

THE MODERATING ROLE OF EXPERIENCE ON THE
RELATIONSHIP BETWEEN TRUST AND PERFORMANCE OF
COOPERATING SMEs IN TRANSFORMATION ECONOMIES.

*EL PAPEL DE LA EXPERIENCIA EN LA RELACIÓN ENTRE CONFIANZA Y RESULTADOS
DE LA COOPERACIÓN ENTRE PYMES EN ECONOMÍAS EN TRANSICIÓN.*

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ABSTRACT.

To achieve successful cooperative inter-firm relationships, trust between the partners is a key factor. As trust that is based on the self-commitment of the partners to behave in a non-opportunistic way (maxim-based trust) takes time to evolve and relies upon the cooperation experience of the partners, we expect that the positive performance impact of maxim-based trust grows over time. The purpose of this paper is to test the moderating effect of cooperation experience on the relationship between maxim-based trust and performance in the context of cooperating small and medium sized enterprises (SMEs) in two transformation economies (Czech Republic and Slovenia): Based on a sample of 124 SMEs, a moderated regression analysis reveals that trust and cooperation experience impact positively on performance. However, we could not detect a moderated relationship. We conclude that maxim-based trust may be an effective and efficient coordinating mechanism in the dynamic context of cooperating SMEs in transformation economies, but the absence of a moderating effect indicates that firms do not seem to increase the effects of maxim-based trust over time.

Keywords: Cooperation; Trust; Cooperation Experience; Maxim-based Trust.

RESUMEN.

La confianza es uno de los elementos principales que permiten obtener éxito en las relaciones de cooperación entre empresas. La confianza basada en el propio compromiso de las empresas and que no es fruto de un comportamiento oportunista (maxim-based trust) se desarrolla a través de la experiencia en cooperación entre las empresas, por lo que surge con el tiempo. Por ello, consideramos que los efectos positivos de este tipo de confianza aumentan conforme pasa el tiempo. El objetivo de este trabajo es medir los efectos que la experiencia en cooperación provoca sobre la relación entre la confianza basada en el compromiso (maxim-based trust) and los resultados obtenidos de la misma en el caso de la colaboración entre pequeñas and medianas empresas (pymes) en dos economías en transición (República Checa and Eslovenia): El análisis de *regresión moderada*, basado en una muestra de 124 pymes, muestra que la confianza and la experiencia en cooperación ejercen un impacto positivo sobre los resultados, aunque no se observa *relación moderada*. Concluimos que la confianza basada en el compromiso (maxim-based trust) puede ser un mecanismo de coordinación efectivo and eficiente en el contexto dinámico de la cooperación entre pymes en economías en transición. No obstante, la ausencia de *efecto moderador* indica que los efectos en las empresas de la confianza basada en la el compromiso no aumentan con el tiempo.

Palabras clave: Cooperación; Confianza; Experiencia en cooperación; Confianza basada en el compromiso (Maxim-based Trust).

JEL classification: F23, M13, O52, P29.



1. INTRODUCTION¹.

Interfirm cooperation is potentially an attractive strategy for firms that wish to pool resources and knowledge, reap combined scale effects or preempt strategic buying and selling markets. However, cooperating firms have to deal with the uncertainty of their partner's behaviour. To deal with the behavioral uncertainty, relational "mechanisms and norms" such as solidarity, flexibility and, particularly, trust, can be employed (Krishnan, Martin and Noorderhaven, 2006).

Trust, which can be defined as the willingness to "accept vulnerability based upon positive expectations of the intentions or behaviour of another party" (Rousseau *et al.* 1998, p. 394), can have many benefits for cooperative performance (Mayer, Davis and Schoorman, 1995; Smith, Carroll and Ashford, 1995). Trust can reduce the potential for conflict, increase the speed and reliability of the information flow between partners and may reduce the need for formal control (Krishnan, Martin and Noorderhaven 2006). Generally speaking, trust is said to reduce agency and transaction costs (Frank 1988; Jones and George, 1998) and it supports a firm's capacity to handle complexity and adapt to change (Korsgaard, Schweiger and Sapienza, 1995).

Even though there is a strong normative bias towards the inherent value of trust in the current literature (Atuahene-Gima and Li, 2002), empirical findings do not draw such a clear picture of a positive impact of trust on cooperative performance. For example, McAllister (1995) found a positive impact only upon specific forms of trust. Also, there might be circumstances under which the trust-performance relationship is stronger (or weaker) than in other circumstances. McGee *et al.* (1995) provides an extensive literature review on empirical findings concerning the moderating role of experience on the effect of cooperation on performance. However, to our knowledge, there are no empirical studies investigating the moderating effect of cooperative experience on the relationship between trust and performance in inter-firm cooperation.

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Recently, in the context of inter-firm cooperation, maxim-based trust –a form of trust which is based on the partners' self-commitment to refrain from unfair behaviour– has been discussed as being an especially effective and efficient force for behavioural coordination (Roessl, 1996; Eberl, 2004; Fink, 2005; Fink & Kessler, 2010): However, as cooperative relationships which are coordinated by such maxim-based trust take time to emerge (see section 3.1), we expect that the performance advantages of engaging in such relationships to get stronger over time. Hence, we contribute to the literature by analyzing the impact of cooperative experience on the relationship between maxim-based trust and performance.

2. TRUST IN COOPERATIVE RELATIONSHIPS OF SMEs IN TRANSITION COUNTRIES.

In research on trust, it must be acknowledged that the antecedents and consequences of trust vary depending on the actors and the context in which the actors operate (Schoorman, Mayer and Davis, 2007). For example, the economic framework conditions in which those firms operate have to be considered. We propose to investigate the performance contributions of cooperation experience and maxim-based trust in cooperative relationships between SMEs in two transition economies, Slovenia and the Czech Republic.

The SME context is particularly suited for trust research as the conditions of the evolution of trust-based relationships are especially favourable (Fink and Kraus, 2007; Fink and Roessl, 2007). In particular, SMEs in transition economies have developed a remarkably strong tendency to cooperate (Fink and Keßler, 2010). In Slovenia, cooperation was an attractive strategy to follow, because in the years after the collapse of the Socialist Federal Republic of Yugoslavia in 1990 and the resulting foundation of an independent state, the Slovenian capital market was dramatically underdeveloped (Pissarides, 1999; Bukvic and Bartlett, 2003). The strong inclination to cooperate might also be due to the small domestic market of approximately two million potential customers. In the Czech Republic, SMEs have a tight, cooperative network across the national border. In the previous Austrian Monarchy, the area that is now the Czech Republic was one of the economic hotspots and after the fall of the iron curtain these business relations were successfully reestablished (Fink and Kraus, 2007).

Also, the context of transition economies is particularly suitable for our research. Both Slovenia and the Czech Republic are in a late stage of transition from planned economies to free-market economies, a position that is reflected by the EU membership of both countries. A late stage of transition is characterized by reduced macroeconomic uncertainty, reduced inflation, development of a legal framework for private businesses and infrastructure reform (Smallbone and Welter, 2001). This enables SMEs to move from a focus on short-term profits and from an industry focus on trade and services to a focus on longer-term profits and to industries that require a higher share of fixed investments (Smallbone *et al.*, 1999). Pertaining to strategy, SMEs in

advanced stages of transition begin to export, supported by a competitive strategy based on low prices. However, the growing competition in world markets increases pressure on SMEs that might be counteracted by engaging in cooperations. In short, the macroeconomic and legal situation enables SMEs to engage in long-term strategies such as cooperation. Driven by competitive pressures, SMEs might be forced into cooperation.

3. MAXIM-BASED TRUST: DEFINITION AND ELEMENTS.

3.1. ORIGINS OF TRUST: MAXIM-BASED TRUST AND INSTRUMENTAL TRUST.

Trust, defined as the willingness to “accept vulnerability based upon positive expectations of the intentions or behaviour of another party” (Rousseau *et al.*, 1998:394), can have different foundations. In particular, we distinguish between instrumental and maxim-based trust. Instrumental trust highlights the exogenous behavioral compliance of cooperative partners with the explicit and implicit regulations existing within the cooperation. Actors who are instrumentally trusted are accountable to those trusting them. Recently, researchers began to analyze the role of maxim-based trust. Maxim-based trust focuses on an internal compliance to the maxim of acting non-opportunistically and draws its coordination potential from the behavior-restricting effect of the actors’ self-commitment to the cooperation. Actors who are trusted based upon a maxim basis are accountable to themselves.

Maxim-based trust may provide a strong basis for cooperative relationships and finally for cooperative performance. First, Möllering (2006: 198) points out that the leap of faith that is one of the foundations of maxim-based trust helps to generate a strong basis for trust: “The leap of faith helps to generate and maintain the reasons, institutions and processes from which it first springs and, hence, it is truly crucial for our understanding of trust and its bases.” Second, as the willingness to commit to the maxim of acting non-opportunistically stems from an intrinsic motivation, it can be a stronger motivator than extrinsically triggered instrumental trust.

3.2. THE EMERGENCE OF MAXIM-BASED TRUST.

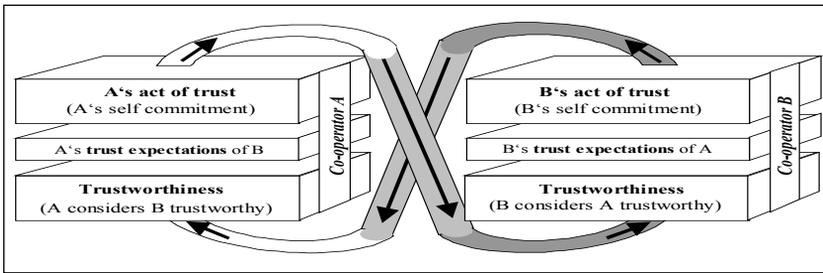
Maxim-based trust draws its coordinative strength from the behavior-standardizing effect of the actors’ self-commitment based on the maxim of cooperative behavior, and thereby reduces the actors’ tendency towards opportunistic behavior (Rippperger, 1998): Actors who are trusted based on a maxim basis are accountable to themselves, i.e. they are self-obligated. In the case of cooperation, the self-commitment is based on refraining from opportunistic behavior.

The emergence of maxim-based trust begins when the actors perceive themselves as self-committed to a cooperative behaviour when dealing with

each other. This way of looking at the cooperation is primarily based on the cooperative partners' reputation that allows the actor to give the cooperation partner an "advance" on trust (Pidduck, 2006). This advance can be risky, and accepting this risk signals to partner B that partner A views him as self-committed, and partner A is committing to partner B without the protection of control and sanction opportunities (McLain and Hackman, 1999).

In a cooperation that begins based on these processes, self-committing actors align their behaviour to the shared goals of the cooperation without external pressure. The cooperative behaviour experienced by the parties justifies and strengthens the maxim-based trust in the other partner and strengthens their own self-attachment to cooperative behaviour (Rusbult, Martz and Agnew, 1998). In maxim-based trust, a relationship as a self-strengthening process unfolds, which results in a self-committed communication and structure.

FIGURE 1: EVOLUTION OF A MAXIM-BASED TRUST RELATIONSHIP.



Source: Own elaboration.

The process leads to a situation in which the cooperation partners mutually submit to each other and by doing so they reduce their counterpart's inclination to behave opportunistically. Once economic value is created in a context of a trust-based relationship, each partner is motivated not to jeopardize this value (Bohnet and Zeckhauser, 2004). Even though latitude for opportunistic behaviour still exists, restricting the participants' inclination to behave opportunistically reduces behavioural uncertainty, which reduces the complexity and the risk of the transactional relationship (Roessl 1994; Osterloh and Weibel, 2000; Fink, 2005).

The evolution processes of instrumental and maxim-based trust have completely different points of departure: in the context of instrumental trust, the starting point is the actor's attempt to limit his transactional partner's behavioural portfolio in order to control his actions; in the context of maxim-based trust, the starting point is the partner's self-commitment to restrict his own behavioural portfolio to what is agreed upon.

3.2. THE ELEMENTS OF A MAXIM-BASED TRUST RELATIONSHIP.

Self-commitment

A maxim-based cooperative relationship has two key components: (1) self-commitment and (2) a heterarchic structure. Self-commitment comprises several dimensions (Roessl 1994; 1996): the *reputation* of the partner provides information on the extent to which he has met the expectations of his interaction partners in the past. This affects an actor's decision to commit to the relationship. *Familiarity* is based on personal impressions and provides information about the specific cooperation partner in the ongoing relationship: A can commit to the relationship with B because A has a broad basis of information to support his evaluation of the partner (Roessl, 1994). Another indicator is the cooperative partner's *perceived behavioural history*. In particular, the stability of the maxims that are motivating for a specific behaviour is crucial here. Self-commitment requires *observable behavioural norms* which remain stable over time and therefore allow a prognosis of the cooperative partner's future behaviour (Lindskold, 1981; Luhmann, 1989; Roessl, 1994). As perceived behavioural history is not based on personal observation but on observations by others, it has to be obtained actively. The source of this information is socialized impressions of others. If the cooperative partners build up a *personal relationship*, the relationship will be enriched by personal connotations, taking the relationship to a higher level. Such personal relationships between self-committed cooperative partners have a *long-term perspective* (Roessl, 1994; Kanter, 1995; Becaerra and Gupta, 2003).

A further dimension of self-commitment is the actor's *self-restriction*. The actor confines himself to cooperative behaviour. Thereby, he takes the risk that his expectations concerning his cooperative partner's behaviour might be frustrated. Therefore, the *willingness to take a risk* is another dimension of self-commitment. This willingness to take risks requires *frustration tolerance*; that is, the actor's belief in his ability to cope with situations resulting from a frustration of his expectations (Roessl, 1994).

As outlined, a maxim-based relationship requires a *leap of faith*, which the interaction partner might capitalize on by defecting from the relationship unexpectedly, particularly when the actor is committed to *self-exposure*.

Heterarchic Relationship

In cooperation based on maxim-based trust, *heterarchic relationships* evolve. Heterarchic relationships are characterized by the *equal status* of the partners. They can be delineated on the one hand from hierarchical relationships (that are characterized by power, control and sanction, Pleitner and Roessl, 1995) and a rigid structure of competences (Strohmayr, 1996), and on the other hand from informal relationships (that is, relationships with only an absolute minimum of rules): More specifically, heterarchic relationships are characterized by certain structural and interpersonal characteristics.

The structural characteristics of heterarchic relationship are characterized by no or a low degree of *power distance* between the partners, who remain *autonomous* in their decisions (Strohmayr, 1996). The partners *adjust their behaviour mutually* and voluntarily in the context of an *organized relationship*. Consequently, each cooperator has the possibility of a *one-sided defection* relationship at any time.

In terms of interpersonal characteristics, partners in relationships founded on maxim-based trust will enjoy *high communication quality*. The communication quality ensures that all participants can contribute their ideas and safeguard their interests. This is crucial for exchanging opinions and thoughts between the partners of the cooperative relationship and contributes to *high relationship quality* (Kanter 1995; Becerra and Gupta, 2003). Heterarchic relationships are also characterized by a high degree of *transparency*. Transparency captures the cooperative partners' openness concerning the internal processes of their firms. The more the actor knows about his interaction partner, the less risk he will perceive in the trust relationship, and the more likely it is that a heterarchic cooperative relationship will evolve (De Búrca, Fynes and Roche, 2004). Resilience describes the robustness of the relationship in terms of conflict solving capacity and is an issue that arises in terms of crisis (De Búrca, Fynes and Roche, 2004).

4. DEVELOPMENT OF THE HYPOTHESES.

4.1. THE PERFORMANCE CONTRIBUTION OF MAXIM-BASED TRUST.

Among the coordination mechanisms of cooperative relationships, maxim-based trust has a number of advantages over other mechanisms such as instrumental trust (trust based on exogenous behavioural compliance with explicit and implicit regulations) and formal rules.

First, partners in a relationship based on maxim-based trust can be more flexible. One argument here is that maxim-based trust is not sensitive to specific circumstances, as it is based on a general belief in that the partner does not behave opportunistically. Instrumental trust and formal rules, however, need to be defined while keeping in mind specific situations to which it can be applied (Noorderhaven, 1996; Fink, 2005). Another argument is based on the idea that maxim-based trust does not reduce the actors' behavioural portfolio, thus saving the resources of monitoring and sanction mechanisms. These flexibility advantages become more important when the complexity in a transaction relationship increases and the ability to translate expectations into well-defined and easily monitored agreements declines (Roessl, 1996; Eberl, 2004).

Second, relationships based on maxim-based trust are characterized by high communication quality, stability, resilience, transparency and honesty as well as relationship intensity (Roessl, 1994; De Búrca, Fynes and Roche,

2004). These characteristics evolve in heterarchic relationships (see section 3.2) and can increase the speed and reliability of the information flow between partners and may reduce the need for formal control (Krishnan, Martin and Noorderhaven, 2006).

Third, maxim-based trust enables transactional relationships which would otherwise not take place due to high behavioural uncertainty. Once companies possess the competence to establish and to manage relationships based on maxim-based trust, they may capitalize on additional opportunities which their competitors have to forego, since other firms might not be able to manage a transactional relationship in uncertain environments and uncertain cooperation contexts.

Finally, from a resource-based perspective, the ability to establish and maintain a cooperative relationship coordinated by maxim-based trust can be seen as a valuable, rare, inimitable and non-substitutional resource (Barney, 1991 or also Teece, Pisano and Shuen, 1997). Maxim-based cooperations rely on specific socio-psychosocial profiles of the cooperation partners that enable them to take the "leap of faith" to enter such a cooperation. Based on the idea that the propensity to take the (risky) leap of faith is related to the risk-taking propensity of individuals, which itself is rather rare in a population (Brockhaus, 1980) these socio-psychological profiles might be even more rare. Given their dependence on rare starting conditions and path-dependent idiosyncratic evolution processes, maxim-based cooperative relationships are inimitable and non-substitutionable. Hence, maxim-based relationships may be a source of a competitive advantage.

H1: The more behavioral coordination relies on maxim-based trust in a cooperative relationship, the better the performance of the focal participating company will be.

4.2 THE PERFORMANCE CONTRIBUTION OF COOPERATION EXPERIENCE.

Evolutionary theory (Kale, Dyer and Singh, 2002) claims that a firm's competences evolve through incremental adaptation and progressive learning. Also, organizational learning theory argues that companies may develop the capacity to handle complex transactional relationships by gaining experience in similar settings. In an interactive process, the firm extracts inferences from experience gained in past cooperation relationships and extrapolates them to future situations in order to improve its behaviour (Argyris and Schoen, 1978; Fiol and Lyles, 1985; Levitt and March, 1988).

In the context of cooperative relationships, these competences grow along with experience on two levels: first, on the level of general experience in cooperation management, and second, on the level of specific experience gained in a cooperative relationship with a particular partner (Brulhart, 2007). The experience can be gained by engaging in either domestic or international

cooperative relationships (Nadolska and Barkema, 2007). Based on the arguments above, we propose the following hypothesis:

H2: A cooperating company's cooperation experience has a positive effect on the focal firm's business performance.

4.3. THE MODERATING EFFECT OF COOPERATION EXPERIENCE ON THE RELATIONSHIP BETWEEN MAXIM-BASED TRUST AND COOPERATION.

Relationships which are coordinated by maxim-based trust typically evolve over time. This evolution cannot be accelerated with force. It rests on a consistent long-term strategy aimed at building up a good reputation and ensuring a positively perceived history. This requires a long-lasting personal relationship with the cooperation partner, in the course of which, one has credibly communicated a willingness to take risks, a sufficient level of frustration tolerance and readiness for self-restriction and self-exposure. Self-exposure is only legitimated by its result. A positive result, in turn, strengthens the trust relationship. This implies that the experience a firm has gained in cooperative relationships in the past strengthens the performance contribution of maxim-based trust in current cooperative relationships. Accordingly, we propose the following hypothesis:

H3: The more cooperative experience a firm has, the stronger will be the relationship between maxim-based trust and business performance.

5. METHODS.

5.1. SAMPLING FRAME AND RESPONSE RATES.

The population consists of SMEs from the advanced transition economies of The Czech Republic and Slovenia. Using addresses from national SME databases, random samples of 4000 SMEs for each country were drawn. The survey yielded a total of 339 (4.2%) returned questionnaires. Of these SMEs, 212 firms indicated that they participate in cooperative activities. This low response rate can be partially explained by the fact that SME are particularly reluctant to answer surveys (Bartholomew and Smith, 2006) and partially because non-cooperating SME might not have taken part in the survey. Due to missing data, 124 firms were included in the analysis. Analyses of non-response bias, e.g. by performing telephone interviews with a random sample of 45 non-respondents from each country showed no systematic bias for missing respondents (Rogelberg and Stanton, 2007). In addition, the comparison of firms with complete data and missing data did not show any systematic biases.

5.2. OPERATIONALIZATION.

Maxim-based Trust: Constructing a Formative Indicator

We measured the extent of maxim-based trust by surveying the extent to which self-commitment and heterarchic relationships are present in the focal cooperation (see section 3.3.): Drawing on criteria for the selection of measurement models (Jarvis, MacKenzie and Podsakoff, 2003), we decided to use formative measurement. In formative measurement, it is assumed that the construct is “composed” of the indicators. Each indicator provides an aspect of the content domain of the construct and is hence non-interchangeable.

To calculate the formative construct, we followed the steps outlined by Diamantopoulos and Winklhofer (2001). To ensure that the content domain is captured adequately, we performed a literature analysis and enhanced the results by drawing on knowledge from a network of researchers that are active in the field of cooperation. We allocated the items to the specific constructs and used four-point scales (“completely agree”, “inclined to agree”, “inclined to disagree” and “completely disagree”) to measure all items. Then, we checked for multicollinearity to avoid repeat counts of similar content in the formative measurement. Finally, we added the responses to each variable in an unweighted additive score.

Cooperative Experience

Cooperative experience was captured by three distinct indicators: the number of cooperative relationships (metric), the duration of the focal cooperation (ordinal) and the existence of international cooperation (categorical).

Performance

SMEs enter cooperative relationships for many reasons: to access international markets (e.g. Cullen *et al.*, 2000; Carson *et al.*, 2006), to reap scale benefits (Masurel and Janszen, 1998), or to share knowledge in cooperative innovation (Levy, Loebbecke and Powell, 2003), just to name a few examples. Therefore, the proximal, particular goals of a cooperation are quite diverse, and firms which may score high on one particular goal may not even have attempted to achieve another goal. Therefore, we chose firm performance, a distal performance indicator, as a dependent variable. This choice is also supported by the idea that a relevant cooperation should also impact upon a firm’s performance in a significant way. To measure performance, we assessed aspects of financial performance, other aspects of external performance and indicators of internal performance by using four-point scales (“completely agree”, “inclined to agree”, “inclined to disagree” and “completely disagree”) and integrated them in a formative construct (unweighted additive index): Table 1 shows the variables employed, along with their sources and the items used, while Table 2 shows the descriptive statistics and correlations.

TABLE 1: MEASUREMENT OF MAXIM-BASED TRUST AND PERFORMANCE.

		Variables	Items
maxim-based trust	self-commitment	reputation	Before establishing the cooperation relationship, I had heard good things about my cooperation partner.
		familiarity	I have cooperated with my present cooperative partner in the past.
		perceived behavioral history	Before establishing the cooperative relationship, I gathered information about my cooperative partner.
		personal relationship	I also meet my cooperative partner in my private life.
		no short-term perspective	With the cooperative relationship, I aim to realize noticeable success as fast as possible.
		self-restriction	I attune my behavior to the aims of the cooperative relationship.
		willingness to take a risk	I am willing to take a risk.
		frustration tolerance	I am convinced that I am able to cope with setbacks.
		self-exposure	The cooperative relationship has a strong influence upon the success of my company.
		leap of faith	In order to make cooperation work, one has to take a leap of faith with one's cooperative partner, even though this involves risk.
heterarchic cooperation relationship	structural characteristics	organized relationship	My cooperative partners and I talk about the cooperation.
		mutually adjusted behavior	My cooperative partner and I take joint action in the area of cooperation.
		autonomy	I have remained legally independent within the cooperative arrangement.
		equality	In decisions regarding the cooperative relationship, the opinion of each cooperative partner is equally important.
		possibility of one-sided defection	By behaving opportunistically, I could damage the cooperative relationship.
	voluntary nature of relationship	I can terminate the cooperative relationship unilaterally at any time.	
	interpersonal characteristics	communication quality	I can get right to the point when speaking with my cooperative partner.
		resilience	Discussions with my cooperative partner always result in a solution.
		transparency	I know the internal processes in my cooperative partner's company.
		relationship intensity	Since its establishment, the cooperative relationship has gained intensity.



performance	endogenous perspective	employee qualifications	Since the establishment of the cooperation relationship, the qualifications of my employees have improved.
		employee turnover	Since the establishment of the cooperative relationship, fewer employees have left my company.
	exogenous perspective	customer satisfaction	My customers are always satisfied with my products and services.
		share of regular customers	Most of my customers are regular customers.
		market development	Since the establishment of the cooperative relationship, I have enlarged my market share.
	financial perspective	share of regular suppliers	Most of my suppliers are regular suppliers.
		cash flow development	Since the establishment of the cooperative relationship, I have boosted my cash flow.
		sales development	Since the establishment of the cooperative relationship, I have boosted my sales.
		development of investment activity	Since the establishment of the cooperative relationship, I have boosted my investments.

TABLE 2: MEANS, STANDARD DEVIATIONS AND CORRELATIONS.

	Mean	Standard deviation	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) performance	34.25	5.06	1						
(2) firm size	2.33	.92	.034	1					
(3) firm age	2.41	.76	-.074	.254**	1				
(4) number of cooperative relationships	1.81	.87	.156*	.166*	-.041	1			
(5) duration of cooperation	3.24	1.39	.206*	.013	.116	.141	1		
(6) international cooperation (yes/no)	.52	.50	.223**	.078	-.058	.086	.072	1	
(7) maxim-based trust	61.72	6.34	.557**	.106	-.055	.157*	.206*	.074	1

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

6. RESULTS.

As the method of analysis, we used moderated regression analysis (Aiken and West 1991). First, a linear model was calculated. In a second model, the moderator variable was introduced. The results of the hierarchical regression analysis can be found in Table 3.

TABLE 3: RESULTS OF THE ANALYSIS (N = 124).

	linear model	moderation model
	β	β
Firm size	.014	-.004
Firm age	-.093	-.080
Number of cooperative relationships	.042	.037
Duration of cooperation	.154*	.871
International cooperation (yes/no)	.215**	.215**
Maxim-based trust	.459***	.634**
Duration * Maxim-based trust		-.746
R ²	.306**	.311***
Adjusted R ²	.271**	.270***

Note: Standardized regression coefficients are displayed in the table. * $p < 0.5$; ** $p < 0.01$; *** $p < 0.001$.

In the linear model, the control variables did not impact upon performance (firm size: $\beta = .014$, $p = .864$; firm age: $\beta = -.093$, $p = .509$): Among the values pertaining to cooperative experience, the number of cooperative relationships was not significantly related to performance, but the duration of the cooperation and the existence of international cooperation exhibited a positive significant relationship with performance ($\beta = .154$, $p = .049$; $\beta = .733$, $p = .007$): Moreover, maxim-based trust also had a strong and positive impact upon performance ($\beta = .459$, $p = .000$): In the moderation model, we could not detect a significant relationship ($\beta = -.746$, $p = .364$):

In combination, these results do not contradict H1 and H2: Both cooperative experience and maxim-based trust have a positive influence upon business performance. However, we did not detect a moderation of the relationship between maxim-based trust and performance by the duration of the cooperation.

7. DISCUSSION, LIMITATIONS AND IMPLICATIONS.

Based on the conceptual arguments put forth in the literature on trust in general and on maxim-based trust in particular we assumed that maxim-based trust has a positive impact upon the performance of the focal firm. Drawing

on organizational learning, we also assumed that cooperative experience has a positive impact upon the focal firm's performance and we assumed that cooperative experience can strengthen the link between maxim-based trust and performance.

The findings support the idea that maxim-based trust and cooperative experience have a positive linear effect upon the focal firm's performance. However, a moderation effect of experience upon the relationship between maxim-based trust and performance could not be observed.

A possible explanation for this missing moderation relationship could be that it is not so much the quantity but the quality of experience the firm has accumulated in past relationships which may serve as a fruitful ground for the evolution of successful cooperative relationships which are coordinated by maxim-based trust. For example, long-time experience in hierarchically governed cooperative relationships may contribute only very little to a firm's capacity to evolve an effective and efficient maxim-based trust relationship with a cooperative partner. McGee, Dowling and Megginson (1995) argue that firms often fail to learn in cooperative relations because they are not aware of what they do not know. This argument is empirically underpinned by Reich and Mankin (1986) in a sample of partnerships between US and Japanese companies.

In the current cooperative relationships the impact of maxim-based trust upon the performance (distal performance measure) of the participating firms might materialize quickly and does not increase significantly with time. This result has to be interpreted with caution because those relationships in which one party has behaved opportunistically are likely to break up and are not counted as ongoing cooperative relationships in our study.

However, one of the key benefits of maxim-based trust is the longevity and the flexibility of the cooperative relationship over time, or, more generally, the relationship quality (proximal performance measure): This idea is underscored by the positive and significant correlation coefficient between the duration of the cooperative relationship and the degree of maxim-based trust ($\beta = .206, p = .017$).

However, our results must be interpreted in the light of the shortcomings of this study. First, the low response rate has to be qualified in light of the fact that surveys on SMEs (especially in transition economies) typically show low response rates. This difficulty is exacerbated when surveys address sensitive issues such as trust in cooperative partners. However, our check for non-response bias showed no systematic bias. Second, the one-sided measurement of maxim-based trust is justified by theoretical arguments and therefore does not compromise the empirical results. However, the measure should be subjected to further validation in qualitative as well as quantitative studies using pairs of cooperators. Pairing would further increase the reliability of the data, but at same time represents a major challenge with regard to the anonymity of the respondents and, consequently, the resulting response rate.

The limitations notwithstanding, our study suggests that cooperation based on maxim-based trust is a possible key to boosting a firm's performance. By pursuing cooperative strategies, SMEs can strengthen their competitive positioning as inter-firm cooperation can help to access international markets (Cullen, Johnson and Sakano, 2000; Carson, Madhok and Wu, 2006; Fink *et al.*, 2008), to reap scale benefits (Masurel and Janszen 1998) or to share knowledge (Levy, Loebbecke and Powell, 2003). At the same time, the coordination by maxim-based trust allows for flexibility, can be managed without costly formal control mechanisms and can bring about high quality communication. Hence, the ability to develop maxim-based trust opens up the possibility for SMEs to realize transactional relationships that otherwise could not be coordinated due to prohibitively high complexity and uncertainty. Once a cooperative relationship based on maxim-based trust is established, it can be the source of a competitive advantage, since it is based on valuable, rare, inimitable and non-substitutable capabilities.

Even though our results do not imply that the relationship between maxim-based trust and a firm's performance increases with the duration of the cooperation, we would caution against perceiving it as a management tool for short-term intervention. In light of our empirical results, further research in this field is certainly worthwhile, both from a scientific and a practical point of view.

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