MANAGERIAL DECISIONS, THE INTERNAL ORGANIZATION STRUCTURE, AND AGENCY CONSIDERATIONS

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ABSTRACT

This paper deals with issues related to productive inefficiencies that occur at a divisional level of a multinational firm. More specifically, the paper introduces an additional consideration in the agency relationship, namely, the internal organization structure. It is argued that the internal organization structure imposes restrictions on the behavior of divisional managers resulting in financial decisions characterized by short-term orientation and risk aversion. These suboptimal financial decisions generate organizational costs, called managerial regulatory costs, which should be distinguished from agency-type costs.

Introduction

There is a convincing body of literature which demonstrates that the modern corporation is characterized by a separation of ownership from control. It is argued that this separation allows qualified managers to control the crucial resources of the corporation presumably for the benefit of the shareholders. However, possible conflicts of interest between shareholders and managers generate a suboptimal allocation of resources within the organization which could, in fact, result in a reduction of shareholders' wealth.

The contracting environment theory of agency (1) has examined the sources of productive inefficiencies that result from the manager's self-interest behavior. Relevant studies in this area have focused attention on two important elements of the manager’s contracting environment: the role of capital markets and the magnitude of agency costs. However, the literature examines agency problems without taking into consideration the internal organization structure of the modern corporation. Previous research has assumed that agency costs result exclusively from decisions made by top management in the absence of any internal constraints. Essentially, this analysis has isolated the managerial behavior from the internal corporate structure. It also has assumed that all possible conflicts of interest among members of the organization are resolved without costs to the organization. Therefore, this analysis of agency problems should be applied to only one type of firm: the traditional, unitary firm whose top manager directs his effort to one productive activity.

Although agency problems are important to a traditional firm, issues relevant to the nature and allocation of agency costs are more important to the multidivisional firm. These issues have not been examined for the multidivisional firm. Certainly, a multidivisional firm is more complex than a traditional firm both in terms of the magnitude of its diverse resources and the nature of internal administrative control of various corporate assets. Internal conflicts of interest in a multidivisional firm have an impact on resource allocation and financing decisions. Clearly, this form of internal organizational structure complicates the analysis of agency costs considerably. As Jensen and Meckling [11, p. 309] pointed out, "the agency problem.... exists in all organizations at
every level of management in all firms... Unfortunately, the analysis of these more general organizational issues is difficult because the nature of the contractual obligations and rights are much more varied. Nevertheless, (agency costs) exist and we believe that extensions of our analysis in these directions show promise of producing helpful insights..."

This paper augments the research on behavioral decision making in general, and the agency theory in particular, by introducing as an additional consideration the internal organizational structure. Emphasis is placed on the financial decisions of behavioral decision making. The research reported has a conceptual orientation, with emphasis on the descriptive aspects of managerial decisions made under the influence of an internal administrative structure. More specifically, the paper deals with issues of agency costs and financial decisions at the divisional level of a well-diversified corporation. Our analysis places emphasis on some costs associated with the internal structure of the firm and raises some questions about the real managerial benefits of diversification. An important element of our analysis is that it is made on the basis of comparison. That is, we compare the financial decision made by a divisional manager in a multidivisional firm with the financial decisions made by a manager under the same circumstances but in a unitary firm independent of an internal/hierarchical structure.

The remainder of our paper is organized as follows. Section II briefly reviews some theories dealing with the multidivisional structure of a firm which is characterized by decentralization and product line diversification. Section III describes agency costs from the point of view of the contracting environment agency theory. In addition, this section attempts to analyze the important elements that determine agency costs in a multidivisional firm. In section IV, we compare the financial decisions of a firm that operates with one independent unit with the financial decisions of a divisional unit of a multidivisional firm. We state some propositions regarding the divisional manager's risk attitudes, and we explore some trade-offs that explain the survival of the multidivisional structure. Section V concludes our discussion with an interpretation of our findings.

The Multidivisional Form of Organization: A Review

A Methodological Distinction

Coase [5] was the first to analyze issues of internal organization. Since his exploratory work, a segment of literature relevant to the theory of the firm has dealt with issues of the administrative structure of the modern corporation. The review of the literature reveals that there are two distinct methodologies which analyze issues of internal organization. (2)

The first methodology focuses on the parallel examination of the internal organization structure and the capital markets. Under this approach, markets and firms are regarded as alternative administrative structures. The traditional production function is modified in order to include the concept of the firm as a governance structure. This parallel treatment of markets and organizations provides some direct explanations for the widespread use of the multidivisional organizational form. According to this methodology, internal organizational structures are like markets, subject to disequilibrium and other forces that are similar to transactional frictions. Another similarity is that organizational failures, like market failures, are common.

The second methodology isolates the firm from its external environment and attempts to examine issues of incentives, labor relations, and productivity of the actors that comprise the firm. The emphasis is placed on the parts that comprise the firm's internal operating units. An important outcome that is derived from the application of this methodology is a partial explanation of why hierarchies are adopted by organizations. More specifically, among the reasons that explain the adoption of hierarchies are the following:

(1) Firms and hierarchies are needed to exploit the advantages of team work (Alchian and Demsetz [1]). Since the free-rider problem is always present, teams require central monitors to control and discipline potential shirkers. Although central monitors are themselves members of teams and consequently are subject to the same dysfunctional behavior, an adoption of an institutional structure will eliminate this problem. Indeed, according to Alchian and Demsetz, top managers are monitored by potential takeover raiders. (2) The nature of the employment relation forces the firm to adopt hierarchies (Simon [13], Williamson [18]). (3) Economies of scale associated with the production
and transmission of information is another reason that explains the internal organizational structure [19].

In the following section, we address the literature that examines the first methodology, the parallel relationship between markets, on one hand, and administrative organizations, on the other.

Some Issues of Internal Organization

Two major characteristics are associated with the modern corporation. First, the modern corporation is made up of many distinct operating units which, because of their internal structure, could operate as independent business enterprises. Second, a modern corporation employs a hierarchy of middle and top-salaried managers who supervise and coordinate the work of units. The managerial hierarchy is often completely separated from the ownership of the enterprise.

Chandler [4] examined the changing processes of production and distribution in the U.S.A. and the ways they have been managed. He provided documentation of the evolutionary process of corporate structure and described the transformation of the corporation from its early unitary form (U-Form) to its recent multidivisional structure (M-Form). In his work, Chandler [4] argues that the modern corporation has replaced the market mechanisms with respect to the coordination of the economic activities and the process of allocating scarce resources. Although the market place retains its function as "the generator of the demand for goods and services," its invisible role of allocating funds and coordinating cash flows was replaced by the "visible managerial hand."

There are negative and positive aspects with each of these organizational forms. A unitary form exploits economies of scale but it is subject to many market externalities. On the other hand, a divisional organization has the ability to internalize potential externalities, but at the same time duplicates functions unless the firm is very large. Possible externalities to the firm's environment include information processing costs, transaction costs, and product market uncertainties. More specifically, among others, the reason for the existence of the divisional form of organization is justified in one or more of the following:

1. Incomplete information regarding the state of the world. To reduce this form of informational asymmetry the firm could be involved directly in contracting with those agents that are better informed. However, there are opportunity costs associated with this arrangement. There are costs of negotiating contracts and uncertainties about the proprietary value of the information obtained. The existence of these information processing costs provides incentives to explore devices for circumventing the market. The firm can internalize this form of inefficiency through a divisional structure as long as the incremental improvement exceed the cost of using the market for this purpose.

2. Transaction costs economies. Williamson [16],[18] argues that transactions ought to be executed across markets. Due to transaction costs, however, the market mechanism cannot regulate discretionary decision making. Thus, the response to the relative inefficiencies that appear in the market place is the multidivisional corporation. This multidivisional form behaves as a small-scale capital market with more functional efficiency due to the internalization of transactions. Therefore, divisional decentralization favors least-cost behavior for large firms and so approximates profit maximization better than does the functional form of organization.

3. Uncertainty regarding the product market or technology. Firms respond in an adaptive manner to shifts in market demands by appropriately modifying their internal structures. Diversification in various product lines and vertical or horizontal integration are examples that point out the results of selecting an internal structure that serves market needs better. Therefore, a multidivisional structure promotes adaptiveness at the divisional and organizational levels.

The above discussion suggests that the adoption of a divisional form by organizations is a trade-off proposition which is based on a cost/benefit analysis. On the benefit side, we may include informational efficiencies, diversification, savings on coordination costs, and reduction in transaction costs. On the cost side, we consider possible costs that arise from the duplication of functions and losses in economies of scale. Also, the literature on hierarchies has established that with some "deadweight losses" there is a top coordinator who restricts the number of individuals with whom anyone in the organization should maintain contact.(3) Deadweight losses, in this sense, include
communication inefficiencies and monitoring errors that can be seen as "loss of control."

The pressure of capital and product markets on firms have accelerated the diffusion of the divisional organization form. In fact, multidivisional structures have been documented by many researchers, and both the industrial organization literature and the management literature have exhaustively examined the questions addressing the degree of decentralization, span of control, and other normative and behavioral factors affecting organizational design. In recent studies, Amour and Teece [2] and Teece [15] have documented a positive correlation between profitability and the multidivisional organization structure.

Agency Costs in a Multidivisional Firm

The multidivisional form represents a rational decomposition of the firm's affairs. There are two unique features assigned to the function of the top coordinator of a divisional firm. First, the top coordinator is responsible for strategically planning the allocation of resources among the divisions. Second, the same coordinator is responsible for monitoring and controlling the performance of the semi-autonomous divisions. Taking into account these considerations, an important question arises regarding the nature of the agency costs. In addition, there is a justifiable concern over the degree of agency costs of divisional structures and whether the degree is at a level that creates problems for the overall efficiency of the corporation.

Jensen and Meckling [11] analyzed agency costs in an owner-manager framework. Their major concern was the examination of the contracting environment and the monitoring and bonding activities of the firm. Agency costs were defined as the sum of the monitoring expenditures paid by the principal, the bonding costs paid by the agent, and the residual losses. Fama [6] imposed an ex-post settling up mechanism that disciplines managerial behavior, so that agency costs are not an important consideration. However, the assumption of an efficient labor market raises many questions regarding the relevance of the argument. Nevertheless, the Jensen and Meckling analysis was conducted at the level of top management with the intention of addressing issues of ownership and control. It was assumed that the top coordinator is an owner-manager with fixed wages, and outside shareholders were introduced into the analysis without any voting rights. Although Jensen and Meckling acknowledge the usefulness of an extension of their work at different organizational levels, the literature lacks evidence of such an extension.

From a different perspective, Fama and Jensen [7] argue that decisions in the modern organizations can be characterized as either operating or strategic and that the firm's decision making process consists of decision management and decision control. Decision management includes the initiation of proposals and the implementation of ratified decisions, and the decision control involves the monitoring of performance and the choice among the proposals presented. Fama and Jensen [8] suggest that if there is separation between decision management and ownership, the internal decision process is dominated by an organizational form that separates decision management from decision control. The result of this internal arrangement is that agency costs are insignificant. The diffuse nature of corporate residual claims allows the market and organizational mechanisms to control the agency problems. These mechanisms include:

(1) The stock market, which is an external monitoring device specializing in pricing common stocks. Stock prices are visible signals that summarize the quality of internal decisions. (2) The market for takeovers, which can replace inefficient decision control mechanisms, either by a direct offer to purchase stock (a tender offer) or by an appeal for shareholder votes for directors (a proxy fight). (3) The expert boards, which are established by the residual claimants in the process of delegating internal control to the agents. The boards monitor the internal agent market.

The above-mentioned mechanisms help to explain the reduction of agency costs in a large corporation. To the extent that there is a separation of decision management from decision control in a multidivisional firm, agency costs are not an important consideration (4). Despite the relevance of this argument, more research is needed to establish that agency costs are absent in a multidivisional firm, which is characterized by a diffuse ownership structure and a weak form of separation between decision management and decision control. Only a diffuse decision control system can limit the power of individual decision agents to expropriate the interests of residual claimants. It
is suggested that a diffused decision system leads to disaggregation of specific information among many internal agents. This is the result of both the delegation of decisions to different agents and the separation of decision management and control at various levels of the organization. Agency costs can be reduced by assigning the initiation and the implementation of decisions to those agents with valuable specialized knowledge.

In a divisional organization, there are two conditions that have pervasive consequences for the firm’s internal efficiency: bounded rationality and self-interest behavior by virtually all participants of the organization. Simon [13] and Williamson [18] analyzed these conditions and explained the nature of conflicts that arise when managerial responsibility is assigned to human factors. While it is useful to distinguish bounded rationality and self-interest behavior, Fama and Jensen collapse these two terms under the heading of “agency costs.” The decomposition of agency costs can be helpful in examining the intertemporal contracting problem in a divisional firm.

A Comparison

A Divisional Unit vs. An Independent Unit

We consider a multidivisional firm which operates with n-divisions. Each division operates independently from all others in different product line(s). We also assume that each division has achieved economies of scale in its functional area and that it is fully competitive with other units of similar product line(s) in the market. In other words, divisional units (hereafter D.U.) are fully compatible with competing independent units (I.U.). The only difference is the nature and degree of forces that restrict managerial behavior. Specifically, the manager of a D.U. has to reconcile the demands of the following constituencies:

(1) Capital market constituency: Lenders of capital want to have greater assurance that their wealth will be returned intact. Shareholder’s wealth is directly enhanced or diminished by actual transfers of funds under management control. Capital markets continuously evaluate managerial performance and accordingly reward or penalize dysfunctional behavior by providing or restricting sources of capital for future expansion.

(2) Product market constituency: Customers demand reliable products at the lowest price, and suppliers of factors of production are interested in finding customers willing to pay the highest sustainable prices. The demand for a competitive product is obvious.

(3) Internal organization constituency: Decisions made by a D.U. manager should be in line with the internal requirements, that is, rules that have been established by the top managers. Such rules may require, among other things, the integration of business units and the balancing of the product portfolio. The former implies allocation of funds in order to achieve growth and market share. The latter indicates potential cross-financing or cross-subsidization in order to implement the desirable diversification objectives.

A firm with an I.U. will have to reconcile the demands of the product market and capital market constituencies. Managers of an I.U. are evaluated by the product markets in the same way as are D.U. firms. In fact, the product market constituency will be best satisfied when the corporation’s profit margin provides the lowest acceptable return to investors. However, a D.U. firm differs from an I.U. firm with respect to internal structure and administrative regulations. The manager of a D.U. firm is evaluated not only on the basis of market signals indicating the competitiveness of the product, but also according to the extent of his conformity to and compliance with internal rules.

All other things being equal, managers of I.U. and D.U. firms face the same opportunity set. However, the existence of the internal organizational constituency affects a business unit’s decisions and alters managerial decision making at the divisional level in two respects. First, the introduction of a hierarchical-managerial structure drastically modifies the opportunity set facing the D.U. manager. Secondly, the evaluation criteria applied and the maximization decision process employed by the D.U. manager are generally different from those used by an I.U. manager. For these reasons we would expect that financial decisions made by a D.U. manager would be different from those made by an I.U. manager. Both the internal managerial environment and the capital market restrict the possible range of actions that can be taken by a D.U. manager. Thus, we can state the following propositions:

Proposition I: A D.U. manager has the tendency
to adopt financial policies with shorter horizons.

**Discussion:**

The performance of D.U. manager is based on a control system which is financial in nature. The top coordinator, having "bounded rationality" and incomplete information concerning the operating problems of the business units, will seek to adopt control systems which are standardized across divisions. By accepting standardized control procedures, the top coordinator of a multidivisional corporation can extract that portion of information he needs in order to review divisional performance.

A D.U. manager will have more information than the top coordinator about the opportunity set, expected returns, and other variables which are crucial to the financial decisions for the division. Although he knows the true probability distribution of a project's cash flow, it is difficult to communicate this information to the top coordinator with credibility. Problems associated with informational impactedness (Williamson [16],[17]) further complicate the transmission of information(5). In addition, the D.U. manager that he is being judged on the basis of uniform standards that do not allow for explanations of unexpected, below average performance. Therefore, he is forced to take actions having short-term results that will generate both good news in the capital and product market constituencies and at the same time satisfy the internal managerial rules.

**Proposition II:** The D.U. manager tends to be risk-averse. All other things being equal, he will prefer to accept projects that are less risky than others.

**Discussion:**

It is possible for a risky project to generate negative returns. It is very hard for the D.U. manager to communicate in a credible and verifiable way the "correct" ex-ante probability distribution of a risky investment. On an ex-post basis, the top coordinator might interpret negative results as being a sign of managerial inability. Moreover, the capital markets will react unfavorably to the announcement of a failure. Therefore, the D.U. manager, charged by all constituencies with the full blame for any failure and given both his inability to communicate accurately the risk-reward tradeoffs of an investment and the problems of information impactedness, will be forced to adopt policies that exhibit risk aversion.

In extreme cases, proposition II suggests the following conclusion: well-diversified firms of the type that we have described, despite their ability to bear business risk, behave as risk-averse institutions. Therefore, the benefits from diversification come from a cost/benefit analysis. The costs include losses due to an unwillingness to adopt risky policies. Proposition II also contradicts Jensen and Meckling's results. Although in a different setting, Jensen and Meckling (1976) claim that the owner-manager will adopt risky projects in an attempt to exploit outsider's wealth. However, as was discussed above, it is our contention that internal managerial regulation will prevent this possibility.

The previous analysis indicates that the administrative structure of a multidivisional firm generates substantial organizational costs. We name these costs managerial regulatory costs to distinguish them from the agency costs of the Jensen and Meckling type. Managerial regulatory costs refer to the aggregation of divisional losses due to internal administrative regulation. These costs are the result of the behavior of divisional managers who respond to market and organizational forces. In this sense, deadweight losses occur mainly because of the indirect constraints placed on divisional managers by the internal organizational structure. On the other hand, agency costs represents losses which result from the self-interest behavior of managers who pursue personal goals which are generally different from the organizational goals. Monitoring, bonding, and residual losses reflect suboptimal managerial decisions at the top of the organization. Managerial regulatory costs are the manifestation of the imperfections of the hierarchical structure of the modern corporation.

**Exploring Some Trade-offs**

Looking at the consequences of managerial/internal regulation, we can conclude that there are some plausible conditions which force the firm to operate with internal costs. While this is not necessarily true for all companies, some negative forces are evidently present and might prevent the firm from achieving the full benefits of diversification. However, abundant evidence indicates that the multidivisional structure is a common organi-
zational form. In order to explain this regularity, we should consider not only the internal managerial costs, but also the benefits from operating synergies and diversification.

Some economic reasons that justify the existence of the multidivisional firm have been presented. Here, we provide a different reason which is based on managerial synergies. Jensen and Ruback [10] and Jensen [9] argue that managers are self-interested individuals, but the environment gives them relatively little freedom to satisfy their interest. Among other things, the market for corporate control forces the top manager to be quite efficient in managing corporate resources. Certainly, there is informational asymmetry between the top manager and D.U. managers regarding the general administration of the corporate assets. The behavior of the D.U. manager towards risk is a reflection of the fact that the top manager does not want to follow policies that will jeopardize his ability to compete effectively for the right to manage the firm's corporate resources.

As stated above, there is a cost side and a benefit side of the analysis of divisional financial decisions. A multidivisional organization represents a balance between the marginal benefits and the marginal costs associated with additional divisionalization. The cost side includes the managerial regulatory costs which are the result of the substitution of the market disciplinary forces with an imperfect administrative structure. On the benefit side, we consider the arguments presented in section II(b). Obviously, a multidivisional organization has survival value only when marginal benefits exceed marginal costs.

Conclusions

The focus of this paper has been on the further development of the agency theory. It is suggested that the integration of the agency literature with the concepts of internal organization provides an operational framework within which observable managerial behavior can be explained under a set of realistic assumptions.

We have addressed the question of how financial decisions differ depending on whether the manager is responsible for the performance of a divisional firm or the performance of an autonomous unit (outside of the influence of the multidivisional firm). This question was examined in section IV of this paper using a conceptual framework.

The central hypothesis of our analysis concerns the nature of financial decisions made by divisional managers. It was suggested that D.U. managers tend to select financial policies with short-term horizons. In addition, we provided arguments that support the hypothesis that D.U. managers prefer to select less risky projects. The major cause of this behavior was explained on the basis of the internal regulatory environment that appears in multidivisional firms. In our framework, we identified some deadweight losses (managerial regulatory costs) which are a reflection of the fact that a divisional manager operates under dual constraints: the internal administrative structure and market disciplinary forces. It was advocated that, despite the costs that result from the internal organizational structure, the multidivisional organizational form has a survival value since the marginal benefits exceed the marginal costs.

We have dealt with issues that link the internal organization with the principal-agent model. Still an unsettled issue is the pervasiveness of the Jensen & Meckling type agency costs in multidivisional structures. Even if we accept the thesis developed by Fama and Jensen [7] regarding the elimination of the agency costs in a multidivisional firm, this paper has shown that there are some other potential costs that prevent the firm from operating without any internal friction. It is our belief that managerial regulatory costs model provides a rich environment within which investment and financing decisions can be examined in a practical manner. Indeed, the propositions developed in this essay have some practical implications.

Footnotes

1. Recent developments in the agency literature have focused attention on two separate features of the principal-agent relationship: the risk-sharing arrangements and the contracting environment of the principal and agent. Therefore, a simple taxonomy of all the papers in the area of agency is possible. More specifically, the risk-sharing agency literature deals with the examination of the preferences and risk-sharing arrangements of the principal and the agent. This literature has mathematical orientation. The contracting environment theory of agency investigates the contracting environment surrounding the principal and agent, as well as the nature of the monitoring activities of the firm’s contracts. This segment of the literature consists of conceptual papers (Jensen and Meckling
2. This classification is neither exhaustive nor refined. Nevertheless, it offers considerable explanatory power in dealing with the main topics discussed in the literature on internal administrative structure.
3. This restriction is called span of control and the number of stages into which the control system is subdivided, is referred to as the length of a chain of command i.e., the levels of the hierarchy.
4. This is an indirect implication of the Fama and Jensen [8] framework.
5. Information impactedness is relevant to asymmetric information among agents. It exists when the true underlying circumstances relevant to a decision are known to one party but cannot be costlessly communicated to other parties. Williamson [18] distinguishes information impactedness between buyers and sellers and specifies conditions for ex-post and ex-ante information impactedness.

References


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