Noémi Piricz

The Determinants of Trust in Business Relationships

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Head of the Doctoral School:
DR. SZITA DR. TÓTHNÉ, Klára (Mrs.), C.Sc.
Professor

Supervisor: Dr. NAGY, Szabolcs PhD.
Associate professor

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Introduction and the structure of the thesis

(Trust) “The One Thing That Changes Everything”
(Stephen M.R. Covey: The SPEED of TRUST, 2006:9)

The most appropriate relationship is the one that best fits the specific set of circumstances (Cooper, Gardner 1993). “All firms are simultaneously involved in the on-going management of the network, and the resulting structure and performance is co-produced by their actions” (Ritter, Wilkinson and Johnston 2004:177).

Among different management methods trust received much attention for several reasons. Trust is one base of all kinds of cooperation and network building. Originally social psychology and sociology focused on trust but this term appeared also in marketing literature from the 1980’s. Trust is especially crucial factor in the shift from discrete market transactions to continuous exchange relationships (Dwyer, Schurr and Oh 1987). According to a study the failure rate of relationships is estimated to be over 50% (Spekman, Isabella and MacAvoy 2000). Certainly behind this failure numerous reasons can be hidden but another research is more concrete when it reports that one-third of strategic alliances failed due to lack of trust among trading partners (Sherman 1992). Another study of companies in the United Kingdom found that 55 per cent of all strategic partnerships fail within three years (Moberg et al. 2003). Vlachos and Bourlakis (2006) also showed that trust between the suppliers and retailers in the food industry in the United Kingdom contributed to the short term and long term relationships maintaining the distribution network.

Hungary has an inheritance of socialist system till 1989. Due to these different political and economic pre-conditions business relationships and networking show some special features but global tendencies have appeared as well. The tendency of growing number of newly established privately owned entrepreneurship has already started in the 1980’s as a result of different – only – economic reforms. The party governance tolerated these firms however the legal framework was created a bit later in 1988 when already about 30000 private enterprises had been operating which were in many cases special “overtime brigades” working at weekends with the machines of state-owned factories earning as much as their monthly salaries. (Magyar Statisztikai Évkönyv 1995:94) According to a Hungarian proverb much water has been flowed down in River Danube since that period but the new roots of Hungarian companies originate from these conditions.

In my dissertation therefore I focus on the determinants of trust among organizations (especially business enterprises). That’s why I deal with the following questions:
- What factors does trust determine in business relationships?
- Do the investigated factors affect trust? If so, what impacts are these?
- Is there cultural difference in trust?
In order to answer these questions I asked organizations registered in Hungary independently from sizes and sectors of economy using quantitative research methods.

My starting point is business marketing. I introduce the importance of relationships approaching from the personal side. In the literature review I summarize the definitions, models, theories and characteristics of trust in business life.

After the theoretical part I test the hypothesized elements of trust by quantitative methodologies. Using these results I modify my model accordingly.
1 Short literature review of trust

1.1 Trust in business relationships
Basically trust can be equal with belief, expectation, will, familiarity, a certain aspect or even a process, such as belief – attitude – will – behaviour. More researchers use inverse approach by introducing the different losses that lack of trust may result in business life. Trust also has been investigated as a successful coordinating method in certain business network. The dimensions, degrees, forms, development and measurement of trust are researched not only by theoretical researchers but also by the economic actors who should cooperate in networks so smoothly as one entity.

Moorman, Zaltman and Deshpandé define trust as "(... a willingness to rely on an exchange partner in whom one has confidence" (1992:315). But trust involves not only the belief in the benevolence in the partner’s actions but also the vulnerability against the partner (Morgan and Hunt 1994:23). It means that trust, whether in someone or something, can be defined as an attitude, characterised by the belief in the counterparty’s reliability, for example supplier or client. From a bit different aspect trust has been viewed as the perceived credibility and benevolence of a target of trust (Ganesan 1994; Kumar, Scheer and Steenkamp 1995). So "trust exists when a firm believes its partner is being honest and benevolent" (Kumar et al. 1995). Moody defines trust as "the fuzziest driver to partnering" (Moody, 1993:18) while trust can serve as a lubricant (Arrow 1974) or as glue (Jarillo 1988) in relationships.

So I approach trust as calculable, risk-decreasing, relationship-based, and embedded in a permanent changing environment soft resource. This includes the reliable behaviour of business partner and commitment as well. (Dyer - Chu, 2003, 2000; Klein, 1980; Williamson, 1983)

1.2 The theories of transaction costs and social exchange
Theory of transaction costs. According to Coase (1994), the costs of coordination within a firm and the level of transaction costs that it faces are affected by its ability to purchase inputs from other firms, and their ability to supply these inputs depends in part on their costs of coordination and the level of transaction costs that they face. In my model transaction cost serves as one group of variables of trust, which includes asset specificity, behavioural uncertainty and information sharing.

Williamson (1985) defines asset specificity as "durable investments that are undertaken in support of particular transactions, the opportunity cost of which investments is much lower
in best alternative uses or by alternative users should the original transaction be prematurely terminated” (p. 55). Investments in partners’ specific assets are not easy to convert. This incurs potential costs and results problems that had to be prevented. Therefore companies’ investment in partners’ specific assets may cause distrust in partnerships because companies tend to minimize cost of transaction. Specific asset investment (or asset specificity) refers to investments in physical or human assets that are dedicated to a particular business partner and whose redeployment entails considerable switching costs (Erramilli and Rao 1993; Heide 1994).

In conversion of specific assets is desirably done, however, partnerships become satisfactory to build trust. The fact that transaction-specific investments cannot be easily redeployed gives rise to a safeguarding problem, which can result in potential costs. This viewpoint (the firm’s aroused distrust or scepticism) may logically lower the level of trust (Suh and Kwon 2006). Weiss and Anderson (1991) also argued that a partner’s asset specificity reduces dissatisfaction with the partnership.

Companies form governance that minimizes transaction cost. It means, opportunism can be avoided to minimize transaction cost and various systems and agreements are made to achieve the most economically efficient cost structure (Williamson, 1999). Efficient governance refers to the governance that minimizes transaction cost. Therefore, companies form collaboration and partnerships to keep transaction costs as low as possible compared to market prices (Hong, Kwon 2007).

Trust is related to each of the behavioural assumptions of Theory of transaction costs. The relationship between trust and opportunism has been widely established (Bradach and Eccles, 1989; Granovetter, 1985; Larson, 1992). Operationalized as replaceability in this dissertation, opportunism – by which a context for TCA is characterized – is defined as self-interest seeking with deviousness. Behavioural or internal uncertainty is defined as “the inability to predict partner behaviour or changes in the external environment” (Joshi and Stump, 1999:293). The behavioural assumption of opportunism assumes that some probability exists that any given actor will behave opportunistically some of the time. Suh and Kwon (2006) state, that the higher the level of replaceability of a firm, the positive impact of their partner’s specific asset investments on trust in the partner will be significantly attenuated. They add that stability in partnership may reflect some level of trust and lead to a better chance of building trust. Kwon and Suh (2004) come to the conclusion that the impact of behavioural uncertainty on trust and other subsequent business decisions is becoming more important due to the increasing uncertainty in the ever-changing business environment. Thus, the lack of fear of the opportunistic behaviour by the other party creates a favourable environment for establishing trust.

Information sharing is the most fundamental and critical factors for successful supply network management (Bowersox 2000; Handfield et al. 2000). Uncertainty surrounding
the supply chain process has been blamed for many supply chain glitches, ranging from unusually high levels of inventory throughout the supply chain to a shortage of some products in other areas (Kwon and Suh 2004). Many solutions have been suggested to reduce the degree of uncertainty, including formation of strategic alliances among partners and collaborative planning, forecasting and replenishment (CPFR) to control and manage the flow of information, thereby reducing the variability of information (reducing information distortion). The study of Kwon and Suh (2004) seems to confirm such a relationship.

Kumar and Dissen (1996) present integrated management of information system as a critical factor that promotes sustainable collaboration and manages conflicts within supply network. If partners share vital information, transaction becomes easier, efficient and effective. Trust is often considered in literature as an essential consequence of communication within the inter-organizational relationship (Goodman and Dion; 2001, Homburg et al., 2000). Langfield-Smith and Smith (2003) consider a lack of communication as a major obstacle to the development of trust between buyers and suppliers. The sharing of information encourages trust in the continuity of the relationship and reduces dysfunctional conflict. Uninterrupted communication flow and effective information exchange are also a prerequisite for commitment (Anderson and Weitz, 1992; Goodman and Dion, 2001).

The tenet of the Social exchange theory is that the interactions related to the social exchange have social and / or economic outcomes. The comparison of each party to the exchange allows trading partners to assess the relative merits of possible alternatives to the relationship and thus to measure its dependence regarding the relationship. Social capital is the human elements in supply chain, such as learning, trust, and innovation; and is created and enhanced during interpersonal interactions (McGrath and Sparks 2005).

Social exchange theory argues that trusting behaviour between partners leads to mutual trust (Blau 1964). Similarly to Simmel Ganesan assumes that there is symmetry in the trust relationships. Trust is perceived, then, as a dyadic phenomenon that is characterised by reciprocity, even if this symmetry is not always confirmed (Ganesan 1994). In Huemer’s view the parties’ mutual trusting raised business partners from earlier routines and procedures to something much less predictable. “The essence of trusting is suggested to the capability of gaining acceptance for actions that deviate from customs and conformities, thereby reducing predictability.” (Huemer, 2001:24) Therefore I also integrate social exchange theory in my model, so perceived satisfaction, perceived conflict and the partner’s reputation will belong to this second group of variables of trust.

Perceived satisfaction may be defined as a positive and affective state resulting from the appreciation of all aspects of the relationship compared with other alternative relations. It is directly linked to the perception of trust in the partner and partly
related to the conduct of business (Ganesan, 1994; Haliday, 2003; Vaquez-Casielles et al., 2005). That’s why in the context of this relationship between buyers and suppliers, a high level perceived customer satisfaction leads to a higher level of trust. The notion of perceived satisfaction can indeed increase the mutual benefit arising out of the relational exchange.

In a situation where trust is high, the parties may more easily give the benefit of doubt to their partners and therefore reduce the risk of conflict (Jap and Ganesan, 2000). However, contrary to what one may logically assume trust may also increase the incidence of conflict rather than reduce it. Indeed, this situation may occur when trust exists between the parties while their motivations are very divergent without effective governance structures being in place in anticipation of any conflicts. However, one study shows that the long-term relationship which is able to survive these conflict(s) tends to cause fewer new conflicts with the experience accumulated by the parties (Zaheer et al., 1998).

Reputation may be defined as the extent to which firms and people in the industry believe a counterpart is honest and concerned about his customers (Branzei, Vertinsky and Camp 2007). Reputation is an intangible asset cumulated by history of good behaviour in a business circle unattainable by monetary investments. It is, therefore, a positive contributor to building trust in the exchange relationship and, as such, it represents a predisposing factor of relational commitment (Vaquez-Casielles et al., 2005). Reputation may be based on previous experience (Branzei et al., 2007) but also on the credibility of a party within the industry (Ganesan, 1994). Reward is that an individual is more willing to commit to another if the other person holds a reputation for cooperative behaviour (Anderson and Weitz, 1989).

2 Some special Features of Business Relationships in Hungary

Although in Hungary there were much more competitive markets of goods and services comparing with Romania and former East-Germany in the socialist system before 1989 due to different economic reforms, the competitive attitude among economic actors was not dominant. This means that such behavioural forms and skills have not developed as results of demand markets and shortage economy, which would have been essential in a real market economy. In the decades of socialism cooperative chains have operated based on family and friendship bonds but these worked among other kinds of conditions and the majority of these was liquidated or basically modified in the change of political economic system (Hámori – Szabó – Derecskei – Hurta – Tóth 2007).

So new business networking seems to be quite slow process in Hungary. Kolos et al (2006) investigated 301 companies in Hungary, which employ more than 50 persons and find that only 52 interviewed companies (17.6 %) indicated strategic alliances. These alliances determine their current horizontal and vertical integration and partly show their networking
willingness as well. The majority of the interviewed firms have the opinion that strategic alliances have positive effect on their output and turnover furthermore 41 per cents of the respondent plan to develop strategic cooperation within 3-5 years.

In a qualitative study Hámori et al (2007) investigated the competitive and cooperative behaviours of companies and find that 63 per cents of respondents (50 persons) though that cooperative attitude is low among economic actors and in 22 cases (28 per cents) identified lack of trust as result. The second frequent reason was lack of cooperation. It is a paradox situation that 20 per cents of respondents think market economy as cause of low cooperation willingness and 15 per cents of interviewed Hungarian companies consider that the socialist regime is the blame for lack of cooperation.

Kolos et al (2006) also find that such characters of inter-personal relationships as sincerity, reliability and readiness to help have basic importance in evaluation of relationships. According to respondents relationship with a buyer is valuable if the buyer is: reliable (4.6 on the scale of one through five; 1: Insignificant and 5: Dominant importance), keeps his promises (4.32), contribute to the good reputation of his business partner (3.95), given information by him/her are relevant (3.91) or has good reputation (3.91). Therefore in the same study the supplier is valuable: if he keeps his promises (4.63), he is reliable (4.56), his contact persons are professionals (4.3), helps in solving problems (4.19), given information by him/her are relevant (4.15) and he is sincere (4.08).

So trust can also be viewed in the wider context of the cultural boundaries. Simmel’s objectification of culture includes the constitution of confidence in less and less personal knowledge about the other is required to have confidence. “The traditions and institutions, the power of public opinion and the definition of the position which inescapably stamps the individual, have become so solid and reliable that one has to know only certain external facts about the other person in order to have the confidence required for the common action.” (Simmel 1950:319, first edition: 1908)

3  Methodology of the thesis

3.1 Expected contribution to theory and practitioners

Concerning marketing literature several controversies can be found and these can be lead to the different meaning recognized to trust construct and consequently, to the distinction between determinants and consequences. More authors have defined trust with elements that others, instead, have considered as its determinants.

When the relationship develops, a high trust stock can affect the quality and quantity of communication between parties, and consequently the understanding of customer
expectations, and the correct formation of expected performance that the firm can offer. Afterwards, in a dynamic prospective, trust affects satisfaction, by means of communication variable. Supplier relationships have tremendous potential to expand from pure product purchasing and short-term oriented transactions to long-term, trustworthy, and valuable relationships.

Therefore my investigation in trust may bring the following contributions:

♦ While there is no widely accepted definition of trust in business and determinants of it, both my quantitative and qualitative research may bring new thoughts to researchers or even can support earlier models as well.
♦ If managers can use trust and its variables in more efficient way, there is big chance for them to develop a relatively stable competitive advantage.
♦ Asset specificity may cause different views and conflicts among partners and this research can contribute to solve these in early stages.
♦ This project can identify in which sectors of economy trust plays crucial role.
♦ In global economy empirical results concerning cultural differences in business relationships can offer useful suggestions as well.

3.2 Applied methodology

It is difficult to introduce the complex, hidden, both past-resulted and future-oriented natured trust. The problems of identifying the determinants of trust are connected to the effects that it produces in a retroactive way, on the determinants themselves.

In this work the empirical research of trust is part of an international investigation. The pilot research was fulfilled in Korea in 2006 where the variables were defined that build trust for satisfying, long-term partnerships (asset specificity, information sharing, partner’s reputation, and perceived conflicts). (Kwon and Suh, 2004) This research is different from previous studies while it focuses on the effects of trust on the sustainable distribution network management which goes beyond the long-term partnership and cooperation. The results of this international research, based on a series of comprehensive studies conducted among supply chain practitioners shows how transaction cost variables (replaceability, asset specificity, behavioural uncertainty) and social exchange variables (perceived satisfaction, partner’s reputation, perceived conflict) affect trust-commitment variables in partnership based supply chain relationships. The trust factors in this study are based on the results of Kumar et al. (1995). The variables used in the studies of Kwon and Suh (2004) and of Chu and Fang (2006) were considered to select the variables for this study. The surveys were conducted in five countries (France, Hungary, Tunisia, USA and Korea) and applied statistical methods (Hong, Kwon, Roques, Mandják, Brahim and Piricz, 2011).
In the process of Hungarian research first I translated the original English questionnaire into Hungarian and controlled it in two steps (one step was depth interviews). The final Hungarian version was retranslated in English and controlled by the project centre.

I chose a bit tiring but reliable personal questioning, more concretely convenience sampling. It means that members of the population are chosen based on their relative ease of access so it tries to collect samples from close and reachable elements. Although in this case the interviewer’s one of the main tasks is to choose the samples this method is frequently used – especially with large samplings – while it is very cheap and quick. (Malhotra 2008) The personal questioning was fulfilled by correspondence students of the College of Dunáujváros (was not obligatory) in 2009 who usually worked and were ready to use their business relationships. Companies registered in Hungary were asked about trust in their supply chain independently on sizes and sectors of economy. During answering the questions the respondents were asked to choose freely one of their buyers or sellers and after it they should focus on the chosen concrete business relationship. The questioning process was closely monitored and I frequently discussed the experiences during it. This time the largest problem was that many interviewed firms did not want to give information about their annual sales revenue, which was necessary to identify the category of size of the given company.

From the received 400 questionnaires I found 315 valid. The questioned samples by size (Micro entrepreneurship: the annual revenue of the previous year maximum EUR 2 Million, small entrepreneurship: maximum EUR 10 Million, Medium entrepreneurship: maximum EUR 50 Million, Large entrepreneurship: more than EUR 50 Million) shows that large companies are overrepresented compared with the Hungarian national data. The reason can be that the majority of the questioned organizations are situated in the middle part of Hungary (Budapest, Pest and Fejér counties). This region has a leading economic role, for example 39.4 per cents of the operating entrepreneurships are here while the national regional average is only between 8.6 – 11.5 per cents. (Statisztikai tükör 2009/65:2)

Analysing the questionnaires by activity, 41 questioned firms deal with whole sale, 69 organizations with retail trade and this commercial group is the largest in this investigation (Commerce: 34.9 per cent) (total N = 315). The second largest group belong to heavy industry (54 questioned firms, 17.1 per cent) while the third largest activity group is light industry (44 questioned firms, 14.0 per cent). These resulted activity groups fit to the Hungarian national activity categories. The concrete interviewees are (middle and top level) leaders.

The valid questionnaires were analysed by SPSS (PASW) software using factor analysis, and regressions. The measurement of trust is mostly based on seven-point Likert scales, ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). In this study I used
exploratory factor analysis and Bartlett – test to control variables. In order to get to know the number of factors effecting trust I chose Principal component analysis (PCA) and Varimax rotation. The results show a 10-factor solution with a 64 per cent variance explained. This percentage is acceptable in social sciences (Hair et al. 2003).

In order to have the final number of factors graphic of Scree Plot gives useful support. The scree test involves plotting the eigenvalues in descending order of their magnitude against their factor numbers and determining where they level off. The break between the steep slope and a leveling off indicates the number of meaningful factors, different from random error. In this case the break is between 6th and 8th factors and there is a smaller break around the 10th factor (see figure 1). So it seems that not only 10 factors are acceptable but using of 7 factors is also a good solution. For example the Korean pilot survey resulted 8 factors. In their research the 8th factor was the Sustainable Relationship, which factor did not appear in the Hungarian investigation.

1. figure: Scree Plot of Factos Analysis

According to Costello and Osborne (2005) a factor with fewer than three items is generally weak and unstable. With further research and analysis it may be possible to reduce the item number and maintain a strong factor. My factor analysis has resulted three factors with only one item while others included three or more items. So I added these ‘lonely’ items to the factors of similar content by using MEAN in PASW software. Therefore finally I created seven factors from ten. The variables of each factor represent clearly separated contents as it can be seen in the Appendix.

While I planned to use factors from factor analysis during regressions I applied two methods to examine the possibility of multicollinearity. On one hand I saw the correlations of the seven final factors but the results were low, which shows no multicollinearity among
factors. On the other hand I always calculated the variance inflation factor (VIF), which quantifies the severity of multicollinearity in an ordinary least squares regression analysis. It provides an index that measures how much the variance (the square of the estimate's standard deviation) of an estimated regression coefficient is increased because of collinearity. The values of VIF were between 1 and 2 indicating low multicollinearity.

I made regression when the focus was on the relationship between a dependent variable of trust (TRUST) and the following independent variables: perceived conflict (KONFL), perceives satisfaction (SAT), partner’s reputation, replaceability, partner’s asset specificity (PARTE), respondent’s asset specificity (VALE), replaceability (LECS), and information sharing (INF).

4 New and novel findings of the research

4.1 The variables of transaction cost theory

I made regression between trust (TRUST) and the Partner’s asset specificity (PARTE) where TRUST was the dependent variable. In the Model Summary the correlation coefficient is 0.511. This value of R suggests a moderate linear correlation between Trust and the Partner’s asset specificity (PARTE). The coefficient of determination is 0.261; therefore about 26.1 % of the variation in trust is explained by perceived conflict. This means that the Partner’s asset specificity (PARTE) does not play a dominant trust affecting role. The multiple regressions also show significant relationship between these two notions.

The graphic summary of factors of Trust and the Partner’s asset specificity (PARTE) also shows positive association (see figure 2 on next page). Here the tendencies are more visible and we can understand from it that one essential pre-condition of relationship specific investment is trust because the larger the factor of Partner’s asset specificity, the higher the level of trust as well. In this current investigation we do not research development of trust or change of it through time but only ask respondents to evaluate one of their business relationships. That’s why I just assume that trust and the partner’s asset specificity developed and improved as years passing by. Meanwhile it is useful to mention there are certain theories concerning the starting level of trust (e.g. Tarnai 2003).

When we turn to the other side more concretely the Respondent’s asset specificity (VÁLE) and make Pearson Correlation with the factor of Trust the Sig. level (2-tailed) is too high (0,068). Although in factors analysis I receive this factor (Respondent’s asset specificity (VÁLE)), the correlation with trust is invalid. However correlations of Respondent’s asset specificity show valid relationship with Information sharing (0.287) and Perceived satisfaction (0.273). Practically this means that there is only indirect
The relationship between Trust and Respondent’s asset specificity because these factors impact Trust.

2. **figure:** Graphic relationship between Trust and the Partner’s asset specificity (PARTE)

![Graph showing the relationship between Trust and Partner's asset specificity](image)

Source: PASW software using own empirical data

To my opinion however there is sense to investigate both sides of asset specificity – from the other business partner’s and the respondent firm’s aspect – because risks and therefore trust is different. This current research of trust proves this view as well. As a summary I state the first thesis:

1. **In Hungary, enterprises independently from sectors see that there is moderate positive relationship between trust and partner’s asset specificity which means that this factor does not have dominant role in changing trust. But asset specificity has different effect from the aspect of investor. If the respondent enterprises made the specific investment, according to the opinion of respondent this does not impact the level of trust.**

Behavioural uncertainty is dominantly affected by **replaceability** although it is obvious that behavioural uncertainty is not equal to replaceability. There is another reason for investigation of replaceability; my factor analysis results a factor where statements obviously focus on chances of the business partner’s replaceability.

During regressions between the factors of Trust and Replaceability (LECS), - besides acceptable significance level - the result shows little or no association (-0.27) between them. The correlation coefficient is 0.016; therefore about 1.6 % of the
variation in trust is explained by business partner’s replaceability. This means that in this research replaceability is able to decrease trust only in a small compass in business ties in Hungary.

3. figure: Graphic relationship between Trust and Replaceability (LECS)

When we have a look at the graphical illustration of association between the factors of Trust and Replaceability (LECS) (see figure 3 above) we see first that replaceability is a real threat at almost any time. This is understandable if we think of the high, mostly global competition in each sector of economy. On the other hand in cases of larger possibility for replaceability there are both lower middle and higher levels of trust! These results are parallel with the result of regression. Based on these findings I create my relevant thesis:

2 In operating relationships of enterprises registered in Hungary, independently from sectors the chance of business partner’s replaceability does not mean modifying element of trust while the empirical investigation shows little or no relationship between trust and replaceabilty. This means that replaceabilty is a real threat in case of both low and high level of trust.

Although all used factors – such as Information sharing (INF) and Replaceabilty (LECS) – were resulted by factor analysis the regression between Trust and Information sharing (INF) showed (valid) little or no correspondence (+0.197) in the interviewed organizations’ opinion. The correlation coefficient is 0.039; therefore about 3.9 % of the variation in trust is explained by Information sharing (INF). Despite relevant literature it seems that in Hungary the share of information does not contribute to improve the level of trust. Therefore my following thesis is:
3 In operating relationships of enterprises registered in Hungary, independently from sectors trust is affected in very low rate by information sharing.

4.2 The variables of social exchange theory

I made regression between trust (TRUST) and Perceived conflict (KONFL) where TRUST was the dependent variable. In the Model Summary the correlation coefficient is 0.422. This value of r suggests a moderate linear correlation between trust and perceived conflict. The coefficient of determination is 0.178; therefore about 17.8% of the variation in trust is explained by perceived conflict. This means that appearance of conflict does not close off trust or developing trust. I also state that perceived conflict does not play a dominant trust affecting role.

The graphic illustration of coherency between trust and perceived conflict indicates a relatively weak tendency – in case of high trust generally there is low level of conflict and vice versa – but the picture is more elaborated again (figure 4 on next page). It is a bit surprising that there are cases in the other sections as well. This means that there are business relationships with low trust and low conflict. For example arm’s length relationships could be in this section dealing with standard products where sellers are easily replaceable. At the same time there are a few values with high trust and high conflict! This seems to be a bit unusual situation but it can happen that there are more or many conflicts in a business relationship despite of its long duration due to e.g. crisis or very changeable environment. In case of low trust and high level of conflict relationships could be identified as well. These ties can be in early stage or mean common projects of competitors.

4. figure: Graphic relationship between Trust and Conflict

Source: PASW software using own empirical data
This board variety of relationship between trust and conflict may prove the earlier views saying conflict is normal part of business life (e.g. Tatum and Eberlin, 2006; Waluszewski and Håkansson, 2006; Hagberg-Andersson and Tidström, 2008) According to Kemp and Ghauri (1999) trust and norms, which is a result of long-term development, reduce the potential for conflict. Pondy (1967) also stresses the role of conflicts and identifies the latent conflict. Latent conflict is naturally embedded in every relationship and it can be considered as a “silent” or invisible factor that either remains as such or is perceived by the actors. Trust can be also called as an invisible factor which is often difficult to punctually determine and it is easier to experience when it is missing. From an inter-organizational perspective Vaaland and Håkansson (2003) distinguish between formal and informal governance mechanisms. Formal conflict management mechanisms are related to compliance, awareness, comprehensive planning and structure. Informal conflict management mechanisms are related to trust, flexibility, lack of planning and process. This means that role of trust is essential in conflict management but not in all cases.

Tjosvold and Chen (2010) state managing conflict cooperatively can strengthen trust. Trust is critical for strengthening perceived cooperative goals and mutually beneficial interaction. Partners can develop their trust as they deal with the many conflicts they confront in groups, organizations, and alliances.

Summarising these findings I create my fourth thesis:

**4 In operating relationships of enterprises, registered in Hungary, independently from sectors there is weak negative relationship between trust and perceived conflict. However the relationship does not have simply opposite direction because the level of trust is not affected only by perceived conflict.**

In regression between trust (TRUST) and Perceived satisfaction (SAT) TRUST was the dependent variable. In the Model Summary the correlation coefficient is 0.413. This value of r suggests a moderate linear correlation between trust and perceived satisfaction. The coefficient of determination is 0.168; therefore, about 17% of the variation in trust is explained by perceived satisfaction. So it seems that although satisfaction influences developing trust this is not the only one or even dominant building element of trust. I state that perceived satisfaction affects the level of trust but not dominantly and it seems that there are more other influencing factors as well.

When I illustrate Trust and Satisfaction graphically there are certain tendencies; usually larger trust belongs larger satisfaction and vice versa. This finding strengthens earlier relevant researches. Walter et al. (2002) state – using Drosch et al’s view – that customer satisfaction, trust and commitment constructs relationship quality. Anderson et al. also approach trust determinants by research on satisfaction (Anderson and Narus, 1990).
But I want to add that this empirically found correspondence seems to be not very
dominant and there are more business relationships on the other sections of the figure 5
(below). The research resulted more cases where trust is relatively high levelled although
satisfaction is not high at all. Meanwhile there are relationships with low trust and high
satisfaction at the same time. However there are relationships with low trust and low level
of satisfaction. These ties can be for example in early stage. Geyskens et al. (1999) found
similar results demonstrated that satisfaction is both conceptually and empirically
separable from related constructs like trust and commitment.

So it seems that relationship between them is not so dominant and there are more business
relationships where trust is relatively high levelled although satisfaction is not high at all.
Meanwhile there are cases with low trust and high satisfaction at the same time. Geyskens
et al. (1996) found similar results demonstrated that satisfaction is both conceptually and
empirically separable from related constructs like trust and commitment.

As a consequence of empirical data although there is natural relationship between trust and
satisfaction, this coherency is clearly not strong. I have to take into consideration however
that both trust and satisfaction is influenced by more other elements as well. Therefore my
relevant thesis is the following:

5. figure: Graphic relationship between Trust and Satisfaction

Source: PASW software using own empirical data

5 In existing relationships of enterprises registered in Hungary, independently from
sectors there is weak positive relationship between trust and perceived satisfaction.
That’s why satisfaction with business relationship does not improve solely the level of trust.

The factor analysis did not result a factor regarding reputation. Therefore I could not investigate the relationship between trust and the partner’s reputation. This result is a bit surprising while the Korean pilot research shown strong positive relationship between trust and the partner’s reputation (Hong – Kwon 2009).

This reason can origin from cultural differences. Sturman and Hanmer-Lloyd (2005) investigated the relationship between trust and reputation in commercial enterprises in four countries, concretely in Germany, Holland, Italy and Great Britain. This paper is essential because the authors research this correspondence from cultural aspect. In Sturman’s and Hanmer-Lloyd’s (2005) model reputation takes effects through transference to the following aspects:
- Low Power Distance
- Feminin Culture,
- High Uncertainty Avoidance,
- Collectivism.

4.3 The cultural differences of trust

I have already started to discuss the cultural aspects of trust when I tried to understand the relationship between reputation and trust in the previous chapter. In this chapter I also investigate this relationship by comparing the results of Korean Hungarian and USA trust-researches. These scientific projects used the same questionnaire and methodology.

In table 1 (see next page) I compare the Korean and the Hungarian factors by name. In more cases the content of the Korean and the Hungarian factors were not the same. On the other hand there are certain factors which have almost the same variables such as factors of conflict. In spite of the similar variables the absolute values of Pearson – correlation index are a bit different:
   a) Korean case: Perceived conflict (PPC) and Trust (TR) 0.389
   b) Hungarian case: Perceived conflict (KONFL) and Trust (BIZ) 0.422

I found that there are even larger differences in variables of the Korean and the Hungarian factors of perceived satisfaction. The values of Pearson – correlation index between trust and satisfaction also show very clear difference:
   a) Korean case: Perceived satisfaction and Trust (TR) 0.413
   b) Hungarian case: Perceived satisfaction (SAT) and Trust (BIZ) 0.713
1. Table: The factors of Hungarian and Korean research

<table>
<thead>
<tr>
<th>Factors of Hungarian research</th>
<th>Factors of Korean research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived satisfaction (SAT)</td>
<td>Perceived satisfaction</td>
</tr>
<tr>
<td>Perceived conflict (KONFL)</td>
<td>Perceived conflict</td>
</tr>
<tr>
<td>Partner’s asset specificity (PARTE)</td>
<td>Partner’s asset specificity</td>
</tr>
<tr>
<td>Respondent’s asset specificity (VÁLE)</td>
<td>Respondent’s asset specificity</td>
</tr>
<tr>
<td>Replaceability (LECS)</td>
<td>Information sharing</td>
</tr>
<tr>
<td>Information sharing (INF)</td>
<td>Partner’s reputation</td>
</tr>
<tr>
<td></td>
<td>Sustainable relationship</td>
</tr>
</tbody>
</table>

Source (in case of Korean data): Hong – Kwon, 2009:12

There is however such factor – Respondent’s asset specificity (VÁLE) – what was resulted in each three (Korean, Hungarian, American) factor analyses. Meanwhile I have to add that the Hungarian factor analysis between the Respondent’s asset specificity (VÁLE) and Trust (BIZ) is invalid.

I also found such cases when the “Korean” factor was not resulted in the Hungarian factor analysis. The Korean factors of the Partner’s reputation and Sustainable relationship belong to this group (see table 1).

Comparison of the results of Korean, Hungarian, American trust researches shows that there are essential differences according to countries in spite of the same questionnaire and same methodology. There were not found any factor where not only the variables of the factor but also the correlation index show very similar results in two or three countries. As a summary I state my 6th thesis:

6 According to results of comparison of international trust research the Hungarian organizations have different opinion about trust than the Korean and the USA organizations. The Hungarian organizations see different determinants of trust in business relationships. They think that perceived satisfaction and the partner’s asset specificity affect trust most dominantly. In spite of the Korean results, the Hungarian firms have the view that information sharing and sustainability of relationship do not have impact on trust.
4.4 The sectorial differences of trust

In order to investigate the sectorial differences of trust I made cross tab. Cross-tabulation analysis, also known as contingency table analysis, is most often used to analyse categorical (nominal measurement scale) data. A cross-tabulation is a two (or more) dimensional table that records the number (frequency) of respondents that have the specific characteristics described in the cells of the table. Cross-tab tables provide a wealth of information about the relationship between the variables.

When I made the cross tab I focused on the largest activity groups (that’s why in this case N=287 instead of total N=315). This method improves the quality of analysis. From the 287 enterprises 110 firms (38%) operate in commerce (Wholesale and Retail Trade), 54 (19%) in heavy industry, 44 (15%) in light industry. Besides the group of Commerce I also created another service group. So Accommodation and Food Services (20 firms), Transportation and Warehousing (13 firms) and Information Technology (11 enterprises) belong the group of Service.

The other variable of my cross tab is the factor of Trust. The measurement of trust is based on seven-point Likert scales, ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). The first trial of cross tab however gave invalid results therefore I made contraction of values into four categories. Together with the four summarized activity groups I could make valid cross tab.

In table 2 (see next page) we can find the cross tab of the the respondents’ activity and Trust. Through investigating the rows (% within trust) we can see that the lowest value (1) of Trust belongs to the two groups of service (Commerce and Service) the most (both group in 33 %). On the other hand Commerce (32.2 %) and Heavy Industry contribute the most dominantly to the highest value (4) of Trust. In this category (highest level of trust) Service shows 22.6 % and Commerce only 18.3 %! So looking at the rows I cannot state that in the two industrial groups trust has weaker role.

The columns show that in the largest activity group – Commerce (110 enterprises) – the most respondents chose the second highest value (3) of Trust (44.5 %) while the second frequent choice was the highest value of Trust! In case of group Service the high values (3 and 4) of trust were dominantly chosen by the respondents.

In the group of Heavy industry the most respondents (75.4 %) selected the highest value of Trust and the second most selection (29.6 %) were the second highest value (3) of Trust. This means that organization in heavy industry are also aware the importance of trust in business relationships.
### 2. Table: Cross tab about the relationship between the respondents’ activity and Trust

<table>
<thead>
<tr>
<th>Trust (BIZ)</th>
<th>Commerce</th>
<th>Heavy Industry</th>
<th>Light Industry</th>
<th>Service</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00 Count</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>% within trust</td>
<td>33.3%</td>
<td>6.7%</td>
<td>26.7%</td>
<td>33.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within activity</td>
<td>4.5%</td>
<td>1.9%</td>
<td>9.1%</td>
<td>6.3%</td>
<td>5.2%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.7%</td>
<td>.3%</td>
<td>1.4%</td>
<td>1.7%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Count</th>
<th>19</th>
<th>6</th>
<th>2</th>
<th>22</th>
<th>49</th>
</tr>
</thead>
<tbody>
<tr>
<td>% within trust</td>
<td>38.8%</td>
<td>12.2%</td>
<td>4.1%</td>
<td>44.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within activity</td>
<td>17.3%</td>
<td>11.1%</td>
<td>4.5%</td>
<td>27.8%</td>
<td>17.1%</td>
</tr>
<tr>
<td>% of Total</td>
<td>6.6%</td>
<td>2.1%</td>
<td>.7%</td>
<td>7.7%</td>
<td>17.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Count</th>
<th>49</th>
<th>16</th>
<th>17</th>
<th>26</th>
<th>108</th>
</tr>
</thead>
<tbody>
<tr>
<td>% within trust</td>
<td>45.4%</td>
<td>14.8%</td>
<td>15.7%</td>
<td>24.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within activity</td>
<td>44.5%</td>
<td>29.6%</td>
<td>38.6%</td>
<td>32.9%</td>
<td>37.6%</td>
</tr>
<tr>
<td>% of Total</td>
<td>17.1%</td>
<td>5.6%</td>
<td>5.9%</td>
<td>9.1%</td>
<td>37.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Count</th>
<th>37</th>
<th>31</th>
<th>21</th>
<th>26</th>
<th>115</th>
</tr>
</thead>
<tbody>
<tr>
<td>% within trust</td>
<td>32.2%</td>
<td>27.0%</td>
<td>18.3%</td>
<td>22.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within activity</td>
<td>33.6%</td>
<td>57.4%</td>
<td>47.7%</td>
<td>32.9%</td>
<td>40.1%</td>
</tr>
<tr>
<td>% of Total</td>
<td>12.9%</td>
<td>10.8%</td>
<td>7.3%</td>
<td>9.1%</td>
<td>40.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>110</th>
<th>54</th>
<th>44</th>
<th>79</th>
<th>287</th>
</tr>
</thead>
<tbody>
<tr>
<td>% within trust</td>
<td>38.3%</td>
<td>18.8%</td>
<td>15.3%</td>
<td>27.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within activity</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>38.3%</td>
<td>18.8%</td>
<td>15.3%</td>
<td>27.5%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: PASW software using own empirical data

The column of Light industry the high values of Trust were the mostly chosen (value 4: 47.4 % and value 3: 38.6 %). This points to the fact that companies in this field think trust is important in business life.

Next to cross tab it is suggested to see Cramer’s V coefficient. In table 3 significance level is acceptable and shows weak relationship between the respondents’ activity and Trust. This result confirms my findings earlier based on table 2.

### 3. Table: Cramer’s V coefficient of cross tab about the relationship between the respondents’ activity and Trust

<table>
<thead>
<tr>
<th>Symmetric Measures</th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal Phi</td>
<td>.282</td>
<td>.006</td>
</tr>
<tr>
<td>Cramer’s V</td>
<td>.163</td>
<td>.006</td>
</tr>
</tbody>
</table>

Source: PASW software using own empirical data
Using cross tab I came to the conclusion that there is no clear relationship between the main activity of the respondent organizations and trust. As a summary I state the 7th thesis:

7 According to this quantitative research the results do not support that activity of the enterprises dominantly impacts the level of trust. The investigated organizations in Hungary see the importance of trust in operating relationships and this view is independent if their main activity is either in industry or service sector.

4.5 Model testing

In order to have general results I tried to investigate organizations independently from sizes and also from sectors of economy. The total number of sampling is 315, but the groups of sizes or the activity groups are quite small. Furthermore, the method of convenience sampling means the other limitation.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.633</td>
<td>.400</td>
<td>.389</td>
<td>5.18031</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), INF, KONFL, LECS, VALE, PARTE, SAT
b. Dependent Variable: Trust

Source: PASW software using own empirical data

Multiple regression analysis is used to test the effects of independent (predictor) variables on a single dependent (criterion) variable. The multiple regression of my model of trust can be seen on table 4. If we see R^2 we can make the consequences – although these factors are able to explain the level of trust in business relationships – it seems that there are more other building elements of trust because R^2 (0.400) is indicating that 40 % of the variability in the response is explained by the explanatory variable. This value however does not count low in social sciences. The Std. Error of the Estimate (SEE) indicates the exactness of the model and the value of it is low so I can continue my analysis.

Analysis of Variance (ANOVA) provides information about levels of variability within a regression model. My model of trust is valid and the following ANOVA- table also proves this (see Table 5 on next page). The F statistic is the mean square due to regression divided by the mean square due to residual, and tests the hypothesis that all coefficients (except the intercept) are zero. (Sig. < 0.05)
5. Table: The ANOVA-table of regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>5482,944</td>
<td>6</td>
<td>913,824</td>
<td>34,053</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>8211,683</td>
<td>306</td>
<td>26,836</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13694,626</td>
<td>312</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), INF, KONFL, REPL, VALE, PARTE, SAT
b. Dependent Variable: TRUST

Source: PASW software using own empirical data

In order to decide whether it is reasonable to consider that assumptions for regression analysis are met by the variables in questions I use residual plot of Trust (see figure 6 below). The residual plot shows a random scatter of the points (independence) with a constant spread (constant variance). The studentized residual plot shows a random scatter of the points (independence) with a constant spread (constant variance) with no values beyond the ±2 standard deviation reference lines (no outliers). The normal probability plot of the residuals shows the points close to a diagonal line; therefore, the residuals appear to be approximately normally distributed. Thus, the assumptions for regression analysis appear to be met.

6. figure: Residual plot of Trust

Source: PASW software using own empirical data
In table 6 (below) standardization of the coefficient can be see what is usually done to answer the question of which of the independent variables have a greater effect on the dependent variable in a multiple regression analysis. So it tells us the nature of the linear relationship between the dependent and independent variables. In my trust research the first three variables were found to have measurable impact on trust:

♦ SAT: Perceived satisfaction,
♦ KONF: Perceived conflict
♦ PARTE: Partner’s asset specificity (these factors have grey background in table 6).

The main factor of Trust results valid, positive or negative modearte association with the above mentioned factors.

The other three variables (VÁLE: Respondent’s asset specificity, LECS: Replaceability of the business partner, INF: Information sharing) do not have explanatory power based on the multiple regression although these factors also were born by factors analysis.

Therefore regression shows which variables have statistically effect on trust in business relationship. During research I tried to take into consideration as many elements as possible while trust is extremely complex and effected by more variables by its nature.

6. Table: Regression equation

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>21.082</td>
<td>2.341</td>
<td>9.006</td>
</tr>
<tr>
<td>SAT</td>
<td>.242</td>
<td>.068</td>
<td>.188</td>
<td>3.535</td>
</tr>
<tr>
<td>KONFL</td>
<td>-.380</td>
<td>.072</td>
<td>-.270</td>
<td>-5.281</td>
</tr>
<tr>
<td>PARTE</td>
<td>.478</td>
<td>.058</td>
<td>.400</td>
<td>8.184</td>
</tr>
<tr>
<td>VÁLE</td>
<td>.009</td>
<td>.061</td>
<td>.008</td>
<td>.156</td>
</tr>
<tr>
<td>LECS</td>
<td>-.066</td>
<td>.067</td>
<td>-.045</td>
<td>-.994</td>
</tr>
<tr>
<td>INF</td>
<td>-.005</td>
<td>.118</td>
<td>-.002</td>
<td>-.045</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Trust

Source: PASW software using own empirical data

On order to receive casulalty Lazarfeld (1959, cited Babbie 2001) states three requirements:

a) the cause should be earlier than effect,
b) there should be empirically found association between the two variables,
c) the empirically proved finding cannot be explained by another variable.

Let’s look through these three points now in my trust research. With regard of the requirements of chronology and empirical association (a and b) I fulfil these when we think
through the methodology of this research. I asked organizations to focus on one of their existing relationships and introduce this by answering questions. The checked obvious content of the questions also contributed to understand causality.

The third requirement is realized as well because I use more classical statistical methods which exclude the irrelevant elements. During investigation of trust this circumspection is really useful and expected due to elaborated nature of trust.

Based on literature review I created my hypothetical model of trust where only four of the hypothesized eight variables were found to have explanatory effect on trust after empirical investigation (see figure 7 on next page).

Among the variables of Transaction cost theory the Partner’s asset specificity shows moderate relationship with the factor of Trust but the Information sharing has only very weak relationship with Trust in the Hungarian survey. On the other hand among the variables of Social exchange theory the Partner’s reputation gave invalid result while the other two variables – Perceived satisfaction and Perceived conflict – show moderate relationship with Trust. According to the empirical investigation cultural differences have clear impact on trust in business relationship as well. Furthermore organizations independently from sectors see the importance of trust.

Turning back to the variables of Transaction cost theory I research behaviour uncertainty through replaceability. The reason of it is that factor analysis gave a factor concerning replaceability but there was no factor on behaviour uncertainty concretely. In spite of this the hypothesis relationship between replaceability and trust is not confirmed as a result regression and correlations. It seems that organizations registered in Hungary agree with the essential role of trust in business relationships but not for the reason to decrease the possibility of replaceability by developing trust.

The other variable of Transaction cost theory is Information sharing (INF) which shows weak relationship with the factor of Trust. I have the view that this result may stem from cultural differences. The national level of trust in Hungary generally low and this low level of trust are also confirmed in Hofstede’s model and country analyses (Hofstede 2001).

The third variable of Transaction cost theory is asset specificity, on closer examination the Partner’s asset specificity, which shows moderate relationship with the factor of Trust. In my research the factor of Partner’s asset specificity showed the strongest impact on trust among the investigated elements. But this affect still cannot be called a dominant one. Anyway this empirically found role of partner’s asset specificity is not surprising because more relevant publications have already confirmed it and point out that long term relationships create a good base for relationship-specific investments.
At this point it is useful to investigate the other side of asset specificity and this is the respondent’s asset specificity. This identifies the situation when we approach asset specificity from the aspect of investing company. During my survey on trust in Hungary the factor analysis gave a factor for both the Partner’s (PARTE) and the Respondent’s asset specificity (VÁLE). However the regression between the Respondent’s asset specificity (VÁLE) and Trust (BIZ) gave invalid results meanwhile the Partner’s asset specificity shows moderate relationship with the factor of Trust as I mentioned earlier. Laaksonen, Pajunen, and Kulmala (2008) also draw attention to the two different sides of asset specificity and also stress this dimension of relationship when companies want to get valuable resources.

Based on the empirical data the partner’s asset specificity is the most important building element of trust which is a little bit more essential than satisfaction with the business partner (see table 6 earlier). So it seems that the partner’s asset specificity is a more concrete tangible consequence of trust than perceived satisfaction.

Regarding the variables of Social exchange theory the factor of Partner’s reputation could not be investigated (due to invalid results) meanwhile the Perceived satisfaction and the Perceived conflict show moderate relationship with the factor of Trust. Certainly there is inverse relationship between conflict and trust. But I have to mention that both in
sociology and business life there is a general view that conflict is part of life. In my research there are several business relationships which do not belong to the mainstream of high trust – low conflict or vice versa.

Earlier I gave detailed explanation that regression with Partner’s reputation gave invalid results due to cultural differences, now I add Bakonyi’s (2007) empirical research as a confirmation. He found that one sixth of the respondents rely on institute in general and only 10 per cents of interviewed Hungarian citizens have faith in central balancing institutes such as media, the National Bank or trade unions! I agree with more scholars that trust has a personal interpersonal nature that’s why I consider an important starting point these kinds of surveys. Although an economy is very developed, global decisions are made by human beings applying rational and irrational elements as well.

Concerning the variables of Social exchange theory the Perceived satisfaction shows moderate relationship with the factor of Trust, based on the results of both regression between the two factors and multiple regression. These results are a little bit expected but I have to add that this determinant is not a dominant building element of trust either! Satisfaction is reasonably subjective notion however it cannot be neglected by decision-makers because its role can strengthen during pondering of partner’s replaceability or asset specificity.

As a consequence of empirical data I have the view that although there is natural relationship between trust and satisfaction and asset specificity these coherencies are clearly not strong. We have to take into consideration however that both trust and the other factors are influenced by other elements as well.

The third variable of Social exchange theory is the Perceived conflict which was resulted by factor analysis – like all other used factors – multiple regression issues this as significant coefficient and shows moderate relationship with the factor of Trust. These results are also not surprising and in correspondence with the relevant literature. This affects usually indirectly similarly to perceived satisfaction however inversely.

Limitations: My aim was to understand the complex notion of trust in business relationships, more concretely to identify the determinants of trust. Therefore I collected broad circle of possible effecting elements and I tried to investigate organizations in Hungary independently from sizes and also from sectors of economy. The total number of sampling is 315, but the groups of sizes or activity groups are quite small. So this is one limitation of my research. The method of convenience sampling means the other limitation.

This survey cannot investigate the dynamic relationship between changing environment and trust because the questionnaire focused on the respondent’s chosen existing relationship at the moment of query. Furthermore the personal questioning was fulfilled by
correspondence students who worked and were ready to use their business relationships. This cost saving method has disadvantage and it seems very problematic to repeat this quantitative research somewhen in the future.

A number of previous researches address the role of trust as factor to increase the outcome of cooperation and partnership between companies. This investigation also proves the importance of this soft resource however trust is extremely complex notion. Not only the above mentioned elements effect clearly trust but several other elements furthermore several other factors have indirect influences.

Based on my empirical investigation there is relationship between trust and the majority of applied determinants but the picture is much more complex. My investigation points out for example, that conflict is really part of business relationships. If practitioners are aware of it they can rather focus on handling and solving actual conflicts.

After empirical research of trust I state that one element has no dominant role in developing trust either. Therefore the complexity of trust is confirmed.

I summarize briefly my findings in the following:

♦ in business relationships trust develops as a summary of more processes,
♦ trust is a result of several factors’ common effects,
♦ partner’s asset specificity and perceived satisfaction have moderate positive impact on trust,
♦ perceived conflict has measurable negative affect on trust however certain level of conflict is normal part of business life,
♦ trust may have positive consequences which are partly indirect advantages,
♦ the role of trust is not always different according to sectors of economy,
♦ trust shows differences in cultures and countries as well.

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Appendix

### Content of Factors

<table>
<thead>
<tr>
<th>Trust</th>
<th>Whenever the partner gives us advice on our business operations, we know that it is sharing its best judgment. Though circumstances change, we believe that the partner will be ready and willing to offer us assistance and support. When making important decisions, the partner is concerned about our welfare. When we share our problems with the partner, we know that it will respond with understanding. In the future, we can count on the partner to consider how its decisions and actions will affect us. Even when the partner gives us a rather unlikely explanation, we are confident that it is telling the truth.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction (SAT)</td>
<td>This partner firm has a good reputation in the market. Even if we could, we would not drop the partner because we like being associated with it. We want to remain a member of the partner’s network because we genuinely enjoy our relationship with it. Our positive feelings towards the partner are a major reason we continue working with it. The renewal of our relationship with the partner is virtually automatic.</td>
</tr>
<tr>
<td>Conflict (KONFL)</td>
<td>The partner has often provided us information that has later proven to be inaccurate. A high degree of conflict exists between the partner and our firm. The partner and our firm have major disagreements on certain key issues. The relationship of our firm with the partner firm has been an unhappy one.</td>
</tr>
<tr>
<td>Partner’s Asset Specificity (PARTE)</td>
<td>This partner firm has made significant investments in resources dedicated to their relationship with us. This partner firm’s operating process has been tailored to meet the requirements of our organization. Training our people has involved substantial commitments of time and money for this partner. We can accurately predict the performance of this partner for our next business cycle.</td>
</tr>
<tr>
<td>Respondent’s Asset Specificity (VÁLE)</td>
<td>We have made significant investments in resources dedicated to our relationship with this partner firm. Our operating process has been tailored to meet the requirements of dealing with this partner. Training and qualifying this partner has involved substantial commitments of time and money. If the partner requested it, we would be willing to make further investment in supporting the partner.</td>
</tr>
<tr>
<td>Replaceability (LECS)</td>
<td>There are other firms that could provide “the partner firm” with comparable business. The partner would incur minimal costs in replacing our firm with another firm. It would be difficult for the partner to replace the sales and profits generated from the business with us.</td>
</tr>
</tbody>
</table>
There are other firms that could provide “our firm” with comparable business information sharing (INF). Information sharing on important issues has become a critical element to maintain a strong partnership. We share a common information technology (software) to facilitate communication with the partner.
The PhD candidate’s relevant publications and her award

Conferences (presenting member as well) and lectures:

  Dr Judy Zolkiewski – Dr Tibor Mandják – Noémi Piricz: Looking for a concept…Towards a better understanding of matching
- 2007. „A tudomány hete” Konferencia - Dunaújvárosi Főiskola
  Tibor Mandják - Judy Zolkiewski – Noémi Piricz: Az illeszkedés jobb megértése felé…
  Tibor Mandják – Noémi Piricz – Judy Zolkiewski: A személyes kapcsolatok szerepének vizsgálata az üzleti kapcsolatokban
- 2008. „A tudomány hete” Konferencia - Dunaújvárosi Főiskola
  Dr. Tibor Mandják – Noémi Piricz: A személyes kapcsolatok szerepének komplexitása az üzleti kapcsolatokban
- 2009. XXIII: microCAD Nemzetközi Tudományos Konferencia, Miskolc
  István Piskóti – Noémi Piricz: Illeszkedés és kapcsolati marketing
  Noémi Piricz – Dr Judy Zolkiewski – Dr Tibor Mandják: The problem of matching in the SME sector – A focus on actors’ bonds
- 2009. „A tudomány hete” Konferencia - Dunaújvárosi Főiskola
  Noémi Piricz – Dr. Tibor Mandják: Mindent megváltoztat a bizalom? – A bizalom modelljei
- 2010. 26th Annual IMP Conference – Budapest
  Noémi Piricz: The Role of Trust from the Aspect of Business Networks
- 2010. 26th Annual IMP Conference – Budapest: Dr Tibor Mandják – Noémi Piricz – Györgyi Kővágó: Do Hungarian Supply Chain Members Trust in Each Other?
- 2011. 27th Annual IMP Conference – Glasgow
  Nizar Bahim, Noémi Piricz, Seock-Jin Hong, Thierry Roques, Tibor Mandják: How Transaction Cost Variables and Social Exchange Variables Affect Trust in Supply Chain Relationship
- 2012. 28th Annual IMP Conference – Rome
  Noémi Piricz – Tibor Mandják: The relationship among trust conflicts and perceived satisfaction in B2B context

Publications:

- Noémi Piricz (2010): AZ ÜZLETI HÁLÓZATOK REJTÉLYES SZOFT ERŐFORRÁSA, A BIZALOM. Marketing Kaleidoszkóp, Miskolci Egyetem

Award

István Harsányi prize 2011. (Innovációs Szövetség és Manager Képzés Közhasznú Alapítvány - The Hungarian Association for Innovation): Kiemelt dicséret – Certificate of Laudation