THE TRUST IN INSTITUTIONS AND MANAGER ASSOCIATION

Abstract:

Recent research suggests that greater business co-operation between enterprises is associated with a higher level of social capital of an individual. Since managers are basically people who base their activity on co-operation, the goal of this paper is to establish a link between the level of social capital of managers in cluster-based companies with their assessment of the activity and results of those activities in clusters. The analysis includes all dimensions and elements of social capital and the perception of managers on the business results of mutual cooperation. For this purpose, the Canonical correlation analysis (CCA) and the nonparametric statistical method (Kendall Tau-b correlation; \( \tau_b \)) were used to avoid the conclusion using only one of the methods. The results have shown that there is a statistically significant, but weak, correlation between trust in institutions and active membership in associations with managers' assessment of joint activities within the cluster.

Keywords:
social capital, trust, network, business results

This research has shown that there is a statistically significant association between multiple memberships of managers in associations with their higher grade of activity within the cluster. The results have shown that general trust and perception of compliance with the norms of citizens is negatively associated with a higher grade of cluster activity, but these results are not statistically significant.

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Introduction

Arrow [1: 357] further analysed the causes of lagging of certain regions in relation to others and stressed that "virtually every commercial transaction has an element of trust [...]. It can be said that much of the economic downturn in the world can be explained by the lack of mutual trust." (according to [20: 1252]). Explaining the sociological phenomenon with which the term social capital is related to is of the earlier date [12], [16], [20], but the dissolution of the concept of social capital belongs to the recent literature [7], [8]. The development of the concept of social capital is described by the words: "The concept of social capital was originally shaped in sociology, its full application experienced in political research, from which it expanded to other social sciences, especially economics." [34: 134]. Precisely because of its widespread use and different measurements, the concept of social capital was also subjected to criticism [15], [26]. Talking about the firmness of social capital, Fidford [10] says that much of today's social capital has emerged in the recent past and cannot be attributed to the long-term historical legacy.

The study of the relation between the dimensions and the elements of social capital and the distribution of social capital by the counties of the Republic of Croatia on the sample of citizens [6] showed a strong and significant link between social trust, active participation in associations and perception of non-violation of the norms of citizens, with total social capital. The same has been established for elements of social trust; general trust and trust in institutions, which is not the case with the personal attitude on the importance of respecting norms. Analysis of the elements of social trust has shown that institutional trust plays a key role in the formation of social capital, and within it, trust in parliament, the government, the legal system and local self-government.

According to many authors, social capital indicators positively mutually correlate with indicators of economic activity [3], [4], [9], [13], [14], [19], [27], [28], [29] and [36], although the results of their research point to different conclusions. Beugelsdijk and Van Schaik [4] using EVS data for 54 European regions when examining the relationship between social capital and economic growth assumed a positive relationship. On the social capital side, trust and active and passive membership in the associations were examined. On the side of economic growth indicators, the variables of investments in the physical and human capital were used, measured by the rate of enrolment in schools and the relative indicator of GDP per capita. Using four different statistical models for correlating variables, authors found that trust and active membership are significantly and positively related to economic growth.

Unlike previous surveys conducted on a sample of citizens, this research is examining the relationship of social capital of enterprise managers who are members of the cluster and their perception of activities within the cluster. Respectively, this research should identify which element of social capital is most closely related to the perception of accomplished shared activities and results in the area of information exchange among members, employee education, joint investment in research and development and market research, cooperation with universities, faculties and research centres, promotion, performances towards partners and fairs and financial support achieved by the Government, local government and support institutions. The conducted research presented in this paper is based on the definition of the World
Bank's social capital [38: 1], whereby social capital refers to institutions, relationships and norms, and it consists of three dimensions: social trust, association (active and passive), and respect for norms as presented by Štulhofer [37]. The perception of the importance of observance of the norms (which can be observed within the concept of opportunism) was explored within the framework of first dimension of social capital, called social trust, together with general trust in other people and trust in institutions, while the rating of respecting the norms of fellow citizens was examined as a third dimension of social capital while representing the perception of the level of corruption in the living environment. The importance of the level of association, the other dimension of social capital, can be linked to the statement [41: 225] "It’s not what you know, it’s who you know."

Measuring the contribution of social capital to the development of clusters

The idea of clusters is broad enough to be applied to service and manufacturing industries, high technology agglomerations, and to the concentration of the industry with lower technology, [21]. Clusters can lead to the great development of regions by boosting productivity by enabling access to specialized inputs and employees, increasing access to information, institutions, and public goods, increasing the capacity of the enterprise to innovate through faster expansion of technological knowledge and innovation. Clusters show higher rates of technological innovation and organizations and greater adaptability to unexpected exogenous changes [22] and [2] and enable easier entry into entrepreneurship as barriers are less accessible than elsewhere [17].

In the literature, they present a rare study of social capital in clusters. Sirak and Rehak [32] investigated the levels of social capital of the Slovak cluster on issues of attitude towards cooperation and trust among companies in the same region. The survey included 177 companies. Respondents rated co-operation among clusters somewhat better than the average (on a scale of 1 to 7) and showed a moderate level of confidence among cluster members. Social capital according to Sölvell [33] has been proven to be the most difficult area to define and measure, and again probably the most important area for determining cluster growth. Social network analysis was a method used in the research of this area, but it showed its limits. An attempt to research social capital was also carried out by mapping methodology on the map of interconnectedness and cooperation that grows as the cluster matures. But the result was just a cluster image without explaining how the cluster works.

Research results [35] on a sample of 111 micro-entrepreneurs in Croatia have shown that managers find clustering and other forms of association unrelated to the business results of their companies. On a scale from 1 to 5, the importance of mergers for business success averaged 1.9 (70.3% of respondents rated the mergers of 1 and 2). The results showed that there was a statistically significant negative correlation between the assessment of the importance of linking clusters and other forms of association (-0.17) to the company’s performance. In other words, people who believe in the importance of association come from micro-enterprises that are less successful. According to the information obtained through interviews, interviewed micro-entrepreneurs are not ready to join clusters and other forms of association, and one of the main reasons is legal
and market uncertainty and distrust of members of such associations.

**Data and methods**

Data for empirical research on the level of social capital of cluster members and cluster business performance under the title 'Research on the influence of social capital on cluster development' was collected by an indirect access through the Lime Survey tool by submitting questionnaires to the electronic addresses of cluster member representatives in 2012. The questionnaire was forwarded directly to the 312 electronic addresses of the managers of companies who were cluster members at the time they were investigating Clusters in the Republic of Croatia 2011 [5:10]. Out of 114 completed questionnaires received, 104 are fully filled (76 small business managers, 24 medium-sized enterprises and 4 large enterprises). Since the questionnaire is passed on to all members of the population, the sample is represented by participants who have responded to the questionnaire by self-selection.

The questionnaire is made up of samples of the World Values Survey (WVS) [42] which is used to assess the level of social capital, whereby respondents are asked to indicate the degree of agreement with a specific statement on the five-degree scale of the Likert format. General trust includes claims: Most people can be trusted, Most people will cheat you if they are forced, Most people will cheat you if they can, You should be very careful about people and Most people will return the favour you do to them. Within the trust in institutions, confidence in the government, local government, parliament, the police, the legal system and trade unions was examined. Within the framework of respecting the norms of the respondents themselves, their views on their personal (non-)based social welfare benefits (e.g. unjustified search for social benefits, fictitious employment for maternity leave etc.), tax evasion, receiving and giving of bribes were examined. Results of the research gave an overview of the first dimension of the social capital of the respondents. Within the second dimension of social capital, association is measured by membership in eight different associations: professional, political, ecological, charitable associations, trade unions, sports and recreational clubs, church and religious organizations, artistic and cultural societies, on the ordinal scale of "I am not member" (value 0), through "yes, but not active member" (1) to "active member" (2). In this way, it is possible to distinguish active from passive membership and its measurement. Since the confirmation of membership in one association does not exclude the certificate in the second one, the survey enables the measurement of multiple memberships of the respondent. The third dimension of social capital was examined by respondents' viewpoints on compliance with norms, but rather of fellow citizens and not personal.

The survey on the level of social capital and business performance of the cluster also contains an assessment of the examinees about the cluster activity (Table 1, column 8), who are its members, by expressing the level of agreement with a specific statement on the Likert scale. In order to ascertain whether individual groups of managers' claims regarding dimensions and elements of social capital are one-dimensional scale or can the factor score [18] be taken as a common measure of individual elements of social trust (Table 1, mark M1, M2 and M3), particles were subjected to analysis of major
components. For this purpose, the Principal component analysis was used, a method that reduces dimensionality by constructing latent variables that are not correlated with each other, and only those that are "sufficiently informative" are retained. After the resulting main components, the multivariate variable was transformed with varimax rotation to obtain more manageable solutions. In the repeat process, according to the Kaiser-Guttman criterion [23], extracted factors were made of one-factor solution (with the sufficient share of the interpreted variance). These factor results were used as a measure of confidence in other people. Component analysis gave a one-factor solution to other groups of claims: the trust of managers in institutions, the importance of respecting norms in the form of justification of certain forms of behaviour or opportunism as the third element of social trust and the perception of the frequency of behavioural forms among fellow citizens (Table 1, marks from M6 to M9), which were used as a perception of corruption level among fellow citizens as the third dimension of social capital.

The association, the second dimension of social capital (Table 1, marks M4 and M5), was measured by the membership of cluster members in eight different associations on the ordinal scale of "I am not a member" (value 0) over "yes, but not an active member" (value 1) to "active member" (value 2). Because of the ordinariness of the variables, the factor structure is not counted, and the index of the association is obtained by adding values to the individual variables or variables that signify membership in individual associations. The cluster-related activity assessment claims were subjected to a component analysis with varimax rotation to determine their dimensionality. The one-factor solution with sufficient share of the interpreted variance, justifying the use of factor results as a measure of activity perception within the cluster.

In the analysis of the results of the research, two methods were used in the analysis, i.e. the analysis was performed in two steps. The reason for this is Peiró-Palomino and Forte Deltell [25: 1], according to which a third of the European budget is devoted to regional policies, and nevertheless: 1) the results of social capital research on regional development in European countries contradict the predictions presented in the theory of social capital at national and at the regional level; 2) the current research with the use of standard parametric analysis has shown exceptional limitations. The first step was to determine the maximum possible correlation between the variables that make up the individual dimensions and elements of social capital and the variables of activity estimation within the cluster. The analysis was carried out by Canonical correlation analysis [11]. In this context, the dimensions and associated elements of social capital are manifold variables on the one hand and some common activities and satisfaction with the results achieved within the cluster of manifest variables on the other.

By examining the correlation between the manifold variables, latent variables are obtained resulting from the maximum possible correlation between the two sets of manifest variables. The relationship between manifest and latent variables is shown in a scheme, Table 1.
Table 1. The dimension of managers’ social capital and their assessment of cluster activity - the relationship between the manifest and the latent variables

<table>
<thead>
<tr>
<th>Manifest variables</th>
<th>Mark</th>
<th>Latent variables</th>
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<th>Latent variables</th>
<th>Mark</th>
<th>Manifest variables</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>M1</td>
<td>General trust</td>
<td>L1</td>
<td>Social trust</td>
<td>M1</td>
<td>Exchange of information among members</td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>Trust in institutions</td>
<td>L1</td>
<td>Association</td>
<td>M2</td>
<td>Joint employee education</td>
<td></td>
</tr>
<tr>
<td>M3</td>
<td>The importance of respecting norms</td>
<td>L1</td>
<td>L4</td>
<td>Assessment of cluster activity</td>
<td></td>
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<tr>
<td>M4</td>
<td>Number of memberships in associations</td>
<td>L2</td>
<td>L4</td>
<td></td>
<td></td>
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<tr>
<td>M5</td>
<td>Membership activity in associations</td>
<td>L2</td>
<td>Association</td>
<td>M3</td>
<td>Joint investment in research and development</td>
<td></td>
</tr>
<tr>
<td>M6</td>
<td>Unfounded search for social benefits</td>
<td>L3</td>
<td>Respect for citizens’ norms</td>
<td>M4</td>
<td>Joint market research</td>
<td></td>
</tr>
<tr>
<td>M7</td>
<td>Tax fraud</td>
<td>L3</td>
<td>Respect for citizens’ norms</td>
<td>M5</td>
<td>Collaboration with universities, colleges and research centres</td>
<td></td>
</tr>
<tr>
<td>M8</td>
<td>Bribe receiving</td>
<td>L3</td>
<td>Respect for citizens’ norms</td>
<td>M6</td>
<td>The joint approach towards partners and at trade fairs</td>
<td></td>
</tr>
<tr>
<td>M9</td>
<td>Bribe giving</td>
<td>L3</td>
<td>Respect for citizens’ norms</td>
<td>M7</td>
<td>Joint advertising</td>
<td></td>
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<td>Table 1. The dimension of managers’ social capital and their assessment of cluster activity - the relationship between the manifest and the latent variables</td>
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In addition to the fact that the canonical correlation technique maximizes the correlation between two sets of variables, its application also results in the relative proportions of variables on a particular canonical variant. The analysis of canonical correlations is relatively robust and well ‘tolerates’ small samples and deviations from a normal distribution [11]. The analysis of the canonical
correlations of a set of variables that make general trust, trust in institutions, variables related to opportunism, variables of perception of compliance with the norms of fellow citizens and a set of variables that make the assessment of activities within the cluster did not yield significant results at the significance level of 0.05. As expected, due to the absence of statistically significant bivariate correlation, neither the analysis of the canonical correlations of the variables of the social capital dimension and the variables of activity estimation within the cluster did not yield significant results. Therefore, in the second step, the correlation of individual dimensions and elements of managers' social capital and their assessment of activity within the cluster was investigated by computing nonparametric Kendall’s Tau-b correlation between these variables [31]. The non-parametric correlation is chosen because of the non-Gaussian distribution of independent variables (the dimension of social capital), as well as the fact that the dependent variable (perception of activity within clusters) is by its nature ordinal.

### Results and discussion

The results showed that at the level of significance $\alpha = 0.01$, there is a statistically significant correlation between the estimation of managers on cluster achievements and trust in institutions and active membership of associations, although these correlations are weak (0.220 and 0.134 respectively). In other words, individuals who have less trust in institutions and who are less active in associations are less likely to accurately evaluate the results of activities within the cluster. When examining the multiple memberships of managers in associations with their assessment of cluster activity, it was found that there was a statistically significant but weak correlation of 0.144. (significance level $\alpha = 0.01$).

<table>
<thead>
<tr>
<th>Dimensions and elements of social capital</th>
<th>Correlation coefficient</th>
<th>Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a. General trust</td>
<td>-0.050</td>
<td>0.488</td>
</tr>
<tr>
<td>1.b. Trust in institutions</td>
<td>0.220</td>
<td>0.001</td>
</tr>
<tr>
<td>1.c. The importance of respecting norms</td>
<td>0.098</td>
<td>0.164</td>
</tr>
<tr>
<td>2.a. Passive membership</td>
<td>-0.025</td>
<td>0.749</td>
</tr>
<tr>
<td>2.b. Active membership</td>
<td>0.134</td>
<td>0.070</td>
</tr>
<tr>
<td>2.c. Multiple membership</td>
<td>0.144</td>
<td>0.001</td>
</tr>
<tr>
<td>3. Respecting the norms of fellow citizens</td>
<td>-0.013</td>
<td>0.850</td>
</tr>
</tbody>
</table>

Table 2. Correlation of individual dimensions and elements of managers' social capital with activity cluster assessment

The results of the analysis are fully consistent with the results of the research conducted by Raiser et al. [29] using WVS data, carried out in 1995. The results of their work have shown that there is no correlation...
between general trust and economic performance in transition countries to the extent that it is expressed in the mature market economies. The authors argue that networking and trust in public institutions are in a positive correlation with economic growth and confidence in institutions that are of particular importance in the transition process, the legal system and the police, while the results for political institutions are ambiguous.

These results may be related to the results of the Bauernschuster et al. [3] who found that there is a link between active membership in associations and the preference of an individual to entrepreneurship and is in line with expectations, as the respondents are people whose activities are based on cooperation.

The results of the research, which show that there is confidence in the institutions of managers while the absence of a link between general trust with their positive assessment of cluster activity, are contrary to the expectations and results of some recent social capital research, Warren [40], Rothstein and Stolle [30], Šalaj [34], while according to Uslaner [39], the relationship between institutional and social, in this work called general trust, applies only to established, economically developed, democracies, while this cannot be said for economically less developed countries, especially for post-communist ones [39]. Since clusters in Croatia have in most cases been created in cooperation with state-level institutions and partly in cooperation with local authorities, there are no unexpected results that have a statistically significant positive link between the trust of managers in institutions with an assessment of cluster activity and are in line with the views of Hardin [13] and Knack and Keefer [19], who are suggesting that where general trust is low and there is no indication of improvement, institutional reforms that provide better formal mechanisms for reliable implementation of contracts and access to credit are more important than greater confidence.

The results of the analysis according to which there is a positive correlation between active and multiple memberships of management in associations and economic development, match with the results of the research that Putnam et al. [27] and are in contrast with the results [35] which have shown that more successful micro-enterprises do not consider clustering as an important factor in business success. The results in this paper, in terms of association, are in line with the analyzes performed by Beugelsdijk and Van Schaik [4].

The results obtained do not match with the results [25] of Peiró-Palomino and Forte Deltell which suggest that a higher level of trust and the importance of respecting social norms can lead to more intensive economic growth and are in contrast with the results [4]. The obtained results are not in line with the assumed positive relationship between the overall trust of the managers and the results of the joint business co-operation and are not in line with the expectations of Paldam [24] that the introduction of more variables describing the trust (as introduced in this paper) would lead to fact that the general trust is significantly positively related to economic performance.

Although the results of the research by Knack and Keefer [19] that the trust and the importance of respecting norms (civil co-operation norms) are associated with greater economic impacts, contrasting to the results in this paper, in support to the results obtained (for Croatia) their words can be cited that the influence of confidence in economic growth is greater in the poorer countries, which is according to them also justified because confidence
is more important in those systems where contracts are not implemented and where access to formal sources of credit is more limited due to the underdeveloped financial market.

Conclusion

Previous research on social capital suggests that the way and the conditions of connecting with others have implications for better economic performance. It also stems from the fact that the community which abounds with social capital is characterized by the desire to achieve common rather than individual goals within the framework of postmaterialist value orientation. Because a manager’s job is marked by the very close cooperation with others, it is to assume that it results in better business outcomes. Starting from this, the results of examining the level of managers' social capital and establishing a correlation with their perception of the level of joint activities within the cluster should be positive and significant. The results have shown that there is a statistically significant correlation between trust in institutions and active membership in associations with a better estimate of cluster activity managers, although the magnitude of these correlations is very low. Passive membership is negatively related to cluster activities, which is not surprising given the alerts of previous researchers on the necessity of researching the level of active and multiple memberships and the lack of examining the relationship between passive membership and economic performance. This research has shown that there is a statistically significant association between the multiple memberships of managers in associations with their higher grade of activity within the cluster, even though it is weak. The results have shown that general trust and perception of compliance with the norms of fellow citizens is negatively related to a higher grade of cluster activity, although results are not statistically significant.

References


