HOW SOCIAL CAPITAL HELPS SMALL ENTERPRISE?: IMPLICATIONS FOR REGIONAL ECONOMIC DEVELOPMENT

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Abstract

Presenting findings from a sample survey carried among manufacturing small and medium sized enterprises in Kayseri Sub-Region (TR72 – Sivas, Kayseri and Yozgat), this study attempts to understand whether and how social capital has an impact on small firms' performance. Besides, the study goes further to bring into question the effectiveness of different types of social capital, norms and networks and how social capital is created at local level. Social capital is measured at two different (potential and actual) levels. Results of our analysis point to the fact that measuring social capital at its "actual" level might be more useful than measuring it as a "potential". Our findings suggest that firms perform better, if they enjoy higher levels of collective action and can reduce their transaction costs through social relations.

Key words: Regional development, Social capital, trust, collective action, networks, SMEs, Sivas, Kayseri, Yozgat.

JEL Classification: D71, D83, L14

1. INTRODUCTION

There has been a growing interest evidenced by the increasing number of empirical studies focusing on the idea of social capital (SC) over the last decades. SC is more widely accepted now as necessary for economic growth as much as other types of capital, i.e. physical and human capital. It helps long run growth by preventing waste of resources and market imperfections. SC is believed to lower transaction costs, and favour the exchange of knowledge (Boschma, 2005). It is viewed as a viable and cost-effective substitute for laws and legal systems especially for small businesses (Fafchamps and Minten, 1999). The problems of distrust that generate from imperfect information can be better addressed through social groups and networks which facilitate the flow of information.

However, still a debate is going on about what actually social capital means and how it is to be best measured. Most of the indicators of social capital in the empirical literature are only 'proxies' and are not directly representative and exact measures of social capital. That is why SC and its consequences are usually mixed. This study tries to make a contribution in finding better indicators.

On the other hand, this study constitutes one of the few samples from this part of the world on social capital, since there is a lack of empirical work dealing with the situation in Turkey (except for a few such as Secor & O'Loughlin, 2005; Koç & Ferneding, 2007). Although there is some kind of a generalized view about the low level of trust in Turkey based on data compiled for World Values Surveys at different times (WVS, 2009), work on local economic development, in particular concerning small firms and SC is also very limited.

2. CONCEPTUAL FRAMEWORK AND THE MODEL

Theoreticians have not yet reached a consensus on the definition of social capital. Coleman (1990) and others like Burt (1992), Foley & Edwards (1999) and Lin (1999) have focused on the utilization of social structure for rational pursuits; and Putnam (1995) has based SC on the value of *social networks, norms and trust*.

In the empirical literature following the mainstream economics, SC is usually treated as a new element to explain the "missing link" in economic development, and it is taken as a new resource or input in the production function (Paldam & Svendsen, 2004; Dasgupta, 2005). In this study SC is taken as having a unique *transforming* impact on the overall production process rather than being just another new input inside the production function. As put by Putnam (1993), SC increases the profitability of the physical and human capital investments. The rational use of human capital also depends upon the existence of SC. It enables a more productive and rational use of existing factors of production (Glaeser, Laibson & Sacerdote, 2000).

By defining SC for industrial entrepreneurs as the set of relations that enable them to have access to resources and markets (as in Knorringa & van Staveren, 2006), we are able to make a distinction between what SC is, and what it does: Producers' relations with their buyers and suppliers, with other producers, and with the authorities would help them to have access to markets, maintain or improve their positions in the markets, and to take advantage of learning new designs and techniques to apply in their business.

Three types of SC – mainly *bonding, bridging* and *linking* social capital – are being mentioned in the literature (Granovetter, 1985; Woolcock, 2001; Sabatini,

2006). We take bonding SC as strong ties based on common identity (being from the same family, ethnicity, religion/religious sect and neighborhood or village) which is thought to be of great importance especially for small companies. Bridging SC on the other hand, refers to weaker ties among people belonging to different groups; in other words, our feelings of trust towards those which we identify as "others" or "strangers" (those from other ethnicities or religions/religious sect). In our model, business associations are believed to serve as a potential forum both for broadening the bonding SC and for creating the bridging SC. Through the activities within these networks, small firms can better cooperate, reduce transaction costs and learn from each other.

Main hypothesis being put as "social capital can influence small manufacturing companies at local level", there are a number of more detailed hypotheses which we had to test:

- H1: Owner typology is correlated with firm's performance: Open minded, new competition entrepreneurs with a relatively higher level of education can increase their performance better.
- H2: Tendencies of trust is effective on firms' performance.
- H3: Bridging SC is more likely to be beneficial for the economic performance of the company than bonding SC.
- H4: Social norms and sanctions ensure a more secure environment in which entrepreneurs can take investment decisions more easily.
- H5: Formal and informal social network plays an important role in firms' performance.
- H6: Entrepreneurs who can reduce transaction costs using their social relations are more likely to raise their firms' performance.
- H7: Those firms who cooperate and act collectively with other producers are expected to achieve a higher performance.
- H8: Local producers who can get feedback from buyers and provide a significant input that lead to improvement in production by using their social relations (including with out-migrated fellow countrymen) would be more likely to be efficient producers.

3. DATA AND METHOD

The survey was carried out in 2008 between March and July, in Kayseri Sub-Region (TR72 – Sivas, Kayseri and Yozgat), using face-to-face interview and questionnaire techniques. Preliminary results on part (only Sivas) of this study had previously been reported in another paper (Erselcan et al., 2009). The region used

to be at a strategic location for traders since ancient times, but today it ranks behind and the people have been migrating out to more developed western regions especially from Sivas and Yozgat since the beginning of 1950s. Among 81 provinces in Turkey, Kayseri ranks 19, Sivas ranks 53 and Yozgat ranks 64 (DPT, 2005). The total number of manufacturing companies in the region is 1.383, with majority (around 80%) operating in Kayseri, followed by Sivas and Yozgat (STB-KOSGEB, 2006). We approached every small and medium enterprise (SME) in the manufacturing sector located in OID (Organized Industrial Districts) and SIS (Small Industrial Sites), though some of the companies were closed and some of them have not accepted to be interviewed. The questionnaires were filled in by the owners/managers of a total of 325 SMEs out of which 201 were from Kayseri, 94 were from Sivas, and 30 were from Yozgat. Therefore the sample chosen for the questionnaire was representative of the region chosen.

Data were evaluated statistically using SPSS V.13. For interpretation of linkages between certain variables, we used Spearman correlation coefficients.

Many of the questions were taken from earlier surveys and particularly from the questionnaires developed by international organizations like UNIDO, World Bank and by national organizations related to SMEs such as KOSGEB. The questionnaire included four sets of variables and coded answers in some questions were used to develop a number of composite variables. The variables used in the study are reproduced in *Box1*.

4. DESCRIPTIVE ANALYSIS OF THE SAMPLE

Looking at our sample at sectoral divide, basic metals and metal products with 83 companies and furniture with 80 companies constituted the largest portion, followed by machinery and equipment (44), chemical and plastic products (32), textiles and clothing (28), other non-metallic mineral products (26), food (21), and paper and paper products (10). Majority was small scale local companies employing less than 50 workers, producing mainly for local or domestic markets, with low levels of innovation, whose owners/managers have low levels of education. 120 firms (37%) produce also for the export markets while the rest had almost no experience with foreign markets. Of these exporting companies, 31 companies seem to be producing only for the foreign market, which constitute only a 9.5% of the total sample. Almost half of the firms have bought new machinery to expand production capacity in recent years.

4.1. Level of Potential Social Capital: Trust, Norms and Networks

One of the questions to measure *generalized trust* was the so called WVS question: "Generally speaking, would you say that most people can be trusted, or that you can't be too careful in your dealings with people?" Only 24.6 % of our sample believed that "most people can be trusted" *(Table 1)*.

Trust towards more specific (nine) groups of people was also asked as an alternative measure of trust. The responds ranked from 1 to 5 indicating an increasing level. We later used these responses to calculate a composite trust variable which is supposed to reflect an average level of trust. These are reflected in *Table 2*. Composite trust or the average tendency to trust is calculated 2.80 (over 5) for the overall region, 2.90 for Sivas, 2.70 for Kayseri and 3.16 for Yozgat. In assessing whether *bonding SC (ascribed trust)* forms the basis for business relations in the region, we found out that entrepreneurs did not totally rely on their strong ties. Indicators of *bridging SC (earned trust)* on the other hand, reflect a very low level.

Answers to (both direct and control) questions about *norms and sanctions* relating to cheating or business reputation were contradictory which prevent us to make clear assessments about the existence of sufficient social and institutional incentives.

Companies' business association *network* is considered to be an important asset for improving business, as far as it is efficient and effective. Companies in our sample were either members of the local Chamber of Industry and Commerce or of the Chamber of Tradesmen and Artisans. Some of them were also members of voluntary associations. However they were generally not satisfied with their formal business network.

4.2. Social Capital in Action: Economic effects

Owners of the firms in our sample generally have high transaction costs and low levels of collective action. Joint actions (like lobbying, purchasing raw materials and marketing products, or establishing a facility etc.) are very rare. Companies were asked, by using their social relations, to what extent they feel they have provided a significant input that lead to improvement in production. We understand they get too little in terms of *learning* by using their ties. They seem to have benefited especially from buyers and suppliers to a certain extent, but not from the universities for example. Local producers were also asked about their social relations with out-migrated fellow countrymen the level of which is found to be quite low.

5. CREATION OF SC AND ITS EFFECTS ON PERFORMANCE

In order to find out the mechanism through which SC affects economic performance of small scale enterprises at local level, we looked at the correlations between four groups of variables outlined in Box1. Our objective was to better understand both how SC at local level is created and how it impacts on the economic performance of the companies. Tables 3, 4, and 5 summarize the significant relationships between these groups of variables. Generally, though significant, the level of associations is found to be low.

From *Table 3* which gives information on the associations of firm typology with SC and performance, it worth to note the significant negative relationship between bonding social capital and innovation capacity which gives support to the idea that close ties might be restrictive. Interdependence of the firm with its major customer also seems to be significantly correlated with a number of social capital and performance indicators. Level of education, use of IT, innovative capacity, participating in fairs is all found to be significantly associated with firm's performance indicators. Therefore hypothesis (H1) is confirmed.

Looking at levels of association between the characteristics and economic effects of SC in *Table 4*, composite trust, bonding and bridging SC are significantly related to collective action, and bridging SC is especially connected positively with export performance, while bonding SC is negatively related with exports.

Network efficiency is strongly associated with both collective actions and learning, and also with performance indicators. Actively participating in social network of local producers which means a feeling of "belonging" is also positively related with performance. Level of association between norms and economic performance is low but significant. It is important to note here the negative relationship between bonding SC and the reduction in transaction costs.

Based on our findings, hypothesis H2 which claims that "trust is effective on firms' performance" is found to be valid only for the composite variable, not for WVS question. Again H3 is proved for export performance that bridging SC is more likely to be beneficial than bonding SC. Accordingly, other hypotheses H4 on social norms, H5 on social networks are all found to be valid arguments.

Each of the actual social capital indicators are significantly and positively correlated with economic performance indicators. Composite variables of reduction in transaction costs (TC), collective action (COOP), learning spin-offs (LEARN) and the contributions by out-migrated fellow countrymen (LRNCM) are related both with expanding production capacity and composite performance

variable. Learning spin-offs is found to be associated also with export performance. Therefore H6, H7 and H8 are also verified.

6. CONCLUSION

This study is an attempt to fill in the gap of empirical work on SC in Turkey. We focused on small manufacturing companies in Central Anatolia, searching for a basis for regional development efforts. In this framework, we first looked at the tendencies of trusting behaviour; norms and networks (*potential SC*). Levels of trust are found to be generally low. While norms and sanctions relating to cheating and business reputation seems to exist, due to some contradictory results there is a need for further interdisciplinary research on these issues. Firms reported discontent with their associations, implying an ineffective network, probably with little influence on the formation of bridging SC. We have also measured what entrepreneurs actually do, by trusting others, in terms of investing in networks (*actual SC*). Low levels of collective action and learning characterize the business environment. Companies by using their social relations can provide too little in terms of *learning* that lead to improvement in production. They seem to have benefited especially from buyers and suppliers to a certain extent, but not from the universities for example. However those who can benefit from their social relations can achieve productivity enhancement. Therefore we conclude that SC has to be "in action" to provide a more useful explanation of productivity enhancement. Changing the characteristics of SC (trust, networks or norms) through policies may not be very easy and might take a longer period, but it might be possible to enhance collective action by taking appropriate measures as part of regional development policies.

When designing such policies, it would be useful to keep in mind that increasing the level of education in general and innovative capacity are important elements for the formation of an open minded, new competition entrepreneurs who might be more likely to benefit from social capital.

Based on the outcome that bridging SC is more beneficial than bonding SC (as it is also suggested by other empirical research), we can conclude that there is an urgent need for business associations' to be more effective in providing a forum for new social connections, i.e. for bridging SC to be created.

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Box 1: INDICATORS OF SOCIAL CAPITAL AND ECONOMIC PERFORMANCE

I) Firm/Owner type: - Education level (EDU); - Use of Information Technology (IT); - Innovative capacity (INNOV); - Firm category (SIZE): micro, small and medium;- Participation in the fairs, efforts to open up to new markets (NWMKT); - Interdependence with the main customer (INTERDEP)

II) Potential SC: Sources of SC

Trust levels: -generalized trust: World Values Study question (WVS) and trust for different groups (TRUST)* - BR: Bridging SC; - BO: Bonding SC ; - SECUR: Perception of security of the business environment

Norms and sanctions:- Importance of business reputation (N1); - Institutional sanctions on cheating (N2) - Possibility of direct punishment (N3); - Possibility of breaking of the business relationship (N4)

Social Networks: - Efficiency of business associations (NWeff)*; - Feeling of belonging to local producers' group (BLNG); - Participating in social networks (PSNW)

III) Actual SC: Economic effects

*Transaction costs (TC)**: Relative amount of effort spent on
- Finding alternative suppliers or buyers (TC1); - Monitoring compliance of transaction partners (TC2);
- Achieving access to production factors (such as finance) (TC3).

*Collective action (COOP)**: Cooperation with other producers on: exchange of information (C1); sharing machines and tools (C2); joint marketing (C3); joint purchasing of inputs (C4); lobbying (C5); joint product development etc.(C6).

*Learning spin-offs (LEARN)**: Input from others in contact; feedback from buyers into the production process. (L1: from other local producers; L2: buyers & suppliers; L3: support organizations like KOSGEB, etc.; L4: university & other education and research inst.) - Contributions by out-migrated fellow countrymen (LRNCM)*: Businessmen (CM1); bureaucrat (CM2); academician (CM3); politician (CM4)

IV) Performance

- (PC): Expansion of production capacity
- (PERF)*: Trends in productivity: output growth (OUTPUT), employment growth (EMP), rise in average quality of products (QUALITY), product upgrading (UPGR) (e.g. average speed of delivery, fashion content of products)
- (EXPO)*: Trends in exports

* Composite indicators (based on equal weighting of answer categories of levels increasing from 1 to 5)

Table 1: Generalized Trust and Distrust (WVS question)

Answer:	**Sivas(N=94)**	**Kayseri(N=201)**	**Yozgat(N=30)**	**TOTAL(N=325)**
YES	31 (33,3 %)	42 (21,6 %)	5 (16,7 %)	78 (24,6%)
NO	62 (66,7 %)	152 (78,4 %)	25 (83,3 %)	239(75,4%)

Table 2: Trust Levels (%)

	Below Normal Level		**Normal L**	**Above Normal Level**	
How much do you trust	(1)	(2)	(3)	(4)	(5)
- other producers					
from your own ethnic background	**12,9**	**16,0**	51,7	17,2	2,2
from your own religious sect	8,9	13,5	56,6	16,9	4,0

from another ethnic background	**12,6**	**28,3**	49,8	8,9	0,3
from another religious sect	**15,1**	**27,4**	48,9	8,0	0,6
- your suppliers	4,9	15,7	48,0	**25,2**	**6,2**
- your buyers	4,3	11,7	45,8	**29,2**	**8,9**
- public officials	**7,7**	**18,2**	51,1	17,5	5,5
- Strangers	**39,7**	**24,9**	28,9	4,9	1,5
- local government	9,5	14,8	47,1	**20,3**	**8,3**

Table 3: How Firm/Owner Typology is Correlated with Social Capital & Performance (a)

	SIZE	EDU	IT	INNOV	NWMKT	INTERDEP
Potential SC:						
WVS		,159**		,126*		
TRUST				-,114*		,148*
SECUR						,190**
BO	-,135*		-,125*	**-,206****	-,175**	**,235****
BR				-,129*		
Norms				,151** (N3)		**-,203****(N4)
NWeff	,147**	**,226****	,148**	,111*	,210**	**,269****
SNW			,140*	,119*		
Actual SC:						
TC (TC1-3)						,140* (TC3)
COOP (C1-6)		,159**(C5)	,133*	,153**	,162**(C3-4)	**,355****
LEARN	,179**(L3)	**,218****	,167**	,188** (L4)	**,258****(L3)	**,280****
LRNCM			,118*		,169**(CM3)	**,201****
Performance:						
PC	**,222****		,186**	,111*	,128*	**,297****
PERF	**,231****(EMP)	,136*(EMP)				,127*
EXPO					**,207***	**,283****

Table 4: How Potential SC is correlated with Actual SC & Performance Parameters (a)

	WVS	TRUST	SECUR	BO	BR	Norms	NWeff	BLNG	PSW
TC	-,132*(TC1)			**-,220****					
COOP		**,201****	,185**	**,315****	**,247****		**,365****	,173**(C6)	
LEARN			,118*(L4)	,171**	,172**(L4)		**,396****		
LRNCM				,185**(CM4)	-,175**	,126*	**,219****	,187**	,139*
PC				,143*	,136*	,170**	,167**	**,219****	
PERF		,118*				,156**	,125*		
EXPO				**-,204***	**,257****		,198*	**,295****	

Table 5: How Actual SC is correlated with Performance Parameters (a)

	TC	COOP	LEARN	LRNCM
PC	,115* (TC3)	**,229** (C6)**	**,209****	**,267****
PERF	,153** (TC1)	,113* (Q-C6)	,162** (L3)	,149** (CM3)
EXPO			,184* (L3)	

* Correlation is signif. at the 0.05 level (2-tailed).** Correlation is significant at the 0.01 level (2-tailed).
(a) Correlations of the composite variables are generally better, but in certain cases variables which compose the composite variables are better correlated with other variables. The best correlated variable is chosen in such cases and this is specified in a parenthesis.