The role of trust in sustainable business relationships – an empirical research using dyadic data analyses

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Abstract

The paper tests the *hypothesis*: In a business relationship characterized by mutually high level of trustworthiness perceived by the counterparts the willingness to be involved in risky situation is higher than in relationships, where actors do not mutually think their partners are highly trustworthy. In these situations the level of trustworthiness is used as a governance mechanism in the relationship.
Trust and *trustworthiness* both are *dyadic phenomena*. Consequently the general practice to rely on *single-end research* can only result in limited validity basically because it ignores differences of perceptions that exist between partners in different relationships. Answers given to questions about relational attributes tend to generalize perceptions. Furthermore, a single-end data gathering does not make it possible to analyze the effect of mutuality. These limitations can be exceeded with using *pair wise sampling* and dyadic data analysis. This methodology has been developed in social psychology and applied in researches on personal relationships focusing interdependence and *mutuality*.
Pair wise sampling has already been used in business research too but according to our best knowledge dyadic data analysis still lacks management research application. Our paper aims at filling this *research gap*. The paper is built on the *risk based interpretation of trust* that is directly linked to the literature of governance mechanism in business relationships. So we distinguish between trustworthiness that can be measured and trust as a governance mechanism.
Our *empirical research* analyzes situations characterized with different level of risk. 50 concrete B2B dyads have filled out our questionnaire. These data were then analyzed using dyadic data techniques. *Results* show that cooperating parties are willing to engage in business situations with high level of perceived risk but only when the perceived level of trustworthiness is mutually very high.

Key words: trust, level of trustworthiness, mutuality, business relations, empirical research, dyadic data analysis

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INTRODUCTION

Our initial *research question* was, whether trust does influence the willingness of a partner active in a given business relationship to act in risky situations and so dissolve the stress between the counterparts restraining further development. Based on our literature review related to the concept of trust this initial research question was refined and developed into a specific ***research hypothesis***: In a business relationship characterized by mutually high level of trustworthiness perceived by the counterparts the willingness to be involved in risky situation is higher than in relationships, where actors do not mutually think their partners are highly trustworthy. In these situations the level of trustworthiness is used as a governance mechanism in the relationship.

Both trust and trustworthiness are dyadic phenomena. This means they are interpreted and should be measured in concrete relationships. Therefore the practice to rely on single-end research (Brennan et al., 2003) can only result in limited validity. The reason for this lies in the fact, that this traditional approach ignores differences of perceptions that exist between partners in different relationships. In a research applying single-end data gathering, where the partner is not personalized results tends to generalize and the analysis is not capable to capture such important issues as mutuality. These limitations can be exceeded with using pairwise data gathering and dyadic data analysis (Ickes – Duck ed., 2000). The methodology has been developed in social psychology and has already been applied in such researches (Gonzalez – Griffin, 2000; Burk et al., 2007). Pairwise sampling has already been used in business research (Liu et al., 2009; Li et al., 2011) but according to our best knowledge the methodology of dyadic data analysis still lacks research application in the field of business and management. This paper aims at filling this research gap; it presents an empirical research on trust in business relationships applying pair wise sampling and using dyadic data analysis.

THEORETIVAL FOUNDATION

GOVERNANCE IN BUSINESS RELATIONSHIPS

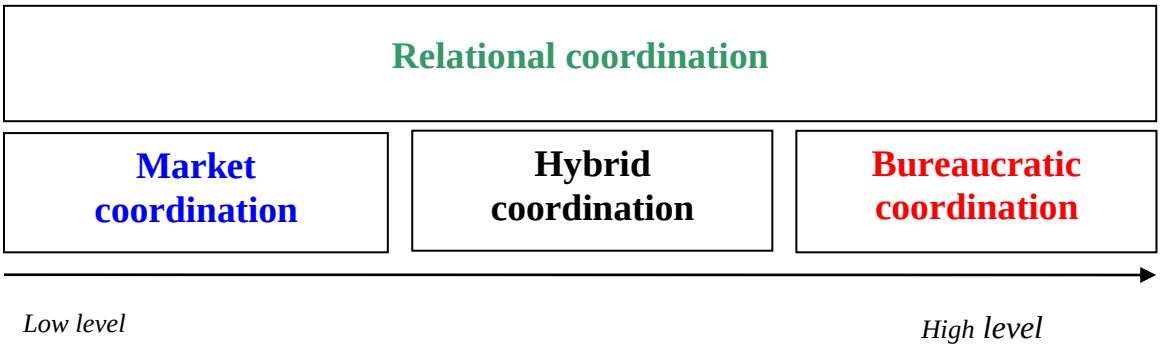
The issue of governance in B2B relationships is deeply linked to the theory of transaction cost economics (TCE) (Coase, 1937; Williamson, 1975). TCE focuses on two basic coordination and their aligned governance mechanisms, the market and the hierarchical (or bureaucratic) coordination, but their representatives and followers also acknowledge the existence of additional mechanisms. Ouchi (1980) for example introduced the term of clan coordination, where common values and beliefs play a crucial role in harmonizing actions between cooperating parties. Kornai (1992) introduced the ethical and the aggressive mechanism of coordination. In cases of both Ouchi and Kornai relational characteristics play the key role in coordinating exchange processes. Medlin et al. (2005) have called the type of coordination where relational attributes and norms are the ones that govern the relationship as relational coordination mechanism. This interpretation incorporates a clear distinction between the concept of coordination and the mode of governance. Coordination mechanism is the broader concept specifying the general rules of regulating and intermediating micro level processes taking place between two actors (Kornai, 1986; Rosenbaum, 2000). These rules include the mode of governance applied by different coordination mechanisms. Governance mechanisms are generally defined as safeguards against opportunism that firms employ in order to govern

their relationships, the conduct of their partners in risky situations, when they face the possibility of opportunistic behavior (Jap – Ganesan, 2000; Olsen et al., 2005; Wang et al., 2008). Theory does distinguish three basic coordination and their aligned governance mechanisms as follows:

1. ***Market coordination*** and its governance mechanism, the **contract**.
2. ***Bureaucratic coordination*** and its governance mechanism, **ownership** and property rights.
3. ***Relational coordination***, where **relational characteristics, such as trust** (Zaheer – Venkatraman 1995; Yu et al., 2006) play the role of governance.

According to TCE three characteristics of the exchange have important influence on the type of coordination and governance that is suggested to be applied. These characteristics are the frequency, the uncertainty and the asset-specificity of the exchange. Traditionally, TCE suggests that based on these characteristics the ideal coordination and its aligned governance mechanism can be specified. Let us imagine a continuum, on one end with transactions characterized with very low level of uncertainty, asset-specificity, and frequency. The other end of this continuum represents transactions with extremely high frequency, uncertainty, and asset specificity. In the neighborhood of the former point the ideal coordination mechanism is the market mechanism, while around the latter end of this continuum bureaucratic mechanism is suggested. According to Ouchi (1980) clan coordination (as a specific representation of relational coordination) is suggested to use in the middle of this continuum. This kind of interpretation supposes that different coordination - and governance - mechanisms are exclusive to each other.

Figure1 – Supplementary character of different coordination mechanisms (based on Simon, 1945; Bradrach – Eccles, 1989; Poppo - Zenger, 2002; Olsen et al., 2005)



Other researchers (Bradrach - Eccles, 1989; Olsen et al., 2005), suggest that in most of real life situations a mix of different mechanisms are applied parallel, these mechanisms are supplementary in nature. An example for this latter interpretation –different coordination and governance mechanisms are supplementary– affects the two traditional mechanisms: In those cases, when the above mentioned distinctive features tend to be moderately strong, hybrid solutions have been developed, such as complex contracts with partial ownership agreements (Dyer et al., 1998). These hybrid solutions combine the two formal coordination mechanisms (Yu et al., 2006), market with bureaucratic coordination

This supplementary character is true for the relational coordination mechanism too. Neither a good contract nor full ownership (so called formal coordination and their aligned governance mechanisms) can guarantee that all potential future potentially risky transactions are completely governed. In these situations relational norms may play a decisive role (Simon, 1945; Bradrach – Eccles, 1989; Poppo – Zenger, 2002; Olsen et al., 2005). We accepted in our research the complementary nature of different coordination mechanisms. Our hypothesis actually aims at analyzing the role of a special relational attribute, trust as a governance mechanism in formally non-regulated, non-controlled business situations.

TRUST OR TRUSTWORTHINESS AS A GOVERNANCE MECHANISM

While interpreting and analyzing the role of relational coordination and their governance mechanism TCO uses the term trust. Trust has always been an important feature and intensely researched aspect of behavior between persons and also organizations. Research on trust has a long standing tradition in social psychology (Larzelere - Huston, 1980). Based on their results several other areas –including b2b marketing– have put effort into understanding ***trust between cooperating business organizations*** (Mayer et al., 1995; Doney - Cannon, 1997). It is clear that organizations do not behave the same way persons do; so conceptualizing and measuring interorganizational trust is a real challenge (Anderson – Narus, 1990; Zaheer et al., 1998). Despite the theoretical differences between personal and organizational trust, it is widely accepted that organizations can be interpreted as sets of actors. Organizational trust is so based on personal trust, consequently empirical analysis often captures interorganizational trust along the perceived level of personal trust between boarder line professionals (Deutsch, 1973; Zucker, 1986; Bachman, 2001).

Trust related business research is very rich. According to the traditional interpretation *trust* is the credibility and benevolence of the trustee perceived by the trustor (Ganesan, 1994). Kumar (1996) similarly defines trust as the confidence of the trustor that the counterpart in a business relationship will not exploit one's vulnerabilities even in situations where such opportunistic behavior would be possible. This interpretation is the basis of a rich body of literature focusing on different types of trust, where typology is based on the source of this confidence (Korczynski, 2000).

But there is a different approach to trust in the literature as well. This interpretation makes a clear distinction between trust and trustworthiness (Mayer et al.; 1995). The latter is a characteristic of the trustee, while trust itself is interpreted as the trustor's willingness to engage in risky behaviors or actions with a given counterpart in the relationship. Trustworthiness is a perception, a perception of the trustor about the trustee's features, such as ability, integrity or benevolence. Trust itself refers to the trustor and not the trustee. It indicates the trustor's intentions with respect to risky transactions with a give partner.

In both interpretations risk has a key role, because both trustworthiness and trust are important only in situations involving actions in which vulnerability and risk is present. It is an axiom in trust related research that trust can empirically researched only risky situations (Luhmann, 1979). Still the distinction outlined above is crucial. Based on this distinction the terminology used by TCE and related B2B marketing literature related to governance mechanisms has to be refined. It is especially true for relational coordination and its governance mechanism. ***Not trust but trustworthiness is or can be the safeguard applied against potential opportunism in risky situations and may play the role of governance, influence the actual behavior of the parties.*** The level of trustworthiness can be measured, although subjectively. A certain level of trustworthiness is necessary to be accumulated in the relationship in order to be able to act as a safeguard, a governance mechanism.

Whether a given level of trustworthiness is or is not enough to function as a governance mechanism is an important question in business relationships. It is not independent from other characteristics of the relationship and the situation it is actually in. From these characteristics the level of risk has critical importance. Whether in a given situation the perceived level of trustworthiness can fulfill its role as a safeguard and governance mechanism or not, directly depends on the level of perceived risk associated with the actual situations of the cooperating partner (Gefen et al., 2003).

Based on the above given theoretical description we accept the thesis of TCE that relational coordination is important between cooperating business partners. But correct its interpretation of trust. According to our hypothesis: In a business relationship characterized by mutually high level of trustworthiness perceived by the counterparts the willingness to be involved in risky situation is higher than in relationships, where actors do not mutually think their partners are highly trustworthy. In these situations the level of trustworthiness is used as a governance mechanism in the relationship. In such cases trust interpreted as willingness to act in risky situations appears, it can be detected in the relationship.

EMPIRICAL RESEARCH – APPLIED METHODOLOGY

As already mentioned both trust and trustworthiness are dyadic phenomena that can not effectively be analyzed using single end research (Brennan et al., 2003). In order to overcome limitations of state of the art empirical research we have applied pair wise sampling and dyadic data analysis (Ickes - Duck, ed., 2000). According to our best knowledge this methodology was not yet applied in any empirical business research. This paper does not want to give an in-depth presentation of dyadic analysis; we only aim at highlighting the basic differences compared to the traditional sampling and mathematical-statistics concepts and discuss the tools directly relevant for our research. Therefore, after a short introduction to the methodology we describe the empirical research carried out. Detailed description of the statistical background of dyadic analysis is given in the works of Gonzalez and Griffin (2000) and Kenny et al. (2006).

In case of dyadic data analysis the unit of analysis is a dyad, two interacting partners. Since interaction in relationships leads to dependence, dyadic data analysis is also called as the statistics of interdependence. Classic statistical analysis is not appropriate to asses and measure these interdependencies. Several management phenomena arise in dyadic setting. All these necessitate gathering information in dyads, where dyad members may be dependent on that phenomenon. In order to assess the level of dependencies pairwise sampling is necessary, where dependent informants are called pairs. Variable indicates the phenomenon under investigation. In dyadic data analysis two coherent scores –a vector– will specify one observation related to this phenomenon; and analytical tools try to capture statistical relationships between these vectors.

Researcher using pairwise sampling and dyadic data analysis must avoid the so called level of analysis error, which is due to the fact that correlations using dyadic data always contain a mix of dyad and individual level information. Separating these two levels "requires an approach that explicitly identifies and models the degree of interdependence within and between variables at each level of analysis" (Gonzales – Griffin, 2000: 183). The technique of *pairwise method* is suggested because it helps researchers to think in a structured way about processes and effects in dyads and makes it possible to ask questions at both the dyad and the individual levels. The method starts at the coding process and applies the *double entry coding*.

Let us suppose that we have information along several variables on ***N*** dyads in the sample. Scores given to specific variables in the dyads have to be doubled and coded in a pairwise reversal fashion that yields a total of ***2N*** scores. The pairwise reversed column of scores on ***X*** variable is referred to as ***X'***.

Table 1 – Symbolic representation for the pairwise data setup in an exchangeable case (based Gonzales – Griffin; 2000)

Observations	***Variables***	
	X	***X'***
1. dyad (initial order)	x_{11}	x_{12}
1. dyad (reversed order)	x_{12}	x_{11}
2. dyad (initial order)	x_{21}	x_{22}
2. dyad (reversed order)	x_{22}	x_{21}
3. dyad (initial order)	x_{31}	x_{32}
3. dyad (reversed order)	x_{32}	x_{31}
4. dyad (initial order)	x_{41}	x_{42}
4. dyad (reversed order)	x_{42}	x_{41}

Dyadic data analysis can be applied for exchangeable and also distinguishable cases as well. In case of an exchangeable case, dyad members can not be distinguished according to a non-arbitrary variable. In the latter case dyad members can be distinguished according to a theoretically meaningful variable (e.g. gender, or the order of the coding) that is indicated with ***C***. The so called dyadic homogeneity analysis is necessary to decide, whether a case is exchangeable or distinguishable. We have carried out this analysis and resulted that our cases are exchangeable. In order to test our hypothesis we had to apply dyadic regression analysis developed for exchangeable cases. These models are the ***ICC*** (Intraclass Correlation Coefficient) and the APIM (Actor-Partner Interdependence Model) model (Gonzalez, 2010). These models analyze how one or more independent variables determine the value of a dependent variable. In our analysis the dependent variable was the willingness to act in risky situation, in concrete, the willingness to share with a partner (and his or her organization) risky information. Independent variables were related to the perceived level of trustworthiness in the dyad.

As already mentioned, dyadic data analysis has developed two regression models; the ***ICC*** and the APIM model. Due to the pairwise sampling these models are special because they can incorporate several effects into the regression function, the actor and the partner effect. APIM is even more complex because it also incorporates the mutual effect, the effect of mutuality in the dyads between concrete cooperating partners. Because our hypothesis does stresses this mutuality, our expectations were that using APIM model will lead to backing results. The mathematical formula of APIM model is the following:

$$Y = \beta_0 + \beta_1 \cdot X + \beta_2 \cdot X' + \beta_3 \cdot X \cdot X' ,$$

where Y is the dependent variable, the values of β_0, β_1 and β_2 are regression values. X and X' are independent variables, the two perceived levels of trustworthiness in a given dyad. The product $X \cdot X'$ is a new independent variable indicating the mutual effect of these levels on the dependent variable (Kenny et al., 2006).

In order to develop our sample we have developed a special questionnaire (see Appendix 1), where we asked our respondents to evaluate the perceived level of trustworthiness of his or her concrete partner in the dyad and also the perceived level of trustworthiness of the partner's company as an organization. We also asked them to indicate, whether they are willing to share with these persons (and also separately with other employees of the partner's company) different type of information. Actually we asked them to indicate their willingness to share the following type of information:

- Operational information related to transactions with your partner (e.g. order volumes, due dates, inventory levels);
- Operational information related to other, third party companies;
- Financial information concerning your company (e.g. cost level, profit margin);
- Information related to future innovations and strategic actions.

We have organized a workshop with both purchasing and logistics professionals and asked them to fill out our questionnaire. We have applied the technique of pairwise sampling. We could gather 42 pairs of questionnaires. Because of the technique of double entry, our effective sample size was 84.
We have not discussed any concept related to the research in advance, started with the sampling. After this we let our respondents to evaluate the four situations involved in the project. They clearly indicated that sharing financial information is associated with high level of risk, but did not evaluate any other situation as risky.

In our empirical analysis 20 different regression functions have been developed. These functions were different along the three following dimensions:

1. Whether the ICC or the APIM model has been applied;
2. Who was the partner, the effect of who was incorporated into the regression function: The actual pair as a person during the pairwise sampling or the company (another representative of this company) of this actual partner;
3. Four information sharing situations characterized with different level of risk were analyzed. Here we tested the willingness to act; that is to share these different types of information with partners.

RESEARCH RESULTS AND CONSEQUENCES

Remember, our hypothesis was the following: In a business relationship characterized by mutually high level of trustworthiness perceived by the counterparts the willingness to be involved in risky situation is higher than in relationships, where actors do not mutually think their partners are highly trustworthy. In these situations the level of trustworthiness is used as a governance mechanism in the relationship. In these cases risky behavior is also undertaken in the relationship and so trust interpreted as willingness to act in risky situations can be detected, does appear in the cooperation.

According to our expectations applying ICC model –that does not includes the effect of mutuality– did not lead to backing results. Sharing the four types of information were associated with different levels of risk. As mentioned, respondents have clearly indicated that

a real level of risk is associated with sharing financial information. Therefore we have also expected that the mutually high perceived level of trustworthiness will play the role of governance only in the situation of sharing financial information. We also expected that in case information sharing was carried out with a concrete person –the actual partner during the pairwise sampling– APIM model will lead to backing analytical results. But we did not expect this in case the willingness of information sharing with another employee of the firm was analyzed with the regression function. These expectations were basically backed.

Table 2– Analytical results of the different regression functions

No of the regres-sion models	**Dependent variable**	**Independent variables incorporated into the functions**	**Value of R^2**	**Significance of the regression model**
Perceived level of trustworthiness of the partner as a person – APIM Model – information sharing with the partner as a person				
1.	InfoOperational1	Trustworthiness1 Trustworthiness2 TrustworthinessMutual	0,019	Not significant
2.	InfoOtherfirm1	Trustworthiness1 Trustworthiness2 TrustworthinessMutual	0,226	Not significant
3.	**InfoFinancial1**	**Trustworthiness1 Trustworthiness2 TrustworthinessMutual**	**0,21**	**Significant**
4.	InfoStrat1	Trustworthiness1 Trustworthiness2 TrustworthinessMutual	0,064	Significant (p=0,07)
Perceived level of trustworthiness of the partner as a person – ICC Model - information sharing with the partner as a person				
5.	InfoOperational1	Trustworthiness1 Trustworthiness2	0,010	Not significant
6.	InfoOtherfirm1	Trustworthiness1 Trustworthiness2	0,201	Not significant
7.	InfoFinancial1	Trustworthiness1 Trustworthiness2	0,019	Not significant
8.	InfoStrat1	Trustworthiness1 Trustworthiness2	0,004	Not significant
Perceived level of trustworthiness of the partner's company – APIM Model - – information sharing with the partner as a person				
9.	InfoOperational1	TrustworthinessFirm1 TrustworthinessFirm2 TrustworthinessFirmMutual	0,019	Not significant
10.	InfoOtherfirm1	TrustworthinessFirm1 TrustworthinessFirm2 TrustworthinessFirmMutual	0,217	Not significant
11.	**InfoFinancial1**	**TrustworthinessFirm1 TrustworthinessFirm2 TrustworthinessFirmMutual**	**0,207**	**Significant**
12.	InfoStrat1	TrustworthinessFirm1 TrustworthinessFirm2 TrustworthinessFirmMutual	0,003	Not significant
Perceived level of trustworthiness of the partner's company – ICC Model – information sharing with the partner as a person				
13.	InfoOperational1	TrustworthinessFirm1 TrustworthinessFirm2	0,019	Not significant

14.	InfoOtherfirm1	TrustworthinessFirm1 TrustworthinessFirm2	0,213	Not significant
15.	InfoFinancial1	TrustworthinessFirm1 TrustworthinessFirm2	0,048	Not significant
16.	InfoStrat1	TrustworthinessFirm1 TrustworthinessFirm2	0,000	Not significant
Perceived level of trustworthiness of the partner as a person – APIM Model – information sharing with the partner's company				
17.	InfoFinancialFirm1	Trustwothiness1 Trustwothiness2 TrustwothinessMutual	0,070	Nem szignifikáns
Perceived level of trustworthiness of the partner's company – APIM Model – information sharing with the partner's company				
18.	InfoFinancialFirm1	TrustwothinessFirm1 TrustwothinessFirm2 TrustwothinessFirmMutual	0,025	Not significant
Perceived level of trustworthiness of both the partner as a person and the partner's company – APIM Model – information sharing with the partner as a person				
19.	**InfoFinancial1**	**Trustwothiness1** **Trustwothiness2** **TrustwothinessMutual** **TrustwothinessFirm1** **TrustwothinessFirm2** **TrustwothinessFirmMutual**	**0,28**	**Significant**
Perceived level of trustworthiness of both the partner as a person and the partner's company – APIM Model – information sharing with the partner's company				
20.	InfoFinancialFirm1	Trustwothiness1 Trustwothiness2 TrustwothinessMutual TrustwothinessFirm1 TrustwothinessFirm2 TrustwothinessFirmMutual	0,084	Not significant

As Table 2 indicates our results do not verify our hypothesis, but we got backing results. In three cases the models were significant, whiles the values of R^2 were also backing. Model 3, 11 and 19 were these models. It is notable that all these models were using the APIM model. This implies that the level of trustworthiness does influence the willingness to act in a risky situation –the appearance of trust in a given relationship– only in case it is mutually high. High level of perceived trustworthiness in a relationship does not necessarily leads to trust in case it is only one-sided. Besides its theoretical importance, this result underlines the significance of the applied methodology. Single end research is not appropriate to capture relevant aspects of dyadic phenomena, while dyadic data analysis seems to be useful in such analyses.

Results met our expectations in the sense only in case of really risky situations do the levels of perceived trustworthiness seem to have an influence on the behavior of partners. According to our respondents the only really risky situation analyzed was sharing financial information. Mutually high levels of perceived trustworthiness in a relationship seem to leverage the willingness to bear risk in this risky situation, because both partners in the relationship think that the partners will not exploit the actors' potential vulnerability stemming from the associated risk. The levels of perceived trustworthiness in these cases seem to act as safeguards against potential opportunisms, level of trustworthiness functions as the effective governance mechanism in the relationship.

Regression model 3 was expected to lead to positive result. It applied the APIM concept, was applied to the situation of sharing financial information and incorporated the perceived levels of trustworthiness of the partners as persons. Persons have formed specific dyads filling out our questionnaire in pairs, these persons were present, were personalized, the levels of their perceived trustworthiness could therefore have been directly evaluated by their partners.
Model 11 incorporated the perceived levels of the partners' firm into the regression equation but indicated the willingness of sharing information with the concrete partner as a person in the dyad. This model was also expected to be significant and backing because it indicated the willingness to act in risky situation with concrete, personalized partner and not with firms, not objectified in the concrete situation.
Model 18 has varied from model 11 only in this latter aspect, it tested the situation, where the actor in a given dyad indicated his or her willingness to share sensitive financial information with another, hypothetical, not personalized employee of the concrete partners' firm. This indicates that personal relations frame business relations, but relational characteristics developed between these persons can not be projected to other persons, even these persons are closely related to the previous ones, working for example for the same firm. Our result also indicate that even in cases of both mutually high levels of personal and institutional trustworthiness trust will only be present in personalized relations.

The research we have presented in this paper aimed at testing a concrete hypothesis but also to present an application of a relatively new methodology, the dyadic data analysis that – according to our best knowledge– has not been applied in any business research. Although results did not proved our concrete hypothesis, we think they have proved the broadly know opinion, traditional single- end survey research is not appropriate to capture the complexity of research problems associated with relational issues. Dyadic data analysis developed by social psychologies seems to be able to overcome some limitations of the traditionally applied methodology therefor it deserves more attention in business research.

Although our research has several limitations, we think it does have relevance and not only in respect to theory development and methodology. As discussed above mutually high levels of trustworthiness seem to be able to govern behavior in business situations characterized with high level of risk. This has significant managerial consequences. Sharing sensitive information plays crucial role in deeper cooperation of several forms, from collaborative planning and forecasting to joint innovation projects. So we think our results point out that building relationship with mutually high level of trustworthiness is in the core of competitiveness of relationships and also their building blocks, specific companies.

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Appendix 1: Questionnaire filled out using the technique of pairwise sampling

The research program focuses on the role of trustworthiness in business relationship using a special method, pairwise sampling and dyadic data analysis. Respondents are anonymous during both the sampling and the analytical processes.
All the questions in the questionnaire should be evaluated and filled out ***related to your actual pair and his or her company.***

1. Please indicate using an *x* the level of perceived ***trustworthiness toward your concrete pair as a person*** on a scale between -3-and + 3. (Where -3 indicates a very low level of perceived trustworthiness and +3 indicates a very strong level of perceived trustworthiness)!

	-3	**-2**	**-1**	**0**	**+1**	**+2**	**+3**
Level of perceived trustworthiness toward your concrete pair as a person.							

2. Please indicate using an *x* the level of perceived ***trustworthiness toward your concrete pair's company*** on a scale between -3-and + 3. (Where -3 indicates a very low level of perceived trustworthiness and +3 indicates a very strong level of perceived trustworthiness)!

	-3	**-2**	**-1**	**0**	**+1**	**+2**	**+3**
Level of perceived trustworthiness toward your concrete pair's company.							

3. Please indicate ***whether you would share with your partner as a person the following types if information***! Y indicates, yes, *I* would share them, while *N* indicates that you would not share them with your partner as a person!

Types of information	Please indicate whether you would share this information with ***your partner as a person***! *Y* indicates yes, whereas *N* no.
Operational information related to transactions with your partner (e.g. order volumes, due dates, inventory levels).	
Operational information related to other, third party companies.	
Financial information concerning your company (e.g. cost level, profit margin).	
Information related to future innovations and strategic actions.	

4. Please indicate ***whether you would share with another representative of yours partner's company (not present at the moment) the following types if information***! Y indicates, yes, *I* would share them, while *N* indicates that you would not share them with your partner as a person!

Types of information	Please indicate whether you would share this information ***with another representative of your partner's organization*** (not present at the moment)! *Y* indicates yes, whereas *N* no.
Operational information related to transactions with your partner (e.g. order volumes, due dates, inventory levels).	
Operational information related to other, third party companies.	
Financial information concerning your company (e.g. cost level, profit margin).	
Information related to future innovations and strategic actions.	

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