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SCIENTIFIC PAPER

MORAL HAZARD IN PRODUCER ORGANIZATIONS - SOME EXPERIENCES OF AN EMPIRICAL SURVEY

Kovács, Zoltán
University of Szeged, Faculty of Engineering
e-mail: *kovacszoltan.szte@gmail.com*

Abstract: *A wide range of empirical experiences shows that the performance of Hungarian producer organizations (aka TÉSZ) significantly falls behind the activity observed in the developed Western European countries. Regarding this issue, the present study examines how moral hazard - as one of the possible reasons - influences the producers' activities in cooperative organizations. Information for the research was collected with the help of a questionnaire survey among the members of PaprikaKert TÉSZ Ltd.*
A statistical path model has been developed for the research, which assumed that - in addition to a direct effect - moral hazard also affects collaborative activity by eroding trust. The statistical model has been tested both in member-member and members-management relations.
The experiences from the survey clearly show that moral hazard exists in the producer organization. According to my results, though its measure cannot be regarded numerically considerable, its negative effect on cooperative activity can be proved with statistical examinations. Its effect can be divided into two aspects: besides a direct effect, an indirect one can also be detected, which means that moral hazard is able to reduce producers' willingness to cooperate by eroding trust. Moreover, our results have clearly pointed out that moral hazard has a negative impact on member-member and members-management relations to varying degrees and through different mechanisms.
In addition to the above tests, the empirical testing of another model called Sholtes trust model has been carried out, too. The validating was successful, so the model - which attributes trust to the faith in the partner's loyalty and capability - is basically acceptable. The argument says that high-level trust can be observed among partners only when faith both in loyalty and capability is strong enough. The research, however, revealed that the above-mentioned two factors determine it in a different way: regarding trust between members, the faith in capability is more important; while trust towards the management is more determined by faith in loyalty.

Keywords: *trust, collaborative activity, moral hazard, Sholtes (*JEL code: Q12, Q13*)*

INTRODUCTION

By reviewing the related statistical data, it can be stated that the producer organizations (e.g. marketing cooperatives, POs) have a significant part in coordinating the product line in some leading vegetable and fruit producing member states of the European Union. Cooperatives offer a number of economical and non-economical benefits both at micro and macro levels. Szabó (2011) and Szabó-Barta (2014) summarize the benefits obtained through cooperatives as follows:

- Marketing cooperatives and other producer organizations are often able to solve problems connected to producers' vulnerability both in market and technology, and to increase their counterbalancing forces in market and their income;
- One of the most important reasons for having cooperatives is the reduction of the so-called transactional (e.g. informal) costs;
- The bigger bargaining power and the higher market share of producers have a positive message for the whole marketing channel, including consumers, too, who can get more reliable and often better quality products;
- The increasing role of producer organizations in rural development and employment is also important, as well as their contribution to keep the agricultural population.

Despite the significant benefits offered by the cooperatives, the experiences show that cooperatives have a small - under 20% - market share in the new member states of the European Union, like Hungary, (see e.g. Bijman et al., 2012; or Szabó, 2012). The references in this subject unanimously agree that this phenomenon can be explained basically with the low level of producers trust. Taking this situation as a basis, the present study examines the role of moral hazard and trust within producer organizations. First of all, it aims to answer the question how moral hazard and trust in member-member and members-management relations influence the members' activities in the cooperative.

The study has the following structure: the next part presents the most important references, which provide the theoretical basis for the research. Following that, the databases used and the methodological problems of their evaluation are detailed which is followed by the structural part presenting the empirical analysis.

The last chapter summarizes the most important conclusions drawn from the research and suggestions based on these conclusions.

THEORETICAL BASIS

Farmers in the agricultural sector cooperate with different groups, and conclude oral and/or written agreements. Cooperative agreements like these can be very different depending, for example, on whether the agreement is horizontal (agreement among more farmers) or vertical (agreement among farmers and a „regulator"). Furthermore, there can be differences regarding the cooperative partners: whether they are other farmers, employees, regulators, factor owners or government organizations (Larsen, 2008). Analysis of contract agreements (written or oral) of this type concluded among farmers for cooperation activities, as well as the resulting organizational structures is one of the thoroughly examined fields of the new institutional economics (NIE).

The new institutional economics focuses on the analysis of institutions (like, for example: markets, organizations, legal norms) in the framework of which the economical processes are going on. The main target of the analyses made by the institutionalist school is to explain the structure and efficiency of economic institutions and the economic behaviour of people (Schumacher, 1991).

Theories of the new institutional economics have been classified in different ways (see, for example, works of Menard (2004) and North (2015). As regards the present theoretical basis, Kieser (2002) can be regarded as authoritative. He classifies the theories of the new institutional economics as follows: agency theory, property rights theory and transaction costs economics. The general features of the theories are that they have more realistic assumptions about actors of economy than earlier economics theories, and they intend to explain economic events through the individual's behaviour. They assume that the human behaviour includes information barriers, fraud, self-interest and limited rationality.

Both the international and the Hungarian references widely apply the theoretical approaches of the new institutional economics in order to examine agricultural cooperatives and – among others to explain the choice of the cooperative type and forms of property structures. The theoretical approaches focus on different aspects of cooperative agreements, which is extremely useful from the aspect of their differentiated examination: typically, it is the agency theory which deals with problems of asymmetric information, while it is the theory of transaction costs, which concentrates on the fields related to the contract costs; and finally, the property rights theory discusses the issues of the so-called residual control rights. Of course, these theories are often overlapping, but different theoretical approaches are extremely useful for the differentiated examination of agreements. The present study detailes the results of examinations carried out on the basis of the principal-agent theory..

The agent theory – and especially its normative approach, the principal-agent theory -, while examining agricultural cooperatives, puts the emphasis on asymmetric information and the resulting opportunist behaviour (Kieser, 2002). According to the economic literature, there is information asymmetry when one of the partners in the transaction has more or more exact information than the other. As a result, asymmetric information – though to a varying degree - is present in each case when co-operation takes place among two or more partners. Authors distinguish two types of problems within the framework of the principal-agent theory: moral hazard and adverse selection. The issue of adverse selection is not discussed in the present study.

In general, there is moral hazard if at least one input cannot be observed in the co-operative processes or transactions, and its quantity cannot be defined in the contract. This lack of transparency and regulation may become the source of corrupt practices (Royer, 1999).

The analysis of the relation between the principal and the agent is in the focus of the general agent theory (Picot, 1990) in which moral hazard is introduced as follows: the principal, in order to realize his interests, delegates certain tasks and decision-making competences to the agent in a contract who receives a compensation in return for their services. On the one hand, the principal can benefit from this relation since he can use the agent's specialized labour force or information (knowledge) for their own purposes, but on the other hand, it raises some problems, too. Due to the lack of information (asymmetric information) on behalf of the principal, there is a risk that the agent will not act entirely or partly in the interest of the principal; they may act in their own interest, or perhaps to the principal's disadvantage.

This present study is partly based on this above-mentioned theory. Since it is generally true in producer organizations, too, that the management (the agent) have more precise information about the organization which, from the members' (principal) aspect, can be a source of perceived or real corrupt practises.

The other examination aspect of the study is the observation of moral hazard between members. The agent theory provides theoretical basis for this, too. The references about agent theory introduce several special models, out of which the team production model (Alchian – Demsetz, 1972) is the most outstanding. The team production model examines the situation as a basic case, when production is performed by more producers. It was Holmstrom (1982) who introduced the concept of moral hazard into the literature of team production. The essence of his concept is the following: if partners in the same team are rewarded by their joint effort and at least one input cannot be observed by the others, it will stimulate some agents to keep away from the joint effort (free-riding). This type of moral hazard is called effort moral hazard by the references.

Moral hazard presented in economic relations between producers results in the reduction of trust level (Larsen, 2008), that is why it is necessary to expand research to this direction, too.

Trust is especially important in human relations, which explains why it has been put in the centre of interest in several disciplines in the last period. Trust as the subject of research is a relatively new phenomenon in the field of economic sciences, although a large number of publications have been published and several trust approaches have been drafted in the last 25-30 years (e.g.: McAllister, 1995; Borgen, 2001; Hansen, 2002; Szabó, 2011; Szabó et al. (2008) and Dudás – Fertő (2009), Sholtes, (1998) etc.). This present study – on the basis of earlier research experiences (e.g. Baranyai et al. (2013) - takes the Sholtes trust model as its basis.

Sholtes (1998) placed trust in the matrix of loyalty and capability. Provided that faith both in loyalty and capability take up high values among partners, it can develop trust (Figure 1). This research work was carried out by using the relations found in the model.

Figure 1: Trust development between partners on the basis of the level of both loyalty felt towards each other and perceived capability

		CAPABILITY *"I believe that my partner is well-trained and talented."*	
		low	high
LOYALTY *"I believe that my partner likes me and will help me in the future."*	high	SYMPATHY	**TRUST**
	low	MISTRUST	RESPECT

Source: own edition on the basis of Sholtes (1998)

Finally, it is important to underline that this present research is not unprecedented. Among others, I have relied mostly on the work of Baranyai et al. (2013) in research planning and in the development of the methodological background. The authors examined the effect of moral hazard on the collaborative activity in the co-operation in machine use of individual farms using path models. Their results have proved that moral hazard is present, though to a small degree, in co-operations of machine use. They have clearly confirmed that moral hazard, which appears in cooperative agreements, has negative impact on the cooperative activity of farmers by destroying trust. In the framework of the referred research, the authors also successfully tested the Sholtes-model empirically.

MATERIAL AND METHOD

Examinations which are presented hereinafter are based on an empirical database: a questionnaire survey was made among the members of PAPRIKAKERT TÉSZ TERMELŐI ÉRTÉKESÍTŐ Ltd. between May and October of 2015, during which we managed to collect data about altogether 144 member-farms.

The questionnaire compiled by the empirical research touched the following issues - linked to the present essay:

level of activity of the farming members in the cooperative (collaborative activity (COOP));

the issue of trust (trust by the Sholtes-model (TR variable), and its perceived determinants, faith put in loyalty (LOY variable) and in capability (CAP variable)), and

the level of moral hazard experienced in the cooperative (MOR variable).

Quantification of each specified area was realized with Likert-scales, assigned to statements. We used a simple average calculation or a method of PCA weighting to form variables. Furthermore, another piece of important information is that questions used to quantify TR, LOY, CAP and MOR variables were formulated both in member-member (T) and member-management (M) relations.

The effect of moral hazard on the collaborative activity was examined with the so-called „path model" which is a sequence of regression models built on each other. The logical links of the model are shown in Figure 2.

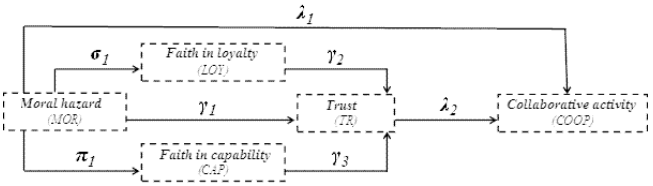

Figure 2: The logical structure of the general path model
Source: edited on the basis of Baranyai et al. (2011)

The model studies how moral hazard (MOR), as an exogenous variable, affects the collaborative activity (COOP). Besides the direct effect of moral hazard (λ1), we can also analyse its indirect effect, which is manifested through trust: using the Sholtes-model we can take into account that moral hazard affects the trust level both in direct (γ1) and indirect (σ1 and ϖ1) ways through forming the trust determinants (*LOY* and *CAP*) which also influences the collaborative activity (λ2). On the basis of Figure 2 we can formulate four regression models:

$$\text{M1.:} COOP = \lambda_1 * MOR + \lambda_2 * \mathbf{R} + RESID_1 \quad (1)$$

$$\text{M2.:} \ \mathbf{R} = \gamma_1 * MOR + \gamma_2 * LOY + \gamma_3 * CAP + RESID_2 \quad (2)$$

M3.:

$$LOY = \sigma_1 * MOR + RESID_3 \quad (3)$$

$$\text{M4.} CAP = \pi_1 * MOR + RESID_4 \quad (4)$$

Where: λ_i, γ_i, σ_i, π_i partial standardized coefficients *(beta);* $RESID_i$: residuals.

Consolidating the equations, the following relation can be written where beta multiplications express the strength of each „paths":

$$COOP = \lambda_1 * MOR + \gamma_1 * \lambda_2 * MOR + \sigma_1 * \gamma_2 * \lambda_2 * MOR$$

$$\cdot \pi_1 * \gamma_3 * \lambda_2 * MOR + \sum_{i=1}^{4} RESID_i \quad (5)$$

THE RESULTS OF THE PATH MODELS

The descriptive statistics of the variable set found in the regression models of the path model is summed up in Table 1. The experiences of the empirical research show that moral hazard is present among the examined group of farmers (MOR_T and MOR_M) but its average value (2,38 and 2,09) cannot be regarded as significant one (the maximum in theory in both cases is 7,00). Moreover, on the basis of the figures in the table, it can be concluded that the responding cooperative members evaluate the level of moral hazard in member-member relation higher than in member-management direction. It should be noted, however, that statistically this difference is not significant because confidence intervals (CI95%) are overlapping.

Descriptive statistics of the variable set
Table 1

Name	Average	Average CI95%		Dispersion	Min/ Max
		Lower	Higher		
MOR_T	2,38	2,05	2,74	1,37	1/7
MOR_M	2,09	1,79	2,44	1,31	1/7
LOY_T	4,69	4,29	5,13	1,75	1/7
LOY_M	4,98	3,95	6,01	1,14	1/7
CAP_T	5,29	4,95	5,63	1,36	1/7
CAP_M	5,31	4,30	6,32	2,01	1/7
TR_T	5.06	4.58	5,52	1,86	1/7
TR_M	6,06	5,65	6,39	1,47	1/7
COOP	7,55	6,80	8,31	2,19	3,5/18,1

Source: own calculation

Coming to the parameters of the Sholtes-model, it can be stated that averages on the 1-7 Likert-scale linked to each variable are higher in the member-management relation. It also means that respondents typically trust more in the management's loyal behaviour (LOY_T vs. LOY_M) and their capability (CAP_T vs. CAP_M) than in their fellow-farmers'. Another especially important experience is that the general trust level of members towards the management is significantly higher than trust expressed for the fellow-members (TR_T vs. TR_M).

Finally, by evaluating the collaborative activity (COOP), it is obvious that it can be regarded as medium-level with significant dispersion. In order to evaluate the activity rate of 7,55 value, it is important to note that there was a farmer who reached the activity value of 18,1 on the basis of the PCA-weighted index.

In the next part of the research, the regression models (M1., M2., M3. and M4.) were run both in the member-member and member-management approaches the most important results of which are summarized in Table 2. The summing statement: each model is statistically validated.

Summary of the results of regression models
Table 2

Model	Standardized coefficients (Beta)	
	Member-member	Member-management
M1.	MOR_T: λ_1= -0.393** (CI95%:-0.628 - -0.128) TR_T: λ_2= 0.297** (CI95%: 0.062 - 0.532) (R^2=0,406; F-szig: 0,000)	MOR_M: λ_1= -0.371** (CI95%:-0.530 - -0.212) TR_M: λ_2= 0.543** (CI95%: 0.384 - 0.702) (R^2=0,476; F-szig: 0,000)
M2.	MOR_T: γ_1= -0.366** (CI95%: -0.555 - -0.178) LOY_T: γ_2= 0.226** (CI95%: 0.079 - 0.373) CAP_T: γ_3= 0.372** (CI95%: 0.172 - 0.571) (R^2=0,639; F-szig: 0,000)	MOR_M: γ_1= -0.192* (CI95%: -0.352 - -0.032) LOY_M: γ_2= 0.495** (CI95%: 0.325 - 0.665) CAP_M: γ_3=0.335** (CI95%: 0.165 - 0.506) (R^2=0,479; F-szig: 0,000)
M3.	MOR_T: σ_1= -0.295** (CI95%: -0.502 - -0.087) (R^2=0,087; F-szig: 0,006)	MOR_M: σ_1= -0.410* (CI95%: -0.615 - -0.205) (R^2=0,107; F-szig: 0,010)
M4.	MOR_T: π_1= -0.713** (CI95%: -0.865 - -0.561) (R^2=0,808; F-szig: 0,000)	MOR_M: π_1= -0.396* (CI95%: -0.601 - -0.191) (R^2=0,325; F-szig: 0,000)

Source: own calculation

In order to introduce and evaluate them more easily, I present the results of path models graphically, too, starting with the presentation of the results of path-model examinations carried out in member-member relation (Figure 3). The most important findings can be summarized as follows: in the first model (M1.) regression estimated the effect of moral hazard (MOR_T) and trust between members (TR_T) on the collaborative activity (COOP). The results show that moral hazard and trust in economic relations affect the collaborative activity, which can be justified statistically: as it had been expected, moral hazard exerts negative (-0, 393) while trust exerts positive (0,297) determination. According to beta values, the partial effect of moral hazard is stronger, which means that it affects the collaborative activity more than trust.

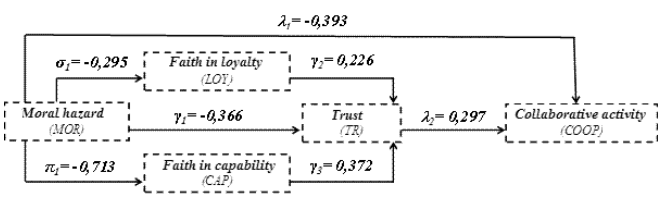

Figure 3: The path-model complemented with regression coefficients (between member-member)
Source: my own edition

Also, in the second model (M2.) the effect of MOR_T, LOY_T and CAP_T independent variables on the trust level (TR_T) between members has been statistically proven.

It can be pointed out, that moral hazard in collaboration reduces the trust level between partners (-0,366). Another interesting experience is that there is a remarkable, though not significant difference between the „strength" of the trust determinants in the Sholtes-model. It means that faith in the partner's capability is probably more important in forming trust between members than the faith in loyalty. It partly contradicts to the assumptions of the Sholtes trust model, which suppose symmetry, meaning that faith both in loyalty and capability are of the same importance in developing trust. This problem will be studied later in this study, when the Sholtes trust model is tested.

The third and the fourth regression models (M3. and M4.) estimated the effect of moral hazard on faith in loyalty and capability as dependent variables. The examinations also revealed significant connections: they showed that moral hazard between partners reduces the faith in capability more (beta value of -0,713 against -0, 295).

The second path-model analysed the effect of moral hazard (MOR_M) in member-management relation on the farmers' collaborative activity (COOP) within the cooperative (Figure 4). The findings lead to the following conclusions, emphasizing especially the differences regarding the above mentioned.

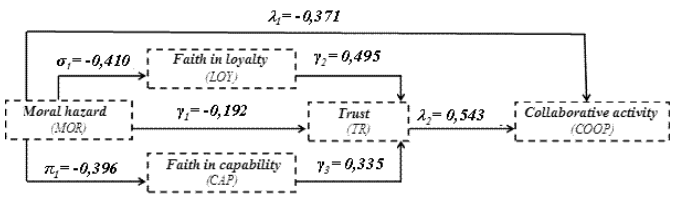

Figure 4: The path model complemented with regression coefficients (between member-management)
Source: own edition

According to the regression model run first (M1), the trust level towards the management (TR_M) has stronger impact on determining the activity within the cooperative than moral hazard (MOR_M) (-0,371). This experience differs from what the previous path-model has shown; where it was exactly the opposite. It is clearly obvious that the level of trust manifested by the members towards the management is one of the most important components of the success of agricultural cooperatives.

The second regression model (M2.) also brought different results, since it shows that trust in the management is based on faith in loyalty (0,495) rather than in capability (0,335). It was the opposite in case of trust between members where faith in capability had a stronger role.

Finally, the third and the fourth models (M3. and M4.) brought different results, too: moral hazard, though just a little, affects negatively the loyalty dimension to a greater degree (-0,396 vs. -0,410).

Following the immanent features of the path-models, it was assumed that moral hazard affects collaborative activity in four „paths": (1) directly, the strength of this effect is $\lambda 1$; (2) through its effect on trust (TR) the strength of which is $\gamma 1 * \lambda 2$; (3) through reducing faith in loyalty (LOY) where the degree of the whole effect is $\sigma 1 * \gamma 2 * \lambda 2$; (4) through developing faith in capability (CAP) the strength of which is $\varpi 1 * \gamma 3 * \lambda 2$. (Table 3).

The strength of each „path" in member-member and member-management relations
Table 3

Relation	Path „strength"				Pearson-coefficient
	$\lambda 1$	$\gamma 1 * \lambda 2$	$\sigma 1 * \gamma 2 * \lambda 2$	$\pi 1 * \gamma 3 * \lambda 2$	
Member-member	-0,393	-0,109	-0,019	-0,088	-0,503
Member-management	-0,371	-0,104	-0,110	-0,072	-0,657

Source: own calculation

To sum it up: the effects of negative experiences coming from the collaboration on collaborative activity were divided in the constructed model into a direct and an indirect effect, where the direct effect was deduced through trust reduction. Actually, nothing else was done, than dividing Pearson-coefficients between the independent (MOR) and the dependent (COOP) variables into two parts. The results show that the direct effect of moral hazard is more remarkable in both cases (-0,393 and -0,371), but it is differentiated! While in member-member relation it gives 78% of the Pearson correlation value, this rate is only 56% in member-management relation. It shows that in member-management relation moral hazard can cause more harms by destroying trust, thus setting back collaborative activity in the given cooperative.

EMPIRICAL TESTING OF SHOLTES-MODEL

The Sholtes trust approach has a key role in analysing the effect of moral hazard on collaborative activity. The model explicitly assumes the same importance for the perceived trust-determinants (faith in loyalty and capability), though the research results show that they probably have different values in developing the trust level, which raises the need for the empirical testing of this model.

Therefore the next step in the research attempts to validate the Sholtes trust model empirically. In order to carry out the test, the LOY and CAP scales were divided into two parts (low and high) by using their averages and as a result, four groups were formed. The general trust level (TR_T and TR_M) in member-member and member-management relations was studied in these groups (Table 4).

The results prove in both relations that the assumption based on the Sholtes trust model is mostly right: provided faith in both capability and loyalty take high values (over the average) (Group 2), the average level of the general trust is higher (5,77, and 6,65) as compared to any other groups which can be statistically justified. Though the average trust

values calculated in Group 3 are well behind the average values of Groups 1 and 2, these differences cannot be regarded statistically significant. Moreover, there is no significant difference between the TR-averages in case of Group 1 and 2. (It is worth mentioning that the results of the examinations with the above-mentioned descriptive statistics were checked by one-way ANOVA statistical models and Post-Hoc tests (Games-Howell Post Hoc Test), and these examinations have not brought a different result.) Naturally, these experiences do not mean at all that the trust model describes reality wrong, that is the model cannot be validated.

Changes in the trust level (TR_T and TR_M) in each group
Table 4

Faith in loyalty (LOY_T and LOY_M)	Faith in capability (CAP_T and CAP_M): low	Faith in capability (CAP_T and CAP_M): high
high	*Group 1* (**SYMPATHY**) **TR_T-average: 3,41** (n=20) CI (95%): [2,16-4,66] **TR_M-average: 5,15** (n=12) CI (95%): [4,51-5,79]	*Group 2* (**TRUST**) **TR_T-average: 5,77** (n=97) CI (95%): [5,39-6,15] **TR_M-average: 6,65** (n=99) CI (95%): [5,95-7,55]
low	*Group 3* (**MISTRUST**) **TR_T-average: 2,05** (n=8) CI (95%): [1,46-2,64] **TR_M-average: 3,86** (n=14) CI (95%): [2,76-4,96]	*Group 4* (**RESPECT**) **TR_T-average: 4,45** (n=19) CI (95%): [3,83-5,07] **TR_M-average: 5,29** (n=19) CI (95%): [4,48-5,74]

Source: own calculations

Continuing the examinations, the Sholtes trust-determinants got tested within the framework of statistical explanatory models. The effect of faith both in loyalty and capability on trust level has been studied with the help of two statistical models. Results of examinations made in member-member relation are summarized in Table 5.

The effect of faith in loyalty (LOY_T) and capability (CAP_T) on trust (TR_T)
Table 5

Factors	Hierarchic ANOVA model				Linear regression model			
	Eta	Beta	*Sig.*	R^2	B	Beta	*Sig.*	R^2
LOY_T	0,419	0,375	*0,000*	0,453	0,391	0,427	*0,000*	0,547
CAP_T	0,524	0,411	*0,000*		0,429	0,502	*0,000*	

Source: own calculations

The results basically validate the Sholtes-model, so it has been proved again that both factors are important in developing trust, both have statistically justifiable effects. Both the ANOVA and the regression model show that the importance of certain background factors is slightly asymmetric from the aspect of trust: faith in capability seems to be a bit more important as compared to loyalty (ANOVA beta: 0411 against 0,375, and the regression beta: 0,502 vs. 0,427). It is worth mentioning, however, that differences detectable in these parameter-values are not significant statistically.

Examinations done in member-management relation also prove the trust-model, although, with a bit different outcomes: in this relation the explanatory models evaluate faith in loyalty as more important from the aspect of trust, although these differences cannot be regarded statistically significant.

The effect of faith in loyalty (LOY_M) and capability (CAP_M) on trust (TR_M)
Table 6

Factors	Hierarchic ANOVA model				Linear regression model			
	Eta	Beta	*Sig.*	R^2	B	Beta	*Sig.*	R^2
LOY_M	0,619	0,422	*0,000*	0,343	0,531	0,548	*0,000*	0,507
CAP_M	0,559	0,391	*0,000*		0,331	0,302	*0,000*	

Source: own calculations

CONCLUSIONS

The study analyses the effect of moral hazard on collaborative activity by means of the path-model. Summing up the experiences concluded from the results, it could be stated that although the statistical analyses justified the negative effect of moral hazard on the collaborative willingness, it has not been proved entirely that the low level of collaborative willingness within producers' organizations can be attributed only to moral hazard. However, one of the most important outcomes of examinations done on path-models is that moral hazard – besides its effect exerted either directly or some other „ways"- has negative impact on the collaborative activity of farmers by eroding trust.

Furthermore, it can also be stated on the basis of our results that the effect of moral hazard, which hinders trust and thus the collaborative activity, is differentiated. The farmers' judgement tolerates the possible opportunist behaviour of fellow-members more than that of the management. As a result, the key to the successful agricultural organizations is the management integrity.

Within the framework of some additional examinations, the Sholtes-model has been tested successfully. According to the experiences, the model, which deduces trust to the faith put in the partner's loyalty and capability, is basically relevant. The argument according to which there is a high level of trust between partners provided faith in both loyalty and capability takes equally high values has been clearly confirmed. The research, however, revealed that the above-mentioned two factors determine it to a different degree: in case of trust between members faith in capability seems to be more important, while trust towards the management is determined rather by faith in loyalty.

It can be concluded from the experiences that one of the

possible ways of trust development within the organizations and collaborative activity improvement is, on the one hand, development of skills-training - for example through the professional training of farmers and the management - while on the other hand, by strengthening loyalty of partners towards each other, for example through team-building programs, events.

Naturally, this research has its own limits. It is difficult to generalize the results because of the sample concentration (only one agricultural organization) and its low number (N=144). The obtained results, however, significantly overlap with what was published by Baranyai et al. (2013) and Vasa et al. (2014) and it makes some level of generalization possible. Nevertheless, it is worth conducting more research in this subject which can have two directions: the quantitative expansion of the research, namely expanding the number and the field of data collection, as well as qualitative expansion, namely expanding more empirical models. Hopefully, by means of the qualitative expansion we will be able to get more precise answers about the factors that hinder agricultural cooperatives the most.

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