inves-

---


66. Even if wealth transfers occur without substantial transaction costs, gains and losses in utility are rarely symmetrical, given investor risk aversion. Thus wealth transfers impose positive costs on co-investors.
tor returns, because a controlling investor can compensate himself for the 
premium by selecting firm policies on distributions and risk that maxi-
mize his own, rather than the minority's, welfare. These dominant inves-
tors can also engage in expropriation of wealth from the minority 
through various forms of self-dealing with the firm, including takeouts 
involving a disparity of treatment. 67 Minority investors should receive ex 
ante compensation for this cost, in the form of the minority discount. 68 
The firm's cost of capital will increase to the extent expected minority 
losses exceed expected majority gains.

To the extent that these coordination costs are not costlessly elimi-
nated through diversification, they will also exist for publicly traded 
firms, although in a less visible fashion. In firms with widely dispersed 
stock ownership all shares represent minority interests. The "minority 
discount" or coordination-cost discount represents only the low 
probability that someone can develop a dominant ownership position, 
and the equally low (and related) probability of a major shift in firm 
policies that would require costly portfolio adjustments. Under these 
conditions the size of the discount is likely to be small, and because it 
applies to all trading shares, invisible. 69 The discount becomes visible

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67. Rules that require only a majority approval, rather than unanimity, for investor decisions, 
including selection of agents, permit the dominant investor to make such choices. This article 
asumes that there is nothing intrinsically wrong with shareholders voting their own interests. Indeed, 
prior to erosion of rules of unanimous consent, the general law clearly held that shareholders could 
vote their own interests. Sneed, The Stockholder May Vote as He Pleases: Theory and Fact, 22 U. 
Pitt. L. Rev. 23 (1960). The erosion of these rules is traced in Carney, Business Purposes, supra 
note 59.

68. In efficient capital markets, characterized by investors with rational expectations, the ex-
pected coordination costs will be discounted to present value by minority investors, while the ex-
pected benefits of a majority interest will be treated in a similar manner by those investors acquiring 
or selling such a block. (The nature of competition among sellers in efficient markets requires a 
qualification of this statement. There is an indication that sellers raise their reservation prices when 
they understand that a control block is sought, so that some premium is required. This may be a 
function of the fact that each seller recognizes that the bidder faces a potential holdout problem. 
Expressing the full richness of this problem exceeds the scope of this article.) Thus arbitrage activi-
ties should bid up the price of control blocks, and bid down the price of minority interests, until the 
expected returns are equal. The lack of this market activity explains why returns may not achieve 
equality in closely held firms, where investors suffer from bounded rationality. Manne, Our Two 
Corporation Systems: Law and Economics, 53 Va. L. Rev. 259 (1967) [hereinafter Two Corporation 
Systems]. See infra text accompanying notes 191-96 infra for a discussion of bounded rationality.

69. Some valuation cases seem to apply the minority discount even where no control block 
existed, or at least where none is apparent in the reported facts. Valuing Closely Held Stock, supra 
note 65, at 145. Unsuccessful dissenting shareholders in squeeze-outs have argued that they should 
be entitled to a pro rata share of the value of the entire firm, rather than the value of their minority 
interest. The Delaware courts have thus far rejected this argument. Weinberger v. UOP, Inc., 426

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only if a dominant block appears. This occurrence usually elicits the reciprocal of the minority discount, the control premium.\textsuperscript{70} Although the

\textsuperscript{70} A.2d 1333 (Del. Ch. 1981), rev'd on other grounds, 457 A.2d 701 (Del. 1983). The opinion of the Chancery Court presages the analysis contained in much of this article:

"While I make no effort to discuss in any detail the workings of either method [of valuation urged by the plaintiff], I think it is significant that both were based on the value that one would supposedly derive as a result of becoming a 100\% owner of an ongoing corporation as opposed to acquiring a less than 100\% interest. The underlying rationale is that one with full and complete ownership of a company is free to take out of it whatever he wants, to direct the business as he sees fit, to declare dividends as needed, etc., thus making his ownership interest a thing of greater value than an ownership interest shared with others whose rights and financial position must also be honored."

"Thus, plaintiff seems to be suggesting that in evaluating the fairness of the merger terms to the minority in such a proceeding as this, one must look to what it is reasonably worth to the former majority shareholder to be rid of all other shareholders so as to become the sole owner of the enterprise, and then, using that as a basis or starting point, determine what is a fair amount for it to have paid the minority for the right to become the sole shareholder."

426 A.2d at 1356, 1359.

The court interpreted the plaintiff's position to mean that he would receive only the value of a minority interest in an appraisal proceeding and something more in an equitable "fairness" proceeding. The court rejected that approach as not supported by either logic or existing law. \textit{Id.} at 1359.

70. Easterbrook & Fischel, \textit{supra} note 2. The phenomenon of the control premium, or the payment of disparate prices to different shareholders in the acquisition of a firm, has generated an enormous critical literature. Perhaps representative of that literature is Andrews, \textit{The Stockholder's Right to Equal Opportunity in the Sale of Shares}, 78 \textit{Harv. L. Rev.} 505 (1965), which argues that control has value principally because it includes the opportunity to create agency costs for the benefit of the owner-manager. Andrews takes the same approach as A. Berle & G. Means, \textit{The Modern Corporation and Private Property}, 244 (1932), that control is a corporate asset and that the premium for the sale of a control block should go to the corporate treasury. The courts have thus far rejected this doctrine. See Notes on Equal Opportunity: A Theory Thus Far Rejected by the Courts, in W. Cary & M. Eisenberg, \textit{Cases and Materials on Corporations}, 707 (5th ed., unabr., 1980) and R. Hamilton, \textit{Private Sale of Control Transactions: Where We Stand Today}, 36 \textit{Case W. Res. L. Rev.} 248 (1985). A few cases seem to have inspired this literature. Perhaps the most famous is Perlman v. Feldman, 219 F.2d 173 (2d Cir.), \textit{cert. denied}, 349 U.S. 952 (1954), where the dominant shareholder received $20 per share for a 33\% block when the market value had not exceeded $12. \textit{See also} Brown v. Halbert, 271 Cal. App. 2d 252, 76 Cal. Rptr. 781 (1969) (majority stockholders rejected offer to sell entire firm, but sold their shares for $1548 per share while minority were offered $300) and Delano v. Kitch, 542 F.2d 550 (10th Cir. 1976) (dominant stockholder and corporate attorney negotiated increased salary and sales commission, respectively, as conditions of agreeing to sell their shares, which put pressure on minority shareholders to sell at price negotiated by dominant shareholder for his shares alone).

price of all shares in a target firm may rise when a bid is announced, the disparity between the value of control and minority shares usually increases as the takeover progresses.

The Irrelevance Hypothesis is thus incorrect to the extent that it posits diversification as a panacea for the costs of investor conflicts; nevertheless diversification plays a major albeit not exclusive role in dealing with such costs. Thus our rejection must be a weak one, because diversification plays a major, but not exclusive, role in dealing with the costs of investor conflicts.

III. THE ROLE OF CONTRACT

Testing the Costly Contracting Hypothesis presents two initial difficulties. First, to the extent that diversification is a relatively complete answer to investor conflicts, expenditures on contracts may be trivial for some firms. Second, some contracts that seem to solve investor conflicts also reduce agency costs. In these circumstances we cannot completely reject the agency-cost hypothesis as the sole explanation of these phenomena. The approach of this section is to unify the discussion of publicly held and closely held firms, in order to resolve these difficulties. Because investors in closely held firms seem less likely to diversify fully, contracting should occur more frequently. Because the unity of ownership and control in these firms resolves many agency-cost problems, the presence of costly contracts in closely held firms is more indicative of coordination costs. The extent to which similar contracts, or devices designed to achieve similar outcomes, appear in publicly held firms provides further support for the Costly Contracting Hypothesis.

A. The Extent of Contracting

Three factors influence the expected costs of investor conflicts. Costs increase with the probability that the firm will be dominated by a single investor or group of investors, in the case of common stockholders, or by another class of investors in the case of bondholders, thus giving the firm an undiversified demand for a set of distribution and investment policies. Costs also increase with the duration of the investment in the firm, because as duration increases so does the expected variance of events influencing firm policies. Finally, the expected costs of opportunistic behavior, of wealth transfers between groups or classes of investors, are also a function of the open nature of the investment contract. Thus, short term investments that specify outcomes under all contingencies are less subject to such risk, as in the case of trade creditors or short term notes with fixed payment obligations. Residual claims of an indefinite nature, such as shares of common stock or common stock options or warrants, in firms with no specific rules constraining the power of dominant investors, are the most subject to such risk.

As noted above, an investor who chooses distribution and risk policies that deviate from the mean will incur search and transaction costs in order to maintain an optimal portfolio. Because disagreements can occur repeatedly in any firm, and with respect to all of the securities held in a portfolio, avoidance of such repeated adjustments through one-time contracting costs for firms may be efficient. Investors and firms will choose to incur transaction costs by entering into such contracts to the extent that marginal gains from contracting exceed the marginal costs of contracting. Contracting by a firm is a one-time event for a security that

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71. See supra note 64.
72. This can be expressed as:
   \[
   C_c = F \left[ (d + 1) o \right]
   \]
   where: \( C_c \) = the present value of expected coordination costs
   \( d \) = probability of dominance, and
   \( l \) = length of investment period
   \( o \) = the open nature of an investment contract.

The greater the specification of outcomes under different contingencies, the lower the expected coordination costs. No fully contingent contracts can be expected for any investments except those of the briefest duration. Cf. Klein, supra note 64, at 1562.
73. Thus even fully diversified investors will find it useful to expend resources on contractual resolution of conflicts up to the point where the marginal cost of contracting equals the marginal savings in expected portfolio adjustments resulting from conflicts. These savings must also be ad-
may be outstanding for many years, and held by a variety of investors. Thus scale economies suggest that contracting plays an important role even in publicly held firms.

B. The Coordination Costs of Joint Ownership: A Taxonomy

In the following sections I analyze the effects of coordination costs by describing the general types of conflicts among co-investors. In each case the discussion focuses first upon conflicts and costs that exist whenever there is multiple ownership of a firm. I next examine the behavior of a dominant owner in a firm with minority investors. Conflicts involve only two types of firm decisions: (1) distributions versus firm investments, justed to present value, which suggests that contractual expenditures in publicly held firms may be relatively modest. Scale economies and standardization of contract terms may nevertheless produce elaborate contracts to reduce the cost of conflicts. A familiar model from tort theory illustrates the extent of contract. Assuming that contracting introduces no costs beyond the transaction costs of reaching agreement (e.g., that no increases in agency costs are incurred, and the firm loses no flexibility in responding to future changes in conditions), the cost of contracting will rise constantly with the level of restrictions imposed, as a ray from the origin. The cost of portfolio adjustments is negatively sloped, but the curve declines at a decreasing rate to reflect declining marginal returns from contracting. The efficient contracting level is illustrated in Figure 1 below:

![Figure 1](image-url)

Where: $TC = \text{Total Costs}$,
$CC = \text{Contracting Costs}$,
$PC = \text{Portfolio Shift Costs}$, and
$C^* = \text{the optimum point where } TC \text{ is minimized.}$
and (2) the riskiness of new firm projects. Conflicts may involve members of the same class of investors, or holders of different classes of securities. Changes in investor preferences, often incident to changes of, or opportunistic behavior by, a dominant shareholder or representatives of a single class able to control firm choices, such as common stockholders, generate disputes.

C. Distribution and Investment Choices

All firms face continuing choices concerning the distribution of cash flows. A firm may select policies ranging from total reinvestment to total disinvestment and ultimate liquidation. These choices affect investors personally, either by limiting their personal investment choices (as in the case of total reinvestment by the firm); requiring new investment choices (as in the case of disinvestment, or distribution of cash flows and liquidation); limiting consumption choices (if investors do not wish to incur the transaction costs of selling investment units during periods of reinvestment); or requiring investment liquidations (where investors require current cash flows). Any of these outcomes can impose costs on some investors in the firm.

An examination of the general nature of conflicts among investors suggests elaboration of contract provisions as diversification provides weaker protection and as scale economies allow greater specification.

I. Timing and Rate of Distributions

a. General Conflicts

i. The Diversity of Investor Preferences

The diversity of investor preferences can hardly be gainsaid; it is best illustrated by the panoply of investment instruments made available in capital markets. Distribution policies range from: assessable limited partnership interests, where projects are developed in stages; warrants that anticipate further financing; zero payout instruments, such as zero coupon bonds that pay no interest until maturity; and common shares in firms that announce an intent to pay no dividends, to high yield corporate debt and cash flow investments in wasting asset enterprises, such as oil and gas investments. Some corporations, such as utilities, frequently make dividend distributions on common stock that include a return of capital. Such policies often require regular trips to the capital markets.
for refinancing.\textsuperscript{74}

Without excluding agency cost explanations, this diversity is also responsive to the needs of a variety of investors. Preferences may vary on the basis of the age of investors. Investors, for a variety of reasons, may prefer a policy calling for the reinvestment of all earnings. For some investors, current income may be sufficient to satisfy current needs. Thus a policy of firm reinvestment may reduce their transaction costs.\textsuperscript{75} The tax advantages of long term capital gains over ordinary income reinforce such a preference.\textsuperscript{76} Other investors, such as retirees or those who need capital for alternative investments, may prefer current distributions of the firm's entire cash flow, or even speedy liquidation, in order to meet current needs.

Preferences may also vary depending on the legal structure of the investor. Trustees, for example, may prefer a policy that pays out all true earnings while preserving the purchasing power of the capital invested in the firm, because of their obligations to different classes of beneficiaries with respect to income and principal.\textsuperscript{77} Corporate investors, on the other hand, may well be indifferent as between dividends and reinvestment, either because they consolidate returns or because of the eighty-five percent intercorporate dividend deduction that eliminates most of the tax cost of dividends.\textsuperscript{78}

Though financial theory teaches that investors should generally be in-

\textsuperscript{74} Cf. Jensen & Smith, supra note 15, at 119 (citing Smith, Corporate Dividend Policy: An Analysis of Dividend Reinvestment Plans, (unpublished manuscript, Univ. of Rochester, 1983); Easterbrook, Two Agency-Cost Explanations of Dividends, 74 Am. Econ. Rev. 650 (1984).\textsuperscript{75} Investors currently receiving income at levels above their expected lifetime average will have a stronger preference for saving (and reinvestment), according to Modigliani's Life Cycle Hypothesis of Saving, supra note 16.

\textsuperscript{76} Under progressive income taxation, those investors currently experiencing above average earnings will also be experiencing above average rates of taxation, and will have stronger preferences for tax deferral or avoidance. Subject to taxes on preferences, long-term capital gains have recently been taxed at 40\% of the taxpayer's ordinary income tax rate, which applies to dividends received. I.R.C. § 1202(a) (1982). While tax reform legislation has eliminated the distinction in rates between ordinary income and capital gains, it has not eliminated the deferral of recognition of unrealized capital appreciation.


\textsuperscript{78} Dividends paid by one corporation to another within a related "group" able to consolidate their tax returns are free of separate taxation as income. 1 Peet, Consolidated Tax Returns §§ 2.04, 15.01 (3d ed. 1984). Dividends paid by an unrelated corporation to another corporation are subject to an 85\% dividends received deduction. I.R.C. § 243 (1978). Where the acquisition of stock is debt financed by the corporate owner, the deduction is reduced under I.R.C. § 246A (West Supp. 1985).
different as to the choice between dividends or reinvestment, because of their ability to "home make" distributions through sales of shares or borrowings against them, this theory ignores the transaction costs of such adjustments for individual investors. Brokerage fees, interest on borrowings, and search costs to determine which investment to sell and where to invest proceed in excess of those needed for the moment are not trivial. If investors know their future cash needs, they will probably select securities with distribution and reinvestment policies matched to those needs, in order to reduce these transaction costs.

ii. The Impact on the Firm

Diversity of investor preferences predicts only that markets will offer a variety of financial instruments, not that single firms will do so. Coordination costs provide a large part of the explanation for complex capital structures. Where all interests in a firm are held by a single claimant, firm distribution and investment policies can be expected to adjust to changes in the owner's circumstances and preference in order to max-

79. Dividends remain a puzzle to economists. R. Brealey & S. Myers, supra note 37, at 336-350; Jensen & Smith, supra note 15, at 119-120; Black, The Dividend Puzzle, 2 J. PORTFOLIO MGT. 5 (1976); Black & Scholes, The Effects of Dividend Yield and Dividend Policy on Common Stock Prices and Returns, 1 J. Fin. ECON. 1 (1974); and Easterbrook, supra note 74. The puzzle began with the assertion that dividends are irrelevant to investors, because they can "home-make" their own, either by selling shares or borrowing against them. Miller & Modigliani, Dividend Policy, Growth, and the Valuation of Shares, 34 J. Bus. 411 (1961); Miller & Modigliani, The Cost of Capital. Corporation Finance and the Theory of Investment, 48 AM. ECON. REV. 261 (1958); Stiglitz, On the Irrelevance of Corporate Financial Policy, 64 AM. ECON. REV. 851 (1974). An alternative view argues that dividends provide investors with useful signals, because investors prefer stable dividend policies, and management will not commit new earnings to dividends unless it is certain that it can sustain an increased payment for an indefinite period. Bhattacharya, Imperfect Information, Dividend Policy, and the "Bird in the Hand" Fallacy, 10 BELL. J. ECON. 259 (1979); Ross, The Determinants of Financial Structure: The Incentive Signalling Approach, 8 BELL J. ECON. 23 (1977). Easterbrook, supra note 74, criticizes this view, and argues instead that dividends have value because they signal to potential investors in common stock: (1) that the firm will not accumulate earnings and reduce risk for bondholders beyond the level contracted for, and (2) that the firm will undergo the scrutiny of capital markets by seeking new funds for investment. Recently De Alessi and Fishe, supra note 20, have argued that regular dividends control agency costs by inter alia reducing the cost of obtaining control of the firm and by reducing the chances of opportunistic behavior at the expense of stockholders. That debate is not critical to this article, which simply assumes that investors desire distributions, a position supported by the evidence, without asking why. De Alessi and Fishe observe that regularly scheduled dividends serve an important function for investors in reducing transaction costs, which is perhaps the most significant observation in this field for the purposes of this article.
mize the owner's expected utility over time.\textsuperscript{80} Individual investors, like sole owners, may experience variations in income received from other sources, or in their preferences for current versus future consumption and investment. At certain times the personal utility of current cash distributions will rise dramatically for individual investors, compared to the utility of later benefits from firm reinvestment.\textsuperscript{81} Under these conditions investors experiencing such variations would prefer that the firm follow a distribution policy that compensates for other variations in their income, and adjusts to changes in their demand for current versus future consumption. A transfer of investment units in the firm to investors with different preferences can change demand for firm distributions and investments.\textsuperscript{82} The sale of a majority of the interests (or a controlling interest) in the firm to a new owner can change such policies radically.

In closely held enterprises, because the firm faces only a few demands for distributions and investments, a few transfers of ownership claims can radically alter aggregate demand. When ownership claims and these demands are not diversified against changes in investor demand, co-owners should have an incentive to exert some control over changes in the identity of owners. This explains the fact that restrictions on the transfer of shares are a common feature of the closely held corporation. It also explains why partnership law generally prohibits the admission of new partners without the consent of existing owners.\textsuperscript{83}

In closely held firms where decision agents are also the sole owners a

\textsuperscript{80} For a description of how individuals choose between current and future consumption and savings, see STIGLER, supra note 17, at 276-86.

\textsuperscript{81} Modigliani's Life Cycle Consumption Hypothesis, supra note 16, predicts that individual savings rates will change radically as individual income varies from the individual's expected lifetime average. In addition, the marginal utility of alternative investment opportunities may increase from time to time. Thus investments such as purchasing a new home or educating children may shift the individual's preference away from one set of investments toward another. Similarly, the marginal utility of certain consumption activities may rise dramatically from time to time, such as unexpected medical expenses.

\textsuperscript{82} See, e.g., \textit{In re Franchard Corporation}, 42 S.E.C. 163 (1964), where the SEC held that a violation of the registration provisions occurred because a prospectus failed to disclose the tight financial circumstances of the dominant owner of a firm, which gave him an incentive to pursue high rates of distributions from the firm. See also Nelkin v. H.J.R. Realty Corp., 25 N.Y.2d 543, 307 N.Y.S.2d 454, 255 N.E.2d 713 (1969) (three tenants of building purchased it through a corporation and agreed to charge themselves uniform below-market rents that eliminated company profits; when one tenant moved, he attempted to dissolve the firm on the grounds that the other shareholders were wrongfully diverting profits. The court denied dissolution.)

\textsuperscript{83} See generally I.F. O'NEAL, supra note 26, at ch. 7 (stock transfer restrictions) and UNIF. PARTNERSHIP ACT, § 18(g) (requiring consent of all the partners for admission of a new member in the absence of partnership agreement to the contrary).
diversity of demands for distributions can be partially satisfied through a complex capital structure. The use of debt to control total firm distributions has both positive and negative aspects. Interest payment obligations, for example, assure certain minimum payouts by the firm, while bank loan agreements may place ceilings on total distributions. Owners of closely held firms can assure themselves of a desired mix of distributions by holding varying combinations of debt and equity—a “homemade” dividend policy, in effect. One would expect to see owners in closely held firms holding several classes of claims against the same firm, a phenomenon that is less likely for holders of publicly traded securities. When owners are also agents, stability of distribution policies is at least partially assured through wage and salary payments made pursuant to employment agreements.  

A publicly held firm, where ownership is widely dispersed, faces a multitude of such individual demands, which results in full diversification of these changes for the firm. In efficient capital markets, where investors hold rational expectations firms will attempt to minimize the costs caused by such investor conflicts. Because shifts in distribution and investment decisions cause some investors to make costly portfolio changes, firms have incentives to reduce aggregate coordination costs by assuring investors of stable policies. Under normal conditions it will be less costly for individual investors experiencing shifts in their own demands to make portfolio adjustments. This enables the majority of investors to pursue a “buy and hold” strategy. As a result, firms will be reluctant to change their policies unless a relatively permanent shift in the firm’s circumstances occurs.

b. The Complications of a Dominant Investor

In many firms no dominant investor can be identified. This will be true of all firms where no investor, either alone or in concert with others, is able to exert a decisive influence over firm actions. The SEC defines “control” as the ability to direct or to cause the direction of the manage-

84. 1 F. O’Neal, supra note 26, § 6.02 (1971).
85. For a description of the reasons why various firms would vary the nature of their payments, see De Alessi & Fishe, supra note 20. These authors suggest that firms experience life cycles, from promotional stages, when all available investments are positive net present value projects, to more mature stages, when such projects are generally not available. They also note that some firms are single project undertakings, where all cash flow is intended to be paid out periodically, while other firms face more complex sets of investment opportunities.
86. See De Alessi & Fishe, supra note 20.
ment and policies of an entity, an open and fact-based definition. No better definition can be offered here.

Dominance generally depends upon the following factors: the percentage of a class of ownership claims held by a single investor; the ability of holders of that class of claims to alter firm policies; the relative dispersion of the remaining ownership units; the transaction costs of creating coalitions; and the voting rules in effect for a particular decision. Even within a single firm an investor may be dominant for some purposes and not for others. Thus, when there are scale economies in coalitions, a


88. See generally L. LOSS, FUNDAMENTALS OF SECURITIES REGULATION, 445-47 (1983). Common stock, for example, may not dominate dividend decisions if dividends are prohibited by a bond indenture. The concept of a dominant stockholder appears at least as early as A. BERLE & G. MEANS, supra note 1, at 235-36. Dominance is a positive function of the percentage of control held by a single owner, and of the dispersion of the remaining interests. Dominance is a negative function of the costs of coalition on the particular vote and the height (restrictiveness) of the applicable decision rule. But see AM. L. INST., PRINCIPLES OF CORPORATE GOVERNANCE: ANALYSIS AND RECOMMENDATIONS, § 3.02 (Ten. Draft No. 3, 1984), which defines a “dominating shareholder” in the same general manner as this paper, but treats a 51% shareholder as dominant for all purposes, regardless of voting rules for particular transactions. The official comments, however, appear to take back what the definition claims:

However, where because of restrictions in a corporation’s charter or because of contractual restrictions imposed upon voting rights, a holder of more than 50 percent of the outstanding voting securities is entitled to elect less than a majority of directors and where there is clear and convincing evidence that the shareholder did not in fact otherwise exercise control under Sec. 5.02(2), it is not intended that such shareholder will be a dominating shareholder simply because of the size of his holdings.

Id. at 93-94.

When supermajority voting rules reduce the power of a majority shareholder to effect a desired transaction, the ALI reporters argue that any shareholder with a veto power may be dominant, rather than admitting that no one shareholder can dominate. (“A shareholder may be entitled by reason of special voting rights to control approval of a particular transaction, even though the shareholder does not possess general voting rights for the election of directors. Under such circumstances, the shareholder may be a dominating shareholder only with respect to the particular transaction.”) Id. at 94. This suggests that if one shareholder has a majority of the stock, but not enough to approve a fundamental corporate change, and a second (minority) holder has “negative control” or a veto power over the transaction, both are “dominant”, in the sense that both can preclude such transactions. Under these conditions, rather than follow the traditional rule that all shareholders can vote their own interests, the ALI apparently imposes fiduciary duties on both shareholders with respect to the transaction. The analysis of this paper suggests that neither shareholder is dominant, since neither can unilaterally effect changes in firm distribution and investment policies, or a wealth transfer. Exogenous changes may mean that a recalcitrant or holdout shareholder may profit at the expense of a majority under some circumstances, but this does not fit this paper’s definition of dominance. Inability to change firm policies is simply a cost of restrictive decision rules. For a more general description of the transaction costs of group decisions, see J. BUCHANAN & G. TULLOCK, supra note 15, at 106-109.
dominant group may evolve. Repeated choices by co-investors on similar issues may provide such opportunities, because once formed, an investor coalition may be advantageous for repeated decisions. Voting rule choices also affect dominance. When decision rules require unanimous consent, dominance is impossible, while dominance arises with relative ease when co-investors are apathetic and the applicable decision rules require relatively low votes.

Thus in a publicly held corporation a twenty percent shareholder may have working control to elect the board of directors, given normal stockholder apathy about such matters. In such circumstances the dominant stockholder will also control dividend policies, which are normally a board prerogative. But that same twenty percent stockholder may lack the voting power to authorize new shares (and thereby obtain the power to make new investments in the firm), if a charter amendment is required, or to cause the firm to engage in other fundamental changes, such as a takeover merger or a liquidation.

i. The Effect of a Single Demand for Distributions and Investments

The sole owner of a firm can be expected to maximize utility through a mix of distribution and investment decisions that maximize the owner's utility over time. In a one-owner firm, there is no reason to expect consistency in firm distribution and investment policies. What is expected is that the owner will be consistent in personal (rather than firm) consumption and investment policies, absent exogenous changes in personal circumstances, and that these policies will be adjusted to maximize personal utility over time in response to such changes. The sole owner will


90. For discussions of rational shareholder apathy in voting their shares, see Manne, Some Theoretical Aspects of Share Voting, 64 COLUM. L. REV. 1427, 1439-43 (1964) and Easterbrook & Fischel, Voting in Corporate Law, 26 J. L. & ECON. 395 (1983).

91. A. BERLE & G. MEANS, supra note 1; Sommer, Who's "In Control"?, 21 BUS. LAW 559, 569 (1966).

92. Generally such votes require approval of a majority of all shares, rather than a majority of a quorum, as in the election of directors. See generally Carney, Shark Repellents, supra note 9, at 389-90.

93. See note 16, supra.
properly regard the firm as an "alter ego," and will transfer funds between owner and firm in order to maximize personal utility.\textsuperscript{94}

Shifting control of a firm to a single owner gives the firm a single demander of distributions. This will increase the expected variance in demanded distributions and reinvestments.\textsuperscript{95} The problem is exacerbated because it is possible that the block of shares will be transferred as a unit to yet another owner, who has a different demand schedule.

The solutions for the close corporation are well known: restrictions on the transfer of equity interests; employment agreements guaranteeing fixed salary payments; issuance of multiple classes of income securities to equity holders; and the like.\textsuperscript{96} Some close corporations adopt special decision rules to limit majority power, such as cumulative voting for directors, coupled with supermajority voting requirements for some or all board decisions.

Shifts in distribution policies in publicly held firms (absent radical changes in firm cash flows) appear to be relatively rare phenomena, even in the presence of a dominant investor. This may result from a publicly held firm's tendency to engage in a takeout transaction that eliminates minority interests and the accompanying prospect of future conflicts over these policies, once an owner obtains dominance.\textsuperscript{97} It may also result

\textsuperscript{94} The phrase "alter ego" is a judicial term of art, which indicates that a corporate firm is operated as an agent that is perfectly responsive to its owners. Under these circumstances a court may "pierce the corporate veil" and impose vicarious liability on the owners for the acts of the firm, corporate rules of limited liability notwithstanding.

"To establish the alter ego doctrine it must be shown that the stockholders' disregard of the corporate entity made it a mere instrumentality for the transaction of their own affairs; that there is such unity of interest and ownership that the separate personalities of the corporation and the owners no longer exist; and to adhere to the doctrine of corporate entity would promote injustice or protect fraud."

\textsuperscript{95} See, e.g., \textit{In re Franchard Corporation}, supra note 82, (prospectus should have disclosed the tight financial circumstances of the dominant owner of a firm, and his incentive to pursue high rates of distributions from the firm). On the other hand, a shift in the business circumstances of the minority stockholders can have the same impact. When the Dodge brothers, major shareholders in Ford Motor Co., wished to begin a competing business, Henry Ford caused the Ford Motor Co. to reduce its dividend rate drastically, thus cutting off a source of funds for the Dodge brothers to use to finance their business. \textit{Dodge v. Ford Motor Co.}, 204 Mich. 459, 170 N.W. 668 (1919). \textit{See Ribstein, Business Associations} § 7.02[1], at 7-32 (1983). Although this decision was harmful to the Dodge interests, it might still have been Kaldor-Hicks efficient if the gains to remaining shareholders exceeded losses to the Dodge brothers.

\textsuperscript{96} See text at notes 83-84, supra. See also Jensen, supra note 52, at 15 (describing leveraged buyouts as involving classes of debt and equity securities that are "stapled" together to reduce stockholder-bondholder conflicts).

\textsuperscript{97} \textit{See generally} Carney, \textit{Business Purposes}, supra note 59, at 100-108.
from a dominant owner's desire to seek continued access to the capital markets for equity investments in the firm. By observing the same policy of consistency that widely held firms follow, the dominant owner can reduce the cost of equity capital. Nevertheless, conflicts still arise in some instances. A few examples illustrate the nature of the problem.

A shift in control to an investor in a higher income tax bracket than previous controlling investors may reduce investor demand for taxable distributions, and cause the firm's policies to shift toward reinvestment and long-term capital gains. In closely held firms, where several significant shareholders have veto power over firm choices, any one of a series of investors may have a form of negative control over decisions that affect other investors.98

A shift from individual to corporate ownership can have a dramatic impact on dividend demand. An 85% intercorporate dividend deduction takes most of the tax bite out of dividends for corporate owners, leaving them subject to a much lower marginal tax rate than individual investors on dividend income, which creates an accompanying stronger demand for dividends.99 Similarly, ownership by tax-exempt entities can affect

98. See, e.g., Atlantic Properties, Inc. v. Commissioner, 519 F.2d 1233 (1st Cir. 1975), where the Internal Revenue Service imposed a punitive tax on a corporation for unreasonable accumulations of earnings. Stock in the firm was divided into four equal holdings, with an 80% shareholder vote (effectively, unanimous consent) required to approve any board action, such as a dividend. One shareholder deadlocked the corporation by refusing to approve dividends, because he was in a high tax bracket. The Court of Appeals sustained the imposition of the tax, because there was no corporate purpose for the accumulation. In a later suit, the other three shareholders recovered damages from the recalcitrant shareholder. Smith v. Atlantic Properties, Inc., 422 N.E.2d 798 (Mass. App. Ct. 1981). See also Gottfried v. Gottfried, 73 N.Y.S.2d 692 (Sup. Ct. 1947) (charging tax avoidance by dominant shareholders was a motive for the failure to pay dividends). Even tax rate changes for individuals can change the relative preference of a dominant stockholder for reinvestment or distributions. Capital gains rates have historically been set at a fraction of an individual's marginal rate. Thus, as marginal rates increase, if the capital gains percentage remains constant, the absolute difference between the two rates increases. See, e.g., Berwald v. Mission Development Co., 40 Del. Ch. 509, 185 A.2d 480 (Del. 1962), where a complaining shareholder charged that the corporation had terminated dividend payments because the controlling stockholder, J. Paul Getty, was not interested in receiving dividends. These problems arise because historically the highest marginal income tax rate facing individuals has been well above that facing corporations. Under present tax laws, this problem does not arise for partnerships, because firm income flows through to the individual partners in accordance with the proportions set out in their agreement, or imputed to them by law. See generally I.R.C. §§ 701-761 (1982). Nor does it arise as frequently for shareholders when the maximum marginal rates are 50% for individuals and 46% for corporations. Id. at §§ 1 and 44. Compression of rates through tax reform that minimizes differences between investors' marginal rates will also reduce these conflicts.

99. I.R.C. § 243 (1978). See also note 78, supra. Although there is no indication of a shift in control, such a conflict may well have been part of the basis for shareholder complaints of excessive
the investor demand for distributions, because such investors will not seek tax deferral. Indeed, under current tax laws certain foundations must liquidate a portion of their portfolio (and thus "homemade" their own dividends), if income and disbursements fail to attain specified minimum levels. Evidence of private foundation demand for dividends would provide further support for the hypothesis that home-made dividends carry higher transaction costs than corporate dividends. Trustees, faced with fiduciary responsibilities to life-income beneficiaries as well as residual claimants on principal, may prefer a policy that pays out all true earnings, and maintains a constant purchasing power for invested capital. Under such a policy all real growth of the firm is financed with new infusions of capital, rather than from reinvestment.

ii. Selective Changes in Rates of Distribution

Drastic reductions in firm distributions are a classic method of effecting a "squeeze-out" of minority interests. These reductions are often selective and non-pro rata, especially in closely held firms, where part of the distribution mix is frequently in the form of employment compensation. Thus a dominant partner or shareholder may retain his or her own position as a salaried agent of the firm, terminate the employment of co-investors, and thereby reduce or eliminate those distributions that were actually based on relative investments in the firm. If investors

dividends in Sinclair Oil Corp. v. Leven, 280 A.2d 717 (Del. 1971). The dominant (97%) shareholder, Sinclair, caused Sinclair Venezuelan Oil Company to pay out more than its current earnings over a six year period, when Sinclair apparently needed cash for use elsewhere. Presumably Sinclair was able to consolidate tax returns with its subsidiary, and eliminate all tax considerations for such intracorporate dividend decisions. The court noted that it would only interfere with the judgment of the board of directors if the dividend payments involved a conflict of interest, in the form of self-dealing between parent and subsidiary. Because all shareholders were treated pro rata, the court found no self-dealing.

100. "Private foundations" (defined in I.R.C. § 509) are subject to a tax of 15% on undistributed income under Section 4942(a). To avoid incentives to invest in non-income producing assets, the Code sets a minimum assumed income at 5% of the net market value of a foundation's non-charitable assets. § 4942(e).

101. See note 77, supra.

102. F. O'NEAL & R. THOMPSON, OPPRESSION, supra note 59, at § 3.04. This is true despite the fact that dividends must be paid pro rata on all shares. 11 FLETCHER, CYCLOPEDIA OF CORPORATIONS § 5352 (1958 Rev. Vol.).

103. F. O'NEAL & R. THOMPSON, OPPRESSION, supra note 59, at § 3.06. See also Trpkus v. Edstrom's, Inc., 489 N.E.2d 340 (Ill. App. 1986) (majority shareholder caused firm to breach employment agreement with minority shareholder that was means of effecting 50:50 distribution of profits).

104. Although rational investors will require both a market rate of compensation for their serv-
perceive that they will not receive distributions for many years, they will reassess the value of their investments to reflect the expected reductions in cash flows. There have been charges of such tactics in publicly held firms, although this story is usually told by co-owners of closely held enterprises.105 In closely held firms we can expect to see many of the responses previously mentioned to curb majority power: stock transfer restrictions, supermajority voting by directors, cumulative voting and employment contracts that provide assurance that the salary portion of distributions will continue.106 In some cases regular distributions to

ices and for their investment, they will be indifferent about how it is paid under these circumstances. See, e.g., Wilkes v. Springside Nursing Home, Inc., 370 Mass. 842, 353 N.E.2d 657 (Mass. 1976) (All four shareholders agreed to share equally in the work and profits, and each drew an equal weekly salary; no dividends were paid on any shares). When part of the salary represents a return on invested capital, it is vulnerable to non-pro rata reductions. In Wilkes one of four investors was not relected to the board of directors, and was not reappointed by the new board as an officer, thus eliminating his salary. See also Potter v. Brown, 328 Pa. 554, 195 A. 501 (1938), where a dominant partner, who disagreed with his co-partners about admission of a new partner, reduced the salaries of the dissenting partners by 50%. In imposing special fiduciary duties on dominant shareholders in close corporations, the Massachusetts Supreme Court noted the opportunities for oppression of minority interests:

The minority is vulnerable to a variety of oppressive devices, termed 'freeze-outs,' which the majority may employ. . . . An authoritative study of such 'freeze-outs' enumerates some of the possibilities: "The squeezers . . . may refuse to declare dividends; they may drain off the corporation's earnings in the form of exorbitant salaries and bonuses to the majority shareholder-officers and perhaps to their relatives, or in the form of high rent by the corporation for property leased from majority shareholders . . .; they may deprive minority shareholders of corporate offices and of employment by the company. . . ."


See generally, F. O'NEAL & R. THOMPSON, OPPRESSION, supra note 59; Note, Freezing Out Minority Shareholders, 74 HARV. L. REV. 1630 (1961). For cases raising complaints of the use of most of these oppressive tactics, see White v. Perkins, 213 Va. 129, 189 S.E.2d 315 (1972) and Cole Real Estate Corp. v. Peoples Bank & Trust Co., 160 Ind. App. 88, 310 N.E.2d 275 (1974) (dominant shareholder paid herself a salary and expense allowance that exhausted corporate profits). Indeed, where salaries are deductible by a corporation and dividends are not, owners will prefer salary payments to dividends.

105. This was essentially the charge in Schlick v. Penn-Dixie Cement Corp., 507 F.2d 374 (2d Cir. 1974) and in Greenstein v. Paul, 400 F.2d 580 (2d Cir. 1968). In Southdown, Inc. v. McGinnis, 89 Nev. 184, 510 P.2d 636, 640 (Nev. 1973), the controlling shareholder pointed to its discontinuation of dividends by the controlled firm as evidence that the subsidiary's shares had declined in value. The court disagreed, noting that ability to pay was more important than actual payment. The court was correct. Absent a negative signal, of either a squeeze-out or an adverse change in the firm's expectations about future profits, a one-time change in dividend rates should not adversely affect stock prices. Black & Scholes, supra note 79. See also Berkowitz v. Power/Mate Corp., 135 N.J. Super. 35, 342 A.2d 566 (Ch. Div. 1975), which involved a one-step "going private" transaction, where there were similar charges of manipulation through high executive salaries that reduced firm profits. Such changes, that negatively affect shareholder wealth, could be expected to reduce stock prices.

106. See generally W. PAINTER, CORPORATE AND TAX ASPECTS OF CLOSELY HELD CORPORATIONS.
common stockholders may be assured by issuing either debt or preferred stock to these investors in the same proportion as their stock holdings.107

iii. **Purchases of Assets**

Dominant shareholders may also sell assets to the firm at inflated prices, thus effecting disproportionate future distributions. This practice is more common at the promotional stage in enterprises that anticipate seeking public funds in the future. It may continue even after co-investors have been brought in, however, if a dominant investor retains control after going public.108 The fact that assets sold to the firm under such circumstances frequently are difficult to value creates monitoring difficulties for co-investors. Patents, copyrighted materials and trade secrets are examples of intangible property, the value of which is uncertain until it is tested in the market. Mining claims have been a favorite of many promoters, because valuation difficulties persist until the properties have been fully exploited by the firm, which may take years.109 Because firms expect to acquire assets in the future, it is costly to prohibit all such future acquisitions by contract, even from dominant shareholders, and few such contracts are observed.

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107. Cf. I O'Neal, supra note 26, § 2.13, at 78 (2d ed. 1971) (preferred stock). Oddly, the author does not discuss the use of debt for the same purpose. But see W. Painter, supra note 106, at Sec. 2.6 (use of debt to reflect unequal contributions but desire for equal control). A major problem for attorneys planning a complex capital structure for close corporations corroborates the hypothesis that it is used to assure equity investors a steady cash flow and security against opportunism. The Internal Revenue Service may attempt to treat debt as if it were in fact equity, with the consequent disallowance of corporate interest deductions, and treatment of the payments as dividends. Cf. I Hood, Kurtz & Shors, Closely Held Corporations in Business and Estate Planning ch. 5 (1982).

108. See, e.g., Old Dominion Copper Min. & Smelting Co. v. Lewisohn, 210 U.S. 206 (1908); Old Dominion Copper Min. & Smelting Co. v. Bigelow, 203 Mass. 159, 89 N.E. 193 (1909) (promoters contributed assets with basis of $1 million and received stock worth $3.25 million, on basis of offering price to public); San Juan Uranium Corp. v. Wolfe, 241 F.2d 121 (10th Cir. 1957) (promoters had no cost basis in mining leases sold to corporation).

109. See cases cited supra note 108. A maxim of the industry, imparted to the writer by a former client, is that in the mining business, "you are either one foot away from a million dollars or a million feet away from a dollar."
iv. Share Repurchases as Selective Distributions

Dividend distributions must be pro rata to all shareholders of the same class, but no such rules restrict share repurchases. In general a corporation has the power to repurchase its own shares at any time, and in as selective a manner as it may choose. If no market exists for the shares, the corporation may decline to repurchase from one who wishes to withdraw from the enterprise while at the same time repurchasing from another. Repurchases may be at prices that represent a disproportionate distribution of firm assets to one investor.

Contracting has an obvious role where opportunistic behavior is concerned. Bondholders can only diversify against the stockholder-bond-

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110. 11 FLETCHER, supra note 94, § 5352 (1958 Rev. Vol.). The rule of equal treatment can be altered if all shareholders agree to a change. Id. at 1106. This is also the rule in partnership law, which provides for equal sharing in profits and losses in the absence of contractual arrangements to the contrary. UNIF. PARTNERSHIP ACT § 18(a) (1914). Rules of equal treatment can be seen as efficient "off the rack" standard form contract provisions, designed to reduce transaction costs by providing a standard form rule that will satisfy most contracting parties without further modification.

111. There is no statutory requirement of pro rata repurchases, nor a general fiduciary rule to this effect. Brudney, Equal Treatment of Shareholders in Corporate Distributions and Reorganizations, 71 CALIF. L. REV. 1072, 1108 (1983) [hereinafter Equal Treatment]. Brudney points out that fiduciary duties do impose some limits on repurchases in order to preclude a use of corporate assets which favors insiders. Id. at 1108, n.111. Some courts have nevertheless given management wide latitude in repurchases. See, e.g., Uncocal Corp. v. Mesa Petroleum Co., 493 A.2d 946 (Del. 1985) (issuer tender offer for its own shares that excluded a bidder for control approved); Kaplan v. Goldsamt, 380 A.2d 556 (Del. Ch. 1977) (repurchase from dissident major shareholder); Cheff v. Mathes, 124 Del. Ch. 320, 199 A.2d 548 (Del. 1964) (repurchase directly from large shareholder at premium over the market); and Kors v. Carey, 18 Del. Ch. 242, 158 A.2d 136 (Del. Ch. 1960) (repurchase in market from major shareholder at premium).

112. Cf., Lewis v. H. P. Hood & Sons, Inc., 331 Mass. 670, 121 N.E.2d 850 (1954) (sustaining the selective redemption of common stock from the plaintiff at book value, on plaintiff's retirement). The Lewis court stated:

A shareholder is free to purchase or not as he pleases. He buys with an eye to investment and profit. But if he acquires stock on terms whereby his investment may be temporary and his profits short-lived he has asserted in advance to such terms and we see no reason why he may not do so. He gets what he bargained for and if the call provision is exercised he is in no position to complain.

121 N.E.2d at 853.

But see, Greene v. E.H. Rollins & Sons, 22 Del. Ch. 394, 2 A.2d 249 (Del. 1938) (invalidating call provisions for shares because they would allow expulsion of disfavored investors). Recently such selective repurchases have come under closer judicial scrutiny. See, e.g., Donahue v. Rodd Electrotype Co., 367 Mass. 578, 328 N.E.2d 505 (1975) (requiring close corporations to offer an equal opportunity to all shareholders to resell) and Comolli v. Comolli, 241 Ga. 471, 246 S.E.2d 278 (1978) (same).

113. See Brudney, Equal Treatment supra note 111, at 1108.
holder conflict at some positive cost.\textsuperscript{114} The role of contract in this area is well documented.\textsuperscript{115} Further, even if diversification could provide a complete and costless solution, investors have incentives to improve the odds, and be on the winning side (as investors in dominant stockholders) more often than on the losing side (as minority investors in firms with dominant stockholders).\textsuperscript{116}

Shareholders in closely held firms may protect themselves from repurchases by decision rules which require shareholder approval and supermajority voting, giving minority interests a veto power. Recently, in the context of selective repurchases from raiders, some firms have amended corporate charters to protect investors against the cost of such repurchases.\textsuperscript{117} This appears to be a response, not to a dominant shareholder problem, but to an agency cost problem, brought about by the apparent desire of some managers to fend off all bidders for control, even at the expense of all investors but one in the firm.\textsuperscript{118}

v. Claim Issuances as Selective Distributions

Smith and Warner have identified claim dilution as a major aspect of the stockholder-bondholder conflict.\textsuperscript{119} Claim dilution extends to the dominant-minority shareholder conflict as well. Dilution occurs when the firm issues new investment units at a price below what existing investors would have paid if offered the opportunity.\textsuperscript{120} That dilution may

\begin{itemize}
  \item \textsuperscript{114} See text supra at notes 53-56.
  \item \textsuperscript{115} But see McDaniel, Bondholders and Corporate Governance, 41 BUS. LAW 413 (1986) (concluding that existing bondholders have suffered substantial losses due to dramatic increases in corporate debt in recent years).
  \item \textsuperscript{116} This is subject to other costs incurred by entering into such contracts. If, for example, these contracts deter transfers of control, investors incur the cost represented by a loss in discipline for incumbent management from threatened takeovers. See note 57, infra.
  \item \textsuperscript{117} See, e.g., Proxy Statement of Mobil Corporation (Feb. 22, 1985), reprinted in 2 D. BLOCK & H. PITT, eds., HOSTILE BATTLES FOR CORPORATE CONTROL 1985, 495, 514-15, 533-34.
  \item \textsuperscript{118} But see Macey & McChesney, A Theoretical Analysis of Corporate Greenmail, 95 YALE L.J. 13 (1985) (offering a shareholder welfare explanation of some greenmail transactions).
  \item \textsuperscript{119} Smith & Warner, supra note 12, at 118.
  \item \textsuperscript{120} An extreme example appears in Katzowitz v. Sidler, 24 N.Y.2d 512, 301 N.Y.S.2d 470, 249 N.E.2d 359 (1969), where two of the directors voted to issue new shares at 1/8 of their book value, with the two controlling shareholders purchasing their full complement while the third shareholder refused to do so. This new issue was followed shortly by dissolution, and the distribution of much larger sums to the two controlling shareholders. The court noted that when new shares are issued at prices far below fair value in a close corporation, "existing stockholders who do not want to invest or do not have the capacity to invest additional funds, can have their equity interest in the corporations diluted to the vanishing point. . . ." See also Bennett v. Breuil Petroleum Corp., 34 Del. Ch. 6, 199 A.2d 236 (1953) (allegations that majority offered shares at $40 that were worth between $2.50 and
\end{itemize}
take the form of a sale of shares other than on a pro rata basis to existing investors or in a public offering. This usually either causes a reduction in the per share earnings, or prevents an increase in per share earnings from a new project which is expected to be a positive net present value project. 121 This produces an increase in the expected yield for favored investors, at the expense of the disfavored group.

Because managers generally have no incentives to shift wealth from old to new investors in the firm, bargain purchases of shares are a problem only if there is a dominant investor. Even if an offering is formally pro rata, the result may benefit the dominant shareholder if minority investors are unable to finance their purchases or market their right to purchase in a brief time. In closely held firms with a dominant investor that has exhibited a willingness to press its advantage, outsiders are unlikely to pay a significant amount for such rights. 122 The value of new

$3.00). Claims by minority shareholders that directors have breached their fiduciary duty under these circumstances are often complicated by difficulties in proving the value of closely held shares. See, e.g., Steven v. Hale-Haas Corp., 249 Wis. 205, 23 N.W.2d 620 (1946) (challenged sale at $10 per share; evidence showed prior sales at $7, $10 and $12.50 per share, and expert testimony that were currently worth $15).

121. Where the expected rate of return on newly invested funds is higher because the new project is riskier, the non-participating investor may suffer no decline in per share earnings, while suffering a loss in value because he is not compensated for the increased risk. Where the expected rate of return on the new project is higher with no corresponding increase in risk, the non-participating investor has been denied the opportunity to participate on a pro rata basis in the economic rents available to the firm. This rationale appears to underlie the initial decision establishing preemptive rights. Gray v. Portland Bank, 3 Mass. 364, 3 Am. Dec. 156 (1807).

122. New issues in closely held firms can be offered pro rata at a time when a minority shareholder cannot finance an acquisition of more shares. See, e.g., Browning v. C & C Plywood Corp., 248 Ore. 574, 434 P.2d 339 (1967) (minority shareholder who received 32% interest required to purchase new stock for $151,000 to maintain relative position in firm); Gord v. Iowan Farms Milk Co., 245 Iowa 1, 60 N.W.2d 820 (1953) (directors breached their duty by failing to disclose the diluting effect of a decision not to exercise preemptive rights); Gaines v. Long Mfg. Co., 234 N.C. 340, 67 S.E.2d 350 (1951) (plaintiff complained that he lacked funds to exercise preemptive rights, and that result of his failure to buy his pro rata share of the offering would be to dilute his equity from $59,000 to $790); and Hyman v. Velsicol Corp., 342 Ill. App. 489, 97 N.E.2d 122 (1951) (plaintiff complained that after a dispute and his resignation, firm issued shares at a time when other shareholders knew he lacked funds).

The same fate can befall even a dominant shareholder in a publicly held firm who has lost control over the board, due to a falling out. Tallant v. Executive Equities, Inc., 232 Ga. 807, 209 S.E.2d 159 (1974). Courts have sometimes rejected minority complaints on the ground that these owners could resell any rights that they could not personally exercise. See, e.g., Jones v. Concord & M.R.R., 67 N.H. 119, 30 A. 614 (1892) and Greebaum v. American Metal Climax, Inc., 27 A.D. 2d 225, 278 N.Y.S.2d 123 (1967). This rationale ignores the difficulties in seeking investors for minority interests in closely held firms. It also ignores the barriers to such sales imposed by the prohibition of unregistered public offerings in both federal and state securities laws. The refusal to pay dividends may
minority interests under these conditions is clearly subject to a minority
discount.

In other cases the dominant owner may be in a position to mask the
terms of the transaction, and make it difficult for co-owners to monitor
and to determine whether they have been the victims of a wealth transfer.
Assets exchanges that are difficult to value can also effect a bargain
purchase of shares.123 Mergers of enterprises owned by the dominant
owner may create similar opportunities, with the difficulties, in terms of
information asymmetries, scale economies and free-rider problems, that
accompany monitoring and challenges by individual investors.124

vi. Business Opportunities

Business opportunities are defined here as investment opportunities for
the firm, that promise higher yields in relation to risk than firm investors
can currently obtain elsewhere. Thus allocation of business opportunities
also allocates future cash flows to investors. To the extent that both risk
and return are implicated in such choices, they demonstrate the artificial
nature of the construction of this paper, which attempts to separate risk
and return for purely expository purposes. But regardless of how busi-
ness opportunity questions are categorized, they create the most difficult
problems for contractual protection. Implicit in the contract creating the
firm is an agreement that agents will be loyal to the firm. This agreement

allow a dominant shareholder to dilute minority interests by offering new shares pro rata, which the
minority may be disinclined to purchase because of the expectation that no dividends will be paid.
See, e.g., Tashman v. Tashman, 13 Misc. 2d 982, 174 N.Y.S.2d 482 (1958) (plaintiff did not wish to
participate in offer of new shares of $100 when book value was $600 because of his inability to secure
dividends).

123. See, e.g., note 108 supra.

124. One of the difficulties with appraisal statutes is that they value the firm in the hands of the
current management team, and provide no share of the gains from a transfer of control for target
shareholders, because of their requirement that the firm's value be measured "excluding any appreci-
ation or depreciation in anticipation of the corporate action..." REV. MODEL BUS. CORP. ACT
§ 13.01(3) (1984); see also DEL. CODE, tit. 8, § 262(b) ("exclusive of any element of value arising
from the expectation or accomplishment of the merger or consolidation." This approach was criti-
cized in Brudney & Chirelstein, Fair Shares in Corporate Mergers and Takeovers, 88 Harv. L. Rev.
297 (1974). Statutory appraisal methods have been inconsistent with modern financial techniques.
See, e.g., Weinberger v. UOP, Inc., 457 A.2d 701 (Del. 1983). Criticisms of the "Delaware Block"
method of appraisal appear in Schaefer, The Fallacy of Weighting Asset Value and Earnings Value in
The Appraisal of Corporate Stock, 55 S. CAL. L. REV. 1031 (1982); Fischel, The Appraisal Remedy in
Corporate Law, 1983 AM. B. FOUND RES. J. 985; and Comment, Valuation in the Context of Share
is enforced by fiduciary duties governing business opportunities.\textsuperscript{125} If, however, new capital must be raised to capture an opportunity, a dominant investor may decline to invest through the firm in order to do so personally. He may also prevent others from funding the firm's investment, at least where investor consent is required to raise new capital.\textsuperscript{126} Under these conditions firm agents, even if loyal to the firm itself rather than to a dominant investor, are precluded from expanding the firm's activities.\textsuperscript{127} A dominant investor will possess transaction-cost and scale advantages when bidding for new opportunities similar to those possessed when bidding for firm assets.\textsuperscript{128}

Contractual protections against such behavior are not costless. The transaction costs of writing a fully contingent contract covering future business opportunities are high, and such a contract would increase firm costs by restricting future choices. Accordingly, investors may prefer a distribution of new investment units that avoids the development of a dominant position, to the extent that this is less costly than other choices.\textsuperscript{129} Preemptive rights, a principal form of protection against de-

\textsuperscript{125} See generally Brudney & Clark, A New Look at Corporate Opportunities, 94 Harv. L. Rev. 997 (1981).

\textsuperscript{126} Thus, where a charter amendment is required to authorize new shares, a dominant investor can render the firm incapable of raising equity capital to finance the purchase. Cf., Hannerty v. Standard Theatre Co., 109 Mo. 297, 19 S.W. 82 (1891) (no breach of duty for dominant stockholder to acquire business opportunity where firm was unable to raise funds). Deadlock in a 50-50 firm can also frustrate a firm's ability to exploit business opportunities. Application of Vogel, 25 A.D. 2d 212, 268 N.Y.S.2d 237, aff'd, 19 N.Y.2d 589, 278 N.Y.S.2d 236, 224 N.E.2d 738 (1965) (option to purchase leased property); Summers v. Dooley, 94 Ida. 87, 481 P.2d 318 (1971) (one partner may not hire employee to expand business over objections of the other).

\textsuperscript{127} But see Brudney & Clark, supra note 125, at 1055-1060 (suggesting a presumed subsidiary entitlement in parent-subsidiary situations).

\textsuperscript{128} See infra text accompanying note 136.

\textsuperscript{129} Consent restraints are a common device in closely held firms. Dominance in publicly held firms may be avoided by imposing ceilings on the voting power of any one shareholder. Some publicly held firms have recently amended their charters to achieve this result. Height Finance Corp. has provided that for each share in excess of 10% of the firm's outstanding shares owned by a single shareholder, voting power is reduced from one vote per share to one-tenth of a vote per share. Banner & Finley, Shark Repellent Charter and By-Law Provisions in PLI, 15TH ANN. INST. SEC. REG. 629, 667-678 (1983); Winter, Stumpf & Hawkins, supra note 48, 346-47. MCI Communications Corp. permits only one-hundredth of a vote per share in excess of 10%. Id. at 319-20. Such ceilings do not appear to encounter resistance from the courts under corporation statutes. Providence & Worcester Co. v. Baker, 378 A.2d 121 (Del. 1977). The obvious objection to such rules is that they exacerbate the problem of shareholder apathy and thus increase agency costs. Cf., Manne, Some Theoretical Aspects of Share Voting, 64 Colum. L. Rev. 1427 (1964) and Easterbrook & Fischel, Voting in Corporate Law, 26 J. Law and Econ. 395 (1983). But see, Ratner, Government of Business Corporations: Critical Reflections on the Rule of One Share, One Vote, 56 Cornell L. Rev. 1 (1970). Ratner's analysis is flawed by its failure to account for the free rider problems
velopment of dominant investors, appear to have value in both publicly and closely held firms. In view of the general fungibility of investment securities in efficient capital markets, this value poses something of a puzzle.\textsuperscript{130}

2. Liquidating Distributions

a. General Conflicts

Liquidation is one end of a spectrum between complete reinvestment of all firm cash flows and complete disinvestment, through a return of capital. The sale of a firm to a third party also represents a liquidation decision for the present owners of the firm. Even where the distribution is pro rata, it raises in extreme form all of the conflicts raised by other distribution decisions. The conflicts are exacerbated by the magnitude of the distribution, and by the fact that liquidation is an irrevocable choice. The difference between liquidation and other distribution decisions, however, is mainly one of degree rather than of kind. There are a few exceptions, however.

Liquidation may be a means of defeating the contract expectancies of one class of security holders, such as the value of options to purchase shares in the firm, when an increase in the value of the firm seems imminent.\textsuperscript{131} Holders of some classes of claims obtain their protection in the


\textsuperscript{131} Cf., Harvard Indus., Inc. v. Wendel, 178 A.2d 486 (Del. Ch. 1962) (dissolution defeated seller's right to contingent securities). Fundamental corporate changes, either in the form of dissolution or merger, may defeat the conversion rights of the holders of debt securities as well. \textit{See}, e.g., Parkinson v. West End St. Ry. Co., 173 Mass. 446, 53 N.E. 891 (1899), where conversion rights of bondholders were destroyed by a consolidation. In the words of Justice Holmes:

\ldots The bondholder does not become a stockholder, by his contract, in equity any more than at law. [Citation omitted.] So, if the corporation which made the bond finds it for its interest to go out of existence at or before the maturity of the obligation, the option given to the bondholder will not stand in the way. The option gives him merely a \textit{spec}, not an undertaking that the corporation will continue for the purpose of making it good.

173 Mass. at 448, 53 N.E. at 892. \textit{See also}, Broad v. Rockwell Int'l Corp., 642 F.2d 929 (5th Cir.)
form of compensation for their loss of expectancies, as in call premiums. In some cases, such as where capital investments may be impaired for a class of preferred shares, voting rights may be accorded the class, either by statute or contract. Voting rights, either as a class on liquidation or to elect a majority of the board of directors in delinquency situations, give the class a veto power over liquidations.

b. **The Complications of a Dominant Investor**

i. **Scale Economies and Agency Costs**

Most of the conflicts over liquidation decisions involve dominant investors. Liquidation may allow a large investor to capture the expected value of a one-time increase in the value of the firm. In some cases, the dominant investor may seek to purchase the firm's assets at liquidation and use them to capture valuable business opportunities. Reduced transaction costs in financing or the rapid timing required to

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132. Smith & Warner, supra note 12, at 142, describe the function of call provisions for debt. Similar provisions for redemption or liquidation premiums may protect the holders of preferred shares. See BRUDNEY & CHIRELSTEIN, CASES AND MATERIALS ON CORPORATE FINANCE, 239 (3d ed. 1987).

133. See, e.g., REV. MODEL BUSINESS CORP. ACT § 10.04 (1984) (providing for class voting rights for classes of shares normally without voting rights when charter amendments with specified effects on the class are proposed).


135. See, e.g., Page v. Page, 55 Cal. 2d 192, 10 Cal. Rptr. 643, 359 P.2d 41 (1961), involving the dissolution of a partnership at will that had lost money for years, until the recent establishment of an Air Force base nearby. Justice Traynor held that the statutory right of partners at will to dissolve at any time must be exercised in good faith, and partners cannot act opportunistically with respect to each other. The opinion stated that:

[If . . . it is proved that plaintiff acted in bad faith and violated his fiduciary duties by attempting to appropriate to his own use the new prosperity of the partnership without adequate compensation to his co-partner, the dissolution would be wrongful and the plaintiff would be liable . . . for violation of the implied agreement not to exclude defendant wrongfully from the partnership business opportunity.

359 P.2d at 45.

In other cases the California courts have held that the partnership was impliedly for the term necessary for investors to be repaid. Vangel v. Vangel, 116 Cal. App. 2d 615, 254 P.2d 919 (1953); Owen v. Cohen, 19 Cal. 2d 147, 119 P.2d 713 (1941); and Mervyn Inv. Co. v. Biber, 184 Cal. 637, 194 P. 1007 (1921). Courts generally hold that despite fiduciary duties, the right of partners in a partnership at will to dissolve is absolute, and that dissolving partners have a right to bid on the assets at their own sale. See, e.g., Prestiss v. Sheffel, 20 Ariz. App. 411, 513 P.2d 949 (1973).
seize the opportunity may provide dominant investors with advantages in bidding for these assets.\textsuperscript{136} The time of sale may be critical. Where several co-owners wish to bid for the assets, choice of a particular time for sale may maximize costs for some competing investors while minimizing them for others.\textsuperscript{137} The largest co-owner possesses a scale advantage. He needs fewer funds to buy out all remaining co-owners than do competing bidders.\textsuperscript{138} The transaction costs of assembling a new coalition of investors to finance the buyout may be prohibitive for dispersed minority interests when time is of the essence. Free-rider problems may also limit the response of these investors, because those taking the initiative in seeking financing have no assurance that their expenses will be shared unless they are successful.

Agency costs are also a factor here. Investors who currently control management already have agents to seek financing and to manage the firm; others must secure them. If the dominant investor has also been the manager of the firm and thus he possesses relatively scarce firm-specific skills, co-investors may be forced to expend considerable resources in locating suitable substitutes.\textsuperscript{139} In other cases, dominant investors who have participated actively in the control of the firm may possess valuable human capital developed at firm expense, which they can now capture through liquidation or, more recently, through a leveraged buyout.\textsuperscript{140}

\begin{footnotesize}
\textsuperscript{136} See, e.g., Lebold v. Inland Steel Co., 125 F.2d 369 (7th Cir. 1941), where the parent steel company caused the dissolution of a shipping company and the sale of its ships. The parent, which owned 80\% of the stock purchased the ships for $1,120,000. Id. at 372. No other bidders appeared at the sale.

\textsuperscript{137} This is particularly true in close corporations, where co-owners are likely to know the personal financial situations of one another. The law of large numbers also makes it less likely in publicly held firms, but in such firms a dominant shareholder may possess other advantages, such as possession of a management team and scale economies in financing the purchase.

\textsuperscript{138} This may have been the complaint of the minority partner in Page v. Page, 55 Cal. 2d 192, 10 Cal. Rptr. 643, 359 P.2d 41 (1961), where, in addition to an equal capital account, the plaintiff’s wholly owned corporation held a $47,000 demand note of the partnership. The court noted that “[t]he fact that plaintiff’s wholly-owned corporation holds a $47,000 demand note of the partnership may make it difficult to sell the business as a going concern.” 359 P.2d at 444. See also Lebold, 125 F.2d 369.

\textsuperscript{139} This theme also appears in Page, supra, where the court noted, “[d]efendant fears that upon dissolution he will receive very little and that plaintiff, who is the managing partner and knows how to conduct the operations of the partnership, will receive a business that has become very profitable. . . .” Page 359 P.2d 41, 44. See also In re Radom & Neidorff, Inc., 307 N.Y. 1, 119 N.E.2d 563 (1954) (music publishing business where one shareholder died and the survivor offered to buy out the widow’s half interest for one year’s earnings, threatening to quit and start a competing business if she refused).

\textsuperscript{140} I suspect that is part of the explanation for the conflict in In re Radom & Neidorff, Inc.,
\end{footnotesize}
Problems of opportunistic dissolution of partnerships are frequently minimized by specifying a fixed term for the life of the firm sufficient to allow all participants to realize any benefits expected from the long-run success of the enterprise. Complex capital structures that give non-controlling investors priority claims on assets in the early years of a firm's life, coupled with options or warrants on residual claims triggered by outcomes at the upper tail of expected outcomes can provide similar protection for corporate investors. Supermajority voting rules can also limit the majority's power to dissolve the firm. Under some circumstances, mutual buy-out provisions can have the same effect, assuming minority investors can readily finance a purchase and provide the necessary human capital to continue the business.

A dominant investor who owns property that uniquely complements that of the enterprise may be in a position to capture a disproportionate share of the joint proceeds through a strategy of holding out for a high price for the individually held assets. These situations may arise in circumstances that do not involve the constraints of the business opportunity doctrine on agents. Contracting is unlikely to be an efficient method of limiting the bargaining power of such investors, because of the high costs of writing fully contingent contracts.

ii. Takeout Mergers and Self-Dealing

While the foregoing discussion of dominant investors illustrates the

supra, where a 50% shareholder wished to dissolve a business with machinery and supplies worth only $9500, but which averaged profits of over $70,000 per year. The owner wishing to dissolve was the surviving founder, who offered approximately one year's earnings to the decedent's widow, and threatened to start a competing business if she refused to sell, or if she purchased at a dissolution sale. See also Patient Care Services, S.C. v. Segal, 32 Ill. App. 3d 1021, 337 N.E.2d 471 (1975), where the service partner in a professional corporation threatened to dissolve the firm and deal directly with its sole customer unless the absent partner agreed to sell his interest. Supermajority voting rules can also limit the majority's power to dissolve the firm.

141. Unif. Partnership Act § 31(1) specifies as a cause of dissolution "the termination of the definite term or particular undertaking specified in the agreement." See generally 2 CAVITCH, BUSINESS ORGANIZATIONS WITH TAX PLANNING § 30.02. If a partner attempts to dissolve in breach of the agreement to continue the partnership for a term, those partners who have not wrongfully dissolved are permitted to continue the business and to retain the wrongfully dissolving partner's capital if they provide proper security. Unif. Partnership Act, § 38(2)(a).

142. See generally, VENTURE CAPITAL AND PUBLIC OFFERING NEGOTIATION, 253-55 (Hallowan et al., eds. 1982) and 2 HAFT, VENTURE CAPITAL AND SMALL BUSINESS FINANCING §§ 1.01-1.02 (1985).


145. Ribstein, supra note 95, observes that some courts resist enforcing contract provisions that vary from the standard form provided by the Unif. Partnership Act.
difficulties present, even when distributions are formally pro rata, the problem is exacerbated when these formalities are not observed. Under these conditions liquidation may become a means for distributing valuable firm assets to dominant investors to effect a bargain purchase, and thus a disproportionate distribution. Asset sales may in some cases be private sales, where no competition is permitted. A corporate merger between a dominant stockholder and a subsidiary is in effect a private sale. Squeeze-outs in closely held firms have long been the focus of an extensive literature. The advent of two-tier bids for corporate control has dramatized the potential for conflicts between dominant and minority stockholders in publicly held firms. The development of the market for corporate control has led to greater utilization of fundamental corporate changes such as mergers and recapitalizations both by existing dominant shareholders, in leveraged buyouts, and by successful bidders, in two-tier acquisitions. The squeeze-out that once seemed to be a unique problem of the closely held firm has thus been introduced into public securities markets. These transactions have generated considerable commentary concerning the treatment received by minority stockholders.


148. F. O'Neal & R. Thompson, Oppression, supra note 59; Matteson v. Ziebarth, 40 Wash. 2d 286, 242 P.2d 1025 (1952) appears to be the earliest case of a takeover merger with a subsidiary created by a dominant shareholder expressly for that purpose. This has become the dominant method in modern squeeze-out transactions. See generally, Carney, Business Purposes, supra note 59.

Although such transactions are subject to legal constraints on self-dealing, enforcement is not costless. In some cases, the value of the assets sold may be extremely difficult to determine. Thus, some co-owners, facing the free rider problems of litigation, will be deterred from vigorous monitoring.\textsuperscript{150} In other cases, even if the inadequacy of price is detected, problems of proof in the courts may deter litigation. Courts are generally concerned more with historical financial data than with opportunity cost and expected returns, which they often characterize as "speculative."\textsuperscript{151}

Appraisal, the usual remedy of shareholders dissenting from a merger or sale of substantially all of the assets of the firm, is infrequently used. The frequent attempts by plaintiffs at circumvention of the general rule of the

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\textsuperscript{151} This indicates that the expected marginal gains from valuation are smaller than the marginal costs. The problem is exacerbated by free rider and scale problems, and by problems of bounded rationality. The potential gains from valuation by shareholders are unknown in advance, because the assets are likely to be unique, and the valuation a one-time activity for the shareholder. Attorneys' fees are awarded only to successful plaintiffs. Stigler points out the problems of determining the efficient amount of search by buyers when dealing with unique assets or entering new markets in Stigler, The Economics of Information, 59 J. POL. ECON. 213, 216, 219 (1961).

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The "Delaware Block" method is criticized at length in Schaefer, Fischel, supra note 124, at 890-93 and Comment, supra note 124.
exclusivity of the appraisal remedy, provide evidence of the high costs and low expected payoffs from the remedy.\textsuperscript{152}

iii. Contractual Responses

Given the difficulty of contractually specifying the expected future value of the firm, it is not surprising that common shareholders rely to a large extent on voting rules rather than other contract arrangements to gain protection from the effects of dominance. Generally voting power governing events such as liquidation is partially retained by the shareholders rather than entirely delegated to agents, such as the board of directors, who will be responsive to a dominant investor.\textsuperscript{153} Only in the past decade have large numbers of publicly held firms developed similar contract responses to the takeout problem.\textsuperscript{154} These responses, denominated "shark repellents", generally provide a combination of supermajority voting rules and "fair price" formulae that excuse such requirements if specified conditions are met.\textsuperscript{155} These responses demonstrate the identity of dominant shareholder problems in close and publicly held firms, and the role of contract rather than diversification in reducing the expected costs of dominance.

Supermajority voting rules have commonly been employed in closely held firms to restrain majority power. Similarly, participants in closely held firms have used exit rights, such as "forced bid" provisions, that are not dissimilar to redemption or forced bid rights in publicly held firms.\textsuperscript{156}

\textsuperscript{152} Criticisms of the remedy appear in Vorenberg, Exclusiveness of the Dissenting Stockholder's Appraisal Right, 77 HARV. L. REV. 1189 (1964) and Brudney & Chirelstein, Fair Shares, supra note 149. Attempts to litigate the "fairness" of price in such transactions began in Delaware with Sterling v. Mayflower Hotel Corp., 33 Del. Ch. 293, 93 A.2d 107 (Del. 1952) and ended with Weinberger v. UOP, Inc., 457 A.2d 701 (Del. 1983). The latter opinion conceded the inadequacy of the valuation techniques used in appraisal cases.

\textsuperscript{153} Originally liquidation was seen as a fundamental change in the nature of the contract among the shareholders, requiring unanimous consent of all parties to the contract. Carney, Business Purposes, supra note 59, at 77-82. Although this rule has been abrogated both judicially and by statute, it remains the case that a sale of substantially all of the assets of a firm outside the ordinary course of business usually requires a shareholder vote, which in many cases has been raised above a bare majority by the charter. See, e.g., REV. MODEL BUSINESS CORP. ACT § 12.02 (1984). See also Easterbrook & Fischel, Voting in Corporate Law, supra note 129, at 415-417.

\textsuperscript{154} See generally Carney, Shark Repellents, supra note 9; Carney, Two-Tier Tender Offers supra note 9; and Gilson, The Case Against Shark Repellent Amendments: Structural Limitations on the Enabling Concept, 34 STAN. L. REV. 775 (1982) [hereinafter "Shark Repellents Amendments"].

\textsuperscript{155} See Carney, Shark Repellents, supra note 9.

\textsuperscript{156} Exit rights in closely held firms may include dissolution of partnerships, see note 26 supra, or the right of disdissident investors to be bought out. See generally 2 O'NEAL, supra note 26, Ch. 7 and W. KLEIN, supra note 22, at 87. Exit rights in the form of "forced bid" provisions for minority
In each case contracts are designed to deal with essentially the same problem.

Because the adoption of such shark repellent amendments is often initiated by firm agents, who are also motivated by a desire to obtain protection from hostile bids, agency and coordination costs once again become interrelated. Managers who are loyal to firm investors have incentives to produce contractual arrangements that reduce the dominant shareholders' power to engage in opportunistic behavior. On the other hand, disloyal managers have incentives to raise the costs of takeovers in order to reduce the prospects of a change in control. Assuming managers operate as if they were loyal to investors, shareholders who do not expect to obtain a dominant position may have incentives to adopt such arrangements. It is in the interest of these shareholders to contractually reduce the dominant owners' power to transfer wealth in all firms in which they invest, if they can do so.

There is evidence that investors believe that the expected costs of dom-

shareholders of publicly held firms are generally triggered by a successful bid for control. Smith, Fair Price and Redemption Rights: New Dimensions in Defense Charter Provisions, 4 Del. J. Corp. L. 1 (1978); Winter, Stumpf & Hawkins, supra note 48, at § 7.2, at 214; 1 A. Fleischer, supra note 41, 37-38. In some cases exit rights take the form of "poison pills" which give minority shareholders instruments other than their common stock that can be redeemed for cash after a change in control. See, e.g., Revlon, Inc. v. MacAndrews & Forbes Holdings, Inc., 506 A.2d 173 (Del. 1986) (dividend of right to each stockholder to exchange one share of common stock for one target note due in one year with principal value set at board's determination of the fair value of a target share).

157. See Carney, Shark Repellents, supra note 9 and Gilson, Shark Repellent Amendments, supra note 154.


159. Use of these fair price exemptions from restrictive decision rules is often conditioned on the absence of self-dealing transactions preceding the takeover. See, e.g., Hochman & Folger, Deflecting Takeovers: Charter and By-Law Techniques, 34 Bus. Law. 537, 572 (1979); Proxy Statement of Central Bankshares of the South, Inc. (May 17, 1982) in Winter, Stumpf & Hawkins, supra note 48, at 79; Proxy Statement of Dart & Kraft, Inc. (May 5, 1983) in Id. at 111; Proxy Statement of Atlanta Gas Light Company, A-5 (Dec. 21, 1984). Contracting to reduce or avoid coordination costs will occur to the extent that diversification does not provide a complete solution, and will be a function of the magnitude of these costs. Thus:

\[ K = F([1-D] \ Cc) \]

where: \( K \) = cost of contracting,

\( Cc \) = total coordination costs, and

\( D \) = diversification as a complete solution

Assuming that expected coordination costs are $100, and that diversification provides a complete solution, investors will spend nothing on contracting. If, on the other hand, diversification is expected to reduce coordination costs by only 50%, investors will spend up to $50 on contracting to avoid these costs. One cost of contracting, of course, is the possible deterrence of bids for control of the firm. See text at note 167, infra.
inance are real and substantial. That evidence provides a link between the closely and publicly held firm, that was not apparent until recent years. Complex contracts are a regular feature of closely held firms, where diversification is most costly. As the market for corporate control has developed publicly held firms have faced the same problems of dominance as closely held ones. Under these conditions firms will engage in more costly contracting. Not surprisingly, contractual provisions limiting the power of dominant stockholders have been regularly approved by large majorities in hundreds of publicly held firms.

Typical fair price charter amendments illustrate the nature of the conflict. These amendments impose extremely restrictive decision rules for mergers with a dominant shareholder. Affirmative votes, often in excess of two-thirds majorities, are required, with some ranging as high as 95%. But these voting rules can be relaxed to the statutory minimum, frequently a simple majority, if the consideration paid to minority shareholders in the takeout merger is "fair." Fairness is typically set as a minimum price based on several alternative formulae, including: the highest price paid by the dominant shareholder for any shares of the firm; the firm's earnings per share multiplied by the bidder's price-earnings ratio, etc.

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160. See generally HOOD, KURTZ & SHORS, supra note 107; F. O'NEAL, supra note 26; and W. PAINTER, supra note 106.
161. See Carney, Shark Repellents, supra note 9 at 368, for a game theory analysis of the problems presented by a dominant investor in a hostile takeover.
162. One study reports that from 1974-79 approximately 200 companies listed on the New York Stock Exchange proposed corporate charter and by-law amendments designed to make the transfer of control more difficult, principally by restricting the majority's power to set the terms of acquisition of minority interests in the firm. DeAngelo & Rice, Antitakeover Charter Amendments and Stockholder Wealth, 11 J. FIN. ECON. 329 (1983). Another study, using NYSE listed companies in the period 1960-1980, found at least 475 charter or by-law amendments by 398 companies. Linn & McConnell, An Empirical Investigation of the Impact of 'Antitakeover' Amendments on Common Stock Prices, 11 J. FIN. ECON. 361, 367 (1983). A more recent study included 649 firms (approximately two-thirds of which were listed on exchanges) that adopted "shark repellent" amendments, generally to restrict the terms of second-stage mergers. JARRELL, SHARK REPELLENTS AND STOCK PRICES: THE EFFECTS OF ANTITAKEOVER AMENDMENTS SINCE 1980: A STUDY OF THE OFFICE OF THE CHIEF ECONOMIST, SECURITIES AND EXCHANGE COMMISSION (1985).
163. DeAngelo & Rice, supra note 162, at 331, found some shark repellents with supermajority requirements as high as 95%. JARRELL, supra note 162, at 7 (1985); an unpublished study by the Office of the Chief Economist, Securities and Exchange Commission (1980), found voting requirements ranging from two-thirds to as high as 90 percent. Generally, however, these requirements are set between two-thirds and 80%. See, e.g., 2 FLEISCHER, supra note 41, at 615 (1985 Supp.); see also, Hochman & Folger, supra note 159, at 553-54.
164. See, e.g., Proxy Statement of Control Data Corporation (May 3, 1978), in WINTER, STUMPF & HAWKINS, supra note 48, at 87 ("the highest per share closing public market price for such
In order to prevent a dominant shareholder from using its power to manipulate any of the formulae, these amendments often relax voting rules only if the dominant shareholder has not engaged in a variety of specified self-dealing transactions since becoming a dominant shareholder. Recently popular "poison pill" plans often provide for the bargain purchase of shares, either of the target or of the successful bidder after a merger, if a similar series of specified self-dealing transactions have been undertaken by a dominant shareholder.

An agency cost explanation has been advanced to explain these contracts—that managers have systematically deceived investors into approving management entrenchment provisions against takeovers. Although that explanation cannot be rejected entirely, the model suggests that at least some, perhaps the less restrictive, of these contracts can serve a cost-reducing function for investors.

This model suggests an important role for coordination costs in ex-

Common Stock during such five year period, plus (b) the aggregate amount, if any, by which five percent for each year, beginning on the date on which such Controlling Person became a Controlling Person, of such higher per share price exceeds the aggregate amount of all Common Stock dividends per share paid in cash since the date on which such Person became a Controlling Person.

See also, Article Nine of Sabine Royalty Corporation's Articles of Incorporation, reprinted in 1 LIPTON & STEINBERGER, TAKEOVERS AND FREEZEOUTS, 267-68 (1978) (fair price must be the greatest of the same percentage premium over the pre-takeout market price as was the cash tender offer to the pre-bid market price, or the highest price paid by the bidder for any target shares, or the last four quarters' earnings multiplied either by 15 or the bidder's price-earnings ratio).

165. See, supra note 159.


167. See Gilson, Shark Repellent Amendments, supra note 154. I do not dispute the possibility that the agency cost explanation has power; I only assert that alternative and more benign possibilities also exist.

168. Thus investors may trade coordination costs for agency costs. Carney, Shark Repellents, supra note 9. Managers seeking capital in efficient capital markets facing investors with rational expectations will attempt to minimize total firm costs, which consist of the sum of agency costs and coordination costs. Assuming that reductions in coordination costs increased agency costs (which may be true for some types of coordination costs, but not all of them), we would expect a negative correlation between agency and those coordination costs. Agency and coordination costs would be a function of the severity of those shark repellents that affected them. Thus, we can express the relationship as follows:
plaining a firm’s ownership structure and related contract provisions. Ultimately it can be tested by examining the incidence of costly capital structures and investor contracts in firms where agency costs are relatively low. No agency cost explanation of the presence of costly contracts seems persuasive for closely held firms, where similar provisions often exist. The lack of universality undermines the agency cost explanation, and lends credence to the coordination cost story.

\[ C = f(S) = C_c(S) + C_a(S) \]

where:
- \( S \) = severity of charter provisions,
- \( C_c \) = total coordination costs, and
- \( C_a \) = total agency costs

If the optimum point, \( C^* \) is a unique minimum of the sum of \( C_c(S) \) and \( C_a(S) \), where the slope of \( C_c = 0 \), then:

\[ \frac{dC}{dS} = \frac{dC_c}{dS} + \frac{dC_a}{dS} = 0 \]

and:

\[ \frac{dC_c}{dS} = -\frac{dC_a}{dS} \]

The relationships can be depicted graphically as shown in Fig. 2:


170. The agency cost explanation thus has limited power, because it fails to explain the presence of supermajority voting rules in closely held firms. See, e.g., Benintendi v. Kenton Hotel, 294 N.Y. 112, 60 N.E.2d 829 (1945), and Katcher v. Ohmsman, 26 N.J. Super. 28, 97 A.2d 180 (N.J. Super., Ch. Div., 1953).
D. Investment Decisions: Risky Choices

1. General Conflicts

Investors can also be distinguished on the basis of their relative preferences for risk. Some of these differences are explained by matters such as age, current income, wealth, level of diversification, and the like, though others may be purely idiosyncratic.¹⁷¹ Investor preferences in any single firm are subject to change over time. Even if a group of investors were in agreement on appropriate distribution, reinvestment, and risk policies at the time they purchased common stock in a firm, exogenous events can disrupt this equilibrium.

Introduction of new complexities in the firm's capital structure may signal changes in firm preferences for risk. For example, introducing debt shifts stockholder preferences toward riskier policies. Changes in relative wealth of co-investors may have a similar effect. Furthermore, not all common stockholders will have identically sloped marginal utility curves for wealth. Thus investors may have different preferences with respect to the degree of increase in risk, even though they agree on the direction of the change. Changes in firm wealth, and derivatively in owners' wealth, may have similar effects in closely held firms.

In close corporations the need to obtain new financing may provide a contractual means for controlling these conflicts. Authorization of new partnership units, assessment of partners or authorization of new shares may be necessary in order to finance a new project. Decision rules can be set to protect the interests of minorities that object strongly to changes in risk.¹⁷² Negative covenants demanded by banks, or indenture terms demanded by bondholders to control risk may also reduce the cost of equity, because these provisions provide assurances to equity investors about the limits on the level of firm risk.

2. Stockholder—Bondholder Conflicts

Firms with complex capital structures face other investor conflicts over methods of financing. A new project financed entirely with debt can increase the risk facing existing bondholders, while one financed entirely

¹⁷¹ See text at notes 16-18 supra.

¹⁷² For example, section 18(h) of the UNIF. PARTNERSHIP ACT requires unanimous consent of partners to take any action in contravention of the partnership agreement. Authorizing new shares in a corporation generally requires shareholder approval of an amendment to the corporate charter, unless shareholders have previously delegated such decisions to the board by authorizing more shares than were originally required to finance the firm.
with equity can reduce it, even though the risk associated with the new project is otherwise identical to that of other firm activities.\textsuperscript{173} Residual claimants have incentives to increase the firm's exposure to risk (and the potential for higher returns) at the expense of bondholders and other creditors.\textsuperscript{174}

The contractual solutions to the stockholder-bondholder conflict are well known. Specific constraints on investment policy may include prohibitions of mergers, for example. Other provisions implicitly limit investments, either by requiring earnings to provide minimum coverages of debt service, or by providing bondholders with attractive contingent claims on the upper tail of firm outcomes, through conversion privileges and warrants. Scale economies and standardization of terms make these provisions common in all debt issues of any size.\textsuperscript{175}

Preferred stock provides investors with a less secure position than bonds with respect to assurances of regular distributions. Normally charter provisions and board resolutions creating preferred stock do not contain covenants restricting risky activity. However, preferred holders often obtain the right to elect directors when dividends fall in arrears, the ultimate signal that the firm has chosen riskier projects than preferred investors would like.\textsuperscript{176}

Other solutions prevail in some highly leveraged industries. Regulation of public utilities may preclude risky choices, or protect debt claimants at commercial banks. Protection of bank depositors against risky shareholder choices is also subsidized through federal deposit insurance. These claims are also protected by their relatively short term, which allows depositors to withdraw fixed sums on short notice, if a bank engages

\textsuperscript{173} Smith & Warner, supra note 12, at 119; Easterbrook, supra note 36.

\textsuperscript{174} In a partnership, where all members are liable for firm debts, impecunious service partners may have incentives to increase firm borrowings or engage in risky projects if they believe most of the increased risk will be borne by other and wealthier partners. See, e.g., W. Klein and J. Coffee, Jr., supra note 22, at 89.

\textsuperscript{175} See generally Smith & Warner, supra note 12; but see McDaniel, supra note 49. McDaniel concludes that Smith and Warner's description of the general nature of negative covenants may mislead some readers, because a substantial number of the indentures he examined contained only some of the possible negative covenants. See also Malitz, On Financial Contracting: The Determinants of Bond Covenants, 15 Fin. Mgt. 18 (1986) (43% contained no restrictions on dividends or unsecured debt).

in riskier projects. Similar protection, in the form of withdrawable capital, exists for some investors in investment banking firms. Insur-
ance of customer accounts also provides protection for that class of creditor least likely to monitor the riskiness of brokerage firm investments.

3. The Complication of a Dominant Investor

Even where the firm is financed entirely with residual claims, conflicts can arise if a dominant investor is present. The firm now faces a single demand for new projects, rather than a diversified demand, which may result in unilaterally imposed changes in risk. When an investor obtains this sort of dominance in a closely held firm, co-investors have virtually no options, and can expect to suffer a one-time loss in personal utility.

Investors in close corporations can obtain some protection against changes in the riskiness of their investments through one or more of the following: a complex capital structure that issues debt claims; cumulative voting plus supermajority voting on board decisions; or contractual rights subject to buyout at a time of the investors' choosing. Alternatively, investors can avoid the development of a dominant block, through share transfer restrictions.

In publicly held firms a dominant investor can unilaterally change the riskiness of firm projects only at the price of higher capital costs. A dominant investor who anticipates a need to raise capital in the securities markets in the future may thus choose to continue consistent investment policies. A dominant investor is only constrained, however, to the extent that he cannot self-finance firm expansion, either through retained earnings or by going to the capital markets himself rather than through the firm.

IV. Why is Joint Ownership so Widespread?

A review of the costs of joint ownership raises a question as to why joint ownership is so widespread, especially in closely held firms where

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177. The relationship between coordination costs and duration of investment is discussed supra note 64 and infra text at notes 208-212.
178. See, e.g., Exchange Nat'l Bank v. Touche, Ross & Co., 554 F.2d 1126 (2d Cir. 1976) (de-
scription of subordinated debt, callable by the creditor, that serves as capital to satisfy stock exchange and regulatory requirements).
180. See, e.g., Martin v. Peyton, 246 N.Y. 213, 158 N.E. 77 (1927) for an example of extensive creditor controls over a debtor partnership.
capital market forces do not operate to restrain shifts in firm policies, and where dominance is either present or likely.

A. Scale Economies

Scale economies in many enterprises explain joint ownership. In many smaller enterprises all residual claims are held by a sole proprietor. But even in these cases joint ownership often exists in the form of creditor claims against the enterprise. Lenders may invest for the long term, with elaborate contract protection in their loan agreements. Even trade creditors provide a form of debt financing that gives them an interest in the firm. Jensen and Meckling have fully described the relationship between agency costs and firm size. A similar relationship should hold for coordination costs, with the caveat that dispersed ownership may itself reduce coordination costs through diversification.

B. Specialization and Complementary Skills

In personal service enterprises such as law and accounting firms, medical partnerships, or advertising agencies, a variety of specialized skills may be required to offer the full range of services on the one-stop basis that consumers prefer. Large firms reduce consumer search costs in these instances, by providing larger liability and reputational bonds. Co-ownership may be required to attract and retain highly skilled practitioners, who wish to be residual claimants on any rents that may be generated by their services.

C. Diversification and Liquidity

Where enterprises own large firm-specific assets, a sole owner can reduce risk by selling off investment units and diversifying his own portfolio. The sale of such units may create an active market for the units and provide additional liquidity for the owner, aside from the diversification

\[\text{\textsuperscript{182}}\] See Smith & Warner, supra note 12.
\[\text{\textsuperscript{184}}\] See text supra at notes 85-86.
\[\text{\textsuperscript{185}}\] Cf. Fama & Jensen, supra note 43, at 335 (describing large professional partnerships as offering portfolios of specialized services and large bonds to protect clients from losses through malfeasance or incompetence).
benefits. Efficient securities markets are the ultimate product of that process, which converts illiquid specific assets into marketable and homogeneous units.

D. Outside Monitoring

Agency cost reductions may also explain the incurrence of some coordination costs. Where shares of the firm are traded in efficient capital markets, investors in the firm have purchased a new form of management monitoring. Non-owners of the firm now have incentives to monitor management, and to signal the firm's owners about declines in performance through declines in stock prices. In some cases, these monitors may choose to compete for the opportunity to manage the firm, by bidding for a controlling block of shares, thus providing a solution to agency cost problems not solved by other arrangements. In this sense, the existing owners free ride on the efforts of outside monitors.

E. Deferral and Externalization of Costs

There may be many instances when investors have reached a clear consensus on goals and policies for the firm at its inception. To the extent it is unlikely that exogenous events will significantly alter their preferences in the short run, the present value of coordination costs may be minimal, and the most rational method to reduce present contracting expenses may be to avoid them. Under these conditions, the present value of coordination costs may not be significant. This does not mean that such conflicts will not arise, or that their costs, when they do arise, will be insignificant for these investors. It simply means that it was rational not to expend resources contracting about them at the time of initial investment, because the present value of the marginal returns expected from such contracting was lower than those available from alternative uses of

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188. Jensen & Meckling, supra note 8, at 354-55.
189. Id. at 355. In control battles, of course, attempts by firm shareholders to free ride on the efforts of bidders may result in the underproduction of changes in control. Grossman & Hart, Takeover Bids, the Free-Rider Problem, and the Theory of the Corporation, 1980 Bell. J. Econ. 42.
190. Achieving such relative investor peace for lengthy periods reduces the present value of the coordination costs facing investors at the inception of the firm. Thus, in Figure 2, supra, this has the effect of lowering the coordination cost curve (and thus the total cost curve) to reflect the discount to present value.
resources. Courts are frequently asked to resolve disputes when they arise by reading implicit terms into an investment contract, when the parties chose not to expend resources on writing them initially. To the extent it provides such ex post terms, whether by statute or judicial implication, the legal system subsidizes the failure to specify a fully contingent contract.

F. Bounded Rationality

An extension of the present value analysis takes us to conditions of uncertainty.191 Though efficient capital markets assure that all generally recognized contingencies are appropriately discounted, and provide pressure on firms to select optimal contractual arrangements to reduce these expected costs,192 no such assurance is present for closely held firms.193 Investors in closely held enterprises are likely to be subject to conditions of bounded rationality, under which they either fail to perceive the complete set of problems that may occur later, or underestimate the

191. Here I distinguish risk from Knightian uncertainty. F. Knight, Risk, Uncertainty and Profit, 19-21 (1921).
193. Assumptions about investor knowledge (at the margin) in efficient capital markets take several forms. As one treatise states them:

The weak form [of the efficient market hypothesis] asserts that current prices fully reflect the information implied by the historical sequence of prices. In other words, an investor cannot enhance his ability to select stocks by knowing the history of successive prices and the results of analyzing them in all possible ways. The semistrong form of the hypothesis asserts that current prices fully reflect public knowledge about the underlying companies, and that efforts to acquire and analyze this knowledge cannot be expected to produce superior investment results. The strong form asserts that not even those with privileged information can often make use of it to secure superior investment results.

J. Lorrie & M. Hamilton, supra note 37, at 71.

probability of their occurrence.\textsuperscript{194} The initial glow of enthusiasm for a new business may prevent investors from reflecting fully upon these problems. In all too many instances, their attorney may provide incomplete advice, whether from ignorance, cost considerations, or fear of "queering the deal."\textsuperscript{195} It is hardly surprising to find courts more active in resolving investor conflicts in closely held firms.\textsuperscript{196}

G. Appropriate Quasi-Rents

Klein, Crawford and Alchian have described how investment in specific assets creates appropriate quasi-rents in the specific asset.\textsuperscript{197} These authors concluded that creation of a firm was one means of solving the specific assets problem. Here I have demonstrated that the problem does not disappear with the creation of a firm, rather it merely assumes a new form. That does not mean that the risks and costs associated with opportunistic behavior are not reduced.\textsuperscript{198} Indeed, the survival principle suggests that where firms own specific assets these costs are indeed reduced.\textsuperscript{199}

V. Implications for the Ownership Structure of Firms

A. Claimants on the Firm

The model of ownership structure suggested herein requires that we think of all who invest capital in claims against the firm’s assets, whether human or financial, as owners of the firm. In addition to stockholders

\textsuperscript{194} The principle of bounded rationality has been defined as follows: “The capacity of the human mind for formulating and solving complex problems is very small compared to the size of the problems whose solution is required for objectively rational behavior in the real world.” H. Simon, Models of Man 198 (1957). See also E. MACKAY, ECONOMICS OF INFORMATION AND LAW 119-43 (1980); H. Simon, THEORIES OF BOUNDED RATIONALITY, in DECISION AND ORGANIZATION 161-76 (D. McGuire & R. Radner eds. 1972). These notions were anticipated by FRANK KNIGHT, in RISK, UNCERTAINTY AND PROFIT 210-11 (1921). For a discussion of various applications of bounded rationality with respect to investments in firms, see Carney, Defining A Security: The Addition of a Market-Oriented Contextual Approach to Investment Contract Analysis, 33 EMORY L.J. 311, 343-45 (1984).

\textsuperscript{195} W. Klein & J. Coffee, Jr., supra note 22, at 63-65.

\textsuperscript{196} Documenting this claim is a task best left to another paper.

\textsuperscript{197} Klein, Crawford & Alchian, supra note 27.

\textsuperscript{198} Rather, it means that there are diminishing marginal returns from using firms to replace contract where investments in specific assets create appropriate quasi-rents, and one of the forces diminishing these returns is the creation of another form of specific asset, an investment in a firm, which creates separate appropriate quasi-rents, as well as other coordination costs.

\textsuperscript{199} Stigler, The Economies of Scale, 1 J. LAW & ECON. 54 (1958).
and bondholders, agents who invest human capital in ways that create approducible quasi-rents must also be regarded as having a type of ownership claim, at least to the extent that it enables us to understand the nature of the contracts they will prefer. Employees may be thought of as such claimants, when employment decisions involve commitments to firm specific human capital that cannot be fully salvaged in the event of changes in firm behavior. Suppliers that make investments in specific assets in anticipation of contracts with the firm have a form of ownership claim, although it is clear that the law treats different classes of claimants differently.\footnote{200} The important feature common to the entire group of owners is their investment in specific assets that create quasi-rents, approducible under certain conditions by other claimants.

B. The Extent of Contracting

The existence of quasi-rents predicts that some forms of contracting and bonding will be undertaken to assure investors in specific assets that these quasi-rents will not be appropriated, or at least that the risk of appropriation will be low. The extent of this contracting is influenced by two factors: the extent and effectiveness of diversification, and the duration of claims against the firm.

1. Diversification

Where diversification provides a complete solution to investor conflicts, as in efficient capital markets, it is available at zero marginal cost, since under most conditions it will be undertaken to avoid other risks. Its protection against investor conflicts provides investors with a positive externality. Thus firms with little prospect of a dominant investor should not be expected to offer residual claimants significant contractual assurances against policy shifts or opportunistic behavior. Under these condi-

\footnote{200. Where holders of open residual claims obtain the protection of fiduciary duties in their dealings with the firm and its managers, other claim holders are restricted to contract claims. See generally Bratton, The Economics and Jurisprudence of Convertible Bonds, 1984 Wis. L. Rev. 667, 668 (bondholders) and W. Klein & J. Coffee, Jr., supra note 22. One rationale for this, of course, holds that firm managers can only owe full duties of loyalty to one constituency, and that the relative specificity of other claimants' contracts makes it clear that they expect to be treated at arms' length in their dealings with the firm. For a discussion of the complexities and the indeterminacy introduced by notions of fiduciary duties to multiple constituencies in another corporate context, see Schwartz, Defining the Corporate Objective: Section 2.01 of the ALI's Principles, 52 Geo. Wash. L. Rev. 511 (1984). See also Williamson, Corporate Governance, 93 Yale L.J. 1197 (1984).}
tions preemptive rights should have little value.\textsuperscript{201}

We should expect to see costly contracting only to the extent that diversification does not provide a complete solution. The principal solutions are likely to be designed to offer protection against wealth transfers caused by opportunistie behavior that cannot be costlessly diversified away. Bond indenture covenants and shark repellents are currently the most visible of these contracts.\textsuperscript{202} Holders of other claims obtain protection against the loss of expectancies, through call premiums on premature redemption of fixed claims, and adjustments of exercise rights on highly contingent claims, such as convertibles and warrants.\textsuperscript{203}

Closely held enterprises, where diversification is less likely to eliminate all risk for investors, will make greater use of contract to reduce the cost of expected investor conflicts. Transfer of investment units and issuance of new units may be restricted by contract to assure greater homogeneity of the investor group.\textsuperscript{204} Investor voting may be more widespread, with more firm decisions left in the hands of investors.\textsuperscript{205} Protection against dominance will be more extensive.

In partnerships this protection may be furnished by the “off-the-rack” provisions of the Uniform Partnership Act, which provide for per capita voting regardless of relative investments.\textsuperscript{206} In corporations it may be provided by cumulative voting, which assures minority representation on the board of directors, coupled with supermajority voting requirements, both on the board and for shareholders.\textsuperscript{207} The general absence of specific contract provisions prohibiting future firm actions demonstrates the

\textsuperscript{201} The studies of preemptive rights to date have not addressed this claim directly, although Smith, Alternative Methods for Raising Capital, 5 J. Fin. Econ. 273 (1977), does suggest that a monitoring cost reduction benefit exists, for foregoing direct or “rights” offerings to shareholders in favor of underwritten offerings. But see, Hansen & Pinkerton, Direct Equity Financing: A Resolution of a Paradox, 37 J. Fin. 651 (1982) (rejecting the monitoring hypothesis and finding support for flotation cost economies in underwritten offerings).

\textsuperscript{202} Smith & Warner, supra note 12 and Carney, Two-Tier Tender Offers, supra note 9.

\textsuperscript{203} Smith & Warner, supra note 12, at 140-143.

\textsuperscript{204} See text supra at notes 83 and 96.

\textsuperscript{205} Delaware’s close corporation chapter, for example, permits charter amendments to shift all firm management decisions to the shareholders, eliminating the board of directors entirely. DELAWARE GENERAL CORPORATION LAW, § 351, Del. Code Ann. tit. 8, § 351. See also MODEL STATUTORY CLOSE CORPORATION SUPPLEMENT § 21, 3 MODEL BUSINESS CORP. ACT. ANN. 1836 (1985).

\textsuperscript{206} UNIF. PARTNERSHIP ACT § 18(b) (partnership questions decided by majority of the partners unless otherwise provided).

\textsuperscript{207} See text supra at note 180.
high cost of restricting the opportunity set available to the firm under conditions of uncertainty.

2. **Duration of Claims**

The extent of costly contracting to reduce investor conflicts is also a function of the duration of the particular claim. The longer the duration, the greater the appropriated quasi-rents created, because more exogenous events can influence firm decisions and co-investor choices. A brief examination of debt claims against the firm illustrates the relationship.

Long-term corporate debt is usually issued only in connection with an elaborate indenture, which explicitly restricts the opportunity set of investment and distribution choices available to the firm. Short-term debt in many instances is the subject of only summary contracts, which specify only dates of repayment and the consequences of a failure to repay as scheduled. No attempts are made to restrict the debtor's investment and distribution policies, though the lender may obtain assurances about the application of loan proceeds. Problems of wealth transfers from the lenders to other classes of claimants on firm assets are usually handled by reliance on general legal rules, under statutes dealing with fraudulent conveyances. If scale problems preclude complete creditor investigation and specification of contract terms, regulation may provide a substitute, as in the case of commercial and investment banking regulation, or deposit and customer account insurance.

3. **The Role of Liquidity**

The foregoing discussion of the use of contract protections for creditors is intended to demonstrate that the existence of a market for the investment units does not determine whether appropriable quasi-rents are created in the investment, nor the need for contract protection. Both long-term corporate debt and commercial paper are issued and traded in relatively efficient capital markets, so that liquidity is not a problem for investors in either case. Yet the contract protections obtained in indep-

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208. See supra text at note 64.
212. See text at note 179 supra.
tures covering long-term debt are far more elaborate than those governing commercial paper. The existence of efficient trading markets only means that price adjustments for the creation of approducible quasi-rents will be instantaneous and incremental, rather than catastrophic one-time events.

C. The Special Difficulties of Residual Claims

Residual claims present the most difficult contracting questions, and as a result contracts provide only a partial solution for conflicts in these instances. Contracts among shareholders, for example, may be at least partially substituted for by investor diversification into fixed as well as residual claims of the same issuer, greater court intervention and by ex ante compensation in the form of higher expected returns on investments.

1. Specification vs. Decision Rules

Where residual claims are concerned, writing a fully contingent contract becomes prohibitively expensive, because the range of contingencies is too great to permit bargaining over all possible events. Investors in residual interests normally obtain their protection by deferring the cost of deciding such issues until the event is highly probable, and it makes economic sense to focus on it. Typically these events include decisions about the liquidation of the firm or its sale to third parties. In a significant number of cases, decisions about major expansions will also be reserved. Because more information will be available at a later date, the chances of making a better decision are also improved. Nor are these decisions delegated to agents. Investors generally reserve to themselves the power to decide, though in some instances agents may have a veto.


214. The actual efficiency of bond and commercial paper markets is an empirical question on which doubts exist. W. McDaniel, Bondholders and Stockholders—Corp. L. Rev. (forthcoming). The issue is beyond the scope of this paper.

215. The other part of the solution is ex post settling up where neither party has specified outcomes. Costs are recognized ex post rather than ex ante under these circumstances.

216. This is accomplished by limiting residual claims to those originally issued, unless expansion is approved by amendment of the partnership agreement or the corporate charter. See, e.g., Unif. Partnership Act § 18(h) and Rev. Model Business Corp. Act § 10.03 (1984).
power. Here restrictive decision rules, such as supermajority voting, may be substituted for ex ante specification.

2. **Diversification of Claims Against the Firm**

Investors in residual claims can reduce their risk of conflicts in ways other than writing contracts expressly for these investors. The firm that issues debt or preferred stock, for example, may make binding promises to those who invest in those classes of securities that are desired by some of the residual claimants as well. Indeed, in some cases these additional classes will be issued for the express purpose of permitting residual investors to hold several classes of claims against the firm. Though it is not uncommon for stockholders in closely held firms to hold debt or salary claims, similar features also appear in publicly held firms, where some stockholders obtain warrants, that provide them with further claims on the upper tail of outcomes should risky ventures prove successful.

3. **The Exit Option: Dissolution**

Even if investments in firms create appropriable quasi-rents, realization of salvage value depends on the ability to sell the specific asset. In publicly held firms, the market offers the low-cost exit for investors. Where no such market exists, we can expect the parties to provide for an exit by contract. In default of such contract, the law generally provides an exit, though generally only under the most extreme circumstances, when aggregate welfare of the parties is threatened. Such an approach eschews dissolving Kaldor-Hicks efficient firms, and generally leaves the parties with the benefits and burdens of their bargain. The law

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217. Typical statutes require shareholder votes to dissolve the firm e.g., Rev. Model Business Corp. Act Ann. (1984) § 14.02, to sell all or substantially all assets not in the ordinary course of business id., § 12.02 or to authorize new shares, which requires a charter amendment id., § 10.03. In each instance, however, board approval is a prerequisite to a shareholder vote.

218. Partnership agreements may be amended only by unanimous consent in the absence of contractual specification. See, e.g., UNIF. PARTNERSHIP ACT § 18(h).


220. Historically, liquidation has been available at shareholder request only under limited circumstances. See, e.g., REV. MODEL BUSINESS CORP. ACT ANN. (1984) § 14.30(2) (allowing, but not requiring, dissolution only where directors are deadlocked and "irreparable injury to the corporation is threatened or being suffered...[that] the directors or those in control of the corporation have acted, are acting, or will act in a manner that is illegal, oppressive or fraudulent; [or]...[that] the shareholders are deadlocked in voting power...[or that] the corporate assets are being misapplied or wasted.")
only intervenes when dissolution appears to be a Pareto superior move because resources are being dissipated in disputes among co-owners.\footnote{\textit{See}, e.g., \textit{In re Radom \\ & Neidorff, Inc.}, 307 N.Y. 1, 119 N.E.2d 563, declining to dissolve a profitable business where a bitter dispute existed between the only two shareholders, a brother and sister.}  

4. \textit{Discounting for Investment Risk: Bounded Rationality}  

Only residual claims will be characterized by price differentials among units of the same class, depending on the ownership of the units, because it is only in residual claims that differential treatment among such units is possible. In efficient capital markets the price of residual claims will fully reflect non-diversifiable risk, and investors will be fully compensated ex ante for that portion of the risk that has not been eliminated by contract. No investor can credibly claim that he or she has been injured by subsequent firm actions or the behavior of dominant investors or holders of a single class of the firm's securities.

Only where capital markets are not fully efficient and where investors' rational expectations are limited by bounded rationality can we find conditions where prices may not fully reflect expected coordination costs. Closely held enterprises provide the most likely setting for the failure of markets to generate the efficient set of contracts and prices for the investment units.\footnote{\textit{See}, e.g., Manne, \textit{Two Corporation Systems}, supra note 68.}  

5. \textit{The Role of Courts in Settling Up}  

When contracts have not resolved problems in advance, parties can agree to settle up after the event. Settling up is likely to work only if the parties expect to remain in a contracting relationship, and if the continued good will of the other party has value. When these conditions do not exist, the absence of contract limitations will enable some co-investors to take full advantage of their contract and property rights to disappoint the expectations of other investors. In these circumstances investors who purchased in efficient markets will have been fully compensated ex ante, while those who did not buy in such markets may or may not have been so compensated.

Residual claimants who find that their co-investors lack incentives to settle up are the most likely class to seek judicial relief from disappointments created by an absence of contractual protections. Intervention is unlikely to occur for those claimants with restricted sets of claims, absent
outright theft or fraud. In such cases, the courts take the absence of fully contingent contract protections as an express grant of property rights to engage in any activities not prohibited. This analysis is generally extended to residual claims that are tied to fixed claims, such as conversion rights, apparently on the theory that the number of contingencies to be dealt with is finite, and can be dealt with efficiently by contract.

Typically, courts have exercised a limited role in providing ex post settling up for residual claimants. But when residual claimants with open contracts are in conflict, the courts have engaged in some intervention. To a large extent firm decisions about distributions and risk have been left to the parties, under the “business judgment rule.” It is only when opportunistic behavior by dominant residual claimants is involved, that American courts have intervened. They appear to have done so without regard to whether the investment units were likely to be priced in efficient markets, thus compensating the disappointed investors in advance. They have also done so without regard to the costs of judicial restructuring, whether with respect to the costs of litigation or incentives for future investors.

VI. CONCLUSION

The business enterprise is an awesomely complex social institution. It is shaped by the nature of both agency and coordination costs. Its ownership structure represents an attempt to minimize both sets of costs. Much work remains to be done to fully describe both sets of costs, and the contract and institutional responses to them.

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223. See Bratton, supra note 200, and cases cited at 682-83 (bondholders generally relegated to their contract claims).

224. See, e.g., Broad v. Rockwell Int'l Corp., 642 F.2d 929.
