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STRUCTURAL SOCIAL CAPITAL AND ECONOMIC PERFORMANCE: FINDINGS OF EMPIRICAL FARM DATA IN THE CZECH REPUBLIC

*Axel Wolz, Jana Fritzsich und Jitka Pencáková**

Abstract

With the change of the political regime in Central and Eastern Europe, both managers of corporate farms and newly established private farmers had to adjust to the rules of the market economy. Among both groups, some are economically more successful than others. In general, a varying adoption of production factors is identified as being of influence. Whether their ability to collaborate with other farmers is an additional factor which has been discussed under the concept of social capital since quite some time will be analyzed in this paper. Based on the findings of a survey among a sample of 62 farms in the Czech Republic it can be shown by adopting factor and multiple regression analysis that social capital is indeed a significant factor determining the level of agricultural income.

Keywords

corporate farms, private farms, social capital, cross sectional models, Czech Republic

1 Introduction

At the eve of the transformation from socialist central-planning to the market economy in Central and Eastern Europe, it had been assumed that the collective and state farms would relatively quickly be transformed into private farms or even family farms. This seemed to be the conclusion not only in line with historical experience but also of most neo-classical and neo-institutional economists (see for a summary discussion: SCHMITT, 1993: 143-159). While many persons took up private farming, it had not become that important as anticipated. Particularly, in East Germany, Hungary, Slovakia and the Czech Republic agricultural production is dominated by corporate farms, i.e. transformed agricultural co-operatives, joint-stock companies and limited liability companies. Hence, a dualistic pattern of agricultural producers can be observed these days in these countries, i.e. private farmers on the one side and corporate farms on the other.

Almost 15 years after transformation a relatively diverse picture emerges. Among both groups of farm entities some are economically more successful than others. Many factors seem to be of influence, of which the major ones can be summarised as follows (ROZELLE and SWINNEN, 2004; BEZEMER, 2002: 1301-1307): Underdeveloped rural financial systems and the complicated mode of farm restructuring led to a limited access to loans due to lack of profitability, collateral problems, risks and uncertainty. Similarly, the farm sector was characterised by a weak human capital structure to manage private farms, fragmented land ownership, rapid changes in agricultural policies and an incomplete legal framework. In addition, it had been argued that a low level of social capital has led to a poor economic performance. Particularly, with respect to farmers in transition economies, it had been argued that they have to regain initiative and relearn how to co-operate (CHLOUPKOVA and BJORNOSKOV, 2002: 245). Whether social capital constitutes an additional factor increasing economic welfare will be the focus of this analysis. Two tasks have to be accomplished: First, it has to be shown that social capital

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can be identified as an independent factor. Second, it has to be assessed whether this factor has a significant impact on economic performance. We will test this hypothesis in making use of data of an empirical survey among agricultural producers in the Czech Republic.

2 Concept of Social Capital

The concept of social capital had been adopted fairly recently in social and economic sciences. The idea is based on the assumption that social networks are vital in managing one's daily life. These networks, however, are not naturally given but must be constructed through investment strategies oriented to the institutionalization of group relations, usable as a source of other benefits (PORTES, 1998: 3). In broad terms, social capital can be defined as networks, norms and trust that facilitate information sharing, collective decision-making and collective action. However, researchers differ whether it can be regarded as an attribute of an individual in a social context (e.g. BOURDIEU, 1983) or as a group property (e.g. COLEMAN, 1988; PUTNAM, 1993). Due to its recent emergence, broad ambit and multi-disciplinary nature, the conceptual literature is still evolving (PRODUCTIVITY COMMISSION, 2003: 5). Therefore, there had been a lot of criticism about the vagueness of the concept, as simply too many meanings are associated with it and a consensus about a commonly acknowledged one is still missing. Hence, some economists are very sceptical about the concept (e.g. MANSKI, 2000: 121-123), while others urge to go on with the debate (e.g. DURLAUF, 2002: F418).

In economics, the concept gained prominence with the execution of the 'Social Capital Initiative' by the World Bank during the second half of the 1990s. When analysing economic performance the ambitious claim had been put forward that social capital might constitute an independent, and hitherto under-appreciated, factor of production (WOOLCOCK, 2002: 20-21). More specifically, the social capital question concerns the benefits and costs of co-operation. OLSON'S study (1965) about the logic of collective action can be seen as the basic work of research about organisational development. Incentives, costs and expected profits are discussed as the central issue that motivate people to act together. The basic hypothesis concerning social capital's impact assumes that the welfare within the group generally will be enhanced, in the sense that the collective gains net of costs to group members will be positive (KNACK, 2002: 43).

As a consequence of this discussion, there had been calls for a more tightly focused micro definition of social capital and a 'lean and mean' conceptualization focusing on the sources – that is, primarily social networks – rather than its consequences (which can be either positive or negative, depending on the circumstances), such as trust, tolerance and co-operation. The focus is on the micro level and the structural elements. The upside of this approach is that it is more or less clear about what is, and what is not, social capital, making for cleaner measurement and more parsimonious theory building; the downside is that it tends to overlook the broader institutional environment in which communities are inherently embedded (WOOLCOCK, 2002: 22).

In our analysis we will follow this more pragmatic approach. In line with other authors (e.g. SOBEL, 2002: 139) we use a quite narrow definition of social capital. We refer to ROSE (2000: 1) who defines social capital as follows: "Social capital consists of informal social networks and formal organizations used by individuals and households to produce goods and services for their own consumption, exchange or sale". In this respect, the focus is laid on membership on formal organizations, i.e. the structural side. The cognitive side of social capital is bypassed at this stage. Closely linked to the discussion about the definition is the question of how to quantify and measure social capital. The number and focus of adopted indicators differ both geographically and sectorally (GROOTAERT and VAN BASTELAER, 2002: 6-7). However, it is aimed at identifying one or two core indicators of social capital which reflect its impact like those with respect to human capital ("social capital dream", PALDAM and

SVENDSEN, 2000). In line with the call for a more tightly focused definition of social capital the number of relevant indicators is supposed to be reduced. In our analysis we could make use of a limited range of indicators, only, and concentrate on membership in formal organizations.

3 Most Important Organisations in Support of Agricultural Producers

Quite a number of organisations have been set up since 1990 in the Czech Republic. They either had to be established from scratch or former socialist mass organisations had been transformed into membership-oriented ones. The most important ones will be briefly discussed below (BAVOROVÁ, 2004: 240-245; YAKOVA, 2005: 9-11):

Chamber of Agriculture (CA): It had been established in 1992 by law. The main objectives are to represent the interests of its members, i.e. all enterprises with respect to agriculture, food industries, and forestry. The Chamber encompassed two levels, i.e. the central one and 60 regional branches. Membership used to be compulsory during the first year, but since May 1993 it is voluntarily (RAKUŠOVÁ, 2002: 44). Three major groups of members are the corporate farms, the private farmers and the agro-industrial enterprises. The organisational degree of both groups of agricultural producers is highly different. While just about 4 % of private farmers are members of CA, about two-thirds of the corporate farms have joined.

Agricultural Association (AA): This organisation had been registered in 2001 and been transformed from the former Association of Agricultural Co-operatives which had been set up in 1968. Therefore, it could make use of all the assets of its predecessor organisation. It is the political lobbying organisation of all large farms which employ staff regardless of the legal form. More than one third of all corporate farms have become members. The average farm size of the corporate member farms comes up to about 690 ha. This is about 200 ha smaller than the average farm size of all corporate farms. It can be assumed that larger-scale corporate farms do not see the need of joining this formal organisation to their support.

Association of Private Farmers (APF): It had been founded in 1999. Its main task is to defend the economic, social and professional interests of individual farmers. It is guided by the respect for family farming and the belief that these farms will form an important part of modern agriculture and a developed countryside. It is a merger of three small predecessor organisations which had been set up during the early 1990s. All of them started from scratch. With a small annual budget it depends mainly on honorary work of its board members. It has not been very successful in organising private farmers effectively. Just about 6 % of all private members have joined.

Marketing Co-operatives: They have been set up since the early 1990s. In 2002 their number stood at 84 spread all over the country. Their main role is to strengthen the position of agricultural producers in face of consumers and agricultural processing industries. Particularly, since the late 1990s, it had also been the objective to strengthen the position of Czech producers in the EU common market. Very often, the formation of marketing co-operatives has been supported by CA and the government. They mainly focus on strengthening the bargaining position of the agricultural producers which is reflected in higher farm gate prices for agricultural products and lower input prices. However, quite a number of marketing co-operatives failed during the 1990s, so their reputation is not so good among agricultural producers.

Professional Organisations: Their number increased rapidly since 1990. They can be seen as specialised societies which promote information sharing, extension and the interests of their members with respect to political bodies but also the society at large. Their goal is to permanently increase the quality and the economic performance of the respective product at the farm level. In 1996, it has been estimated that there are in total about 360 professional organi-

sations in the Czech Republic. While there is no detailed information with respect to the number of agricultural professional organisations, more than 20 can be identified.

4 Data Analysis

Up to now, not many studies about the role of social capital on rural development in general and agricultural development in specific have been executed in transition economies (MIHAYLOVA, 2004). Similarly, in most studies the issue of social capital is covered partly and the adopted approaches differ greatly. In this analysis, we assume that membership in organizations will lead to higher economic performances. It is based on the central hypothesis that, besides the provision of the major production factors, like land, labour and capital, social capital can be identified as a significant factor explaining economic development at national, regional and local levels. More specifically, we follow the hypothesis that the economic welfare of agricultural producers is, at least to some extent, determined by their membership in formal organizations. We could test this hypothesis in making use of the data of an empirical survey among agricultural producers in the Czech Republic. The survey was developed by VUZE (Prague) and had been executed during late summer of 2003 referring to the figures of 2002. It included 42 corporate farms as well as 20 private ones.

4.1 Descriptive Analysis

Ten recorded variables could be put together under six categories (i.e. labour, land, capital, social capital, legal form and production intensity) in analyzing their influence on economic performance. These categories were used in the quantitative analysis below. As the dependent variable we applied gross farm income. In this analysis, we do not discuss the two variables describing human capital, i.e. level of education and age. The calculations showed that they neither formed an independent factor in factor analysis nor had they high factor loadings on any other extracted factor. This is caused by a number of significant, but low correlations between all collected variables. All the calculations were done with the software package SPSS. In the following we describe the variables separated according to the legal form of the farm, i.e. corporate and private farms, and as a pooled sample:

Labour: The labour input is measured as the sum of the total annual working time calculated from the total number of the work force multiplied by 2,000 hours for full-time workers and 1,000 hours for part-time workers. The median labour input comes up to 148,000 hours per corporate farm and 4,000 hours per private farm, respectively.

Land: This indicator covers the total land area operated by the farm including permanent pastures, perennial crops, and land under buildings. Corporate farms amounting to an average size of 1,723.5 ha are remarkably larger than private farms operating about 112.0 ha. These figures almost double the national average of corporate farms and are about four times larger than those of private ones. Therefore, we have to admit that our sample is more biased with respect to larger agricultural producers.

Capital: The questionnaire did not collect data about the value of capital (buildings, machines, animals, etc.). But it had been asked about the value of annual depreciations per farm which is used as a proxy indicator for farm capital. On average, depreciations amount to 5.61 million CZK¹ with respect to corporate farms and 350.0 thousand CZK for private ones.

Production intensity: The intensity of production has an undisputed effect on economic performance. As almost all farms cultivate cereals, we decided that the average yield of cereals can be seen as a viable proxy of production intensity. Nevertheless, we are aware that production intensity is not only dependent on economic and human factors, but also reflects natural conditions. Average yields came up to about 3.5 t/ha among corporate farms and about

¹ CZK: Czech Koruna, 1 US\$ = 32.81 CZK, 1 € = 30.91 CZK in 2002 (OANDA, 2005).

3.8 t/ha among private ones. The difference is statistically not significant (Mann-Whitney-Test).

Social capital: The focus of this paper is on social capital. We had to restrict the analysis on its structural form and five different variables could be analyzed. With respect to formal organizations, four different types could be distinguished: (a) the Chamber of Agriculture, (b) political lobbying organizations, (c) professional organizations, and (d) marketing organizations. Membership in the Chamber is for both, corporate farms as well as family farms, very high in our sample. 83.3 % (35 of 42 farms) of the managers of corporate farms and 80.0 % (16 of 20 farms) of the heads of private farms stated that they are members. Membership in lobbying organizations, i.e. the Agricultural Association with respect to corporate farms and the Association of Private Farmers with respect to private farmers, is a bit lower. About two thirds of the corporate farms and about one third of the private farmers had joined their respective organization. Again, corporate farms were better organized, but when compared with the national level, the organizational degree of both forms in the sample is very high.

Since membership in lobbying organizations focuses more on the representation of interests with respect to policy makers, it is therefore not directly connected with farm production as such. In order to get professional information and to improve technical knowledge, farmers join specialized organizations. Membership seems to be motivated by the production profile of a farm. Since corporate farms have a more diversified production profile, they are members in more professional organizations (up to 5 in our sample) than private farms (up to 3 in our sample). Only 26.2 % of the corporate farms are not members in at least one professional organization whereas 44.4 % of the private farms did not join any.

The used marketing channels are a good proxy-indicator for the ability of managers to build up networks promoting their economic situation. We are concentrating on two marketing channels, only. Joint marketing through marketing organizations based on voluntary membership forms the one side. All sales by other marketing channels are seen as own sales and stand for the second marketing channel in our survey. While marketing through joint marketing organizations requires the build-up of social capital with other farms, own sales do not need this type of capital. Therefore, we see high shares of sales by joint marketing organizations as a proxy for a high level of social capital. In our survey, both marketing channels amount, on average, to about two fifths of the total sales and are of the same importance. The differences between corporate farms and private farms are not significant (Mann-Whitney-Test).

Legal form: The survey includes corporate farms as well as private farms. In total, 42 corporate farms and 20 private farms responded to the questionnaire. For our regression analysis, we coded corporate farms with 0 and private farms with 1.

Economic performance: We used one indicator to measure economic performance (as the dependent variable). This indicator refers to the gross farm income calculated as the total output (including not only the turn-over of agricultural production but also other types of income, i.e. services and tourism) minus the intermediate consumption, i.e. specific costs and farming overheads. On average, the gross farm income amounted to 11.5 million CZK for corporate farms and 600,000 CZK for private farms, respectively.

4.2 Factor Analysis

The focus of this paper is to test the influence of social capital on gross farm income as our performance indicator. Therefore, it is necessary to make sure that social capital is not correlated in the sample with other influencing variables like the value of capital or the amount of used land. The factor analysis is a multivariate procedure that extracts independent factors from a set of correlated variables. The extracted factors can be used in further, more advanced calculations. As input data a matrix of correlation coefficients (Kendall's tau) was used. The Kaiser-Meyer-Olkin criterion (MSA: measure of sampling adequacy) came up to 0.69 proving

the matrix as mediocre but suitable for factor analysis (BACKHAUS et al., 2003: 276). By principal component analysis with varimax rotation and Kaiser normalization four factors could be extracted from the set of nine variables explaining 79.2 % of the total variance in the included variables. Only factors with an eigenvalue greater than 1 are used in the further analysis (Kaiser criterion).

Table 1: Factor loadings for nine variables on four factors (principal component analysis, varimax rotation with Kaiser normalization)

Variable	Factor			
	1	2	3	4
Production intensity	-0.014	0.054	0.009	0.974
Total annual working time	0.908	-0.027	0.094	-0.008
Used land	0.888	0.017	0.160	-0.060
Depreciations	0.875	0.008	0.089	0.074
Membership in the Chamber of Agriculture	-0.106	-0.031	0.844	-0.060
Membership in lobbying organizations	0.300	0.113	0.716	-0.039
Membership in professional organizations	0.380	-0.020	0.608	0.289
Percentage of total agricultural sales by joint marketing organizations	-0.020	-0.947	-0.065	0.012
Percentage of total agricultural sales by own sale	-0.024	0.946	-0.015	0.073
Eigenvalue	2.63	1.81	1.64	1.05

Relevant factor loadings greater than 0.6 or less than -0.6 are in bold letters

Source: Own calculation with data from the VUZE farm survey 2003

Table 1 summarizes the results of the calculations by showing all factor loadings and those greater than 0.6 or less than -0.6 in bold letters for the nine variables on four factors. We labelled the four factors according to the variables that have factor loadings greater than 0.6 or less than -0.6. Factor 1 summarizes the three variables that describe the classical production factors land, labour, and capital. Two factors indicate partial aspects of social capital. We named them marketing through joint marketing organizations (factor 2) and membership in supporting organizations (factor 3). Factor 4 stands for the production intensity.

At this stage, it can be concluded that the factor analysis separated the classical production factors clearly from factors indicating social capital. Two social capital related factors have been extracted. In this respect, we cannot contribute to the ‘social capital dream’. Nevertheless, both factors, i.e. “membership in supporting organizations” and “use of different marketing channels” are independent from farm size or the volume of capital. Or, in other words, it also shows that in our sample farm size *per se* is not related to membership in formal organisations, and hence to a higher level of social capital. Therefore, in a final step, the factor scores for the four independent factors were computed to replace the nine correlated variables in the multiple regression model and to test whether the two social capital factors have a significant effect on gross farm income.

4.3 Multiple Regression Analysis

In the last step of the analysis the following linear multiple regression model had been calculated to test whether there is any significant impact of social capital factors on gross farm income:

$$(1) Z_GFI = b(5) * legal_form + \sum_{i=1}^4 b(i) * factor(i)$$

Z_GFI : standardized gross farm income

legal_form : dummy variable (0 = corporate farm, 1 = private farm)

b(5), b(i) : coefficients, i = 1..4

factor(i) : scores for the ith factor, i = 1..4

In addition to the four factors a dummy variable was introduced with respect to the legal form of the farm. Due to missing values and one outlier the total number of observations came up to 43 farms on whose data the calculations of the regression analysis were based. The calculation started with the full model which was backwards reduced thereby that non-significant factors were excluded step by step from the model. A factor was treated as non-significant if its level of significance was higher as 0.1. Table 2 summarizes the results of the regression analyses, i.e. on the one side the influence of all five factors and on the other, of the significant ones, only.

With respect to the results, the measurement of determination comes up to 0.52. Hence, our model explains more than half of the variability in gross farm income. The model is significant. As expected by neoclassical theory the factor 'land, labour, and capital' is highly significant indicating that larger farms have higher farm outputs. Similarly, the factor 'production intensity' is significant showing that farms using modern technologies and/or operating under favourable conditions obtain higher outputs. The legal form of the farms shows no significant influence on gross farm income, so we cannot conclude that family farms are more or less successful than corporate farms.

Table 2: Results of the multiple regression analysis (N = 43)

factor(i) and legal form	Model with all factors		Model with significant factors only	
	b(i)	Level of significance*	b(i)	Level of significance*
Land, labour, and capital	0.601	0.000	0.647	0.000
Marketing through joint marketing organizations	-0.226	0.048	-0.177	0.093
Membership in supporting organizations	-0.034	0.775		
Production intensity	0.184	0.077	0.171	0.096
Legal form	-0.366	0.224		
Corrected R²	0.52		0.52	

* A significance level lower than 0.1 stands for a significant effect of the factor on the dependent variable

Source: Own calculation with data from the VUZE farm survey 2003

As expected in our hypothesis, the social capital related factor 'marketing through joint marketing organizations' shows a significant impact on gross farm output. Its coefficient is negative. Since there is a negative factor loading of the variable 'percentage of total agricultural sales by joint marketing organizations' on this factor, the negative coefficient stands for increasing gross agricultural income for higher percentages of sales by joint marketing organizations. In this respect, our hypothesis has been confirmed by our results. On the other side, the second social capital related factor 'membership in lobbying organizations' does not show a significant impact on gross farm income. We suggest that it is not passive membership that

increases economic performance but active participation in formal organizations which could not be covered in this survey.

5 Conclusions

In this paper we discussed the impact of social capital on farm performance. By running a factor analysis, it could be shown that two social capital related factors, i.e. 'marketing through joint marketing organizations' and 'membership in supporting organizations' could be clearly separated from the classical production factors. Therefore, we continued in testing our hypothesis by running a regression analysis. As expected by neoclassical theory farm performance is significantly determined by the traditional production factors, i.e. land, labour and capital and by production intensity. The legal form of the farms, however, does not show any significant influence on economic performance. Therefore, we cannot conclude that private farms are more or less successful than corporate ones.

Our findings show that social capital can be identified as a separate production factor, but the social capital related variables did not load into a single one. The social capital factor referring to 'marketing through joint marketing organizations' had a significant impact on farm performance. Our hypothesis has been approved by the analysis. On the other side, it could not be shown that our second social capital related factor 'membership in supporting organizations' had any significant influence on farm performance. We suggest that it is not passive membership in a supporting organization, but active participation which will have an effect on farm performance. Therefore, a first recommendation can be drawn: Both types of farms, i.e. corporate and private farms, can improve their income if they join marketing co-operatives. But more in-depth analysis is needed.

References

- BACKHAUS, K., B. ERICHSON, W. PLINKE and R. WEIBER (2003): *Multivariate Analysemethoden*. Springer, Berlin.
- BAVOROVÁ, M. (2004): Interessenkonflikte in der tschechischen Landwirtschaft. In: *Osteuropa-Wirtschaft* 49 (3): 237-246.
- BEZEMER, D. (2002): Credit Markets for Agriculture in the Czech Republic. In: *Europe-Asia* 54 (8): 1301-1317.
- BOURDIEU, P. (1983): Ökonomisches Kapital, kulturelles Kapital, soziales Kapital. In: Kreckel, R. (Hrsg.): *Soziale Ungleichheiten*. Otto Schwarz & Co, Göttingen: 183-198.
- CHLOUPKOVÁ, J. and C. BJORNOSKOV (2002): Could social capital help Czech agriculture? In: *Agricultural Economics – Czech* 48: 245-249.
- COLEMAN, J.S. (1988): Social Capital in the Creation of Human Capital. In: *American Journal of Sociology* 94 (Supplement): 95-120
- DURLAUF, S.N. (2002): Symposium on Social Capital: Introduction. In: *The Economic Journal* 112 (483): 417-418.
- GROOTAERT, C. and T. VAN BASTELAER (2002): Introduction and overview. In: Grootaert, C. and T. van Bastelaer (eds.): *The Role of Social Capital in Development. An Empirical Assessment*. Cambridge University Press, Cambridge: 1-15.
- KNACK, S. (2002): Social capital, growth and poverty: a survey of cross-country evidence. In: Grootaert, C. and T. van Bastelaer (eds.): *The Role of Social Capital in Development. An Empirical Assessment*. Cambridge University Press, Cambridge: 42-82.
- MANSKI, C.F. (2000): Economic Analysis of Social Interaction. In: *Journal of Economic Perspectives* 14: 115-136.
- MIHAYLOVA, D. (2004): *Social Capital in Central and Eastern Europe. A Critical Assessment and Literature Review*. Center for Policy Studies, Central European University, Budapest.
- OANDA (2005): In: <http://www.oanda.com/convert/fxhistory?lang=de>, (Stand: 2. September 2005).

- OLSON, M. (1965): *The Logic of Collective Action*. Harvard University Press, Massachusetts, Cambridge.
- PALDAM, M. and G.T. SVENDSEN (2000): An essay on social capital: Looking for the fire behind the smoke. In: *European Journal of Political Economy* 16: 339-366.
- PORTES, A. (1998): Social Capital: Its Origins and Applications in Modern Sociology. In: *Annual Review of Sociology* 24: 1-24.
- PRODUCTIVITY COMMISSION (2003): *Social Capital: Reviewing the Concept and its Policy Implications*. Research Paper. AusInfo, Canberra.
- PUTNAM, R.D. (1993): *Making Democracy Work: Civic Tradition in Modern Italy*. Princeton University Press, Princeton.
- ROSE, R. (2000): *Measures of Social capital in African Surveys*. Report prepared as part of the World Bank Social Capital Initiative. Centre for the Study of Public Policy, Glasgow. In: www.socialcapital.strath.ac.uk/africaindex.html (Stand: 27. September 2001).
- RAKUŠANOVÁ, P. (2002): Conference proceedings: Reprezentace zemědělských zájmů v českém stranickém systému po roce 1989 (*Representation of agricultural interests in the Czech party system after 1989*), Czech Republic, Praha.
- ROZELLE, S. and J.F.M. SWINNEN (2004): Success and Failure of Reform: Insights from the Transition of Agriculture. In: *Journal of Economic Literature* 42 (2): 404-456.
- SCHMITT, G. (1993): Why Collectivization of Agriculture in Socialist Countries Has Failed. A Transaction Cost Approach. In: Csaki, C. and Y. Kislev (eds.): *Agricultural Co-operatives in Transition*. Westview Press, Boulder: 143-159.
- SOBEL, J. (2002): Can we Trust Social Capital? In: *Journal of Economic Literature* 40 (1): 139-154.
- WOOLCOCK, M. (2002): Social capital in theory and practice: where do we stand? In: Isham, J., T. Kelly and S. Ramaswamy (eds.): *Social Capital and Economic Development – Well-being in Developing Countries*. Edward Elgar, Cheltenham: 18-39.
- YAKOVA, I. (2005): How is agricultural interest intermediation affected by accession to the EU: Czech Republic, 'Europe' and its farmers. Revised version of a paper presented at the CONNEX workshop "Managing Interest Representation in the EU". Vilnius, Mykolas Romeris University.