

# IS TRUST NECESSARY IN SUPPLY CHAIN NETWORKS?

## FIRST IMPRESSIONS OF HUNGARIAN EXAMPLES

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### ABSTRACT

This preliminary study examines how small producers can cope with new trends of the agri-food business of Central and Eastern European Countries. Trends, such as growing importance of vertical coordination has become relevant in the time of ‘new quality’ to guarantee the consumer the correctness of credence attributes. This process results in the appearance of different forms of networks such as supply chain network, where more and more frequently, interfirm relationships are being examined as a major source of value creation. At the same time, due to experiences during both the communist and the transition periods, trust is generally lacking as a base for business exchanges in many of these countries. However, some empirical data shows that companies are able to successfully create certain contractual exchange forms where trust can be built up relatively quickly. Furthermore, marketing cooperatives can solve many problems of vertical coordination; but the numbers of cooperatives are still small because trust plays an important role for farmers to join a marketing cooperative in transition countries. Thus, we focus on the obstacles which origin from lack of trust; therefore we investigate the key elements of decision to cooperate in the literature. In the last part we use case studies about Hungarian cooperatives to assess which factors have role in these cases.

**Keywords:** SCN, cooperatives, trust, CEEC

### INTRODUCTION

People are generally concerned about the quality of their food. But during times of food scandals people become even more aware and concerned. The change in the perception of food quality by consumers and politicians is affecting the consumption patterns and the expectations of “good” food. The relevance of the reliable transfer of credence attributes as a part of the product quality has been increased. The most striking consequence of these dramatic food scares was the fact that politicians, consumers and also producers and suppliers assessed that food quality is no longer the responsibility of a single firm, instead the whole food chain needs to work together in order to deliver the “new quality”(Hanf and Hanf, 2007). This situation results in certain processes such as evolving vertical coordination which is mirrored in the Hungarian agri-food business, by developing modern types of cooperatives. This phenomenon brought challenges for local actors of agri-business sector with demands for coordinated production from the field to consumers by requirement of reliable transfer of trust attributes as a part of the product quality to the consumer. Credence attributes are characterized as such product and service characteristics that cannot be detected by the buyer under ordinary circumstances, neither before nor after the buying process has finished (Hanf,

2000; Picot et al., 2001). They are often affiliated with the production process, and risk related attributes are generally part of the product itself. Bounded rationality, asymmetric information and time restraints are factors that create a situation in which consumers are not able or not willing to prove the quality of food products. Most of the trust attributes are considered to be components of quality by the consumers. In the progress of sophistication of the control- and measurement technologies credence attributes alter to experience attributes (Hanf and Drescher, 1994). With this object actors have to develop monitoring, food safety, traceability, quality standards, communication technology. They must also have understanding of changes in marketing, good knowledge about the market and consumers, and the ability to follow the trends of product development and new innovations (Juhász and Kürthy, 2006).

To fulfill such requirements, more strictly coordinated supply chains have been evolved. Quite often such chains are formed of independent but collaborating enterprises called supply chain networks. According to Lazzarini et al. (2001) and Omta et al. (2001), „supply chain networks are commonly characterized as firms that are embedded within a complex network of horizontal (i.e. strategic alliances, joint ventures) and vertical (buyer and supplier) relationships” (Ng et al., 2003). Such as supply chain network also could be defined as a strategic network (Hanf et al., 2004). According to Burr (1999), intensity of the relations in strategic network is high and set for a long term. Traditionally, the management of such supply chains focused on operational aspects, but there is a benefit in considering retail supply chain strategy in terms of relationship building among retailers and their key supply chain members (Mentzer et al., 2000). Mentzer et al. (1999) defined supply chain management as “the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain (that consists of multiple firms), for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole”. This suggests supply chain management is the management of close interfirm relationships, so understanding interfirm relationships is important for successful development in a supply chain network (Mentzer et al., 2000).

In context of cooperative interfirm relationships, the importance of trust has increased because of its benefits such as reduction of transaction costs, increased information sharing, and willingness to invest in specific interfirm relationships. Several researchers worked on trust from theoretical and empirical perspectives (Das and Teng, 1998; Zaheer et al., 1998; Dyer and Chu, 2003; Laaksonen et al., 2008). The research of Lindgreen et al. (2005) shows that trust, defined as “a willingness to rely on an exchange partner in whom one has confidence” (Moorman et al., 1993), is seen as the most important foundation for relationship marketing (Andaleeb, 1996; Crosby et al., 1990; Morgan and Hunt, 1994) because of the lack of trust has frequently been mentioned between the chain actors (Srivastava, 1999; Urlings et al., 2000). Furthermore, in the context of procurement systems, which are characterized by contractual relationships between buyers and sellers, the level of trust is an important factor influencing participation.

In this condition each actor in the supply chain network needs to collaborate in order to fulfill the requirements of consumers. It means suppliers also need to cope with developments in coordination with other actors of the chain. It is especially difficult for small producers in Central and Eastern European Countries like Hungary, where almost the half of agricultural production is produced by them; they make up almost 90% of the number of producers. These small farmers have difficulties in the above mentioned requirements. If they want to integrate in the new market environment, one possible way is to cooperate horizontally. Cooperatives may solve many problems in situation of vertical coordination; however the

numbers of cooperatives are still low in transition countries (Fertő and Szabó, 2002). A number of case studies indicate that small farmers are slow to realize this because the negative experience with collective farming from the Communist period has made a significant impact upon farmers' attitudes toward any form of cooperation (Csáki and Forgács, 2008). One of the possible explanations for this phenomenon is the lack of trust among farmers, and between farmers and their partners (Bakucs et al., 2007).

#### OBJECTIVE AND RESEARCH QUESTIONS

In context of supply chain networks, where cooperative interfirm relationships have become important, it is obvious that the role of trust has also become relevant. In this situation, the question is arising whether trust is the only influencing factor of a successful cooperation. To be able to answer the question it is needed to know what the key elements are in the decision to cooperate. Therefore, this preliminary paper investigates factors which might have impact in the decision to cooperate like expectation, confidence, cooperativeness as well as trust.

Thus, the rest of the paper is organized as follows. The first section describes key elements of the decision to cooperate. It starts with general definitions of cooperation, and then states characteristics of main components. As we attempt to clarify the role of trust in this decision, we need to define it and investigate the bases and effect of trust. The second section discusses the role of the theoretically described key elements as well as trust in "real" examples of cooperation. We use successful cases for integration of small producers to modern procurement system in a CEEC. It is provided by three studies about Hungarian cooperatives which were conducted by Juhász and Kürthy (2006) Bakucs et al. (2007), Forgács (2008).

#### THEORETICAL FRAMEWORK

Scientists realized the importance of trust in cooperative relationships and systematic research on trust in context of cooperation crosses already more than 30 years. It is because the word "trust" is so confusing (Shapiro, 1987) and broad (Williamson, 1993; McKnight et al., 1998). Several researchers worked on trust from theoretical and empirical perspectives (Das and Teng, 1998; Zaheer et al., 1998; Dyer and Chu, 2003; Laaksonen et al., 2008). Besides many definitions, there are several classifications by different criteria like its strength, quality, relational level, contents, development processes, as well as work on topic of trust development and dynamics of trust is also researched. Thus, trust as an important element in the decision to cooperate has been widely researched, therefore, the current approach defines trust in a way that distinguishes trust from other similar constructs (cooperativeness, confidence, expectation) in the decision to cooperate, which often have been confused with trust in the literature (Mayer et al., 1995) and we only define trust and introduce a classification by bases of trust (Belaya et al., 2008) to illustrate the influencing connections between trust and other constructs in the decision to cooperate.

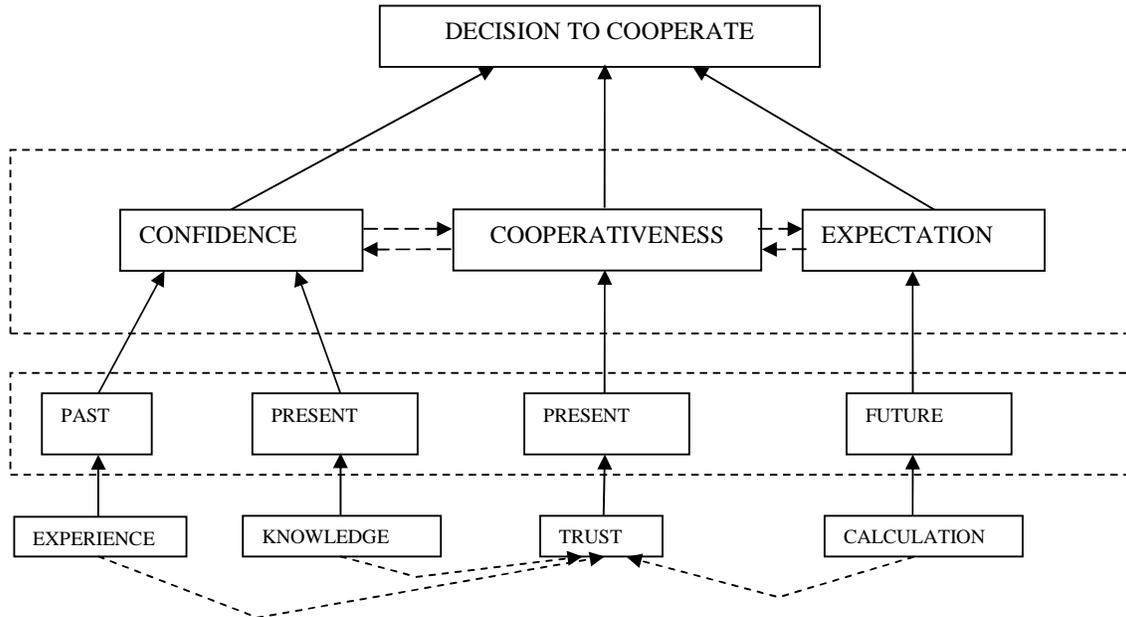
#### KEY ELEMENTS OF DECISION TO COOPERATE

Cooperation can be defined as a process by which individuals, groups, and organizations come together, interact, and form different relationships for mutual gain or benefit (Smith et al., 1995). Since such cooperation consists two or more actors, who must consider that each firm has different motives, reasons and preconditions for joining, firms usually are not equable; cooperation might be discouraged (Hanf and Dautzenberg, 2006). Such heterogeneity could cause a number of inefficiency problems like; agency problems, commitment problems, decision-making problems, opportunistic behavior, coordination problems, and strategy-related problems (Hanf and Schweickert, 2007). Furthermore, other

factors might be an obstruction of fluent cooperation action. For example, cooperation does not always create short-term advantages for the firms involved, but they also absorb resources – especially during their establishment, because it is beneficial in the long-term.

Because of such problems firm needs to have clear expectation and certain level of confidence in others’ action in the decision to cooperate. But often it is not possible to get enough level of them in which case actors need general cooperativeness.

Figure 1. Decision to cooperate (own source)



In the figure 1 we illustrated our preliminary ideas about the structure of these 3 constructs in the decision to cooperate, which will be investigated with their bases in the following parts of the work.

### Expectation

Firms have to recognize cooperation as a mean to overcome limitations of their resources based on their calculations. Firms also have to understand that cooperation is a lever that increases their profits. Overall, firms must understand cooperation as a unique source for pursuing strategic objectives by achieving cooperation benefits (Echols and Tsai, 2005; White and Siu-Yun Lui, 2005; Zaheer and Bell, 2005; Hanf and Dautzenberg, 2006). For example in modern supply chain networks firms can exploit technological spillovers.” (Shan et al., 1994), reduce the need for costly direct monitoring, lower resource demands than full ownership - because individual firms do not have to supply all resources (Combs and Ketchen, 1999) by having access to complementary assets (Rothaermel, 2001). Interfirm cooperation can be useful way to have alternative ways of reducing transaction costs (Shaw et al., 2000). It can help to overcome long-term contract’s constraints to have important safeguard mechanism mitigating external and internal hazards and to encourage long-term evolutions (Luo, 2002). Firms in cooperation can easier build a brand name, design products (Heide and Miner, 1992; Combs and Ketchen, 1999) learn (Powell, Koput, and Smith-Doerr, 1996) reveal information (Ross and Conlon, 2000) for example new technology from partners and to develop new product (Rothaermel, 2001), gaining complementary skills by getting into sources of know-how located outside the boundaries of the firm (Ring and Van De Ven, 1992). Furthermore, firms have better chance to comply with external pressure (Hanf and

Dautzenberg, 2006). This is particularly true in the context of the agri-food business since the “new food quality” is being produced as the result of the cooperation between all stages of the food chain (Hanf and Hanf, 2007; Theuvsen, 2004; Obersojer and Weindlmaier, 2006; Menard and Klein, 2004).

### **Confidence**

In this situation, firms demand to perceive certainty that their partners will act in a responsive manner and garner enough confidence. In order to understand more the role of confidence in the decision of cooperation, it is necessary to clarify what confidence means. Generally, Das and Teng (1998) defined confidence in partner cooperation as “a firm's perceived level of certainty that its partner firm will pursue mutually compatible interests, rather than act opportunistically“. At the same time, in some definitions trust is equally defined “... as the confidence held by one party in its expectations of the behavior and good-will of another party regarding business actions” (Ring and Van de Ven, 1992; Zucker, 1986; Mayer et al., 1995; Carson et al. 2003). Such confidence can be based on experience in the past or on knowledge in the present.

*Insert Table 1 around here*

For example, experience based confidence develops by having close and trusting relations (Moran, 2005), or gaining satisfaction with past outcomes indicates equity in the exchange (Ganesan, 1994); or if the partner firm fulfills positive expectations (Gulati and Nickerson, 2008). Consequently, the firms can gain confidence in each other over time having evidence about past performance (Siegrist et al., 2003; Earle and Siegrist, 2008, McEvily et al., 2003).

If there is no experience with partners, firm can also have confidence by having knowledge about clearly defined role responsibilities, clarified expectations (Nygaard and Dahlstrom, 2002, Perrone et al., 2003), shared experience (Kor, 2006) rich experience of older executives (Golden and Zajac, 2001), formal mechanisms of coordination, informal organization, such as shared experience, culture, leadership, norms, and precedent (Gulati et al., 2005), control (Das and Teng, 1998), sharing of values (Jones and George, 1998; Earle and Siegrist, 2008), reciprocal or joint commitment inputs (Gundlach et al., 1995).

### **Cooperativeness**

It is often impossible to monitor every detail in most exchanges; firms must always have a minimum level of cooperativeness. Cooperativeness is the attribute that defines the players' willingness to cooperate. According to the literature the following factors have effect on actors' willingness to cooperate.

- Likely future interactions - The greater the amount, “the less important is the payoff in a current period relative to the number of potential opportunities for reward or retaliation, and the lower is the relative risk of current cooperation” (Heide and Miner, 1992).
- Expectation of future cooperation – It reduces the incentive for opportunistic behavior (Nooteboom et al., 1997).
- Expectations of pay-offs from future cooperative behavior – It support cooperation in the present (Poppo and Zenger, 2002).
- Expectation of another party's willingness to cooperate – It is positively correlated with an individual's decision to take risks and cooperate with the other party (Dawes, 1980). When individuals are committed to a collectivity, they are more loyal to it and are more willing to invest their time, effort, and attention on behalf of it (Whitener et al., 1998; McEvily et al., 2003).

- Collective learning – Primarily involves learning about the partner in a manner that enables more efficient cooperation (Inkpen 2000).
- Similarities in goals and values – "when ingroup members perceive similarities in goals and values, they believe that other ingroup members are more likely to behave in accordance with these values (i.e., beliefs about ingroup members' integrity) and that ingroup members are more likely to care about goals that are good for all group members (i.e., beliefs about in-group members' benevolence)" (Williams, 2001; McEvily et al., 2003).
- Trust that is based on past experience, interactions and partners attributes – It develops the relationship maturity and influence the willingness to put oneself at risk.

### *Trust*

Often cited definition of trust is "willingness to be vulnerable," proposed by Mayer, Davis, and Schoorman (1995). In other words define "trust" to mean that one believes in, and is willing to depend on, another party (McKnight et al., 1998). It is "a pre-eminently modern phenomenon, resting, ultimately on the self-regulating, autonomous individual" (Seligman, 1998). "Trust is the degree to which the trustor holds a positive attitude toward the trustee's goodwill and reliability in a risky exchange situation" (Gambetta, 1988; Nooteboom et al., 1997; Ring & Van de Ven, 1992; Das and Teng, 1998). Trust requires a previous engagement on a person's part, recognizing and accepting that risk exists (Mayer et al., 1995). So, former risk must be recognized and assumed, meaning that trust develops over time. Trust by this definition is independent of contractual provisions or controls in an exchange; it is a personal trait that influences commitment decisions in the sense that it affects an individual's assessment of the benevolence of other actors (Lazzarini et al., 2008). The definition of trust is the willingness of a party to be vulnerable to the actions of another party, irrespective of the ability to monitor or control the other party (Mayer et al., 1995). "Control or confidence is what you have when you know what to expect in a situation; trust is what you need to maintain interaction if you do not" (Seligman, 1998). Therefore, trust is needed when there is no basis for confidence, like when behavior cannot be predicted or when strangers are part of the interaction. Trust is necessary when the other is unknown, or behavior cannot be imputed or predicted, because either there is no system within which sanctions can be imposed or there is no underlying sense of or terms of familiarity or sameness that would allow such prediction (Seligman, 1998).

There are number of classifications of trust but we consider the following five kinds, according to their origin: calculus-based, experience-based, cognition-based, goodwill, and affect-based trust (Belaya et al., 2008). Calculus-based trust is based on both the fear of punishment for violating trust and rewards for preserving it (Lewicki & Bunker, 1996). Trust can also originate from experience that has developed into a routine behavior, thus, it is named experience-based trust (Woolthuis et al., 2002). Trust may also evolve from knowledge and inference of the partner's abilities, traits, goals, norms, values, which is referred to as cognition-based or economic trust (Larson, 1992; Gulati, 1995; McAllister, 1995; Shapiro, 1987). Before the actual relationship begins, goodwill trust forms out of an initial value which is based on inclination or willingness to trust (Mayer et al., 1995). This inclination may be determined by survival conditions, experience and socialization, traits of people and/or firm culture, or institutional environment. Furthermore, the cooperation attitude is heavily influenced by this type of trust. At the moment of entering a trustful relationship, firms already possess the willingness to trust each other. Another kind of trust based on loyalty, care, warmth, friendship or empathy for the other partner, and is called affect-based trust (McAllister, 1995), This type of trust can also originate from kinship (Ouchi, 1980),

similarity or mutual identification on the basis of shared cognitive frameworks (Hellriegel et al., 1992; Gulati, 1995; Burt, 1992). A company's good image and reputation could serve as an example of such type of trust.

## HUNGARIAN CASE STUDIES

In this part, we investigate the role of the above mentioned three constructs of decision to cooperate in "real" examples of integration of small producers to modern procurement system in Hungary. We chose three studies about cooperatives which were conducted by Juhász and Kürthy (2006), Bakucs et al. (2007), Forgács (2008). They investigated the success factors in five different cooperatives.

### **AVIUM agricultural cooperative and AVIUM 2000 poultry processing cooperative**

The poultry farmers around Besnyő founded AVIUM agricultural cooperative in 1993 after the new cooperative law was accepted by the parliament. AVIUM concentrated the supply of live chickens and organized joint procurement of inputs. To fill a market niche and to gain the market security and profit surplus provided by the processing stage of the vertical chain, a few members of the agricultural cooperative later founded AVIUM 2000 poultry processing cooperative. Expectations of members in these cooperatives were to achieve more favorable producer prices, sales security, and reduction of transaction costs. They aimed to concentrate the supply (joint marketing), thus increasing market security, countervailing power and the obtainable price for farmers; and to purchase jointly the input materials, thus lowering the costs of production. At the founding of these agricultural cooperative, producers who became members all knew each other through professionally and enjoyed good personal relationships, especially with the president. The confidence level of members was based on their knowledge about the integrity of the president (authenticity, reliability) and his personal and professional connections. Furthermore, they knew about the restricted circle of management controls, which secures the flexibility and quick adaptation of the system. Furthermore, the authors concluded that the mutual trust and interest were important success factors in these cooperatives. (Juhász and Kürthy, 2006)

### **Mórákert Cooperative**

The Mórákert cooperative plays important role with a large number of small farms in the fruit and vegetable production of Hungary. In this sector, the most successful among the similar cooperatives that was established by small-scale farmers and is still developing, with increasing annual turnover and membership. The main aims of founding this cooperative were reduction transaction costs and solving the problems from incomplete pricing mechanisms. According to the results of Bakucs et al., (2007), members have other reasons for choice of cooperative. The first four most relevant factors are selling quantity via cooperative, existence of contract, flexibility, trust. Other not so relevant factors were personal contacts, services, price and not relevant factors are input finance, payment speed, price premium, delivery, habit. Bakucs et al. (2007) investigated these factors, and made cluster analyses. According to their results, there are three clusters with the following factors: In the first cluster importance of trust, personal contact, the existence of contract, and the direct benefits from cooperative membership including price, input finance and services were identified. In the second cluster, all of the factors means are below the average. In the third cluster, the factors of 'quantity selling via cooperative' and 'payment speed' and 'service' were important. (The share of the clusters: 1. 36 per cent; 2. 34 per cent; 3. 30 per cent). (Bakucs et al., 2007)

## **Béke Cooperative**

The Béke Co-op is a traditional production cooperative, was founded in 1955, by the poorest peasants in the town. During transition to a market system, the president was replaced by a new one in 1990. The level of trust between the former and the new president and between them and most of the members was high; therefore the members did not want to break up the cooperative community that they built up together over the years. They strongly believed in cooperation because of the achieved successful developments. (Forgács, 2008)

## **Hajdú gazdák Cooperatives**

Farmer' Club was founded in 1993, with the aims of representing producers' interests, improving the skills of producers, developing quality of products, and increasing quantity of selling. The member of Farmer's Club established the Hajdú Purchasing and Marketing Cooperative (PMCH) in 1996, to gather and share information, to purchase inputs jointly and to improve marketing of products. Later, in 1999, they changed to Hajdú gazdák Purchasing and marketing cooperatives (PMCHG) to access additional government support. Members with significant individual professional experience, adjust their actions to reduce transaction costs. (Forgács, 2008)

## **Conclusion**

It is observable that each cooperative was established because members expected to reduce transaction costs. Most of them also aimed to create sales security and other different objectives created in the new business environment.

*Insert Table 2 around here*

They were able to cooperate even though they might have had bad experiences with cooperatives. They could garner enough certainty in the possibilities of cooperatives; however, their confidence has different bases. Most likely the knowledge about ability of cooperative leaders and management control helped them in decision to cooperate or not. In other cases the individuals' professional experiences provided certainty in each other.

It is observable that members' expectations and sources of gaining confidence are different even in the same cooperative. We assume that members of Mórakert, in the first cluster, probably had worse experience in the past and needs higher level of confidence in transactions. That is why for them the trust level, personal contacts and good contracts are the most important factors in the decision to cooperate. Contrarily members, in the third cluster, probably have better experience in the past, they do not need so high level of certainty. We also assume that trust in the ability of cooperative leaders and the filter rules applied to potential members are more important factors in the decision to cooperate for members of the first cluster while the strict coordination of the required quality and quantity of products has bigger importance in the decision to cooperate in case of members in the third cluster.

Such knowledge and experiences might be integrated into their level of general cooperativeness by increasing level of mutual trust with members and with leaders. Like in case of both Béke Cooperative and Hajdú gazdák Cooperative where members emphasized the importance of the duration of personal relationships among members and the importance of trust. However, in PMCHG, members had higher level of trust with business partners while in Béke coop members had higher level of trust in formal institutions (Forgács, 2008).

Thus, it is observable that these cooperatives are operating well after the bad experience in their history. The role of expectation and perceived certainty are the most important factors that can improve the general cooperativeness.

## SUMMARY

For many years it has been observable that in the agri-food businesses there is an ongoing request in efficiency gains and quality enhancement by the alignment of actions of all players of food chains. Hence, strictly coordinated chain organizations evolved and consequently supply chain networks have emerged. Taking into account agricultural production characteristics, most often supply chain networks are still composed of many farmers. This in turn, leads to horizontal cooperation on the farm level. In general, authors found that cooperation can fail due to lack of trust between chain network members, lack of understanding of the benefits of collaboration, and lack of strategic vision. But successful collaboration can be developed if certain conditions are enhanced, for example, if members have enough level of certainty and clear expected benefits from cooperation. Therefore in this work, we introduced preliminary ideas about mechanisms in the decision to cooperate. In order to understand it better, we have distinguished trust from other similar constructs like cooperativeness, confidence, and expectation. Furthermore, the bases of these constructs are also analyzed. Elaborating cases studies about Hungarian cooperatives, conducted by Juhász and Kürthy (2006), Bakucs et al. (2007), Forgács (2008), it is observable that (table 2) the main expectations are to secure the market and decrease transaction costs. In addition, these cooperatives could be established, because of the significant confidence level of members. Their confidence based on their experience with other members and/or the leader, on the clear rules, and on knowledge about members' mutual interest. We can also observe that trust in the leader of the cooperatives can be integrated into the confidence and cooperativeness of the members. So we can see that due to verticalisation as well as due to the huge number of small producers, the idea of forming horizontal co operations (i.e. cooperatives) can and must be taken into the context of transition countries.

## REFERENCES

- Andaleeb, S. S. (1996): "An experimental investigation of satisfaction and commitment in marketing channels: the role of trust and dependence". *J. Retailing* 72. 77-93.
- Bakucs, L. Z., I. Fertő, G. G. Szabó (2007): "Innovative Practice Hungary: Mórakert Cooperative". Institute of Economics in Hungarian Academy of Sciences.
- Belaya, V., T. Török, J. Hanf (2008): "Recognizing the Links between Power and Trust in Managing Supply Chain Relationships". XII Congress of the European Association of Agricultural Economics, Gent, Belgium.
- Burr, B. (1999): "Koordination durch Regeln in selbstorganisierenden Unternehmensnetzwerken". *Zeitschrift für Betriebswirtschaft* 69.10. 1159-1179.
- Burt, R. (1992): "Structural Holes: The Social Structure of Competition". Cambridge, Mass, *Harvard University Press*
- Carson, S. J., A. Madhok, R. Varman, G. John (2003): "Information Processing Moderators of the Effectiveness of Trust-Based Governance in Interfirm R&D Collaboration". *Organization Science* 14. 1. 45-56.
- Child, J. and G. Möllering (2003): "Contextual Confidence and Active Trust Development in the Chinese Business Environment". *Organization Science* 14.1. 69-80.
- Combs, J. G. and D. J. Ketchen (1999): "Explaining Interfirm Cooperation and Performance: Toward a Reconciliation of Predictions from the Resource-Based View and Organizational Economics". *Strategic Management Journal* 20. 9. 867-888.
- Crosby, L.A., K.R. Evans, D. Cowles (1990): "Relationship Quality in Services Selling: An Interpersonal Influence Perspective". *J. Marketing* 54. 68-81.

- Csáki Cs. and Cs. Forgács (2008): "Restructuring market relations in food and agriculture of Central and Eastern Europe - Impacts upon small farmers". Observations on Regional Level. In *Regional Outcome. Central and Eastern Europe*. (Eds.) 29-51.
- Das, T. K. and B.-S. Teng (1998): „Between Trust and Control: Developing Confidence in Partner Cooperation in Alliances”. *The Academy of Management Review* 23.3. 491-512.
- Dawes, R. M. (1980): "Social dilemmas". *Annual Review of Psychology* 31. 169-193.
- Dyer, J.H. and W. Chu (2003): "The role of trustworthiness in reducing transaction costs and improving performance: Empirical evidence from the united states, Japan and Korea". *Organization Science* 14.1. 57-68.
- Earle, T. C. and M. Siegrist (2008): "On the Relation Between Trust and Fairness in Environmental Risk Management". *Risk Analysis* 28.5. 1395-1413.
- Echols, A. and W. Tsai (2005): "Niche and performance: The moderating role of network embeddedness". *Strategic Management Journal* 26. 219-238.
- Fertő I. and G. G. Szabó (2002): "Vertical Co-ordination in Transition Agriculture: a Hungarian Cooperative Case Study". Institute of Economics Hungarian Academy of Sciences. KTK/IE Discussion Papers
- Forgács, Cs. (2008): "Leadership and importance of social capital in cooperatives during transition: A case study of two cooperatives". *Journal of Rural Cooperation* 36.1. 57-72.
- Gambetta, D. (1988): "Can we trust trust?". In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations*: 213- 237. New York: Basil Blackwell.
- Golden, B. R. and E. J. Zajac (2001): „When will boards influence strategy? Inclination + Power = Strategic Change”. *Strategic Management Journal* 22. 1087-1111.
- Gulati, R. (1995): "Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances". *Academy of Management Journal* 38. 85-112.
- Gulati, R. and J. A. Nickerson (2008): "Interorganizational Trust, Governance Choice, and Exchange Performance". *Organization Science* 19.5. 688-708.
- Gulati, R., P. R. Lawrence, P. Puranam (2005): "Adaption in vertical relationships: Beyond incentive conflict". *Strategic Management Journal* 26. 415-440.
- Gundlach, G. T., R. S. Achrol, J. T. Mentzer (1995): „The Structure of Commitment in Exchange”. *The Journal of Marketing* 59.1. 78-92.
- Hanf, C-H. (2000): „Wettbewerbsfähigkeit und Unternehmertum in der Land- und Ernährungswirtschaft“. *Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues e.V.*, Bd. 36. 265-271.
- Hanf, C-H. and K. Drescher (1994): "Der Einfluß von Verbraucherverhalten, Produktqualität und technischem Fortschritt auf vertikale Koordination im Nahrungsmittelsektor". *Agrarwirtschaft* 43.12. 423-430.
- Hanf, J. and C-H. Hanf (2007): "Does food quality management create a competitive advantage?" In: THEUVSEN, L./ SPILLER, A./ PEUPERT, M./ JAHN, G. (Eds.) *Quality management in food chains*. Wageningen Academic Publishers, 489-502.
- Hanf, J. and E. Schweickert (2007): "How to deal with member heterogeneity – Management implications". S.40-48.
- Hanf, J. and K. Dautzenberg (2006): "A theoretical framework of management". *Journal on Chain and Network Science* 6. 79-94.
- Hanf, J. and R. Kühn (2004): "Strategy focussed Supply Chain Networks". In: Bremmers / Omta / Trienekens / Wubben (eds.) „Dynamics in Chain and Networks“. Wageningen Academic Publishers 104-110.

- Heide, J. B. and A. S. Miner (1992): "The Shadow of the Future: Effects of Anticipated Interaction and Frequency of Contact on Buyer-Seller Cooperation". *The Academy of Management Journal* 35.2. 265-291.
- Hellriegel, D., J.W. Slocum, R. W. Woodman (1992): "Organizational Behavior". West Publishing Company, St. Paul.
- Inkpen, A. C. (2000): „Research notes and communications A note on the dynamics of learning alliances: Competition, cooperation, and relative scope“. *Strategic Management Journal* 21. 775-779.
- Jones, G. R. and J. M. George (1998): "The Experience and Evolution of Trust: Implications for Cooperation and Teamwork" *The Academy of Management Review*. 23.3. 531-546.
- Juhász A., A. Kürti, A. Seres, M. Stauder (2008): "Effect of commerce concentration on the small scale production and the adaptation of the small-scale vegetable and fruit producers". Műhelytanulmányok. MT-DP – 2008/2 MTA Közgazdaságtudományi Intézet
- Juhász, A. and Gy. Kürthy (2006): "AVIUM agricultural cooperative and AVIUM 2000 poultry processing cooperative: successful cooperatives in the Hungarian poultry sector". Agricultural Research Institute. Hungary. [www.regoverningmarkets.org](http://www.regoverningmarkets.org).
- Kor, Y. Y. (2006): "Direct and interaction effects of top management team and board compositions on R&D investment strategy". *Strategic Management Journal* 27. 1081-1099.
- Laaksonen, T., T. Jarimo, H. I. Kulmala (2008): "Cooperative strategies in customer-supplier relationships: The role of interfirm trust". *International Journal of Production Economics*
- Larson, A. (1992): "Network dyads in entrepreneurial settings: a study of governance of exchange relationships". *Administrative Science Quarterly* 37. 76-104.
- Lazzarini, S. G., G. J. Miller, T.R. Zenger (2008): "Dealing with the Paradox of Embeddedness: The Role of Contracts and Trust in Facilitating Movement Out of Committed Relationships". *Organization Science* 19.5. 709-728.
- Lazzarini, S., F. Chaddad, M. Cook (2001): "Integrating Supply Chain and Network Analysis: The Study of Netchains". *Journal on Chain and Network Science* 1.1. 7-22.
- Lewicki, R. J., D. J. McAllister, R. J. Bies (1998): „Trust and Distrust: New Relationships and Realities“. *The Academy of Management Review* 23.3. 438-458.
- Lewicki, R.J. and B. B. Bunker (1996): "Developing and Maintaining Trust in Work Relationships". In: Kramer / Tyler (eds.) "Trust in Organizations: Frontiers of Theory and Research". Thousand Oaks, CA: SAGE Publications 114-139.
- Lindgreen, A., R. Palmer, J. Trienekens (2005): "Relationships within the supply chain: A case study". *Journal on Chain and Network Science* 5
- Luo Y. (2002): "Contract, Cooperation, and Performance in International Joint Ventures". *Strategic Management Journal* 23. 903-919.
- Mayer, R. C., J. H. Davis, F. D. Schoorman (1995): "An integrative model of organizational trust". *Academy of Management Review* 20. 709-734.
- McAllister, D. J. (1995): "Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations". *Academy of Management Journal* 38. 24-59.
- McEvily, B., V. Perrone, A. Zaheer (2003): "Trust as an Organizing Principle". *Organization Science* 14.1. 91-103.
- McKnight, D. H., L. L. Cummings, N. L. Chervany (1998): "Initial Trust Formation in New Organizational Relationships". *The Academy of Management Review* 23.3. 473-490.
- Menard, C. and P.G. Klein (2004): "Organizational Issues in the Agrifood Sector: Toward a Comparative Approach". *American Journal of Agricultural Economic* 86. 750-755.

- Mentzer, J. T., J. William, J. S DeWitt, S. Keebler, N. Min, W. Nix, C. D. Smith, Z. G. Zacharia (1999): "What is Supply Chain Management?". Unpublished Working Paper. The University of Tennessee, Knoxville, TN.
- Mentzer, J. T., S. Min, Z. G. Zacharia (2000): „The Nature of Interfirm Partnering in Supply Chain Management”. *Journal of Retailing* 76.4. 549-568.
- Moorman, C., R. Deshpandé, G. Zaltman (1993): "Relationships between providers and users of market research: the role of personal trust". Working Paper Series, Cambridge, Massachusetts, Marketing Science Institute.
- Moran, P. (2005): "Structural vs. relational embeddedness: Social capital and managerial performance". *Strategic Management Journal* 26. 1129–1151.
- Morgan, R.M. and S.D. Hunt (1994): "The commitment-trust theory of relationship marketing". *J. Marketing* 58. 20-38.
- Ng, D., S. Sonka, R. Westgren (2003): "Co-evolutionary Processes in Supply Chain Networks". *Journal on Chain and Network Science* 3.1. 45–58.
- Nooteboom, B., H. Berger, N. Noorderhaven (1997): "Effects of trust and governance on relational risk". *Academy of Management Journal* 40. 308-338.
- Nygaard, A. and R. Dahlstrom (2002): "Role Stress and Effectiveness in Horizontal Alliances". *Journal of Marketing* 66. 61–82.
- Obersojer, T. and H. Weindlmaier (2006): "About the Preparedness of Dairy Companies for ECR". In: Bijman, J., S.W.F Omta, J.H. Trienekens, J.H.M Wijnands, E.F.M. Wubben (eds.). International agri-food chains and networks. Wageningen Academic Publishers 151-161.
- Omta, A. W. F., J. H. Trienekens, G. Beers (2001): "Chain and network science: A research framework". *Journal on Chain and Network Science* 1.1. 1-6.
- Ouchi, W.G. (1980): "Markets, Bureaucracies, and Clans". *Administrative Science Quarterly* 25. 129-141.
- Perrone, V., A. Zaheer, B. McEvily (2003): „Free to Be Trusted? Organizational Constraints on Trust in Boundary Spanners". *Organization Science* 14.4. 422-439.
- Picot, A., R. Reichwald, R.T. Wigand (2001): "Die grenzenlose Unternehmung". Gabler Verlag, 4. Aufl. 316-319.
- Poppo, L. and T. Zenger (2002): „Do Formal Contracts and Relational Governance Function as Substitutes or Complements?". *Strategic Management Journal* 23.8. 707-725.
- Ring, P. S. and A. H. Van De Ven (1992): "Structuring Cooperative Relationships between Organizations". *Strategic Management Journal* 13. 7. 483-498.
- Ring, P. S. and A. H. Van de Ven (1992): „Structuring cooperative relationships between organizations". *Strategic Management J.* 13. 483-498.
- Ross, W. H. and D. E. Conlon (2000): "Hybrid Forms of Third-Party Dispute Resolution: Theoretical Implications of Combining Mediation and Arbitration". *The Academy of Management Review* 25. 2. 416-427.
- Rothaermel, F. T. (2001): "Research note Incumbent's Advantage Through Exploiting Complementary Assets via Interfirm Cooperation". *Strategic Management Journal* 22. 687–699.
- Seligman, A. B. (1998): „Trust and Sociability: On the Limits of Confidence and Role Expectations". *American Journal of Economics and Sociology* 57.4. 391-404.
- Shan, W., G. Walker, B. Kogut (1994): "Interfirm Cooperation and Startup Innovation in the Biotechnology Industry". *Strategic Management Journal* 15. 5. 387-394.

- Shankar, G. (1994): "Determinants of Long-Term Orientation in Buyer-Seller Relationships". *The Journal of Marketing* 58.2. 1-19.
- Shapiro, S. P. (1987): "The social control of impersonal trust". *American Journal of Sociology* 93. 623-658.
- Shaw, J. D., N. Gupta, J. E. Delery (2000): "Research Notes and Communications Empirical Organizational-Level Examinations of Agency and Collaborative Predictions of Performance Contingent Compensation". *Strategic Management Journal* 21. 611-623.
- Siegrist, M., T. C. Earle, H. Gutscher (2003): „Test of a Trust and Confidence Model in the Applied Context of ElectromagneticField (EMF) Risks". *Risk Analysis* 23.4. 705-716.
- Smith, K. G., S. J. Carroll, S. J. Ashford (1995): "Intra- and Interorganizational Cooperation: Toward a Research Agenda". *The Academy of Management Journal* 38. 1. 7-23.
- Srivastava, R. (1999): "Transaction in the International Pork Industry". Policy Branch, Ottawa, Ontario, Economic and Policy Analysis Division.
- Theuvsen, L., (2004): "Transparency in netchains as an organizational phenomenon: exploring the role of interdependencies". *Journal on Chain and Network Science* 4. 125-138.
- Urlings, H. A. P., P. Walstra, G. M. L. Tacken (2000): „Marktgericht werken in de varkensvleesketen“. Presentation at Veehouderijsystemen van de toekomst. 20 April, Utrecht, www.vsys.nl.
- White, S. and S. Siu-Yun Lui (2005): "Distinguishing costs of cooperation and control in alliances". *Strategic Management Journal* 26. 913-932.
- Whitener, E. M., S. E. Brodt, M. A. Korsgaard, J. M. Werner (1998): „Managers as Initiators of Trust: An Exchange Relationship Framework for Understanding Managerial Trustworthy Behavior". *The Academy of Management Review* 23.3. 513-530.
- Williams, M. (2001): "In whom we trust: Group membership as an affective context for trust development". *Acad. Management Review* 26. 377-396.
- Williamson, E. (1993): "Calculativeness, trust, and economic organization". *Journal of Law and Economics* 34. 453-502.
- Woolthuis, R.K., B. Hillebrand, B. Nooteboom (2002): "Trust and Formal Control in Interorganisational Relationships". Erasmus Research Institute of Management (ERIM)
- Zaheer, A. and G.G. Bell (2005): "Benefiting from network position: firm capabilities, structural holes, and performance". *Strategic Management Journal* 26. 809-825.
- Zaheer, A., B. McEvily, V. Perrone (1998): "Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance". *Organization Science* 9. 2. 141-159.
- Zucker, L. G. (1986): "Production of trust: Institution a sources of economic structure". 1, 840-1920. BarryM. Staw and L. L. Cummings, eds. *Research in Organizational Behavior*. 8, JAI Press, Greenwich, T, 53-111.

## APPENDIX A

### Bases of confidence

Experience based confidence	Knowledge based confidence
<ul style="list-style-type: none"> <li>- Close and trusting relations (Moran, 2005)</li> <li>- Satisfaction with past outcomes indicates equity in the exchange (Ganesan, 1994)</li> <li>- If the partner firm fulfills positive expectations (Gulati and Nickerson, 2008)</li> <li>- Experience or evidence (Earle and Siegrist, 2008)</li> <li>- Past performance (Siegrist et al., 2003; Earle and Siegrist, 2008)</li> <li>- Over time, as the parties gain confidence in each other (McEvily et al., 2003)</li> </ul>	<ul style="list-style-type: none"> <li>- Clearly defined role responsibilities (Nygaard and Dahlstrom, 2002)</li> <li>- Shared experience (Kor, 2006)</li> <li>- Clarified expectations (Nygaard and Dahlstrom, 2002 )</li> <li>- Rich experience of older executives (Golden and Zajac, 2001)</li> <li>- Formal mechanisms of coordination (Gulati et al., 2005)</li> <li>- Informal organization, such as shared experience, culture, leadership, norms, and precedent (Gulati et al., 2005)</li> <li>- Control (Das and Teng, 1998)</li> <li>- Sharing of values (Jones and George, 1998; Earle and Siegrist, 2008)</li> <li>- Defining system of role expectations (Perrone et al., 2003)</li> <li>- Reciprocal or joint commitment inputs (Gundlach et al., 1995)</li> <li>- Institutions designed to constrain future performance (e.g., evidence, regulations, rules and procedures, indicators of competence, etc.) (Earle and Siegrist, 2008)</li> </ul>

Table 1.: Bases of confidence

## APPENDIX B

Table 2. Results from case studies (Forgács, 2008; Juhász and Kürthy, 2006; Bakucs et al. 2007)

	CONFIDENCE		COOPERATIVENESS	EXPECTATION
	BASED ON EXPERIENCE	BASED ON KNOWLEDGE		
AVIUM agricultural cooperative and AVIUM 2000 poultry processing cooperative	At the founding of the agricultural cooperative, producers who became members all knew each other through professionally and enjoyed good personal relationships, especially with the president.	<ul style="list-style-type: none"> <li>- Integrity of the president (authenticity, reliability) and his personal and professional connections</li> <li>- Restricted circle of management controls everything directly, which secures the flexibility and quick adaptation of the system</li> </ul>	Mutual trust and interest	<ul style="list-style-type: none"> <li>- more favorable producer prices</li> <li>- sales security</li> <li>-Reduction of transaction costs               <ul style="list-style-type: none"> <li>- By concentrating the supply (joint marketing), thus increasing market security, countervailing power and the obtainable price for the chicken fattening farmers.</li> <li>- By collective purchasing of the input materials, thus lowering the costs of production.</li> </ul> </li> </ul>
Mórákert cooperative		<ul style="list-style-type: none"> <li>- Filter rules applied to potential members</li> <li>- Strict coordination of the required quality and quantity of products.</li> <li>- The ability of cooperative leaders</li> </ul>	Trust in leader	<ul style="list-style-type: none"> <li>- Reduction transaction costs</li> <li>- Solve the problems from incomplete pricing mechanisms</li> </ul>
Hajdú Gazdák cooperative	<ul style="list-style-type: none"> <li>- In producing</li> <li>- In knowledge about other people especially about the leader</li> </ul>	Communication	Trust between members and in the leader	Reduction of transaction costs