The Vertical Integration Strategies Approach for Organizational Risk Reduction

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Abstract
The vertical integration decision poses strategic challenges for a firm's marketing channels' decision prerogatives which drive its business strategy. This paper explicates those putative benefits of vertical integration as organizational strategy adopted by firms for alleviating respective transaction costs and optimizing functional governances of the business system in the enterprise. The discourse concentrates on the dynamics of the varied vertical integration mechanisms like joint ventures, mergers, and contracting agreements practiced by firms to serve as risk reduction strategies in the business exchange process.

Keywords: vertical integration, transaction costs, joint ventures, mergers, contracting agreements.

I. INTRODUCTION

Vertical integration has been an important research topic in organization studies, widely dealt with by academicians and practitioners. Whether or not to vertically integrate poses a strategic decision for a firm from marketing channels' prerogatives which drive its business strategy (Stern and El-Ansary, 1988); as these initiatives can, from viewpoints of industrial economics and business exchange, have pronounced as well as long-term orientations and implications for the enterprise. The basis for vertical integration stems from a strongly held belief that transactions outside the firm (meaning those in the market) cost far greater than those within the firm. The basic notion of transaction cost economics is that the properties of a transaction determine what constitute the efficient governance structure (market, hierarchy, or alliance) (Reve, 1990). In vertically integrated firms, functions which were previously being outsourced would tend to be brought in-house. This means that the firm now has to undertake the responsibility of performing all its upstream and downstream processes in equally efficient a manner as it was being previously done, as the long term perspective is on information accuracy, cost saving, and organizational control. The premise of this research paper is based on how the firm can bring the desired business functions, processes, and facets of control within its confines by utilizing joint ventures, mergers, and/or contracting agreements as potential vertical integration strategies. These will be the focus areas of explanation in this paper as the vertical integration mechanisms which can be adopted by firms for alleviating respective connected transaction costs and optimizing functional governances of the business system in the enterprise. This paper concentrates on those putative benefits of vertical integration as organizational strategy for risk reduction, along with the dynamics of its varied mechanisms like joint ventures, mergers, and contracting agreements which serve as risk reduction tools in the business exchange process.

II. LITERATURE REVIEW, WITH PERTINENT THEORY AND DISCOURSE

This main section of the paper encompasses vertical integration aspects as dealt with in background literature streams, with connected discourse embedded in the fabric of the explanations and descriptions.

A. Vertical Integration as Organizational Strategy

Vertical integration manifests business chain internalization activities as the substitution of internal organization for market exchange, wherein the reason attributed to is mainly the transactional failure of the market in operations for intermediate goods, and also to the transaction costs which arise when using the market mechanism (Williamson, 1971). The implication is that institutional form and internal organization matter when it comes to strategy (Reve, 1990). Transaction costs arise from four main transactional difficulties: bounded rationality (cognitive and perceptual limitations on the part of the actors), opportunism (self-interest seeking with guile), small numbers bargaining (e.g., oligopoly conditions), and information impactedness (asymmetrical distribution of information among the exchange parties) (Williamson, 1981). These transactional difficulties and associated costs increase when transactions are characterized by: asset specificity (transactions requiring investments which are specific to the requirements of a particular exchange relationship), uncertainty

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(ambiguity as to transaction definition and performance), infrequency (transactions which are seldom undertaken) (Williamson, 1981). Under competitive conditions organizations will seek governance structures that economize on transaction costs. Hence, hierarchy (the firm) will prevail when asset specificity and uncertainty are high (Reidel, Lewis and Pawar, 1992). This leads the firm to adopt vertical integration whereby many of these transaction costs can be greatly attenuated. The advantage of integration lie not in that technological (flow process) economies are unavailable to nonintegrated firms, but that integration reconciles differences, harmonizes mutual interests and paves for decision processes to be utilized. The advantages of internalization reside in the facts that the firm's ex post access to the relevant data is superior, it attenuates the incentives to exploit uncertainty opportunistically, and the control machinery that the firm is able to activate is more selective. In a production scenario, if there is a high degree of interdependence among successive stages of production, and if occasions for adaptation are unpredictable yet common, coordinated responses may be difficult to secure if the separate stages are operated independently. With vertical integration, a firm can rid itself of internal sub-parts' taxes, quotas, tariffs, etc. It enjoys structural advantages like free availability and exchange of information, and better inter-personal interactions for smoother communication in complex matters. The incentives and interests to work toward a common goal free employees of opportunistic behavior. Besides, the firm is able to have tighter control over its intra-firm activities, and possess better conflict resolution abilities, along with its own reward and reprimand policies.

Vertical integration provides more systematic coordination between and better control of respective upstream and downstream functions. There is timely exchange of information regarding intermediate goods, raw materials, components and work-in-process inventory (Norton and Sashi, 2004). Increased coordination from better communication (Arrow, 1975; Perry 1984) and supply assurances (Carlton, 1979; Buzzell, 1983; Green, 1986) constitute elements of organized factor endowments positively driving firm strategy and structure (Porter, 1990), thereby posing vital benefits of vertical integration. With timely information regarding costs and supply patterns disseminating through the business chain, a vertically integrated enterprise is better able to process the price information and employ an optimal mix of inputs (Norton and Sashi, 2004). If firms do not possess superior bargaining power for controlling costs so as to drive profitable returns from revenue and information over other members in their channel, they are better off vertically integrating (Harrigan, 1983). If market conditions are not stable, and risk of outsourcing is high, firms prefer to bring those functions in-house. Besides cost, nature of the functions performed, and quantity of production is also to be considered when engaging in vertical integration (Stigler, 1951). As industries mature, costs for suppliers increase; hence it suits better to absorb activities in-house, and vertically integrate. Vertical integration optimizes the capital and knowledge necessary to conduct operations within the firm, rather than rely on externalities in channels on supply and demand side. Vertical Integration creates value in that it is essentially a way of acquiring predictive information regarding upstream and downstream process activities (Arrow, 1975). It provides the firm with information flows to facilitate supply of raw materials, procurement relationships, outputs and pricing structures, sales planning and demand forecasting, proper processes and operations planning, and work/resources allocations.

However, the decision on how to integrate business units is often complicated and each form of business organization from wholly owed subsidiaries to joint ventures has its own associated costs and risks. The potential transaction failures identified in the streams of business literature typically relate to transactions involving procurement, joint production, or distribution. As such, the transactions are properly characterized as vertical linkages of a central manufacturing firm (Butler and Baysinger, 1983). The most obvious strategy or governance structure for reducing the transactions costs of these market-mediated linkages, i.e., reducing the probability of transaction failures, is vertical ownership integration of the various separable stages in the procurement-production-distribution chain. This integration converts suppliers and customers, whose relationship had been market-mediated, into divisions of the organization. These previously separate levels of production are now controlled through administrative command of the common owner (Butler and Baysinger, 1983). As the extent of a firm's vertical integration increases, through ownership, the firm's reliance on market-mediated exchange decreases, and the transaction costs associated with using the market correspondingly decrease. Opportunism between divisions, for example, will be irrational because an organization cannot logically exploit itself (Butler and Baysinger, 1983).

The notion that two firms may become vertically integrated while continuing to exist as legally separate and autonomous entities is a significant departure from traditional notions of vertical integration. Yet, under the transaction-cost approach, all intermediate strategies that suppress the market price mechanism can be viewed as a form of vertical integration (Butler and Baysinger, 1983). Industrial organization economists have come to recognize the generic nature of intermediate vertical strategies and outright vertical ownership, whereby vertical economies can often be achieved by long-term contracts, adjacent location, or other devices between separate companies, as well as by formal ownership and functional integration (Butler and Baysinger, 1983). The most basic way to reduce these costs is to avoid using markets by vertically integrating through ownership. These vertical-integration cost savings, however, are not without cost. As vertical ownership integration increases, the firm incurs a number of diseconomies associated with a large-scale, complex organization. Self-interested employees and even entire divisions may pursue goals which are not necessarily consistent with the maximization of the firm's profits. The major drawback of this market-suppressing solution is that it may lead to a net increase in costs due to increased administrative costs. Therefore, a firm can choose intermediate exchange strategies like contracting agreements, mergers, and joint ventures which minimize the sum of transaction and bureaucratic costs, while optimizing on control dynamics of the enterprise.

B. Strategy of Contracting Agreements for Vertical Integration

Reducing transactional costs can be achieved through contract management wherein economic literature has postulated the idea of the firm operating as a nexus of contracts (Dimatteo and Larry, 2010). Thereby the internalities and externalities of the business environment pose the multitude of complex relationships (i.e., contracts) between the legal fiction (the firm) and the owners of labor, material and capital inputs and the consumers of output. To this accord, a significant advantage of relational contracting as compared to the classical and neoclassical modes of contracting is that it not only provides for the sharing of risks but also a possible reduction of risk (Butler and Baysinger, 1983). This reduction is possible because the long-term nature of relational contracts reduces the incentives of economic agents to engage in the types of opportunistic behavior that lead, in market-mediated discrete transactions, to transaction failures. In this regard, it is important to note that relational contracting involves not only inter-firm but also intra-firm relationships. This serves to emphasize the point that relational notions supersede the simple market-firm dichotomy that is the basis of the classical and neoclassical systems. Thus, a relational contract system attempts to save contractual relationships that are in trouble by going beyond the four corners of the original contract and looking to the overall context of the whole relationship (Butler and Baysinger, 1983). When the marginal cost of overseeing a contract with a third party exceeds the cost of firms producing something in-house, integration will result. As a practical matter, however, parties do enter relational contracts. While economic organization is a tool for economizing on transaction costs, the creation of internal organization through the establishment of firms entails other transaction costs (McInerney, 2004). As per the basic industrial economics postulation for 'nature of the firm', performing some activities within a firm might reduce the transaction costs of using external market pricing mechanisms (Coase, 1937). Forming an agreement costs money and represents a significant reoccurring transaction cost; negotiating and drafting detailed contracts entails expenses when the parties need to include clauses that govern arcane contingencies (Geis, 2007). A potential benefit of centralized firm control is the reduction of price discovery, negotiation, and contracting costs arising under market transactions. Moving economic activity into a firm can help reduce some transaction costs by replacing them with ex post governance mechanisms (Geis, 2007). Instead of bothering to write a detailed contract, a firm maintains enough discretion over the activity to make the optimal decision later - if and when a future uncertainty emerges (Geis, 2007). Thus, depending on the exact nature of the economic activity, and the likely complexity of transaction costs, a firm will choose between markets and firm 'hierarchies' to secure the input. A problem in contracting away risk is the ability to ameliorate agency costs. An agency relationship arises as a contract between two or more persons under which one person (the principal) engages another person (the agent) to perform some service on his or her behalf, which involves delegating some decision-making authority to the agent (McInerney, 2004). The problem of opportunism or agency costs arises from the fact that when a principal contracts with an agent to perform a certain service, the principal lacks the ability to monitor the agent fully to oversee performance of that service. Because of principals' inability to monitor agents' behavior fully or draft contracts specific enough to bind agents to perform in a particular manner, principal-agent theory seeks to identify tools to reduce the costs of such dilemma (McInerney, 2004).

C. Strategy of Organizational Mergers for Vertical Integration

Structuring the transaction as a merger or an acquisition can propagate ways of reducing transactional and agency risk when acquiring the business or its functions externally and incorporating those within the confines of a new firm. Some of these productive methods include mergers where the subsidiary is fully controlled by the parent, mergers where the parents' corporation owns a majority of the subsidiary, mergers where the subsidiary is entirely eliminated, and mergers where all the assets of the target are purchased by the parent. When eliminating the existence of the subsidiary, with its full merger into the parent firm, this method has the desired affect of eliminating the need to contracting deal with the subsidiary, its shareholders, and its board of directors as an ongoing separate entity. In this manner it reduces the ongoing agency costs of competing interest and opportunism. In addition on going transaction costs associated with up keep of records and legal costs for the subsidiaries board of directors and shareholders are eliminated. The major advantage of structuring the firm into a wholly owned subsidiary is to take managerial control of the employees, equipment and quality control mechanisms, while building collaborative relationship which should reduce intra-firm opportunism costs. In situations where there is at least ninety percent ownership of the subsidiary there is little need to worry about minority shareholders blocking the parent's corporate plans as they can simply be eliminated in a short form merger without the consent of the targets Board of Directors or shareholders (Cheeseman, 2012). A vertically integrated merger can occur where the parent has majority ownership of the subsidiary but there also is a substantial minority stockholder percentage. This situation can create agency and transactional costs for the vertically integrated firm because the minority shareholders can interrupt the corporate planning of the parent firm. Many courts have held that the majority shareholders owe a fiduciary responsibility to the minority shareholders; for instance, Coggins versus New England Patriots Football Club, Inc, 406 Mass. 666, 550 N.E.2d 141, 1990. This essentially means that the parent corporation would need the minority shareholders' approval in many situations. If the parent corporation wanted to merge into another corporation, or substantially change its business model in a transaction that would require either the Board of Director or Shareholder approval. A vertically integrated merger can occur where, rather than acquire the target corporation as an ongoing enterprise the assets that are needed are simply purchased. While this eliminates the transaction costs associated with the ongoing maintenance of the subsidiary's records and the agency costs associated with maintaining the relationship with the subsidiary, it also has the large drawback of not providing the technical skill and knowledge of the employees. A firm would usually pursue this form of organization when they already have the technical skill within their current confines to produce the service or product. One can separately hire or contract with the target corporations employees. However, unless such skill is located within a selected group of employees it is unlikely that the corporation will see any reduction in transaction costs.

D. Strategy of Joint Ventures for Vertical Integration

Reducing risk through joint ventures is another powerful mechanism for vertically integrating firms. The typical make-or-buy decision has been analyzed from the standpoint of transaction costs, industrial organization economics, and flexibility (Salbu and Brahm, 1992). However, the 'make-or-buy' dichotomy is sometimes inadequate to differentially examine production decisions along the value chain. The option to enter joint ventures that serve either to supply raw materials or to purchase them is a hybrid option. Supply options include contract arrangements with separate entities for manufacturing or assembly, contract arrangements with a subsidiary or joint venture, licensing agreements, and functional absorption. The joint venture option to that effect is a hybrid, or middle-ground choice, because it operates as a compromise in terms of the flexibility versus coordination. A joint venture is an arrangement in which two or more business entities combine their resources to pursue a single project or transaction (Cheeseman, 2012). Unless otherwise agreed, both firms involved in the joint venture have equal rights to manage the joint venture (Cheeseman, 2012). This maintains the level of opportunism and agency costs associated with other types of outsourcing. However, the joint venture has the benefit of sharing capital assets. As the coherent goal-seeking working relationships progress with symbiotic initiatives for sharing of risks and rewards, such synergy often manifests into forms of strategic alliances between the involved partnerships in the venture. Each joint venture is also protected legal from opportunism and agency costs by the legal protections of the duty of loyalty and the duty of care. The duty of loyalty results in severe legal sanctions against the perpetrator of opportunism by punishing such opportunism as self dealing, usurping a business opportunity, and wasting corporate assets (Salbu and Brahm, 1992). The joint venture can be set up as a partnership; in such form of organization the joint ventures are share holders of the joint venture corporation. In a joint venture partnership each joint venture is liable for the debts and obligations of the other joint venture, through drafting and enforcement of agreements which discourage free riding, thereby minimizing the risk of opportunism related costs (Salbu and Brahm, 1992). Contracting with a joint venture is more of a commitment than contracting with an outside entity. It enhances control over the joint venture supplier while potentially reducing strategic flexibility over the option to select an alternative source of supply. Joint ventures are often used to organize upstream productive activities in order to bypass inefficient markets for intermediate inputs (Salbu and Brahm, 1992). This explanation of joint venture activity has two components. The first restates arguments supporting advantages of hierarchy over markets under certain identifiable types of failures in markets for intermediate goods (Salbu and Brahm, 1992). The second and equally important part of the argument explains why a shared equity joint venture, rather than sole ownership through vertical integration, is the appropriate response to market failure, in that shared equity will be preferred when the scale economies of production at a downstream stage are significantly different from the scale economies of production at the immediately adjacent upstream stage. When a downstream producer cannot fully utilize the higher capacity of scale-efficient operations at the previous stage, the producer will prefer to share ownership with another buyer of the intermediate goods (Salbu and Brahm, 1992).

A vertical joint venture is best used to provide its parents with preferential access to its outputs while restraining the pricing of those outputs to rates below the external market. In effect, the partners can attempt to subsidize their own products' price competition with an artificial advantage that non-integrated competitors would be unable to tap (Salbu and Brahm, 1992). To utilize this stratagem the joint venture's dependence upon external sources for its investment capital must be low, since the venture's low profits will not attract capital at favorable rates. Parents can usually address this problem by supplying the venture's capital from their own resources (Salbu and Brahm, 1992). Another risk of joint ventures is the acquitting of trade secrets or technology by the joint venture partner. Joint venture participants can take several steps, both contractual and extra-contractual, to mitigate the risk of a partner's appropriation of technological capabilities (Salbu and Brahm, 1992). Extra-contractual precautions include careful partner selection including scrutiny of potential partners' collaborative history as well as their probable incentives for appropriation regardless of stated intentions or objectives, restriction of access especially to interdependent technological capabilities within the parent organization about which a partner may seek to learn, and implementation of appropriate human resource tactics designed to help ensure satisfactory progress in the evolution of the collaboration (Salbu and Brahm, 1992).

III. IMPLICATIONS AND FUTURE RESEARCH

Vertical Integration as an organizational strategy itself, although practiced as the major route to alleviate transactions costs in the business exchange process, is clearly not free of its own inherent and projected costs and risks. The market-mitigating mechanism of vertical integration manifested via the renowned strategies like joint ventures, mergers, and contracting agreements practiced by firms, as explained in detail within this research paper, poses its own forms of risks and costs as well. This paper's discourse has attempted to compound the varied integration elements into a cohesive initiative propagating the putative benefits of these strategies. Future research endeavor in this light will work toward drawing out the risk-inducing and cost-resulting components of each of these vertical integration strategies, in an attempt to develop a comprehensive nature of costs-benefits type framework, along with posited conjectures to point toward firms' criteria for optimizing their marketing channels and business decision-making prerogatives.

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