STRATEGIC GOVERNANCE OF THE ALLIANCE SPECTRUM

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Abstract

This paper applies the principles of transaction cost economics to the strategic management of firms' external alliances. External alliances span a spectrum from simple transactional relationships to outright control. Each of these alliance types requires a different degree of monetary and managerial investment. The paper shows that the optimal form of alliance aligns the governance capabilities of firm management with the attributes of the alliance relationship. We regard its approach as particularly relevant for cross-border alliances, especially when the legal and regulatory systems differ between the two countries.

Keywords: Governance, transactions economics, alliances, alignment

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I. Introduction

Corporate organization can take many forms, and fads may dictate that certain forms dominate in different periods. The merger boom of the mid- to late-20th century gave way to a more focused management approach in the 1990's, a movement which is in turn giving way to an increasing dependence on outsourcing. Recently, outsourcing has come to cover a spectrum of activities ranging from payroll through advertising and project management to research and development.

Mergers are typically motivated by a search for synergies; that is, savings sought from realizing economies of scale and/or economies of scope.[1] The convergence mergers of the late 1990's, where technology, telecommunications and media companies were combined to take best advantage of the emerging "new economy" are classic examples. However, they were not all successful: a number failed because the span of control became too large for one management team. That is, X-inefficiencies can arise and management may be unable to eliminate them all. (AOL-Time Warner was one of the high profile dismal failures.) The difficulties experienced in attempting to control very large enterprises led many conglomerates to disaggregate into a number of discrete entities in attempts to "unlock value". In the same way that closed-end investment funds can, and often do, trade at a discount to underlying market value, share prices of conglomerates can be less than the value of the component enterprises. Once the parts are traded separately, the market will sometimes re-price share issues upward to reflect a stronger management focus on separate activities.

The next step in such a refocusing phase is for management to focus on what it believes to be the firm's "core functions," in attempts to exploit their "core competencies". For example, General Motors no longer makes auto parts, and Levi Strauss no longer makes jeans. Instead, extra-firm alliances are used to carry out these and similar activities. At the same time, of course, the new alliances introduce new management challenges. These challenges themselves range across a spectrum, because the nature of an alliance defines the type of control that firm managers must exercise to be successful. It also leads to managers having less understanding of the "non-core" functions represented by the alliance arrangement.

This paper argues that optimal forms of alliances are those where management capabilities, which range across one spectrum, are aligned with the attributes of the alliance's activities, which range across another. That is, a successful alliance requires an appropriate matching of selections from the two spectra – a supply of governance services of a given type will be most successful if it is matched against a demand for governance services of a similar type. Our discussion is organized as follows. Section II of the paper describes the nature of and types of alliances. Section III introduces the principles of transactions cost economics. In Section IV, we

[1] Tax considerations and under-valuation of one or both of the firms' stocks are also motivating, but more ephemeral, factors.

apply these principles to the alliance spectrum to determine the nature of optimal alliances. Section V concludes.

II. The Nature of Alliances

If the classical firm needed capability, it would build it or buy it. Today, the focussed firm uses alliances in searching to acquire new capabilities. Alliances are particularly attractive to technology companies, where the speed of technological change, product complexity, and the high cost of product development imply that acquiring certain competencies is more likely to prove cost-effective than is developing them internally. For the incipient internet industry, cross-selling, shared marketing, and shared distribution channels are common features. Alliances can take many forms. The spectrum of enterprise organization extends all the way from simple purchase orders to acquisition. Figure 1 (based on Harbison and Pekar, 1998, p. 16) shows this spectrum schematically. Transactional alliances (such as collaborative marketing and distribution deals) are relatively ephemeral and have no ownership linkages. Outsourcing is longer term and contractual, but still with no ownership linkages. R&D partnerships are longer term and tend to have joint ownership characteristics. Strategic alliances typically last at least 10 years, with linkages based on equity or on shared capabilities. Joint ventures entail substantial contributions of resources by all parties. Acquisitions form the limit to the spectrum, where the other party is formally taken over. Each of these arrangements is reached in order to combine appropriately a demand for governance services of a given type with a supply of governance services of that type. Different organizational arrangements present different demands for governance services, and managements offer specialized capabilities with differential responsiveness to the different forms of demand. Figure 1 displays these matching arrangements schematically. Less formal relationships such as transactional alliances generally last less than five years and are contract driven. The parties remain at arm's length, and there is no sharing of control or of critical capabilities. As relationships become more formalized (moving to the right in Figure 1), the commitment becomes longer term, linkages are based on equity or on shared capabilities, and strategy is shared (Harbison and Pekar, 1998). The motives for more formal, longer term alliances tend to be risk sharing, economies of scale, market segment access, technology access, geographic access, funding constraints, and skills leverage. While each of these alliances provides tangible benefits, they also induce costs, in particular management costs for purposes of supplying governance services, which mainly involve monitoring and controlling the alliance relationship. These costs increase as the reader moves to the right in Figure 1. Managers would not spend much time worrying about an outsourced transaction such as a payroll function (as long as everybody was paid on time and in the right amount) but they would concern themselves with the qualitative and difficult-to-quantify features of, say, a shared R&D partnership. Managers need both the time and the capabilities to govern these more complex forms of relationship.

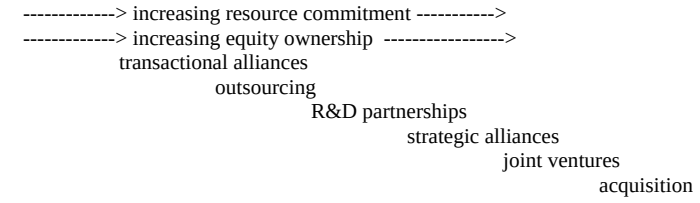

Figure 1. The Alliance Spectrum

For analytical purposes the alliance spectrum can be described in terms of different combinations of a few basic attributes, the most important of which are the nature of the assets being financed (asset liquidity), the informational conditions under which the deal is arranged and governed, and the newness of the particular transaction type. Assets can range from being highly liquid and easily valued to highly illiquid and difficult to value. Informational conditions can be characterized in polar terms as presenting either risk or uncertainty. (There are also gradations of both categories – degrees of risk, degrees of uncertainty - but for conciseness we do not consider these complications here.) A risky deal can usually be documented in standardized terms, while a deal under uncertainty may have to be specially negotiated according to a set of agreed principles rather than a set of detailed rules. As deals range from relatively risky to relatively uncertain, the degree to which they can satisfactorily be described using a complete

contract decreases. A risky deal can be expressed using a (relatively) complete contract, while an uncertain deal is usually governed by an incomplete contract. The newness of the transaction type presents demands for governance capabilities that may or may not be easy to muster.

Assuming they regard themselves as possessing the appropriate capabilities, the challenge for managers is to decide on the form of alliance to engage in. An optimal form alliance will be that which best matches management capabilities with the demands for governance presented by the transactions conducted within the alliance. That optimum is found using the principles of transactions cost economics, which are discussed in the next section.

III. The Principles of Transaction Cost Economics

Transaction cost economics, also called transactions economics, began with Coase (1937) and continued with the work of Oliver Williamson (1975). Williamson argues that organizations achieve cost-effective governance of transactions through aligning the capabilities of managers with the attributes of the tasks they manage. Williamson uses the individual transaction (which we term the "deal") as his basic unit of analysis. He postulates that agents (both managers and managed) are opportunistic and that their abilities to achieve opportunistic ends are limited by their bounded rationality, the latter arising from the agents' conceptual and computational limitations. Williamson then describes the purpose of economic organization as aimed at "craft[ing] governance structures that economize on bounded rationality while simultaneously safeguarding the transactions in question against the hazards of opportunism". The key considerations in aligning governance capabilities with transaction attributes are asset specificity (the degree to which assets can be reallocated to other economic uses, which we here term asset liquidity), the degree of risk or uncertainty surrounding an activity's outcomes, and the extent to which tasks are novel. More intensive governance capabilities are demanded and must therefore be supplied if the enterprise is to be successful, if decision criteria are primarily "discretion based" rather than "rules based." Mustering and administering enhanced governance capabilities means incurring additional costs. An optimal organization musters an appropriate level of governance capability for the tasks at hand, and does so at least cost.

Asset liquidity

Asset liquidity makes a considerable difference as to whether a deal can be structured more nearly like a complete rather than an incomplete contract. If the underlying assets can readily be traded in secondary markets, alliance partners have two potential sources of recovering their investment. They will recoup their investment with interest if the project being financed turns out well. In a worst-case situation where project profits do not materialize, liquid assets can be sold to recover at least some of the funds initially put up. But if the assets are project specific and therefore illiquid, alliance partners can only expect to recover a return on their investment by working to ensure that the project will operate profitably.

Risk versus uncertainty

A second important deal attribute is whether its payoffs can be described quantitatively using a probability distribution. If the returns to a deal can usefully be described in probabilistic terms, the deal can be called risky. In an uncertain type of deal, it is not usually possible to quantify those factors critical to profitability; in some cases it may not even be possible to identify the critical factors. Uncertainty means that an agent does not regard himself as understanding a deal well. Deals most likely to present uncertainty are those involving a strategic change in business operations, or those financing a technological innovation. A start-up investment in a new, high technology business offers an example of a deal under uncertainty. It is often observed that such projects are particularly difficult to finance, mainly because agents find it difficult to make quantitative analyses of their likely payoffs. First, neither clients nor financiers may be able to determine a proposed deal's key profitability features. Second, the possible reactions of competitors to carrying out the project may be difficult to predict. Despite these difficulties, deals presenting uncertainties are the essence of both business and financial innovation.

Informational differences

The partners to an alliance do not always have the same deal information. A deal's informational attributes can be classified according to whether agents perceive the risks or uncertainties symmetrically (i.e., they share the same view), or whether they perceive the risks or uncertainties differently. The differences can arise either because the two parties do not have access to the same data, or because they interpret the same data differently. Differences in interpretation can stem from differing levels of competence, or because differing experiences color the parties' interpretations. In addition to these views of the deal itself, agents may form views of how counterparties regard the deal, complicating the picture further. Whenever informational asymmetries are perceived to have economically important consequences, a manager will attempt to obtain more information, at least if the

information's value is expected to be greater than the cost of gathering it. Cost-benefit analysis of information acquisition can be a challenging task under risk, and is even more so under uncertainty. In the latter case, managers' bounded rationality may imply that they do not know how to frame relevant questions regarding any benefits to gathering more information. Even in routine public market transactions, not all parties obtain the same information at the same time. However, informational differences usually occur in deals that do not receive intensive study by a number of agents. They may occur either because the deals are not worth studying, or because they are so novel that little information can currently be obtained at reasonable cost. As a result, informational differences can sometimes impede transactions, as might be the case if a firm is changing the nature of its activities.

Complete versus incomplete contracting

Risky deals normally require only a minimal degree of subsequent monitoring, since their terms can be specified relatively completely at the time when funds are first advanced. Deals of this type are said to use complete contracting. In contrast, incomplete contracting means that not all important outcomes can be described completely in terms of a probability distribution. Aghion and Bolton (1992) provide an example of incomplete contracting by considering a conflict of interest between entrepreneurs and outside investors that cannot be solved by specifying entrepreneurial effort and reward. When earnings prospects are good, the entrepreneur decides whether or not the profits from expansion are worth the effort she must supply. The effort of the entrepreneur cannot be modelled, nor can it be insured by an incentive scheme. Thus when earnings prospects are bad, outside investors are likely to liquidate the company and frustrate the entrepreneur's attempt to expand. That is, if the entrepreneur's actions can only be influenced by a threat to liquidate, and if either the effort or the threat is incapable of being modelled quantitatively, then the situation is one of incomplete contracting. Deals under uncertainty are often characterized by incomplete contracting.

Principles of alignment

Alignment decisions depend importantly on whether specialised knowledge is needed to govern deals effectively. In some but not all types of deals, learning over time is an important aspect of governance.

Deals in which learning is important are usually governed either internally or through more formal alliance relationships. Deals in which learning over time is less important are deals that can more readily be undertaken through less formal, transaction-based alliances.

Jensen and Meckling (1998) use the term specific knowledge to refer to knowledge that is costly to transfer among agents. Knowledge that is inexpensive to transmit is called general knowledge. Deals whose governance requires specific knowledge are more difficult to govern through partners than are deals whose governance requires only general knowledge. Indeed, deals requiring specific knowledge are often administered in a decentralized manner. For example, if specific knowledge is needed to govern a deal cost-effectively, the deal is more likely to remain with the company rather than being out-sourced. Moreover, the skills of the personnel originating the deal are more likely to be used in its continuing administration.

The delegation of decision-making authority creates both a rights assignment problem (who should exercise a decision) and a control or agency problem (ensuring self-interested agents will conform to organizational objectives). Jensen and Meckling maintain that capitalist economic systems often, but not always, solve the rights assignment and control problems by granting alienability of decision rights to decision agents. They define a right as alienable if its owner can sell it and capture the proceeds offered in exchange. That is, ownership means possession of a decision right along with the right to alienate that right.[2] In contrast to markets, organizations generally do not delegate both decision rights and the authority to alienate those rights (i.e. sell the instruments involved) to an organization employee or agent. That is, decision-makers confront the limits of their knowledge at two levels. The first is technological feasibility, the second is individuals' limitations. The second is of greater concern both to Jensen and Meckling and to the present discussion. Individuals' limitations arise because human beings have limited mental capability and therefore limited decision-making capabilities. However, organizations that can assemble the knowledge of many agents can transcend some of their individual members' limitations. For example, it is sometimes possible to assemble the requisite knowledge to complete complex financial deals by combining many different types of expertise within a financial intermediary. Attempting to assemble the same expertise

[2] Jensen and Meckling also hold that the combination of decision right with the right of alienation is also what is generally meant by the term "property right" that is so often used in economics.

through separate market transactions can be less effective, partly because the same information may be reusable in many deals, partly because much of the information is qualitative and its reliability cannot be assessed at the time of the transaction. Decision-makers are constantly creating new knowledge, and such assembled knowledge can also be a significant input to decision making. Jensen and Meckling argue that assembled knowledge can be either general or specific, where specificity is again interpreted in terms of transfer costs. The more specific the knowledge, the more costly its transfer becomes and the more likely the knowledge will be retained within the producing organization. On the other hand the more general the knowledge, the less costly it is to transfer, and the less likely that it will be retained within a given producing organization. While the initial costs of acquiring idiosyncratic knowledge (learning) can be modest, but the costs of transferring it can be high relative to the benefits. Uncertainty about what pieces of idiosyncratic knowledge might prove valuable *ex post* can actually present high *ex ante* transfer costs, in part because uncertainty implies a need to transfer knowledge that might never turn out to be useful. Thus idiosyncratic knowledge is also likely to be retained within the producing organization.

Jensen and Meckling distinguish activities taking place within the firm from activities taking place between the firm and the rest of the world by asking whether alienability is transferred to agents along with decision rights. For example, a mutual fund manager can sell shares she has purchased, but the bank manager cannot sell individual loans she has granted. Mutual funds hold mainly liquid assets that are often priced using general knowledge. On the other hand financial intermediaries like banks hold mainly illiquid assets that are usually valued using specific information. Thus illiquid assets are much more difficult to trade. Combining decision rights with decision knowledge is more difficult within organizations than it is in markets, largely because the transactions within organizations are less readily separable than are transactions within markets (i.e. between organizations). Agency costs are the sum of the costs of designing, implementing and maintaining appropriate incentive and control systems plus the residual loss resulting from the difficulty of solving these problems completely. Organizations attempt to manage agency costs by establishing both internal rules of the game (rules that provide a system for partitioning decision rights out to agents in the organization), and a control system (procedures that provide a performance measurement and evaluation system as well as a reward and punishment system).

Dessein (2005) develops "a theory of control as a signal of congruence of objectives" (p. 2513), a theory much in the spirit of our theory of alignment. Dessein shows that investors exert more control over entrepreneurs as ex ante information asymmetries increase, as uncertainty increases, and as incentive conflicts increase, and less control as the entrepreneur's resources increase. These influences map nicely onto our Figure 2 as a subset of our influences, where the formality of the alliance increases with information asymmetry, uncertainty, asset specificity, greater need for monitoring and adjustment, and increasing cost of default.

IV Application to Alliances

Consider a company that has decided to stop performing a particular function in-house. It still needs the function to be performed so its problem is to determine what type of alliance to form. The options are to contract the function out, outsource the function, form a partnership, enter into a strategic alliance, form a joint venture, or acquire a company with the expertise.

One obvious determinant is the nature of the function, and this in turn defines the kinds of quality control and developmental leadership that need to be acquired. Printing, payroll, and research and development, for example, all have very different attributes. Printing is routine and repetitive; payroll requires some continuity; R&D is specialized and customized. These differing attributes would likely lead the first company to a transactional alliance, the second to an outsourcing, and the third to an R&D partnership, respectively. Moving along the alliance spectrum (Figure 1) entails increasing resource commitment and equity ownership. Committing resources to, say, printing, may not be rational, but failure to commit resources to, say, research and development, could be fatal. Figure 2 maps the alliance spectrum onto the deals' attributes and the requisite governance capabilities. Alliances which involve more complex, less repetitive, and more opaque activities require more monitoring and control, and more resource commitment. The type of alliance determines the governance capabilities which need to be engaged, with more complex relationships requiring more commitment and more capabilities. Figure 2 indicates that a routine transactional relationship, such as outsourcing printing or payroll, does not require (nor should it engender) sophisticated and costly managerial effort. Shared marketing, for example, where there is more uncertainty and greater need for monitoring and adjustment, would require a concomitant expenditure of effort. Joint ventures and mergers require the maximum managerial effort (and higher-order governance capabilities.

This is especially true with convergence-type mergers such as in the dot-com era and in financial services. The failure of AOL Time Warner can be ascribed at least in part to the inability of top management to govern this now-heterogeneous media empire. Similarly, the clash of cultures between former bankers and brokers in recent financial conglomerates arises in large part from their different managerial styles, themselves the result of having dealt with vastly different kinds of transactions.

Figure 2. Alliance Spectrum, Governance Capabilities, and Alignment

Alliance Spectrum

Contract the function out
Outsource the function
Form a partnership
Enter into a strategic alliance
Form a joint venture
Acquire a company with expertise.

Alliance Attributes

----→ Direction of change ----→
Increasing information differences
Perceived greater risk; uncertainty rather than risk
Decreased asset liquidity
Greater need for continued monitoring
Greater need for subsequent adjustment
Increasing cost of default

Governance Capabilities

----→ Direction of change and of increasing governance costs----→
----→ From complete to incomplete contracting ----→
Greater monitoring capabilities
(particularly on a continuing basis)
Greater control capabilities
(auditing, replacement of key personnel)
Greater adjustment capabilities
(ability to alter governance as circumstances change)

Our theory has particular relevance for cross-border alliances, especially when the legal and regulatory systems differ across the two (or more) countries. As LaPorta et al. have shown in a series of articles (e.g., 1997, 1998), business is done differently in different countries, and these differences are systematic. The contrast of cultures is most evident when companies in developed countries interact with companies in and governments of developing countries. China (and to a lesser extent, India) are seen to be tomorrow's economic giants, but many western companies are experiencing great difficulty in establishing beachheads in these countries. Our theory predicts that higher degrees of monitoring and adjustment capability are required to manage this greater tension, and this requirement leads in turn to more formal alliance structures.

V Conclusion

Transaction cost economics provides a template for managers' use in determining the nature of the alliances they can most profitably enter. Matching the form of alliance with the attributes of its deals and the associated governance capabilities provides a cost-effective governance structure for extra-firm relationships. The disciplined analysis needed to determine the deal attributes and governance capabilities will enhance the quality of the alliance and will help to minimize costly organizational mistakes.

References

1. Aghion, Philippe and Patrick Bolton (1992), "An Incomplete Contract Approach to Financial Contracting", Review of Economic Studies 59.
2. Coase, Ronald (1937), "The Nature of the Firm", Economica 4, 386-405.
3. Dessein, Wouter (2005), "Information and Control in Ventures and Alliances", American Economic Review LX, 2513-2549.
4. Harbison, John and Peter Pekar (1998), Smart Alliances. San Francisco: Jossey-Bass Publishers.
5. Jensen, Michael C. and William H. Meckling (1998), "Specific and General Knowledge, and Organizational Structure," Chapter 37 in Joel M. Stern and Donald H. Chew, Jr., eds. The Revolution in Corporate Finance: Third Edition, Oxford: Blackwell.
6. LaPorta, R., Lopez-de-Silanes, F. Shleifer, A. and R. Vishny (1997), "Legal Determinants of External Finance", Journal of Finance 52, 1131-1152.
7. LaPorta, R., Lopez-de-Silanes, F. Shleifer, A. and R. Vishny (1998), "Law and Finance", Journal of Political Economy 106, 1113-1155.
8. Williamson, Oliver E. (1975), Markets and Hierarchies, New York: Free Press.
9. Williamson, Oliver E. (1985), The Economic Institutions of Capitaism, New York: Free Press.
10. Williamson, Oliver E. (1988), "Corporate Finance and Corporate Governance", Journal of Finance 43.