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# THE EFFECT OF RELATIONAL RISK PERCEPTION ON SUPPLIER'S PERFORMANCE; AN EMPIRICAL STUDY ON TURKISH STRATEGIC ALLIANCES

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#### **Abstract**

The aim of this research is to find answers to two principle questions: what is the effect of buyer's relational risk perception on supplier's expected performance? And how do strategic alliances manage relational risk in their enhanced supplier-buyer partnerships. In order to formulate hypotheses a review of the general literature on strategic alliances and the specific literature on relational risk, governance structure and trust in alliances has been provided. The hypotheses were tested using data from 135 questionnaire sent to the directors and key managers of alliances from Turkey's main industrial sectors. The results of this study show that there is a negative link between perception of relational risk and supplier's expected performance. However our results do not support any significant correlation between opportunism and expected performance. The results of study also confirm that higher perception of opportunistic behavior tends to use of more formal control mechanisms and higher compatibility between supplier and buyer tends to decrease the use of formal control mechanisms such as contract. The main contribution of this paper is to present an empirical support to relational risk management in Turkish strategic alliances.

*Keywords:* Strategic Alliance, Relational Risk Perception, Supplier-Buyer Partnership, Governance Structure, Contractual Arrangement, Trust.

JEL Classification: D7, G32, G34

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#### 1. Introduction

Strategic alliances have grown in importance over the last few decades. Companies are using such strategic linkages to get competitive advantage and obtain common strategic objectives. Firms are teaming up with other firms and work together to share resources, enter new markets, gain access to new technology, obtain economies of scale and reduce risks. Despite their potential benefits, many alliances fail to accomplish their objectives (Parkhe 1991; Ellis 1996; Das and Teng 1998; Elmuti and Kathawala 2001). Alliance partners can end up wasting valuable time and resources even before the actual collaboration starts (Clegg et al., 2011). Alliances are supposed to reduce risks however they generate a special kind of risk entitled "relational risk" (Delerue, 2005). Studies regard risk in alliances mention the existence of relational risk, which is defined as a specific risk arising from the relationship itself (Ring and Van de Ven 1992; Das and Teng 1996; Nooteboom 1996; Nooteboom et al, 1997). Relational risk is a fundamental and unique feature that distinguishes strategic alliances from all other strategic activities done by a single firm (Das and Teng 1996). Even though many researchers have worked on relational risk in strategic alliances, very few studies in general and almost none in Turkey were tested empirically; Nooteboom et al, (1997) have tested the effects of governance and trust on the risk perceived by agents of firms in the context of buyer and supplier. The hypotheses have been tested on 97 relationships on the customer relations of ten suppliers of electrical/electronic components. Delerue (2005), as well, has carried out a two phase empirical research on relational risk in alliances; firstly, an exploratory research to explore multidimensional concept of relational risk by conducting indepth interviews on 20 managers. Secondly, she did a confirmatory research to test the hypothesis on 87 partnerships of French biotechnology firms.

The main objective of this paper is to present an empirical support to relational risk management in strategic alliances. In order to examine relational risk on supplier's performance, we address two important questions:

- 1. What is the effect of buyer's relational risk perception on supplier's expected performance?
- 2. How do strategic alliances manage relational risk in their partnerships?

The paper begins by reviewing literature on strategic alliances and their various typologies in general and then proceeds to examine relational risk and its management specifically. Finally, we discuss the contribution and implication of this paper by proposing results and findings.

# 2. Theory and Hypothesis

In this section we first define strategic alliances and different types of risk in strategic alliances in general and proceed to focus on supplier partnership as a common type of non- equity arrangement (Supplier-Buyer) and relational risk perception as a unique type of risk in alliance relationships. We argue that a partner's relational risk perception could affect other partner's performance and consequently it would affect partners' satisfactory cooperation in alliance. Finally we argue that alliances management is usually established through the contractual agreements and their governance forms and contractual arrangements can change with different governance structure. Since trust affect contractual arrangements in alliances we seek to find out the relationship between perception of relational risk and different level of contractual arrangement from pure trust to formal contracts.

#### 2.1. Defining Strategic Alliances

Theorists have offered a numerous definitions for strategic alliances. However the common characteristics of all definitions indicate alliances as a long term relationship between two or more independent firms that share compatible objectives, strive for mutual benefits, and require a high level of mutual dependence (Mohr and Spekman 1994; Dussauge and Garrette 1995; Faulkner 1995; Gulati 1995; Yashino and Rangan 1995; Das and Teng 1996, 1998b, 1999, 2000a, 2001; Kale et al. 2000; Elmuti and Kathawala 2001). There are a wide range of strategic alliances' types, based on various degrees of inter-firm interdependency and levels of internalization (Kang and Sakai 2000). These alliances range from informal loosely agreements to formal agreements in which the parties may exchange equity or form a joint venture corporation (Elmuti and Kathawala 2001). To organize such a large collection of alliance structures, theorists have categorized them in different forms e.g. equity and non-equity alliances (Kang and Sakai, 2000), non-equity, minority equity and joint ventures (Yashio and Rangan 1995) and etc. Das and Teng (2001) offered a typology that categorize alliances in four different structures; unilateral contract-based alliances, bilateral contract-based alliances, minority equity alliances, and joint ventures. For the purpose of this research the late typology is preferred over others because it covers all possible forms of alliance. The first two are non-equity alliances and the last two are equity alliances. The difference between non-equity and equity alliances is whether the alliance agreements include equity creation or equity exchange. The distinguishing characteristics of strategic alliances' structures could be defined as following (Das and Teng 2001);

Equity joint ventures have joint equity ownership structure. The degree of interfirm integration in equity joint ventures is high and their control mechanism is hierarchical. Duration of alliance in equity joint ventures is medium to long term and their unplanned termination is very difficult.

Minority equity alliances have one-way or cross-equity ownership. The degree of inter-firm integration in minority equity alliances is substantial and their control mechanism is interest alignment through equity stake. Duration of alliance in

minority equity alliances is also medium to long term and their unplanned termination is difficult.

Unilateral contract-based alliances have no shared ownership involved. The degree of inter-firm integration in unilateral contract-based alliances is light and their control mechanism is contract law. Duration of alliance in unilateral contract-based alliances is short to medium and their unplanned termination is fairly easy. Licensing, distribution agreements, and R&D contracts are the main forms of unilateral contract-based alliances.

Bilateral contract-based alliances have no shared ownership involved. The degree of inter-firm integration in bilateral contract-based alliances is moderate and their control mechanism is reciprocity. Duration of alliance in bilateral contract-based alliances is short to medium term and their unplanned termination is fairly difficult. Joint R&D, joint marketing and promotion, enhanced supplier partnership, and joint production are the main forms of bilateral contract-base alliances.

Common types of strategic alliances consist of Joint venture, minority equity alliance, joint production, joint marketing and promotion, joint R &D, enhanced supplier partnership, R&D contract and licensing agreement. "Enhanced Supplier Partnership" is one of the main forms of bilateral contract-based alliances. The supplier not only provides a particular type or line of good/services, but also becomes an integral part of buyer's operation through extensive cooperation. In this kind of supplier partnership a higher level of reciprocal interdependence could be found than the traditional buyer-supplier relationship (Borys and Jemison 1989, p. 246). Supplier partnerships refer to more exclusive relationships between organizations and their upstream suppliers and downstream customers in an alliance in order to reduce uncertainty and enhancing control of supply and distribution channels. Such alliances are usually created to increase the financial and operational performance of each channel member through reductions in total cost and inventories and increased sharing of information (Maloni and Benton 1997). Rather than concerning themselves only with price, manufacturers are looking to suppliers to work co-operatively in providing improved service, technological innovation and product design. This development has produced a significant impact by expanding the scope of supply chain management through greater integration of suppliers with organizations (Gunaskaran et al. 2004). According to Todeva and Knoke (2005) one of the strategic motives for organizations to engage in alliance formation is achieving vertical integration, recreating and extending supply links in order to adjust to environmental changes.

#### 2.2. Risk in Strategic Alliances

Despite all the potential benefits, strategic alliances have also been known for the relatively high rate of failure. There are several reasons for the underperformance and failure of strategic alliances. Alliances involve difficulties of coordination and mutual dependence (Nooteboom et al, 1997). For interdependency, a high degree of harmony, flexibility and management are required which would not be the case if the company operates as a single firm (Delerue, 2005). Moreover, the greatest difficulty lies in the management of inter-firm dynamics, as inter-firm relationships in alliances go substantially beyond that of competitors or of buyer-suppliers. Opportunistic behavior, hidden agendas, cultural clashes, and excessive contractual and managerial controls are just some examples of relational uncertainties and problems in strategic alliances. Besides the usual "business" risk, strategic alliances attract the additional dimension of risk to prospective partners in terms of the level of mutual co-operation Das and Teng (2001).

According to Ring and Van de Ven (1992), the total risk in an alliance is made up of two distinct sets of uncertainty; "uncertainty regarding future states of nature" and "uncertainty whether the parties will be able to rely on trust". Proceeding along similar lines Das and Teng (1996) differentiate between relational risk and performance risk. Relational risk is about "the probability and consequences that a partner firm does not commit itself to the alliance in the desired manner". On the other hand, performance risk is concerned with "those factors that may jeopardize the achievement of strategic objectives, given that the partners cooperate fully".

One of the most important sources of relational risk is the concern about the partner's opportunistic behavior- that is, "self-interest seeking with guile" (Williamson, 1975, p.9). Examples of opportunistic behavior include "withholding or distorting information, shirking or failing to fulfill promises or obligations, appropriation of the partner firm's technology or key personnel, late payments, and delivery of substandard products" (Parkhe, 1993, p. 828). The threat of opportunism is considerable. In order to constrain opportunism two means have been suggested in literature; contract and monitoring. Trust, coercion and incentives such as shared ownership of specific investments have been considered as relevant dimensions of governance (Nooteboom et al, 1997).

Besides deliberate opportunistic behavior, relational risk also arises from partner firms' inability to make inter-firm cooperation work. Firms simply may not have enough experience and knowledge to collaborate effectively with other firms in alliance (Kanter, 1994). In international alliances, a perception of opportunism may be attributed to a lack of cultural understanding and responsiveness (Lane and Beamish, 1990).

Literature suggest that the degree to which managers perceive relational risk influence their expectation of the performance, hence

H1. Buyer's perception of relational risk affects supplier's expected performance.

# 2.3. Governance and Trust in Strategic Alliances

Literature suggests two basic approaches for control; external measure—based control (formal control or objective control) and internal value-based control (informal control or social control) (Eisenhardt 1989). The first approach emphasizes on the establishment and utilization of formal rules, procedures, and policies to monitor and reward desirable performance such as legal contracts. The second approach relies on the establishment of organizational norms, values, culture, and the internalization of goals to encourage desirable behavior and outcome, such as organizational culture (Delerue, 2005).

The establishment of governance structure is at the core of alliance management. Alliance governance entails the agreements between partners regard the integration of their interests and the use of combined resources (Clegg et al. 2011). The organization and functioning of alliances are usually established through the contractual agreements and their governance forms. Contract is concerned to deal with allocation of risks and trading benefits resulted from exchanges while governance is institutional context in which the collaboration takes place (Arino and Reuer 2006).

Research on alliances governance largely is based on distinction of equity and non-equity agreements. Researchers argue that equity alliances provide partners with more managerial control than non-equity alliances by virtue of the establishment of an administrative hierarchy that allows them to exercise a right of control (Hennart 1988; Pisano 1989). The general findings in literature indicate that when the cost and chance of opportunistic behavior is high, equity alliances will be preferred (Gulati 1995). The reason is that partners' share ownership of equity decreases their incentive to behave opportunistically (Pisano and Teece 1989). Reuer and Arino (2002) argue that contractual arrangements can change with different governance structure. Contractual arrangements in alliances are influenced by different aspects such as trust or relational quality, the specificity of alliance related investments and the purpose and type of alliance. Alliance contracts also differ in their complexity. Two common types of contract consist of "Explicit" and "Implicit" contracts. Explicit contracts determine roles and responsibilities of parties, the ownership structure, decision rights and policies of conflicts. They also include legal issues such as non-disclosure agreements and intellectual property rights. Implicit contracts, however, are not always enforceable by law but by mutual interest of parties such as trust or desire to maintain a valuable relationship (Clegg et al. 2011).

Researchers believe that inter-firm trust is a critical element in strategic alliances (Ring and Van de Ven 1992; Nooteboom 1996; Sydow 1998, Das and Teng 2001) because it is effective in lessening concerns about opportunistic behavior, better

integrating the partners, and reducing formal contracting (Parkhe 1993). There is extensive support in prior research for the overall beneficial effect of trust. Empirical studies have shown that trust allows for constructive interpretation of partner motives, reduces the potential for conflict, and encourages smooth information flow between partners (Zaheer et al. 1998; Krishnan et al. 2006). Concerning to the social exchange theory (Blau, 1964), it has been argue that since social exchange relies on shared system of beliefs and ethics more than contractual arrangement, trust can reduce the specification and monitoring of contracts and it decrease uncertainty as well (Nooteboom et al, 1997). In an online survey (Linkdin 2014) answers of 286 directors to the question of "In one word, what is the most important challenge facing Alliances/Channel Relationships?" indicated that the most frequently answer was "Trust" (59 answers), the second most frequently answer was "Alignment" (16 answers) and the third one was "Added value" (12 answers). We can argue that besides formal and informal control mechanisms, trust also could be considered solely as control mechanism in partner's relationship. However, the excessive concern with control can be counterproductive (Nooteboom et al, 1997).

Managers have several instruments for reducing risk in strategic alliances. Delerue (2005) showed that when the perception of relational risk is high, more autonomous instrument of control is going to be adopted by managers and decision makers. Adoption of autonomous instrument of control, on the other hand become an obstacle to cooperation. Hence,

H2a. The higher the level of perceived relational risk the higher the level of formal control

H2b. The higher the level of perceived relational risk the higher the level of informal control

On the other hand trust eases the concern about opportunistic behavior.

Hence

H3. The higher the level of perceived relational risk the lower the level of inter firm trust

#### 3. Research Design and Methodology

The questionnaire used in this study contained measures of perceived relational risk, supply chain performance and control mechanisms. All measures have been adopted thorough literature review. The scale of perceived relational risk includes four major aspects based on the definition of relational risk: opportunistic behavior, inter-firm trust, incompatible cultures and objects of partners (Das and Teng 2001)

For the purpose of this study, criteria for measuring supplier-buyer partnership's performance have been selected based on "perfect order-index" and "flexibility". Three critical service elements as the components of the perfect order-index have been selected as "on time delivery", "order completeness", and "error-damage free delivery" (Borghesi and Gaudenzi 2004). Flexibility can measure a system's ability to accommodate volume and schedule fluctuations from suppliers, manufactures and customers. To achieve the goal of flexibility four types of system flexibility; "volume flexibility", "delivery flexibility", "mix flexibility" and "new product flexibility" have been considered in this study (Slack 1991). The scale of risk reducing mechanisms includes formal control (contract), informal control (organization behavior) and inter-firm trust (Bradach and Eccles 1989).

## 3.1. Questionnaire Development and Sample Selection

The hypotheses were tested using data from questionnaire which have been sent to the directors and key managers of 2000 companies in Turkey. A small group of managers and expert reviewed a preliminary version of the questionnaire to assess the validity of selected items. Convenience sampling method has been used to prepare database, although in data gathering special consideration has been taken for using most relevant sources, such as Turkish Business and Professional Network, Network of Risk Management in Turkey, Turkish companies Network, and etc. A mix of service/product, national/international and SME/large size alliances from main industrial sectors (Agriculture, IT, Construction, Consumer electronics and home appliances, Textiles, Automotive, Steel and Energy sectors and Transport, Financial and Tourism services) located in Turkey was sampled. In order to get in contact with directors and top managers directly, questionnaires have been sent via "LinkedIn" to their personal account. Of 2000 director which received questionnaire, 8 percent responded. Finally 135 respond have been selected for analysis.

# 3.2. Descriptive Statistics

All data have been check for outliers before any statistical analysis. The reliability values of variables exceed the recommended value of 0.70 except for one construct for which Cronbach's Alfa was 0,676. After dropping two items from the measure we get an acceptable Cronbach's Alfa as 0,725. Table1 provides descriptive statistics such as mean, variance, standard deviation, and the number of items and Cronbach's Alfa of each variable.

**Table 1.** Descriptive Statistics of Variables

Variables	Mean	Variance	Standard deviation	Items no	Cronbach' s Alfa
Relational Risk Perception (RRP)	34,597	21,518	4,638	13	0,691
RRP after modification				11	0,725
Performance	6, 991	2,582	1,606	9	0,903
Risk Reducing Mechanisms	7,168	0,588	0,766	14	0,732

Factor analysis has been performed for every variable. The results of factor analysis for 11-items "Relational Risk Perception" variable suggested a two factors solution, for 9-items "Performance" variable, items were loaded on two factors and for 14-items "Risk Reducing Mechanisms" variable, items were loaded on four factors. Table 2 provides the results of factor analysis of the variables.

Table 2. Results of Factor Analysis of Variables- Cronbach's Alfa		
Factor 1. Opportunistic behavior	0,716	
Our firm is generally doubtful of the information provided to us by our supplier.		R
Sometimes the supplier firm alters the facts slightly in order to get what it need.		elat
The supplier firm may turn out to be dishonest.		ion
The supplier firm sometimes promised to do things without actually doing them later.		al F
The supplier firm may do anything within its means that will help it further its interest.		
Factor 2. Conformity	0,667	Relational Risk Perception
In our contacts with this supplier we can understand each other well and quickly.		rce
Our partner expresses himself in a language which is close to ours.		ptio
Our partner interprets the events related to our cooperation in the same way as we do.		'n
The supplier firm may have incompatible objectives.		
Factor 1. Perfect order	0,886	
How is your supplier's performance as compared to your expectation after placing an order?		
Your supplier's ability to On time delivery		
Your supplier's ability to Order completeness		l
Your supplier's ability to modify the quantity of your order		Per
Your supplier's ability to modify the variety of products to meet your requirement		for
Factor 2. Flexibility	0,835	Performance
Your supplier's ability to modify the existing products or introducing new products based on your requirement.		ıce
Your supplier's ability to change planned delivery dates.		
Your supplier's ability to meet your expectation at the lowest possible cost.		
In your overall assessment how would you characterize the performance of your primary supplier?		
Factor 1. Formal Control (Contractual arrangement)	0,840	
In addition to an agreement we sign a detailed legal contract with this supplier.		
The contract with this supplier is as complete as possible.		
The contract forms the core of our relation with this customer.		
We sign an agreement specifying price, delivery, quality specification and estimated annual usage.		- ₽
Factor 2. Trust & Interaction	0,778	isk
We chose this supplier because we trust his good intention.		Re
We chose this supplier because we trust his competences.		Risk Reducing Mechanisms
Our cooperation is characterized by mutual respect with this supplier.		ing
Our cooperation is characterized by high reciprocity with this supplier.		Me
There is a close, personal interaction between us and this supplier.		cha
Factor 3. Responsibility & Honesty	0,735	nis
The supplier firm carries out its duties even if we do not check up on it.		ms
The supplier firm always provides us a completely truthful picture of its business.		
Factor 4 Informal Control (Organizational culture)	0,702	1
The organizational cultures of our supplier are compatible with ours.	-,	
We undertake no contractual agreements with this supplier beyond each order as it is		
placed.		

The reliability values of all factors exceed the recommended value of  $0,\,70$  (Hair et al 1995) except for one construct for which the coefficient is 0,667. In this study, we used subjective performance indicators (expected performance). According to Saxton (1997) there is a positive relationship between subjective and objective measures of the alliance performance.

#### 3.3. Correlations and Regression Analysis

We used Pearson Correlations, linear regression analysis and ANOVA to test the hypotheses. Table 3 provides correlation analysis of relational risk perception and expected performance. From two factors of relational risk perception just one of them (conformity) was found to be significantly correlated with two factors of expected performance; perfect order and flexibility. In other words, higher expectation of flexibility and perfected order tends to higher perception of conformity between supplier and buyer. The correlation between Opportunistic behavior and expected performance are not significant.

**Table 3.** Results of Correlation between Relational Risk Perception and Expected Performance

1 CITOTITIUTICC				
Variables	1	2	3	4
Opportunistic behavior	1	,036	,070	,040
Conformity	,036	1	,554**	,343**
Perfect order	,070	,554**	1	,488**
Flexibility	,040	,343**	,488**	1

<sup>\*\*</sup>Correlation is significant at the 0,01 level (2-tailed).

According to the results, Table 4, both factors of relational risk perception, Opportunistic behavior and Conformity was found to be significantly correlated with risk reducing mechanisms. In other words, higher perception of opportunistic behavior tends to more use of formal control mechanisms and higher conformity between supplier and buyer tends to decrease the use of formal control mechanisms such as contract. The correlation between risk perception and organizational culture are not significant.

**Table 4.** Results of Correlation between Relational Risk Perception and Risk Reducing Mechanisms

Variables	1	2	3	4	5	6
Opportunistic behavior	1	,036	,181*	,120	,263**	-,076
Conformity	,036	1	-,428**	,556**	,308**	,109
Contractual arrangement	,181*	-,428**	1	-,416**	-,116	,067
Trust & Interaction	,120	,556**	-,416**	1	,234**	,108
Responsibility& & Honesty	,263**	,308**	-,116	,234**	1	,057
Organisational Culture	-,076	,109	,067	,108	,057	1

<sup>\*</sup>Correlation is significant at the 0, 05 level (2-tailed)

<sup>\*\*</sup>Correlation is significant at the 0, 01 level (2-tailed)

We use linear regression analysis to test the hypotheses regarding the effect of perceived relational risk on expected performance and risk reducing mechanisms. The results of regression analysis yielded partly support for hypothesis 1(Table 5). From two factors of relational risk perception just one of them (conformity) was found to be significantly correlated with two factors of expected performance; perfect order and flexibility. Jia et al. (1999) showed that risk perception increase when the estimated results are negative and remain constant when estimated result is positive. In the same line Delerue (2005) confirmed that the results of her study partially supported her hypothesis regards the effect of risk perception and perceived performance. The author concluded that some risks do not have a negative effect on performance perception and the ways by which managers perceive relational risk influence their perception of performance.

Table 5. Results of Regression Analysis for Relational Risk Perception and Flexibility

Independent Variables	В	Beta	t	Sig.	
(Constant)	3,339		2.720	000	
Std. Error	,898		3,720	.000	
Opportunistic behavior	,067	.027	222	720	
Std. Error	,201	,027	,333	.739	
Conformity	1,063	,342	4,185	.000	
Std. Error	,254	,342	4,183	.000	
Dependent variable		Flexib	ility		
R	.344a				
R2	.119				
F		8,876 Si	g,000		
(Constant)	1,519		1,430	,155	
Std. Error	1,062		1,430	,133	
Opportunistic behavior	,166	,051	,698	,487	
Std. Error	,238	,031	,096		
Conformity	2,290	,552	7,622	.000	
Std. Error	,301	,332	7,022	.000	
Dependent variable	Perfect Order				
R	.556a				
R2	.309				
F	29,518 Sig,000				

Table 6 provides the result of regression analysis for relational risk perception and risk reducing mechanisms. Many instruments of control are used to reduce relational risk perception. Some of these instruments are more informal such as relational capital (trust) and some of them more formal like legal procedures and contractual agreements. Delerue (2005) showed that perception of relational risk is influenced by a combination of several instruments of control. The author argues that some instruments of control are appropriate for some risks but increase the perception of other risk. For example contractual arrangement can become an obstacle to cooperation. The results of our study also confirm that effect; higher perception of opportunistic behavior tends to more use of formal control mechanisms and higher conformity between supplier and buyer tends to decrease the use of formal control mechanisms such as contractual arrangement. Results of our research partially support hypothesis (H2a, H2b).

**Table 6.** Results of Regression Analysis for Relational Risk Perception and Risk Pedusing Machanians

Independent variable	В	Beta	t	Sig		
Constant	14,621		11,089	,000		
Std. Error	1,319		11,009	,000		
Opportunistic behavior	,759	,197	2,567	,011		
Std. Error	,296	,197	2,307	,011		
Conformity	-2,117	-,436	-5,671	,000		
Std. Error	,373	-,430	-5,071	,000		
Dependent variable	Contractual arrangement					
R			,472a			
R2			,222			
F		18,87	75 Sig ,000			
Independent variable	В	Beta	t	sig		
Constant	1,606		1.570	117		
Std. Error	1,017		1,579	,117		
Opportunistic behavior	,318	,100	1,394	,166		
Std. Error	,228	,100	1,374	,100		
Conformity	2,213	,553	7,691	,000		
Std. Error	,288			,000		
Dependent variable		Trust &	& Interaction			
R			,565a			
R2			,319			
F		30,9	77 Sig,000			
Independent variable	В	Beta	t	sig		
Constant	1,429		2.466	015		
Std. Error	,580		2,466	,015		
Opportunistic behavior	,410	,252	3,155	,002		
Std. Error	,130	,232	3,133	,002		
Conformity	,614	,299	3,744	,000		
Std. Error	,164	,299	3,744	,000		
Dependent variable		Responsib	oility & Honesty			
R		,398a				
R2			,159			
F		12,4	32 Sig,000			
Independent variable	В	Beta	t	sig		
Constant	4,337		7.644	000		
Std. Error	,567		7,644	,000		
Opportunistic behavior	-,119	090	022	252		
Std. Error	,127	-,080	-,932	,353		
Conformity	,208	112	1 208	107		
Std. Error	,161	117 1748 147				
Dependent variable	Organisational Culture					
R	,136a					
R2	,018					
F	1,235 Sig,294					

In our study trust has been considered as an instrument of control. Trust is characteristic of successful alliances and it has negative relation with relational risk perception. According to the results of our study there is a significant relationship between Trust & Interaction and relational risk perceived by partners. The results support hypothesis H3. The correlation between risk perception and organizational culture are not significant in our study. However it is impossible to conclude by generalizing this result for all alliances, it may happen due to cultural differences.

Finally we used ANOVA test to analysis variance between groups based on sector, form of alliance and size of company. Results of the study did not indicate any significant variance.

#### 4. Conclusion

The key argument put forward in this study is consisting of two principle questions: what is the effect of relational risk perception on supplier's expected performance? And how do strategic alliances manage relational risk in their vertically integrated buyer-supplier partnerships.

The results of this study show that there is a negative link between perception of relational risk and expected performance. Although the literature on strategic alliances had been focused strongly on negative effect of partners' opportunistic behaviors, our results do not support any significant correlation between opportunism and expected performance. Since risk perception is decision makers' subjective assessment of probability of different outcomes, personal characteristic, culture and task environment may affect decision making process and exhibit different risk behaviors in strategic alliances' risk management. A strict interpretation of results emphasizes the need of focusing on personal trait of decision makers based on their nationality, cultural differences and location in future studies.

Alliances use several instruments in order to control relation risk. Literature on risk management suggests variety of instruments range from rigid contractual arrangement to inter-firm trust. The result of our study confirms that higher perception of opportunistic behavior tends to more use of formal control mechanisms. In other words the more specific and complex the contract, the less probability there is for opportunistic behavior of alliance partners. Meanwhile higher conformity between supplier and buyer tends to decrease the use of formal control mechanisms such as contract. The correlation between risk perception and organizational culture are not significant in our study. Our conclusion show that trust between partners is effective in lessening concerns about opportunistic behavior and reducing formal contracting.

Even though many researchers have worked on relational risk perception in strategic alliances, very few studies in general and almost none in Turkey were tested empirically. So the main contribution of this paper is to present an empirical support to relational risk management in Turkish strategic alliances. Though there are similar works, but among few works that have been done empirically, almost none of them have been addressed enhanced supplier partnerships directly. In the present work the effect of relational risk perception on supplier partnerships have been studied exclusively.

Several limitations to the current research should be recognized. First, the theory presented here is limited to relational risk perception in strategic alliances. Further research is needed to extend it to other type of risk in alliances such as performance risk. A second limitation is that we have focused on supply chain performance in supplier-buyer relationship. We expect that the theory can be empirically examined on different industries, different type of strategic alliance and alliances with different governance structure. Finally as mentioned before nationality, cultural differences and location of partner firms are critical factors for presenting satisfactory performance and gaining common objectives in strategic alliances. So the theory developed in this study requires empirical testing in different multinational alliances.

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#### References

- Alliances & Channels (2014), Strategic alliance, business development, partnership and channel Linkedin group, https://Linkedin.com.
- Arino, A. & Reuter. J. J. (2006), Strategic Alliances: Governance and Contracts, London: Palgrave Macmillan.
- Borys, B. & Jemison, D. B. (1989), "Hybrid arrangements as strategic alliances: theoretical issues in organizational combinations", *Academy of Management Review*, 14, 234-249.
- Bradach, J. L. & Eccles, R. G. (1989), "Markets versus hierarchies: From ideal types to plural forms", *Annual Review of Sociology*, 15, 97–118.
- Clegg S., Carter, C., Kornberger M., Schweitzer J. (2011), Strategy Theory and Practice, SAGE Publication Ltd., 322-358.
- Das, T. K. & Teng, B. (1996), "Risk types and inter-firm alliances structures." Journal of Management Studies, 33(6), 827-843.
- Das, T. K. & Teng, B. (1988b), "Between Trust and Control: developing confidence in partner cooperation in alliances." *Academy of Management Review*, 23, 491-512.
- Das, T. K. & Teng, B. (1999), "Managing risks in strategic alliances." *Academy of Management Executive*, 13(4), 50-62.
- Das, T. K. & Teng, B. (2000a), "A resource-based theory of strategic alliances." Journal of Management, 26, 31-61.
- Das, T. K. & Teng, B. (2001), "Relational Risk and Its Personal Correlates in Strategic Alliances." Journal of Business and Psychology, 15(3), 449-465.
- Das, T. K. & Teng, B. (2001), "Trust, control, and risk in strategic alliances: An integrated Framework." Organization Studies, forthcoming.
- Deleure, H. (2005), "Relational risk perception and alliance management in French biotechnology SMEs." *European Business Review*, 17, Iss: 6, 532-546.
- Dussauge, P. & Garrette, B. (1995), "Determinants of Success in international Strategic Alliances: Evidence from the global Aerospace industry." *Journal of International Business studies*, 26, 505-530.
- Eisenhardt, K. M. (1985), "Control: Organizational and economic approaches." *Management Science*, 31, 134-149.
- Ellis, C. (1996), "Making Strategic Alliances Succeed." Harvard Business Review, 74(4): 8-9.
- Elmuti, D. & Kathawala, Y. (2001), "An overview of strategic alliances." Management Decision, 39/3, 205-217.
- Faulkner, D. (1995), International Strategic Alliances: Co-operating to Compete, McGraw-Hill Book Company.
- Gaudenzi, B. & Borghesi, A. (2006), "Managing risks in the supply chain using the AHP method." International Journal of Logistics Management, 17 Iss: 1 pp. 114 – 136.
- Gulati, R. (1995), "Does familiarity breed trust? The implication of repeated ties for contractual choice in alliances." Academy of Management Journal, 38, 85-112.
- Gunasekaran, A., Patel, C., McGaughey, E. (2004), "A framework for supply chain performance measurement." *International Journal of Production Economics*, 87, 337-347.

- Hennart, J. F. (1988), "A Transaction Cost Theory of Equity Joint Ventures." *Strategic Management Journal*, 9(4): 361-74.
- Hair, J. F., Anderson, R. E., Tatham, R. I., Black, W.C. (1995), Multivariate Data Analysis. Prentice-Hall, Englewood Cliffs, NJ.
- Jia, J., Dyer, J.S., John, C. B. (1999), "Measures of perceived risk." Management Science, 45(4), 519-532.
- Kale, P., Singh, H., Perlmutter, H. (2000), "Learning and Protection of Proprietary Assets in Strategic Alliances: Business Relational Capital", Strategic Management Journal, 21: 217-37.
- Kang, N. & Sakai, K. (2001), "International Strategic Alliances: Their Role in Industrial Globalization." OECD Science, Technology and Industry Working Papers, 2000/05, OECD Publishing.
- Kanter, R. M. (1994), "Collaborative advantage: The art of alliances", *Harvard Business Review*, 72/4, 96-108.
- Krishnan, R., Martin, X., Noorderhaven, N. (2006), "When does trust matter to alliance performance?" *Academy of Management Journal*, 49 (5), 894–917.
- Lane, H.W. & Beamish, P.W. (1990), "Cross-cultural cooperative behavior in joint ventures in LDCs." *Management International Review*, 30, 87±102 (Special issue).
- Maloni, M.J. & Benton, W.C. (1997), "Supply chain partnerships: Opportunities for operations research." *European Journal of Operational Research*, 101, 419–429.
- Mohr, J. & Spekman, R. (1994), "Characteristics of partnership success." *Strategic Management Journal*, 15 (2), 135–152.
- Nooteboom, B. (1996), "Trust, opportunism, and governance: a process and control model." *Organization studies*, 17(6), 985-1010.
- Noteboom, B., Berger, H., Noorderhaven, N. (1997), "Effects of Trust and Governance on Relational Risk." *Academy of Management Journal*, 40 (2), 308-338.
- Parkhe, A. (1991), "Inter-firm Diversity, Organizational Learning, and Longevity." *Journal of International Business Studies*, 22(4): 579-601.
- Parkhe, A. (1993), "Strategic alliance structuring: a game theory and transaction cost examination of inter-firm cooperation." *Academy of Management Journal*, 36, 794-829.
- Pisano, G. P. (1989), "Using equity participation to support exchange: Evidence from the biotechnology industry." *Journal of Law, Economics, and Organization*, 5, 109–126.
- Reuer, J. & Arino, A. (2002), "Contractual heterogeneity in strategic alliances." *IESE Business school*, University of Navarra, Research paper.
- Ring, P. S. & Van de Ven, A. (1992), "Structuring cooperative relationship between organizations." Strategic Management Journal, 13, 483-498.
- Saxton, T. (1997), "The effect of partner and relationship characteristics on alliance outcomes", Academy of Management Journal, 40(2), 443-461.
- Slack, N. (1991), The Manufacturing Advantage. Mercury Books, London.
- Sydow, J. (1998), Understanding the constitution of inter-organizational trust in trust within and between organizations: Conceptual issues and empirical applications. Christel Lane and Reinhard Bachmann (eds.), 31-63. Oxford: Oxford University Press.

- Todeva, E. & Knoke, D. (2005), "Strategic alliances and models of collaboration." *Management Decision*, 43 (1), 123-148.
- Williamson, O. E. (1975), Markets and Hierarchies: Analysis and Antitrust Implications. Free Press, New York.
- Yoshino, M. Y. &Rangan, U. S. (1995), Strategic alliances: An entrepreneurial approach to globalization, Boston, MA: Harvard Business School Press.
- Zaheer, A., McEvily, B., Perrone, V. (1998), "Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance." *Organization Science*, 9, 1–20.