SEPARATION OF OWNERSHIP AND CONTROL

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Abstract

This paper analyzes the survival of organizations in which decision agents do not bear a major share of the wealth effects of their decisions. This is what the literature on large corporations calls separation of "ownership" and "control." Such separation of decision and risk bearing functions is also common to organizations like large professional partnerships, financial mutuals and nonprofits. We contend that separation of decision and risk bearing functions survives in these organizations in part because of the benefits of specialization of management and risk bearing but also because of an effective common approach to controlling the implied agency problems. In particular, the contract structures of all these organizations separate the ratification and monitoring of decisions from the initiation and implementation of the decisions.

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I. Introduction

Absent fiat, the form of organization that survives in an activity is the one that delivers the product demanded by customers at the lowest price while covering costs.[1] Our goal is to explain the survival of organizations characterized by separation of "ownership" and "control"—a problem that has bothered students of corporations from Adam Smith to Berle and Means and Jensen and Meckling.[2] In more precise language, we are concerned with the survival of organizations in which important decision agents do not bear a substantial share of the wealth effects of their decisions.

We argue that the separation of decision and risk-bearing functions observed in large corporations is common to other organizations such as large professional

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[1] Alchian (1950) is an early proponent of the use of natural selection in economic analysis. For a survey of general issues in the analysis of organization, see Jensen (1983).

[2] Smith (1776); Berle and Means (1932); and Jensen and Meckling (1976).

partnerships, financial mutuals, and nonprofits. We contend that separation of decision and risk-bearing functions survives in these organizations in part because of the benefits of specialization of management and risk bearing but also because of an effective common approach to controlling the agency problems caused by separation of decision and risk-bearing functions. In particular, our hypothesis is that the contract structures of all of these organizations separate the ratification and monitoring of decisions from initiation and implementation of the decisions.

II. Residual Claims and Decision Processes

An organization is the nexus of contracts, written and unwritten, among owners of factors of production and customers.[3] These contracts or internal ‘‘rules of the game” specify the rights of each agent in the organization, performance criteria on which agents are evaluated, and the payoff functions they face. The contract structure combines with available production technologies and external legal constraints to determine the cost function for delivering an output with a particular form of organization.[4] The form of organization that delivers the output demanded by customers at the lowest price, while covering costs, survives.

The central contracts in any organization specify (1) the nature of residual claims and (2) the allocation of the steps of the decision process among agents. These contracts distinguish organizations from one another and explain why specific organizational forms survive. We first discuss the general characteristics of residual claims and decision processes. We then present the major hypotheses about the relations between efficient allocations of residual claims and decision functions. The analysis focuses on two broad types of organizations—those in which risk-bearing and decision functions are separated

[3] See Jensen and Meckling (1976).

[4] See Jensen and Meckling (1979).

and those in which they are combined in the same agents. We analyze only private organizations that depend on voluntary contracting and exchange.

A. Residual Claims

The contract structures of most organizational forms limit the risks undertaken by most agents by specifying either fixed promised payoffs or incentive payoffs tied to specific measures of performance. The residual risk—the risk of the difference between stochastic inflows of resources and promised payments to agents—is borne by those who contract for the rights to net cash flows. We call these agents the residual claimants or residual risk bearers. Moreover, the contracts of most agents contain the implicit or explicit provision that, in exchange for the specified payoff, the agent agrees that the resources he provides can be used to satisfy the interests of residual claimants.

Having most uncertainty borne by one group of agents, residual claimants, has survival value because it reduces the costs incurred to monitor contracts with other groups of agents and to adjust contracts for the changing risks borne by other agents. Contracts that direct decisions toward the interests of residual claimants also add to the survival value of organizations. Producing outputs at lower cost is in the interests of residual claimants because it increases net cash flows, but lower costs also contribute to survival by allowing products to be delivered at lower prices.

The residual claims of different organizational forms contain different restrictions. For example, the least restricted residual claims in common use are the common stocks of large corporations. Stockholders are not required to have any other role in the organization; their residual claims are alienable without restriction; and, because of these provisions, the residual claims allow unrestricted risk sharing among stockholders. We call these organizations *open* corporations to distinguish them from *closed* corporations

that are generally smaller and have residual claims that are largely restricted to internal decision agents.[5]

B. The Decision Process

By focusing on entrepreneurial firms in which all decision rights are concentrated in the entrepreneur, economists tend to ignore analysis of the steps of the decision process. However, the way organizations allocate the steps of the decision process across agents is important in explaining the survival of organizations.

In broad terms, the decision process has four steps:

- *initiation*—generation of proposals for resource utilization and structuring of contracts;
- *ratification*—choice of the decision initiatives to be implemented;
- *implementation*—execution of ratified decisions; and
- *monitoring*—measurement of the performance of decision agents and implementation of rewards.

Because the initiation and implementation of decisions typically are allocated to the same agents, it is convenient to combine these two functions under the term *decision management*. Likewise, the term *decision control* includes the ratification and monitoring of decisions. Decision management and decision control are the components of the organization's decision process or decision system.

[5] The terms "public corporation" and "close corporation," which are common in the legal literature, are not used here. "Closed corporation" seems more descriptive than "close corporation." The term "public corporation" best describes government-owned corporations such as Amtrak and the TVA. In contrast, what we call "open corporations" are private organizations.

III. Fundamental Relations Between Risk-Bearing and Decision Processes

We first state and then elaborate the central complementary hypotheses about the relations between the risk-bearing and decision processes of organizations.

- Separation of residual risk bearing from decision management leads to decision systems that separate decision management from decision control.
- Combination of decision management and decision control in a few agents leads to residual claims that are largely restricted to these agents.

A. The Problem

Agency problems arise because contracts are not costlessly written and enforced. Agency costs include the costs of structuring, monitoring, and bonding a set of contracts among agents with conflicting interests. Agency costs also include the value of output lost because the costs of full enforcement of contracts exceed the benefits.[6]

Control of agency problems in the decision process is important when the decision managers who initiate and implement important decisions are not the major residual claimants and therefore do not bear a major share of the wealth effects of their decisions. Without effective control procedures, such decision managers are more likely to take actions that deviate from the interests of residual claimants. An effective system for decision control implies, almost by definition, that the control (ratification and monitoring) of decisions is to some extent separate from the management (initiation and implementation) of decisions. Individual decision agents can be involved in the management of some decisions and the control of others, but separation means that an individual agent does not exercise exclusive management and control rights over the same decisions.

[6] This definition of agency costs comes from Jensen and Meckling (1976).

The interesting problem is to determine when separation of decision management, decision control, and residual risk bearing is more efficient than combining these three functions in the same agents. We first analyze the factors that make combination of decision management, decision control, and residual risk bearing efficient. We then analyze the factors that make separation of these three functions efficient.

B. Combination of Decision Management, Decision Control, and Residual Risk Bearing

Suppose the balance of cost conditions, including both technology and the control of agency problems, implies that in a particular activity the optimal organization is noncomplex. For our purposes, *noncomplex* means that specific information relevant to decisions is concentrated in one or a few agents. (Specific information is detailed information that is costly to transfer among agents.)[7] Most small organizations tend to be noncomplex, and most large organizations tend to be complex, but the correspondence is not perfect. For example, research oriented universities, though often small in terms of assets or faculty size, are nevertheless complex in the sense that specific knowledge, which is costly to transfer, is diffused among both faculty and administrators. On the other hand, mutual funds are often large in terms of assets but noncomplex in the sense that information relevant to decisions is concentrated in one or a few agents. We take it as given that optimal organizations in some activities are noncomplex. Our more limited goal is to explain the implications of noncomplexity for control of agency problems in the decision process.

If we ignore agency problems between decision managers and residual claimants, the theory of optimal risk bearing tells us that residual claims that allow unrestricted risk

[7] Specific information is closely related to the notions of "information impactedness" and "bounded rationality" discussed in Williamson (1975) and (1981). Hayek (1945) uses specific information to discuss the role of markets in complex economies. See also Sowell (1980). Our analysis of the relations between specific information and efficient decision processes owes much to ongoing work with William Meckling.

sharing have advantages in small as well as in large organizations.[8] However, in a small noncomplex organization, specific knowledge important for decision management and control is concentrated in one or a few agents. As a consequence, it is efficient to allocate decision control as well as decision management to these agents. Without separation of decision management from decision control, residual claimants have little protection against opportunistic actions of decision agents, and this lowers the value of unrestricted residual claims.

A feasible solution to the agency problem that arises when the same agents manage and control important decisions is to restrict residual claims to the important decision agents. In effect, restriction of residual claims to decision agents substitutes for costly control devices to limit the discretion of decision agents. The common stocks of closed corporations are this type of restricted residual claim, as are the residual claims in proprietorships and partnerships. The residual claims of these organizations (especially closed corporations) are also held by other agents whose special relations with decision agents allow agency problems to be controlled without separation of the management and control of decisions. For example, family members have many dimensions of exchange with one another over a long horizon and therefore have advantages in monitoring and disciplining related decision agents. Business associates whose goodwill and advice are important to the organization are also potential candidates for holding minority residual claims of organizations that do not separate the management and control of decisions.[9]

Restricting residual claims to decision makers controls agency problems between residual claimants and decision agents, but it sacrifices the benefits of unrestricted risk sharing and specialization of decision functions. The decision process suffers efficiency

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[8] See, for example, Arrow (1964); or Fama (1976, chs. 6 & 7).

[9] In contrast, the analysis predicts that when venture equity capital is put into a small entrepreneurial organization by outsiders, mechanisms for separating the management and control of important decisions are instituted.

losses because decision agents must be chosen on the basis of wealth and willingness to bear risk as well as for decision skills. The residual claimants forgo optimal risk reduction through portfolio diversification so that residual claims and decision making can be combined in a small number of agents. Forgone diversification lowers the value of the residual claims and raises the cost of risk-bearing services.

Moreover, when residual claims are restricted to decision agents, it is generally rational for the residual claimant—decision makers to assign lower values to uncertain cash flows than residual claimants would in organizations where residual claims are unrestricted and risk bearing can be freely diversified across organizations. As a consequence, restricting residual claims to agents in the decision process leads to decisions (for example, less investment in risky projects that lower the costs of outputs) that tend to penalize the organization in the competition for survival.[10]

However, because contracts are not costlessly written and enforced, all decision systems and systems for allocating residual claims involve costs. Organizational survival involves a balance of the costs of alternative decision systems and systems for allocating residual risk against the benefits. Small noncomplex organizations do not have demands for a wide range of specialized decision agents; on the contrary, concentration of specific information relevant to decisions implies that there are efficiency gains when the rights to manage and control decisions are combined in one or a few agents. Moreover, the risk-sharing benefits forgone when residual claims are restricted to one or a few decision agents are less serious in a small noncomplex organization than in a large organization, because the total risk of net cash flows to be shared is generally smaller in small organizations. In addition, small organizations do not often have large demands for wealth from residual claimants to bond the payoffs promised to other agents and to purchase risky assets. As a consequence, small noncomplex organizations can efficiently

[10] These propositions are developed in. Fama and Jensen (1983).

control the agency problems caused by the combination of decision management and control in one or a few agents by restricting residual claims to these agents. Such a combining of decision and risk-bearing functions is efficient in small noncomplex organizations because the benefits of unrestricted risk sharing and specialization of decision functions are less than the costs that would be incurred to control the resulting agency problems.

The proprietorships, partnerships, and closed corporations observed in small scale production and service activities are the best examples of classical entrepreneurial firms in which the major decision makers are also the major residual risk bearers. These organizations are evidence in favor of the hypothesis that combination of decision management and decision control in one or a few agents leads to residual claims that are largely restricted to these agents.

We analyze next the forces that make separation of decision management, decision control, and residual risk bearing efficient—in effect, the forces that cause the classical entrepreneurial firm to be dominated by organizational forms in which there are no decision makers in the classical entrepreneurial sense.

C. Separation of Decision Management, Decision Control, and Residual Risk Bearing

Our concern in this section is with the organizational forms characterized by separation of decision management from residual risk bearing—what the literature on open corporations calls, somewhat imprecisely, separation of ownership and control. Our hypothesis is that all such organizations, including large open corporations, large professional partnerships, financial mutuals, and nonprofits, control the agency problems that result from separation of decision management from residual risk bearing by separating the management (initiation and implementation) and control (ratification and monitoring) of decisions. Documentation of this hypothesis takes up much of the rest of the paper.

1. Specific Knowledge and Diffusion of Decision Functions. Most organizations characterized by separation of decision management from residual risk bearing are *complex* in the sense that specific knowledge relevant to different decisions—knowledge which is costly to transfer across agents—is diffused among agents at all levels of the organization. Again, we take it as given that the optimal organizations in some activities are complex. Our theory attempts to explain the implications of complexity for the nature of efficient decision processes and for control of agency problems in the decision process.

Since specific knowledge in complex organizations is diffused among agents, diffusion of decision management can reduce costs by delegating the initiation and implementation of decisions to the agents with valuable relevant knowledge. The agency problems of diffuse decision management can then be reduced by separating the management (initiation and implementation) and control (ratification and monitoring) of decisions.

In the unusual cases where residual claims are not held by important decision managers but are nevertheless concentrated in one or a few residual claimants, control of decision managers can in principle be direct and simple, with the residual claimants ratifying and monitoring important decisions and setting rewards.[11] Such organizations conform to our hypothesis, because top-level decision control is separated from top-level decision managers and exercised directly by residual claimants.

However, in complex organizations valuable specific knowledge relevant to decision control is diffused among many internal agents. This generally means that efficient decision control, like efficient decision management, involves delegation and diffusion of decision control as well as separation of decision management and control at different levels of the organization. We expect to observe such delegation, diffusion, and separation of decision management and control below the top level of complex

[11] See Alchian and Demsetz (1972).

organizations, even in those unusual complex organizations where residual claims are held primarily by top-level decision agents.

2. Diffuse Residual Claims and Delegation of Decision Control. In the more common complex organizations, residual claims are diffused among many agents. Having many residual claimants has advantages in large complex organizations because the total risk of net cash flows to be shared is generally large and there are large demands for wealth from residual claimants to bond the payoffs promised to a wide range of agents and to purchase risky assets. When there are many residual claimants, it is costly for all of them to be involved in decision control and it is efficient for them to delegate decision control. For example, some delegation of decision control is observed even in the large professional partnerships in public accounting and law, where the residual claimants are expert internal decision agents. When there are many partners it is inefficient for each to participate in ratification and monitoring of all decisions.

Nearly complete separation and specialization of decision control and residual risk bearing is common in large open corporations and financial mutuals where most of the diffuse residual claimants are not qualified for roles in the decision process and thus delegate their decision control rights to other agents. When residual claimants have no role in decision control, we expect to observe separation of the management and control of important decisions at all levels of the organization.

Separation and diffusion of decision management and decision control—in effect, the absence of a classical entrepreneurial decision maker—limit the power of individual decision agents to expropriate the interests of residual claimants. The checks and balances of such decision systems have costs, but they also have important benefits. Diffusion and separation of decision management and control have benefits because they allow valuable knowledge to be used at the points in the decision process where it is most relevant and they help control the agency problems of diffuse residual claims. In complex organizations, the benefits of diffuse residual claims and the benefits of separation of

decision functions from residual risk bearing are generally greater than the agency costs they generate, including the costs of mechanisms to separate the management and control of decisions.

3. Decision Control in Nonprofits and Financial Mutuals. Most organizations characterized by separation of decision management from residual risk bearing are complex. However, separation of the management and control of decisions contributes to the survival of any organization where the important decision managers do not bear a substantial share of the wealth effects of their decisions—that is, any organization where there are serious agency problems in the decision process. We argue below that separation of decision management and residual risk bearing is a characteristic of nonprofit organizations and financial mutuals, large and small, complex and noncomplex. Thus, we expect to observe separation of the management and control of important decisions even in small noncomplex nonprofits and financial mutuals where, ignoring agency problems in the decision process, concentrated and combined decision management and control would be more efficient.

4. Common General Features of Decision Control Systems. Our hypothesis about the decision systems of organizations characterized by separation of decision management and residual risk bearing gets support from the fact that the major mechanisms for diffusing and separating the management and control of decisions are much the same across different organizations.

Decision hierarchies. A common feature of the diffuse decision management and control systems of complex organizations (for example, large nonprofit universities as well as large open corporations) is a formal decision hierarchy with higher level agents ratifying and monitoring the decision initiatives of lower level agents and evaluating their

performance.[12] Such hierarchical partitioning of the decision process makes it more difficult for decision agents at all levels of the organization to take actions that benefit themselves at the expense of residual claimants. Decision hierarchies are buttressed by organizational rules of the game, for example, accounting and budgeting systems, that monitor and constrain the decision behavior of agents and specify the performance criteria that determine rewards.[13]

Mutual monitoring systems. The formal hierarchies of complex organizations are also buttressed by information from less formal mutual monitoring among agents. When agents interact to produce outputs, they acquire low-cost information about colleagues, information not directly available to higher level agents. Mutual monitoring systems tap this information for use in the control process. Mutual monitoring systems derive their energy from the interests of agents to use the internal agent markets of organizations to enhance the value of human capital.[14] Agents choose among organizations on the basis of rewards offered and potential for development of human capital. Agents value the competitive interaction that takes place within an organization's internal agent market because it enhances current marginal products and contributes to human capital development. Moreover, if agents perceive that evaluation of their performance is unbiased (that is, if they cannot systematically fool their evaluators) then they value the fine tuning of the reward system that results from mutual monitoring information, because it lowers the uncertainty of payoffs from effort and skill. Since the incentive structures and diffuse decision control systems that result from the interplay of formal

[12] See Weber (1947); Blau (1956); Simon (1962); and the titles by Williamson (1975). The historical development of hierarchies in open corporations is analyzed in Chandler (1977); and Chandler and Daems (1980).

[13] The separation of decision management from decision control that we emphasize is reflected in the auditing profession's concern with allocating operating and accounting responsibility to different agents. For instance, it is recommended that an agent with responsibility for billing should not have a role in receiving or recording customer payments. See, for example, Horngren (1982, ch. 27); or Stettler (1977, ch. 4 & 8).

[14] See Fama (1980).

hierarchies and less formal mutual monitoring systems are also in the interests of residual claimants, their survival value is evident.

Boards of directors. The common apex of the decision control systems of organizations, large and small, in which decision agents do not bear a major share of the wealth effects of their decisions is some form of board of directors. Such boards always have the power to hire, fire, and compensate the top-level decision managers and to ratify and monitor important decisions. Exercise of these top-level decision control rights by a group (the board) helps to ensure separation of decision management and control (that is, the absence of an entrepreneurial decision maker) even at the top of the organization.[15]

IV. The Spectrum of Organizations

A. Introduction

Organizations in which important decision agents do not bear a major share of the wealth effects of their decisions include open corporations, large professional partnerships, financial mutuals, and nonprofits. We are concerned now with analyzing the data each of these organizations provides to test the hypothesis that separation of decision management functions from residual risk bearing leads to decision systems that separate the management and control of decisions.

To motivate the discussion of specific organizational forms, we also outline a set of more specialized propositions to explain the survival value of the special features of their residual claims. These more specialized hypotheses about the survival of specific organizational forms in specific activities are developed in our paper "Agency Problems and Residual Claims.[16]

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[15] Decision functions can be delegated in two general ways: (1) joint delegation to several agents (as in a committee), or (2) partitioning and delegation of the parts to different agents. Boards of directors are examples of the former approach; decision hierarchies are examples of the latter.

[16] Fama and Jensen (1983).

B. Open Corporations

1. Unrestricted Common Stock Residual Claims. Most large nonfinancial organizations are open corporations. The common stock residual claims of such organizations are unrestricted in the sense that stockholders are not required to have any other role in the organization, and their residual claims are freely alienable. As a result of the unrestricted nature of the residual claims of open corporations, there is almost complete specialization of decision management and residual risk bearing. Even managers who own substantial blocs of stock, and thus are residual risk bearers, may elect to sell these shares.

Unrestricted common stock is attractive in complicated risky activities where substantial wealth provided by residual claimants is needed to bond the large aggregate payoffs promised to many other agents. Unrestricted common stock, with its capacity for generating large amounts of wealth from residual claimants on a permanent basis, is also attractive in activities more efficiently carried out with large amounts of risky assets owned within the organization rather than rented. Moreover, since decision skills are not a necessary consequence of wealth or willingness to bear risk, the specialization of decision management and residual risk bearing allowed by unrestricted common stock enhances the adaptability of a complex organization to changes in the economic environment. The unrestricted risk sharing and diversification allowed by common stock also contributes to survival by lowering the cost of risk-bearing services.

2. Control of the Agency Problems of Common Stock. Separation and specialization of decision management and residual risk bearing leads to agency problems between decision agents and residual claimants. This is the problem of separation of ownership and control that has long troubled students of corporations. For example, potential exploitation of residual claimants by opportunistic decision agents is reflected in the arguments leading to the establishment of the Securities and Exchange Commission and in the concerns of the modern corporate governance movement. Less

well appreciated, however, is the fact that the unrestricted nature of common stock residual claims also allows special market and organizational mechanisms for controlling the agency problems of specialized risk bearing.

The stock market. The unrestricted alienability of the residual claims of open corporations gives rise to an external monitoring device unique to these organizations—a stock market that specializes in pricing common stocks and transferring them at low cost. Stock prices are visible signals that summarize the implications of internal decisions for current and future net cash flows. This external monitoring exerts pressure to orient a corporation's decision process toward the interests of residual claimants.

The market for takeovers. External monitoring from a takeover market is also unique to the open corporation and is attributable to the unrestricted nature of its residual claims.[17] Because the residual claims are freely alienable and separable from roles in the decision process, attacking managers can circumvent existing managers and the current board to gain control of the decision process, either by a direct offer to purchase stock (a tender offer) or by an appeal for stockholder votes for directors (a proxy fight).

Expert boards. Internal control in the open corporation is delegated by residual claimants to a board of directors. Residual claimants generally retain approval rights (by vote) on such matters as board membership, auditor choice, mergers, and new stock issues. Other management and control functions are delegated by the residual claimants to the board. The board then delegates most decision management functions and many decision control functions to internal agents, but it retains ultimate control over internal agents—including the rights to ratify and monitor major policy initiatives and to hire, fire, and set the compensation of top level decision managers. Similar delegation of decision management and control functions, at the first step to a board and then from the board to internal decision agents, is common to other organizations, such as financial

[17] Monitoring from the takeover market is emphasized in Manne (1965).

mutuals, nonprofits, and large professional partnerships, in which important decision agents do not bear a major share of the wealth effects of their decisions.

However, the existence of the stock market and the market for takeovers, both special to open corporations, explains some of the special features of corporate boards, in particular: (1) why inside manager board members are generally more influential than outside members, and (2) why outside board members are often decision agents in other complex organizations.[18]

Since the takeover market provides an external court of last resort for protection of residual claimants, a corporate board can be in the hands of agents who are decision experts. Given that the board is to be composed of experts, it is natural that its most influential members are internal managers since they have valuable specific information about the organization's activities. It is also natural that when the internal decision control system works well, the outside members of the board are nominated by internal managers. Internal managers can use their knowledge of the organization to nominate outside board members with relevant complementary knowledge: for example, outsiders with expertise in capital markets, corporate law, or relevant technology who provide an important support function to the top managers in dealing with specialized decision problems.

However, the board is not an effective device for decision control unless it limits the decision discretion of individual top managers. The board is the top-level court of appeals of the internal agent market,[19] and as such it must be able to use information from the internal mutual monitoring system. To accomplish this and to achieve effective separation of top-level decision management and control, we expect the board of a large open corporation to include several of the organization's top managers. The board uses

[18] See Herman (1981, ch. 2), for data on the characteristics of corporate boards.

[19] See Fama (1980).

information from each of the top managers about his decision initiatives and the decision initiatives and performance of other managers. The board also seeks information from lower level managers about the decision initiatives and performance of top managers.[20] This information is used to set the rewards of the top managers, to rank them, and to choose among their decision initiatives. To protect information flows to the board, we expect that top managers, especially those who are members of the board, can effectively be fired only with consent of the board and thus are protected from reprisals from other top managers.

The decision processes of some open corporations seem to be dominated by an individual manager, generally the chief executive officer. In some cases, this signals the absence of separation of decision management and decision control, and, in our theory, the organization suffers in the competition for survival. We expect, however, that the apparent dominance of some top managers is more often due to their ability to work with the decision control systems of their organizations than to their ability to suppress diffuse and separate decision control. In any case, the financial press regularly reports instances where apparently dominant executives are removed by their boards.

Corporate boards generally include outside members, that is, members who are not internal managers, and they often hold a majority of seats.[21] The outside board members act as arbiters in disagreements among internal managers and carry out tasks that involve serious agency problems between internal managers and residual claimants, for example, setting executive compensation or searching for replacements for top managers.

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[20] For example, Horngren (1982, at 911), describes the role of the audit committee of the board (generally composed of outside board members) as a collector and conduit of information from the internal mutual monitoring system: "The objective of the audit committee is to oversee the accounting controls, financial statements, and financial affairs of the corporation. The committee represents the full board and provides personal contact and communication among the board, the external auditors, the internal auditors, the financial executives, and the operating executives."

[21] See Herman (1981, ch. 2).

Effective separation of top-level decision management and control means that outside directors have incentives to carry out their tasks and do not collude with managers to expropriate residual claimants. Our hypothesis is that outside directors have incentives to develop reputations as experts in decision control. Most outside directors of open corporations are either managers of other corporations or important decision agents in other complex organizations.[22] The value of their human capital depends primarily on their performance as internal decision managers in other organizations. They use their directorships to signal to internal and external markets for decision agents that (1) they are decision experts, (2) they understand the importance of diffuse and separate decision control, and (3) they can work with such decision control systems. The signals are credible when the direct payments to outside directors are small, but there is substantial devaluation of human capital when internal decision control breaks down and the costly last resort process of an outside takeover is activated.

C. Professional Partnerships

1. Mutual Monitoring, Specific Knowledge, and Restricted Residual Claims.

The residual claims of professional partnerships in activities such as law, public accounting, medicine, and business consulting are restricted to the major professional agents who produce the organization's services. This restriction increases the incentives of agents to monitor each other's actions and to consult with each other to improve the quality of services provided to customers. Such mutual monitoring and consulting are attractive to the professional agents in service activities where responsibility for variation in the quality of services is easily assigned and the value of professional human capital is sensitive to performance. The monitoring and consulting are likely to be effective when

[22] See Herman (1981, ch. 2).

professional agents with similar specialized skills agree to share liability for the actions of colleagues.

In both large and small partnerships, individuals or small teams work on cases, audits, and so forth. Because of the importance of specific knowledge about particular clients and circumstances, it is efficient for the teams to make most decisions locally. At this level. however, decision management and decision control are not separate. To control the resulting agency problems, the residual claims in professional partnerships, large and small, are restricted to the professional agents who have the major decision-making roles. This is consistent with our hypothesis that combination of decision management and control functions leads to restriction of residual claims to the agents who both manage and control important decisions.

2. Large Professional Partnerships. The partners in large professional partnerships are diffuse residual claimants whose welfare depends on the acts of agents they do not directly control. Thus, these organizations provide a test of our hypothesis that separation of residual risk bearing and decision management induces decision systems that separate the management and control of important decisions. The major decision control devices of large professional partnerships are similar to those of other organizations with diffuse residual claims. For example, residual claimants in large partnerships delegate to boards the ratification and monitoring of important decisions above the level of individual cases and audits. Moreover, the sharing of liability and residual cash flows among important decision agents (the partners) ensures that large partnerships have strong versions of the mutual monitoring systems that we contend are common to the decision control systems of complex organizations.

The boards of large partnerships have special features that relate to the restriction of the residual claims to important internal agents. The residual claimants are experts in the organization’s activities, and they observe directly the effects of actions taken by the board of managing partners. Thus, unlike the stockholders of open corporations, the

residual claimants in large partnerships have little demand for outside experts to protect their interests, and their boards are composed entirely of partners.

The board is involved in decisions with respect to the management of the partnership, for example, where new offices should be opened, who should be admitted to the partnership, and who should be dismissed. The board is also involved in renegotiating the shares of the partners. Here, as in other decisions, the boards of large partnerships combine the valuable specific knowledge available at the top level with information from partner-residual claimants. The role of the board is to develop acceptable consensus decisions from this information. Thus, the boards of large professional partnerships are generally called committees of managing partners rather than boards of directors. The idea is that such committees exist to manage agency problems among partners and to study and determine major policy issues in a manner that is less costly than when performed jointly by all partners.

Since the residual claims in a large professional partnership are not alienable, unfriendly outside takeovers are not possible. Inside takeovers by dissident partners are possible, however, because the managing boards of these organizations are elected by the partner-residual claimants.

D. Financial Mutuals

A common form of organization in financial activities is the mutual. An unusual characteristic of mutuals is that the residual claimants are customers, for example, the policyholders of mutual insurance companies, the depositors of mutual savings banks, and the shareholders of mutual funds. Like the diffuse stockholders of large nonfinancial corporations, most of the diffuse depositors, policyholders, and mutual fund shareholders of financial mutuals do not participate in the internal decision process. Thus, financial mutuals provide another test of our hypothesis that substantial separation of decision

management and residual risk bearing leads to decision systems that separate the management and control of decisions.

1. The Control Function of Redeemable Claims. For the purpose of decision control, the unique characteristic of the residual claims of mutuals is that they are redeemable on demand. The policyholder, depositor, or shareholder can, on demand, turn in his claim at a price determined by a prespecified rule. For example, the shareholder of an open-end mutual fund can redeem his claim for the market value of his share of the fund's assets, while the whole life or endowment insurance policyholder, like the shareholder of a mutual savings bank, can redeem his claim for its specified value plus accumulated dividends.

The decision of the claim holder to withdraw resources is a form of partial takeover or liquidation which deprives management of control over assets. This control right can be exercised independently by each claim holder. It does not require a proxy fight, a tender offer, or any other concerted takeover bid. In contrast, customer decisions in open nonfinancial corporations and the repricing of the corporation's securities in the capital market provide signals about the performance of its decision agents. Without further action, however, either internal or from the market for takeovers, the judgments of customers and of the capital market leave the assets of the open nonfinancial corporation under the control of the managers.

2. The Board of Directors. Like other organizations characterized by substantial separation between decision management and residual risk bearing, the top-level decision control device in financial mutuals is a board of directors. Because of the strong form of diffuse decision control inherent in the redeemable residual claims of financial mutuals, however, their boards are less important in the control process than the boards of open nonfinancial corporations. The reduced role of the board is especially evident in mutual savings banks and mutual funds, which are not complex even though often large in terms of assets. Moreover, the residual claimants of mutuals show little interest in their boards

and often do not have the right to vote for board members.[23] Outside board members are generally chosen by internal managers. Unlike open corporations, the boards of financial mutuals do not often impose changes in managers. The role of the board, especially in the less complex mutuals, is largely limited to monitoring agency problems against which redemption of residual claims offers little protection, for example, fraud or outright theft of assets by internal agents.

E. Nonprofit Organizations

When an organization's activities are financed in part through donations, part of net cash flows is from resources provided by donors. Contracts that define the share of residual claimants in net cash flows are unlikely to assure donors that their resources are protected from expropriation by residual claimants. In a nonprofit organization, however, there are no agents with alienable rights in residual net cash flows and thus there are no residual claims. We argue in "Agency Problems and Residual Claims'' that the absence of such residual claims in nonprofits avoids the donor-residual claimant agency problem and explains the dominance of nonprofits in donor-financed activities.[24]

The absence of residual claims in nonprofits avoids agency problems between donors and residual claimants, but the incentives of other internal agents to expropriate donations remain. These agency problems between donors and decision agents in nonprofits are similar to those in other organizations where important decision managers do not bear a major share of the wealth effects of their decisions. Our hypothesis predicts that, like other organizations characterized by separation of decision management from residual risk bearing, nonprofits have decision systems that separate the management (initiation and implementation) and control (ratification and monitoring) of decisions.

[23] See Herman (1969), for documentation of such lack of interest. For example, he describes situations where in more than a decade only four depositors in total attended the annual meetings of two savings and loan associations and other situations where management did not even bother to collect proxies.

[24] Fama and Jensen (1983). See Hansmann (1980) for a general discussion of nonprofits.

Such decision systems survive in donor nonprofits because of the assurances they provide that donations are used effectively and are not easily expropriated.

1. Nonprofit Boards. In small nonprofits delegation of decision management to one or a few agents is generally efficient. For example, in nonprofit cultural performing groups, an artistic director usually chooses performers, does the primary monitoring of their outputs, and initiates and implements major decisions. Nevertheless, the important decision agents in these organizations are chosen, monitored, and evaluated by boards of directors. Boards with similar decision control rights are common to other small nonprofits characterized by concentrated decision management, such as charities, private museums, small private hospitals, and local Protestant and Jewish congregations. Boards are also observed at the top of the decision control systems of complex nonprofits, such as private universities, in which both decision management and decision control are diffuse.

Although their functions are similar to those of other organizations, nonprofit boards have special features that are due to the absence of alienable residual claims. For example, because of the discipline from the outside takeover market, boards of open corporations can include internal decision agents, and outside board members can be chosen for expertise rather than because they are important residual claimants. In contrast, because a nonprofit lacks alienable residual claims, the decision agents are immune from ouster (via takeover) by outside agents. Without the takeover threat or the discipline imposed by residual claimants with the right to remove members of the board, nonprofit boards composed of internal agents and outside experts chosen by internal agents would provide little assurance against collusion and expropriation of donations. Thus, nonprofit boards generally include few if any internal agents as voting members, and nonprofit boards are often self-perpetuating, that is, new members are approved by existing members. Moreover, nonprofit board members are generally substantial donors who serve without pay. Willingness to provide continuing personal donations of wealth

or time is generally an implicit condition for membership on nonprofit boards. Acceptance of this condition certifies to other donors that board members are motivated to take their decision control task seriously.

2. The Roman Catholic Church. To our knowledge the only nonprofit organization that is financed with donations but lacks a board of important continuing donors with effective decision control rights is the Roman Catholic church. Parish councils exist in local Catholic churches, but unlike their Protestant and Jewish counterparts, they are only advisory. The clerical hierarchy controls the allocation of resources, and the papal system does not seem to limit the discretion of the Pope, the organization's most important decision agent.

Other aspects of the contracts of the Catholic clergy in part substitute for the control of expropriation of donations that would be provided by more effective donor-customer constraints on decisions. For example, the vows of chastity and obedience incorporated into the contracts of the Catholic clergy help to bond against expropriation of donations by avoiding conflicts between the material interests of a family and the interests of donor-customers. In addition, the training of a Catholic priest is organization-specific. For example, it involves a heavy concentration on (Catholic) theology, whereas the training of Protestant ministers places more emphasis on social service skills. Once certified, the Catholic priest is placed by the hierarchy. He cannot offer his services on a competitive basis. In exchange for developing such organization-specific human capital, the Catholic priest, unlike his Protestant and Jewish counterparts, gets a lifetime contract that promises a real standard of living. The organization-specific nature of the human capital of the Catholic clergy and the terms of the contract under which it is employed act as a bond to donor-customers that the interests of the Catholic clergy are closely bound to the survival of the organization and thus to the interests of donor-customers.

Although Protestantism arose over doctrinal issues, the control structures of Protestant sects—in particular, the evolution of lay councils with power to ratify and

monitor resource allocation decisions—can be viewed as a response to breakdowns of the contract structure of Catholicism, that is, expropriation of Catholic donor-customers by the clergy. The evolution of Protestantism is therefore an example of competition among alternative contract structures to resolve an activity's major agency problem—in this case monitoring important agents to limit expropriation of donations.

There is currently pressure to allow Catholic priests to marry, that is, to drop the vow of chastity from their contracts. We predict that if this occurs, organizational survival will require other monitoring and bonding mechanisms, for example, control over allocation of resources by lay councils similar to those observed in Protestant and Jewish congregations.

3. The Private University and Decision Systems in Complex Nonprofits. In complex nonprofits we observe mechanisms for diffuse decision control similar to those of other complex organizations. For example, large private universities, like large open corporations, have complicated decision hierarchies and active internal agent markets with mutual monitoring systems that generate information about the performance of agents. Again, however, the decision control structures of complex nonprofits have special features attributable to the absence of alienable residual claims.

For example, a university's trustees are primarily donors rather than experts in the details of education or research. In ratifying and monitoring decision initiatives presented by internal decision agents (presidents, chancellors, provosts, etc.), and in evaluating the agents themselves, boards rely on information from the internal diffuse decision system—for example, reports from faculty senates and appointments committees—and on external peer reviews.

Moreover, the structure of internal diffuse decision control systems is a more formal part of a university's contract structure (its charter or by-laws) than in large for-profit organizations such as open corporations. For example, unlike corporate managers. university deans, department heads, provosts, and presidents are generally appointed for

fixed terms. The end of a contract period activates a process of evaluation, with search committees chosen according to formal rules and with rules for passing their recommendations on to the board. A more formal structure of diffuse decision management and control is helpful to trustees who do not have specialized knowledge about a university's activities. It also helps to assure donors that the absence of discipline from an outside takeover market is compensated by a strong system for internal decision control.

V. Summary

The theory developed in this paper views an organization as a nexus of contracts (written and unwritten). The theory focuses on the contracts that (1) allocate the steps in an organization's decision process, (2) define residual claims, and (3) set up devices for controlling agency problems in the decision process. We focus on the factors that give survival value to organizational forms that separate what the literature imprecisely calls ownership and control.

A. The Central Hypotheses

An organization's decision process consists of decision management (initiation and implementation) and decision control (ratification and monitoring). Our analysis produces two complementary hypotheses about the relations between decision systems and residual claims:

- Separation of residual risk bearing from decision management leads to decision systems that separate decision management from decision control.
- Combination of decision management and decision control in a few agents leads to residual claims that are largely restricted to these agents.

B. Combination of Decision Management and Control

When it is efficient to combine decision management and control functions in one or a few agents, it is efficient to control agency problems between residual claimants and decision makers by restricting residual claims to the decision makers. This proposition gets clear support from the proprietorships, small partnerships, and closed corporations observed in small-scale production and service activities. These organizations are all characterized by concentrated decision systems and residual claims that are restricted to decision agents.

C. Separation of Residual Risk Bearing from Decision Management

1. The Role of Specific Knowledge. In contrast, most of the organizations characterized by separation of residual risk bearing from decision management are complex in the sense that specific information valuable for decisions is diffused among many agents throughout the organization. Thus in a complex organization separation of residual risk bearing from decision management arises in part because efficient decision systems are diffuse. Benefits from better decisions can be achieved by delegating decision functions to agents at all levels of the organization who have relevant specific knowledge, rather than allocating all decision management and control to the residual claimants. Control of the agency problems of such diffuse decision systems is then achieved by separating the ratification and monitoring of decisions (decision control) from initiation and implementation (decision management). The efficiency of such decision systems is buttressed by incentive structures that reward agents both for initiating and implementing decisions and for ratifying and monitoring the decision management of other agents.

2. The Role of Diffuse Residual Claims. In most complex organizations, residual claims are diffused among many agents. When there are many residual claimants, it is costly for all of them to be involved in decision control. As a consequence there is

separation of residual risk bearing from decision control, and this creates agency problems between residual claimants and decision agents. Separation of decision management and decision control at all levels of the organization helps to control these agency problems by limiting the power of individual agents to expropriate the interests of residual claimants. Thus diffusion and separation of decision management and control have survival value in complex organizations both because they allow valuable specific knowledge to be used at the points in the decision process where it is most relevant and because they help control the agency problems of diffuse residual claims.

3. Common Features of Decision Control Systems. What we call separation of residual risk bearing from decision management is the separation of ownership and control that has long bothered students of open corporations. We argue that separation of decision and risk bearing functions is also common to other organizations like large professional partnerships, financial mutuals, and nonprofits. Moreover, our central hypothesis about control of the agency problems caused by separation of residual risk bearing from decision management gets support from the fact that the major mechanisms for separating decision management and decision control are much the same across organizations.

The common central building blocks of the diffuse decision control systems of complex organizations of all types are formal decision hierarchies in which the decision initiatives of lower level agents are passed on to higher level agents, first for ratification and then for monitoring. Such decision hierarchies are found in large open corporations, large professional partnerships, large financial mutuals, and large nonprofits. Formal decision hierarchies are buttressed by less formal mutual monitoring systems that are a by-product of interaction that takes place to produce outputs and develop human capital.

The common apex of the decision control systems of organizations, large and small, in which decision agents do not bear a major share of the wealth effects of their decisions is a board of directors (trustees, managing partners, etc.) that ratifies and

monitors important decisions and chooses, dismisses, and rewards important decision agents. Such multiple-member boards make collusion between top-level decision management and control agents more difficult, and they are the mechanism that allows separation of the management and control of the organization’s most important decisions.

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