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The role of social capital
in the transdanubian winery networks

Abstract

Wineries are currently going through a dynamic transformation as globalization challenges all firms' strategies. Companies form cooperation from strategic alliances through networks of suppliers till clusters to gain competitive advantages, which can facilitate their market penetration and corporate growth. But what are those factors of social capital that encourages wine-makers to cooperate, to participate in a network? How can regional identity, culture, trust and the connectedness of economic players encourage them? The objective of the research is to measure the role of social capital in network or cluster formation. Statistical examination of eight different wine regions in Transdanubia, covering up 179 wineries who are active members of a network or a cluster proves that there is a positive correlation between regional identity and likeliness of joining or even forming a network. Intercompany cooperation tend to develop faster in regions where economic players share common values, norms and show deep regional identity between their members.

Keywords: social capital, winery networks, regional identity, trust and confidence.
JEL Classification: J24, L66, R11.

Introduction

The long dominant market position of the traditional wine producers' counties, such as France, Italy, Spain and Portugal has been facing challenges and serious threats since the beginning of the 90s, as the new world wine producers, such as Chile, Argentina, Australia, USA or South Africa outperform their traditional counterparts and show astonishing export performance in the global wine market. While traditional European wine-producing countries could increase

their export share from 15% to 32% in the global wine production between 1988-2009, the new world wines reached 37% from their initial 3%, defeating traditional wine producers' countries domination (Anderson, Nelgen 2011). The competitiveness of New World wine-producing countries is based not only on the immense investments in viticulture, and on the very sophisticated, well-targeted marketing activities, but also on high level of R&D activities and knowledge-transfers between wine-growers. In these countries wine producers cooperate closely together in a form of an intercompany network or cluster, which connects farmers, cellars, traders, suppliers, R&D institutions, local governments and other professional organizations (Anderson 2001).

With the growth of the wine industry in New World countries many researcher focused on and started projects on the intercompany cooperations, namely on networks and clusters. Porter and Bond (1998) were the first to analyze the California wine cluster, which was followed by many studies in wine sectors of Australia (Aylward 2006), Argentina (McDermott 2007), Canada (Wolfe, David, Lucas 2005) and Chile. Most of these studies conclude the following:

- the characteristics of wine clusters vary largely not only by countries, but even within regions,
- the role of innovation systems is emphasized as the driver of high performance of these countries,
- the relationship between firms and public research centers is appreciated,
- the word 'cluster' emerges in these works, which refers to the tight cooperation between economic actors, R&D institutions, government and professional organizations.

Having seen the example of the New World, the European Union also developed its research in the wine industry cluster of France, Spain, Italy and Portugal in order to have a clear picture (Larreina, Aguado 2008; Rebelo, Caldas 2011). In general, these works are focusing on the analysis of 'agricultural knowledge and information systems' (AKIS), and unfortunately they pay little attention to the networks between winery firms, furthermore neglecting all soft factors such as social capital and regional identity.

The European wine networks can be contractual, organizational or mixed. These networks are either vertical or horizontal, and are more common in the upper part of the supply chain linking farmers and cellars, but examples can be found in stages of distribution and supply of services (Caffagi, Imacieli 2010). However, in traditional wine countries there are still debates over conservative (traditional) and liberal (modern) orientation of wine production, they see the organizational and business strategies applied in the New World countries as a benchmark, and they start adopting those measures to encourage innovation

and enhance their competitiveness. Obviously, these wine regions are adopting the New World models in their own way, since all wine regions vary culturally, historically, as well as their terrior characters are not similar.

In this paper we focus on the adoption of New World intercompany cooperation model in eight different wine regions in Transdanubian part of Hungary. Analyzing these wine regions we measure how social capital can influence network formation through its soft factors such as trust, confidence and regional identity. First of all, the literature of social capital and regional identity is explored to have a general overview how they promote social cooperation between firms and individuals, and later the connection between social capital and network is demonstrated.

1. Social capital

Researchers have in recent decades tried to answer the question how social capital effects and stimulate regional economic development; many of them focused on people's integration in a region and establishment of social contacts or networks.

The phrase social capital was first mentioned by Hanifan (1916), who considered social capital as all those factors that determine people's everyday life, such as "empathy, friendship, mutual sensitivity to each other and charity". Loury (1977) named all those resources social capital, that inherent in families, social relations, community institutions, and are deeply rooted in a child's development and socialization process. These thoughts and views were crystallized by the works of Pierre Bourdieu, James S. Coleman and Robert D. Putnam, which created three remarkable theoretical standpoints.

In the beginning of Bourdieu's studies he describes social capital as "a capital stemming from social relationships or social obligation" (Bourdieu 1997). In addition, he emphasizes the private nature of social capital, which enables people an efficient mobilization and exploitation of their social relationships through reciprocity and mutuality. As he notes, social capital is the sum of those actual and potential resources, which are linked to more or less institutionalized relations through mutual acquaintances or recognition. In other words, these resources are based on the social belonging to a given group. The sum of all capital, held by each individual member, serves as an assurance, and in the broadest sense, provides creditability to all of them (Bourdieu 1997).

According to Bourdieu (1997), the network of social relations are "products of individual or collective investment strategies", since these strategies consciously or

unconsciously aim at maintaining and creating social ties, that will directly have higher return on investment in the coming future (Csizmadia 2009).

The second theory standpoint comes from Coleman, who provides a definition derived from the educational system combined with the individual's social capital. His definition links contradictory elements perfectly together. According to Coleman (1998) social capital is embodied in the relations between individuals, and occurs, when "the relationships between individuals change so that it facilitates action."

Coleman's early definition of social capital can be utilized as a resource in the role of networking; he differentiates three types: 1) obligations and expectations, 2) information channels and 3) norms and sanctions. Coleman (1990) later refined his concept of social capital and raised it to the most determining definition of all social theories. In his theory of social capital he continues to promote individual behavior, which is beneficial to the person itself, but simultaneously he unfolds the 'public good' character of social capital: certain types of benefits are consumed not only by those who created it; sometimes it is impossible to exclude others from 'consumption' (Coleman 1990). Therefore, Coleman's definition is way beyond the scope of individual action, consequently forming a bridge toward the collectivist, community-based social capital interpretations.

The third theory standpoint derives from R.D. Putnam (1993) works, as he understands social capital as a public good and gives a collectivist interpretation to it. He refers physical capital to subjects, human capital to the unique characters of individuals, while social capital is defined as collective criteria. In this case, the collective criteria means relationships among individuals, close social networks, strong civil organizations, as well as commonly shared norms of mutuality and solidarity, and the problem solving potential of different social groups (Orban, Szántò 2005). According to Putnam (1993), "social capital is a cultural phenomenon, which means at the same time the ability of collective action and the trust or distrust in the public institutions", which characterize large communities such as regions or even entire nations. Putnam (2000) emphasizes the role of trust, confidence, norms, and elementary networks, so to say the 'civil virtues', through which social relations can easily exert their effects. Csizmadia (2009) sees the key of Putnamian social capital concept in the following: first, in the general principle of reciprocity, second, in trust, that 'lubricates' almost every aspect of social interactions, it allows social cooperation and integration while society has mutual benefits.

Putnam (2000) completes the theory of social capital concept and stresses the collective/civil character of social capital. He sees it as a public good that is based on trust and transparency. According his view, social capital rests on high level of trust and confidence among individuals, and of course between public

and political institutions. As a consequence, this creates a public good that boosts not only economic productivity, but also increases the efficiency of the whole society. In line with findings of Putnam (2000) and Burt (2001) social capital can work through several mechanisms: as a common development process based on community level networks, as collective action, as competitiveness and social cooperation, as knowledge transfer, as norm of reciprocity and mutual aid, as collective consciousness and most important as trust and confidence. Regarding this paper's point of view, the presence of formal and informal social networks is essential, since these networks connect each individual to each other and facilitates interaction among them.

D. Narayan (1995) defines social capital as a collection of all rules, norms, obligations and mutual trust that ensures the members of society to achieve their goals. Its degree depends on those institutions, networks and norms, which shape the quality and quantity of social interactions. The most important theories and conclusions of the previous definitions appear simultaneously and the openness toward individual and collective aspects is striking (Orban, Szántò 2005).

Analyzing the concept of social capital by theories of Fukuyama (1999) the following conclusion can be drawn: social capital promotes "social cooperation between individuals, mobilizes informal social norms and commonly shared values". He also emphasizes, that the economic life is inseparable from culture: inseparable from all those 'irrational' values that are linked to morality, to public spirit, to family and to religion. As a result, the neo-liberal economic system, which is based on pure rational choices and decisions, works only within certain limits. Therefore, the major role of modern society is to ensure and maintain a high level of social trust and confidence, and/or to create it, since the lack of social capital means more like an obstacle to economic development than the scarcity of physical capital (Fukuyama 2000).

2. Social capital and regional identity

By projecting social capital to spatial dimensions we find regional identity. As Paasi (2002) states "spatial proximity results in interpersonal interactions among community members developed through direct, informal and long-term relationships which could facilitate intercompany interactions". People's integration in a region and the establishment of social contacts, in other words social networks, strengthens social capital. Furthermore, it is important to notice the extent to which people identify themselves with the region. Dealing with wine regions we must state that wine sector is a natural resource-based industry that is

focused around what Mytelka and Goertzen (2003) refer to as 'site-specific characteristics'. Giving the fact that wine regions have very clear boarders (terrior) they are easy to differentiate from one another, as a consequence, wine growers and cellars can unambiguously identify themselves with the region. At this point individual and collective identification must be separated.

Paasi (2002) and Rose (1995) distinguish between individual and collective identity when connecting identity and space, they claim that "sense of place is more than just one person's feelings about a particular place". They conclude that regional identity may be "an important component of territoriality in various contexts and a significant element in the construction of regions as meaningful socio-political spaces" (Paasi 2002).

Besides the distinction of individual and collective identity Keating (1998) refers to the importance of a differentiation of local and regional identity, which is linked to the question of scale and the definition of regions. According to Keating "local identity is predominantly based on a personal experience, individual contact and events of everyday life, whereas regional identity is a social construction forged in a specific context under the influence of social, economic and political pressures" (1998).

Ray (1998) maintains that territorial identity represents an emerging form of local governance especially in the field of rural development. He links territorial identity with endogenous development and identifies cultural, historical and physical sources of an identity of the territory. He maintains that "the endogenous approach is used particularly for areas which have relative socio-economic problems" (Ray 1998). For this so-called endogenous territorial approach to socioeconomic development, local culture and political participation are central. Both are elementary factors in the sustainable development process.

Roca and Oliveira-Roca (2007) define territorial identity as "a set of spatial fixes and flows that mark a geographical unit such as a place, or a region". In their pronunciation spatial fixes are the "sum of permanently or temporarily rooted and/or anchored elements of the natural heritage, population and human made economic and cultural heritage in a geographical area" (Roca, Oliveira-Roca 2007).

According to Paasi (2009) regional identity is an idea that indicates social integration in a region. He defines regions as processes with boundaries, symbolisms and institutions. Furthermore, identity is part of the institutionalization of regions, the process through which regions come into being (Paasi 2003).

Raagmaa (2002) emphasizes that spatial identity must relate to the individual's personal identity, and it is a social construct as well. People attribute 'meaning' to the observed characteristics of a place, making the environment more than just a random collection of physical and material elements. They identify

themselves with a certain area, not only with the landscape, but with a whole set that encompass culture, sociality, morality, tradition and the social system specific to that region.

It can be concluded, that regional identity extends the meaning of social capital as it promotes social cooperation between individuals, mobilizes informal social norms and commonly shared values and ones connectedness to the region.

3. Connection between social capital and intercompany networks

As the above mentioned authors and many others clearly define the high level of confidence as the fundamental element of social capital, they also highlight the need for networking, spontaneously emerging cooperations and trust, as soft factors. Emphasizing regional identity, culture and trust in network formation we must remember the thoughts of Fukuyama (2000) about economy: "economy is not what it seems to be; it is well rooted in social life, and it cannot be analyzed without taking the establishment of modern societies into account" (Fukuyama, 2000). This means that economy is inseparable from culture: actors are highly influenced by all those elements, structures and functions that surround them in time-space relations, such as nature, history, tradition, morality, norms or even individual connectedness (Paasi 2009; Brányi 2012).

Researchers found that regions with high social capital and trust seems to be able to initiate and execute regional economic development strategies and projects more easily and more effectively than regions with low social capital and low trust (Ray 1998; Roca 2007; Orbán, Szántó 2005). As a result, social capital and networks have to be examined through the eye of trust and confidence, to which, I use the findings of Vadasi's (2009) research.

According to Vadasi: "regional competitiveness can be evaluated by the level of development of clusters and networks located in the region. The formation and development of these networks always rely on the supportive social and cultural background, which is built on existing trust and confidence" (2009). The lack of confidence can cause barriers to local and regional development, hindering the birth and growth of strategic alliances. Vadasi's research shows that in regions with low level of trust and confidence companies set up a defensive behavior, they generate conflict and at the same time they also refuse any form of cooperation. She concludes that through recognition of common interests and values the level of trust may increase between firms, leading to a certain willingness to work together. After having social networks and trust established, more mature corporate networks can evolve. These networks are more capable

of serving common interest and they can build more profitable cooperations. Successful clusters origin from these local, industry-specific networks (Vadasi 2009; Macke, Sanate, Vallegos 2010).
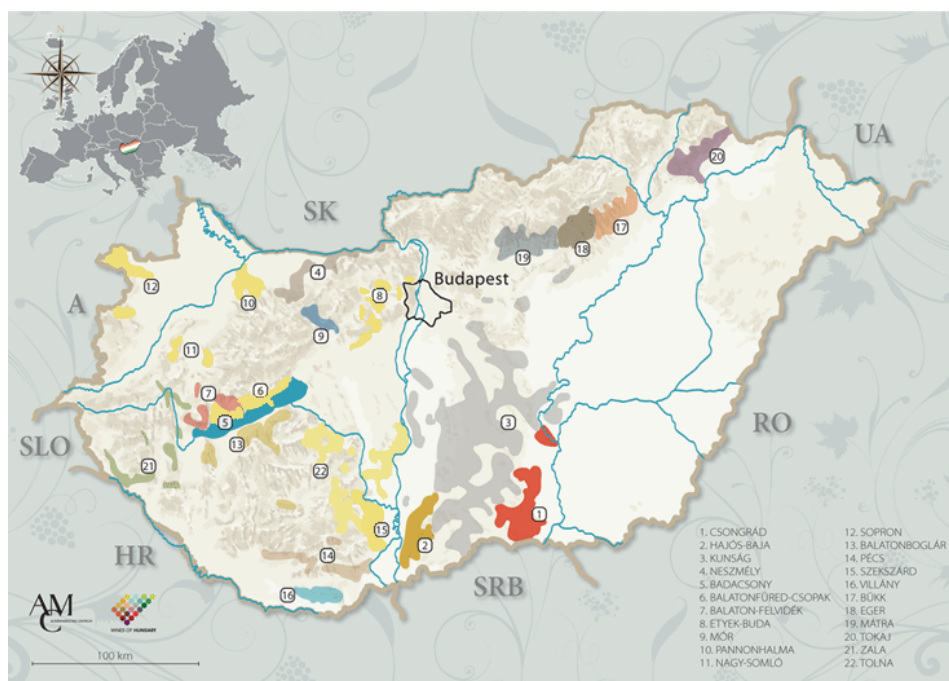
Granovetter's findings (2005) are in close relation with Coleman's (1998) three differentiated types of social capital concepts, namely: 1) obligations and expectations, 2) information channels and 3) norms and sanctions. It is evident from Granovetter's and Coleman's findings, that trust, built on society and commonly shared cultural background, can greatly influence the development of social networks, which in turn affects the willingness to cooperate. When the society passes through this stage, those networks are established easily, that improve competitiveness, enhance social cooperation and knowledge transfers.

On the other hand, it serves as a reward and punishment system among economic actors; furthermore, it improves the regional consciousness and solidarity (Putnam 2000; Coleman 1990). Therefore, it is misleading to examine social networks merely through economic perspectives. Freeman (2004) formulates it comprehensively and precisely: analyses of social networks appear to be an interdisciplinary area of behavioral sciences. These analyses are based on observations that show interdependence and ties among social actors that significantly affect all of them.

4. Research methods

This paper is empirically based, therefore quantitative descriptive research method was chosen, where samples were taken once (Malhotra 2005, p. 303). Eight Transdanubian wine regions were arbitrarily selected out of the existing 22 wine regions, where the entire population of the wine firms was sourced. The following wine regions were considered, marked with yellow on the map: Badacsony, Balatonfüred--Csopak, Tolna, Etyek, Sopron, Szekszárd, Pannonhalma and Great-Somló.

In all, 179 firms were included in the sample with the restriction, that they must belong to an active operating wine cluster or network. All of these firms were surveyed, out of 179 firms, 128 replied resulting in a response rate of 71%, which is outstanding and statistically it can be considered as representative (Sajtos, Mitev 2007). After having checked all surveys for missing data six were discarded.

Figure 1. Transdanubian wine regions considered in the research

Source: Agrármarketing Centrum (2012).

Respondents were asked a series of questions related to social capital, which measured the willingness of cooperation, the motivation of entering a network or cluster and the level of trust and confidence toward local economic actors in the wine industry. Respondents were asked to assess these factors on a five-point Likert scale from strongly disagree to strongly agree. The final survey contained 57 questions, where the measuring level of the response combinations show 11 nominal, 18 ordinal and 62 scale variables. The average time necessary to fill out the survey took 18-25 minutes each. Statistical analyzes were performed using MS Excel and SPSS statistical software. In this paper we would like to show the results of multivariate techniques, namely correlation tables and factor analysis. The value of sample size is N = 113 and there are not any cases missing. The sample size is valid for all questions in our research.

5. Results: context and discussion

Hungarian national wine production averaged 3,5 million hl in the last 5 years (2007-2012) according to National Council of Wine Communities – Hegy-

községek Nemzeti Tanácsa – HNT (2012), which made up a 2% of total EU wine production. Hungary occupies the 18th position in the ranking of wine producers in the world, and the 8th rank in the EU (HNT 2012). The surface dedicated to grape growing was 71.791 ha of vineyard in 2012 (HNT 2012), which shows a significant 15% reduction since the EU accession.

The majority of vineyards can be found in 22 wine regions (appellations), where Hungary produces mainly PDO wine (protected designation of origin), PGI wine (protected geographical indication) and table wines on 53,842 ha (HTN 2012). In this paper I focus on the Trandanubian region of Hungary which covers up 15 wine regions with 25,558 ha. Out of these 15 wine regions the above mentioned 8 wine regions were measured, giving 59% of the Trandanubian wine production (HTN 2012).

Within these eigth Transdanubian wine regions some private and even government agencies stimulate the formation of wine networks or clusters between wine growers and cellars; however, it was eased up by the culture and the history of wine growing, as well as the willingness of mutual assistance and cooperation. In some cases, other agents such as higher education institutions or government agencies extend these cooperations.

5.1. Soft factors effecting intercompany cooperations

Before the data were submitted to factor analysis using Principal Component Analysis, all those soft factors were ranked, that influence the motivation of entering a wine network or cluster. These variables involve the following: connectedness, mutual trust and distrust, confidence and regional identity. Table 1 shows the ranked results with mean, median and standard deviation.

As the positive image of the region (4,82), identification with the region (4,65), former acquaintance with cluster members (4,20) were valued as the most important factors of entering a network or a cluster we accepted Vadasi's (2008) findings. These variables indicate a supportive social and cultural background in the formation and creation of an intercompany cooperation. Furthermore, standard deviation approves it statically, as it is always below 1, that wine growers and cellars uniformly share these values.

The first three soft elements were followed by variables such as 'active participation at public events' (3,95), trust and confidence to local actors (3,45), former strong connections with members (3,41), coping with former negative 'memories' (3,23) and the possibility of dividing tasks between members (2,79). The results highlight the importance of confidence and connectedness in inter-

company network formulation. According to respondents, they gained trust towards local economic actors by entering an intercompany cooperation. Regarding Putnam (1993) and Coleman (1998) network density, confidence and durability of relationships, in other words former connections with members, are key elements to high level of trust and cooperation.

The cooperating winery firms were moderately motivated by the possibility of risk sharing between members (3,37), coping with former negative 'memories' or offenses (3,15), accepting cooperation with rival companies (3,03) or by the possibility of dividing tasks (2,77). Wine growers expect higher costs, but low rate of return through cooperation with others (2,68). The median is 3,0 at this variable, which means respondents are most often on neutral standpoint. The vast majority does not recognize the long-term benefits and return. Wine firms believe that cooperation plays a marginal role in increasing their lobbying power or bargaining position against suppliers (2,53). Surprisingly, the cooperating firms see irrelevant the possibility of developing active trade connections with member companies (2,65). This result also confirms the presence of short-term thinking.

Table1. Soft factors effecting intercompany cooperations

Rank	Soft factors	Mean	Median	Standard deviation
1	Positive image of the region	4,82	5,00	0,60
2	Identification with the region	4,65	5,00	0,82
3	Former acquaintance with cluster members	4,20	5,00	0,90
4	Active participation at public events	3,95	4,00	0,84
5	Possibilities of lobbying	3,67	5,00	1,19
6	Increasing trust and confidence to local actors	3,45	3,00	1,12
7	Sharing risks between members	3,37	3,00	1,05
8	Former strong connections with members	3,24	3,00	1,11
9	Coping with former negative 'memories'	3,15	3,00	1,00
10	Accepting cooperation with rival companies	3,03	2,00	1,28
11	Possibility of dividing tasks	2,77	4,00	1,03
12	Higher costs, but low rate of return through cooperation with others	2,68	3,00	0,98
13	Former business connections with cluster members	2,65	3,00	1,22
14	Developing active trade connections with member companies due to cluster	2,65	2,00	0,87
15	Increasing lobby power towards suppliers	2,53	2,00	0,99

Source: Own research (2013).

5.2. Correlation between soft factors

After having the soft factors ranked, correlations of variables were controlled for statistical significance with Pearson's correlation coefficient in order to reveal the linear relationship between trust and confidence, risk sharing, regional identity, identification with the region, lobbying power, former business

relations or acquaintance. Boxplot helped identifying potential outliers, and then correlation analysis was performed. Correlations were accepted above 0,01 significance level (Sajtos, Mitev 2007, p. 211).

Table 2 demonstrates the correlation of variable 1 and variable 2 at significance level of 0,000. All Pearson's coefficients are between $0,2 < r < 0,7$, which indicate intermediate positive relationship between variables (Sajtos, Mitev 2007, p. 205). It can be concluded, that trust and confidence correlates statistically to risk sharing among members ($r = 0,657$), possibility of lobbying ($r = 0,608$), coping with former negative 'memories' ($r = 0,505$), dividing tasks between members of cluster or network ($r = 0,465$) or even it strengthens the lobbying power towards governmental institutions ($r = 0,460$).

These findings on trust and confidence are in line with Putnam's (1993) statement on trust or distrust, namely "trust, confidence, norms and elementary networks, so to say »civil virtues« exert and facilitate their effect in social relations". Regarding Coleman's (1998) three types of social capital utilization theory, the role of norms and sanctions are present in the Trandanubian wine clusters or networks. It helps overcoming former negative experiences, extends connectedness to local actors, thus creating mutual trust.

Furthermore, it can be stated, that former acquaintances correlates with active business connections between members ($r = 0,469$), helps dividing tasks between local actors ($r = 0,437$) and a perfect tool of sharing risks and overcoming market threats ($r = 0,435$). At this point referring to Granovetter (2005) and Coleman (1998), social connectedness can greatly influence the development of social networks, which in turn affects the willingness to cooperate. Built on former connections companies do not set up defensive behavior, they realize common interest instead. After having social networks established, more mature corporate networks can evolve, which can also be found between the Transdanubian wine cluster members.

Regional identity or one's identification with the region as a soft factor effecting intercompany cooperation was measured in the research too. Table 2 shows a strong correlation between the identification with region, namely how one identifies himself with a certain region with its culture, sociality, morality or traditions, and between projecting positive image of the region ($r = 0,599$). As Paasi (2009) states regional identity indicates social integration in a region. It is statistically proven, that active participation at fairs and exhibitions are influenced by regional identity between wine cluster members ($r = 0,404$). Giving the fact that wine regions have very clear boarders they are easy to differentiate from one another, as a consequence, wine growers and cellars can unambiguously identify themselves with the region and they actually doing so.

Table 2. Correlation of soft factors effecting intercompany cooperations

Variable 1	Variable 2	Pearson correlation
Trust and confidence to local actors	Sharing risks between members	0,657
Possibilities of dividing tasks	Possibilities of lobbying	0,646
Business connections between members	Coping with former negative 'memories'	0,475
Identification with the region	Positive image of the region	0,599
Possibilities of lobbying	Trust and confidence to local actors	0,608
Sharing risks between members	Increasing lobbying power towards suppliers	0,496
Former acquaintance with members	Business connections btw. members	0,469
Trust and confidence to local actors	Possibilities of dividing tasks	0,465
Trust and confidence to local actors	Lobbying power towards institutions	0,460
Sharing risks between members	Possibilities of dividing tasks	0,422
Sharing risks between members	Business connections between members	0,435
Positive image of the region	Active participation at fairs and exhibitions	0,404
Trust and confidence to local actors	Coping with former negative 'memories'	0,505

Source: Own research (2013).

5.3. Factor analysis of soft factors

The soft factors were analyzed using Principal Component Analysis with varimax rotation and considered all valid observations of each variable for the missing data. The index of Kaiser–Meyer–Olkin (KMO) adequacy of the sample was 0,645 and the Bartlett's Test of Sphericity (significant to 0,000) indicated the factorability of data. The KMO indicates that the factor analysis is an appropriate technique (Sajtos, Mitev 2007, p. 258).

The result of factor analysis suggested that the motivation of entering a wine network or cluster is explained by four factors, with 66,5% of total variance explained. The Cronbach's alpha is above 0,5, which represents a good range for an exploratory study, furthermore, the items' coefficients absolute value are above 0,5 as well (Sajtos, Mitev 2007). It is possible to conclude that the items in each dimension of the construct are suitable for measuring all those soft factors that influence the motivation of entering a network or a cluster (Table 2).

As one contribution of this study, Table 3 shows the variables and accordingly the emerged factors. It is possible to observe that they represent the dimensions of social capital, namely trust and confidence, regional identity, connectedness and distrust. The meaning of each factor can be inferred from the content.

In the case of Transdanubian wine growers the social capital is represented mainly by trust and confidence, which explains 29,2% of the total variance. The regional identity factor represents 11,8%, the connectedness factor 10,2% and finally the distrust factor explains 8,3% of the total variance.

The results call attention to the fact that the averages of the variables in each factor, in other words the soft factors motivating wine firms to enter a net-

work, are very similar for 'Trust and confidence', 'Regional identity' and 'Connectedness' factors, ranging from 3,2 to 4,3, while 'Distrust' factor has a mean of 2,6. Therefore, we conclude that there is an important role of social capital in the decision of entering or formulating a wine network or even a cluster in the Transdanubian wine region. However, distrust is present, but it is underweighted compared to the other three factors. In this perspective, we argued that the soft factors of social capital were effectively motivators in the intercompany cooperations, as discussed previously.

Table 3. Soft factors motivating Transdanubian wine firms to enter a network or cluster

Factor	Item	Loading	Mean
Trust and confidence 0,849*	Possibilities of dividing tasks	,822	2,77
	Possibilities of lobbying	,780	3,67
	Lobbying power towards government institutions	,746	2,74
	Increasing trust and confidence to local actors due to cluster	,699	3,45
	Sharing risks between members	,660	3,37
	Coping with former negative „memories"	,536	3,15
	Business connections between members	,513	2,65
Regional identi-ty 0,703*	Positive image of the region	,817	4,82
	Identification with the region	,749	4,65
	Active participation at fairs and exhibitions	,518	3,95
Connectedness 0,639*	Strong connections to members	,798	3,24
	Former acquaintenance with members	,797	4,20
Distrust 0,552*	Higher costs, but low rate of return through cooperation with others	,783	2,68
	Due to distrust, low level of knowledge-transfer	,646	2,55

* Cronbach's alpha.

Source: Own research (2013).

6. Final considerations and future research possibilities

As wineries from all over the world go through a dynamic transformation since globalization, many wine producing enterprises in the traditional European wine regions are forced to deal with low-cost, standardized quantities of New World wine backed with heavy marketing campaigns. Hungarian wine producers are neither exception; just like other traditional European wine producers they seek competitiveness by intercompany cooperations. Generally Hungarian wine networks are present but formed rarely. It can be explained by bad memories of forced cooperation during communist era, distrust between actors and some opportunistic behavior with short term thinking and lack of capital in the wine sector (Cafaggi, Iamiceli 2010). To overcome these difficulties a supportive social

and cultural background is essential, which is built on existing trust and confidence, in other words, on social capital.

The aim of this research was to examine social capital and to measure those soft factors that motivate or influence enterprises to enter intercompany cooperations. Our research examined social capital and its soft factors that motivate or influence enterprises to enter intercompany cooperation. The study shows that intercompany network formation in Hungarian wine regions is highly influenced by trust and confidence, regional identity and connectedness of local actors, which was proven by the ranking of soft factors effecting intercompany cooperation. However, distrust is still present, it cannot hinder network formation itself, but able to slow down knowledge-transfer between members. The results of factor analysis confirm the importance of assessing social capital in intercompany wine networks, which can be summarized: 1) high level of trust and confidence ease up intercompany formations; 2) intercompany networks divide the risks among members; 3) intercompany networks allow that its members solve their collective problems easily.

The case of the eight wine regions in Transdanubia demonstrates that spatial connection and former interpersonal interactions among members were necessary to initiate first informal network formation. After having social networks and trust established, more mature corporate networks could evolve.

Future research should investigate social capital evolution and their effect in wine clusters and networks on a longer time scale, exploring the role of trust and connectedness in emerging wine regions as well. This paper is limited to eight wine regions in Transdanubia, which can be in future extended to other wine regions in Hungary.

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