

PLURAL GOVERNANCE AND PERFORMANCE – A REVIEW OF EXPLANATIONS AND A MODEL

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ABSTRACT

Plural governance is a strategy where a firm is making and buying the *same* good or service (Bradach & Eccles 1989; Heide 2003; Parmigiani 2007). This paper reviews and compares explanations to why firms both make and buy, and based on the review it develops a model suggesting how the combination of buying and making the same component or service affects performance. The model suggests that both making and buying the same product or service has several effects on performance: (1) it reduces the negative relationships between uncertainty and performance in both the market and the hierarchy, (2) it reduces the negative relationship between transaction specific assets and performance in the market, (3) it reduces the cost of determining transfer prices in the hierarchy, (4) it enhances the positive effect of strong internal and external capabilities, and (5) finally it adds cost because of increased conflicts between the internal and external units, and because of the cost of setting up and managing two different governance structures simultaneously. Furthermore, the model emphasizes that the ability to exploit economies of scope and economies of scale and strong capabilities also increases the performance of the system.

Keywords: *Vertical integration, agency theory, transaction cost theory, resource-based view*

INTRODUCTION

During the past years, there has been a growing interest in plural governance and empirical observations have shown that many firms both make and buy, as well as transfer downstream and sell (Parmigiani 2007; Jacobides & Billinger 2006). However, studies on the make-and-buy form have used one or only a few theories and hypotheses as a theoretical starting point (He & Nickerson 2006), and they have often used a simple dependent variable, i.e. they have tested the correlations between different independent variables and the use or non-use of the plural form. Studies of franchising systems have often used the percentage of company operated outlets as compared to franchised outlets as the dependent variable (Windsperger & Dant 2006). More comprehensive models, which relate the plural form to performance, seem to be lacking. This paper reviews, compares, and discusses the different explanations to why firms both make and buy. Finally, the paper develops a model suggesting how the combination of buying and making the same component or service affects performance.

THEORETICAL APPROACHES TO PLURAL FORMS OF GOVERNANCE

Life cycle theory

Table 1 gives an overview of explanations to why firms both make and buy the same product or service. Oxenfeldt and Kelly (1968-1969) argued that franchisors use franchisees to gain access to necessary resources such as capital, skilled management, and knowledge of local conditions to expand and replicate their concepts relatively fast. But in the course of time these resources become accumulated internally by the franchisor or more easily available externally from other sources, thus making it possible for the franchisors to reacquire the franchised sites.

Table 1: Theoretical approaches to plural forms of governance

Theories/models:	Explanations:
Life cycle theory (Oxenfeldt and Kelly 1968-69)	Franchising is used to access resources such as capital, skilled management, and knowledge of local conditions to expand relatively fast. When the resources are no longer needed, the dual system will gradually transform to a wholly company-owned system.
Neoclassical economics (Porter 1980, Harrigan 1984)	Plural forms have a number of advantages, which explain their existence: (1) Lower fixed costs compared to full integration. (2) The opportunity of using independent units for the irregular part of the demand while using the internal units for the stable part of the demand. (3) Access to outside R&D activities. (4) Reduction of the risk of becoming too dependent on either the internal or the external units and thus a reduction of the vulnerability to strikes, shortages etc. (5) Provision of incentives through the competition between inside and outside units. (6) Full vertical integration becoming a more credible threat. (7) Provision of information on cost and market prices. (8) Many of the other information benefits of full vertical integration.
Principal – agent theory (Rubin 1978; Lafontaine 1992; Gallini and Lutz 1992, Heide 2003)	Three explanations are offered by principal-agent theory. First, franchisees bear the residual risk of their operations and have high-powered incentives, whereas managers of company-owned outlets bear no residual risk and have low-powered incentives. Therefore company-owned outlets offer more income but also need more monitoring, and hence outlets which are difficult to monitor should be franchised, and outlets which are easy to monitor should be company owned. Second, ownership sends a signal of profitable operations, knowledge of the operations, etc. to potential franchisors when establishing a chain of outlets. Thirdly, it is costly to write individual specific contracts with the outlets and hence the solution is a standard contract or company ownership. Fourthly, the hierarchy reduces the information asymmetry in the market-governed relationships. Furthermore, P-A-theory may offer explanations like companies owing will be better at selecting franchisors and potential franchisees which are opportunists will not select companies which have many company-owned outlets (self-selection).
Transaction cost economics (Dutta <i>et al.</i> 1995; Mols 2000)	Relationships differ in terms of the level of transaction specific investments, transaction frequency, uncertainty, and their institutional environment, and hence it is efficient to use different governance structures. Furthermore plural systems increase the credibility of the termination safeguard, and they decrease the asymmetric information in the relationships, and thus they provide further protection against opportunism.
Resource and capability view (Parmigiani 2007; Jacobides and Hitt 2005)	(1) A combination of both strong internal capabilities and strong external supplier capabilities will lead the firm to try to take advantage of both and hence lead to the use of plural governance. (2) A need to learn from many sources because of technological uncertainty, will make the firm more likely to both produce internally and to source from external suppliers. (3) Vertically integrated firms will expand operations more and faster in the parts of the value chain where they have their strongest productive capabilities. The firms will leverage an upstream (downstream) comparative advantage by transacting with both internal downstream (upstream) divisions and downstream (upstream) external companies.
Theories of the multi-profit center firm (Eccles and White 1988)	When firms grow, diversify and vertically integrate, centralized coordination becomes increasingly difficult. The multi-profit center firm solves this problem by decentralization and the use of transfer prices for vertical coordination. But when an external market exists, and internal transactions are most attractive to one profit center, they are least attractive to the other, who will often prefer external transactions to internal ones. However, in order to avoid suboptimization, top management will often mandate or encourage internal transactions. When top management also allow external transactions, the result will be a simultaneous use of internal and external transactions.
Marketing channels (Rangan <i>et al.</i> 1992, Webb and Didow 1997)	When a company wants to reach different customer groups in terms of for example need for product information, product customization, product quality assurance, lot size, assortment, availability, after-sales service, and logistics, a combination of differently governed channels are efficient. However, competition between differently governed channels often leads to conflict, which may raise the costs of using the plural form.
Options theory (Parmigiani 2007)	With a starting point in option theory it is argued that the combination of market and hierarchy provides the firm with the option to switch between the two giving the firm more flexibility with only little extra investments.

The motivation to reacquire the franchised sites arises from conflicts with and difficulties in managing the franchisees and a goal of attaining higher profits. Only in systems where marginal sites are franchised can they imagine that plural governance will prevail in the long-run. The evidence on this theory is, however, mixed with some studies corroborating it (Hunt 1973; Caves & Murphy 1976; Minkler 1990, 1992) and others arguing against it (Rubin 1978; Martin 1988; Thomas, O'Hara & Musgrave 1990; Windsperger & Dant 2006). When life cycle theory is generalized to other settings than franchising it resembles the dynamic capability explanation, since plural forms of governance will be used to access resources such as capital, skilled management, and knowledge of local conditions, when they are in short supply internally in the company. However, the life cycle explanation differs from the capabilities explanation, because the plural form is used in order to expand and replicate concepts faster than could be done internally. Furthermore, successful plural systems will provide the company with adequate resources, and this will transform the plural system to a wholly company owned system. Thus, life cycle theory describes the plural form as a transitory phenomenon that will be replaced by a hierarchically organized system, when the company no longer depends on the actors in its environment to supply it with critical resources. In this respect, life cycle theory resembles resource dependence theory (Pfeffer & Salancik, 1978).

Agency theory

Rubin (1978) argued that the franchisees bear the residual risk of local operations and have high-powered incentives, whereas the managers of the company-owned outlets bear no residual risk and consequently have low-powered incentives. Therefore franchised outlets need a lower degree of monitoring but also offer less income potential for the franchisor to cover his monitoring costs. For that reason, outlets which are difficult to monitor will be franchised, and outlets which are easy to monitor will be company-owned. Rubin (1978) argued that monitoring costs are correlated with the distance from the corporate headquarters to the outlets, and therefore outlets close to the headquarters will have low monitoring costs and be company-owned, whereas outlets located far away from the corporate headquarters will be franchised. The use of distance as a proxy for monitoring costs has been empirically supported by e.g. Brickley and Dark (1987), and Norton (1988), whereas e.g. Shepard (1993), found that the probability of company ownership was higher for units located at least fifteen miles from the centre. Table 1 presents other agency explanations developed by Gallini and Lutz (1992), Lafontaine (1992), and Heide (2003), and as the review shows agency theory offers several unique explanations to how plural governance affects performance, and whereas the signalling explanation describes plural governance as a transitory phenomenon that will be replaced by a market-governed system, the other agency-based explanations view the plural form as a stable and economically efficient governance structure.

Neoclassical economics

Porter (1980) and Harrigan (1984) present at least eight advantages of tapered integration (see Table 1), and thus the economics-based strategy literature has listed many of the reasons for using the plural forms of governance found in the other streams of literature. It has focused on ways the firm can strategically control important external forces, i.e. reduce its dependence, increase its power, reduce the risk and preserve its flexibility. However, it is not explained under which circumstances it is efficient to use a plural form of governance. In other words, the literature lacks theories explaining when the advantages of a plural governance form will make it the most efficient choice of governance structure, and in which situations the plural form will be a stable, efficient form or merely a transitory phenomenon.

Transaction cost theory

The plural forms of governance have often been viewed as anomalies in transaction cost theory (TCT) (see Williamson 1975, 1985, 1996), and with a few exceptions (Dutta, Bergen, Heide & John 1995), they have either been excluded from the empirical tests of TCT (e.g. Anderson 1985; Walker & Weber 1984) or have been categorized as hybrids placed between the market and the hierarchical solutions (Dant 1996; John & Weitz 1988). The unit of analysis in TCT is the individual transaction, and the important theoretical variables are the three transaction dimensions, i.e. transaction specific assets, uncertainty, and transaction frequency. All these variables describe the transaction and not the plural form. Furthermore, TCT only emphasizes three governance structures: the hierarchy, the market, and the hybrid, as the possible solutions to transaction problems. However, concepts like the *atmosphere* allow for interactions between different transactions. About *atmosphere* Williamson wrote: ‘What I wish to emphasise here is that *technological separability does not imply attitudinal separability*. Reference to atmosphere is intended to make allowance for attitudinal interactions and the systems consequences that are associated therewith’ (1975: 37). As can be deduced from this comment, atmosphere introduces attitudinal non-separability and behaviour that is not easily understood in rational net gain terms, and it raises the question of whether or not individual transactions can be regarded as independent when it comes to the attitudes and behaviour of the actors. But basically, TCT explains the plural form by differences in the transaction dimensions and the institutional environment, and the potential synergies from combining two different governance structures are ignored (Mols 2000). An exception to this is the argument that plural governance increases the credibility of the termination safeguard, and it decreases the asymmetric information in the relationships, and thus it reduces opportunistic behaviour (Dutta et al., 1995).

Resource-based view of the firm

Mayer and Solomon (2006) argue that the better the understanding of the technology needed for a project, the better the firm is able to identify, select, and write a contract with a proper supplier to cooperate with on the project. In other words, strong internal capabilities make it easier for the firm to manage the relationship with the external supplier or distributor, i.e. it enables the firm to select, signal advanced

knowledge, monitor, provide incentives, terminate the relationship, and re-internalize the production if necessary. Parmigiani (2007) argues that situations where both the supplier and the buyer hold significant expertise in an area, the firm will be more likely to use the plural form combining the hierarchy with another governance structure, because the firm will try to exploit both sets of competences. Furthermore, Parmigiani (2007) argues that a firm facing significant technological uncertainty will need as broad a technological knowledge base as possible, and hence it will have to learn from many sources to maintain and develop this knowledge base. This will make the firm more likely to both produce internally and to source from external suppliers. Jacobides and Hitt distinguish between productive capabilities, i.e. productive efficiency, and capabilities of governance defined as "the ability of a particular firm to use integration or the market to create value by linking these stages" (2005: 1212) and they ask "how the productive capabilities of a firm are distributed *along the value chain, ...*" (2005: 1212-1213). They argue that a firm with superior productive capabilities in a particular vertical segment will want to exploit these capabilities, and hence, it will expand its activities in this vertical segment. If a firm has superior productive capabilities in both upstream and downstream vertical segments, then a firm will want to exploit both, and hence, it will be vertically integrated. However, if a firm has relatively stronger capabilities in an upstream vertical segment, than in the downstream vertical segment, it will deliver to its downstream operations, but it will also use the market to become a seller of upstream goods on the intermediate market. A firm with relatively stronger capabilities in a downstream vertical segment, than in its upstream vertical segment, will buy from its upstream operations, but it will also use the market and buy upstream goods on the intermediate market (Jacobides & Hitt 2005: 1213). The existence of downstream vertical integration is explained by historical reasons, different competitive conditions or past mistakes without reference to transaction specific assets or other aspects of transaction cost theory. It is the sunk investments and gradual reduction of operations in one vertical segment combined with expanding operations in the vertical segment where the firm has its strongest productive capabilities which explains the emergence of plural forms of governance and the gradual changes in the relative use of the market and the hierarchy (Jacobides & Hitt 2005). By comparing the perspective of Jacobides and Hitt with Eccles and White (1988), we see that in cases where profit-center organizations allocate resources according to results or expected results, investments in different vertical segments will differ and hence some operations will expand while others will contract. This results in the same predictions.

Theories of the multi-profit center firm

One of the places we are highly likely to find the plural forms are in the large decentralized corporation or the multidivisional corporation. In these corporations the SBUs are managed as profit centers and evaluated based on their individual performance in terms of profit. In order to use this approach the different SBUs are given autonomy to sell and buy internally in the company and to outsiders. This is a highly decentralized system which resembles the market system. It gives the individual SBU manager a

high motivation, and it puts focus on the development and use of core competences on each level of the value chain. It economizes on top management resources, because top management do not need to have intimate knowledge of the SBUs, and they do not have to facilitate coordination between the SBUs (Chandler 1962; Galbraith 1973). Based on a field study of 13 manufacturing firms, Eccles and White (1988) propose a theory of transfer pricing policies for exchanges between two profit centers in the multi-profit center firm. They focus on large diversified and vertically integrated firms in which it is difficult for top management to centrally coordinate operations. This problem has been solved by implementing a multi-profit center structure characterized by decentralization and the use of transfer prices for vertical coordination. However, when an external market for the intermediate good exists, the use of transfer prices has a built in structural dilemma. The dilemma is that the more attractive internal transactions are to one profit center, the less attractive they are to the other profit center, which will often prefer external transactions to internal ones. However, in order to avoid suboptimization, top management will often mandate or encourage internal transactions. Eccles and White (1988) argue that firms pursuing a strategy of vertical integration for purposes of low-cost supply will use a mandated full cost transfer pricing policy. Firms pursuing another strategy of vertical integration will use a mandated market-based transfer pricing policy. And finally firms, which do not have a strategy of vertical integration that defines the roles the selling and buying units play in the strategy of each other, will use a transfer pricing policy of exchange autonomy. The result is that when top management allow external transactions, the multi-profit center firm will have a simultaneous use of internal and external transactions. In their field study Eccles and White (1988: 34) also find that some companies, in which internal transactions are mandated, actually have a policy to source a part of their needs externally in order to get realistic market prices.

Marketing channels literature

The marketing channels literature has pointed to the advantages of having different channels serve different customer segments in terms of the customers' need for product information, product customization, product quality assurance, lot size, assortment, availability, after-sales service, and logistics (cf. Sa Vinhas and Anderson 2005; Anderson, Day & Rangan 1997; Rangan, Menezes & Maier 1992, Stern & Sturdivant 1987). Furthermore, the topic of conflict in dual systems of distribution has been discussed (e.g. Webb & Didow 1997; Cespedes & Corey 1990; Moriarty & Moran 1990), and a typical solution to the conflict has been a more clear-cut domain definition, i.e. the population to be served, the territory to be covered, the functions or duties to be performed, and the technology to be employed (Coughlan, Anderson, Stern & El-Ansary 2005) or the producers has simply reduced the usage of dual channels to prevent costly conflict (Sa Vinhas & Anderson 2005).

The marketing channels literature has not developed its own theory of vertical integration. It has primarily borrowed from transaction cost theory and agency theory. It operationalizes and applies them on

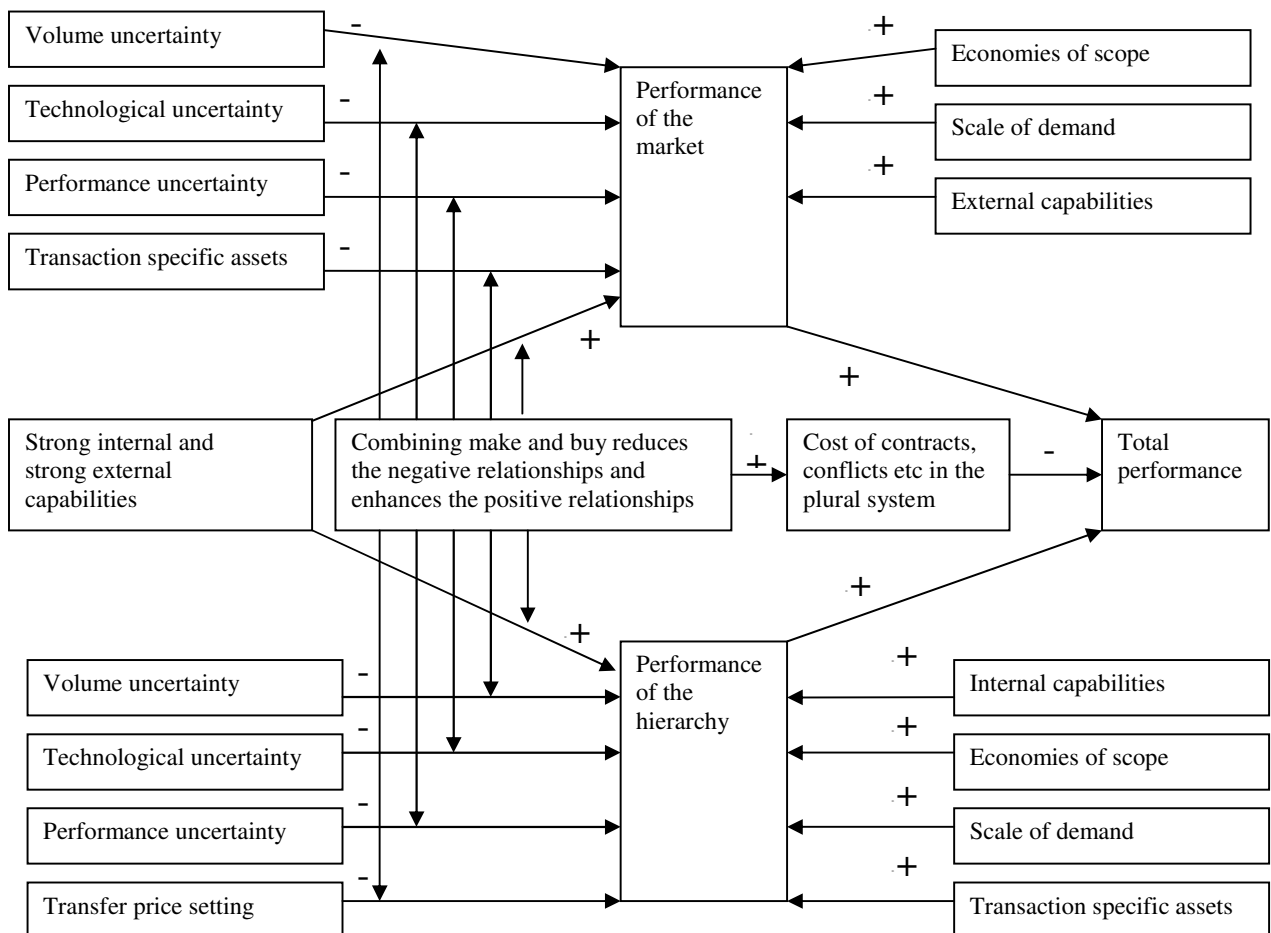
marketing phenomena. The arguments start by identifying important differences in customer segments in terms of different needs for e.g. product information or product customization. Using the transaction cost theory and agency theory, it is argued that these needs are most efficiently governed by different structures and hence different governance structures will be used for different customer segments.

Options theory

Parmigiani (2007) mentions the options framework as another way to explain the value of plural forms of governance. The arguments are that the combination of both market and hierarchical relationships provide the firm with the option to switch between the two giving the firm more flexibility with only little extra investments. Sa Vinhas (2002 cited in Parmigiani 2007) points to the fact that these options become more valuable, when the uncertainty increases.

HOW DOES PLURAL GOVERNANCE AFFECT PERFORMANCE?

Figure 1: How plural forms of governance affect performance



In Figure 1, I propose a model which integrates the different hypotheses and connects them with performance. Volume uncertainty makes it impossible to accurately predict demand. It negatively affects performance, because unpredictable demand makes it difficult to plan production and avoid building storages of goods, which could be rendered worthless. Thus, unpredictable volumes raise costs and hurt performance of both internal production and external sourcing. However, Harrigan (1983) suggested that dual systems mixing markets and hierarchies are a low-risk strategy when the demand is erratic. Carlton (1979) also argued that it may be an advantage to integrate to save costs for the high probability component of demand and use external distributors and suppliers for the low-probability demand. In other words, if demand is fluctuating to such a degree that autonomous adaptation becomes efficient, most of the system can be market governed. This gives relatively low entry or exit costs (e.g. Zaheer & Venkatraman 1995) when the level of activity increases or decreases respectively. Such differences in transaction frequency can be observed over time (Walker & Weber 1984), and if there are plenty of outside actors willing to become suppliers or distributors and absorb the risk, then market-based relationships may be established along side internal production. This allows the firm to use the investments in fixed production facilities more flexibly, and thus, external partners may be used if the firm has too little internal capacity, whereas internal excess capacity may be sold externally (Harrigan 1984). Therefore the plural form moderates the negative relationships between volume uncertainty and performance of both the hierarchy and market by decreasing the negative correlations.

Technological uncertainty makes it difficult to predict changes in technology. It negatively affects performance, because it is difficult to identify which potential technology projects will be valuable and thus, which technology development projects will be profitable to start. In other words, a high technological uncertainty increases the risk of making significant investments that later prove worthless. However, this risk can be reduced by gathering information on technological developments and by learning from many different sources (Parmigiani 2007). Internal knowledge and capabilities make it possible for the firm to effectively absorb the external knowledge (Cohen & Levinthal 1990), and thus the internal production or investments in internal R&D develop an absorptive capacity, which is necessary in order to benefit from the spillovers from the external relationships (Veugelers & Cassiman 1999; Cassiman & Veugelers 2006). Thus, it may be necessary for the firm to be involved in a cooperation that is sufficiently close in order to get access to and to transfer the relevant knowledge from the external part to the firm, when it becomes clear, which technology to use. The plural form cannot reduce the technological uncertainty, but it reduces the negative effect of the uncertainty on performance, because the plural form gives more diverse views on and more sources for new technology, and thus the firm has a larger chance of being involved in the right technology. The internal production also makes it easier to understand the technologies available in the market, and thus the firm can interpret and act quicker, when significant changes appear (Cohen & Levinthal 1990). Therefore the plural form moderates the negative

relationships between technological uncertainty and performance of both the hierarchy and market by decreasing the negative correlations.

Performance uncertainty or measurement difficulty negatively affects performance, because it makes it difficult and costly to measure and evaluate performance of both the internal and external suppliers. Performance uncertainty manifests itself as difficulties connected with: (1) describing the demanded products or services, (2) evaluating whether a product or service will function as required, (3) equitable comparing products and services from different suppliers, and (4) using simple inspections and metrics to evaluate the quality of a product and service (Parmigiani 2007). Thus, performance uncertainty increases the cost of measuring performance, makes it difficult to discover opportunistic behaviour, and degrades the incentives of both the market and the hierarchy. However, in a plural system it is possible to use information from one relationship to the evaluation and controlling of other relationships (Bradach & Eccles 1989). This evaluation could have to do with level of damage, cost and price structure, or the advantages of cooperative adaptations, etc. Thus, while a uniform system may have to accept information asymmetry this can be changed by combining a hierarchically governed relationship with a market-governed relationship. In line with this, Walker and Weber (1984) argued that buyers with experience in producing a component are better informed and thus better able to avoid opportunistic suppliers. In other words, a hierarchical relationship provides more detailed knowledge of costs and hence a useful benchmark with which market relationships can be compared. This serves as a protection against opportunism. Dutta *et al.* (1995) argued that dual channels comprising independent and wholly owned distributors provide performance benchmarks, thus permitting better assessment of distributor units' performance. This is corroborated by Hallwood (1991), who found several examples of tapered integration in the Scottish offshore oil-gathering business, and explained their existence by, for example, a wish on the part of the oil companies to maintain production capabilities internally in order to be better able to direct and cooperate with the service companies. Instead of improving the control system in a monolithic system, a dual system generates information suitable for performance evaluations. Market-governed relationships provide information on prices, whereas activities carried out internally provide cost estimates. The cost estimates may be compared with external prices and thus serve as a competition-enhancing device, resulting in less opportunism and lower costs. Thus, the plural form reduces the information asymmetry, provides architectural knowledge and prices, and allows for benchmarking. This reduces the problems connected with performance uncertainty. Therefore, the plural form moderates the negative relationships between performance uncertainty and performance of the hierarchy and market by decreasing the negative correlation.

Transaction-specific assets have lower value when used in other transactions or for other purposes. The lower this value, the higher is the degree of asset specificity. On the market, investments in specific assets

may be worthless when opportunistic partners try to exploit it, by holding up the firm. Therefore the higher the specific assets, the lower the performance of the market (Williamson 1991), and transaction cost theory therefore predicts that a significant level of transaction-specific investments will lead to the internalization of the transaction. Transactions involving non-specific investments are efficiently governed by the market because of the high-powered incentives of the market. Different levels of asset specificity in otherwise similar and parallel transactions are therefore predicted to lead to a plural form of governance, i.e. concurrent sourcing or dual distribution (Mols 2000). The plural form does not affect the level of transaction specific assets, but it provides the firm with alternatives and thus with a termination safeguard (Dutta et al. 1995). With a termination safeguard, the other party will be less likely to exploit the investments in transaction specific assets, and if the firm is held up, it can minimize its negative consequences by terminating the relationship and instead expanding internally. Therefore the plural form moderates the negative relationships between transaction specific assets and performance of the market by decreasing the negative correlation.

Internally, there may be huge disagreement about internal transfer prices. Eccles and White (1988) pointed to the structural dilemma that the more attractive internal transactions are to one profit center, the less attractive they are to the other profit center, which will often prefer external transactions to internal ones. By allowing external relationships, the market prices become visible, and the actors are allowed to act on the prices they are supplied with. It lowers the conflicts, and therefore the plural form is predicted to moderate the negative relationships between the transfer price setting and performance of the hierarchy by decreasing the negative correlation.

Central in the resource-based view of the firm is that firms will internally produce products that contain the firms' core products, which again are a result of the firms' core competences (Prahalad & Hamel 1990). Core competences of the firm should be governed by the firm, whereas other activities can be outsourced (Quinn & Hilmer 1994). Thus, the greater the expertise, competences or capabilities the firm has, the larger the gain of producing internally, whereas in areas where the firm has less developed capabilities compared to suppliers, it will be less costly to buy from these suppliers. The greater the expertise of the firm and the external partner, the more likely that in some cases the internal solution is the best, whereas in others the external solution is best. By using the plural form, it is possible to take advantage of both internal and external capabilities, and the parties will be able to learn from each other (Parmigiani 2007), or strong internal capabilities will increase the return to external knowledge acquisition, thus making internal and external capabilities complementary (Cassiman & Veugelers 2006). In this case the plural form increases the positive correlation between expertise and performance. Therefore the plural form enhances the positive relationships between capabilities and performance of the hierarchy and market.

In the model, it is suggested that there is a positive relationship between transaction specific investments and the performance of the hierarchy. Furthermore, neoclassical economics and the resource-based view of the firm predict that economies of scope, scale of demand, and capabilities positively affect the performance of the market and the hierarchy (Poppo & Zenger 1998). Parmigiani (2007: 292) found indications that “the greater the scope economies for both the firm and its suppliers to produce the good, the more likely the firm will concurrently source.” However, the plural form is not likely to alter the relationships between economies of scope/scale and performance, but it simply makes it possible to produce at lower costs, when excess capacity is present either internally or externally.

Finally, the use of the plural form is connected with higher cost. First, because two different governance structures have to be set up and managed. In other words, the firm has to invest in an internal organisation, and at the same time gather knowledge of the market, establish relationships with suppliers or distributors, write contracts etc. This requires different capabilities, and investments, and as pointed to by Lafontaine (1992) there may be enormous costs connected with developing, maintaining, and enforcing a variety of contracts. Second, it may cause conflict because the internal production department is interested in becoming sole supplier, whereas the external partners are interested in completely replacing the internal part (e.g. Webb & Didow 1997; Cespedes & Corey 1990). For example Moriarty and Moran (1990: 148) pointed to the problem of adding another channel to an existing channel system and argued that it will typically result in conflict and morale problems inside the firm and cause confusion and anger among distributors, dealers and customers.

DISCUSSION AND CONCLUSION

The proposed model can be extended by proposing that the products which are both made and bought do not have to be totally similar, and that the effect of the plural form will depend on the degree of similarity between the two products or services. The more similar, the more the plural form will moderate the suggested relationships between the independent variables and the performance of the system. However, the model does not explain the degree of difference between the two combined governance structures. Furthermore, there may be a need to reconsider the unit of analysis and expand the definition of plural forms to include combinations of market and hybrid governance.

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