SOCIAL CAPITAL, RELIGIOUS AFFILIATION AND BUSINESS PERFORMANCE IN DENMARK

BODO STEINER
Department of Entrepreneurship & Relationship Management
University of Southern Denmark
Universitetsparken 1, Kolding - DK-6000

CONG WANG
University of Southern Denmark

ABSTRACT

Using Principal Component Analysis and subsequent firm-level regressions, this paper identifies positive and significant effects of key sources of motivation for social capital (norms, trust, networks) on firm performance as measured by several financial performance indicators, with religion playing an additional overall positive role for performance.

INTRODUCTION

Social capital has interested scholars working on many aspects of organizational and personal networks (e.g. Tsai & Ghoshal 1998; Woolcock 2010; Zaheer, Gözübüyük & Milanov 2010). Much evidence suggests that an individual’s social network matters for personal achievement (e.g. Lin, Fu & Hsung 2001) and that features of social organizations and thus sources of motivation for social capital - trust, norms, and networks - can improve the efficiency of society as a whole by facilitating coordinated actions (e.g. Putnam, Leonardi & Nanetti 1993). Whereas work on organizational relationships and networks has improved our understanding of how business organizations mobilize social capital inherent in the structure of intra- and inter-firm relations to create value (e.g. Baker 1990; Nahapiet & Ghoshal 1998; Tsai & Ghoshal 1998), the link between business performance and sources of motivation for social capital that are external to such firm relations - yet embedded in local communities in which businesses are located - has drawn little attention.

Previous work suggests that business activity is driven by network relationships, where these relationships provide direct resource flows to entrepreneurs (e.g. Aldrich & Zimmer 1986; Kim & Aldrich 2005; Hoang & Antoncic 2003). Adler and Kwon (2002) contend that the resources which entrepreneurs access through their personal networks allow them to identify opportunities, mobilize additional resources and build legitimacy for their firm. Yet a growing literature suggests that entrepreneurial decisions and activities can also be influenced by the religious orientation of agents and their surrounding networks (e.g. Weber 1920-23; Eisenstadt 1974; Barro & McCleary 2003; Noland 2005; Tu, Bulte & Tan 2011). That religion can contribute to producing social capital through public and participatory activities of religious life is based on overwhelming sociological evidence (e.g. Smidt 2003).

We adopt the view of Kwon and Adler (2014: 415) who highlight that norms, values, trust, and community membership are key sources of motivation for social capital. Our analysis accounts for generalized notions of trust and norms (civic attitude also toward institutions), two network types as defined by Putnam et al. (1993) and Olson (1982), as well as self-declared religious affiliation of residents in 14 Danish regions (Catholic, Protestant, Jewish, Muslim, Buddhist). The potential effect of these sources of motivation for social capital is then
investigated on firm performance. This paper therefore complements previous micro-level analyses of networks and firm performance, which have concentrated on the effect of entrepreneurs’ personal networks (e.g. Batjargal 2003; Stam 2010; Stam, Arzlanian & Elfring 2014) as well as distinguished inter- and intra-organizational networks as drivers for firm performance (e.g. Walker, Kogut & Shan 1997; Tsai & Ghoshal 1998). Our focus on key sources of motivation for social capital in the vicinity of firms extends previous analyses which have focused on the local nature of social capital (e.g. Stuart & Sorensen 2003). This paper makes also a conceptual contribution, putting forward an extended view of the key sources of motivation for social capital (Kwon & Adler 2014) that include additional motivations underlying people’s religious affiliation, thereby expanding the conceptual focus of social capital on religion (e.g. Putnam 2000; Pretty & Ward 2001; Smidt 2003). Our paper also extends the empirical social capital literature with a focus on the urban-rural divide (e.g. Onyx & Bullen 2000).

THEORY AND HYPOTHESES

Social capital, resource mobilization and business performance. Despite many views on how to define social capital (e.g. Lin 1999; Robinson, Schmid & Siles 2002; Kwon & Adler 2014), connections among individuals (Putnam 2000) and goodwill (Adler & Kwon 2002) have been viewed as the essence of social capital. Its value and source lies with the social structure of relationship networks (Bourdieu 1986). This has led to the distinction of relational and structural dimensions of social capital (Granovetter 1992; Nahapiet & Ghoshal 1998), highlighting the role of trust and social interaction, respectively, to be distinguished from the cognitive dimension capturing shared norms, languages and common values (Nahapiet & Ghoshal 1998; Wang & Steiner 2015). Noting the importance of location of the actor in the structure of relationship networks (Bourdieu 1986) has been one motivation for Putnam (2000) to distinguish between ‘bridging’ and ‘bonding’ social capital. The literature focusing on external ties promotes the idea of bridging and thus inclusive forms of social capital among actors who are alike in important aspects (e.g. Putnam 2000; Putnam & Gross 2002). This bridging view of social capital contrasts with bonding forms of social capital (Gittell & Vidal, 1998; Putnam, 2000), which focus on internal characteristics of a collectivity, such as an organization or community, that can act to create exclusiveness when actors are unlike one another. The internal characteristics are typically characterized by a collective cohesiveness which facilitates the pursuit of collective goals (Adler & Kwon 2002), yet may prevent people to communicate and cooperate across organizations in an effective manner (Olson 1982).

Considering our interest in external linkages and in social capital generated in a firm’s vicinity, it could be expected that generalized reciprocity, which resolves problems of collective action and binds local communities (Adler & Kwon 2002), has a role to play for the performance of firms located in those communities. If local citizens and firm employees have a strong sense of obligation to their local community, which includes their local firms, then their shared commitment and sense of obligation and thus bonding social capital could be expected to transfer into better firm and organizational performance relative to a local marketplace without such networks (e.g. Cohen & Prusak 2001). Uzzi (1996) provides evidence that embeddedness is an exchange system with unique opportunities relative to markets, and that firms organized in such networks have higher survival chances than do firms which maintain arm’s-length market relationships. However, the literature has also highlighted several negative aspects of social capital. There can be costs of relational over-embeddedness (e.g. Granovetter 1973; Uzzi 1996; Nell & Andersson 2012), costs of community solidarity imposed on successful entrepreneurs.
through excessive stakeholder claims, and leveling pressures from community norms to keep community members hierarchically stuck (Portes & Sensenbrenner 1993). Waldinger (1995) and Putnam (2000) also point to the costs of exclusion, in terms of a preference for established actors. Yet in contrast to the above negative view, envisage a region-specific pattern of network structure between firms and local agents, where the benefits from embeddedness dominate and positive externalities arise from greater levels of public engagement, solidarity and generalized trust that extends toward trust in public institutions (Putnam et al. 1993; Zak & Knack 2001). Stuart and Sorensen (2003) contend that social capital crucially enables the organization-building process in geographic proximity, while Kilkenny, Nalbarte and Besser (1999) provide further evidence on such reciprocity in relation to small business in a community. We could thus expect that higher levels of public engagement, solidarity and generalized trust of individuals and communities matter as a function of geographic proximity also in the case of Denmark, especially where large local anchor firms, such as Carlsberg (Benito, Larimo, Narula & Pedersen 2002), are observed to be engaging in reciprocal relationships.

Yet what motivates such collective cohesiveness, civic engagement and thus private individuals and firm stakeholders in a given region to support the growth of social capital, beyond the moral impetus to extend trust underlying the notion of generalized trust (Adler et al. 2002)? Actors are motivated because of other shared normative objectives, such as norms of reciprocity (e.g. Portes, 1998) and because social capital growth can arise from strengthened norms (Putnam et al. 1993; Williamson 1985; Coleman 1988; Uslaner 2002; Adler et al. 2002). Taking the above conceptual underpinnings and arguments into account, they suggest that networks, norms and motivation arising from generalized trust in the vicinity of firms can have an important and positive effect on firm performance. We therefore hypothesize that:

**Hypothesis 1:** Higher levels of social capital in a region as measured by generalized trust, norms and networks will be associated with higher levels of performance of businesses located in such regions.

**Religion and social capital.** An extensive literature has explored the role of trust and social capital in the context of community networks and immigrant communities in particular (e.g. Portes et al. 1993; Lin 1999; Tselios, Noback, Dijk & McCann 2015), with Waldinger (1995) providing evidence of the negative effects of embeddedness in terms of exclusion of benefits that accrue to members of ethnic and religious communities. The literature has highlighted the role of generalized trust for promoting social capital in general (e.g. Adler et al. 2002), as well as a specific role of religion for social capital through the generation of social trust and as a function of hierarchy associated with a particular religion (Smidt 2003; Lee et al. 2011). That hierarchy is important for social capital generation - through affecting motivation and opportunity – is a view shared by Adler et al. (2002), La Porta et al. (1997) and Bjørnskov (2006). Bjørnskov (2006) puts forward a differential view of religions by suggesting that hierarchical religions contribute to the division of society by creating internal bonds of obligation. However, we also expect from Fukuyama (2001) and Coleman (1988) that norms and sanctions produced by the community authority among members of religious groups promote growth of social capital, irrespective of a particular religion. This leads to the issue of measuring religion and religiosity. Using self-declared religious group membership as indicator for religiosity relevant to social capital formation is appealing when noting the differences in dimensions of religiosity with respect to living the faith (Cardwell 1980), involvement (Bergan & McConatha 2000) and religious belief systems (Ellison 1991), which include moral values.
Further, noting the above dimensions of religiosity, a measure of self-declared religious affiliation could also be expected to indirectly capture some reciprocity and other-regarding preferences that are not conditional on the actions or intentions of others (altruism; Cox 2004). Taken together, the above arguments on the role of religion for social capital through the potential generation of social trust and generalized trust, as well as noting the above dimensions of religiosity as they are deemed relevant for the relationship between religion and social capital formation in a given region, our second hypothesis is that,

**Hypothesis 2:** Irrespective of religious affiliation (Catholic, Protestant, Jewish, Muslim, Buddhist), higher proportions of self-declared religious affiliation of people in a given region will be associated with higher levels of performance of businesses located in such regions.

**METHODS**

**Data and variable definition.** Aside from accounting for religious affiliation, we take into account three key sources of motivation for social capital: generalized trust, norms and networks, using the most recent matching datasets that could be obtained by matching the 1999 and 2008 waves of Danish Value Studies (DVS) with corresponding firm performance data. We use first principal component analysis (PCA) to form the variable trust (domestic), if the trust-related questions concern only domestic institutions and organizations, and trust (foreign) if the questions concern foreign institutions and organizations. Norm is measured by the PCA combination of the percentage of respondents who do not approve generally socially unacceptable behaviors. The network component is measured in three ways: first, we use PCA to combine the membership in all organizations surveyed in the value studies to form the network (all group) variable. Second, following the approach introduced by Wang and Steiner (2015), we differentiate two types of organizations through a PCA combination of membership: “Putnam” and “Olson” organizations (Putnam 2000; Olson 1982). Firm performance is measured by three firm-level key financial performance indicators: return on assets, current ratio and solvency ratio for all Danish firms (Amadeus data base), also including profit margin in robustness checks. Self-declared religious affiliation obtained from DVS are percentages of respondents who identify themselves as belonging to religious groups in a given Danish region, namely Catholic, Protestant, Jewish, Muslim and Buddhist.

**Controls.** In all estimations we control for firm size, people’s health status, level of education, urban/rural status of the regions, and location near the border to Germany.

**Estimation and discussion of results.** We estimate the following relation:

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 firm \; performance = \alpha_0 + \alpha_1 \; social \; capital + \alpha_2 \; religion + \alpha_3 X + u ,
\]

where the firm performance variable is the dependent variable, using return on assets, current ratio and solvency ratio alternately; social capital variables are Trust (domestic), Trust (foreign), Norm, Network (all group), Network (Putnam), and Network (Olson); religion variables (self-declared religious affiliation) are Catholic, Protestant, Jewish, Muslim and Buddhist; \( X \) is the set of control variables, while \( u \) denotes the error term. The OLS estimations with heteroscedasticity-consistent standard errors suggest that individually, all three sources of motivation for social capital (trust, norm and network) show strong significant influence on firm performance, supporting Hypothesis 1, although trust and network stand out, with the effect of
norm being considerably weaker. The coefficient on trust and network suggests that a one-unit increase in trust and membership in organizations of people living in the vicinity of firms boosts return on asset by 1.05% to 1.6%, respectively, while a one-unit increase in social norms boosts return on asset by about 0.2%.

To check for robustness of our results, we perform four types of robustness checks, first aggregating the firm level performance data onto three different levels, (1) 14-region level; (2) region-industry level; and (3) postal code-industry level. Second, since we have two years of social capital data (1999 and 2008) matching firm-level performance data, we check whether or not the main results for 2008 are robust in the 1999 sample. Results from the region-industry and postal code-industry sample suggest similar conclusions, now including religion: trust, norm, network as well as self-declared religious affiliation are all important for firm performance, supporting Hypothesis 2. However, estimation results also suggest that for regions with self-declared Muslim affiliation, firm performance is impacted insignificant, yet in two cases negatively. Nevertheless, overall, the estimation results strengthen support for our Hypothesis 2, as they suggest that self-declared religious affiliation is important, without it being included in the model, the results are far less convincing in terms of significance and magnitude of coefficients. Turning to the control variables, firm size controls turn out to be insignificant for firm performance, suggesting that – as expected - small firms have just the same opportunity to be successful as their large counterparts. Both high education and good health status of people living in the vicinity of firms turn out to be positively related to firm performance. The results also suggest that in the case of Denmark, an urban advantage exists for firm performance driven by motivations for social capital, possibly because of the skewed resource distribution towards urban areas (agglomeration economies), a result which goes counter our expectations from Onyx et al. (2000).

CONCLUSIONS

Social capital as a resource that is embedded in local social networks tying firms and market participants together has long been viewed to be relevant for the differential success of individuals and firms in their competitive rivalry (Adler & Kwon 2002). This paper provides evidence that peoples’ values, trust, norms and social networks matter for firms located in their vicinity. Our empirical results provide thus further support for the conceptual pillars of social capital impacting firm performance. Considering generalized trust, norms and networks, we identify significant positive effects of sources of motivation for social capital on firm performance as measured by return on asset, current ratio and solvency ratio. The magnitude of these effects are stronger on return on asset and solvency ratios than on current ratios, suggesting that these sources of motivations are more important for firms’ long term liquidity and profitability. Networks in the vicinity of firms, regardless of whether they are viewed external bridging or internal bonding, are found to positively influence firm performance, although the external-bridging Putnam-type networking (Putnam et al. 1993) matters more for firm performance than the special-interest oriented Olson network types (Olson 1992). This could be viewed as providing support for structural holes and thus brokerage delivering social capital (Fukuyama 2001; Burt 2004).

Our results suggest that overall, people’s religious affiliations (accounting for Catholic, Protestant, Jewish, Muslim and Buddhist) contribute positively toward a social capital stock that supports regional business performance in Denmark. We therefore identify an important role of
specific religions in networks, beyond the role of membership in Putnam-type organizations (Putnam et al. 1993). It is in this sense that we assert our analysis to support an extended notion of social capital, furthering the view of Smidt (2003) that religion should have a much greater role to play in the conceptual view of social capital. It could be maintained that this view receives also support from Weber (1920-23), who argued for an overall transformative potential of religion on individual behavior, and its effect on institutional organizations (Eisenstadt 1974), as well as support from Fukuyama (2001), who views religion to potentially act as a positive force due to norms and sanctions produced by community authority among members of religious groups.

However, in spite of our overall finding that religious affiliations of people living in the vicinity of firms impacts their performance positively, we find evidence that this may not be the case when we consider firm performance implications in relation to respondents identifying themselves as Muslims. A potential explanation for this finding could be that Muslims in Denmark have a stronger sense of internal community relative to other religious communities. The more cohesive nature of this community and strong moral bonds within it (Fukuyama 2001) may be in the way of a greater level of effective involvement of religious community members in general regional affairs (Fair 2003; Bergan & McConatha 2000) that are directly or indirectly relevant to firms located in those regions. However, we contend from other evidence that there could also be a ‘religious absorptive capacity deficit’ in Danish society: the smallness, cultural similarity and tight-knit ‘cosiness’ of Danish society (Mouritsen 2013) could be in the way of the very capacity of Danish society and local businesses to sufficiently absorb the benefits from social capital being generated within certain religious communities, as these benefits can arise from the norms produced by religious community authority (Coleman 1988). Our empirical findings could thus be viewed to add to evidence which has highlighted negative consequences of social capital potentially stemming from community exclusion (Waldinger 1995; Portes & Landholt 1996; Portes et al. 1993), yet in our case going from a surrounding general public to a specific religious community.

Nevertheless, it is important to keep in mind that the above results have to be interpreted with caution. Our attempt to capture social capital through survey responses is, given the nature of the underlying values surveys and the cross-sectional nature of the data, limited in scope when we consider the notion and consequently the very measurement of social capital (Fukuyama 2001). In the spirit of Bensaou, Galunic and Jonczyk-Sédès (2014), an extension of our work could be to go beyond hierarchy and location aspects associated with networks, and take network dynamics within and across religious communities into account, so as to identify the implications of their relational strategies on firms. Further, although we note that the literature has highlighted individual potentially negative aspects of social capital, including over-embeddedness, leveling pressure on norms, and costs of exclusion (e.g. Portes & Sensenbrenner 1993), our data has not allowed us to test for these competing explanation comprehensively. Future work could build on more detailed community-based data linking firm-employees and community members, to explore to what extent embeddedness of economic behavior in ongoing social relations (Waldinger 1995) among religious-based communities affects access to outsiders in different ways from that of non-religious based communities. More work is also warranted to capture how generalized trust is spread and norms differ across these communities. Such an improved understanding of how religion generates externalities and social capital could subsequently help to better understand specific ways through which externalities translate into firm performance.

REFERENCES AVAILABLE FROM THE AUTHORS