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THE EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON SOCIAL CAPITAL CREATION IN SOCIAL COOPERATIVES

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CONTENTS

Abstract	3
Keywords	3
Introduction	4
1. The theoretical relationship between corporate social responsibility and social capital creation	5
1.1 Social capital	5
1.2. Corporate social responsibility.....	5
1.3. Social capital and CSR: the theoretical relationship	7
2. Database and social capital and CSR indices.....	7
2.1. Database	7
2.2. Social capital indices.....	8
Social capital as network of cooperative relations	8
Social capital in terms of generalized trust	9
Social capital intended as relational skills.....	9
2.3. CSR indices	9
2.4. Control variables	9
3. Empirical evidence.....	10
4. Conclusions and policy implications.....	16
Summary statistics.....	18
References	20

ABSTRACT

This paper analyzes the theoretical and empirical relationship between corporate social responsibility and social capital. The focus is on a specific kind of nonprofit organizations: the social cooperatives. With respect to the previous studies on the relationship between participation in nonprofit organizations and social capital creation, this contribution reveals a main reason of interest. We point out the operational characteristics of nonprofit organizations and show the importance of some managerial decisions in fostering the creation of social capital intended as cooperative social network, generalized trust and relational skills. The analysis shows a positive effect of the adoption of CSR good practices on the social capital of cooperatives' members.

KEYWORDS

Social Capital, Corporate Social Responsibility, Social Cooperatives

JEL Classification: M14; L31, Z13

INTRODUCTION

In recent years several contributions have analyzed the relationship between nonprofit organizations and notions usually associated with the concept of social capital. Participation in nonprofit organizations fosters generalized trust (Knack and Keefer, 1997, Brehm and Rahn, 1997, Stolle and Rochon, 1998, Claibourn and Martin, 2000, Knack, 2003, Mayer, 2003, Van der Meer, 2003, Wollebæk and Selle, 2003), civicness (Knack and Keefer, 1997, Mayer, 2003, Wollebæk and Selle, 2003), trust in public institutions (Brehm and Rahn, 1997, Stolle and Rochon, 1998, Mayer, 2003, Wollebæk and Selle, 2003) and different indicators of tolerance, *free riding* and optimism (Stolle and Rochon, 1998).

According to Putnam et al. (1993) nonprofit associations affect social capital because "Internally, associations instill in their members habits of cooperation, solidarity and public-spiritedness. [...] participation in civic organization inculcates skills of cooperation as well as a sense of shared responsibility for collective endeavors." Putnam states also that "a dense network of secondary associations both embodies and contributes to effective social collaboration" (Putnam et al. 1993, pp.89-90) (Putnam et al. 1993, pp.105-106).¹

This paper analyzes the effect of participation in nonprofit associations on members' social capital and it differs from the previous studies in an original perspective. We take into account the operational characteristics of nonprofit organizations and we show the importance of some managerial decisions in fostering social capital creation. The analysis is focused on social cooperatives a specific kind of nonprofit organisation.² Social cooperatives are characterized by the pursuit of community interest objectives and their ownership and governance rights are assigned to the workers or to a mix of workers and other categories of stakeholders such as volunteers, consumers and investors. These organizations conjugate features of traditional cooperative enterprises and traditional nonprofit organizations. In fact, they are frequently controlled by the workforce on the basis of the "one man, one vote" rule. However, residual earnings are mostly reinvested in reserves which are not available to members and workers who are entitled to appropriate residual earnings only to a very limited extent. In this perspective, social cooperatives are nonprofit organizations characterized by the distribution constraint (Borzaga and Tortia 2006).

By starting from the variety of ownership structures of social cooperatives and by considering their entrepreneurial character, we focus our attention on the effect of the adoption of CSR

¹ A different approach is maintained by Olson (1982) who emphasizes some negative effects of associations. Olson argues that private associations pursue special interests of their members and, consequently, generate social costs and reduce social cohesion. In particular, this results a consequence of the fact that only the smaller associations emerge in the society and they defend special interests of small groups. On the contrary, larger organizations are inefficient because of their coordination problems and cannot emerge in the society.

² Social cooperatives were introduced for the first time in Italy in 1991, by Law no. 381. Law no.381 distinguishes between social cooperatives of "type" A, B and A+B. Social cooperatives of "type A" operate in sectors such as social welfare, Education and research, Culture, sport and recreation and Health Activities of the social cooperatives of type B are aimed at favouring the employment of disadvantaged workers (long run unemployed and hard-to-employ workers). To this end, this type of social cooperatives may operate in any industrial, agricultural, commercial activity on condition that at least 30% of their employees are disadvantaged workers. Cooperatives of type A+B combine the characters of both these two types of social cooperatives. In 2005, social cooperatives in Italy were 7363, they employed roughly 244.000 workers and had 6.4 milliards of Euros of total sales (Istat 2007).

(Corporate Social Responsibility) good practices on the creation of members' social capital. In particular we show a positive effect on social capital creation of the multi-stakeholder ownership versus the mono-stakeholder one and of the adoption of CSR formal instruments such as ethical codes and social reports. We are not aware of other previous empirical studies on the effect of corporate social responsibility on social capital formation.³

Section 1 discusses the causal relationship between the adoption of CSR good practices and social capital creation. Section 2 presents the database and the social capital and CSR indices used in the empirical analysis. Section 3 illustrates empirical evidence on the relationship between social capital and CSR. Section 4 summarizes the main conclusions and policy implications.

1. THE THEORETICAL RELATIONSHIP BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND SOCIAL CAPITAL CREATION

1.1 Social capital

Following the literature on social capital that stresses its multidimensional character (e.g. Paldam 2000), we consider three dimensions of this notion.

The first dimension intends social capital in terms of cooperative social networks. The theoretical point of reference for this approach is defined by James Coleman (1988, 1990) (see also Burt, 1992, 2002) who interprets social capital as a system of social relations which a person can mobilize to realize individual goals. According to this approach, people would partly gather social capital, for example in the shape of link with relatives, and mostly would actively create social capital by striking up friendship and by increasing their social network.

The second dimension of social capital focuses on the notion of trust. It follows the Putnam's (1993) statements on social capital: "social trust, norms of reciprocity, networks of civic engagement, and successful cooperation are mutually reinforcing [...] norms and networks of civic engagement contribute to economic prosperity and are in turn reinforced by organized collaboration" (Putnam 1993, p.180) and Fukuyama strengthens (1995, p.26): "Trust is the expectation that arise within a community of regular, honest and cooperative behavior, based on commonly shared norms, on the part of other members of that community" and "social capital is a capability that arise from the prevalence of trust in a society or in a certain part of it".

The third dimension of social capital is the one described by Glaeser, Laibson e Sacerdote (2002) as "individual social capital" which is referred to an individual human capital connected to the social interactions. The social capital in this terms is defined as "[...] a person's social characteristics including social skills, carisma, and the size of his Rolodex – which enable him to reap market and non-market returns from interactions with others." (Glaeser, Laibson and Sacerdote 2002, p.438).

1.2. Corporate social responsibility

With regard to the concept of corporate social responsibility, we adopt a contractarian approach which defines CSR as a "model of extended corporate governance whereby who runs a firm

³ The attention to the relationship between social capital and CSR is recent but it is starting to assume a significant relevance testified, for example, by the international workshop on social capital, CSR and economic sustainable development held in Trento the 24th and 25th of July 2007. See in particular the contributions by Aoki (2007) and Sacconi and Degli Antoni (2007a,b).

(entrepreneurs, directors and managers) have responsibilities that range from fulfilment of their fiduciary duties⁴ towards the owners to fulfilment of analogous fiduciary duties towards all the firm's stakeholders" (Sacconi 2006, 2007a,b).⁵ This approach to corporate social responsibility is chosen since it seems to present the main theoretical connections with the social capital concept, as will be shown, in order to emphasize the CSR capability in generating social capital.

According to this approach, reputation represents an incentive which promotes the adoption of voluntary CSR standards based on the idea of fiduciary duties towards all stakeholder. Compliance with CSR norms generates middle-long term benefit by increasing the reputational capital of the firm even though it could be conducted against the short term personal interests of the ownership⁶. The increase in reputation promotes cooperation among stakeholders (including customers) and their willingness to interact with a firm which does not implement opportunistic behaviour. Clear and transparent *standard* indicating the engagement in respecting the CSR model are necessary in order to enable the reputation benefit. A clear standard system allows stakeholders' evaluation of the firm's behavior in specific situations by comparing *ex ante* explicit statements and behaviour. Therefore the statement of principles has to be formulated in a general form in order to embrace concrete situation not specifically *ex ante* foreseeable. The reputation advantage will be obtained if the firm behaves in conformity with its CSR statements. On the contrary, if stakeholders observe an opportunistic behavior of the firm, they may decide to sanction it by avoiding cooperating. Ethical codes and social reports are the main voluntary standards adopted in a CSR perspective which allow the creation of reputation. The ethical code is a formal statement of the organization's values and it sets out general principles of behaviour which must characterize firm's decisions. The ethical code contains indications about the behavioural procedures which must be adopted by the firm in different situations and delineates the procedures to determine whether a violation of the code occurred. The social report compares the intentions expressed in the ethical code and the real behaviour of the firm.

The CSR voluntary standard adoption is a long process which involves stakeholders in a complex dialogue with the firm's management. It is an essential point in order to balance all the stakeholders' interests and in order to identify the shared principles which must characterize the firm's behavior according to the CSR principles. Therefore, stakeholder engagement is crucial in making possible the adoption of a social responsibility good practice by the firm.

⁴ The notion of fiduciary duties concerns situations where a subject has a legitimate interest but is unable to make the relevant decisions (in the sense that he does not know what aims to pursue, what alternative to choose ecc.). This subject, who is named *trutor*, can delegate decisions to a *trustee* by giving him the power to choose actions and goals. The trustee may thus count on the resources of trutor and select the appropriate course of action. Moreover, the trutor has a claim (right) towards the trustee. On the fiduciary duty concept see also Flannigan (1989).

⁵ Other corporate social responsibility lines are suggested by: Freeman (1984, 2000) and Freeman and Evan (1990) who adopt a multi-stakeholder approach in a managerial perspective; Jensen (2001), who supports the *shareholder's value* maximization approach by stressing that this approach is able, in the long run, to solve problems and take into account also the interests of stakeholder that the stakeholder approach to CSR wants to satisfy; Baron (2005) who interprets the decision of adopting practices aimed at considering interests of subjects different from shareholders as a kind of philanthropy.

⁶ Compliance with the governance voluntary norm based on CSR could imply, for example, a surplus release in behalf of stakeholder.

1.3. Social capital and CSR: the theoretical relationship

Stakeholder engagement which characterizes the CSR process (according to the adopted approach) and the effective adoption of a governance model based on CSR, also ratified by the adoption of formal standards, are two elements which can enhance the three forms of social capital considered in our analysis.

Firstly, stakeholder engagement in the CSR process increases dialogue and meeting occasions between stakeholders and the management of the firm. The meetings are usually aimed at balancing the stakeholders' conflicting interests. The effective implementation of a CSR governance model means that the meetings among the firm and its stakeholders and their dialogue have been successfully performed and they may have represented favorable situations in terms of network relations enlargement (social capital in terms of network).

The success in the adoption of CSR good practices implies also that the firm and its stakeholders decided to trust each other on the basis of voluntary agreements. If the agreements are respected, (and it may be represented by the inclusion of many categories of stakeholders in the directive board), then agents may increase their trust in successfully voluntary agreements even though they concern conflicting interests. Hence it could positively affect agents' social capital in terms of trust.

Finally, meetings between stakeholders and management demand abilities in mediation with involved contractors in order to define CSR criteria and principles. This process requires specific relational skills and, at the same time, it fosters their creation through *learning by doing* trial (social capital in terms of relational skills).

2. DATABASE AND SOCIAL CAPITAL AND CSR INDICES

2.1. Database

This section presents an explorative empirical analysis based on data collected through surveys filled in (in the presence of the data collector) by managers and workers of 10 social cooperatives operating in two neighbouring North-East Italian provinces (5 in Belluno province and 5 in Rovigo province). On the whole, the database collects information on 59 subjects: 10 managers and 49 workers (5 workers for each cooperative but in one case workers are only 4).⁷

The analysis uses a nonprobability sample which refers to the population of social cooperatives operating in the two provinces considered. The sample has been collected so as to have a balanced number of cooperatives with respect to the three variables: numbers of activity years, dimension and type (A or B). Subjects who filled in the surveys have been randomly selected among the workers characterized by at least three years' service with the cooperative. The small number of observations and the characteristics of the sample do not allow us to extend the empirical evidence to the population of social cooperatives in Italy. However, the robustness of the econometric estimates and the originality of the results and of the investigated relationships seem to justify the present paper as an explorative analysis which may find confirmation in further analyses on larger samples.

⁷ Questionnaires filled in by managers and workers present some differences due to the intention of investigating different aspects which could be described by respondents. The managers' questionnaire investigates in particular the characteristics of social cooperatives in terms of ownership structure, business organization, and dimension. The workers' questionnaire asks in particular about relationship between workers, managers and users.

2.2. Social capital indices

Considering the questionnaires, five indices of social capital (related to the three described dimensions of this notion) have been created. They have been elaborated starting from subjective interviewees declarations and they are then open to the criticism which concerns this kind of measures however widely used and generally accepted in social capital literature.⁸

Social capital as network of cooperative relations

Social capital indices related to this dimension are aimed at measuring three aspects:

- how much participation in social cooperatives increases, in general terms, the relational network of members;
- creation of network based on trust and trustworthiness among workers and between them and other people such as users and volunteers connected with the cooperatives;
- percentage of friends met through the social cooperative.

The first proxy (*sc_relinc*) of social capital is elaborated on the basis of evaluations by respondents, from 1 (complete disagreement) to 7 (complete agreement), with regard to the following statement: "Taken all together, the number of my social relations increased thanks to people met in cooperative". The average of this variable is equal to 4,2.

The second index of social capital (*sc_nettrus*) refers to two questions:

- "How many volunteers or workers you would ask help to in the following cases:
 - a) to talk about any family problems
 - b) to entrust relatives (children/elderly persons),
 - c) to ask information about job opportunity,
 - d) to take care of the house during vacation time.
- "How many volunteers or workers you have started the following cooperative relations with:
 - a) readiness to give a lift between cooperative and home,
 - b) reciprocal support or collaboration in activities such as going shopping, to take child or elderly persons to different places
 - c) phone calls to ask information or advices,
 - d) do not very demanding errands"

The aggregated index of social capital is the standardized⁹ value mean of the 8 answered to the questions reported above for each respondents.

⁸ The main criticism to the indices elaborated from survey questions concerns problems related to the interpretation and to the unanimity of meaning given by the respondents to the questions. In this perspective, for example, Glaeser, Laibson, Scheinkman and Soutter (2000, p.812) stress that: "While these survey questions are interesting, they are also vague, abstract, and hard to interpret".

⁹ The standardization of the social capital index has been made by considering the following procedure:

$$\frac{x_{ic} - \min(x_i)}{\max(x_i) - \min(x_i)}$$

where: x_{ic} indicates the value i related to the cooperative c . The standardization process

generates standardized indicators with same range of variation between 0 to 1, and it produces a more robust trial in presence of *outliers* (Saisana e Tarantola 2002, p.11).

The third index of social capital (*sc_perfri*) refers to the question: "on the general number of all people you can consider as friends, which percentage you can link to your affiliation to this cooperative?"

Social capital in terms of generalized trust

The social capital index in terms of generalized trust (*sc_trust*) refers to the general question: "what characteristics have you acquired by working for the cooperative?" in relation to the statement "Trust in others". The answer range is 1 (nothing) to 4 (very much). The mean value of the total respondent is 2,4 and the median is 3.

Social capital intended as relational skills

The creation of the fifth social capital index (*sc_relational*) is connected to the referential question "How do you think to have improved the following skills by participating to the life of the cooperative?" and its answers a) ability in team working, b) ability in understanding others' problems, c) ability in improving connections with people. These abilities are developed by working into the cooperative and they became part of worker's individual experiences and competences. The scale of reference for each answer is form 1 (not at all) to 4 (very much). The index has been constructed as arithmetic mean of the answers for each respondent.

2.3. CSR indices

Moreover we consider two CSR indices:

- the adoption of formal instruments of corporate social responsibility (ethical code or social report) using a *dummy* variable (*CSR_standard*);
- number of stakeholders represented in the cooperative directive board considering volunteers, workers, legal entity, users and their relatives, founders (*multi_stakeholder*).¹⁰

Observing the survey results, we note that only one cooperative has adopted both the instruments (ethical code and social report), one cooperative has adopted only the ethical code and three of them have adopted only the social report.

The greater part of the cooperatives has at least 2 categories of stakeholders involved in its directive board (6 cooperatives), 3 cooperatives have only one category of stakeholders involved in the board and only in one cooperative three categories of stakeholders are involved in the board. Moreover "workers" is the most represented category and it is present in 9 of the survived cooperative. The "volunteers" category takes part to 4 directive boards and "users and their relatives" takes part to only one board.

2.4. Control variables

Control variables are:

- demographic individual characteristics, i.e. *age*; *sex*; *education*;
- cooperative's characteristics, i.e. cooperative type, selected with a dummy variable A, B, or mixed AB (*cooperative type_AB*; *cooperative type_B*) ; cooperative area of activity (*area*) that varies from city (value 1) to national level (value 5); numbers of activity years (*agecoop*); numbers of workers per cooperative (*employees*);

¹⁰ The question gives the opportunity to include further categories into the directive board nonetheless it was not used by anyone.

- a *provincial_dummy* variable (Rovigo=1 and Belluno=0) which describes where cooperative accomplishes its main activity and another dummy variable distinguishes between answer supplied by workers and managers (*manager_dummy*).

3. EMPIRICAL EVIDENCE

The empirical analysis uses ordered logit with regard to the two social capital indices which range from 1 to 7 according to an ordinal scale and OLS in relation to the other three indices. In all the regressions we cluster standard errors by considering which cooperative the workers come from. We assume that the observations are independent cross groups, but not necessarily between groups (workers belonging to the same cooperative). Regressions are conducted by referring to all the sample of workers and managers when we analyse the indices of trust and relational skills, while they refer only to the sample of workers for the three indices of social capital in terms of cooperative networks¹¹. Estimates' results related to the control variables are omitted for reason of space and available from the author upon request.

Table 1 shows the effect of corporate social responsibility on the indices of social capital intended as network of relations. The decision to adopt CSR formal instruments positively affects social capital in terms of cooperative networks. In particular, the adoption of CSR formal instruments is statistically significant with respect to the creation of cooperative relations based on trust and trustworthiness between workers and other cooperatives' members such as volunteers and other workers (*sc_nettrus*). The effect of the adoption of at least one CSR instrument (ethical code or social report) is to more than double the value of the variable *sc_nettrus* (equation 4).

Moreover, the more the number of stakeholders' categories involved in the ownership of the cooperative are, the higher the impact is on social capital indices considered in table 1, even though in two cases out of three the effect is not robust to the inclusion of the provincial dummies (this effect of provincial dummies does not come up in any of the following estimations). With respect to the quantitative aspects, we find out that a standard deviation increase in the variable *multi_stakeholder* is associated with an increase in the dependent variable *sc_nettrus* by 0.248 standard deviation (equation 4)¹².

¹¹ The questionnaires filled in by managers contain a lot of questions related to the organization's characteristics. In order not to make the questionnaire too long, we decided not to include all the questions included in workers' questionnaires in managers' questionnaires. For this reason we could not elaborate all the social capital indices in relation to the managers.

¹² An objection related to the association between the adoption of CSR practices and social capital creation could concern a selection bias problem. This problem could arise if cooperatives endowed with CSR instruments and practices would be able to attract people with more pro-social behaviours than other cooperatives. Even though we consider that the adoption of CSR practices may have a role in attracting people more interested in cooperating with organizations which adopt CSR practices, it is not the same to say that these people are also more disposed to create new social relations or to develop social norms or social skills.

Table 1 - Social capital in terms of cooperative networks

<i>Equation</i>	<i>1</i> <i>(Ologit)</i>	<i>2(Ologit)</i>	<i>3(OLS)</i>	<i>4(OLS)</i>	<i>5(OLS)</i>	<i>6(OLS)</i>
	<i>sc_relinc</i>		<i>sc_nettrus</i>		<i>sc_perfri</i>	
CSR_standard	0.206 (0.360)	0.522 (0.345)	0.126*** (0.019)	0.132*** (0.017)	-9.037 (9.326)	3.230 (12.961)
multi_stakeholder	1.077*** (0.142)	0.306 (0.307)	0.084*** (0.020)	0.070*** (0.019)	22.569*** (5.396)	10.457 (14.536)
provincial dummy		-1.187** (0.479)		-0.020 (0.028)		-9.805 (9.499)
constant			-0.087 (0.150)	-0.059 (0.153)	-29.050 (42.272)	4.925 (55.802)
cut1	2.213 (2.178)	0.756 (2.316)				
cut2	3.275 (2.162)	1.838 (2.374)				
cut3	4.124 (2.246)	2.694 (2.392)				
cut4	4.931 (2.269)	3.496 (2.474)				
cut5	5.601 (2.180)	4.169 (2.383)				
cut6	6.938 (2.135)	5.524 (2.324)				
R ²			0.558	0.559	0.500	0.502
Pseudo R ²	0.064	0.069				
Root MSE			0.128	0.130	20.162	20.395
Prob > χ^2	0.000	0.000				
Number of obs.	49	49	49	49	41	41

Robust standard errors in brackets. * Significant at 10%; ** significant at 5%; *** significant at 1%. All Estimates include the following control variables: age; sex; education cooperative type_AB; cooperative type_B, area, agecoop; employees, provincial_dummy.

Tables 2 and 3 consider the effect of CSR indices respectively on social capital in terms of relational skills and generalized trust. The creation of social skills is positively affected both by the adoption of a formal CSR instrument and by the number of stakeholders' categories involved in the decisional processes.

Table 2 - Social capital in terms of social skills

<i>Equation</i>	<i>1 (OLS)</i>	<i>2(OLS)</i>	<i>3(OLS)</i>	<i>4(OLS)</i>
CSR_standard	0.370 ^{***} (0.111)	0.244 ^{***} (0.060)	0.330 ^{**} (0.109)	0.219 ^{***} (0.064)
multi_stakeholder	0.249 ^{**} (0.090)	0.517 ^{***} (0.076)	0.235 ^{**} (0.094)	0.479 ^{***} (0.082)
provincial dummy		0.391 ^{***} (0.071)		0.378 ^{***} (0.209)
manager_dummy			0.403 [*] (0.202)	0.354 (0.081)
costant	1.239 (0.664)	0.611 (0.668)	1.748 (0.699)	1.149 (0.697)
R ²	0.246	0.272	0.284	0.304
Root MSE	0.533	0.530	0.525	0.523
Number of obs	59	59	59	59

*Robust standard errors in brackets. * Significant at 10%; ** significant at 5%; *** significant at 1%. All estimates include the following control variables: age; sex; education cooperative type_AB; cooperative type_B, area, agecoop; employees, provincial_dummy manager_dummy.*

Table 3 - Social capital in terms of generalized trust

<i>Equation</i>	<i>1 (Ologit)</i>	<i>2(Ologit)</i>	<i>3(Ologit)</i>	<i>4(Ologit)</i>
CSR_standard	0.512 (0.522)	0.040 (0.299)	0.714 (0.618)	0.212 (0.321)
multi_stakeholder	2.435*** (0.325)	3.708*** (0.500)	2.478*** (0.334)	3.976*** (0.739)
provincial dummy		1.719*** (0.452)		1.991*** (0.624)
manager_dummy			-1.168 (1.901)	-1.500 (1.912)
cut1	10.013 (2.763)	13.080 (3.390)	11.763 (4.701)	15.783 (5.492)
cut2	11.869 (2.948)	15.023 (3.604)	13.635 (4.874)	17.768 (5.706)
cut3	16.013 (2.697)	19.227 (3.480)	17.854 (4.947)	22.084 (5.918)
Pseudo R ²	0.218	0.235	0.227	0.248
Prob > χ^2	0.000	0.000	0.000	0.000
Number of obs.	59	59	59	59

*Robust standard errors in brackets. * Significant at 10%; ** significant at 5%; *** significant at 1%. All estimates include the following control variables: age; sex; education cooperative type_AB; cooperative type_B, area, agecoop; employees, provincial_dummy manager_dummy.*

Only the multi stakeholder ownership and not the adoption of ethical codes or social reports seems to impact on social capital in terms of generalized trust. The results presented are robust to the introduction: of provincial dummies (equations 2 in both the tables), of the dummy which consider if the respondent is a manager or if s/he is a worker (equations 3) and of both of these types of dummy variables (equations 4). The effect of the adoption of a formal instrument of CSR on the index of social skills is quantifiable in a 7.6 percent increase (equation 4 table 2).

Since our dependent variables refer to the single agents, while the independent ones are measured at an organizational level, endogeneity problems should not affect our results. On the contrary, some variables such as the working climate, cohesion and feeling among workers could

simultaneously determine the creation of social capital and the decision made by the organization to implement good practices of CSR. In order to take into account this possibility, we consider in our sensitivity analysis a variable (named *working_environment*) which approximates working climate and quality of relations among workers. The sensitivity analysis is carried out by introducing the following control variables¹³ in the regressions 4 of table 1, table 2 and table 3.¹⁴

1. *Volunteers*: number of volunteers in the cooperative.
2. *Meetings*: how often parties, trips and discussion groups are organized by the cooperative;
3. *Years*: number of years the respondent have spent in other nonprofit associations;
4. *Collaboration*: degree of collaboration among workers and between them and managers according to the evaluation given by the respondent using a 7 level scale;
5. *Months*: number of months the respondent have worked in the cooperative;
6. *Connections*: dummy which takes value of 1 if the respondent meets people with relational difficulties through her activity in the cooperative;
7. *Training*: arithmetic mean of 4 dummy variables which takes the value of 1 if the respondent attended training courses respectively on: management of relations with users, mission of the cooperative, human resource management and various aspects connected with human resource management.
8. *Autoscrel*: arithmetic mean of the evaluations given by the respondent (using a 7 level scale) with regard to: a) the importance attached by cooperative's workers to the creation of spirit of cooperation among cooperative's members and b) the creation of relational links between cooperative's members and local community (two aspects strictly related to the concept of social capital);
9. *Working_environment*: dummy which takes the value of 1 if the respondent declares that s/he did not have difficulties to be accepted in the cooperative by other members

¹³ The first 4 control variables are included in all the regressions presented above, the other 5, which can not be elaborated in relation to the managers (see footnote 11) are included only in the estimations reported in table 1 which have been conducted only by considering the sample of workers.

¹⁴ We consider for the sensitivity analysis only the regressions where the *provincial_dummy* and the *manager_dummy* (in case the sample includes also the managers of the cooperatives) are included. For this reason, we do not consider the regressions in which *sc_relinc* and *sc_perfri* are the dependent variables because in these cases the introduction of the *provincial_dummy* eliminates the effects of the two CSR variables (see table 1).

Table 4 - Sensitive analysis with control variables

	(OLS) <i>sc_nettrus</i>		(OLS) Social capital in terms of social skills		(Ologit) Social capital in terms of generalized trust	
	Coefficient of CSR_ standard	Coefficient of multi_ stakeholder	Coefficient of CSR_ standard	Coefficient of multi_ stakeholder	Coefficient of CSR_ standard	Coefficient of multi_ stakeholder
Volunteers	0.031 (0.027)	0.662*** (0.109)	-0.114 (0.165)	2.415*** (0.616)	-0.481 (0.582)	8.026*** (1.751)
Meetings	0.079*** (0.018)	0.059*** (0.012)	0.043 (0.112)	0.441*** (0.075)	-0.153 (0.437)	3.907*** (0.729)
Years	0.162*** (0.020)	0.063*** (0.015)	0.184** (0.071)	0.503*** (0.110)	0.367 (0.323)	3.923*** (0.768)
Collaboration	0.121*** (0.016)	0.052* (0.027)	0.238*** (0.051)	0.379** (0.129)	0.029 (0.405)	3.766*** (0.675)
Months:	0.138*** (0.019)	0.042 (0.032)				
Connections	0.128*** (0.015)	0.079*** (0.023)				
Training	0.131*** (0.019)	0.072** (0.027)				
Autoscrel	0.143*** (0.016)	0.069*** (0.018)				
Working_environment	0.111*** (0.030)	0.077*** (0.024)				

Robust standard errors in brackets. * Significant at 10%; ** significant at 5%; *** significant at 1%.

Other variables included are: age; sex; education cooperative type_AB; cooperative type_B, area, agecoop; employees, provincial_dummy and, in equations 2 and 3 which include data related to managers, manager_dummy.

The rows in table 4 report the coefficients and the standard errors of the independent variables *CSR_Standard* and *multi_stakeholder* when a control variable was introduced into the basic relation analysed in regression 4 of table 1 (with respect to the dependent variable *sc_nettrus*), of table 2 (with respect to the index of social capital in terms of social skills) and of table 3 (with respect to the index of social capital in terms of generalized trust). When the variables *CSR_standard* and *multi_stakeholder* were statistically significant before the inclusion of control variables, they remain significant at least at 10% level except in a very limited number of cases related to the variable *CSR_standard*. In particular the statistical significance of the variable *CSR_standard* disappears when we consider the variable *Volunteers* with respect to the dependent variable *sc_nettrus* and the variables *Volunteers* and *Meetings* with respect to the index of social skills.

4. CONCLUSIONS AND POLICY IMPLICATIONS

This paper presents some original results on the relationship between participation in social cooperatives and the creation of social capital. In particular, we discussed the theoretical relationship between the adoption of CSR practices and social capital formation and carried out an explorative empirical analysis on this relationship.

We found out that some managerial decisions play a very important role in determining the impact on social capital of organization's workers. Both the decision to adopt CSR formal instruments and the implementation of a multi-stakeholder ownership can positively affect the creation of social capital intended as cooperative social network, trust and relational skills.

We identified three main reasons which may explain the positive association between the social capital and CSR practices, intended both as adoption of CSR formal instruments and as multi-stakeholder ownership.

- The implementation of CSR practices needs a long process made by several meetings among stakeholders and between them and the organization. It gives to the workers of cooperatives the possibility of meeting other people and, if the CSR practices are successfully implemented, it is likely that these meetings end up in cooperative personal relations.
- The implementation of CSR practices needs reciprocal trust even with subjects (i.e. various categories of stakeholders) who have conflicting interests. In case the CSR agreements results are good, subjects verify that voluntary agreements may be realized even though people have conflicting interests. It could increase their propensity to trust.
- Meetings aimed at implementing CSR practices require relational skills by agents, for example in terms of ability to mediate with others. The adoption of CSR practices could favour, by a process of learning by doing, the formation of specific relational skills which represent a dimension of the social capital concept.

The role of CSR in promoting the creation of social capital seems to indicate the opportunity of a policy strategy aimed at fostering the adoption of CSR practices by organizations. In this perspective, two strategies could for example be implemented: the inclusion of the adoption of CSR practices among the criteria requested to obtain public works contracts and the elaboration of fiscal incentives which allow the deduction of the costs connected with the adoption of CSR instruments.

We have already stated that the small number of observations and the characteristics of the sample do not allow us to extend our empirical evidence to the whole population of social

cooperatives in Italy. However, considering the sensitivity analysis which does not undermine the robustness of our results and the originality of the findings, the present paper seems to be an interesting step forward in the analysis of the relationship between CSR and social capital which may be extended by considering the opportunity of conducting other analyses both on larger samples and, in particular, on other types of nonprofit and for profit organizations.

SUMMARY STATISTICS

<i>Variables</i>	<i>Obs.</i>	<i>Mean</i>	<i>Std.Deviation</i>	<i>minimum</i>	<i>maximum</i>
sc_relin	49	4.224	1.907	1	7
sc_nettrus	49	0.179	0.172	0	0.788
sc_perfri	49	16.415	24.608	0	100
sc_trust	59	2.424	0.855	1	4
sc_relational	59	2.994	0.559	1	4
Age	59	39.478	9.676	21	73
Education	59	4.172	0.812	1	5
Female	59	0.582	0.490	0	1
CoopAB	59	0.203	0.406	0	1
CoopB	59	0.407	0.495	0	1
Area	59	2.407	0.812	2	4
Agecoop	59	20.034	6.726	9	29
employees	59	75.797	70.054	20	271
CSR_standard	59	0.508	0.504	0	1
multi_stakeholder	59	1.797	0.610	1	3
povincial dummy	59	0.508	0.504	0	1
manager_dummy	59	0.169	0.378	0	1

Control variables:

<i>Variables</i>	<i>Obs.</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>minimum</i>	<i>maximum</i>
Years	59	4,314	5,297	0	20
Volunteers	59	2,339	2,898	0	8
Meetings	59	0,798	0,746	0	1,963
collaboration	59	5,091	0,919	2,5	7
Months	49	95,755	101,983	6	514
Training	49	0,296	0,278	0	1
connections	49	0,796	0,407	0	1
autoscrel	49	5,792	1,241	2	7
working_environment	49	0,714	0,456	0	1

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