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Modulating between Relational and Contractual Approaches to Buyer Supplier Relations: A Case Study of Nissan

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Modulating Between Relational and Contractual Approaches to Buyer Supplier Relations

A Case Study of Nissan

ABSTRACT

There is extensive research examining the benefits of relational and transactional governance in buyer-supplier relations. Research on the implementation of, or evolution in, these governance modes however is lacking. In this paper we present the results of a longitudinal case study of the governance choices of Nissan and its suppliers over an eight year period after Nissan's merger with Renault. We find that formal structural changes undertaken by Nissan as it shifted from a relational to a transactional governance mode did not immediately eliminate the benefits it was deriving from the previously relational informal structure. In line with the literature on modulation we find that the norms, expectations, and inter-organizational processes took several years to adapt to the shift in Nissan's formal approach. Nissan moreover made conscious efforts to return to the intermediate phase, which confirms findings on the intrafirm level that a temporary mismatch between formal and informal structures, resulting from different lead times in their respective adjustment processes, can lead to a situation in which firms simultaneously profit from the advantages associated with two discrete approaches.

INTRODUCTION

Relational coordination and supplier voice are important sources of performance advantages in supplier relations. Ex ante research has shown that relational coordination can result in transaction cost reductions, innovation, and adaptability (Dyer and Singh 1998, Lorenzoni and Lipparini 1999, Patnayakuni et al. 2006, Sako and Helper 1998, Stephen and Coote 2007, Walker and Poppo 1991). The relational approach is often presented as a discrete alternative to the transactional approach associated with advantages like low price and low organizational costs of inter-firm ties (Bradach and Eccles 1989, Bowen and Jones 1986, Heide and John 1990, Zenger et al. 2002). Inter-firm exchanges however rarely rely on relational coordination alone (Macneil 2000), nor are they unaffected by market pressure (Ring and Van de Ven 1994). Similarly, pure transactional coordination is uncommon and most firms adopt an approach somewhere in between pure relational and transactional coordination (Demsetz 1988, Joskow 1985, Williamson 1985, 1993). We consider the interplay between contractual control and relational coordination in the context of the Nissan Renault merger.

Extant research has identified clear performance advantages of supplier voice and relational coordination (e.g. Cusumano and Takeishi 1991, Liker and Wu 2000, Womack et al. 1990), often centering on Japanese firms (Asanuma 1989, Dyer and Chu 2000, Sako and Helper 1998). In this light it is remarkable to note that when Nissan allied with Renault in 1999, it deliberately and systematically dismantled relational coordination and replaced it by a centralized hierarchical stance coupled with transactional principles.

While there is extensive work examining the relative benefits of relational versus transactional governance, the implementation of, or evolution in, governance modes has received but sparse attention (Stephen and Coote 2007). The shift that took place at Nissan allows us to explore the implications of shifting from one coordination mode to another. More importantly, it provides a unique opportunity to examine the intermediate stage between relational and transactional coordination as the transition unfolded. To understand these transitions, we undertook a longitudinal qualitative study consisting of in-depth interviews at Nissan and its suppliers between 2001 and 2008. We develop theoretical insights from Nissan's shift away from relational coordination, and explore the implications of its recent efforts to reintroduce some elements of the relational model. We found that the rationale for the initial shift rests in part in challenges deriving from overembeddedness (Granovetter 1985, Lazzarini et al. 2008, Uzzi 1997), while the return to relational coordination resulted partly from the realization that informal relational coordination contributed more to the formal supply structure than was initially assumed by Nissan. Nickerson and Zenger (2002) argue that the social patterns and routines of a firm often adapt to formal structural changes with a delay, hereby creating a non-steady state that is potentially efficiency enhancing, and we similarly found that the formal structural changes undertaken by Nissan in 1999 did not immediately change its informal structure, and that the intermediate stage that was attained presented significant opportunities for value creation.

As Nissan underwent this modulation process, we identify a clear deficiency in the "voice" or relational perspective on supplier relations. In the literature the benefits of this approach are mostly identified at the dyad level, and then extrapolated for the entire web of supplier relations a firm draws on. We find however that this direct translation from dyadic to network level cannot be assumed. In particular, we find that strong dyadic relationships come at the expense of systemic scanning and relationship building with a broader pool of potential suppliers. As a result, the firm risks losing access to emerging and novel technologies as well as the ability to rely on market mechanisms to ensure a competitive price.

Drawing on 65 hours of interviews with sixteen key actors within Nissan as well as suppliers over three discrete time periods, we build on the traditional buyer-supplier literature by exploring the benefits and costs of modulating between transactional and relational forms of governance. We extend the literature by paying attention to the intermediate stages that are often considered mere stepping stones to either the relational or transactional models. We find evidence of the benefits hypothesized to result from these intermediate stages such as that of "collaboration without trust"

(MacDuffie and Helper 2006). We further find that the very process of moving between discrete states provides benefits and risks that need to be better understood. We first provide a brief literature review, followed by an in-depth analysis of how extant research relates to the dynamic shifts that took place at Nissan. From there, we draw implications for theory regarding both the end points of the relational and contracting spectrum, as well as the intermediate states.

LITERATURE REVIEW

Transactional perspective

The transaction cost perspective on supplier relations has its roots in Commons (1932) and Coase (1937), and was later expanded by Williamson (1975). In its earliest formulation, the transaction cost approach presents firms with two supply-base choices: to integrate parts suppliers in a hierarchical structure, or to purchase parts in the market place for the lowest available price. Due to the centrality of contracts in the transaction cost perspective and the unavoidable diversity of contracts as a result of the pluriform transaction situations and market conditions firms encounter, the question to be answered in managing supplier relations is more complex than simply whether one should make or buy a commodity (Demsetz 1988, Joskow 1985). Consequently the dichotomous view evolved into a spectrum approach that incorporated intermediate or hybrid governance forms (Eccles 1981, Klein et al. 1978, Williamson 1991).

In our approach to the transaction perspective, we follow the literature on supplier relations in the automotive sector, which centers on the contrast between relations that are contract-centered and those that are relationship-centered (Dyer and Singh 1998, Monteverde and Teece 1982, Ouchi 1980). While the traditional transaction perspective uses hierarchy as a contrast to market transactions, we follow the supplier relations literature's approach of contrasting a market-based or "exit" approach, to "voice' or relational arrangements. In related literatures, the latter is also known as the "ally" approach (Bowen and Jones 1986, Bradach and Eccles 1989, Heide and John 1990).

The supplier relations literature incorporates key elements of the early studies on the transaction perspective in their description of the "exit" approach, including the importance of asset specificity, the presence of opportunism, and the central focus on cost reduction of individual transactions (Joskow 1985, Williamson 1993). When the required cost reductions or goals are not attained, one of the partners exits the relationship and enters a new market-based contract. The actions undertaken by the transacting partners are seen as subservient to the ultimate goal of individual optimization, and this includes the leveraging of insight into the context in which transactions are embedded (Williamson 1993).

Relational coordination

Relational coordination is a form of inter-firm coordination that relies on non-market mechanisms such as verbal agreements, reliance on ethnic, social, or kinship networks, commitment, mutual support, shared expectations, and identification. It emphasizes social and behavioral patterns between firms in contrast to contractual arrangements where all key dimensions of the relationship, including cost, price, quality, the role of authority, and incentives are locked down (Macneil 1980, Ring and Van de Ven 1992). Relational coordination is associated with incomplete contracting where much of the exchange is driven by mutual adjustment and negotiation (Grandori 1997). The result is increased flexibility and adaptability and reduced monitoring costs (Crocker and Masten 1991, Walker and Poppo 1991).

Empirical studies of relational coordination often include assessments of relational norms of collaboration, flexibility, information exchange, pursuit of joint outcomes, restraint of power, and the expectation of, as well as commitment to, long-term exchange (Artz and Brush 2000, Lusch and Brown, 1996, Noordewier et al. 1990, Patnayakuni et al. 2006, Stephen and Coote 2007). Relational norms are shared behavioral expectations that have the force of social obligation or pressure (Gundlach et al. 1995). They lead to decision processes and privately defined roles that result in behaviors in line with collective, rather than individual firm well-being (Heide and John

1992, Lusch and Brown 1996, Morgan and Hunt 1994). They are often driven by significant interpersonal relationships of boundary spanners (Uzzi 1999, Haytko 2004). In this way, relational contracting encompasses norms and expectations that extend beyond a focal exchange and its associated processes (Williamson 1991).

Lorenzoni and Lipparini (1999) find that relational capabilities on the part of the coordinating firm can enhance that firm's access to, and transfer of, knowledge, leading to both more rapid growth and innovation. The pursuit of joint outcomes in a buyer-supplier relationship, known as solidarity (Heide and John 1992), may in certain circumstances require subordinating firm-specific interest to collective interest (Young and Wilkinson 1997), with the goal of mutual benefits as ties are expected to be long-term (Heide and Miner 1992).

In contrast to transaction cost theory which focuses on the divergence of actors' interests, relational coordination includes a balancing of self and collective interest and the pursuit of collective goals (Eisenhardt 1989). The presence of relational coordination moreover can in itself reduce transaction costs (Artz and Brush 2000, Dyer and Singh 1998) as well as opportunism (Achrol and Gundlach 1999). Artz and Brush (2000) for example found that relational coordination, in the form of collaboration, non-coercive communication, and expectations of continued exchange, all reduced the cost of negotiations.

Intermediate phases

In the literature the two juxtaposed modes of relational and transactional supplier relations are mostly identified with a regional contrast between Japanese and Western approaches, even though in later time periods the successful implementation of the relational mode was observed at Western firms (e.g. Dyer 1996, and Helper 1991). This delineation of relational and transactional exchange as two discrete inter-organizational strategies mirrors a broader dichotomization that views these two modes as substitutes in the literature (Bernheim and Whinston 1998, Dyer and Singh 1998).

A small subset of researchers has argued for benefits associated with matching elements from both the relational and contractual perspective (MacDuffie and Helper 2006, Helper et al. 2000). Helper et al. (2000) for example argue that “pragmatic” collaborations based on learning by monitoring advances knowledge and controls opportunism, facilitating alignment of interests between the two parties. Similarly, MacDuffie and Helper (2006) discuss an intermediate form that relies on joint learning efforts and exchange to complement contractual agreements. Helper and Kiehl (2004) found that US carmakers demanded the same performance from their domestic suppliers as their Japanese counterparts, and pushed their supply base towards adopting operational changes that lead to improvements analogous to those that would be attained by relational control. Although US manufacturers were not operating in a relational context Helper and Kiehl found that high degrees of trust did emerge between the supplier and customer. This is in line with Poppo and Zenger who observed that “well specified contracts may actually promote more cooperative, long-term, trusting exchange relationships.” (2002, p. 708). The observations by Helper and Kiehl, and Poppo and Zenger raises the question whether the intermediate form between relational and transactional can be a stable hybrid, or is simply a waypoint as firms strive to move from a relational to contractual state or vice versa. Intermediate states between relational and transactional coordination may emerge as firms actively move from one end point to another. Several reported cases illustrate how such movement can be purposeful or fortuitous, transitory or stable. Lavie and Rosenkopf (2006) for example observed a deliberate shift in the exploration-exploitation balance over time in value chain partnerships. Similarly, concurrent sourcing, whereby firms consciously make and buy at the same time, can represent a distinctive choice to adopt a plural governance mode (Bradach and Eccles 1989, Parmigiani 2007). Dieleman and Sachs (2006) on the other hand found that the ad-hoc shifts between the relationship-based and market-based strategies at a Chinese conglomerate resembled “irregular oscillatory dynamics” leading to the conclusion that intermediate stages are not necessarily a conscious part of the overall firm strategy.

Nickerson and Zenger (2002) describe how firms may purposefully use modulation between different governance modes to attain what they term dynamic efficiency gains: "Dynamic efficiency gains are the functionality benefits of the organization achieving temporary and intermediate levels of functionality that more closely approximate the desired functionality than that produced by either mode in steady state" (2002, p. 554). Efficiency improvements emerge because informal procedures respond with inertia to modifications in formal operating procedures (Cyert and March 1963, Nelson and Winter 1982), and benefits associated with each governance mode are achieved simultaneously. While these benefits are transitory, firms may actively modulate between governance modes in an attempt to achieve this state. Nickerson and Zenger (2002) further suggest that modulation is driven by efficiency considerations even in the absence of environmental contingency considerations. The question that arises is whether firms would actively undertake efforts to modulate between governance modes with respect to external partners. Further, while intermediate states in buyer-supplier relations have been identified in the literature, little is known about whether these are stable, what their origins are, or the benefits that they yield.

METHODS

Our goal in this study is to assess the analytic generalizability of theories on relational and transactional supplier relations, considering that firms can shift between these discrete governance modes. A key challenge in studying inter-firm relationships is that the variables under consideration are situationally defined and subject to acceptance and modification by the parties in the relationship (Searle 1995). This renders them difficult to quantify and directly measure. Our study is further complicated by our interest in the dynamic evolution of the relationships and implications for performance. We adopt a qualitative case study approach (Van Maanen 1979, Yin 2003) to deal with the full variety of evidence that emerges as a firm and its suppliers transition between prototypical relational and transactional states.

We selected Nissan as our case firm because it went through a discrete and purposeful structural change. In 1999 it sold shares in all except four of the 1,394 supplier and other firms it had financial ties with in the past, and announced that firms wishing to remain in its supplier network would need to deliver a 30 percent cost reduction in three years. The message sent to suppliers changed from the traditional keiretsu approach of mutual prosperity, to one of hostility in which Nissan claimed it had been “abused” by its suppliers. We undertook three main waves of interviews at Nissan and suppliers. The first took place in 2001 when we observed a shift towards a contractual relationship on the part of Nissan while suppliers were still operating according to relational principles. The second was between 2001 and 2008, when both suppliers and Nissan were operating in a contractual mode. The third was in 2008, when Nissan attempted to reintroduce relational practices while suppliers continued their adaptation to the transactional structure.

Research design

Prior to initiating our data collection, we undertook a comprehensive literature review of English and Japanese sources on the 1999 Nissan Revival Plan (NRP). We also conducted a broad range of interviews with twenty informants including Nissan labor union representatives, academics, government officials, and chamber of commerce representatives. While we did not include these interviews in our sample, they enabled us to understand the context of supplier relations at Nissan at the outset of our study. We continued our interviews with several Japanese academics and an official at a local chamber of commerce during each phase of the study to gather general contextual information.

We relied on these background interviews to initially select two first tier suppliers and a second tier supplier that would be representative of Nissan’s main supply base both in terms of components supplied and history of relationship with Nissan. Together with Nissan, these represent the core cases in our discussion below. As we will discuss, we supported these core cases with supplementary ones to explore specific issues that we identified.

Core cases. We selected two first tier suppliers, and one second tier supplier that we examined in depth, along with our work at Nissan itself. We refer to the two first tier suppliers as Tier 1A and Tier 1B, and to the second tier supplier as Tier 2A. Tier 1A selected in 2001 had 2,000 employees globally in 2001, which grew to 6,000 in 2008. Throughout our study, Tier 1A depended on Nissan for 30 percent of its business volume, down from 80 percent in the 1980s. Its business with Nissan started during the 1950s and Nissan's capital involvement initially matched the business volume; growing steadily to 80 percent in the 1980s. In the 1990s, Nissan cut back on its ownership, reducing it back to approximately 20 percent in the 1990s, until it was completely dissolved in 1999. Due to its long history with Nissan, Tier 1A in 2001 identified itself first as a "child firm" of Nissan, and when Nissan's shareholding dropped below 50 percent as a Nissan "group firm". When we undertook our first interviews with this firm in 2001 it had just returned to profitability after the cost reductions required by Nissan in 1999 had for the first time in its history resulted in a net loss and employee lay-offs.

We selected a small, local tier 1 supplier (Tier 1B) founded during the 1940s with 40 employees –down from 70 in 1999 when Nissan announced the NRP—to contrast Tier 1A. While this smaller firm followed a similar pattern of share acquisition and share reduction by Nissan, it had only one office where its managers, who were mostly siblings, resided, and one production site close to a main domestic plant of Nissan. We did not have access to any financial information of this firm, but were informed that it was operating at a loss due to Nissan's cost reductions since 1999. In phase 1 of our study, 80 percent of its sales were to Nissan and 12 percent to another first tier supplier of Nissan. This firm did not survive past 2005, which was typical of small domestic first tier suppliers during the transition period at Nissan.

The second tier firm we included, Tier 2, is Tier 1A's direct supplier. Tier 2 started doing business with Tier 1A in the 1970s and has been depended on Nissan components for 99 percent of its business volume, until in 2003 this was slowly decreased and reached 85 percent in 2008. Tier 2A followed a pattern common in Japan whereby a Tier 1 firm with a diversified customer base, like Tier 1A, builds up a dedicated domestic Tier 2 supplier base for each of the end customers it supplies. At the start of our data collection, the relation between Tier 1A and Tier 2 was representative of traditionally close and personal ties associated with Japan. Moreover, in 2001 we found that it also continued to receive direct assistance from Nissan purchasers and technicians whenever it embarked on a new project.

Supplementary cases. In the last phase of our data collection we added two first tier suppliers, Tier 1C and Tier 1D, to help us understand Nissan's differential efforts to rebuild connections with some first tier suppliers. One of the suppliers we added in 2008 was one of the main targets of Nissan's attempt to recreate some of its previous keiretsu network, while the other had started business with Nissan in 1999 and operated in the transactional mode without having any of the acceptance problems that were experienced by our other interviewees.

With 15,000 employees and operations at fifty global sites, Tier 1C is larger than Tier 1A and 1B, but its relationship with Nissan initially was very similar. It started supplying Nissan in 1940, and Nissan increased its shareholding over time in a way similar to Tier 1A and 1B, to finally sell all shares in 1999. In 2005 however, Nissan bought over 40 percent of the shares of Tier 1C back and increased joint development projects. This was one of the first ex-keiretsu firm in which Nissan bought shares after 1999, which makes it an important case to study Nissan's partial return to a relational approach.

While Tier 1D, founded in the 1930s, is of similar size and international presence as Tier 1C, it differs in that it is independent of any keiretsu affiliation. Its tie with Nissan was only established in 1999 when Nissan commenced its active search for new and competitive supplier partners. Based on our interviews we typify the relationship between Nissan and Tier 1C as transactional, because very little relational aspects developed between the two firms. Unlike our other interviewees, Tier 1D indicated to be at ease with Nissan’s cost-based approach, which provides an interesting contrast with our other data.

FINDINGS

Data collection

Our main data collection was undertaken via face-to-face interviews of key personnel at Nissan and Tier 1A, 1B, 1C, 1D, and Tier 2. Table 1 lists the number of managers and hours of interviews conducted at each firm in each time period.

*** TABLE 1 ABOUT HERE ***

Our key informants were identified by their respective firms as being most knowledgeable about the Nissan buyer-supplier relationships following contact with each firm to explain our research agenda. Our interviews were open-ended, and were geared at gathering concrete evidence on formal involvement between the firms Nissan and its suppliers, but also to understand how each of the firms viewed the relationship. We asked a range of open questions on both the formal and informal structure of relationships. Appendix A provides an overview of the questions we used as a starting point. All interviews were taped and transcribed by the first author who is fluent in English and Japanese. We undertook a content analysis of the interviews, relying on codes that covered the nature of buyer supplier relations with little interpretation of the data (see Table 2 for our initial coding themes).

*** TABLE 2 ABOUT HERE ***

During this process we inductively developed linkages between key constructs and themes through iterative coding (Strauss and Corbin 1990). As we moved to higher levels of abstraction, we related our observed relationships to the extant literature to understand of implications of the transition periods between and OEM and its suppliers.

Period 1: Nissan pre-merger with Renault, before 1999

The relationships in Nissan's supply network before 1999 clearly followed the relational approach. Nissan and its suppliers made credible commitments to the relation by aligning their economic futures, for example by investing in each other's performance through offering flexibility and collaboration on manufacturing. By refraining from using power they created a sense of equality and balance, and they primarily relied on informal rather than formal agreements to collaborate towards joint gains.

Formal relational structure. Dyadic flexibility has been identified as one of the main competitive advantages of having close ties with suppliers, and the suppliers in our sample all indicate that before 1999 they were very responsive to changes at Nissan, but that Nissan was also quick to respond to their requests. The responsiveness of Tier 2 went even further, and the use of both overtime and the hiring of temporary staff completely depended on the business volume subcontracted to it by Tier 1A. The second tier supplier indicated it felt a sense of pride in being able to offer this responsiveness. The vice president of supply chain management (SCM) at Nissan in 2008 confirmed these statements.

> In the past, at the top of the trust curve, we could ask the supplier without a commercial negotiation "can you make sure that you work Saturday morning this week because we just had a breakdown" or "we want to bring some visitors round, sorry you got only half-an-hour's notice, they'll be coming in at 4 o'clock".

Joint product development and manufacturing before 1999 was frequent at Nissan and both permanent (*tenseki*) and temporary (*jukkō*) exchange of personnel with suppliers was widespread. All our interviewees at the Tier 1 level, except for the independent Tier 1D, started their career at Nissan and moved to the supplier firm after more than a decade at Nissan. One Tier 2 manager also spent six years at the line of Tier 1A to learn about its processes and to solidify the tie between the two companies. Before the alliance with Renault, Nissan offered on-location management and production process training to suppliers, as well as training in its own facilities. *Kyoryokukai* or cooperative associations are a much heralded Japanese approach to exchanging information, and

Nissan's suppliers indicated they achieved substantial gains from the exchange during the gatherings of *Nisshokai*, Nissan's supplier association. We found that commitment that comes with relational coordination was clearly present at Nissan before 1999, and suppliers reported high dedication of R&D resources to Nissan products.

A clear indicator of a collaborative relationship between buyers and suppliers is the restraint of power to invoke mutual gains, and the subsequent sharing of these gains to nurture capabilities and a willingness to contribute to the relation in the long run. Interviewees at both Nissan and the suppliers indicated that while before the NRP the sharing of cost savings was not included in any written agreements, the widely accepted norm was that gains would be shared on a fifty-fifty basis. The reimbursement of costs in case the customer cancelled an order followed similar unwritten rules of mutually accepted reasonableness.

Informal relational structure. Before the alliance with Renault, extensive informal information exchange occurred during afterhours meetings in which Nissan employees shared information on up-coming plans with suppliers on which they could not yet make firm commitments. This exchange was encouraged by the fact that Nissan purchasers were in charge of a supplier firm rather than a specific component group. The goal of this approach was to achieve a comprehensively managed relation, and we found that individual Nissan purchasers were frequently entertained by "their" supplier firms. Similar practices were found at the Tier 2 level, and our sample firm reported that it regularly invited the Tier 1A purchaser for activities ranging from dinner to overnight trips. Early knowledge of future plans helped the suppliers in anticipating upcoming deals, and provided them with an opportunity to give informal feedback to the Nissan buyers. All suppliers reported frequent social gatherings with Nissan before 1999, as well as the exchange of midyear gifts (*chūgen*) and New Year cards. Our interviewee at Tier 1B recounted how a Nissan employee would come to his firm every year in January to put a new Nissan calendar in central spots in the management office as well as the canteen.

While Nissan was enjoying the benefits of close cooperation, it also paid the price of high relational investments and it had limited leeway to work with other firms not part of the Nissan supply base. According to interviews at Nissan, purchasers who would suggest unrelated Japanese suppliers or foreign suppliers, would invariable meet with resistance from their senior managers who had developed a personal interest in continuing the relationship with the keiretsu firms of which they were in charge. Based on what we learned about the pre-1999 period from our interviewees, we conclude that the rationale for the initial shift at Nissan rested in part on challenges deriving from overembeddedness (Granovetter 1985, Uzzi 1997).

Period 2: Transition to transactional model with relational expectations, 1999-2001

Nissan in 1999 initiated a deliberate and systematic effort to dismantle the relational coordination in its supply chain in favor of transactional principles in order to tackle its overcapacity and dire financial state of the 1990s. Our interviews suggest Nissan felt that the close relational ties with its suppliers prevented it from executing necessary reductions, and that the dyadic flexibility did not translate into the network flexibility needed to gain access to a new pool of suppliers with superior technological or cost performance. While Nissan modulated between its previous relational structure and the newly adopted transactional structure, it appeared that a lag in the informal structure resulted in improved performance.

Formal transactional structure. While the Japanese example of relational ties has been lauded in the literature for its positive impact on performance, when we interviewed CEO Carlos Ghosn in 2001 his evaluation of Nissan's previous keiretsu system appeared to be quite different:

> Nissan was abused by its suppliers by not delivering their best performance … the obligation to buy from suppliers in which Nissan held shares confused supplier ties.

The Nissan vice president for SCM similarly argued that:

> There is no doubt that at the end of '99 the performance of Nissan suppliers was terrible. Certainly in terms of … to what extent they shared the benefits with Nissan. … Nissan was getting a bad deal, either because the supplier was poor, or because the supplier was taking most of the benefit.

Ghosn indicated that "coziness" had led to complacency, and that a lack of monitoring of suppliers had resulted in a purchasing price differential of 20 percent with its partner Renault. Similarly the vice president of supply chain management mentioned that:

> The pre-99 situation was unsustainable in its coziness and its inefficiency because of a lack of tension … It was far too comfortable … there wasn't any tension to promote performance improvement... In a situation where relationships will be too long term there are barriers to entry [for] some of the new suppliers or more agile suppliers … Can you imagine in this situation of high trust the sourcing of components in low cost countries, or leading cost countries? It would not have happened … because there is no drive, no impetus to change.

In a dramatic attempt to break from its past and attain significant improvements in its cost structure, Nissan sold shares in most of its keiretsu suppliers and requested that they reduce costs by 30 percent in three years. To make sure favouritism was abolished, Nissan overhauled the organization of its purchasing department. The previous system whereby purchasers had been in charge of individual supplier firms disappeared and purchasers were put in charge of a product group and were given clear individual performance indicators based on the purchasing cost reductions Nissan stipulated. A clear sign that previous personal ties were abolished was given by Nissan when it returned all the traditional midyear gifts it received from suppliers in 2001, with a note that these would not be accepted anymore. As a result none were sent the next year.

The initial performance outcomes of Nissan's changes were impressive. The purchasing cost reduction target of 30 percent announced in 1999 was achieved a year ahead of schedule in 2001, and by overhauling its keiretsu system Nissan increased its ability to switch suppliers and adjust volume. The independent Tier 1D gave a clear example of how access to a broader pool of technology can be realized by associating with new suppliers. According to the general manager of Tier 1D:

> We have independently implemented the good aspects of TPS [Toyota Production System], and we can now transfer these to Nissan when we work with them.

Informal relational structure. Supplier firms viewed Nissan's period of challenging performance as a time to introduce self-sacrifice. In the spirit of aligned economic futures and growth as a group, they wanted to help Nissan strengthen and rebuild after a period of dramatic reduction in volumes during the 1990s. Suppliers saw potential benefits, but also felt relationally committed, to assist in the restoration of a strong Nissan. This one-sided contribution was offered in the unquestioned expectation that Nissan would return to a relational model once it had overcome its deepest crisis.

The lag in the supplier's implicit processes and expectations in relation to Nissan's transactional model surfaced when Nissan announced the early achievement of its new purchasing goals and introduced a second restructuring plan in 2001 that included further cost reduction requests from suppliers. The reactions of suppliers clearly expressed their relational expectations. The manager at the Tier 1B firm for example said:

> Nissan had been able to make its turnaround thanks to the suppliers and now N180 [the second cost cutting directive after NRP] is asking for further cost reductions. … If Nissan is out of debt, why don't they share with us? I want to ask the Nissan management how they feel about our suffering.

Whereas mutual prosperity had been a main reason in keiretsu times to improve one's capabilities, Tier 1D indicated a different reason for its compliance with Nissan's cost reductions:

> We cooperate with Nissan, but it is related to our pride. We are the top maker for [this part], and would feel bad if we had to say "we can't do it". … Nissan's cost reduction [requests] come all the time, every day, every day, every day. But we just say "yes, we can do it".

While Nissan in 1999 forbade all informal meetings with suppliers, even Nissan purchasers themselves did not immediately follow these directions. The chairman and founder of Tier 2A reported that a Nissan purchaser had come to deliver the technical drawings for a new product in person to him in 2001, even though there never had been an official direct relationship between his firm and Nissan. All Tier 1 interviewees, except Tier 1D, similarly indicate that social meetings with Nissan continued informally after 1999.

Our cases confirm the observations of Nickerson and Zenger (2002) that changes in the informal structure often lag changes in formal structures. Similar to their intra-firm findings, we found that at the inter-firm level firms are able to linger at an intermediate stage between discrete governance forms, and that firms can benefit from the advantages associated with each of those governance modes. In Nissan's case we saw that between 1999 and 2001 Nissan profited from the dedication of its suppliers, while at the same time it attained tremendous cost improvements by shifting their purchasing structure to a formal transactional model.

Period 3: The transactional period 2002-2008

In the third period, Nissan's transactional model was fully in place and informal norms and routines had caught up. While Nissan had been enjoying the benefits of the transactional model, during this period the liabilities of the transactional model became increasingly apparent.

Formal transactional structure. Our Tier 1 interviewees, except Tier 1D, indicated that the low prices offered by Nissan, combined with the absence of joint product development and improvement projects, made Nissan one of their least desired customers. Commenting on the importance of costs, the Nissan vice president for SCM explained that during the 2002-2006 period:

> QCD [Quality Cost Delivery] … is the basis of the sourcing decision. When a supplier can manage quality as an entry ticket, can design and develop, and deliver products and management …cost will make the decision. The trend is very much discrete: "do you want this, you are in straightforward competition, best price, you get it, otherwise you won't.

Joint product development and improvement projects are two areas in which both Nissan as well as the first tier suppliers indicate a marked decline in Time 3. According to Nissan's vice president of SCM, Nissan had supplier improvement programs and dedicated engineers available to assist suppliers with conducting detailed analysis and improvement activities. However, while Nissan actively offered these sources, suppliers were not keen to make use of them. According to the vice president of SCM:

> One problem, clearly, is that the improvement is visible to both sides and therefore Nissan has an expectation of how much of that should be shared or should come to Nissan. If [the suppliers] do it with a third party … then clearly they don't share all the details of improvement.

Commenting on Nissan's approach to transparency, an interviewee at Tier 1A argued that:

> They want to have transparency *to* the supplier, but not the other way! … They want to have transparency to find an opportunity for reducing costs. That's the motivation for asking us to be transparent.

Our interviewees at Nissan confirmed a decrease in involvement in design and development, and added that the delivery of high quality products really was the responsibility of suppliers. They explained that Nissan was not willing to "just pour money into the suppliers" and that it was the suppliers' own responsibility to supply high quality and low costs parts. Our interviewees at Tier 1A further indicated that before 1999 Nissan would provide them with machinery and tools, but that this practice was completely abolished. Similarly, before 1999 Nissan would send trainers to supplier firms to teach them about advanced manufacturing practices, but this practice likewise was discontinued in 1999.

In addition to the focus on costs, contracts –which are another central aspect of the transactional approach—became an increasingly important element in the exchange between Nissan and its suppliers. Before 1999 contracts played a very minor role and were mostly outdated and symbolic. In the transactional period between 2002 and 2008 however, suppliers indicated that they scrutinized contracts very closely and sometimes asked for changes in documents that had been left unchanged for decades.

Informal transactional structure. As it became clear to suppliers that Nissan was not intending to let suppliers share in its improved situation, Nissan's approach to supplier relations became identified with terms like “wringing of suppliers” which is the opposite of the previous mutual prosperity. According to a manager at Tier 1A “We got a bad feeling from the very negative direction of Carlos Ghosn.” When we visited the Tier 1B firm, our contact ostentatiously showed us how on the spot where for 50 years the Nissan calendar had hung, now a calendar of a local labor union had taken its place.

All Tier 1 firms except Tier 1D indicated a shift in fairness in relation with Nissan, and the example most often mentioned was that Nissan asked suppliers to deliver components before the agreed deadline –which suppliers always had to comply with—but would never give suppliers additional time when they requested it. Another area in which Nissan assured flexibility for itself but not for suppliers was production volumes. While Nissan did not commit to volume in its contracts, it did bargain for price reductions based on projected volumes. These changes clearly show a decrease in mutuality. According to Tier 1A, its flexibility towards Nissan had not decreased too much, however, while before 1999 it was flexible out of choice and commitment, after 2001 flexibility had become a must. Continuing the remarks about responsiveness of suppliers cited above, the Nissan vice president of SCM argued that:

> We probably have seen some deterioration in responsiveness to change. Now, it’s a bit more formal: “Who is paying for Saturday morning please before we commit?” “Is this visitor really important?” Or: “We are too busy, can we put it off to next week?” Or: “Can’t you tell him to go see a different supplier?”

The challenge entailed in this approach was mentioned by one of the Tier 1A sales representatives:

> They [Nissan] are very strict, they request a lot of … cost savings [which] are very hard. But the level of cooperation, working with the suppliers, is not at the level of the other Japanese manufacturers. …So the danger for RNPO [Renault Nissan Purchasing Organization] is that the suppliers do not want to deal with them anymore if they continue with this kind of approach.

Summarizing the overall relational stance in Period 3 the Nissan vice president of SCM said that these years were characterized by “very much a business-like, hard-nosed, short-term view of the world.”

Our findings in Period 3 confirm that the informal structure is responsive to the formal structure and will over the course of a few years, closely match it. Once informal norms and practices catch up with the shift in formal structure, the parties involved in the exchange attain not just the benefits, but all the costs of the transactional model.

Period 4: Transactional period with reintroduction of relational elements, from 2008

In the face of the challenges posed by the transactional approach, Nissan decided that a partial reintroduction of relational elements was needed. Nissan's attempt to reintroduce relational coordination indicated that the discrete governance mode based on the transactional approach was no longer providing sufficient benefits. In its efforts to reintroduce relational aspects like trust however, Nissan purposefully did not attempt to return to the strong dyadic ties of the past. Instead it undertook efforts to create network-level trust. This system-level trust was intended to enable Nissan to flexibly leverage the benefits of cooperation, without being overly tied to specific suppliers.

Hybrid formal structure. In an initial effort to reintroduce some elements of relational supplier relations, Nissan set up the Administration for Affiliated Companies (MC-AFL) with the explicit goal of improving relations with suppliers. Awareness of the existence of this division or any signs that Nissan had reintroduced trust in the relationship however was not reported by any of our interviewees at the supplier level.

Back in 2005 Nissan had already given first signs that not all elements of its earlier keiretsu system were considered antithetical to its performance anymore when it bought back over 40 percent of shares in Tier 1C. While Nissan presented this move as its realization of the benefits of the keiretsu system, our interviewee at Tier 1C argued that his firm had been so profitable after it reformed itself in answer to Nissan's turnaround demands, that Nissan's investment reflected a purely rational and individual investment. He observed that half of Tier 1C's profit went to

Nissan's purchasing organization, while the other half was paid out to Nissan as its main shareholder. He further recounted that even though Tier 1C was Nissan's closest partner in terms of shareholding, this did not guarantee business from Nissan; it was still in straightforward competition with other suppliers in the field, including those associated with Toyota –much to his disdain.

One concrete way in which Nissan tried to strengthen its ties with suppliers was by approaching them with bundles of business for different models. Nissan employed the practice of *carry over*: an attempt to use as many parts as possible from earlier vehicle models in their replacement models, and *carry across*: using the same parts in different vehicle models. Suppliers were approached with bundles for different models over different time-spans and in different regions. As was mentioned however, while Nissan bargained with its suppliers based on volume, it did not commit contractually to those volumes and Tier 1C, who was approached by Nissan with a large bundle explained that it did not take the offer because it would have to open new facilities abroad and found the projected sales of Nissan unrealistic. Before 1999 it would have set up the new facilities because it knew Nissan would reward this move with future business, but because this assurance was not present anymore it rejected the offer.

Informal transactional structure. The Nissan vice president of SCM succinctly described the rationale for Nissan's change: "If Nissan thinks it can survive, thrive, and prosper at the expense of suppliers then clearly that is not the case." It was not Nissan's goal however to return to exactly the same kind of relational coordination it had employed prior to 1999. According to the same interviewee: "I don't think we're going back to a level of *true* partnership. I just think we need to get back to a level of increased trust." He further elaborated that:

> [Nissan is] in my view, starting to think about going back to some of the pre-1999 long-term-ism rather than what was subsequently. ... [There is] a realization now that maybe we have exhausted the other approach. And as these things tend to be quite cyclical we start talking more about trust, more about partnership, more

> about long-term relationships. … It won't look like what we knew from pre '99, but … there is a realization now that we've caught up from a benchmark position and we now need to decide how we can move forward and how we can … be far more constructive.

The process of reintroducing some of the previous relational aspects however requires more than the passing of time. Specific and purposeful efforts to attain effective relational governance are also needed (Stephen and Coote 2007). At Nissan, managers were aware of the obstacles to reintroducing trust that had formed during the years of Nissan's transactional approach. According to one interviewee:

> [Do suppliers] trust the trust? No, I think we are still in the early days of that. I think they hear the noises, or starting to hear the noises, like what they hear, but you can't change overnight to "we want to now start trusting you again" … We've bottomed out now in terms of the competitive, destructible, short-term approach.

At Tier 1A a feeling of closeness to Nissan seemed to have completely disappeared in 2008 as according to one manager the Nissan management has become "completely opaque". The situation at the Tier 2 level was quite different. While in 2006 it also employed a more transactional approach and adopted new management approaches like ISO9000, in 2008 the president expressed his adherence to the traditional relational approach in the following way:

> I manage my own company and I care about my employees, but the one I work very hard for is my main customer [Tier 1A]. My customer cares for me and this is my main motivation to do my best. This is how it has always been [in Japan] since the era of the Samurai, you would work for a General. And during the war, we worked very hard for the Emperor. If you have this motivation you do your best. This is the kind of education you get in Japan from when you are a child. It is the Japanese spirit (Yamato damashii).

Similar to Period 2 we found in Period 4 that the informal organization lagged formal structural changes, and that suppliers were not instantly responsive to changes proposed by Nissan. This confirms the findings on the intra-firm level of Nickerson and Zenger (2002), but also shows the potential conflict inherent in the "collaboration without trust" approach (MacDuffie and Helper 2006).

DISCUSSION

Strong relational ties between firms and their suppliers have been shown to provide significant benefits to both sets of actors. Because close ties have traditionally been associated with Japanese producers, Nissan's decision to abandon deep relationships with suppliers came as a surprise to many. The benefits of the relational model in the form of responsiveness, flexibility, and monitoring cost reduction, were not sufficient to justify what in Nissan's eyes were the costs associated with reduced price competition, and potential limits in access to technology associated with strong dyadic relationships. In particular, dyadic ties limited the ability of both partners to access larger global pools of technology and talent. These limits have been hinted at in the literature and Uzzi (1997) for example, suggests that there is a threshold beyond which the positive aspects of relational coordination, like integrative agreements, allocative efficiency, and complex adaptation, become obstacles to economic performance because they cut firms off from information beyond their network and make them vulnerable to exogenous shocks. Nissan struggled with these challenges, and responded with a shift towards a transactional approach. While dyadic flexibility, visibility, and commitment dropped markedly with this shift, Nissan benefited through access to a more variegated pool of global suppliers and increased opportunities to rely on the price mechanism, resulting in a cost reduction of almost 30 percent.

In line with Nickerson and Zenger (2002) we found that there was a lag in adjustment of Nissan's informal structure to the formal changes. Nissan attained significant benefits in a transactional structure during the time period when suppliers were still operating in a relational mental frame with an expectation that a reversion to a close relational model would follow, however, when the informal structure caught up with the formal transactional structure and Nissan attempted to reintroduce trust, this was not immediately recognized by its suppliers. The limits of the transactional model became apparent as the commitment to invest in the exchange with Nissan decreased. We found this adjustment to the transactional model took much longer for Tier 2, and it was not until 2006, six years after Nissan shifted to a transactional model, that we discerned any changes at our Tier 2 case firm. The continued commitment of one of the purchasers of Tier 1A meant that the relationship between these two firms, even in 2008, was defined in terms of "parent" and "child" firm by both parties.

We echo Nickerson and Zenger's (2002) call for more research into the intermediate stages between discrete forms of interfirm relations; stages where organizational systems respond with inertia to structural or formal shifts in interorganizational relations. In our study we found that the intermediate states can result in significant performance improvements because firms simultaneously derive benefits from both the relational and the contractual mode. While the intermediate stage between relational and contract-based market relations came about unplanned in Period 2, it was something that Nissan was actively trying to attain in Period 4. As Nissan revisited its supplier relations in 2008, it was taking a more integrative perspective. Instead of rebuilding close dyadic ties, it focused its efforts on creating a general reputation that could help it attain access to a broader base of loosely connected firms. Nissan has redefined "collective interest" in Eisenhardt's (1989) parlance, to reflect the interest of its broad supply base rather than individual suppliers.

Much of the literature on buyer-supplier relations has centered on static states representing the endpoints on a continuum of possible relations. We have shown that examining the dynamic nature of buyer-supplier relationships, and particularly, the transition periods when firms shift from one inter-firm structure to another provides a valuable lens on the benefits as well as limits of each transaction mode. Furthermore, we found that the intermediate states are not merely the inadvertent outcome of the transition process, but that firms actively seek intermediate states. As such, we believe there are significant opportunities for further research to explore the benefits and limits of these states as well as the implications of managerial initiative in attaining them.

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Appendix A: Interview questions

Selected Interview Topics Period 2 (1999-2001) and 3 (2001-2008)

When did you first hear of the NRP (the Nissan Revival Plan), and what were your first thoughts about it?

How do you feel about Carlos Ghosn?

Could you easily accept the NRP?

Do you think the NRP was necessary for Nissan's revival?

How do you think the NRP relates to wider conditions in the Japanese economy?

Could you describe the talks between your company (supplier) and Nissan?

Has your feeling about your job changed?

Has your feeling about your contact with Nissan (your supplier) changed?

Selected Interview Topics Period 4 (2008)

Open questions	
Relationship background	
Length of contracts	
Main outline of contracts	
Importance of contracts	
Length of the relationship	
Nature of involvement of both parties in design and manufacturing of components	
Procedures around extra-contractual requirements	
Milestones in the relationship.	
Closed questions	
Formal structure of the relationship	*Informal structure of the relationship*
Degree of asset dedication	Occurrence or degree of face-to-face meeting
Volume of supplier business dedicated to the customer	Fair treatment by both parties
Membership in the supplier panel	Occurrence of informal meetings
Cooperation in acquisition of raw materials and equipment	Satisfaction with products received or delivered
Management and technical training	Responsiveness to change of both partners
Participation in cooperative associations	Dedication to performance of partner
Joint improvement projects	Dedication to the relationship with partner
Joint product design	Feeling of being on the same wavelength
IT system integration	Personal trust in direct contacts in the partner firm
Reimbursement in case of order cancellation	Personal trust in management of the partner firm
Sharing of cost savings resulting from joint improvement projects	
Financial support in both anticipated as well as unanticipated events	
Mutual stockholding	

Developed based on Clark and Fujimoto 1991, Dore 1983, Dyer and Chu 2000, Fujimoto 1999, Gerlach 1992, Granovetter 1985, Nishiguchi 1994, Sako and Helper 1998, Williamson 1975, 1993, Womack et al. 1990.

TABLE 1: Interviews conducted by time period

	Transition to transactional (1999-2001)	Transactional period (2001-2008)	Reintroducing trust (2008~)
Nissan	CEO and two General managers 4:45 hrs	General Manager 2 hrs in 2002 2 hrs in 2006	General manager and Vice President SCM 6 hrs
Tier 1A	Purchaser 5 hrs (with President Tier 2)	Purchaser 3 hrs (with President Tier 2)	Purchaser 4 hrs (with President Tier 2) Three key managers 6:45 hrs
Tier 1B	Manager 6 hrs	Manager 1hr (plus plant visit)	*Firm is Bankrupt*
Tier 1C			General Manager 2:45 hrs
Tier 1D			General Manager 2 hrs
Tier 2	President 5 hrs (with Purchaser Tier 1A)	President 3 hrs (with Purchaser Tier 1A) 2002 1.5 hrs in 2006 Chairman and four key managers 14 hrs in 2002 Participant observation 2 weeks in 2002	President 4 hrs (with Purchaser Tier 1A)

TABLE 2: Initial coding themes

	Relational	**Transactional**
Formal Structure	Dyadic flexibility Cross-shareholding Recurrent dealings Joint product development Restraint of power to invoke mutual gain Cost sharing Sharing IP	Network flexibility No financial intertwinement Competition based on price Individual product development Use of power No extra-contractual assistance Increase concern confidentiality
Informal Structure	Group approach Fair treatment Personal trust Dedication Informal communication Being on the same wavelength	Individual approach Market competition Generalized trust Individual approach Formal exchange Lack of transparency