BILATERAL GOVERNANCE IN OUTSOURCED SERVICES: INTERORGANIZATIONAL DYNAMICS AND CONSEQUENCES

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Thesis Abstract

Saadet Çetinkaya, "Bilateral Governance in Outsourced Services: Interorganizational Dynamics and Consequences"

Rate of outsourcing, i.e., firms' procurement of services (that can be performed in-house) from outside contractors, has been steadily increasing for the past two decades throughout the world, developed or not, and this is despite the fluctuations of the global economy. This thesis is a study on how firms that outsource services interact with the supplier firm. Specifically, it seeks to identify the antecedents, as well as the consequences, of using two alternative governance mechanisms, contract complexity and relational norms, thereby gaining insight into the dynamics of buyer-supplier interaction in outsourcing. The theoretical basis of this study is the transaction cost framework. Governance forms such as contract complexity and, especially, relational norms have been the subject of substantial interest from academics in law, economics, marketing, and organization studies in other countries in the past twenty years while being largely ignored in Turkey. This thesis volunteers to look into these ignored areas. The empirical component of the thesis includes a survey of 128 outsourcing relationships. Overall, the results provide limited support for transaction cost hypotheses.

Tez Özeti

Saadet Çetinkaya, "Dış Kaynak Kullanımında İki Taraflı Yönetişim:
Firmalar Arası Dinamikler ve Sonuçları"

Firmalarda dış kaynak kullanımı gelişmekte olan bir alandır. Dünyanın çeşitli ülkelerinde yapılan araştımalar, küresel ekonomik krizlerin ne tarafında olunursa olunsun, dış kaynak kullanım oranlarının yirmi yıldan fazladır istikrarlı şekilde artmakta olduğunu bildirmektedir. Bu tez dışarıdan çeşitli hizmetler satın alan firmaların, hizmet tedarikçileriyle nasıl ilişkiler kurduğunu anlamak üzerinedir. Özellikle, bu müşteri – tedarikçi ikilileri arasında firmaların nasıl bir yönetişim tercih ettiklerini inceler. Araştırmamızda, ilişkinin resmi yönünü temsilen yazılı sözleşmelerin karmaşıklık seviyesi ve gayrıresmi yönünü temsilen ilişkide karşılıklı geçerli olan değer ve davranışlar üzerinde durulur. Örgüt ve çevre değişkenlerinin ortaklığın sürdürülmesine yarayan mekanizmalarla, ve ortaya çıkan maliyetler ve karşılıklı memnuniyet seviyesi gibi sonuçlarla ilişkileri incelenmiştir. Tez çerçevesinde yapılan hizmet satın alımı memnuniyet araştırmamızla (İstanbul'daki 128 firmanın dış kaynak kullanım ve yönetişim eğilimleri üzerine) önermelerimizi destekleyen sonuçlara ulaşılmıştır. Araştırmamızın bir hedefi de henüz ülkemizde çok tartışılmamış bu konulara ilgi çekmek ve arkadan gelebilecek çalışmalara yol açmaktır.

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CHAPTER 1

INTRODUCTION

Outsourcing is a potential solution to a broad range of organizational needs from cutting costs to stimulating growth, and as such, it has been a prevalent business activity in all phases of economic cycles. As with all business pursuits, however, company decision-makers need to understand which outsourcing relationships are most beneficial to the organization's self-sustainability and aim their efforts to building and keeping those relationships.

Although various forms of outsourcing have been used for centuries, academic research on this phenomenon has proliferated in the past twenty years. The interest has been even more pronounced in the past decade when firms in developed countries, in a management trend called off-shoring, moved significant amount of their business service processes to other countries. India, for example, owes some of its recent high growth to this trend. The intent was to reduce business process costs for the buyer firms, at the same time generating revenue for supplier firms in developing countries. Consequently, many studies have attempted to verify the existence of such benefits and to understand the dynamics of outsourcing in general. Further, a line of research developed focusing on how outsourcing activities can be managed to build strategic advantage for a firm.

The essence of this study is the use of alternative contractual governance modes in managing outsourcing activities. Transaction cost theory (Williamson, 1975), born from the question of why firms exist, argues that environmental conditions and task characteristics explain the choice of governance mode in each

economic activity. Governance modes range from pure market transactions to pure hierarchies, with most actual business relationships falling between these two. These intermediate forms include written or non-written contracts and other organizational practices.

Frequently, contractual relationships between independent business organizations can be described by bilateral governance where parties to the contract are jointly involved in all decisions about the relationship. Bilateral governance requires both parties to simultaneously manage the written service agreement and their relationship with each other, based on mutually accepted relational norms. Relational contract theory (Macneil, 1978) claims that proper management of such a relationship reduces the costs (such as litigation) associated with the maintenance of that relationship and, at the same time, enhances the outcomes to both parties by establishing open communication, reciprocity, and solidarity between the parties.

Both transaction cost and relational contract theories had their initial appearances in the last quarter of the twentieth century, and since then they have been increasingly developed, refined, adapted, and detailed, with the help of theoretical and empirical studies across multiple academic fields. Unfortunately, there are almost no discussions of these theories in social science publications in Turkey, although both theories are universally applicable to business transactions. Hopefully this study may start filling in that void.

In this work, we have attempted to study how situational factors influence the relationship and performance of partner firms, for the contractual outsourcing partnerships in Turkey. The thesis addresses two main concerns:

- How do environmental and task factors influence the usage of written contracts and relational norms in an outsourcing relationship?

- Do written contracts and relational norms improve performance of the relationship?

In addition, we hope to understand the following aspects of outsourcing contracts:

- Whether any organizational attributes are associated with the choice of governance mode
- Benefits firms gain from outsourcing
- Common mistakes firms make in outsourcing

Finally, although this thesis concerns outsourcing relationships, we hope that the results may allow us to draw parallels to other types of interorganizational relations.

CHAPTER 2

THEORETICAL PERSPECTIVES

Outsourced Services

Definition of Outsourcing

Production and exchange are the root dynamics that ultimately drive economic activity into the complex phenomenon it has become. Whereas production is the process of transforming raw materials into finished goods and services, exchange is the process of trading some goods and services for others, usually through the use of money as medium of exchange. Throughout their life cycles, organizations repeatedly define and redefine their de facto strategic identities by deciding on what goods and services to deliver to their customers and what goods and services to purchase from other vendors in order to fulfill their production goals. Outsourcing decision is a key part of this process because the aggregate of the decisions to purchase various goods and services from another firm, and hence to exclude those activities from the organization, is in effect identical to drawing the boundaries of that organization.

Throughout management literature slightly different definitions of outsourcing are used (Harland et al., 2005). Some definitions focus on the purchase of inputs – components and services – required for production. Other definitions are based on the transfer of physical assets and employees from the focal firm to a new supplier which then continues the activity outside of the focal organization

(Barthelemy & Geyer, 2005). While this transfer could be to an independent third party, sometimes the new supplier is a spin off from the focal firm, resulting in a quasi-outsourcing structure. Some other works on the topic depict outsourcing as all sub-contracting relationship between firms. Most commonly, outsourcing is regarded as the procurement from specialized vendors of those activities beyond a firm's core capabilities and expertise (Özbay, 2004).

Gilley and Rasheed (2000) emphasize the strategic nature of this activity by defining it as "the fundamental decision to reject the internalization of an activity" (Gilley & Rasheed, 2000: 764). They further assert that this decision to reject may arise through two means: Substitution and abstention. Substituting external purchases for activities that were originally conducted within the firm is discontinuation of some portion of internal production and, hence, an act of vertical disintegration. Abstention-based outsourcing occurs when the firm, faced with a new need for a service not previously conducted in house, decides to purchase that service from another party even though it has the capability to internalize that activity. On the other hand, if the firm does not have the managerial and/or financial capability to bring such production within the firm, then that purchasing relationship is classified as simple procurement, not outsourcing.

Possible outsourcing arrangements can be viewed as a spectrum ranging from out-tasking to partnership based on how much discretion the vendor has on the activity outsourced (Beaumont & Sohal, 2004). At the out-tasking end, the vendor has very little decision-making power on the service provided and agrees to comply with the task definition established by the customer. At the partnership end of the spectrum, vendor and customer are considered equally responsible for decision-

making in the process and are expected to strive to adapt to each other's requests as well as to changing conditions.

Outsourcing typically begins with defining the activity to be outsourced. As described above, this is either a vertical disintegration of an existing process from the company or a rejection of internalization of a newly required process. Next is vendor search and selection through a procedure preferred by the focal firm, whether competitive bidding or selection based on previous relations or on other special criteria. After vendor selection, the parties enter into a contractual relationship through signing a written contract specifying the terms of this trade, i.e. responsibilities of each party. Once the relationship begins, it needs to be sustained through managerial activities such as monitoring, reviewing performance, working on details left open in the contract, meeting with the other party to exchange new information, and adapting the relationship terms if necessary. The contract typically terminates when the need for the service disappears or when the parties encounter a deadlock situation. The present study is concerned with the contract and thereafter. It is not concerned with vendor selection. It assumes an existing relationship and seeks to grasp how it is managed.

Motivations for Outsourcing

Outsourcing decisions may be grounded in economic, performance, and control areas (Barthelemy & Geyer, 2001). According to research conducted by Kakabadse and Kakabadse (2005), cost-related reasons are those most frequently cited by firms when asked for their motivations to outsource various activities. Cost-related reasons include improving general cost discipline, as well as reducing headcount, capital

costs, governance costs, and production costs. Operational and capital costs are reported to be lower due to economies of scale of buying from specialized vendors, as well as due to improved cash flow from freed up assets (Harland et al. 2005). Smith et al. (1998) have found that firms enter large scale information systems outsourcing agreements primarily to reduce costs and to generate cash. Domberger (1998) cites several studies where significant cost savings are achieved by contracting and observes that efficiency gains do not necessarily lead to lower quality.

Beyond cost savings, firms are able to enjoy improved performance as they are able to focus on their core activities. Companies are able to excel in their core production, with higher quality in production and increased efficiency in resource utilization, maximizing total value added for the company (Domberger, 1998). In addition to excelling in their core activities, firms also gain the opportunity to purchase the top quality service from specialized providers in their respective fields. Strategic outsourcing approach described by Holcomb and Hitt (2007) allows firms to augment their portfolio of capabilities, especially when they consider the specialized capabilities of their potential partners and how such resources can be complementary to the focal firm's existing assets. When complementary assets are linked together in such a manner, it becomes difficult for competitors to imitate this advantage, enhancing the focal firm's position in the value chain.

Quinn (1999) indicates that many global corporations employ knowledge-based outsourcing, i.e. outsourcing those functions which require expertise in areas such as legal, financial, or advertising, not to cut costs but to take advantage of global knowledge base of specialized service firms. For such organizations, the

question is leveraging not only their own company's capabilities, but also the resources of their service provider network.

The third group of outsourcing motivation for companies is related to control and flexibility. Firms desire to improve their innovative skills in new product and service development, enhance their capability for change, increase their speed to market for new products, and develop their market discipline overall. The purchasing firm, now separated from the provider of the service, is able to focus on outputs of activities rather than inputs to them. Gilley, Greer, and Rasheed (2004) found that human resource outsourcing practices had a positive significant effect on innovation performance of the firm, i.e. research and development investments and product and process innovations, as well as on stakeholder performance, i.e. enhancement of relations with employees, customers, and suppliers. Quinn (2000) presents evidence of shrinking time and cost of new product development for pharmaceutical companies engaged in outsourcing in the research and development function.

Linder (2004) provides evidence that companies are increasingly engaging in transformational outsourcing to "facilitate rapid organizational change, to launch new strategies and to reshape company boundaries" (Linder, 2004: 52). Linder details four different scenarios where outsourcing is used to fundamentally contribute to company strategy: One such circumstance is that of ambitious startups which need to rapidly increase their capacity in various functions, including some core activities of the business. Such services can be moved in-house later as the firm gradually adapts to the new market. The second group is high growth firms lacking experience in activities where they need further know-how to secure their place in the market. These firms partner with specialized vendors to transfer new skills and expertise. The third group is companies encountering operational difficulties after periods of high

growth. Typically, these are firms that need to reduce costs and focus their capital on most value adding activities. Finally, outsourcing can be transformational for firms on the edge of dissolution – those that need to radically redefine their core operations and shed all other activities.

Risks and Concerns Related to Outsourcing

While there is sizeable evidence on the benefits of outsourcing, there are also indications in the literature that not all organizations achieve the targeted benefits. Barthelemy (2001) has demonstrated the existence of hidden costs which companies do not calculate before their decision to outsource IT operations. Among these hidden costs are vendor search and contracting costs, cost of managing the partnership, and cost of transition to the new structure. Successfully entering into and maintaining a contractual outsourcing relationship – whether it is out-tasking or partnership – requires focused management effort and entails non-trivial costs. As we will detail in future sections, in addition to a written contract and formal monitoring of performance, management of a contract-based outsourcing relationship includes the development of an informal relationship with the vendor firm in order to ensure cooperation. Failure of relationship due to lack of proper maintenance will lead to further costs and more efforts to rebuild relations with the existing vendor or a new one.

An additional and significant risk is overreliance on outsourcing resulting in hollowing-out of the focal company. Lei and Hitt (1995) have concentrated on companies' loss of competitive advantage as they lose their knowledge and skill bases to their outsourcing partners and become increasingly dependent on their

partners. Contrarily, Domberger (1998) has suggested that hollowing-out is not a significant risk as long as the organization maintains some special competence, such as that of competitively managing sourcing relationships, as in the case of Virgin, Benetton, Nike, and Marks & Spencer. However, avoiding investment in any distinctive competence and treating the organization merely as a holding company hinders the firm's future learning potential and innovative capacity.

The restructuring of the focal organization induced by new outsourcing relationships leads to costs related to human resources, both financial and social. Dismissal or redeployment of employees, or transfer to vendor's employment may require adjustments such as additional training or severance payments for redundant workers. Additional organizational problems may arise under hierarchical outsourcing arrangements, where the focal firm legally transfers the assets to a new firm, however, maintains hierarchical control over the operations through the use of a contract (Muehlberger, 2007).

The risks mentioned can be decreased significantly through management actions before and during the outsourcing partnership. Review of current literature suggests that whereas outsourcing has the potential to contribute to company performance in significant ways, it may also be more harmful than beneficial if the process is poorly managed. However, also note that most academic publications on outsourcing are concerned with determinants and the processes of contracting. Jiang and Qureshi (2005) have found that, among the studies published on this topic between 1990 and 2003, less than twenty percent is explicitly about results of outsourcing. Hence, although a growing field of study, research assessing the benefits and risks of outsourcing, especially with a holistic strategic perspective whether at the company, industry, or economy level, is far from adequate.

Evidence of What Is Outsourced

Outsourcing is a time-honored practice in industries such as construction, clothing and textiles, and transportation (Graziani, 2001; Özbay, 2004). On the other hand, continuous processes such as petro-chemicals or paper production are typically integrated operations (Harland et al., 2005). This is because the type of production process is a key influence on the ability to contract out some parts of it. In other words, outsourcing is possible to the extent that the manufacture of a product or service is amenable to fragmentation. Fragmentation "refers to the growing complexity of the modern chain of production, which divides and re-divides previously integrated systems into ever more specialized and distinguishable units" (Curzon Price, 2001: 88). Level of inseparability of core service activities is found to be an important determinant of the level of outsourcing among service firms as well (Kotabe & Murray, 2004). Pure service firms tend to outsource less, as their core processes have a higher level of inseparability than non-pure service firms (whose services also include tangible goods).

Processes that lend themselves to fragmentation produce a finer and more complex division of labor compared to those that do not (Arndt & Kierzkowski, 2001). Instead of the average factor intensity of the end product, factor intensities of intermediate products determine the level of integration. Textiles and clothes manufacturing industry, for example, produces a set of commodities, intermediate or final, that utilize a wide range of production techniques, characterized by different factor intensities and widely-varying elasticity of demand (Graziani, 2001). These units of activities may then be performed separately from each other: by separate

firms, in separate locations. Differences in factor costs, such as labor costs, among different locations, such as different countries, stimulated the trend of increasing disintegration of production processes.

Traditionally, support services such as catering, cleaning, maintenance, and security were commonly outsourced by private sector firms (Harland et al., 2005). While such services were usually contracted out as separate activities, they are increasingly being procured bundled into facilities management operations. In addition to production processes and traditional support functions, other functions such as human resource management, information technology, customer services, finance and accounting, logistics services, sales force, and marketing services are also contracted out.

Managerial appreciation for organizational learning and innovativeness in recent years has increased the influence of research and development function, as well as highlighting the importance of collaboration across companies for knowledge sharing (Jones, 2000; Mahnke & Özcan, 2006; Quinn, 2000). Similarly, staff departments such as finance, human resources, and information systems have flourished due to increasing availability and utilization of many kinds of management information. The need for more knowledge intensive services by companies coupled with the development of large and sophisticated service providers, with level of intellectual capital difficult to match in-house, has thus escalated knowledge-based outsourcing (Quinn, 1999).

As late as two decades ago firms were employing subcontractors mainly in order to spread investment risks and to maintain flexibility, and concerns about quality issues used to deter outsourcing (Üsdiken et al., 1988). Only those parts of the human resource base that were considered less valuable for the company were

advised to be employed through subcontracting (Lepak & Snell, 1999). Valuable human resource had to be recruited and developed within the organization. However, as we have noted above, reasons for and areas of sourcing are proliferating. Competitive pressures "induce suppliers to search for greater efficiency" (Domberger, 1998: 203) and to develop specialized capabilities. Consequently, quality concerns are diminished and businesses are increasingly using outsourcing for full processes and for activities closer to the core, such as entire sub-systems of production. Harland et al. (2005) note a global automotive company that subcontracts styling and engine production processes despite labeling these as core competences. For such corporations, effectively managing subcontracting relationships becomes a core competence itself (Kakabadse & Kakabadse, 2005).

Overall, there is considerable evidence on the growth of outsourcing in the past few decades. However, it is uncertain how much of the growth can be attributed to real benefits from outsourcing and how much can be attributed to mimetic isomorphism (DiMaggio & Powell, 1983), institutional influences driving common patterns of behavior without necessarily an economic justification. Approaches such as strategic outsourcing (Holcomb & Hitt, 2007) and balancing vertical integration and outsourcing (Rothaermel et al., 2006) are novel research paths that may provide valid answers to the questions, what, why, and how to outsource.

Transaction Cost Economics

Outsourcing decision is concerned with two critical, and interlinked, choices: The location of organizational boundaries, and, the structure of contractual relationships. The former issue has been the main interest of institutional economics and more recently the institutional school in sociology. The latter issue has been the subject of a range of fields such as business law, marketing strategy, and human resources. Defining organizational boundaries and structuring the inter-organizational relationship are intertwined because in choosing how to govern an exchange a firm also defines its boundary (Barney, 1999), and on the flipside, integration can be an instrument in the service of the parties' relationship (Baker et al., 2002). This co-determination notwithstanding, we will review the major theories regarding organizational boundaries in this section and the next, and we will discuss the management of contractual relations in the following one.

The foundation of this thesis is an organization theory evaluation of transaction cost economics, where the core argument is minimizing transaction costs by assigning transactions (which differ in their attributes) to alternative governance structures (which differ in their relative efficiencies) in a discriminating way (Williamson, 1975). There are two exceptional strengths of transaction cost theory, which probably explain its continued significance: The dexterity with which it incorporates earlier theories, and the capacity for further advance. Throughout its existence, transaction cost theory has been refined based on findings in related fields as well as contributions from other theories. We will explain transaction cost economics as the central theory of this text and will provide information on other

relevant theories, especially with respect to their influence on transaction cost economics and to their bearing on outsourcing decisions.

Opportunism, Bounded Rationality, and Economic Exchange

Although transaction cost theory has been developed in the field of microeconomics, it is also fundamentally related to organization theory and law. A brief review of some prior theoretical developments in these fields is necessary to comprehend transaction cost theory assumptions better.

In 1934, Commons proposed that transaction is the appropriate unit of analysis for microeconomic problems, thereby drawing attention to the concept of firm organization in microeconomics (from Williamson, 1987). A transaction occurs when a good or service is transferred across a technologically separable interface. When the interface does not work properly, i.e. when there are frequent misunderstandings and conflicts that lead to delays, breakdowns, and other malfunctions, transaction costs are incurred. Transaction costs are the economic counterpart of frictional forces in natural sciences.

Ronald Coase in 1937 posed the issue of economic organization in comparative institutional terms, in other words, questioned why all production was not organized in one big firm. Coase argued that firms often supplanted markets as the principal means of coordination and hence should be considered alternative means of economic organization to markets. Whether transactions are organized within a firm (hierarchically) or between autonomous firms (across a market), is thus a decision variable. Which mode is adopted depends on their relative transaction costs.

In 1922, Frank Knight identified moral hazard (opportunism) as a prevalent condition of economic exchanges. Three levels of self-interest seeking can be identified in literature: Opportunism, simple self-interest seeking (neoclassical economics assumption), and obedience (the null form). Opportunism is generally described as calculated self-interest seeking with guile, ranging from more blatant behavior such as lying, stealing, or cheating to subtle misleading such as incomplete or distorted disclosure of information. There are active and passive forms, and ex-ante (adverse selection) and ex-post (moral hazard) types. An exchange partner acting opportunistically is essentially exploiting an informational or other advantage to the economic detriment of others (Barney & Ouchi, 1986).

Arrow (1959) challenged the traditional economic theory assumption that the price system is an efficient source of information. This assumption does hold at equilibrium. However, in conditions of disequilibrium, a premium is paid for the acquisition of information from sources other than the prices and quantities. Similarly, Hayek (1945, 1967) underlined that an equilibrium approach was only preliminary to the study of main issues in economics. Manifestations of complexity, such as idiosyncratic knowledge, which by its nature cannot be summarized by statistical measures, ought to be acknowledged rather than suppressed. Polanyi in "Personal Knowledge" (1962) also argued that indefinable knowledge (such as craftsmanship or special language) is an essential part of technology even in modern industries.

The pervasiveness of idiosyncratic information combined with opportunism lead to real or contrived conditions of information asymmetry, which vastly complicate problems of economic organization (Williamson, 1987). The elemental paradox is that the value of information for the purchaser is not known until he has

the information as demonstrated by Akerlof (1970) in the famous article on market for lemons. As current owners of a product know more about its quality than potential buyers, current owners misrepresent information about products. Observed on an aggregate level, this behavior has significant consequences such as driving high quality products out of the market.

In 1938, Chester Barnard published "Functions of the Executive" concerned with the processes of organization. Intended rationality, that is a precursor to the Simon's (1957) bounded rationality, and cooperation are assigned a central role in organization whose crucial standard of success was adaptation. Simon (1957) in "Administrative Behavior" describes the central problem of organization as joining of rational purposes with the cognitive limits of human actors and maintains that human behavior is intendedly rational, i.e. maximizing, but only limitedly so. Whereas intended rationality is responsible for the observed purposefulness of economic agents and organizations, limited (bounded) rationality explains the existence of actual economic and organizational choices. Williamson (1987) notes that bounded rationality is claimed by some to be merely a convoluted way of stating that, information is costly.

In legal studies, in 1931, Karl Llewellyn advanced a concept of contract as a highly adjustable framework which only roughly indicates real working relations, used as an occasional guide in cases of doubt and as a norm of ultimate appeal when the relations cease to work. This was a challenge to the convenient assumption, in both law and economics, that court ordering can be routinely invoked to enforce a contract. Relative merits of private ordering in relation to court ruling are further emphasized by Shulman (1955) who favored arbitration over judicial resolution of disputes due to the corrosive effects on continuing relationships that legal

proceedings encouraged. Macaulay (1963) also observes that contract execution is typically a much more informal and cooperative endeavor than legalistic approaches would suggest, and that contractual disputes and ambiguities are more often settled by private ordering than by appeal to the courts, as the latter emerged as more costly for all parties.

Findings from economics, organization theory, and legal studies prior to 1970 demonstrate the costs involved in economic exchanges and a readiness to be united under one main framework.

Transaction Cost Theory

Transaction cost economics is a part of "new institutional economics" which expands the concept of firm as production function to include the concept of firm as governance structure. Non-institutional (pre-microanalytic) research tradition portrays the firm as a black box and the typical explanation for non-standard practices is existence of monopoly. New institutional economics and transaction cost economics maintain that institutions matter, in terms of their organizational features, as well as the efficiency purposes they serve (Williamson, 1987). New institutional economics research reached a critical mass by 1975 and grew exponentially in the following decade largely owing to flourishing transaction cost theory..

Transaction cost theory is the common label for a group of theories following the main arguments and assumptions articulated by Williamson in 1975. These arguments and assumptions form the core of transaction cost economics research and eloquently combine previous work on transactions. In line with Coase (1937), Williamson identifies markets and firms as alternative instruments (governance

structures) to organize sets of transactions. The use of each instrument depends on the relative efficiency of each governance form, i.e., minimizing the costs of exchange. Hence, the examination of the comparative costs of planning, adapting, monitoring task completion under alternative governance structures is necessary.

Transaction cost theory can be used to analyze any issue that can be formulated as a contracting problem and hence has a very broad scope. It is suitable for studying any direct economic exchange, as well as other arrangements with an implicit contracting quality such as cartel. Costs of writing and executing complex contracts, with respect to both within-firm and inter-firm exchange relations, vary with: a) characteristics of human decision makers involved with the transaction, i.e. bounded rationality and opportunism, and b) objective properties of the market, i.e. uncertainty / complexity and small numbers bargaining (Williamson, 1975).

There are ex-ante and ex-post types of transaction costs: Ex-ante (before the contract) costs are costs of drafting, negotiating, and safeguarding an agreement. When done with great attention to detail, this process results in a complex document in which many contingencies are recognized and appropriate adaptations by the parties are specified in advance. At the other extreme, the document can be very incomplete, with the gaps to be filled in by the parties later as the contingencies arise. In the former case, all conceivable states of nature are contemplated in advance, in the latter, only the actual choices are addressed as events unfold.

Ex-post costs of contracting are "maladaptation costs incurred when transactions drift out of alignment, haggling costs incurred if bilateral efforts are made to correct ex-post misalignments, the setup and running costs associated with the governance structures (often not the courts) to which disputes are referred, and the bonding costs of effecting secure commitments" (Williamson, 1987, p.21) Ex-

ante and ex-post costs are interdependent and must be addressed simultaneously in the beginning, rather than sequentially. Further note that for each individual decision transaction costs are only partially influential, as an addition to production cost considerations, i.e., the sum of the two types of costs is considered.

Dimensions of Transactions

Every transaction has a set of attributes that influence the costs of exchange differently under each governance form. The principal dimensions with respect to which transactions differ are asset specificity, environmental uncertainty, behavioral uncertainty (difficulty of measurement), and frequency (Williamson, 1991b). Higher levels of each of these attributes are expected to increase transaction costs and hence indicate more hierarchical modes of governance. Figure 1 demonstrates the original transaction cost economics (TCE) framework that is being studied, elaborated, and refined since 1970s.

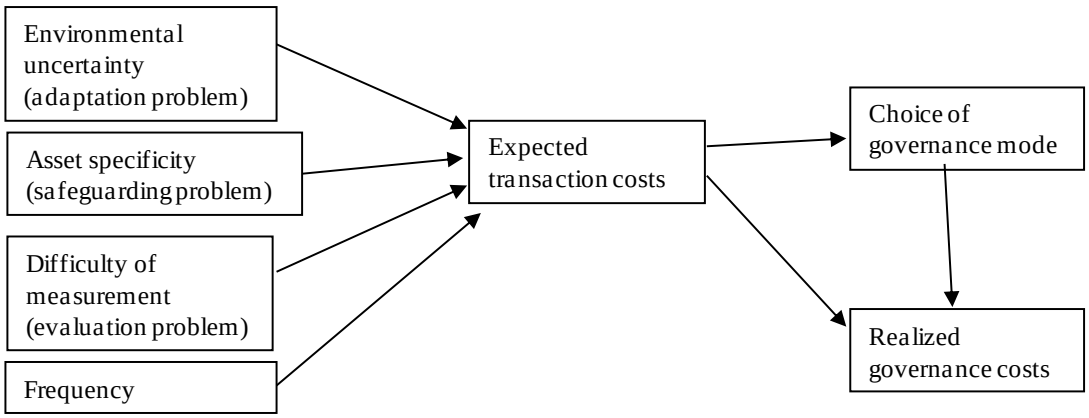

Figure 1: Basic TCE model for choice of governance mode

Asset Specificity

Among all transaction attributes, asset specificity has attracted the most attention within the realm of TCE and it has been noted by Williamson as the most significant in determining the costs of exchange. It refers to "the degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value" (Williamson, 1991a, 281). Related to the assumption that at least some exchange partners behave opportunistically, this transaction attribute generates what is called the safeguarding problem. Asset specificity, in general, increases transaction costs by creating bilateral dependency between exchange partners and increasing the need for coordinated responses to disturbances. The presence of investments in durable, transaction-specific assets leads to "lock in" in the linkage.

The problem of asset specificity arises in an intertemporal context (Williamson, 1987), as the true value of the specialized assets depends on how the relationship evolves. Typically, special purpose investments permit production cost savings to be realized compared to general purpose investments. But special investments are also riskier, as specialized assets cannot be redeployed without sacrifice of productive value if contract is interrupted or prematurely terminated. Whether the prospective cost savings justify the strategic hazards is the main question. The answer depends on whether the assets are redeployable or not. The common accounting distinction between fixed and variable costs is not relevant here. Many fixed assets such as general purpose buildings are redeployable. Other costs that accountants treat as variable often have a non-salvageable part, e.g., firm-

specific human capital. There are at least 4 types of specific assets: Site specificity, physical asset specificity, human asset specificity, and dedicated assets.

In case of asset specificity, the identity of the parties to a transaction plainly matter; hence, the continuity of the relationship is valued. To support transactions of this kind, contractual and organizational safeguards are utilized, at additional cost.

Environmental and Behavioral Uncertainty

Constraints on information processing and communication, i.e. bounded rationality, become problematic in uncertain environments, where uncertainty may refer to the inability to specify ex-ante the circumstances surrounding an exchange (i.e., environmental uncertainty) and/or to the inability to verify the level of performance ex-post (i.e., behavioral uncertainty) (Rindfleisch & Heide, 1997). Governance structures differ in their capacities to respond effectively to disturbances. Adaptation problem would disappear under perfect rationality, as it would be feasible to develop a detailed strategy in advance for all possible states of nature. Similarly, without opportunism, a "general rule" in the contract would be sufficient to counter all potential disturbances.

Environmental uncertainty, also called primary uncertainty (Williamson, 1987), arises from random acts of nature and unpredictable changes in consumers' preferences. This elicits the need for adaptation as a central economic problem (Williamson, 1991a) which may include modifications to existing arrangements. As a result, parties to an agreement may need to "assume considerable transaction costs associated with ongoing renegotiations" (Rindfleisch & Heide, 1997: 31) or suffer

from the inability to provide an efficient response to changes with each other and may need to seek other solutions.

Behavioral (secondary) uncertainty is the problem of evaluating whether the performing party has complied with previously agreed specifications of service. It follows from one decision maker having no way of finding out the concurrent decisions and plans made by another (communication / information problem, including strategic nondisclosure, disguise, or distortion of information). As "the capacity for novelty in the human mind is rich beyond imagination" (Williamson, 1987, p.58), this type of uncertainty leaves the evaluating party strategically vulnerable to opportunism. Behavioral uncertainty is high when the tasks undertaken or goods and services produced by the seller party are complex and difficult to measure, in which case the need of the buyer firm to resort to more elaborate control mechanisms will increase transaction costs.

Transaction Frequency

Transaction frequency, the least studied component of basic TCE theory, is expected to provide an incentive for firms to employ hierarchical governance as high frequency of a task justifies the specialized hierarchy (Williamson, 1987). However, the empirical attempts to demonstrate this hypothesized relationship have generally been unsuccessful (Rindfleisch & Heide, 1997). Frequency and volume of transactions are most important for high asset specificity situations where volume of business addresses both transaction and production cost problems.

Attributes of Governance Structures

Based on the principles described above, transaction cost theory also predicts the success (measured as minimized governance costs) of selected governance forms. Governance costs are minimized when the governance mode appropriate for current levels of transaction attributes is selected (see David & Han, 2004). For example, for the most widely studied asset specificity, transaction cost ($) minimizing path as the level of asset specificity (k) changes would be as highlighted in the following graph, where M(k)=market governance costs, X(k)=hybrid governance costs, and H(k)=hierarchy governance costs (Williamson, 1991 b):

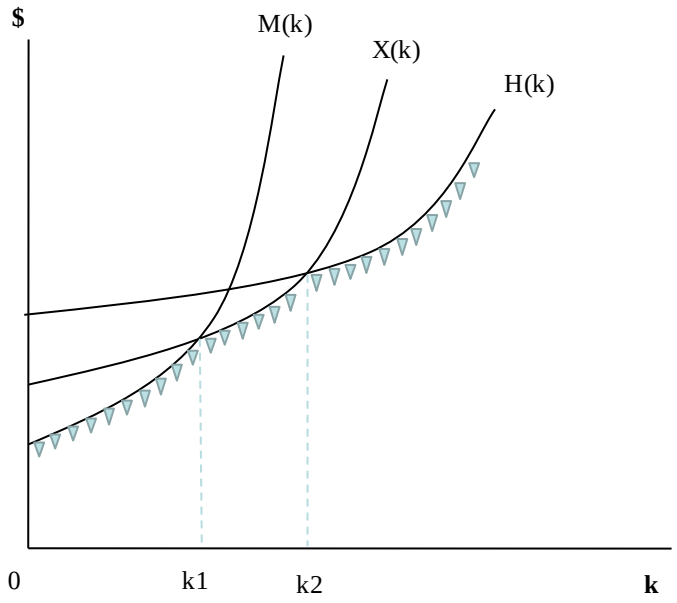

Figure 2: Comparative governance costs, from Williamson, 1991 b

Williamson (1991a) points out that markets, hierarchies, and hybrids (contractual relations) are discrete forms each with its own strengths and weaknesses as governance structures. They differ with respect to the following three dimensions of governance: performance attributes (adaptation), instruments of governance, and legal framework.

Following (and comparing) Hayek and Barnard's definitions of adaptation as a central economic problem, Williamson concludes that there are two types of economic adaptation: The first one is adaptation (A) where (A) denotes autonomous. This process is the neoclassical ideal where buyers and sellers in a market act independently and "for which prices serve as sufficient statistics" (Williamson, 1991a, 278). Incentive intensity of efficient markets is the instrument to achieve such adaptation. The other type is adaptation (C) where (C) denotes cooperation. This is a deliberate effort to realize internal coordination among actors and is achieved through hierarchy and instruments of administrative control.

Table 1: Distinguishing Attributes of Governance Structures
(from Williamson, 1991a)

Attributes	Market	Hybrid	Hierarchy
Instruments			
Incentive intensity	++	+	0
Administrative controls	0	+	++
Performance attributes			
Adaptation (A)	++	+	0
Adaptation (C)	0	+	++
Contract law	++	+	0
++ = strong; + = semi-strong; 0 = weak			

When the parties are autonomous, it is expected that they prefer market governance, which provides high autonomous adaptation, without costs and risks of establishing a

hierarchy. When bilateral dependency is present, hierarchy facilitates cooperative adaptation. However, this mode of governance does not have an ability to clearly distinguish high performers from low performers, i.e., poor incentive intensity. Further, based on Williamson's analysis, it appears that hybrid forms, the contractual relations among relatively autonomous parties, try to imitate the strengths of both polar forms based on transaction attributes. Neoclassical contract law allows parties to act more similar to markets or hierarchies depending on the relationship and requirements of the market as adaptations between autonomous parties can only be accomplished via mutual agreement.

Theories of Competitive Advantage

As for almost any topic in organization studies, there are various economic and social explanations of firm boundaries and contractual sourcing relations. Scott (1992) classifies social theories as rational system and natural system explanations of social phenomena. The rational system explanations typically focus on the efficiency of the system, whereas the natural system explanations concentrate on sovereignty, power, dependence relations and legitimacy. Transaction cost economics discussed above is a pure efficiency explanation of firm behavior. However, a more balanced approach to evaluating firms' outsourcing behavior necessitates recognition of the natural system perspective as well.

Transaction attributes such as asset specificity and uncertainty are meaningful in the context of a market. Hence, the firm's position in the market with respect to the need for specialized investment, and overall market uncertainty and complexity are constituents of the firm's connection with its environment. To be articulate in the

analysis of relations with environment, we need a more defined view of the firm relative to transaction cost economics where firm boundaries are endogenously determined. This is not an unusual endeavor, given that most established theories in economics and organization theory conceptualize the firm and its environment as separate entities. We start this chapter by talking about dynamics of competition as explained by microeconomists and organization theorists independently. Then we will review two chief theories of competitive advantage, namely business strategy (Porter, 1980) and resource-based view (Barney, 1991), which incorporate microeconomics and organization theory.

Economics of Competition

Organization theorists generally agree that strategy and structure of an organization are in a circular causal relationship, while which specific direction of this causal relationship gains significance depends on the stage of an organization's life and other circumstances. Outsourcing is an activity that directly concerns both the strategy and the structure of the organization and a major explanation for outsourcing activity is based on business strategy of the firm.

At a fundamental level, separation of production into different and independent organizations and subsequent formation of sourcing relations between firms have been the result of division of labor. Different organizations with particular capabilities exist, who then trade their products and services to receive other products and services. Price theory, central to neoclassical microeconomics, is based on this division of labor and trade of products and services among firms, assuming efficient markets and equilibrium. Transaction cost economics discussed in the previous

section is a divergence from neo-classical microeconomics with its assumption of market failure; however, it still focuses on achieving efficiency in the system.

Economics of business strategy also assumes market failure; however, it focuses on how firms utilize market inefficiency to outperform competitors. The study of competition has taken three routes with different assumptions on industry structure. These paths do not contradict, but generally complement each other.

Industrial organization approach (Mason, 1939, Bain 1956, 1968) assumes homogeneity among firms in an industry and focuses on how industry structure affects financial returns to firms (from Barney & Ouchi, 1986). Elements of such structure are existence and value of barriers to entry, number and relative size of firms, existence and degree of product differentiation, and overall demand elasticity. Originally developed to assist government policy makers and regulatory authorities to prevent accumulation of supernormal profits to firms and restore market efficiency, this structure-conduct-performance paradigm has later been used by strategists to determine industries with supernormal profit potential.

Chamberlinian economics (Chamberlin, 1933) assumes heterogeneous firms within an industry. This condition is termed monopolistic competition, where firms have different though perhaps overlapping resources and characteristics. Firm heterogeneity, such as differences in technical know-how or reputation, is the main source of competitive advantage. Monopolistic competition leads to a level of competitive equilibrium where there is a distribution of economic returns to firms. The goal of strategy is to specify ways by which firms can obtain above average returns.

Schumpeterian competition (Schumpeter, 1934, 1950) has a longer term approach and focuses on the process of creative destruction, as an attempt to describe

the process of economic development in different countries. Creative destruction denotes major technological and product market shifts, which can be anticipated only imperfectly by firms. Even as such shifts happen, their effects are difficult to estimate. This unpredictability makes Schumpeterian economics less compatible with business strategy making where the focus is on pricing and other competitive market actions.

Resource Dependence

Organizations require resources for survival. To acquire resources, organizations need to manage the competing demands of interest groups who control those resources (Pfeffer & Salancik, 1978). Organizations survive to the extent that they are effective, i.e., able to create acceptable outcomes to a range of other organizations and individuals. This is essentially a sociopolitical issue and connotes that organizations are controlled by their environments, to the extent that they are dependent on resources in those environments.

However, problems exist not because of dependence relationship but because the environment around the organization is also complex and dynamic, and hence, uncertain and not dependable, particularly when resources are scarce. Control over such resources provides others with power over the organization. As organizations seek to reduce uncertainty by managing their way through the webs of resource holders, they also try to shape their own contexts and retain autonomy for independent action. The simultaneous demand for certainty and autonomy lead to various ways by which the organization attempts to manage its task environment.

Task environment is defined by Dill (1958) as parts of the general environment which are relevant or potentially relevant to the attainment of organizational goals. Dill has further noted that task environments include four major sectors: Customers, suppliers of inputs, competitors for markets and resources, and regulatory groups, including governmental agencies, unions, and other inter-organizational associations. Task environments are usually multifaceted and pluralistic, composed of many other organizations and groups (Thompson, 1967). In their complexity, task environments create contingencies for and impose constraints upon organizations.

According to Thompson, an organization is dependent on some element of its task environment in proportion to the organization's need for resources that element can provide, and in inverse proportion to the ability of other elements to provide that same resource. In a complex task environment where organizations are typically interdependent, they both have power with regard to each other. This notion of power based on Emerson (1962) is not a zero-sum concept where A has power at the expense of B. Increasing interdependence between A and B results in increased net power, which typically forms the basis for coalitions.

Pfeffer and Salancik argue that "the typical solution to problems of interdependence and uncertainty involves increasing coordination, which means increasing the mutual control over each other's activities" (1978:43). Hence, resource dependence perspective expects firms with high interdependence to employ such bridging strategies with each other. Bridging strategies which include boundary-spanning and boundary-shifting activities are the opposite of buffering strategies which indicate the need for organizations to protect their technical core (Scott, 1992).

Contracting, coopting, and coalescing are alternative actions indicating different degrees of cooperation and commitment (Thompson, 1967). With such cooperative strategies, effective achievement of power rests on exchange of commitments and mutual reduction of uncertainty. Contracting, defined as "the negotiation of an agreement for the exchange of performances in the future" (Thompson, 1967:35) will be discussed in detail in the following chapter. Contracting as bridging strategy includes short- or long-term, and written and non-written agreements. Coopting has been defined by Selznick (1949) as the process of absorbing new elements into the leadership or policy-determining structure of an organization to avert threats to its stability or existence. Coopting in the form of interlocking directorates has been extensively studied as it is a widespread practice in the western economies (Schoorman et al., 1981). Coopting as a bridging mechanism provides a two-way flow of influence and support, and is a more constraining form of cooperation than contracting. Coalescing refers to a combination with another organization, in the form of a joint venture, merger, or business association (Pfeffer, 1972). A coalition is not only a basis for exchange but also a commitment for future joint decision making. Hence, it is a more constraining form of cooperation than coopting.

In addition to cooperative bridging strategies to gain power relative to those on whom it depends, an organization is also able to manage dependencies through competitive strategies (Thompson, 1967). The organization may choose to maintain alternative sources for inputs in order to avoid becoming subservient to elements of its task environment. The organization may also seek prestige and develop a favorable image to increase its chances of obtaining resources and support from its task environment. Initially suggested by Selznick (1949), instilling distinct

competencies and individual character also provide an organization power over others in its task environment.

Competitive Strategy

Despite the fact that strategy as an academic discipline is naturally eclectic, drawing from different fields, and comprising many rival schools (Mintzberg et al., 1998), an ongoing search for sustainable economic rents is its raison d'etre in business practice (Lado et al. 1997). Among the ten schools identified by Mintzberg et al, competitive positioning approach has been a particularly influential approach in practice as well as heavily criticized by rival schools of thought (Stonehouse & Snowdon, 2007).

Based on notions of competition developed in microeconomics, and especially the industrial organization model, Porter (1980) has developed an industry analysis based method of making strategy. Whereas industrial organization economics aims at minimizing excess returns to firms by demonstrating the presence of such returns to policy makers and regulators, the business strategy approach utilizes the same analytical tool to help business managers maximize profits. The industry is analyzed as a combination of five forces – rivalry among current competitors, bargaining power of buyers, bargaining power of suppliers, threat of new entrants, and threat of substitutes – that jointly determine the intensity of industry competition and profitability. The collective strength of these forces, as well as the relative importance of each, influences strategy formulation. In Porter's view strategy formulation takes one of three routes: Positioning, i.e. selecting among generic strategies of cost leadership, differentiation, and focus; influencing industry

balance, e.g. through innovations; or, exploiting industry change, e.g. diversifying or moving out of markets based on industry trends.

Porter also developed the value chain as a tool to determine value adding activities for organizations. Value chain disaggregates a firm's activities into primary and support activities (1985:3). Primary activities are those directly involved in the flow of product to the customer – inbound logistics, operations, outbound logistics, marketing and sales, after-sales service. Everything else, i.e. infrastructure, human resources management, technology development, procurement, exists to support primary activities. Successful management of the value chain directly influences the profit margin.

Overall, Porter's approach to strategy, the positioning school, has been both heavily influential and heavily criticized. Mintzberg et al. (1998) argue that the generic strategies are not necessarily mutually exclusive. Prahalad and Hamel (1990) maintain that generic strategies cannot be the basis of competitive advantage and that firm-specific core competences need to be built based on the unique experience of each firm. Rumelt (1991) also argues that firm specific factors are more important to business profitability than industry factors. There are also limitations with respect to the assumptions of the model, such as disregard for differences among firms (firm heterogeneity in the industry) and static representation of industry forces.

However, this branch of strategy has been influential in the overall advancement of the field, in addition to the development of a countermovement called the resource based view of the firm.

Resource Based View

The term resource based view was first used by Wernerfelt in 1984. According to him, a resource is anything which can be thought of as a strength or weakness of a firm, mainly consisting of tangible and intangible assets tied semi-permanently to the firm. Although the traditional view of strategy is phrased in terms of the resource position of the firm, until resource-based view field of strategy has been dominated by product-market theories, an environmental perspective without regard for unique firm attributes.

Wernerfelt claims that looking at firms in terms of their resources will lead to significant insight. Specifically, he adapts Porter's five forces framework for use with firm resources instead of product markets to determine types of resources which can lead to high profits. He identifies resource position barriers analogous to entry barriers to a market. He also argues that "strategy for a bigger firm involves striking a balance between the exploitation of existing resources and the development of new ones" (1984:172). In addition, mergers and acquisitions provide opportunities to obtain strategic advantage at low cost if the combined resources are carefully considered.

These suggestions have been largely ignored until Prahalad and Hamel (1990) applied them to conceptualize the "core competence of the corporation". They depict the diversified corporation as a large tree whose major limbs are its core products, from which the smaller branches, the business units, extend. Leaves, flowers, and fruits are the end products of these business units. The roots which provide nourishment and stability to this tree are the core competences. Core competences

are the roots of a firm's competitive advantage and are "the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies" (1990: 82).

Prahalad and Hamel insist that core competencies satisfy at least three criteria: They provide potential access to a variety of markets; they make significant contribution to perceived customer benefits; they are difficult to imitate. This description of core competences is similar to the concept of invisible assets developed by Itami (1987). Itami's argument is (based on Mintzberg et al., 1998) that accumulated invisible assets are the focal point of successful strategy development, are well-rooted, hard to accumulate resources applicable to multiple uses, and can be inputs or outputs of a firm's activities.

Resource based view developed into a comprehensive theory owing to Barney's (1991) delineation of key concepts and assumptions as well as further explanation as to how resources translate to competitive advantage. Barney positions resource based view as an internal analysis of the firm (discovering firm strengths and weaknesses) parallel to the external (industry) analysis in competitive positioning models (discovering opportunities and threats). He concludes that in order to *sustain* competitive advantage, a firm requires resources that are valuable, rare, imperfectly imitable, and not substitutable. Such resources can only be achieved under conditions of resource heterogeneity and resource immobility.

Resource based view deals with and overcomes analytical difficulties associated with competitive positioning view (Barney, 1991). Unlike competitive positioning approach, resource based theory is not limited to practices which ignore or reduce social welfare. Exploiting firm resource advantages is efficient at a macro level, resulting in efficiency rents as opposed to monopoly rents. Further, unlike

competitive positioning which is solely rooted in microeconomics, the resource based model embraces both organizational and economic ways of studying competitive advantage.

An additional flexibility of the resource based model is that it provides a balanced view of the role of management in firm performance because it attributes sustained advantage to a combination of a firm's resource endowments and the management of that endowment. As a result, resource-based view has been a popular method of studying strategic alliances of all types as documented by Ireland et al.'s (2002) review of recent empirical research on alliances. This view of firm resources and core competences as dynamic capabilities or as the consequence of a learning process lends itself to studying the relationship formation and development processes in strategic alliances, which also include sharing of capabilities and joint learning (Holcomb & Hitt, 2007). Resource based theory has also been applied to a broad range of areas such as military history (Pringle & Kroll, 1997), human resource architecture (Lepak & Snell, 1999), and determination of firm boundaries (Barney, 1999).

Governance of Contractual Relations

Cognitive Map of Contract

Earlier in this text we provided the definition of contract by Thompson as "the negotiation of an agreement for the exchange of performances in the future" (1967:35). However, there is a broader view advanced by other thinkers. With respect to an employment relationship Rousseau argues that "when individual

employees believe they are obligated to believe or perform in a certain way and also believe that the employer has certain obligations toward them, these individuals hold a psychological contract" (1990: 390). This argument is based on Weick's (1981) preceding assertion on the emergence of an implicit contract when two parties can predict what each other will do in an interaction, and the implicit rules of the relationship thus inferred shapes their future behavior. Similarly, Baker et al. note that "relational contracts, informal agreements sustained by the value of future relationships, are prevalent within and between firms" (2002: 39). Hence, the notion of contract is extensive and "contractual variety is the source of numerous puzzles with which the study of the economic institutions of capitalism is appropriately concerned" (Williamson, 1987: 68), as contract thus defined becomes the main instrument with which control and coordination, the essential problems of organization, are achieved.

Industrial organization school in economics examines the non-standard complex contract in terms of the purposes served, distinguishing two main groups of purposes: Monopoly and efficiency. Monopoly purpose refers to "any effort by the firm to extend its reach beyond the natural boundaries defined by technology" (Williamson, 1987: 23). Alternatively, a contract may be an instrument of achieving efficiency. Towards this goal, a contract may focus on the ex-ante side, i.e. incentives, or the ex-post issues, i.e. transactions costs. Within the incentive focused group are those contracts that delineate residual rights between the parties (rights remaining after clear rights from ownership are considered), and those contracts that align principal-agent incentives with respect to the agency theory framework. Contracts with a transaction cost approach, however, are based on the notion that not

all issues can be identified in advance, and that ex-post governance matters, including support institutions and performance measurement methods.

Firm as a Nexus of Contracts

A distinctive approach to the study of contracts has been Agency Theory (Jensen & Meckling, 1976) in microeconomics. Agency theory views the firm as the sum of contracts between various actors, taking on principal and agent roles. Under an agency contract, one party engages another to perform some service on his behalf, while also delegating some decision-making authority to the agent. In a classical representation, firm owners or investors are principals and managers are agents, however, in an extension of the argument for organization theory, going down the organizational hierarchy, lower level managers and finally non-managers act as the agents while their supervisors become principals.

Agency theory has the same set of assumptions as transaction cost theory; however, an additional assumption sets it apart. This assumption is the efficiency of capital markets, which, in its strong form, indicates that investors are able to take all the information about the value of the firm into consideration when pricing a firm's debt and equity (Fama, 1970). Weaker forms indicate that only some of this information is reflected in pricing.

Agency costs are the total of monitoring expenditures made by principals to regulate agent behavior, bonding expenditures made by agents to reassure principals, and residual agency costs due to remaining unresolved conflicts of interest between agent and principal. In efficient capital markets, agents choose the capital structure that minimizes agency costs because agents bear the total wealth effects of agency

costs. Contracts "specify measures and promise rewards such that agents will serve their own interests when they fulfill the demands of the contract" (Hatch, 1997: 335). Hence, markets are not only an alternative to firms for governing exchanges, but they also have a significant impact on firm behavior through agency contracts.

Contract Law Framework

The study of contracts as a field of legal studies has passed through Classical, Neoclassical, and Relational Contract stages, with each stage developing the perspective towards a more flexible attitude to contracting relations. Classical contracting is the legal counterpart of classical market governance with its focus on discreteness and "presentiation" (Macneil, 1978). Presentiation refers to rendering present in space and time all aspects of the contract. This includes comprehensive contracting covering all future possibilities of the state of the world. Since all contingencies are accounted for, the identity of each party is irrelevant, the written, formal terms take precedence over informal understandings and norms, and hence no incentive exists to develop a relationship beyond the written contract. Third parties are not included in the contract and disputes are ultimately resolved through litigation.

However, there exists significant amount of uncertainty in the economic environment that is impossible to eliminate through written contracts. This is a problem especially for long term contracts, where not all future contingencies can be readily assessed. In addition the required adaptations and emerging costs usually cannot be determined in advance. When such bounded rationality issues appear

together with opportunistic behavior, a prevailing trait of business transactions, serious contractual difficulties arise under classical contracting framework.

Neoclassical contract law introduces flexibility to contractual relations. "Recognition that the world is complex, that agreements are incomplete, and that some contracts will never be reached unless both parties have confidence in the settlement machinery, thus, characterizes neoclassical contract law" (Williamson, 1987: 70-71). Whereas the written document and legal jurisdiction are still final, third party arbitration becomes an additional method of governance particularly when the continuity of the relationship matters.

Theory of relational contracting takes one further step in responding to the inadequacy of classical contract law. Looking at this theory from the neoclassical point of view, Feinman (2000) indicates that relational contracts are a special category that deserves extra sensitivity within the domain of general contract law. With relational contracting, the focus shifts from the contract to the bilateral relationship, "the entire relation as it has developed through time" (Macneil, 1978: 890), with its own behavioral norms. Under expectations of relational continuity, contract clauses, written or not, become self-enforcing, and private ordering almost completely replaces court procedures. By Macneil's definition, contract is "relations among people who have exchanged, are exchanging, or expect to be exchanging in the future – in other words, exchange relations" (2000: 878), and not specific transactions, agreements, or promises.

Similarly in transaction cost framework, four cases can be distinguished with respect to assumptions about the transaction environment:

1. Unbounded rationality / non-opportunism situation describes contractual utopia obviating any corrective action; however, this situation is never observed.
2. Unbounded rationality / opportunism situation can be remedied in theory by comprehensive contracting, as assumed by classical contracting, but only the simplest and shortest term contracts fall under this group.
3. Bounded rationality / non-opportunism combination can be resolved through general clause contracting where parties strive in good faith to conform to the agreement by disclosing all relevant information; nevertheless lack of opportunism does not describe the typical transaction.
4. Bounded rationality / opportunism situation is the most pervasive and is the source of serious contractual difficulties.

Efficient Governance Structures

Based on Macneil's characterization of stages of contract law, Williamson (1987) has suggested efficient governance arrangements that vary with transaction attributes. The assumptions implicit in this proposal are: presence of significant environmental uncertainty, and high numbers of buyers and sellers precluding ex-ante monopolies in transactions. Hence the focus is on transaction-specific assets, i.e. the specific investments made by suppliers, and frequency of buying dimensions.

Williamson argues that transactions requiring only non-specific assets, i.e. highly standardized transactions, require no specialized governance structure whether they are frequent or occasional (pls. see Figure 3). Market alternatives, and the

possibility of litigation based on a standard contract, protect each party from effects of opportunistic behavior by the other.

Occasional but highly specific transactions require additional governance beyond the market, namely trilateral governance that works to ensure the completion of the contract. In this case, due to setup costs of specialized assets, market relief is not possible once the parties enter into the contract. Highly idiosyncratic investments combined with frequent transactions justify the costs of establishing unified structures, i.e. hierarchies. Finally, frequent transactions with mixed investments require bilateral governance structures where the autonomy of the parties is maintained.

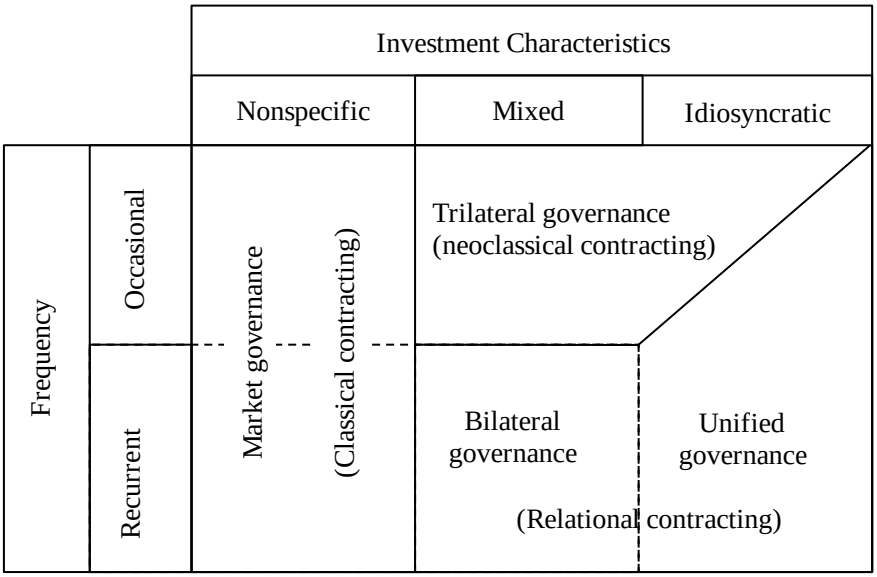

Figure 3. Efficient governance (from Williamson, 1987)

The Role of Relational Norms

The presence of uncertainty combined with highly specific investments locking in at least one of the parties to the relationship necessitates governance structures that eliminate opportunism and infuse confidence in the relationship. Williamson hypothesizes that organizational structures which presume trustworthiness are rendered nonviable, while viable forms are those that screen against and socially penalize opportunistic action. Negative consequences of deviation from relational norms provide the motivation for self-enforcement of written or implicit contracts.

Despite the practical significance and prevalence of social, relational norms in business organizations, it was introduced as an organizational variable by Ouchi (1979, 1980) in his theory of organizational efficiency. Ouchi has taken the modes of control (governance) from transaction cost theory and has delineated normative and informational requirements for each mechanism. Whether based on minimization of governance costs, optimization of adaptation, or any other criteria, efficiency theory necessitates matching form of control to prevailing norms and available informational devices. Table 2, taken from the highly influential Ouchi article (1980), summarizes the requirements for each mode of control.

Table 2. Organizational Failures Framework (from Ouchi, 1980)

Mode of control	Normative requirements	Informational requirements
Market	Reciprocity	Prices
Bureaucracy	Reciprocity Legitimate authority	Rules
Clan	Reciprocity Legitimate authority Common values and beliefs	Traditions

Normative requirements are basic social agreements shared by members of a transactional network. It is generally accepted (based on Gouldner, 1960) that the norm of reciprocity, the basis for the existence of any market, is the omnipresent economic norm across all cultures. Beyond reciprocity, the presence of legitimate authority (in a business organization, as well as in the society in general), is the basis of formal organization, providing a standard of exchange for those recognizing the legitimate authority (from Weber, 1947). However, under conditions of bounded rationality and opportunism, combined with uncertainty in the environment and in performance measurement, even legitimate authority is bound to fail. "Common values and beliefs provide the harmony of interests that erase the possibility of opportunistic behavior" (Ouchi, 1980: 138).

As we move from market to bureaucracy to clan, normative requirements increase, but informational requirements decrease / become simpler. Prices are the most sophisticated carrier of information, however it is difficult to arrive at or verify a "correct" price for each transaction, due to effects of uncertainty and bounded rationality discussed earlier. Hence, rules are introduced by hierarchies to deal with situations as they arise. However, extreme uncertainty (dynamism or complexity) would require too many rules. Traditions, which are implicit rules, replace explicit rules under such conditions.

Thus Ouchi presents the clan form of organization, with members' common values, beliefs and traditions, as the remedy to failure of both markets and hierarchies. This argument appears similar to Etzioni's (1975) earlier work on typology of organizational control. In Etzioni's framework, ideological organizations and the sense of belonging and goal congruence are emphasized, whereas Ouchi specifically distinguishes norms as the organizing principle.

Dyer and Singh (1998) have attempted to delineate the mechanisms with which relationships between firms create strategic advantages. In part, the generation of such advantage and "relational" rents to the firms is due to the creation of relationship specific assets and complementary resources. It is also due, however, to procedural aspects such as norm-based self-enforcing governance mechanisms and knowledge-sharing routines.

How the nature of the relational elements between firms affect performance outcomes has been widely studied in the marketing field following Heide and John's (1992) thought-provoking article. The authors challenge the universality of the opportunistic behavior assumption of transaction cost theory. They argue that in practice organizational control is possible only in the presence of supportive norms, and present a set of such norms: Flexibility, information exchange, and solidarity. Lusch and Brown (1996) build on this argument and elaborate on antecedents and consequences of these relational norms. They also discuss how the structure of inter-firm contracts may relate to operation of relational norms.

Along a similar route, Buvik and John (2000) and Buvik and Andersen (2002) study vertical coordination, defined as "purposive organization of activities and information flows between independent firms" (Buvik & John, 2000: 53) that is not enforced through legal ordering. Both articles maintain that vertical coordination is an important determinant of partnership success represented by ex-post transaction costs.

In their microeconomic account of emergence of long-term trading relationships, Brown et al. (2004) demonstrate that successful long-term relations "exhibit generous rent-sharing and high effort" by the parties. They argue that such relationships emerge naturally in the absence of third part enforcement. While the

direction of such causality, if any, is debatable at the organizational level (as opposed to population level), the same phenomenon was also noted by Johnson et al. (2002). In their study of firms from several Eastern European countries, they have found that in weak legal institutional environments bilateral relations can substitute for courts in supporting contracting, especially in long term relationships. On a similar note, but with an organizational point of view, Ring and Van de Ven (1992) have earlier studied the distinguishing attributes of each type contractual relations, ranging from discrete market transactions to relational contracts. According to these authors, that the ultimate dispute resolution relies on the trust between contracting parties, as opposed to the legal system, hierarchical authority, or societal norms, is an important distinguishing quality of relational contracting.

Thus, the literature on relational norms draws attention to the balance between maintaining efficiency and an appearance of equity. Ouchi (1980) indicates that transaction costs are necessary to create a perception of equity among all parties in the relationship. Transaction costs arise from activities undertaken to satisfy each party in terms of expectations of equitable transfer of value. In addition to underlying nature of goods or services, transaction costs may increase due to lack of trust between parties. With this argument, Ouchi also distinguishes between lack of trust among parties (a situational trait) and opportunism (a universal assumption in transaction cost theory).

Perhaps the most parsimonious way to summarize the joint influence of contracts and relational norms on firms is the phrase suggested by Williamson (1990) to describe the business organization: “Firm as a Nexus of Treaties”. This term, also the name of one of the books he has co-edited, highlights the importance of continuity of relationships and private ordering. Hopefully, it also signifies the

synthesis/fusion gradually taking place among theories of the firm throughout social sciences, such as transaction cost, agency, relational contracting, strategic alliances, and corporate governance theories.

CHAPTER 3

RESEARCH DESIGN AND METHOD

Theoretical Model and Hypotheses

Transaction cost theory has formed the foundation of this study. As Williamson has noted in numerous publications (e.g., 1990) study of transaction cost economics is (naturally) interdisciplinary, joining law, economics, and organization theory. While we have included all of these areas in the literature review, the analysis we have developed in this study has a strictly organizational theory point of view. This applies to research objectives, variables used, hypotheses formed, methods used, and most certainly to the conclusions drawn. Our conception of transaction cost theory and its application to organization studies constitute several research questions, upon which our hypotheses are based, will be explained in this section.

Antecedents of Governance Forms

As noted in the literature review, transaction attributes form the antecedents for governance forms and transaction/governance costs. Firms select governance mechanisms based on expectations of their relative efficiency. The starting point of transaction theory has been to identify those attributes that lead firms to vertical integration instead of market exchanges (Williamson, 1971). As this school of research flourished, theoretical adjustments were made first to include hybrid forms of governance, which are considered intermediate points along the market exchange-

hierarchy spectrum. Later, it was suggested that neither governance forms, market, hierarchy, and relational contracts, nor the bases of controls behind these (i.e. price, authority, and trust) lie along a spectrum (Bradach & Eccles, 1989), and that they are independent mechanisms which can be combined in a variety of ways. This implies combinations at the individual relationship level, as well as combinations at the firm level, where the firm is managed as a nexus of treaties of various levels of integration. In recent years, many instruments have been suggested as alternative governance mechanisms. For example, Alvarez et al. (2003) identify trust, reputation, bargaining power, and contracts as alternatives.

Two of the most widely explored contractual governance mechanisms are contract complexity and relational norms. Notably, these two are the two facets of a relational contract, representing the written (formal) and non-written (informal) aspects. Contract complexity is the extent to which a written contract has elaborate clauses (Barthelemy & Quelin, 2006) and is thought to be strongly related to the notion of contract completeness, the principal dimension with which economists and legal theorists classify contracts (Furlotti, 2007).

Each transaction attribute has a separate type of influence on governance. (Figure 4 illustrates the influences discussed in this section.) As discussed earlier, asset specificity is associated with safeguarding problem. Transaction-specific investments create inter-firm dependence and leave one party vulnerable to opportunistic behavior by the other. Complex (and therefore more complete) contracts provide a means to use legal procedures in settling claims. Thus, they may be more widespread in situations where the risks from opportunism are significant.

This leads to the first hypothesis,

H1: Asset specificity is positively related to contract complexity.

However, although it is the most researched, there is lack of agreement on how to operationalize asset specificity. As a complex multidimensional construct, it is claimed to include such dimensions as specificity, magnitude of the investment, importance of the investment, value of the investment to the other party, visibility of the investment, durability of the investment, and risk assumed by the investing firm (Lohtia et al., 1994). Outsourcing of services is typically a labor- and/or knowledge-intensive activity, and human assets are its major component. For human asset specificity, two dimensions appear most relevant, "specificity" and "value of the investment". Barthelemy & Quelin (2006) argue for the existence of "core-related specificity" construct, parallel to "exceptional strategic resource" in the resource-based view of the firm defined by Barney (1991) as an asset with four attributes: value, rareness, imperfect imitability, and lack of substitutes. Although specificity in a pure sense is equivalent to the last three attributes, it is likely that: a) "value of an asset" is a separate dimension, as also noted by Lohtia et al. (1994), and b) value of an human asset for the company that buys its services are very much linked to what we may call its "core-relatedness", i.e., how connected the asset is to the company's core business activity. We expect that this second aspect of asset specificity (the core relatedness element) will also behave similar to the first dimension. Thus,

H2: Core relatedness is positively related to contract complexity.

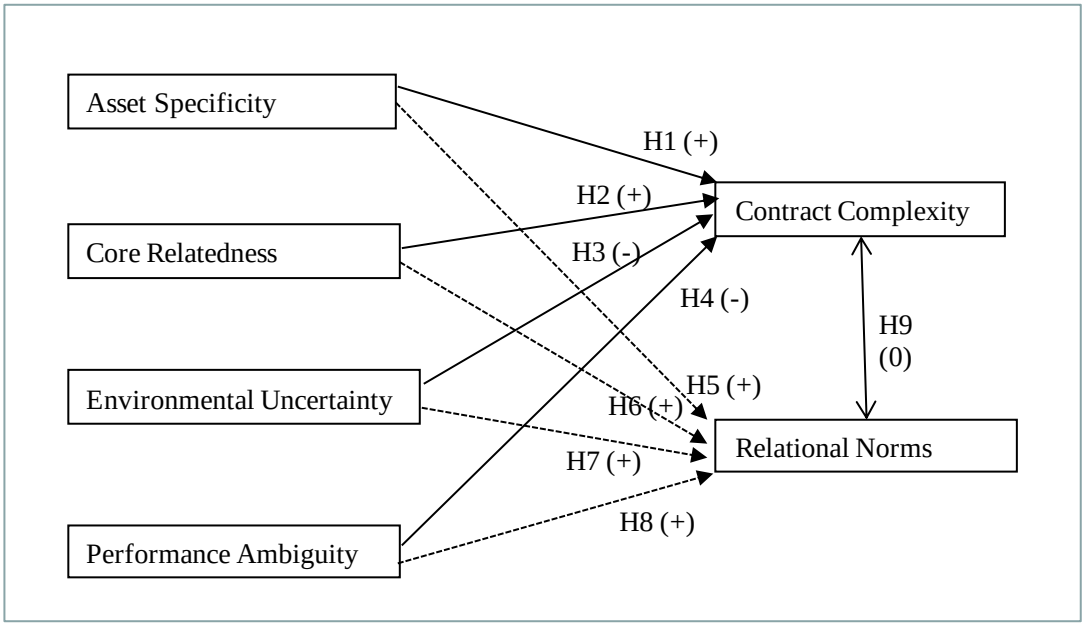

Figure 4: Effects of transaction attributes on governance forms (H1-H9)

Environmental uncertainty, on the other hand, leads to an adaptation problem. Uncertainty, in some form or other, is always present in environment. At low levels of uncertainty, parties to a contract can determine ex-ante the possible future states of nature and define appropriate adaptations. However, business environments are usually so complex, containing the dynamic interaction of so many elements that rarely can a contract specify all future contingencies. As level of environmental uncertainty increases, the possibility of identifying contingencies and required adaptations on the contract decreases, and it is expected that other forms of governance will be preferred at the expense of contract complexity. Thus,

H3: Environmental uncertainty is negatively related to contract complexity.

Behavioral uncertainty is the cause of difficulty of performance evaluation. Performance ambiguity concerns both bounded rationality and opportunism, and its overall effect is more difficult to estimate. Based on possibility of opportunistic behavior, one may expect firms to include more clauses in the contract. However, based on bounded rationality argument, it may be more reasonable to evaluate the supplier through more informal means. As Weber (1947) has noted, rational, formal administration is the exercise of control on the basis of knowledge. The bounding of rationality by performance ambiguity inherently implies switching to less formal means of control. Therefore,

H4: Performance ambiguity is negatively related to contract complexity.

Relational norms "support cooperative adaptation by stressing behaviors that will preserve and continue the relationship even when pure self-interest might suggest otherwise" (Bercovitz et al., 2006: 725), hence it is a potential cure for opportunistic behavior. Similarly, as noted previously, Ouchi (1980) proposes the use of relational norms under bounded rationality conditions, i.e. environmental and behavioral uncertainty. Overall, relational norms offer a potential solution to problems of economic exchange that cannot be resolved by formal mechanisms of the market or legitimate authority. Hence, as also noted by Poppo and Zenger (2002), it is expected that increases in exchange hazards will lead to higher utilization of relational norms. As such,

H5: Asset specificity is positively related to relational norms.

H6: Core relatedness is positively related to relational norms.

H7: Environmental uncertainty is positively related to relational norms.

H8: Performance ambiguity is positively related to relational norms.

From the preceding discussion and hypotheses, note that contract complexity and relational norms do not appear as substitutes. Conditions for the existence of one do not preclude the other. Instead, use of each type is based on multiple criteria, which can lead to different combinations of such governance mechanisms. Within the range of possible states of nature regarding transaction attributes, we cannot expect that the level of each has a significant relation to the other. Lusch and Brown (1996) also argue that explicit contracts may facilitate or undermine relational behavior depending on the individual situation and on balance one's level has no significant bearing on the other. Therefore,

H9: Levels of contract complexity and relational norms have no significant relationship to each other.

Governance Mechanisms and Governance Costs

A distinction is made between ex-ante and ex-post transaction costs. Ex-ante transaction costs, as well as anticipation of ex-post costs, induce selection of governance forms. Ex-post transaction costs are a consequence of maintaining the relationship in the face of uncertainty and danger of opportunism. Thus, within the context of ongoing contractual relations, ex-post transaction costs are the costs governing the relationship, i.e. governance costs, akin to the cost of maintaining a hierarchy in operation. This study is about existing contractual relations between firms, thus ex-post transaction cost (governance cost) is the variable of interest.

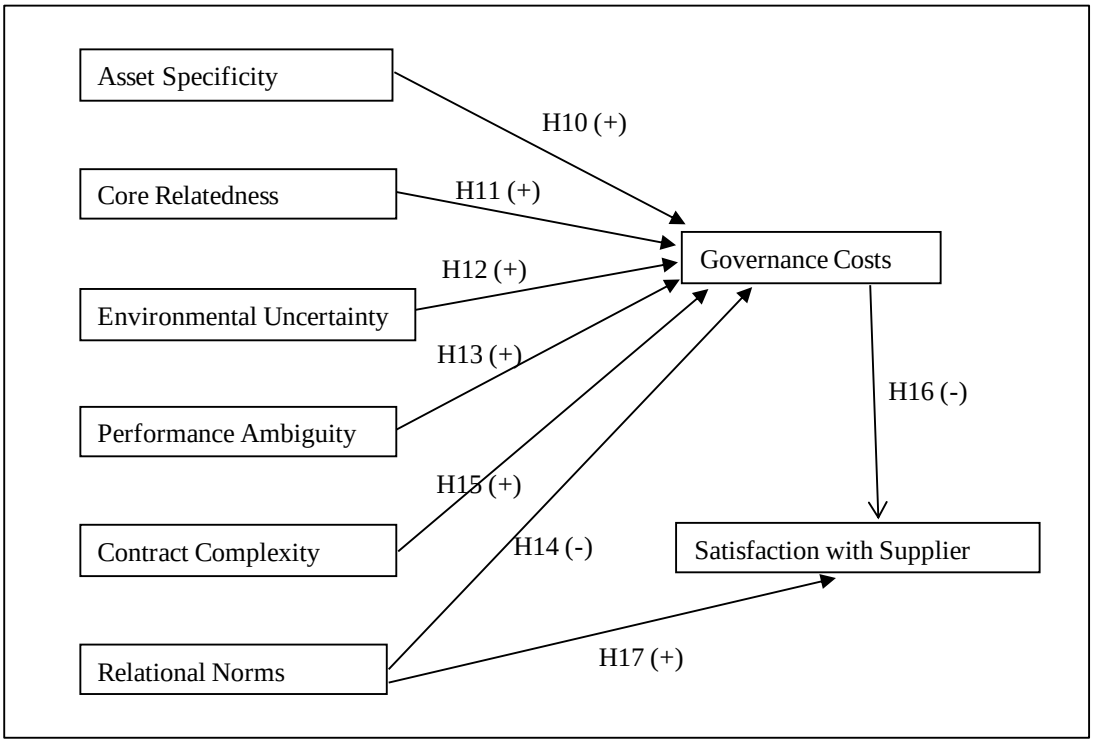

Figure 5: Determinants of governance costs and satisfaction with supplier

As previously shown in the basic transaction cost model, transaction attributes and governance forms used jointly determine the total governance cost/ex-post transaction cost. We hypothesize that the four transaction attributes and the two governance forms studied will be related to the level of governance costs realized. (Figure 5 demonstrates these relationships.) While we expect that all transaction attributes and contract complexity will have a positive relationship with governance costs, we believe relational norms will have a negative relationship as they facilitate transactions:

H10: Asset specificity is positively related to governance costs.

H11: Core relatedness is positively related to governance costs.

H12: Environmental uncertainty is positively related to governance costs.

H13: Performance ambiguity is positively related to governance costs.

H14: Relational norms are negatively related to governance costs.

H15: Contract complexity is positively related to governance costs.

Relationship Between Governance Costs and Satisfaction

In their meta-analysis of transaction cost literature, Geyskens et al. (2006) point out the doubts against explanations of efficiency of governance modes because they heavily focus on costs, and generally costs incurred by a single party. The alternative is to utilize a "cost-exclusive" measure of success. Satisfaction with the contractual relationship is one such measure. Since governance costs reflect the difficulties associated with maintaining the relationship, we can predict that they will have a significant relationship:

H16: Governance costs are negatively related to satisfaction with supplier.

Hypothesis H14 indicates that relational norms reduce the governance costs associated with exchange hazards. However, relational norms increasing flexibility in adaptation, attaining solidarity between parties, and facilitating information exchange and participation, may have an effect beyond acting as a lubricant for the economic friction created by contractual relations. It may have an additional direct effect on supplier satisfaction. Thus,

H17: Relational norms are positively related to satisfaction with supplier.

Evaluating Alternative Explanations of the Dependent Variables

The dependent variables of this study, contract complexity, relational norms, governance costs, and satisfaction with supplier may well have other predictors. In particular, institutional theory (e.g., Meyer & Rowan, 1977; DiMaggio & Powel, 1983) offers alternative explanations to most organizational results. Institutional theory explains many social phenomena through institutional isomorphism dynamics, and indicates that many managerial choices seemingly based on efficiency are actually based on imitation of others' actions. Specifically, it is indicated that organizations in the same industry or the same geographical area, or organizations that resemble each other in some other aspect not necessarily related to efficiency will behave in a similar fashion as they try to gain legitimacy in their task environments. Consequently, firms similar along some institutional dimension may resort to similar governance forms despite very different efficiency constraints. The association between the institutional attributes (such as industry, size, country of origin) and the dependent variables will be explored.

Other Issues

Utility of outsourcing activity will be evaluated for buyer firms with respect to the functional benefits they derive from this relationship. In addition, the common types of problems encountered in outsourcing will be explored.

Operationalization of the Variables

The present study is based on a relatively established theory with its own rich, albeit controversial, empirical and theoretical literature from economics, marketing, and organization theory. Hence, all variables in our theoretical model have been the subject of previous empirical work. The measurement scales used for the variables have a history as reliable and valid indicators, at least in the contexts they were used, as mentioned in prominent journals of their respective fields. Some items have been deleted or combined based on theoretical and empirical considerations as will be discussed for each variable in turn. With the exception of contract complexity, all independent and dependent variables in the model are multi-item and are measured with five-point Likert-type scales, although in literature seven-point scales are more commonly observed.

Asset Specificity

This construct has been repeatedly denoted by Williamson (e.g. 1996) as the most significant determinant of transaction costs, and is the most frequently studied variable within transaction cost literature. It primarily refers to transaction specific investments made by one or both of the parties in physical, human, or other assets. Among the numerous examples of studies using this construct in various forms are Stump and Heide (1996), Poppo and Zenger (1998), Buvik and John (2000), Buvik and Andersen (2002), Claycomb and Franckwick (2005), Anderson and Dekker (2005), Yu, Liao, and Lin (2006), Sheng et al. (2006), and Bercovitz et al. (2006).

The operationalization by Poppo and Zenger (1998) appears most appropriate for this study because it is focused directly on human assets and the procurement of services, as is the case in the present study. Their scale is composed of three items with a Cronbach's alpha of 0.83, each question to be answered on a seven-point scale from 1= very low to 7=very high. In our questionnaire, we have changed the questions into statements with which the respondent would rate his/her level of agreement, from 1=completely disagree to 5=completely agree.

Table 3. Items Measuring Asset Specificity (from Poppo & Zenger, 1998)

1. To what degree must individuals acquire company-specific or division-specific information to adequately perform this function? 2. To what degree is your approach to this function (or set of applications) custom-tailored to the company? 3. How costly, in terms of time and resources, would it be to switch outsourcing vendors in this function?

Core Relatedness

This construct is not typically used in transaction cost literature. It is a novel construct, borrowed from outsourcing and resource-based theory literatures, indicating that core resources of a firm should be valuable, rare, imperfectly imitable, and non-substitutable (Barney, 1991). Other researchers relate this notion to asset specificity construct and have used it in newer studies of outsourcing, e.g. Gilley and Rasheed (2000), Barthelemy and Quelin (2006), and Holcomb and Hitt (2007).

Barthelemy and Quelin's (2006) scale items were included in this study based on their clarity, high reliability measure (Cronbach's alpha = 0.86), and previous usage as part of an outsourcing survey. Four items each to be rated on a seven-point

scale from 1= very little to 7=very highly constitute this measure. We have modified the wording of the items slightly so that the reader could answer on a scale of 1=completely disagree to 5=completely agree.

Table 4. Items Measuring Core Relatedness (from Barthelemy & Quelin, 2006)

1. Degree to which the activity contributed to the overall profitability of the firm.
2. Degree to which the activity was integrated within the company.
3. Degree to which the activity enabled the company to differentiate itself from its competitors in the eyes of the customers.
4. Degree to which the activity was viewed as strategic.

Environmental Uncertainty

This is the second most researched predictor construct within the transaction cost literature. Further, the construct is very popular among all researchers working with organization-environment relations. Hence, there are many approaches to studying uncertainty (see Sutcliffe and Zaheer (1998) or Krickx (2000) for reviews of literature on environmental uncertainty and vertical integration). The scale for this study is also based on Barthelemy and Quelin (2006) study on outsourcing governance forms and transaction costs. The four items of the scale are seven-point ratings from 1=very easy to 7=very difficult, and the Cronbach's alpha for their scale is 0.88. We have used a five-point scale instead of seven.

Table 5. Items Measuring Environmental Uncertainty (from Barthelemy & Quelin, 2006)

1. Difficulty of evaluating future needs in terms of expected technology
2. Difficulty of evaluating future needs in terms of expected activity level
3. Difficulty of evaluating future needs in terms of expected performance level
4. Difficulty of evaluating future needs in terms of expected vendor skills

Performance Ambiguity (Behavioral Uncertainty)

This construct also appears in literature under various other names such as behavioral uncertainty or internal uncertainty. It refers to the difficulty of evaluating product or service outcomes or processes received from the other party. It is used commonly in transaction cost and marketing distribution channel studies such as Heide and Miner (1992), Stump and Heide (1996), Anderson and Dekker (2005), and Bercovitz et al. (2006). In the current study, the scale from Stump and Heide (1996) was adopted. The Cronbach's alpha for the four items constituting the scale is on the lower side (0.67) however the study has been highly influential and the items appear to summarize the construct parsimoniously. The statements are originally to be rated on a seven-point scale from 1= strongly disagree to 7=strongly agree, which we have adapted to five-point level.

Table 6. Items Measuring Performance Ambiguity (from Stump & Heide, 1996)

1. Precise standards by which to assess this supplier's performance are not readily available.
2. Evaluating this supplier's performance is a highly subjective process.
3. This supplier is performing so many different tasks that it is difficult to ascertain whether a good job is being done.
4. It is difficult to determine whether agreed upon quality standards and specifications are adhered to.

Contract Complexity

This construct has been increasingly used in the last decade as economics, organizational, and legal studies research lines approached each other in the questions they ask. Most definitions of this construct are based on the widely-quoted Parkhe (1993) study on strategic alliances. Schwartz and Watson (2004) provide descriptions of contract types in increasing order of complexity. Poppo and Zenger (2002), Anderson and Dekker (2005), Barthelemy and Quelin (2006), and Reuer and Arino (2007) have measured it using various scales. Furlotti (2007) has a review of literature on contract dimensions one of which is complexity. Reuer and Arino (2007) study uses a single summated item of eight contractual provisions where the respondents put a check mark next to provisions which appear in the contract being examined. The items are in increasing order of the weight of contractual safeguard denoted by the item number. The total score (which can range between zero to thirty-six) of each respondent is divided by 3.6 to achieve a scale from zero to ten points.

Table 7. Weighted Summated Item Measuring Contractual Complexity (from Reuer & Arino, 2007)

1. Periodic written reports of all relevant transactions.
2. Prompt written notice of any departures from the agreement.
3. The right to examine and audit all relevant records through a firm of certified public accountants.
4. The designation of certain information as proprietary and subject to the confidentiality provisions of the contract.
5. Non-use of proprietary information even after termination of agreement.
6. Termination of the agreement.
7. Arbitration clauses.
8. Lawsuit provisions.

Relational Norms

This construct also appears under other names such as cooperative norms or relational behavior. Within the literature related to interorganizational relations, the construct is based on Macneil's (1978) description of relational contracting, i.e. the relational norms accompanying contract-based interactions between firms. Various authors agree that this is a three dimensional construct, e.g. Lusch and Brown (1996), Poppo and Zenger (2002), Sheng et al. (2006), and Bercovitz et al. (2006). The scale used in the present study is based on Bercovitz et al.'s scale of cooperative norms. The total of nine items with a joint Cronbach's alpha of 0.88 divide into three dimensions: flexibility norms (the first three items), solidarity norms (the next three items), and participation norms (the final three items). The statements are to be rated on a seven-point scale from 1=strongly disagree to 7=strongly agree, which we have modified as a five-point scale.

Table 8. Items Measuring Relational Norms (from Bercovitz et al., 2006)

Flexibility
1. The organizations are flexible in responding to requests for changes.
2. The parties are willing to make adjustments when circumstances change.
3. When an unexpected situation arises, the parties adapt easily.

Solidarity
4. Problems that arise are treated by the organizations as joint rather than individual responsibilities.
5. Both organizations are open to improvements that may benefit the collaboration as a whole, not only the individual parties.
6. Both parties are concerned about their shared welfare, not just individual gains.

Participation
7. The organizations play an active role in various decisions regarding the collaboration.
8. The organizations consult each other when setting goals.
9. Both parties seek and consider the other's opinions and suggestions regarding how to accomplish various tasks.

Governance Costs

There are two techniques of estimating governance (transaction) costs: Direct approach consists of questions directed to the relevant parties judging the level of effort and resources spent on governing this particular relationship. Some studies employing the direct approach are Pilling, Crosby, and Jackson (1994), Buvik and John (2000), Buvik and Andersen (2000), and Grover and Malhotra (2003).

Indirect approach involves calculating governance costs based on other observations such as management time spent on the relationship. Dyer and Chu (2003) and Barthelemy and Quelin (2006) studies are examples of the indirect approach. Dyer and Chu (2003: 62) calculate ex-ante transaction costs as:

= (Total annual person-days of face-to-face time spent) x (Percent of time spent on price negotiation/contracting) ÷ (supplier sales to the buyer)

In a similar fashion, ex-post transaction costs are:

= (Total annual person-days of face-to-face time spent) x (Percent of time spent on haggling and assigning blame for problems) ÷ (supplier sales to the buyer).

The current study employs the direct approach, as does most research to date, and the individual items are borrowed from Buvik and Andersen (2002). This five-item scale has a Cronbach's alpha of 0.76 and uses a seven-point scale anchored at 1=inaccurate description and 7=accurate description of the respective situation, which in our questionnaire is a five-point scale.

Table 9. Items Measuring Governance (Transaction) Costs (from Buvik & Andersen, 2002)

1. Our firm uses too much time and resources to control the products and production processes of this supplier.
2. The coordination of the relationship with this supplier is too costly, compared with the resulting outcomes of these interactions.
3. It is very difficult to get necessary verification of production performance and production costs data from this supplier.
4. It is easy to settle agreements with this supplier about specification of products and services delivered to our firm (reverse-scaled).
5. It is very time consuming and difficult to accomplish negotiations between our firms about price and payment terms.

Satisfaction with Supplier

There are many studies including satisfaction with the inter-firm relationship as a dependent variable, e.g. Poppo and Zenger (2002). However, the present scale is based on questions originally intended to investigate the basis of supplier selection by Hsu et al. (2006). Their ten item list was reduced to nine by removing two items that were only relevant in context of supplier selection, and adding an item for overall satisfaction with the supplier. The items are measured on a five-point scale ranging from 1=Very dissatisfied to 5=Very satisfied.

Table 10. Items Measuring Satisfaction with Supplier

1. Scope of resources
2. Industry knowledge
3. Commitment to quality
4. Ability to meet due dates
5. Price of services
6. Flexible terms and conditions
7. Cultural match with supplier
8. Sharing confidential information
9. Overall relationship

Additional (Exploratory) Questions

Functional Satisfaction

These items are adapted from Kakabadse and Kakabadse's (2005) question on reasons for outsourcing versus in-house production. One item not applicable to measuring satisfaction was removed, and one overall usefulness item was added. The items are measured on a five-point scale ranging from 1=Very dissatisfied to 5=Very satisfied.

Table 11. Items Measuring Satisfaction Based on Functional Objectives

1. Cost reduction
2. Focus on core competency
3. Access to expert skills / technology
4. Differentiation
5. Adaptation to customer demands
6. Overall usefulness

Seven Sins of Outsourcing

Barthelemy and Adsit (2003) have suggested that most common mistakes firms make in their outsourcing relationships can be grouped under seven items. Our questionnaire asks about the presence of these faults in the relationship based on a five-point scale ranging from 1=completely agree to 5=completely disagree to the following statements:

Table 12. Seven Sins of Outsourcing (from Barthelemy & Adsit, 2003)

1. Outsourcing activities that should not be outsourced
2. Selecting the wrong vendor
3. Writing a poor contract
4. Overlooking personnel issues
5. Losing control over the outsourced activity
6. Overlooking the hidden costs of outsourcing
7. Failing to plant an exit strategy / alternative

Organizational Attributes

Organizational attributes which are not directly relevant to transaction cost or resource based theories, however which may still offer an alternative explanation to the dependent variables of the study are asked directly with single items.

Table 13. Other Organizational Attributes Asked in the Questionnaire

1. Firm age
2. Firm size (number of employees)
3. Industry
4. Type of activity outsourced
5. Volume of business (annual) with the supplier
6. Length of previous relationship with the supplier

Data Collection and Sampling

Data Collection

Data was collected through a structured questionnaire self-administered by respondents through an e-mail message. The web site administration tracked respondents such that only one answer per personal computer was guaranteed.

The survey instrument was built from items based on research variables discussed in the previous section, and several other questions concerning organizational attributes were added. Questions were constructed in English, then translated to Turkish, and finally back-translated by another translator to clarify any misinterpretations. No changes were made as the translation differences were negligible as agreed by both translators. Also, the questionnaire was initially applied to a convenience sample of business managers, based on whose suggestions only minor adjustments to items were made.

The questionnaire included an introduction text where the researcher explained the purpose of the study and attempted to clarify confidentiality issues. This text in Turkish is provided in Appendix B. The wording of the introduction text also distinguished between two groups of respondents: Half of the target group read instructions to answer the questions based on their relationship "with an outsourcing firm they frequently employ", whereas the other half read instructions to answer based on their relationship "with an outsourcing firm they were not satisfied with". This distinction was made to remove potential bias towards basing answers on

favorable firms. Except for this difference in the introduction, all respondents encountered the same wording in the same order throughout the questionnaire.

The e-mail message to the target respondents, to whom the web link was sent, requested that a business manager with direct experience working with an outsourcing partner answer the questionnaire, and asked that if they were not this person, then to pass the e-mail forward to the correct person in their firm.

The data collection procedure lasted a total of five months, between the dates December 01, 2007 and April 30, 2008.

Sampling

The theory upon which this study is based does not impose any limits on the type of organization except the presence of profit motive. The research questions are potentially applicable to all subgroups of for-profit business firms. Since Istanbul is a multifaceted economy and has significant size and variability compared to the Turkish economy as a whole, the researcher has decided to define the population as all for-profit business firms with headquarters or operations in Istanbul during the period of study.

As noted in the data collection section, target respondents are company managers who have direct experience in outsourcing a business service from a third-party outsource firm. Based on the individual company, the correct respondent can be general manager, assistant general manager, department head, procurement manager, human resource manager, among others.

Sampling frame includes two components: The first component is the ISO (Istanbul Chamber of Industry) member list. This list is selected because it is the only

publicly available multi-industrial list including contact addresses of its members. The second component is the Executive MBA graduates list of Boğaziçi University for three consecutive years, 2006-2008. This second list was included in the sampling frame to add service firms to the ISO sample, which only has manufacturing firms. However, it has also served to increase response rate likely due to higher awareness of this research and the researcher among the target list.

The invitation to answer the questionnaire on the internet has been e-mailed in four batches. First, ISO members were e-mailed in two groups with slightly different instructions explained above. About half of 11,854 ISO members had valid e-mail addresses in the database, i.e., about 6000 members. From this list, two groups of 1,500 were randomly selected. Similarly, 150 Executive MBA graduates were e-mailed in two groups. However, instead of random selection, the complete mail list was utilized since the number of firms in this set is much smaller.

This process may have led to a number of biases: Non-coverage bias may result from the half of ISO members not having a correct address on file. Non-response bias may exist due to structural differences between views of people who chose to answer the questionnaire and who chose not to. Out of 3,000 e-mailed ISO member invitations, only 101 resulted in completely answered questionnaires, i.e. a net response rate of slightly over 3%. In the Executive MBA group, 150 invitations resulted in 27 complete questionnaires, i.e. net response rate of %18. In the ISO group, the rate of incomplete questionnaires was notable: 58 out of 159 questionnaires were incomplete, probably due to the length and form of the questionnaire. Different sources of target respondents, i.e. ISO vs. EMBA groups, could also be a source of bias, however, in later analysis of responses no significant difference was found based on respondent groups.

Based on Churchill and Iacobucci (2005), without consideration for hypothesis testing, the required sample size is calculated as: $n = (z^2 / H^2) \sigma^2$ where H is the specified precision interval. For 95% confidence level (z=1.96), desired precision of 0.2 (for the 5-point Likert scale), and estimated population standard deviation of 1.2 (based on initial survey data and Churchill and Iacobucci's suggested typical range for 5-point scales), the desired sample size is 138.

The researcher uses multiple regression analysis to test her hypotheses in this study, and the range Hair et al. (1998) suggest for this method of analysis is 15-20 observations for each predictor variable. Hence, 60-80 observations are indicated for each phase of the present analysis. The obtained net sample size of 128 appears sufficient along these guidelines.

CHAPTER 4

FINDINGS

This chapter reports the findings of the empirical part of our study. Specifically, the report includes findings with respect to sample characteristics, suitability of data for multivariate analysis, measurement scale reliabilities and factor analyses, descriptive statistics of independent and dependent variables, correlations among variable, t-tests to determine whether any grouping of data based on additional categories is meaningful for hypothesis testing, and finally multiple regression analyses to test our hypotheses. Statistical analysis is conducted using SPSS 17.0 for Windows.

Sample Characteristics and Data Properties

Sample Characteristics

The distribution of the final sample of 128 firms across industries is summarized in Table 14. Manufacturing firms have a larger share, about two-to-one ratio, due to sampling procedure explained earlier. Nevertheless, the number and distribution of service firms may still be sufficient to make comparisons between manufacturing and service categories. “Other Manufacturing” mostly includes machinery and components manufacturers supplying to various industries. Among “Other Services” are management consultants, foreign trade firms, and contracting firms.

Table 14. Distribution of Firms According to Industry

Industry	n	% of Total
Textiles-Clothing	14	11%
Food Production	13	10%
Chemicals-Pharmaceuticals	8	6%
Automotive Manufacturing	7	5%
Consumer Electronics	6	5%
Other Manufacturing	38	30%
Total Manufacturing	*86*	*67%*
Telecommunications	6	5%
Construction	5	4%
Energy	4	3%
Banking-Finance	3	2%
Education	2	2%
Retailing	1	1%
Healthcare Services	1	1%
Other Services	20	16%
Total Services	*42*	*33%*
Total	128	100%

Many different activities are outsourced by the firms in our sample (see Table 15). Production services (such as assembly, sub-assembly, or packaging) are the most common type mentioned (thirty-four percent). “Other Supply Chain” functions include logistics, marketing, sales, distribution, and after-sales assistance activities. “Support Services” are information technology, human resources, finance and accounting, consultancy services, and facilities management activities such as security, catering, and cleaning.

Table 15. Distribution of Firms According to Activity Outsourced

Activity Outsourced	n	% of Total
Production Activities	43	34%
Logistics	*16*	*13%*
Marketing Services	*8*	*6%*
Sales Services	*1*	*1%*
Other Supply Chain Services Total	25	20%
Information Systems	*19*	*15%*
Finance & Accounting	*8*	*6%*
Human Resources	*2*	*2%*
Management Consultancy	*5*	*4%*
Security	*4*	*3%*
Cleaning Services	*4*	*3%*
Catering	*12*	*9%*
Travel Services	*2*	*2%*
Diğer	*4*	*3%*
Support Services Total	60	47%
Total	128	100%

Tables 16 – 18 show the breakdown of the sample according to industry type, base country, firm size, firm age, and type of activity outsourced. Half of the firms have less than sixty employees. Similarly, slightly more than half of the firms are under twenty years of age. Twenty firms are of foreign origin, while 108 are Turkish. Overall, the sample covers an adequate range of size, age, industry, and nationalities.

Table 16. Breakdown of Sample by Firm Size, Industry, Nationality

Firm Type			Firm Size (Number of Employees) 0-30	31-60	61-90	91-120	121+	Total
Manufacturing	Domestic	n	17	27	7	8	16	75
		%	13%	21%	5%	6%	13%	59%
	Foreign	n	0	0	1	0	10	11
		%	0%	0%	1%	0%	8%	9%
	Total Mnf.	*n*	*17*	*27*	*8*	*8*	*26*	*86*
		%	*13%*	*21%*	*6%*	*6%*	*20%*	*67%*
Services	Domestic	n	8	8	1	2	14	33
		%	6%	6%	1%	2%	11%	26%
	Foreign	n	4	0	0	1	4	9
		%	3%	0%	0%	1%	3%	7%
	Total Serv.	*n*	*12*	*8*	*1*	*3*	*18*	*42*
		%	*9%*	*6%*	*1%*	*2%*	*14%*	*33%*
	Total	n	29	35	9	11	44	128
		%	*23%*	*27%*	*7%*	*9%*	*34%*	*100%*

Table 17. Breakdown of Sample by Firm Age, Industry, Nationality

Firm Type			Firm Age (Years) 0-10	11-20	21-30	31+	Total
Manufacturing	Domestic	n	12	21	25	17	75
		%	9%	16%	20%	13%	59%
	Foreign	n	1	2	1	7	11
		%	1%	2%	1%	5%	9%
	Total Mnf.	*n*	*13*	*23*	*26*	*24*	*86*
		%	*10%*	*18%*	*20%*	*19%*	*67%*
Services	Domestic	n	13	13	2	5	33
		%	10%	10%	2%	4%	26%
	Foreign	n	2	3	1	3	9
		%	2%	2%	1%	2%	7%
	Total Serv.	*n*	*15*	*16*	*3*	*8*	*42*
		%	*12%*	*13%*	*2%*	*6%*	*33%*
	Total	n	28	39	29	32	128
		%	*22%*	*30%*	*23%*	*25%*	*100%*

Table 18. Breakdown of Sample by Functions Outsourced

Firm Type			Activity Outsourced: Production	Other Supply Chain	Support Services	Total
Manufacturing	Domestic	n	36	12	27	75
		%	28%	9%	21%	59%
	Foreign	n	2	4	5	11
		%	2%	3%	4%	9%
	Total Mnf.	*n*	*38*	*16*	*32*	*86*
		%	*30%*	*13%*	*25%*	*67%*
Services	Domestic	n	3	8	22	33
		%	2%	6%	17%	26%
	Foreign	n	2	1	6	9
		%	2%	1%	5%	7%
	Total Serv.	*n*	*5*	*9*	*28*	*42*
		%	*4%*	*7%*	*22%*	*33%*
	Total	n	43	25	60	128
		%	*34%*	*20%*	*47%*	*100%*

As Table 19 demonstrates, annual contracts under 250,000 YTL make up fifty-three percent of our sample. However, about twelve percent are above 5,000,000 YTL. Whereas production services are more evenly distributed across different contract amounts, about half of all support service contracts in the sample cost less than 100,000 YTL per year.

Table 19. Distribution of Type of Activity Outsourced by Volume of Business

Activity Outsourced		Outsourced Business Volume ('000 YTL): 0-100	101-250	251-500	501-1,000	1,001-5,000	5000 +	Total
Production	n	7	10	9	8	6	3	43
	%	5%	8%	7%	6%	5%	2%	34%
Other Supply Chain	n	6	5	4	1	3	6	25
	%	5%	4%	3%	1%	2%	5%	20%
Support Services	n	31	9	2	8	4	6	60
	%	24%	7%	2%	6%	3%	5%	47%
Total	n	44	24	15	17	13	15	128
	%	34%	19%	12%	13%	10%	12%	100%

According to Table 20, relationships under five years make up sixty-six percent of our sample, with the largest group being relationships between two-to-five years. Again, production activities' distribution with respect to relationship length is more uniform than other types of activities, which are concentrated towards newer relationships.

Table 20. Distribution of Type of Activity by Length of Relationship with Partner

		Length of Relationship with Partner (Years)				
Activity Outsourced		0-2	2-5	5-10	10 +	Total
Production	n	8	15	8	12	43
	%	6%	12%	6%	9%	34%
Other Supply Chain	n	11	10	4	0	25
	%	9%	8%	3%	0%	20%
Support Services	n	16	25	12	7	60
	%	13%	20%	9%	5%	47%
Total	n	35	50	24	19	128
	%	27%	39%	19%	15%	100%

Data Properties

In this section, the collected data is evaluated with respect to the requirements for multivariate analysis: Normality, homoscedasticity, and linearity.

Normality

The data used for the predictor and dependent variables in this study is metric, in the form of five-point Likert scales. As a first step in evaluating the univariate normality

of each variable, histograms and normal probability plots for each were examined. This visual check indicated only slight departures from normal distribution. For a more accurate evaluation, z values for skewness and kurtosis, as well as Shapiro-Wilks and modified Kolmogorov-Smirnov statistics were calculated. The results are summarized below:

Table 21. Tests of Normality

Variable	Shape Descriptors				Test of Normality			
	Skewness		Kurtosis		Kolmogorov-Smirnov		Shapiro-Wilk	
	Stat.	z value	Stat.	z value	Stat.	Sig.	Stat.	Sig.
Asset Specificity	-0,48	-2,22	-0,14	-0,32	0,16	0,000	0,95	0,000
Core Relatedness	-0,50	-2,33	-0,28	-0,65	0,14	0,000	0,96	0,001
Environmental Uncertainty	0,67	3,08*	0,28	0,65	0,20	0,000	0,92	0,000
Performance Ambiguity	0,30	1,37	-0,73	-1,69	0,17	0,000	0,95	0,000
Contract Complexity	-0,12	-0,57	-0,97	-2,23	0,11	0,000	0,94	0,000
Relational Norms	-0,85	-3,92*	0,70	1,61	0,13	0,000	0,95	0,000
Governance Costs	0,70	3,21*	0,62	1,42	0,14	0,000	0,96	0,001
Supplier Satisfaction	-0,46	-2,11	-0,52	-1,20	0,16	0,000	0,95	0,000

* Significant at .01 error level

Kurtosis does not appear to be a problem for any of the variables as all the kurtosis z-values are within the acceptable range of ±2.58 (corresponding to a .01 error level). Skewness values for environmental uncertainty, relational norms, and governance costs point to significant departures from normal. On the other hand, Kolmogorov-Smirnov and Shapiro-Wilks tests, which are more stringent, indicate that distribution of each variable is significantly different from the normal. While there is no theoretical reason to utilize transformed variables, z-tests were nevertheless performed on transformations of data. The next table summarizes the normality evaluation of transformed variables.

Table 22 Normality Tests after Transformations

Variable	Sq Root				Log				Inverse			
	Shape Descriptors				Shape Descriptors				Shape Descriptors			
	Skewness		Kurtosis		Skewness		Kurtosis		Skewness		Kurtosis	
	Stat.	z value	Stat.	z value	Stat.	z value	Stat.	z value	Stat.	z value	Stat.	z value
Asset Specificity	-0,90	-4,17	0,69	1,59	-1,41	-6,52	2,33	5,37	2,74	12,67	9,25	21,37
Core Relatedness	-0,92	-4,25	0,61	1,41	-1,44	-6,63	2,24	5,18	2,67	12,34	7,94	18,34
Env. Uncertainty	0,20	0,94	0,13	0,31	-0,36	-1,65	0,74	1,71	1,89	8,71	6,08	14,05
Perf. Ambiguity	-0,04	-0,17	-0,69	-1,59	-0,43	-1,97	-0,26	-0,61	1,40	6,47	2,33	5,37
Cont. Complexity	-1,00	-4,60	-0,19	-0,43	-0,67	-3,09	-0,34	-0,79	1,52	7,00	1,71	3,95
Relational Norms	-1,23	-5,69	1,82	4,21	-1,69	-7,80	3,73	8,62	2,93	13,54	11,69	26,99
Governance Costs	0,32	1,47	0,13	0,30	-0,07	-0,32	0,11	0,25	0,93	4,29	1,60	3,70
Supp. Satisfaction	-0,69	-3,20	0,01	0,03	-0,98	-4,53	0,94	2,16	1,79	8,28	4,78	11,04

Square root and logarithmic transformations of environmental uncertainty and governance cost variables seem to solve the skewness problem, however there is no theoretical ground to use the existing scales with this transformation and based on an overall evaluation it was decided to leave the variables untransformed.

Homoscedasticity

For two metric variables homoscedasticity is best verified graphically (Hair et al., 1998). The visual examination of the scatterplot diagrams of each independent – dependent variable pair does not signify heteroscedasticity for any such variable pair. Further, even though we have no categorical independent variables, there are some categorical variables which may be potentially used as grouping variables. Levene test was conducted on these variables as shown in Table 23. Governance costs and relational norms variables have unequal error variances across values of industry and outsourced volume respectively. However, these grouping variables are not part of our model, so we decide not to take any action for this issue.

Table 23. Levene Tests for Equality of Variances

	Grouping Variable							
	Firm Size		Firm Age		Nationality		Industry	
Dependent Variable	Levene Stat.	Sig.	Levene Stat.	Sig.	Levene Stat.	Sig.	Levene Stat.	Sig.
Contract Complexity	2,76	0,10	1,20	0,28	0,04	0,83	0,11	0,75
Relational Norms	3,22	0,08	0,00	0,97	0,37	0,55	0,00	0,99
Governance Costs	0,18	0,67	2,42	0,12	0,03	0,86	4,79	0,03*
Supplier Satisfaction	0,10	0,75	3,49	0,06	1,25	0,27	0,37	0,54

* Significant at .05 error level

	Grouping Variable					
	Outsourced Func.		Outsourced Vol.		Rel.Length	
Dependent Variable	Levene Stat.	Sig.	Levene Stat.	Sig.	Levene Stat.	Sig.
Contract Complexity	0,93	0,51	1,09	0,37	0,39	0,76
Relational Norms	0,97	0,48	3,64	0,00**	0,38	0,77
Governance Costs	1,21	0,29	1,20	0,31	0,70	0,56
Supplier Satisfaction	1,33	0,22	2,04	0,08	0,07	0,98

** Significant at .01 error level

Linearity

Similar to homoscedasticity, scatterplot diagrams are a common way of identifying non-linearity between variables. As noted in the Normality and Homoscedasticity sections, the current data does not appear problematic with respect to linearity of relationships and does not necessitate transformations.

Missing Data

There were fifty-eight incomplete questionnaires. They were not included in the analysis at all because the majority of the items were missing. The analysis was conducted with the fully complete questionnaires.

Evaluation of Measurement Scales: Reliabilities and Factor Analyses

Reliabilities

Reliabilities for multi-item scales are evaluated via Cronbach's coefficient alpha and Hotelling's T-square test as Table 24 demonstrates.

The table for scale reliabilities point to a number of issues. First, asset specificity appears a very poor measure based on Cronbach's alpha and Hotelling's T-square test. The researchers who originally used these items (Poppo and Zenger, 1998) report a Cronbach's alpha of 0.83. Asset specificity is an important dimension of inter-firm exchange, however, with respect to "soft" assets such as human resources, which are thought to be more critical in outsourcing services, it is difficult to measure. This scale theoretically fit our model because it was constructed for measuring uniqueness of non-physical assets, human resources, know-how, and ways of conduct. However, based on poor reliability results, the items were re-evaluated. Item 3 in fact appeared more different from the other two in terms of content. After deletion of this item the reliability coefficient improves but only slightly. As this is hypothesized to be a critical variable, we decided not to drop it completely, but evaluate analysis results carefully.

Table 24. Reliabilities for Multi-Item Variables

	Cronbach's Alpha	Hotelling's T-sq. Sig.	Item(s) Deleted to Improve Alpha	Cronbach's Alpha After Item Deleted	Final Number of Items
Asset Specificity	0,313	0,359	AS3	0,368	2
Core Relatedness	0,793	0.041	-	-	4
Environmental Uncertainty	0,652	0.007	EU4, EU1	0,759	2
Performance Ambiguity	0,704	0,000	PA4	0,750	3
Relational Norms	0,822	0,000	-	-	9
Governance Costs	0,581	0,000	-	-	5
Satisfaction with Supplier	0,863	0,000	-	-	9

Next, environmental uncertainty variable was evaluated as Cronbach's alpha indicated an area for improvement in reliability. Items 1 and 4 in the scale, which may have caused digression from the essence of the construct, were removed, increasing the coefficient alpha to over the desirable 0.70 level. Third, performance ambiguity was reduced to three items, removing item four, improving alpha to 0.75. Finally, governance costs also have a low alpha coefficient, despite significant Hotelling's T-square value, and will be carefully assessed in subsequent analysis.

Factor Analysis

Our measures for independent and dependent variables are taken from existing literature on transaction cost theory, strategy, and outsourcing. The relational norms and satisfaction scales have multiple dimensions as reported in the respective articles in which they were published. Reliability statistics and a thorough reading and assessment of all items of each variable suggest governance costs may also be a candidate for multiple dimensions. Multidimensionality of governance costs, i.e. ex-post transaction costs in the context of ongoing contractual relationships, is a reasonable expectation. Factor analysis results of these three variables are shown

below. The results are based on principal components analysis with Varimax orthogonal rotation.

Table 25. Factor Analysis Results for Relational Norms

Factor Name	Factor Loadings	Variance Explained
Factor 1 - Flexibility		42,82%
RN1 *	0,618	
RN2	0,851	
RN4 **	0,416	
Factor 2 - Solidarity		13,34%
RN3	0,733	
RN5	0,785	
RN6	0,783	
RN9	0,751	
Factor 3 - Participation		11,14%
RN7	0,757	
RN8	0,812	
Total Variance Explained		67,30%
KMO Measure		0,833
Bartlett's Test	Approx. Chi-Square (36 df, 0.000 significance)	374,934
Cronbach's alpha	Overall: 0,822 Factor 1: 0,576 Factor 2: 0,830 Factor 3: 0,580	

* RN denotes Relational Norms. Please see Table 8 for full list of items.
** The item has similar loading values on each factor

As expected, relational norms variable has three factors. However, the combination of items for each factor has been somewhat different. Although most items load onto the original factors, Items RN3, RN4, and RN9, load onto others. RN4, “Problems that arise are treated by the organizations as joint rather than individual responsibilities”, has an almost equal relationship with all factors. RN9, “Both parties seek and consider the other’s opinions and suggestions regarding how to accomplish various tasks”, does appear to connote solidarity, as well as participation.

However, that RN3, “When an unexpected situation arises, the parties adapt easily”, falls under solidarity, does not appear as coherent.

Table 26. Factor Analysis Results for Governance Costs

Factor Name	Factor Loadings	Variance Explained
Factor 1 - Governance Costs		38,00%
GC1 *	0,593	
GC2	0,479	
GC3	0,511	
GC4	0,759	
GC5	0,694	
Total Variance Explained		38,00%
KMO Measure		0,616
Bartlett's Test	App. Chi-Square: (10 df, 0.000 significance)	64,328
Cronbach's alpha	0,581	

* GC denotes Governance Costs. Please see Table 9 for full list of items.

Table 27. Factor Analysis Results for Satisfaction with Supplier

Factor Name	Factor Loadings	Variance Explained
Factor 1 - Quality Factors		49,36%
SS1 *	0,822	
SS2	0,812	
SS3	0,861	
SS4	0,654	
SS9 - Overall	0,710	
Factor 2 - Relationship Factors		13,55%
SS5	0,775	
SS6	0,782	
SS7	0,580	
SS8	0,508	
Total Variance Explained		62,91%
KMO Measure		0,816
Bartlett's Test	App. Chi-Square: (36 df, 0.000 significance)	546,735
Cronbach's alpha	Overall: 0,863 Factor 1: 0,873 Factor 2: 0,701	

* SS denotes Satisfaction with Supplier. Please see Table 10 for full list of items.

Descriptive Statistics of Variables

Table 28 shows the descriptive statistics for the independent and dependent variables in the model. Please note that contract complexity is measured by a single summated item ranging from zero to ten points. All other variables are measured by multi-item five-point Likert scales. A detailed table with the descriptive statistics of each item for each variable is provided in the appendix.

Table 28. Descriptive Statistics of Variables

Variables	N	Min.	Max.	Mean	Std.Dev.
Asset Specificity	128	1,00	5,00	3,36	0,92
Core Relatedness	128	1,00	5,00	3,28	0,95
Environmental Uncertainty	128	1,00	5,00	2,82	0,90
Performance Ambiguity	128	1,00	4,67	2,69	0,92
Contract Complexity	128	1,00	10,00	4,44	2,84
Relational Norms	128	1,11	4,56	3,33	0,68
Governance Costs	128	1,20	5,00	2,59	0,67
Satisfaction with Supplier	128	1,56	5,00	3,46	0,70

Correlations among Variables

Table 29 shows the variable inter-correlations. Twelve pairs out of twenty eight pairs of variables have significant correlation coefficients; however, the r values are in the medium range with the maximum absolute value 0.534. This possibly indicates the complexity and distinctness of each variable, and is an encouraging sign of lack of multicollinearity among variables.

Table 29. Correlations among the Variables in the Model

		1	2	3	4	5	6	7
1. Asset Specificity	Pearson Correlation							
	Sig. (2-tailed)							
	N							
2. Core Relatedness	Pearson Correlation	0,448**						
	Sig. (2-tailed)	0,000						
	N	128						
3. Environmental Uncertainty	Pearson Correlation	0,125	0,044					
	Sig. (2-tailed)	0,161	0,625					
	N	128	128					
4. Performance Ambiguity	Pearson Correlation	0,148	-0,052	0,090				
	Sig. (2-tailed)	0,096	0,558	0,313				
	N	128	128	128				
5. Contract Complexity	Pearson Correlation	0,191*	0,176*	-0,217*	-0,178*			
	Sig. (2-tailed)	0,031	0,046	0,014	0,044			
	N	128	128	128	128			
6. Relational Norms	Pearson Correlation	0,191*	0,386**	0,119	-0,067	-0,004		
	Sig. (2-tailed)	0,031	0,000	0,182	0,454	0,961		
	N	128	128	128	128	128		
7. Governance Costs	Pearson Correlation	0,141	-0,168	-0,051	0,156	0,143	-0,525**	
	Sig. (2-tailed)	0,112	0,058	0,564	0,078	0,106	0,000	
	N	128	128	128	128	128	128	
8. Supplier Satisfaction	Pearson Correlation	0,171	0,338**	-0,049	-0,225*	-0,052	0,502**	-0,534**
	Sig. (2-tailed)	0,054	0,000	0,586	0,011	0,561	0,000	0,000
	N	128	128	128	128	128	128	128

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

T-Tests with Categorical Variables

Before conducting hypothesis testing with the independent and dependent variables in the model, all of which are metric, we conducted t-tests to evaluate the relationship of several categorical variables with the dependent variables in the model. This serves the purpose of identifying potential control or grouping variables for our further analyses, as well as eliminating alternative explanations of the variation in our dependent variables.

Table 30. Group Statistics for the Dependent Variables and Firm Size

	Size Group	N	Mean	Std. Deviatio	Std. Error Mean
Contract Complexity	Small (≤ 60)	64	4,00	2,99	0,37
	Large (> 60)	64	4,89	2,62	0,33
Relational Norms	Small (≤ 60)	64	3,28	0,76	0,09
	Large (> 60)	64	3,39	0,60	0,07
Governance Costs	Small (≤ 60)	64	2,57	0,66	0,08
	Large (> 60)	64	2,61	0,68	0,08
Supplier Satisfaction	Small (≤ 60)	64	3,44	0,67	0,08
	Large (> 60)	64	3,47	0,73	0,09

Table 31. Independent Samples t-Test for the Dependent Variables and Firm Size

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Contract Complexity	2,761	0,099	-1,797	126	0,075	-0,893	0,497
Relational Norms	3,224	0,075	-0,884	126	0,379	-0,107	0,121
Governance Costs	0,184	0,669	-0,343	126	0,732	-0,041	0,119
Supplier Satisfaction	0,101	0,751	-0,242	126	0,809	-0,030	0,124

Table 32. Group Statistics for the Dependent Variables and Firm Age

	Age Group	N	Mean	Std. Deviatio	Std. Error Mean
Contract Complexity	≤20 years	67	4,43	2,70	0,33
	> 20 years	61	4,46	3,01	0,39
Relational Norms	≤20 years	67	3,44	0,65	0,08
	> 20 years	61	3,22	0,70	0,09
Governance Costs	≤20 years	67	2,56	0,73	0,09
	> 20 years	61	2,61	0,59	0,08
Supplier Satisfaction	≤20 years	67	3,39	0,76	0,09
	> 20 years	61	3,53	0,63	0,08

Table 33. Independent Samples t-Test for the Dependent Variables and Firm Age

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Contract Complexity	1,196	0,276	-0,052	126	0,959	-0,026	0,504
Relational Norms	0,001	0,973	1,814	126	0,072	0,217	0,120
Governance Costs	2,420	0,122	-0,438	126	0,662	-0,052	0,119
Supplier Satisfaction	3,488	0,064	-1,127	126	0,262	-0,139	0,123

Table 34. Group Statistics for the Dependent Variables and Industry

	Industry Group	N	Mean	Std. Deviatio	Std. Error Mean
Contract Complexity	Manufacturing	86	4,36	2,85	0,31
	Services	42	4,62	2,84	0,44
Relational Norms	Manufacturing	86	3,31	0,71	0,08
	Services	42	3,38	0,63	0,10
Governance Costs	Manufacturing	86	2,59	0,60	0,06
	Services	42	2,58	0,81	0,12
Supplier Satisfaction	Manufacturing	86	3,45	0,69	0,07
	Services	42	3,48	0,73	0,11

Table 35. Independent Samples t-Test for the Dependent Variables and Industry

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Contract Complexity	0,105	0,747	-0,480	126	0,632	-0,257	0,536
Relational Norms	0,000	0,990	-0,500	126	0,618	-0,064	0,129
Governance Costs	4,788	0,030	0,059	126	0,953	0,007	0,126
Supplier Satisfaction	0,369	0,544	-0,281	126	0,779	-0,037	0,132

Table 36. Group Statistics for the Dependent Variables and Nationality

	Nationality	N	Mean	Std. Deviatio	Std. Error Mean
Contract Complexity	Turkish	108	4,25	2,80	0,27
	Foreign	20	5,49	2,91	0,65
Relational Norms	Turkish	108	3,34	0,70	0,07
	Foreign	20	3,28	0,61	0,14
Governance Costs	Turkish	108	2,58	0,67	0,06
	Foreign	20	2,62	0,67	0,15
Supplier Satisfaction	Turkish	108	3,49	0,68	0,07
	Foreign	20	3,30	0,79	0,18

Table 37. Independent Samples t-Test for the Dependent Variables and Nationality

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Contract Complexity	0,044	0,834	-1,803	126	0,074	-1,234	0,685
Relational Norms	0,369	0,545	0,397	126	0,692	0,066	0,167
Governance Costs	0,033	0,857	-0,247	126	0,805	-0,040	0,163
Supplier Satisfaction	1,254	0,265	1,106	126	0,271	0,188	0,170

Table 38. Group Statistics for the Dependent Variables and Volume of Business with Partner

	Annual Contract	N	Mean	Std. Deviatio	Std. Error Mean
Contract Complexity	≤ 250,000	68	4,24	2,99	0,36
	> 250,000	60	4,68	2,66	0,34
Relational Norms	≤ 250,000	68	3,27	0,64	0,08
	> 250,000	60	3,40	0,72	0,09
Governance Costs	≤ 250,000	68	2,55	0,69	0,08
	> 250,000	60	2,62	0,64	0,08
Supplier Satisfaction	≤ 250,000	68	3,35	0,68	0,08
	> 250,000	60	3,59	0,70	0,09

Table 39. Independent Samples t-Test for the Dependent Variables and Volume of Business with Partner

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Contract Complexity	2,372	0,126	-0,885	126	0,378	-0,445	0,503
Relational Norms	0,019	0,890	-1,082	126	0,281	-0,131	0,121
Governance Costs	0,149	0,700	-0,593	126	0,554	-0,070	0,119
Supplier Satisfaction	0,000	0,986	-1,944	126	0,054	-0,238	0,122

Table 40. Group Statistics for the Dependent Variables and Relationship Length

	Relationship Length	N	Mean	Std. Deviatio	Std. Error Mean
Contract Complexity	≤ 5 years	85	4,30	2,99	0,36
	> 5 years	43	4,73	2,66	0,34
Relational Norms	≤ 5 years	85	3,30	0,64	0,08
	> 5 years	43	3,40	0,72	0,09
Governance Costs	≤ 5 years	85	2,60	0,67	0,07
	> 5 years	43	2,56	0,68	0,10
Supplier Satisfaction	≤ 5 years	85	3,41	0,69	0,07
	> 5 years	43	3,55	0,71	0,11

Table 41. Independent Samples t-Test for the Dependent Variables and Relationship Length

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Contract Complexity	0,165	0,685	-0,823	126	0,412	-0,438	0,532
Relational Norms	0,197	0,658	-0,812	126	0,418	-0,104	0,128
Governance Costs	0,000	0,983	0,333	126	0,739	0,042	0,126
Supplier Satisfaction	0,327	0,568	-1,108	126	0,270	-0,145	0,130

As Tables 30-41 demonstrate, t-tests are conducted on four dependent variables while grouping based on firm age, firm size, industry, nationality, volume of business with partner, and relationship length. The test statistics show that none of the dependent variables significantly vary across groups formed according to the grouping variables mentioned. Thus, there appears no need to include these additional elements in our model as grouping or control variables.

Hypothesis Testing

All hypotheses in the model are tested using multiple regression analyses.

Multiple Regression Analysis 1

(Dependent Variable: Contract Complexity)

The first research question was to understand the determinants of two governance alternatives that are commonly employed in interfirm relationships. Transaction attributes – asset specificity, core relatedness, environmental uncertainty, and performance ambiguity – are related to governance forms – contract complexity and relational norms, as summarized by Hypotheses H1 – H8. Further, as stated in H9, we think that the relationship between these two governance mechanisms is not significant, i.e. they are neither substitutes nor complements.

In order to test hypotheses H1 through H4, hierarchical regression analysis is used. In our first model, the level of contract complexity is predicted by asset specificity, environmental uncertainty, and performance ambiguity, the three transaction attributes originally proposed by transaction cost theory. Next, core relatedness is added to the model, to observe any additional effect this may have on the dependent variable. Finally, relational norms are added, to evaluate its relationship to contract complexity. The results are presented in Table 42.

In the first model, we observe that all the predictors have significant beta coefficients. The beta coefficient for environmental uncertainty (Beta=-0.231) is negative and significant at 0.01 level, supporting hypothesis H3. The beta coefficient for asset specificity (Beta=0.248) is positive and significant at 0.01 level, supporting

hypothesis H1. The beta coefficient for performance ambiguity (Beta=-0.194) is negative and significant at 0.05 level, supporting H4. The R-square value is also significant (F value 6.294, $p<0.01$), albeit somewhat low at 0.132 and adjusted R-square at 0.111.

In the second model, we add core relatedness. Although the other predictors are still significant, the beta coefficient for core relatedness is not significant. Further, the change in R-square is not found significant either, with adjusted R-square actually decreasing slightly to 0.110. These results show that H2 is not supported. In the third model, relational norms are added. However, as expected, relational norms have no significant effect on contract complexity, as the beta coefficient for relational norms and the change in R-square value are not significant, with adjusted R-square falling more. This finding supports hypothesis H9. Thus, our basic model is the most useful among the models tested in explaining the variability in contract complexity. From the table, we also note that the collinearity statistics, tolerance and variance inflation factors (VIFs), do not indicate any problems.

Table 42. Hierarchical Regression Results for Contract Complexity

	Model 1						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	5,542	1,222		4,536	0,000		
Environmental Uncertainty	-0,729	0,267	-0,231**	-2,728	0,007	0,979	1,021
Performance Ambiguity	-0,598	0,261	-0,194*	-2,292	0,024	0,973	1,028
Asset Specificity	0,764	0,262	0,248**	2,916	0,004	0,966	1,036
Adjusted R Square	0,111						
R Square	0,132						
F for Change in R Square	6,294						
Sig. F Change	0,001						

* Significant at the .05 level

** Significant at the .01 level

	Model 2						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	5,039	1,350		3,732	0,000		
Environmental Uncertainty	-0,728	0,267	-0,230**	-2,722	0,007	0,979	1,021
Performance Ambiguity	-0,567	0,263	-0,184*	-2,152	0,033	0,956	1,046
Asset Specificity	0,645	0,295	0,210*	2,185	0,031	0,762	1,312
Core Relatedness	0,249	0,284	0,083	0,878	0,381	0,785	1,274
Adjusted R Square	0,110						
R Square	0,138						
Change in R Square	0,005						
F for Change in R Square	0,772						
Sig. F Change	0,381						

* Significant at the .05 level.

** Significant at the .01 level

	Model 3						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	5,740	1,611		3,563	0,001		
Environmental Uncertainty	-0,704	0,270	-0,223**	-2,610	0,010	0,967	1,034
Performance Ambiguity	-0,581	0,264	-0,189*	-2,196	0,030	0,952	1,051
Asset Specificity	0,650	0,296	0,211*	2,198	0,030	0,762	1,313
Core Relatedness	0,330	0,302	0,110	1,095	0,276	0,697	1,436
Relational Norms	-0,305	0,381	-0,073	-0,800	0,425	0,837	1,195
Adjusted R Square	0,107						
R Square	0,142						
Change in R Square	0,005						
F for Change in R Square	0,640						
Sig. F Change	0,425						

* Significant at the .05 level.

** Significant at the .01 level

Multiple Regression Analysis 2

(Dependent Variable: Relational Norms)

To test hypotheses H5-H9, a second hierarchical regression analysis is conducted with relational norms as the dependent variable. The results are summarized in Table 43. The first model evaluates the effects of transaction attributes on the level of relational norms. Only one of transaction attributes, core relatedness, has a significant effect on relational norms (Beta=0.368, $p<0.001$). In line with hypothesis H6, this effect is positive. None of the other coefficients are significant, thereby failing to support the hypotheses H5, H7, and H8. Overall, the model has a significant R-square of 0.163 (F value 5.984, $p<0.001$) and adjusted R-square of 0.136. The second model was added to this analysis to make a cross check for hypothesis H9, which the preceding regression analysis supported. In line with that finding, this second model also supports H9 as the beta coefficient for contract complexity and the change in R-square are not significant. Lastly, the collinearity statistics are at satisfactory levels, as in the previous regression analysis.

Table 43. Hierarchical Regression Results for Relational Norms

	Model 1						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	2,299	0,320		7,183	0,000		
Asset Specificity	0,016	0,070	0,022	0,234	0,815	0,762	1,312
Core Relatedness	0,266	0,067	0,368**	3,956	0,000	0,785	1,274
Environmental Uncertainty	-0,045	0,062	-0,060	-0,714	0,477	0,956	1,046
Performance Ambiguity	0,080	0,063	0,105	1,265	0,208	0,979	1,021
Adjusted R Square	0,136						
R Square	0,163						
F for Change in R Square	5,984						
Sig. F Change	0,000						

** Significant at the .01 level

	Model 2						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	2,385	0,338		7,053	0,000		
Asset Specificity	0,027	0,071	0,037	0,384	0,702	0,734	1,363
Core Relatedness	0,270	0,068	0,374**	4,001	0,000	0,780	1,282
Environmental Uncertainty	-0,054	0,064	-0,073	-0,852	0,396	0,921	1,086
Performance Ambiguity	0,068	0,065	0,089	1,036	0,302	0,924	1,083
Contract Complexity	-0,017	0,021	-0,071	-0,800	0,425	0,862	1,159
Adjusted R Square	0,133						
R Square	0,167						
Change in R Square	0,004						
F for Change in R Square	0,640						
Sig. F Change	0,425						

** Significant at the .01 level

Multiple Regression Analysis 3

(Dependent Variable: Governance Costs)

The next analysis (summarized in Table 44) is to explain level of governance costs through transaction attributes and governance mechanisms used, as stated in Hypotheses H10 - H15. In line with transaction cost and resource based theories, we expect all transaction attributes mentioned to be positively related to governance costs, as summarized in H10-H13. The first model of this regression analysis investigates these. Supporting hypothesis H10, asset specificity has a beta coefficient (0.258) significant at the 0.01 level. Core relatedness also has a significant beta coefficient (-0.274), however the sign is opposite of what is expected, thereby failing to support H11. H12 and H13 are not supported either as environmental uncertainty's and performance ambiguity's effect on the dependent variable are not significant. As it is, Model 1 has a low, despite significant, R-square at 0.104.

In Model 2, relational norms are added to test hypothesis H14. H14 indicates that relational norms have a negative relationship with governance costs, reducing the costs which are increased by the situational attributes. In line with the hypothesis, relational norms have a beta coefficient (-0.539) significant at $p<0.001$. The explanatory power of the model also increases highly with the inclusion of this variable in the model, to R-square 0.348 and adjusted R-square 0.321. In Model 2, the negative beta coefficient of core relatedness, which is difficult to explain by itself, is not significant anymore. Apparently, that portion of the variability in governance costs is in fact explained by relational norms, with which core relatedness variable has a significant positive correlation.

In Model 3, to which contract complexity is added to test hypothesis H15, R-square increases only slightly, with an F value not significant at the 0.05 level. Hence the effect of contract complexity is not significant and H15 is not supported. In total, this analysis indicates that two significant determinants of governance costs are asset specificity and relational norms.

Table 44. Hierarchical Regression Results for Governance Costs

	Model 1						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	2,549	0,324		7,862	0,000		
Asset Specificity	0,187	0,071	0,258**	2,635	0,010	0,762	1,312
Core Relatedness	-0,194	0,068	-0,274**	-2,846	0,005	0,785	1,274
Environmental Uncertainty	-0,061	0,064	-0,082	-0,945	0,346	0,979	1,021
Performance Ambiguity	0,081	0,063	0,111	1,275	0,205	0,956	1,046
Adjusted R Square	0,075						
R Square	0,104						
F for Change in R Square	3,571						
Sig. F Change	0,009						

** Significant at the .01 level

	Model 2						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	3,764	0,331		11,370	0,000		
Asset Specificity	0,195	0,061	0,270**	3,217	0,002	0,762	1,313
Core Relatedness	-0,053	0,062	-0,075	-0,861	0,391	0,697	1,436
Environmental Uncertainty	-0,018	0,055	-0,025	-0,332	0,741	0,967	1,034
Performance Ambiguity	0,057	0,054	0,079	1,052	0,295	0,952	1,051
Relational Norms	-0,528	0,078	-0,539**	-6,748	0,000	0,837	1,195
Adjusted R Square	0,321						
R Square	0,348						
Change in R Square	0,244						
F for Change in R Square	45,535						
Sig. F Change	0,000						

** Significant at the .01 level

	Model 3						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	3,588	0,345		10,389	0,000		
Asset Specificity	0,175	0,061	0,242**	2,853	0,005	0,733	1,365
Core Relatedness	-0,063	0,062	-0,090	-1,027	0,306	0,690	1,450
Environmental Uncertainty	0,003	0,057	0,004	0,057	0,955	0,916	1,092
Performance Ambiguity	0,075	0,055	0,103	1,363	0,175	0,916	1,092
Relational Norms	-0,519	0,078	-0,530**	-6,659	0,000	0,833	1,201
Contract Complexity	0,031	0,018	0,130	1,660	0,100	0,858	1,166
Adjusted R Square	0,330						
R Square	0,362						
Change in R Square	0,015						
F for Change in R Square	2,755						
Sig. F Change	0,100						

** Significant at the .01 level

Multiple Regression Analysis 4

(Dependent Variable: Supplier Satisfaction)

Our final regression analysis is for understanding how governance costs and relational norms relate to supplier satisfaction and for testing hypotheses H16 and H17. Transaction cost theory has governance costs as the main dependent variable, and as it is rooted in economics, it does not include any construct such as satisfaction. However, from an organization theory perspective, satisfaction of partners in an interorganizational relationship is vital to the continuity of the partnership. Model 1 of our final analysis, a simple regression equation, tests the relationship between governance costs and supplier satisfaction (as presented in Table 45).

As hypothesized in H16, governance costs are a significant predictor of supplier satisfaction accounting for 28.5% of the variability by itself. The beta coefficient (Beta= -0.534, $p<0.001$) and R-square value are significant at the 0.01 level.

Model 2, seeks to find the additional effect by relational norms, which are thought to reduce governance costs, but which may also have an additional influence on satisfaction with supplier. In line with hypothesis H17, Model 2 indicates that relational norms do have an additional significant effect (Beta= 0.307, $p<0.001$) on satisfaction with supplier, increasing the R-square value to 0.353 and the adjusted R-square to 0.342. Similar to all the other models in this and preceding regression analyses, collinearity statistics do not indicate any problems.

Model 3 of this final multiple regression analysis does not test any hypotheses from the original model, but is built on a post hoc consideration of why performance ambiguity does not relate significantly to either relational norms or governance costs. Although there could be several explanations to this observation, one explanation is that the inability to clearly assess performance is not "cured" through the transaction cost framework, i.e. it is not resolved via increasing contract complexity or relational norms. Perhaps to managers, it appears as a problem inherent to outsourcing and which they accept and do not attempt to solve. In such a case, it would not influence the transaction cost theory variables, but it would have a negative effect on satisfaction.

In fact, Model 3 results appear to support this additional hypothesis. Performance ambiguity does have an additional effect on supplier satisfaction (Beta=-0.150), although significant only at the 0.05 level. Thus, total R-square increases to 0.375 with the adjusted R-square 0.359.

Table 45. Hierarchical Regression Results for Supplier Satisfaction

	Model 1						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	4,899	0,210		23,327	0,000		
Governance Costs	-0,557	0,079	-0,534**	-7,082	0,000	1,000	1,000
Adjusted R Square	0,279						
R Square	0,285						
F for Change in R Square	50,141						
Sig. F Change	0,000						

** Significant at the .01 level

	Model 2						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	3,420	0,455		7,523	0,000		
Governance Costs	-0,389	0,088	-0,373**	-4,406	0,000	0,724	1,381
Relational Norms	0,313	0,086	0,307**	3,626	0,000	0,724	1,381
Adjusted R Square	0,342						
R Square	0,353						
Change in R Square	0,068						
F for Change in R Square	13,148						
Sig. F Change	0,000						

** Significant at the .01 level

	Model 3						
	Unstd. Coefficients		Std. Coeff.	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
(Constant)	3,645	0,462		7,898	0,000		
Governance Costs	-0,363	0,088	-0,347**	-4,121	0,000	0,709	1,410
Relational Norms	0,317	0,085	0,310**	3,711	0,000	0,724	1,381
Performance Ambiguity	-0,113	0,054	-0,150*	-2,081	0,040	0,975	1,025
Adjusted R Square	0,359						
R Square	0,375						
Change in R Square	0,022						
F for Change in R Square	4,329						
Sig. F Change	0,040						

* Significant at the .05 level

** Significant at the .01 level

Additional Results

Two further issues are considered in the study. One of them is the benefits buyer firms acquire from the outsourcing relationship in question. While eighty-six firms' overall satisfaction scores indicate that they are satisfied to some extent (i.e. with an average score above 3.00 in the five-point Likert scale), 109 firms have indicated that this outsourcing relationship has helped them in at least one area. In other words, even some firms who were not satisfied with the overall relationship gained something from it. The benefits to the firms from outsourcing have been listed in Table 46, from most to least common:

Table 46. Benefits from Outsourcing

	n	Among All Firms	Among Satisfied Firms
Focus on core competency	77	60%	90%
Overall usefulness	68	53%	79%
Adaptation to customer demands	67	52%	78%
Access to expert skills or technology	50	39%	58%
Cost reduction	47	37%	55%
Differentiation in market	43	34%	50%

A second issue was the mistakes buyer firms make in outsourcing. Based on the seven deadly sins of outsourcing Barthelemy and Adsit (2003) have identified, we asked the firms unhappy with the overall outsource relationship whether they had committed any of these sins. Managers of forty-five firms revealed that they had committed at least one of them. The deadly sins and their incidences are in Table 46.

Table 47. The Seven Deadly Sins of Outsourcing

	n	Among All Firms	Among Dissatisfied Firms
Overlooking personnel issues	23	18%	55%
Failing to plant an exit strategy / alternative	21	16%	50%
Selecting the wrong vendor	18	14%	43%
Writing a poor contract	16	13%	38%
Losing control over the outsourced activity	16	13%	38%
Overlooking the hidden costs of outsourcing	16	13%	38%
Outsourcing this activity whereas it should have been done in-house	12	9%	29%

In this chapter, we have presented the results of our hypothesis testing, regarding our primary research questions: the antecedents and consequences of two governance mechanisms, contract complexity and relational norms. Nine out of our seventeen hypotheses were supported. Further, we have attempted to understand the effect of some other organizational / institutional attributes on our dependent variables. No significant effects were found with respect to this secondary research question. Finally, we also demonstrated the respondents' perceptions of benefits of outsourcing as well as the mistakes firms make in this endeavor.

CHAPTER 5

CONCLUSIONS

Discussion of Findings

In this section, we review the major findings and their implications. Since all variables, including the independent variables, are dense, complex constructs, they will each be reviewed to identify issues of interest. In addition, Table 48 summarizes the results of our hypothesis testing.

Asset Specificity

There is considerable debate over what exactly asset specificity is, which sub-constructs it includes, how different types of assets lead to different types of specificity, and so on. Since this study is about services outsourcing, and not the supply chain in general, human asset specificity with its connotations of knowledge, skill, experience specificities is the center of our construct. We borrowed our scale from Poppo and Zenger (1998) who have conducted considerable work on this topic. In fact, they have successfully applied the same scale to their new study (Poppo et al., 2008). Due to reasons yet unidentified, their three item scale showed low reliability in our study, despite cross-checking the translation of questions to Turkish. Hence, the first (albeit somewhat dissatisfactory) finding is the difficulty in measuring asset specificity.

With respect to its functional role in theory, asset specificity, as much as we have succeeded in measuring it, comes to the fore as an important indicator. Not surprisingly, it is directly related to contract complexity and governance costs, explaining a significant portion of each.

Core Relatedness

Resource-based theory's most central concept is a firm resource, a unique, valuable, imperfectly imitable, and non-substitutable asset (Barney, 1991). As asset specificity in the more traditional sense indicates the uniqueness, imperfect imitability, and non-substitutability, we need another variable to capture the full effect of this construct. Core relatedness appeared a suitable candidate. Core relatedness has a relatively high correlation with asset specificity, however it is a distinct independent variable as demonstrated by the items in its scale, as well as the results we have from the model.

Whereas asset specificity is related significantly to contract complexity, core relatedness has a stronger relationship with relational norms, the other governance form we studied. This example demonstrates how complex the influence of a given resource can be. While the specificity, uniqueness of a resource increases the use of contract complexity as a safeguarding mechanism and the governance costs, its strategic value to the company increases the relational behavior used in place of a formal safeguard, and indirectly leads to less governance costs.

Environmental Uncertainty

This construct, extremely popular since Duncan (1972) and the proliferation of contingency theories, behaved in the present study in the manner we expected. It had a significant negative association with contract complexity, supporting the hypothesis that, as the environment-based contingencies increase, managers resort to less formality and less discreteness in their contracts.

Performance Ambiguity

Along with the ambiguity over its label (behavioral uncertainty vs. performance ambiguity), this variable has in fact produced surprising results. Although its negative association with contract complexity, as in the case of environmental uncertainty, is easy to comprehend, its lack of direct association with relational norms, and significant negative association with supplier satisfaction, reveals that there is more to the story, as we will discuss in the following pages.

Contract Complexity

Contract complexity had significant associations mostly as hypothesized. Although far from being astonishing, this finding is still valuable in its support for the validity of this variable and reliability of its measure, as it appears to capture a critical dimension of interfirm governance with a dense measure.

Relational Norms

There are three things to note about this construct. One is related to its measurement. Most researchers agree that it is a three dimensional construct. We have also found three dimensions; however, in this research the distribution of individual items on the dimensions is slightly different from the original study from which the scale was borrowed. Nevertheless, the core dimensions, flexibility, solidarity, and participation are once more validated.

Second, in this study we found that among all transaction attributes suggested by transaction cost framework, only core relatedness is a significant predictor. This has important theoretical and managerial implications, as will be elaborated.

Third, relational norms are a powerful indicator, of governance costs and of supplier satisfaction. As such, it appears to be the critical link between transaction cost economics and behavioral approaches to organization theory.

Governance Costs

This powerful construct, around which a set of wide ranging theories are built, has led to two interesting findings in our study. One is related to our concern regarding the relatively low scale reliability found in the early phases of the research. Despite appearing to indicate quite different aspects of governance, the five items in the scale all load onto a single factor in factor analysis. Perhaps, governance costs construct also needs a distinction between two or more factors based on theoretical grounds, just as core relatedness has "spinned off" from asset specificity.

Second, we were pleased to find a significant relation between governance costs and supplier satisfaction as transaction cost based theories are generally criticized as having no "cost-exclusive" measures of success.

Supplier Satisfaction

In addition to the effect of governance costs, supplier satisfaction also has significant association with relational norms and performance ambiguity, denoting the multifaceted, and somewhat unexpected, composition of the predictors of this variable.

Other Notes

One challenging result is the low explanatory power of the regression analyses for the utilization levels of contract complexity and relational norms. Since our regression equations cover the transaction cost framework elements, and since our t-test comparisons of the sample according to various organizational and relationship attributes (age, size, volume of business, relationship length, etc.) do not show a significant relationship there, there should be a different explanation. Some alternatives are: That the difference in employing governance forms are also related to other factors, such as idiosyncrasies of managers or variation among company cultures or the relative similarity of the partnering firms; or, that we have significant measurement error making results appear less significant than the hypothesized levels.

However, it is not completely surprising to find such insufficiency in explanation regarding bilateral governance mechanisms. As Williamson has noted in

1987, among all governance forms, bilateral structures have been the latest to attract attention from researchers and are, in fact, the least understood. Similarly, the meta-analysis conducted by David and Han (2004) indicates that among all empirical studies of the transaction cost theory, those that have hybrid structures as the dependent variable have the lowest rate of hypotheses supported (twenty-six percent, compared to forty-seven percent for the whole field of research).

Table 48. Results of Hypothesis Testing

Hypotheses Tested		Result
H1	Asset specificity is positively related to contract complexity.	Supported
H2	Core relatedness is positively related to contract complexity.	Not Supported
H3	Environmental uncertainty is negatively related to contract complexity.	Supported
H4	Performance ambiguity is negatively related to contract complexity.	Supported
H5	Asset specificity is positively related to relational norms.	Not Supported
H6	Core relatedness is positively related to relational norms.	Supported
H7	Environmental uncertainty is positively related to relational norms.	Not Supported
H8	Performance ambiguity is positively related to relational norms.	Not Supported
H9	Levels of contract complexity and relational norms have no significant relationship to each other.	Supported
H10	Asset specificity is positively related to governance costs.	Supported
H11	Core relatedness is positively related to governance costs.	Not Supported
H12	Environmental uncertainty is positively related to governance costs.	Not Supported
H13	Performance ambiguity is positively related to governance costs.	Not Supported
H14	Relational norms are negatively related to governance costs.	Supported
H15	Contract complexity is positively related to governance costs.	Not Supported
H16	Governance costs are negatively related to satisfaction with supplier.	Supported
H17	Relational norms are positively related to satisfaction with supplier.	Supported

Limitations and Future Research Opportunities

There are several theoretical and methodological limitations of our study. First, although transaction cost arguments are always based on determining the relatively efficient way of exchange, they implicitly assume production costs are at competitive and similar levels regardless of means of organization. Thus, they ignore the effect of production efficiencies (due to scale, technology, proprietary knowledge, etc.) which may well influence management decisions, from choice of partner to choice of contract clauses. Second, vendor selection and contract building phases are omitted from our analysis. Instead we focus on how ongoing relationships are managed. Vendor search and selection issues relate closely to ex-ante transaction costs, and may be other determinants of why governance mechanisms are employed at their particular levels. Third, we focus only on the dyadic relationship between partners and do not consider the potential transaction network effects on the pairs of firms, such as their relative power within a supply network.

Fourth, we have not included any interaction effects of our core variables. The reason is, while transaction cost theory does discuss interaction effects among various variables, there are no final conclusions about how these effects operate within the bilaterally governed transactions category, and this sample does not appear appropriate for exploration with a high number of potentially interacting variables, which brings us to our fifth point, sample size. Sample size, although adequate for identifying relationships through multiple regression analysis, was not high enough for more advanced methods such as structural equations modeling such that the full model can be tested. Sixth, sample distribution was biased towards

manufacturing firms. Inclusion of more service firms may lead to different perhaps more informative results about outsourcing and bilateral governance. Another limitation is the method of data collection. Although internet-based self-administered questionnaires are user-friendly, as the users can move at their own pace, it has the negative consequences of low response rate, incomplete questionnaires, and the inability to completely verify whether the intended respondent is the actual respondent. Yet another methodological issue was the one-sided analysis of a two-sided relationship. Our variables would be more indicative and our tests more reliable, had we been able to capture the viewpoints of both sides to the same story. Finally, the low reliability rates may indicate some measurement error, the causes of which we cannot yet identify. A more careful preliminary study and refinement of scales may have improved this issue.

Certainly, all our limitations are also areas for improving our research. Nevertheless, we can highlight the most important issues for following studies. This study has attempted to combine economic and behavioral variables. To a certain extent, it has provided some meaningful answers to the research questions. However, to understand the "dynamics" of interaction among firms, we need to look deeper. More emphasis on firms' interactions, on outsourcing processes, and on following the question of how, can help us answer the questions of why. Along those lines, observing firms in partnerships from both sides, and preferably firms and partnerships in different stages of their respective lifecycles can help improve our comprehension of the topic. In addition, incorporating elements of culture, both society and organizational, into the study would enrich the meaning in our results.

Further Implications

Our findings do support the efficiency explanations provided by the transaction cost framework. The hypothesized transaction cost based relationships find significant support; at the same time, some other organizational attributes (such as firm age, firm size, industry, length of the relationship) do not appear to have an effect on the employment of governance forms. According to the "new institutionalist" school (DiMaggio & Powell, 1983; Zucker, 1988), firms with similar institutional profiles (e.g. in terms of industry, size, age, nationality) imitate each other's actions to gain legitimacy in their respective environments, and base many of their decisions on such isomorphic motives, regardless of the efficiency of the said decisions. Although we have not explicitly tested such alternative theories, our data does not provide any indication of isomorphism with respect to the variables studied. However, the findings do not necessarily rule out the "old institutionalist" ideas (Selznick, 1996) which focus on the crystallization of individual firms' characters. While the old and new institutionalist arguments are not always contradictory (Alpay et al., 2008), our results favor the old institutionalist approach compared to the new school.

A second theoretical implication concerns the formation of relational norms. This study finds that among all transaction attributes core relatedness is the sole predictor of relational norms. This raises the question of what the other determinants of relational norms can be. DiMaggio (2001) distinguishes between two types of relational contracts: Project-based and long-term. While both types of contracts are based on the practice of relational norms, their orientations are different: Technical flexibility versus trust. DiMaggio notes that these two variables, while related, are

analytically distinct. Similarly, Yılmaz et al. (2005) have studied the effects of trust and interdependence on interfirm relational behavior and have found that relational behavior may have voluntary or dependence bases. Whereas for highly dependent partners relational behavior is a necessity, for firms that are not dependent on their partner, relational behavior may still exist as a result of trust. The strong association between core relatedness of the activity and relational norms applied suggests that we may have found the dynamics behind the "project-based" or necessity based relational norms.

The role of performance ambiguity presents another puzzle to be solved. Interestingly, performance ambiguity is not associated with relational norms, whereas we had hypothesized this relationship on the grounds that firms would switch to relational forms of control when the performance is difficult to evaluate. It appears that managers accept performance ambiguity and do not attempt to resolve it through the means we studied. Two rationales come to mind: One relates to the understanding of formal cybernetic approach to control, which uses feedback based on a comparison between actual performance and set standards. However, the value of performance feedback "depends upon understanding the technology used by those who will be subject to the control system" (Hatch, 1997:330). It may be that, due to the nature of outsourcing, buyer firms' managers are not knowledgeable about the activity in question and have no interest in / resources for acquiring them. Hence, they cannot utilize the relational norms which, as reflected in our measure, imply an equality or symmetry between partners. Instead, they "let it be" while the unresolved ambiguity has a net negative effect on satisfaction with this supplier.

Second, this insensitivity/inaction towards performance ambiguity may be based on cultural attributes. It may be that Turkish managers as a whole are less

sensitive to uncertainty (as demonstrated by Kabasakal & Bodur, 2002) to the degree that instead of attempting to actively manage such ambiguity, they either trust the supplier or not, taking a passive stance. Based on this explanation, remaining unmanaged ambiguity can only be remedied via the presence of trust between parties, regardless of whether this relationship is governed through the relational norms we have measured. As Lane notes, "trust provides a way to cope with risk or uncertainty in exchange relationships" (1998: 3). Thus, trust appears to be the most important remaining explanation of behavior which we have not directly covered in this study.

The distinction mentioned earlier in this section that relational contracts can be rooted in technological versus trust bases, is comparable to process-based versus characteristic-based trust Zucker (1986) describes. Process-based trust, which corresponds to technology based relational behavior, is deliberately developed by firms and is based on past or expected exchange. In fact, Poppo, Zhou, and Ryu (2008) have recently argued that prior history and expectations of continuity both need to be present in order to create trust in interorganizational exchange. Lane (1998) reports from Luhmann, that trust, a necessary component of every interaction system, is a risky investment because it requires precommitment. Given the high group collectivism values of our society, one can expect that this precommitment will be granted to members of the group with which an individual identifies.

As the results of this study highlight, relational norms are only one component of trust, alleviating only some problems of economic exchange, such as increasing joint participation in decisions. Possibly, other problems, such as performance ambiguity, can be remedied through other types of trust. İnelmen (2002)

has proposed a similar framework, identifying three levels of trust (interpersonal, interorganizational, and institutional), all of which influence business transactions.

Another implication relates to strategy. Reve (1990) has suggested that, if we analyze firms as nexus of contracts as suggested by the agency theory, we can separate internal from external contracts. Internal contracts (the employment relations) make up the strategic core of the firm, determined by the ownership of most specific and valuable assets. External contracts are the strategic alliances, and are those transactions related to assets with medium levels of specificity. Transactions with low levels of asset specificity are handled in spot markets. Joining Reve's analysis with our findings, we conclude that firms can improve their governance costs and overall quality of partnership if they selectively focus on building trust via relational norms in their "core related" transactions.

Eighty-five percent of all firms in the sample indicate that they have received at least one type of benefit from their outsourcing relationship; this also includes some firms who are not happy overall with the partnership. The increased ability to focus on core competences is counted as the most important benefit of outsourcing, after which comes better adaptation to customer demands. Whereas research from earlier years signify cost as the driving factor for outsourcing, currently cost reduction ranks fourth (out of five) among the advantages revealed by the managers. This indicates a trend toward a more strategic and more collaborative approach to outsourcing.

On the other hand, thirty-five percent of all firms mention having committed a deadly sin of outsourcing. Out of the seven deadly sins in our survey, one referred to mistakenly outsourcing an activity although it should have been conducted in house, and this one item was the least frequent answer among the seven. In other

words, only nine percent of all firms in the sample mentioned this mistake. All other mistakes mentioned, such as overlooking personnel issues and failing to plant an exit strategy, were those that could have been cured, if only we could go back to the beginning; i.e., they display a learning effect of outsourcing experience.

Miles and Snow (2007) contend that their most important finding about supply chains in their thirty years of research is the increasing collaboration among firms, as firms move from strategic choice of partners with complementary capabilities to idea sharing for innovativeness, and finally to actively managing knowledge within collaborative networks, which fuels innovation and growth. We are optimistic because our results show that most company executives seem to agree with the direction Miles and Snow are pointing.

On the whole, this study delivers selective but meaningful support for transaction cost economics and resource based theory, while suggesting small but genuine implications for strategy.

APPENDICES

Appendix A. Questionnaire Items (in English)

Question 1. What is the name of your company?

Question 2. In what year was your company founded?

Question 3. What is the industry in which your company operates?

Automotive Manufacturing	Banking and Finance
Food Production	Construction Services
Textiles and Clothing	Energy
Chemicals and Pharmaceuticals	Healthcare
Consumer Electronics	Retailing
Other Consumer Products	Education
Other Industrial Products	Media and Publishing
Other Services	Telecommunications

Question 4. How many employees does your firm have?

Question 5. Where is the headquarters of your company?

Turkey	Other

(Questions after this point will be answered based on a specific outsourcing firm with whom your company works.)

Question 6. What is the type of activity outsourced from this company?

Production – Engineering	Human Resources
Logistics – Transportation	Finance – Accounting
Sales – Distribution	Security
Marketing – Advertising	Cleaning Services
Information Systems – Technology	Catering
Management Consultancy	Other

Question 7. What is the volume of business outsourced from this firm in the past twelve months?

0 – 100,000 YTL	500,001 – 1,000,000 YTL
100,001 – 250,000 YTL	1,000,001 – 5,000,000 YTL
250,001 – 500,000YTL	5,000,000YTL +

Question 8. How long has your company been working with this firm?

0-2 yrs	2-5 yrs	5-10 yrs	10 yrs +

In Questions 9-12, the respondent will rate how much (s)he agrees with the statements about the activity outsourced, from 1=completely disagree to 5=completely agree.

Q. Nr.	Description	Model Variable	Item Code
9.	This activity contributes to the overall profitability of the firm.	Core Relatedness	CR1
10.	This activity is integrated within the company.	Core Relatedness	CR2
11.	This activity enabled the company to differentiate itself from its competitors in the eyes of the customers.	Core Relatedness	CR3
12.	This activity is viewed as strategic.	Core Relatedness	CR4

In Questions 13- 26, the respondent will rate how much (s)he agrees with the statements about the relationship with this supplier, from 1=completely disagree to 5=completely agree.

Q. Nr.	Description	Model Variable	Item Code
13.	The organizations consult each other when setting goals.	Relational Norms	RN8
14.	The coordination of the relationship with this supplier is too costly compared with the resulting outcomes of these interactions.	Governance Costs	GC2
15.	Problems that arise are treated by the organizations as joint rather than individual responsibilities.	Relational Norms	RN4
16.	The organizations are flexible in responding to requests for changes.	Relational Norms	RN1
17.	It is very difficult to get necessary verification of production performance and production costs data from this supplier.	Governance Costs	GC3
18.	When an unexpected situation arises, the parties adapt easily.	Relational Norms	RN3
19.	It is easy to settle agreements with this supplier about specification of products and services delivered to our firm (reverse-scaled).	Governance Costs	GC4
20.	Both organizations are open to improvements that may benefit the collaboration as a whole, not only the individual parties.	Relational Norms	RN5
21.	The organizations play an active role in various decisions regarding the collaboration.	Relational Norms	RN7

22.	Both parties seek and consider the other's opinions and suggestions regarding how to accomplish various tasks.	Relational Norms	RN9
23.	Both parties are concerned about their shared welfare, not just individual gains.	Relational Norms	RN6
24.	Our firm uses too much time and resources to control the products and production processes of this supplier.	Governance Costs	GC1
25.	It is very time consuming and difficult to accomplish negotiations between our firms about price and payment terms.	Governance Costs	GC5
26.	The parties are willing to make adjustments when circumstances change.	Relational Norms	RN2

In Questions 27-30, the respondent will evaluate how difficult it is to estimate the various aspects of the markets in the future, from 1=very easy to 5=very difficult.

Q. Nr.	Description	Model Variable	Item Code
27.	Difficulty of evaluating future needs in terms of expected technology	Environmental Uncertainty	EU1
28.	Difficulty of evaluating future needs in terms of expected activity level	Environmental Uncertainty	EU2
29.	Difficulty of evaluating future needs in terms of expected performance level	Environmental Uncertainty	EU3
30.	Difficulty of evaluating future needs in terms of expected vendor skills	Environmental Uncertainty	EU4

In Questions 31-38, the respondent indicates whether the specified clause is included in the written outsourcing contract.

Q. Nr.	Description	Model Variable	Item Code
31.	Periodic written reports of all relevant transactions.	Contract Complexity	CC1
32.	Prompt written notice of any departures from the agreement.	Contract Complexity	CC2
33.	The right to examine and audit all relevant records through a firm of CPAs.	Contract Complexity	CC3
34.	The designation of certain information as proprietary and subject to the confidentiality provisions of the contract.	Contract Complexity	CC4
35.	Non-use of proprietary information even after termination of agreement.	Contract Complexity	CC5
36.	Termination of the agreement.	Contract Complexity	CC6

37.	Arbitration clauses.	Contract Complexity	CC7
38.	Lawsuit provisions.	Contract Complexity	CC8

In Questions 39-45, the respondent will rate how much (s)he agrees with the statements about the relationship with this supplier, from 1=completely disagree to 5=completely agree.

Q. Nr.	Description	Model Variable	Item Code
39.	It is difficult to determine whether agreed upon quality standards and specifications are adhered to.	Performance Ambiguity	PA4
40.	Precise standards by which to assess this supplier's performance are not readily available.	Performance Ambiguity	PA1
41.	Evaluating this supplier's performance is a highly subjective process.	Performance Ambiguity	PA2
42.	This supplier is performing so many different tasks that it is difficult to ascertain whether a good job is being done.	Performance Ambiguity	PA3
43.	Our approach to this activity is custom tailored to the company.	Asset Specificity	AS2
44.	It would be costly, in terms of time and resources, to switch outsourcing vendors for this activity.	Asset Specificity	AS3
45.	Employees of the outsourcing firm must acquire company-specific information and techniques to adequately perform this function.	Asset Specificity	AS1

In Questions 46-51, the respondent will rate how much (s)he agrees with the statements about the benefits gained in this relationship, from 1=completely disagree to 5=completely agree.

Q. Nr.	Description
46.	Our costs were reduced.
47.	We were able to focus on our core business.
48.	We obtained expert-level knowledge and techniques.
49.	We were able to differentiate ourselves in the market.
50.	Our flexibility for customer demands increased.
51.	Our overall performance improved.

In Questions 52-60, the respondent will indicate the level of his/her satisfaction with the outsourcing relationship according to the respective criteria, from 1=very dissatisfied to 5=very satisfied.

Q. Nr.	Description	Model Variable	Item Code
52.	Scope of resources	Satisfaction with Supplier	SS1
53.	Industry knowledge	Satisfaction with Supplier	SS2
54.	Commitment to quality	Satisfaction with Supplier	SS3
55.	Ability to meet due dates	Satisfaction with Supplier	SS4
56.	Price of services	Satisfaction with Supplier	SS5
57.	Flexible terms and conditions	Satisfaction with Supplier	SS6
58.	Cultural match with supplier	Satisfaction with Supplier	SS7
59.	Sharing confidential information	Satisfaction with Supplier	SS8
60.	Overall relationship	Satisfaction with Supplier	SS9

Questions 61-67 will only be answered by those respondents who gave three points or less for Question 60 (i.e. are not satisfied). The respondent will indicate how much (s)he agrees with the statements, from 1=completely disagree to 5=completely agree.

Q. Nr.	Description
61.	This activity should have been done in-house instead of outsourcing.
62.	Vendor selection was wrong.
63.	The written contract is not sufficient / not appropriate.
64.	Personnel issues were overlooked.
65.	Our company lost control over the outsourced activity.
66.	There were hidden costs of outsourcing not identified before.
67.	Our company has no exit strategy, i.e. switching vendors or integrating the activity.

Question 68. Respondent’s name

Question 69. Respondent’s position in the company

Question 70. Respondent’s e-mail address

Appendix B. Introduction to the Questionnaire Web Page (in Turkish)

Hoşgeldiniz,

Günümüzde şirketler çalışmaları sırasında ihtiyaç duydukları pek çok hizmeti başka firmalardan temin etme yolunu kullanmaktadır. Hazırlamakta olduğum doktora tezi, satın alınan hizmetlerdeki memnuniyet seviyelerini ölçmek ve gelişim potansiyeli olan noktaları belirlemek üzerinedir. Bu anket de tez çalışmamın önemli bir parçasıdır.

Soruları, herhangi bir firmada orta ve üst düzey yönetici olarak çalışıp da başka bir firmadan hizmet alımı konusunda birinci elden bilgi sahibi olan, yani başka bir firmadan hizmet alımında bulunmuş olan herkes yanıtlayabilir. Anket yaklaşık 15 dakika sürede tamamlanabilmektedir ve büyük çoğunluğu çoktan seçmelidir.

Şirketinizin sıkça hizmet aldığı firmalardan bir tanesini göz önünde bulundurarak –firmanın ismini belirtmeden – bu anketi cevaplayabilirsiniz. Veriler tamamen gizli tutulacak ve yalnızca toplu olarak istatistik analiz amaçlı kullanılacaktır.

Çalışma sonuçlandığında, adres bıraktıysanız, bir yönetici özeti size de gönderilecektir. İlgi ve yardımlarınız için teşekkür eder, saygılar sunarım.

Saadet Çetinkaya
Boğaziçi Üniversitesi
İşletme Bölümü

Appendix C. Final Version of the Questionnaire (in Turkish)

Dışarıdan Temin Edilen Hizmetlerde Memnuniyet Anketi

1. Firmanızın adı: _____
2. Firmanız hangi yılda kurulmuştur? _____
3. Firmanızın ana faaliyet konusu nedir? Uygun seçeneği işaretleyiniz.

Otomotiv		Bankacılık – Finans		Enerji		Perakendecilik	
Gıda		İnşaat		Sağlık Hizmetleri		Telekom	
Tekstil		Elektronik - Bilgisayar		Medya – Yayıncılık		Eğitim	
Kimya - İlaç		Diğer tüketici ürünleri		Diğer sanayi ürünleri		Diğer hizmetler	

4. Firmanızda kaç kişi çalışıyor? _____
5. Firmanızın bağlı olduğu genel merkez (varsa) hangi ülkededir?

Türkiye		Diğer (belirtiniz)	

Lütfen bundan sonraki soruları, hizmet aldığınız bir tedarikçi firmayı göz önünde bulundurarak cevaplayınız:

6. Bu tedarikçiden alınan hizmetin konusu nedir? Uygun seçeneği işaretleyiniz.

Üretim – Mühendislik		İnsan Kaynakları	
Lojistik – Nakliye		Finans – Muhasebe	
Satış – Dağıtım		Güvenlik	
Pazarlama – Reklam		Temizlik	
Bilgi Sistem ve Teknolojisi		Yemek	
Yönetim Danışmanlığı		Diğer – belirtiniz:	

7. Bu firmadan son bir yılda aldığınız hizmetin tutarı yaklaşık ne kadardır? Uygun seçeneği işaretleyiniz.

0 – 100,000 YTL		500,001 – 1,000,000 YTL	
100,001 – 250,000 YTL		1,000,001 – 5,000,000 YTL	
250,001 - 500,000 YTL		5,000,000 YTL'den fazla	

8. Bu firmayla kaç yıldır çalışıyorsunuz?

0 – 2 yıl		2 – 5 yıl		5 – 10 yıl		10 yıldan fazla	

Lütfen hizmet aldığınız faaliyete dair aşağıdaki cümlelere ne ölçüde katıldığınızı değerlendirerek uygun seçeneği işaretleyiniz.

1: Kesinlikle Katılmıyorum, 2: Katılmıyorum, 3: Kararsızım, 4: Katılıyorum,
5: Kesinlikle Katılıyorum

9. Bu faaliyetin firmamızın toplam karlılığına etkisi yüksektir.	1	2	3	4	5
10. Bu faaliyet firmamızla bütünleşmiş durumdadır.	1	2	3	4	5
11. Bu faaliyet firmamızın müşteri gözünde rakip firmalardan üstün görünmesini sağlar.	1	2	3	4	5
12. Bu faaliyet firmamız için stratejiktir.	1	2	3	4	5

Firmanızın bu tedarikçi ile ilişkileri konusunda aşağıdaki ifadelere ne ölçüde katıldığınızı belirtiniz. Uygun seçeneği işaretleyiniz.

1: Kesinlikle Katılmıyorum, 2: Katılmıyorum, 3: Kararsızım, 4: Katılıyorum,
5:Kesinlikle Katılıyorum

13. Her iki firma da hedef belirlerken diğerine danışır.	1	2	3	4	5
14. Bu tedarikçi ile olan ilişkilerimizin koordinasyonu, ilişkiden elde edilen sonuçlara kıyasla çok yüksek maliyetlidir.	1	2	3	4	5
15. Ortaya çıkan sorunlar firmalar tarafından ayrı ayrı değil müşterek sorumluluk olarak kabul edilirler.	1	2	3	4	5
16. Taraflar değişim taleplerini karşılama konusunda esnektirler.	1	2	3	4	5
17. Bu tedarikçiden performans ve maliyetlerine dair veri temin etmek çok zordur.	1	2	3	4	5
18. Beklenmedik bir durum ortaya çıktığında taraflar kolaylıkla uyum sağlarlar.	1	2	3	4	5
19. Bu tedarikçi ile ürün ve hizmet detaylarına ilişkin anlaşmalar yapmak kolaydır.	1	2	3	4	5
20. Her iki firma da sadece kendilerine değil ortaklığa fayda sağlayacak ilerlemelere açıktırlar.	1	2	3	4	5
21. Firmalar ortaklığa ilişkin çeşitli kararlarda aktif rol oynarlar.	1	2	3	4	5
22. Her iki firma da çeşitli işler konusunda diğerinin görüş ve önerilerini araştırır ve dikkate alır.	1	2	3	4	5
23. İki taraf da sadece tek taraflı kazanç değil ortak refah sağlama amacındadır.	1	2	3	4	5
24. Şirketimiz bu tedarikçinin ürün/hizmet ve süreçlerini denetlemek için çok fazla zaman ve emek harcamaktadır.	1	2	3	4	5
25. Firmalarımız arasında fiyat ve ödeme koşulları konusunda pazarlığın sonuçlandırılması çok zaman alıcı ve zordur.	1	2	3	4	5
26. Taraflar koşulların değişmesi durumunda ayarlamalar yapmaya isteklidir.	1	2	3	4	5

Piyasa faktörlerini dikkate alarak, firmanızın çeşitli konularda geleceğe yönelik tahminler yapabilmesi ne derece zordur? Uygun seviyeyi işaretleyiniz.

	Çok Kolay				Çok Zor
27. Gelecekteki teknoloji ihtiyaçlarımızı tahmin edebilmemiz	1	2	3	4	5
28. Gelecekteki olası iş hacmimizi tahmin edebilmemiz	1	2	3	4	5
29. Gelecekteki performans beklentilerimizi tahmin edebilmemiz	1	2	3	4	5
30. Gelecekte tedarikçilerimizde arayacağımız becerileri tahmin edebilmemiz	1	2	3	4	5

Firmanızın bu tedarikçi ile yaptığı yazılı anlaşmada aşağıdaki konulardan hangilerine değinilmiştir? Lütfen sözleşmede bahsi geçen tüm noktaları işaretleyiniz:

31. Konuyla ilgili işlemler hakkında düzenli olarak yazılı rapor verilmesi	
32. Anlaşmanın dışına çıkılması durumunda karşı tarafın yazılı olarak bilgilendirilmesi	
33. Ortaklıkla ilgili tüm kayıtların bir mali denetim firması tarafından incelenebilmesi	
34. Bazı bilgilerin ticari sır olarak tanımlanıp anlaşmanın gizlilik hükümlerine dahil edilmesi	
35. Anlaşma sona erdikten sonra da belirlenen ticari sırların kullanılamaması	
36. Anlaşmanın sona erdirilmesi hali	
37. Arabulucu kullanılacak haller	
38. Mahkemeye başvurulacak haller	
HİÇBİRİ SÖZLEŞMEDE YER ALMAZ.	

Firmanızın bu tedarikçi ile ilişkileri konusunda aşağıdaki ifadelere ne ölçüde katıldığınızı belirtiniz. Uygun seçeneği işaretleyiniz.

1: Kesinlikle Katılmıyorum, 2: Katılmıyorum, 3: Kararsızım, 4: Katılıyorum,
5: Kesinlikle Katılıyorum

39. Önceden üzerinde anlaşılan kalite standartlarına ve özelliklere uyulup uyulmadığını belirlemek zordur.	1	2	3	4	5
40. Bu tedarikçinin performansını ölçmemizi sağlayacak kesin standartlar elimizde yoktur.	1	2	3	4	5
41. Bu tedarikçinin performansının değerlendirilmesi oldukça sübjektif / kişisel yoruma açık bir süreçtir.	1	2	3	4	5
42. Bu tedarikçinin hizmeti pek çok farklı işlem içerdiğinden işin tatmin edici şekilde yapıldığı konusunda yargıya varmak zordur.	1	2	3	4	5

43. Dışarıdan aldığımız bu hizmet ve uygulamalarla ilgili firmamıza özel yaklaşımlara sahibiz.	1	2	3	4	5
44. Tedarikçi değiştirmek, harcayacağımız zaman ve kaynaklar açısından, firmamız için zahmetli / maliyetli olacaktır.	1	2	3	4	5
45. Bu hizmetin tatmin edici şekilde yerine getirilebilmesi için elemanların firmamıza has bilgi ve tekniklere sahip olmaları gerekmektedir.	1	2	3	4	5

Bu ortaklık sayesinde firmanızda aşağıdaki konularda fayda sağlandı mı? Uygun seçeneği işaretleyiniz.

1: Kesinlikle Katılmıyorum, 2: Katılmıyorum, 3: Kararsızım, 4: Katılıyorum,
5: Kesinlikle Katılıyorum

46. Maliyetlerimiz düştü.	1	2	3	4	5
47. Asıl işimize odaklanabildik.	1	2	3	4	5
48. Uzmanlaşma gerektiren yetkinlik ve teknolojiler elde ettik.	1	2	3	4	5
49. Pazarımızda rakiplere kıyasla farklılaşma sağladık.	1	2	3	4	5
50. Müşterilerimizin taleplerine uyum sağlayabildik.	1	2	3	4	5
51. Performansımız genel olarak iyiye gitti.	1	2	3	4	5

Aşağıdaki konularda bu tedarikçiden memnuniyetinizin seviyesini belirtiniz:

1: Hiç memnun değiliz, 2: Memnun değiliz, 3: Kararsızım, 4: Memnunuz, 5: Çok memnunuz

52. Tedarikçi firmanın kaynaklarının genişliği	1	2	3	4	5
53. Sektördeki tecrübe ve bilgisi	1	2	3	4	5
54. Kaliteye olan bağlılığı	1	2	3	4	5
55. İş teslim tarihlerine uyması	1	2	3	4	5
56. Fiyatının uygun olması	1	2	3	4	5
57. Koşullarda esneklik sağlaması	1	2	3	4	5
58. Firma kültürlerimizin birbirine uyumu	1	2	3	4	5
59. Şirket sırlarımızı emanet edebilmemiz	1	2	3	4	5
60. Tedarikçi firmanın genel performansı	1	2	3	4	5

Bu firmanın performansından memnun değil iseniz, aşağıdaki değerlendirmelere ne ölçüde katıldığınızı belirtiniz. (Performanstan memnun iseniz bu bölümü boş bırakınız.)

1: Kesinlikle Katılmıyorum, 2: Katılmıyorum, 3: Kararsızım, 4: Katılıyorum,
5: Kesinlikle Katılıyorum

61. Bu firmadan alınan hizmet şirketimiz bünyesinde ve personelimiz tarafından yapılmalıydı.	1	2	3	4	5
62. Firma seçimi hatalı oldu.	1	2	3	4	5
63. Bu firmayla yapılan sözleşme yetersiz / uygun değil.	1	2	3	4	5
64. Personel konularına yeterince özen gösterilmedi.	1	2	3	4	5
65. Firmamız bu hizmet üzerindeki kontrolünü kaybetti.	1	2	3	4	5
66. Önceden tahmin edemediğimiz maliyetler ortaya çıktı.	1	2	3	4	5
67. Bu firmayla olan sözleşmenin sona erme durumu için uygun bir stratejimiz / alternatifimiz yok.	1	2	3	4	5

68. Adınız: _____
69. Firmadaki göreviniz: _____
70. E-mail adresiniz: _____

Ankete katıldığınız için teşekkür ederiz.

Appendix D. Descriptive Statistics for Individual Scale Items

Variable / Item	N	Min.	Max.	Mean	Std.Dev.
Asset Specificity	*128*	*1,00*	*5,00*	*3,36*	*0,92*
AS1:Company specific information needed for performance	128	1,00	5,00	3,31	1,28
AS2:Function/applications custom tailored to company	128	1,00	5,00	3,41	1,07
Core Relatedness	*128*	*1,00*	*5,00*	*3,28*	*0,95*
CR1:Contribution to firm profitability	128	1,00	5,00	3,23	1,22
CR2:Integration within company	128	1,00	5,00	3,28	1,22
CR3:Helps differentiation in the market	128	1,00	5,00	3,17	1,14
CR4:Viewed as strategic	128	1,00	5,00	3,44	1,23
Environmental Uncertainty	*128*	*1,00*	*5,00*	*2,82*	*0,90*
EU2: Difficulty of evaluating future level of activity	128	1,00	5,00	2,94	1,01
EU3: Difficulty of evaluating future performance levels	128	1,00	5,00	2,73	0,98
Performance Ambiguity	*128*	*1,00*	*5,00*	*2,69*	*0,92*
PA1: Standards to assess supplier performance not available	128	1,00	4,67	2,61	1,12
PA2: Evaluating this performance is a subjective process	128	1,00	5,00	2,97	1,25
PA3: Includes many different tasks; hard to ascertain performance	128	1,00	5,00	2,48	1,01
Contract Complexity	*128*	*0,00*	*10,00*	*4,44*	*2,84*
Relational Norms	*128*	*1,11*	*5,00*	*3,33*	*0,68*
RN1: Organizations flexible in responding to change requests	128	1,00	5,00	3,54	1,06
RN2: Parties willing to make adjustments	128	1,00	5,00	3,59	0,91
RN3: Parties adapt easily in unexpected situation	128	1,00	5,00	3,41	1,05
RN4: Problems treated as joint responsibilities	128	1,00	5,00	3,22	1,12
RN5: Both are open to improvements that benefit partnership	128	1,00	5,00	3,48	1,04
RN6: Parties concerned about shared welfare	128	1,00	5,00	3,37	1,01
RN7: Sides play an active role in partnership decisions	128	1,00	5,00	3,06	1,06
RN8: Consult each other when setting goals	128	1,00	5,00	2,87	1,21
RN9: Seek and consider each other's opinions	128	1,00	5,00	3,47	1,03
Governance Costs	*128*	*1,20*	*5,00*	*2,59*	*0,67*
GC1: Too much time and resources to control products/processes	128	1,00	5,00	2,71	1,13
GC2: Coordination too costly compared with outcomes	128	1,00	5,00	2,27	0,88
GC3: Difficult to verify performance and cost data	128	1,00	5,00	2,95	1,21
GC4: Easy to settle agreements about services (Rev. coded)	128	1,00	5,00	2,42	1,11
GC5: Time-consuming difficult negotiations about price/terms	128	1,00	5,00	2,58	1,11
Satisfaction with Supplier	*128*	*1,56*	*5,00*	*3,46*	*0,70*
SS1: Scope of resources	128	1,00	5,00	3,41	0,97
SS2: Industry knowledge	128	1,00	5,00	3,91	0,74
SS3: Commitment to quality	128	1,00	5,00	3,52	1,08
SS4: Ability to meet due dates	128	1,00	5,00	3,23	1,23
SS5: Price of services	128	1,00	5,00	3,27	0,98
SS6: Flexible terms and conditions	128	1,00	5,00	3,52	1,00
SS7: Cultural match with supplier	128	1,00	5,00	3,28	1,10
SS8: Sharing confidential information	128	1,00	5,00	3,62	0,97
SS9: Overall relationship	128	1,00	5,00	3,36	0,96

REFERENCES

Akerlof, G.A. (1970) The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics, 84*, 488-500.

Alpay, G., Bodur, M, Yılmaz, C., Çetinkaya, S., & Arıkan, L. (2008). Performance implications of institutionalization process in family-owned businesses, *Journal of World Business, 43*, 435-448.

Alvarez, S.A., Barney, J.B., & Bosse, D.A. (2003). Trust and its alternatives. *Human Resource Management, 42*, 393-404.

Anderson, S.W. & Dekker, H.C. (2005). Management control for market transactions: the relation between transaction characteristics, incomplete contract design, and subsequent performance. *Management Science, 51*, 1734-1752.

Arndt, S.W. & Kierzkowski, H. (Eds.). (2001). Fragmentation – new production patterns in the world economy (pp.1-16). Oxford: Oxford University Press.

Baker, G., Gibbons, R. & Murphy, K.J. (2002). Relational contracts and the theory of the firm. *Quarterly Journal of Economics, February 2002*, 39-84.

Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*, 99-120.

Barney, J.B. (1999). How a firm's capabilities affect boundary decisions. *Sloan Management Review, 40,* 137-145.

Barney, J.B. & Ouchi, W.G. (Eds.). (1986). Organizational economics. San Francisco: Jossey-Bass.

Barthelemy, J. (2001). The hidden costs of IT outsourcing. *Sloan Management Review, 42*, 60-69.

Barthelemy, J. & Adsit, D. (2003). The seven deadly sins of outsourcing. *Academy of Management Executive*, 17, 87.

Barthelemy, J. & Geyer, D. (2001). IT outsourcing: evidence from France and Germany. *European Management Journal, 19*, 195-202.

Barthelemy, J. & Geyer, D. (2005). An empirical investigation of IT outsourcing versus quasi-outsourcing in France and Germany. *Information and Management, 42*, 533-542.

Barthelemy, J. & Quelin, B.V. (2006). Complexity of outsourcing contracts and ex-post transaction costs: an empirical investigation, *Journal of Management Studies, 43*, 1775-1797.

Beaumont, N. & Sohal, A. (2004). Outsourcing in Australia. *International Journal of Operations and Production Management*, 24, 688-700.

Bercovitz, J., Jap, S.D., & Nickerson, J.A. (2006). The antecedents and performance implications of cooperative exchange norms. *Organization Science, 17*, 724-740.

Bradach, J.L. & Eccles, R.G. (1989). Price, authority, and trust: from ideal types to plural forms. *Annual Review of Sociology, 15*, 97-118:

Brown, M., Falk, A., & Fehr, E. (2004) Relational contracts and the nature of market transactions. *Econometrica, 72*, 747-780.

Buvik, A. & Andersen, O. (2002) The impact of vertical coordination on ex-post transaction costs in domestic and international buyer-seller relationships. *Journal of International Marketing, 10*, 1-24.

Buvik, A. & John, G. (2000). When does vertical coordination improve industrial purchasing relationships? *Journal of Marketing, 64*: 52-64.

Churchill, G.A. & Iacobucci, D. (2005). Marketing research: methodological foundations. 9th ed. Mason, OH: Thomson South-Western.

Claycomb, C. & Franckwick, G.L. (2005). The dynamics of buyers' perceived costs during a relationship development process: an empirical assessment. *Journal of Business Research, 58*, 1662-1671.

Coase, R. (1937). The nature of the firm. *Economica, 4*, 386-405.

Curzon Price, V. (2001). Some causes and consequences of fragmentation. In S.W. Arndt & H. Kierzkowski (Eds.), Fragmentation – new production patterns in the world economy (pp.88-107). Oxford: Oxford University Press.

David, R.J. & Han, S.K. (2004). A systematic assessment for the empirical support for transaction cost economics. *Strategic Management Journal, 25*, 39-58.

DiMaggio, P.J. (Ed.) (2001). The twenty-first century firm (pp.210-243). Princeton, NJ: Princeton University Press.

DiMaggio, P.J. & Powell, W.W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*, 147-160.

Domberger, S. (1998). The contracting organization. New York: Oxford University Press.

Dyer, J.H. & Chu, W. (2003). The role of trustworthiness in reducing transaction costs and improving performance: empirical evidence from the United States, Japan, and Korea. *Organization Science, 14*, 57-68.

Dyer, J.H. & Singh, H. (1998). The relational view: Cooperative strategy and interorganizational competitive advantage. *Academy of Management Review, 23*, 660-679.

Emerson, R.M. (1962). Power-dependence relations. *American Sociological Review, 27*, 31-41.

Etzioni, A. (1975). A comparative analysis of complex organizations: on power, involvement, and their correlates. New York: Free Press.

Fama, E.F. (1970). Efficient capital markets: a review of theory and empirical work. *The Journal of Finance, 25*, 383-417.

Feinman, J.M. (2000). Relational contract theory in context. *Northwestern University Law Review, 94*, 737-748.

Furlotti, M. (2007). There is more to contracts than incompleteness: a review and assessment of empirical research on inter-firm contract design. *Journal of Management and Governance, 11*, 61-99.

Geyskens, I., Steenkamp, J.B.E.M., & Kumar, N. (2006). Make, buy, or ally: a transaction cost theory meta-analysis. *Academy of Management Journal, 49*, 519-543.

Gilley, K.M., Greer, C.R. & Rasheed, A.A. (2004). Human resource outsourcing and organizational performance in manufacturing firms. *Journal of Business Research*, 57, 232-240.

Gilley, K.M. & Rasheed, A.A. (2000). Making more by doing less: an analysis of outsourcing and its effects on firm performance. *Journal of Management, 26*, 763-790.

Gouldner, A.W. (1960). The norm of reciprocity: a preliminary statement. *American Sociological Review, 25*, 161-178.

Graziani, G. (2001). International subcontracting in the textile and clothing industry. In S.W. Arndt & H. Kierzkowski (Eds.), Fragmentation – new production patterns in the world economy (pp.209-230). Oxford: Oxford University Press.

Grover, V. & Malhotra, M.K. (2003). Transaction cost framework in operations and supply chain management research: theory and measurement. *Journal of Operations Management, 21*, 457-473.

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). Multivariate Data Analysis (5th ed.). Upper Saddle River, NJ: Prentice-Hall.

Harland, C., Knight, L., Lamming, R., & Walker, H. (2005). Outsourcing: assessing the risks and benefits for organisations, sectors and nations. *International Journal of Operations and Production Management, 25*, 831-850.

Hatch, M.J. (1997). Organization theory. New York: Oxford University Press.

Heide, J.B. & John, G. (1992). Do norms matter in marketing relationships? *Journal of Marketing, 56*, 32-44.

Heide, J.B. & Miner, A.S. (1992). The shadow of the future: effects of anticipated interaction and frequency of contact on buyer-seller cooperation. *Academy of Management Journal, 35*, 265-291.

Holcomb, T.R., & Hitt, M.A. (2007). Toward a model of strategic outsourcing. *Journal of Operations Management, 25*, 464-481.

Hsu, C.C., Kannan, V.R., Leong, G.K., & Tan, K.C. (2006). Supplier selection construct: instrument development and validation. *The International Journal of Logistics Management, 17*, 213- 239.

İnelmen, K.V.Ö. (2002). Trust in buyer-supplier relationships: a small and medium-sized enterprises perspective. Ph.D. Thesis. Boğaziçi University Institute of Social Sciences.

Ireland, R.D., Hitt, M.A., & Vaidyanath, D. (2002). Alliance management as a source of competitive advantage. *Journal of Management: 28*, 413-446.

Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*, 305-360.

Jiang, B. & Qureshi, A. (2006). Research on outsourcing results: current literature and future opportunities. *Management Decision, 44*, 44-55.

Johnson, S., McMillan, J., & Woodruff, C. (2002). Courts and relational contracts. *Journal of Law, Economics and Organization, 18*, 221-276.

Jones, O. (2000). Innovation management as a post-modern phenomenon: The outsourcing of pharmaceutical R&D. *British Journal of Management, 11*, 341-356.

Kabasakal, H. & Bodur, M. (2002). Arabic cluster: a bridge between East and West. Journal of World Business, 37, 40-54.

Kakabadse, A. & Kakabadse, N. (2005). Outsourcing: current and future trends. *Thunderbird International Business Review, 47*, 183–204.

Kotabe, M. & Murray, J.Y. (2004). Global procurement of service activities by service firms. *International Marketing Review, 21*, 615-633.

Lado, A.A., Boyd, N.G., & Hanlon, S.C. (1997). Competition, cooperation, and the search for economic rents: a syncretic model. *Academy of Management Review, 22*, 110-141.

Lane, C. (1998). Introduction: theories and issues in the study of trust. In Lane, C. & Bachmann, R. (Eds.) Trust within and between organizations (pp.1-27).

Lei, D.& Hitt, M.A. (1995). Strategic restructuring and outsourcing: the effect of mergers and acquisitions and LBOs on building firm skills and capabilities. *Journal of Management, 21*, 835-859.

Lepak, D.P., Snell, S.A. (1999). The human resource architecture: toward a theory of human capital allocation and development. *Academy of Management Review, 24*, 31-48.

Linder, J.C. (2004). Transformational outsourcing. *Sloan Management Review, 45*, 52-58.

Lohtia, R., Brooks, C.M., & Krapfel, R.E. (1994). What constitutes a transaction specific asset? An examination of the dimensions and types. *Journal of Business Research, 30*, 261-270.

Lusch, R.F. & Brown, J.R. (1996). Interdependency, contracting, and relational behavior in marketing channels. *Journal of Marketing, 60*, 19-38.

Macaulay, A. (1963). Non-contractual relations in business: a preliminary study. *American Sociological Review, 28*, 55-67.

Macneil, I.R. (1978). Contracts: Adjustment of long-term economic relations under classical, neo-classical, and relational contract law. *Northwestern University Law Review, 72*, 854-905.

Macneil, I.R. (2000). Relational contract theory: challenges and queries. *Northwestern University Law Review, 94*, 877-907.

Mahnke, v. & Özcan, S. (2006). Outsourcing innovation and relational governance. *Industry and Innovation, 13*, 121-125.

Meyer, J.W. & Rowan, B. (1977) Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340-63.

Miles, R.E. & Snow, C.C. (2007). Organization theory and supply chain management: an evolving research perspective. *Journal of Operations Management, 25*, 459-463.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). Strategy safari. Harlow: Prentice Hall.

Muehlberger, U. (2007). Hierarchical forms of outsourcing and the creation of dependency. *Organization Studies, 28*, 709-727.

Ouchi, W.G. (1979). A conceptual framework for the design of organizational control mechanisms. *Management Science, 25*, 833-848.

Ouchi, W.G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly, 25*, 129-141.

Özbay, T. (2004). Sorularla dış kaynak kullanımı (outsourcing). İstanbul: İstanbul Ticaret Odası Yayınları.

Parkhe, A. (1993). Strategic alliance structuring: a game theoretic and transaction cost examination of interfirm cooperation. Academy of Management Journal, 36, 794-829.

Pfeffer, J. (1972). Merger as a response to organizational interdependence. *Administrative Science Quarterly, 17*, 382-394.

Pfeffer, J. & Salancik, G. (1978). The external control of organizations. New York: Harper and Row.

Pilling, B.K., Crosby, L.A., & Jackson, D.W. (1994). Relational bonds in industrial exchange: an experimental test of the transaction cost framework. *Journal of Business Research, 30*, 237-251.

Poppo, L. & Zenger, T.R. (1998). Testing alternative theories of the firm. *Strategic Management Journal, 19, 853-877.*

Poppo, L. & Zenger, T.R. (2002). Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal, 23*, 707-725

Poppo, L., Zhou, K.Z., & Ryu, S. (2008). Alternative origins to interorganizational trust: an interdependence perspective on the shadow of the past and the shadow of the future. *Organization Science, 19*, 39-55.

Poppo, L., Zhou, K.Z., & Zenger, T.R. (2008). Examining the conditional limits of relational governance: specialized assets, performance ambiguity, and long-standing ties. *Journal of Management Studies, 45*, 1195-1216.

Porter, M. (1980). Competitive strategy. New York: Free Press.

Porter, M. (1985). Competitive advantage. New York: Free Press.

Prahalad, C.K. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review, 68*, 79-91.

Pringle, C.D. & Kroll, M.J. (1997). Why Trafalgar was won before it was fought: lessons from resource-based theory. *Academy of Management Executive, 11,* 73-89.

Quinn, J.B. (1999). Strategic outsourcing: Leveraging knowledge capabilities. *Sloan Management Review, 40*, 9-21.

Quinn, J.B. (2000). Outsourcing innovation: the new engine of growth. *Sloan Management Review*, 41, 13-28.

Reuer, J.J. & Arino, A. (2007). Strategic alliance contracts: dimensions and determinants of contractual complexity. *Strategic Management Journal, 28*, 313-330.

Reve, T. (1990) The firm as a nexus of internal and external contracts. In Aoki, M., Gustafsson, B. & Williamson, O.E. (Eds.) (1990) The firm as a nexus of treaties (pp. 133-161). London: Sage.

Rindfleisch, A. & Heide, J.B. (1997). Transaction cost analysis: past, present, and future applications. *Journal of Marketing, 61*, 30-54.

Ring, P.S. & Van de Ven, A.H. (1992). Structuring cooperative relationships between organizations. *Strategic Management Journal, 13*, 483-498.

Rothaermel, F.T., Hitt, L.A., & Jobe, M.A. (2006). Balancing vertical integration and strategic outsourcing: Effects on product portfolio, product success, and firm performance. *Strategic Management Journal, 27*, 1033-1056.

Rousseau, D.M. (1990). New hire perceptions of their own and their employer's obligations: a study of psychological contracts. *Journal of Organizational Behavior*, 11, 389-400.

Rumelt, R.P. (1991). How much does industry matter? *Strategic Management Journal*, 12: 101-132.

Schoorman, F.D., Bazerman, M.H., & Atkin, R.S. (1981). Interlocking directorates: a strategy for reducing environmental uncertainty. *Academy of Management Review, 6*, 243-251.

Schwartz, A. & Watson, J. (2004). The law and economics of costly contracting. *Journal of Law, Economics, and Organization, 20*, 2-31.

Scott, W.R. (1992). Organizations: rational, natural, and open systems. (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Selznick, P. (1949). TVA and the grass roots. Berkeley: University of California Press.

Selznick, P. (1996). Institutionalism old and new. *Administrative Science Quarterly, 41*, 270-277.

Sheng, S., Brown, J.R., Nicholson, C.Y., & Poppo, L. (2006). Fo exchange hazards always foster relational governance? An empirical test of the role of communication. *International Journal of Research in Marketing, 23*, 63-77.

Smith, M.A., Mitra, S., Narasimhan, S. (1998). Information systems outsourcing: A study of pre-event firm characteristics. *Journal of Management Information Systems, 15*, 61-93.

Stonehouse, G. & Snowdon, B. (2007). Competitive advantage revisited. *Journal of Management Inquiry, 16*, 256-273.

Stump, R. & Heide, J. (1996). Controlling supplier opportunism in industrial relationships. *Journal of Marketing Research, 33*, 431-441.

Thompson, J.D. (1967) Organizations in action. New York: McGraw-Hill.

Üsdiken, B., Sözen, Z., & Enbiyaoğlu, H. (1988). Strategies and boundaries: Subcontracting in construction. *Strategic Management Journal, 9*, 633-637.

Weber, M. (1947). The theory of social and economic organization. (Translated by Henderson, A.M. & Parsons, T.). Glencoe, IL: Free Press.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.

Williamson, O.E. (1971) The vertical integration of production: market failure considerations. *American Economic Review*, *61*: 112-123.

Williamson, O.E. (1975). Markets and hierarchies: Analysis and antitrust implications. New York: Free Press.

Williamson, O.E. (1987). The economic institutions of capitalism. New York: Free Press.

Williamson, O.E. (1990) The firm as a nexus of treaties: an introduction. In Aoki, M., Gustafsson, B. & Williamson, O.E. (Eds.) (1990) The firm as a nexus of treaties (pp. 1-25). London: Sage.

Williamson, O.E. (1991a). Comparative economic organization: the analysis of discrete structural alternatives. *Administrative Science Quarterly*, *36*, 269-296.

Williamson, O.E. (1991b). Strategizing, economizing, and economic organization. *Strategic Management Journal, 12*, 75-94.

Williamson, O.E. (1996). The mechanisms of governance. New York: Oxford University Press.

Yılmaz, C., Sezen, B., & Özdemir, Ö. (2005) Joint and interactive effects of trust and (inter) dependence on relational behaviors in long-term channel dyads. *Industrial Marketing Management, 34*, 235-248.

Yu, C.M.J., Liao, T.J., & Lin, Z.D. (2006). Formal governance mechanisms, relational governance mechanisms, and transaction-specific investments in supplier-manufacturer relationships. Industrial Marketing Management, 35, 128-139.

Zucker, L. (1986). The production of trust: institutional sources of change in the formal structure of organizations, 1840-1920. *Research on Organizational Behavior*, 8, 53-111.

Zucker, L. (Ed.) (1988). Institutional patterns and organizations: culture and environment. Cambridge, MA: Ballinger Publishing