NEGATIVE EFFECTS OF THE BONDING AND BRIDGING FORM OF SOCIAL CAPITAL IN A REGIONAL STRATEGIC NETWORK

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Abstract

Purpose of the paper and literature addressed
Understanding the local socio-economic context is considered by Koschatzky and Kroll (2007) as a precondition for a well designed regional strategic network (RSN). Social capital is often used in research when analyzing such socio-economic contexts (Adler and Kwon 2002, Westlund 2009), and understanding the function and creation of social capital is therefore vital for implementation of policies on cluster initiatives and RSN.

Adler and Kwon (2002) claim that there are two different ways of creating value through social capital. These approaches are attributed to James Coleman and Ronald Burt, two key contributors within the field. Coleman (1988) claims that closure of the network structure (bonding) facilitates the emergence of effective norms maintaining the trustworthiness of others. In contrast to Coleman, Burt (1992) does not stress the utility of consistent norms as the main usage of social capital. He argues that a sparse network including few redundant ties (bridging) often provides greater benefits.

Social capital may involve norms and trust, but can also serve as a lock-in that isolates from the outside world by over-embedding a network in its own social context (Uzzi 1997, Gargiulo and Benassi 2000, Parra-Requena et al 2009, Molina-Morales and Martínez-Fernández 2009). Social capital might therefore not only bring positive effects to regional development, as its drawbacks under some circumstances might outweigh the benefits. Slotte-Kock (2009) argues that all network researchers agree that networks of social or business contacts provide both opportunities and constraints.

Main contribution
Molina-Morales and Martínez-Fernández (2009) and Adler and Kwon (2002) claim that there is a lack of empirical research particularly on the negative effects of social capital. The paper adds to the discourse through a case study focusing on the negative influence of social capital on the RSN process.

Research method
Representatives of the 15 companies included in an regional strategic network (RSN) project were all interviewed prior to the formation of the project in 2004 and interviewed again six years later (2010) when the formal network project was about to end. The longitudinal aspect of the RSN process is portrayed.

Research findings
The organizational lock-ins and network over-embeddedness that the bonding form of social capital might impose upon a network is exemplified in the studied RSN. It is also evident that existing social norms dominate the decision process within the studied RSN more than economic rationality. The creation of bridging linkages imposed by the management group resulting in low relevance of shared information.

Keywords: Social capital, bridging, bonding, regional strategic networks, cluster initiatives
Introduction

Network cooperation can emerge in various ways. Often cooperation develops gradually between two firms and spreads to other connected firms. In other cases cooperation is created by explicit initiatives within a potential group of firms in order to seek mutual benefits, e.g. in marketing, production or logistics. Municipality and city officials also try to stimulate enhanced company cooperation in order to create a regional growth (Porter 1990, Sölvell 2009, Hallén et al 2009a, Andresen 2011).

Koschatzky and Kroll propose that designed networks with the intention of creating regional growth can be used to implement science, technology and innovation (STI) policies (Koschatzky and Kroll 2007:7). “Innovation systems”, “clusters”, and “networks” are all concepts commonly used by political decision-makers to foster regional development (growth) in sparse and geographically remote regions in Europe (Huggins 2001, Hallén et al 2009a). The creation of relationships is a key issue in all these different governmentally funded projects and collaborative arrangements. As huge funds are invested in such initiatives it can be concluded that actions by policy-makers on the regional level intended to influence the local business market should be carefully analyzed and scrutinized (Pesämaa and Hair 2007, Spencer et al 2010). Sotarauta (2010:387) sums up the current state claiming that

people responsible for regional development often understand fairly well the need to construct regional advantage and build clusters. […]But what they have not been given much advice on is how to do it – how to create networks for these purposes, how to direct and maintain them, how to lead complex policy networks (Sotarauta 2010:387).

The socio-economic context within a region is often explicated in socio-centric network research by the term social capital. Social capital is defined as a resource in the social structure within which the actor is located, and “the resource available to actors as a function of their location in the structure of their social relations” (Adler and Kwon 2002:18), or simply as “the goodwill that is engendered by the fabric of social relations and that can be mobilized to facilitate action” (Adler and Kwon 2002:17). Understanding the function of social capital and its creation within the socio-economic context of a region is therefore important when implementing policies regarding various forms of network cooperation.

Hallén, Johanson and Roxenhall (2009a) define clusters as spatial networks that have grown and developed organically over time, and put them in contrast to regional strategic networks (RSNs) that are defined as designed or engineered entities. Jarillo defines a strategic network as a “long term purposeful arrangement among distinct but related for-profit organizations that allows firms within them to gain or sustain competitive advantage vis-à-vis their competitors outside the network”. Jarillo also clarifies that he added the term “strategic” in the attempt to define a strategic network as “a mode of organization that can be used by managers or entrepreneurs to position their firms in a stronger competitive stance” (Jarillo 1988:32).

The term “strategic” is therefore used as an indicator to specify that the network is managed knowingly by one or several participants. RSNs operate as temporary organizations due to the project-related conditions of their funding in their initiating stage. Thereafter they aim at creating a self-organized arena for cooperation and joint development that is supposed to render long-term effects (Lundberg 2008).
In the creation of network policies the focus is on co-operation rather than on competition, and therefore consensus, sharing of know-how and resources are emphasized (Sölvell 2009, Muro and Katz 2010). The network is in practice to a high degree determined by the bonding activities within the member group and the bridging activities outside the group. To reach a balance between bonding and bridging the manager of a strategic network should according to Jarillo (1988) choose carefully the companies that he wishes to include in the network when designing it. If the actors included in the network can “relate to each other” and share the same values, a better breeding ground for trust can be created. Norms and social trust are often viewed as entities that facilitate coordination and cooperation for mutual benefit, and these norms are in turn believed to be supported by the creation of social capital (Coleman 1990, Bourdieu and Wacquant 1992, Putnam 1995, Nardone et al 2010). But the same conditions that support norms and trust can also serve as lock-ins that isolate the organization from the outside world and over-embed the network in its own social context (Grabher 1993, Uzzi 1996, Gargiulo and Benassi 2000, Parra-Requena et al 2009, Molina-Morales and Martínez-Fernández 2009). The features of social capital might therefore not only bring positive effects upon a network. There is a risk that social capital might impose constraints that under some circumstances can outweigh the benefits. Slotte-Kock (2009) argues that researchers representing all network approaches agree that networks provide both opportunities and constraints, and pin-point this as the most significant network paradox with interest for further research.

Adler and Kwon (2002) and Molina-Morales and Martínez-Fernández (2009) claim that there is a lack of existing literature that explores the negative effects of social capital empirically. Osborne et al (2009:214) claim that “much of the social capital literature relies upon the assumption that social capital arises from participation in a uniform fashion, and leads to beneficial outcomes for all involved rather than considering how participation in some types of groups, in some situations, may be beneficial, whereas other types of participation in different contexts may not”. According to Alguezui and Filieri (2010) most scholars have highlighted the benefits of cohesive and sparse networks, failing to analyze more deeply their detrimental effects. Alguezui and Filieri (2010) therefore suggest that future research exploring social capital should close the gap and by identifying negative effects of social capital contribute to a more balanced approach.

**Purpose of the paper**

In this paper we focus upon the negative effects that social capital can impose upon regional strategic network in order to add a nuanced view on the role of social capital in the network discourse. The paper is based on a case study of an RSN operating in a small municipality in Sweden.

The purpose of this paper is to analyze the negative effects of social capital on processes in a regional strategic network with special focus on obstacles that can be referred to characteristics of social capital.
Literature review

The concept of social capital has according to Adler and Kwon (2002) become increasingly popular among a growing number of sociologists, political scientists, economists and business researchers in order to answer a broadening range of questions confronted in their individual fields of interest. As defined above, social capital represents a resource in the social structure within which the actor is located, and “the resource available to actors as a function of their location in the structure of their social relations” (Adler and Kwon 2002:18), or simply as “the goodwill that is engendered by the fabric of social relations and that can be mobilized to facilitate action” (Adler and Kwon 2002:17).

Adler and Kwon (2002) claim that there are two different ways of creating value through social capital stemming from two different views upon what constitutes social capital. These views are in turn derived from James Coleman and Ronald Burt, two key contributors within the field.

Coleman (1988) claims that closure of the network structure, in terms of existing ties between actors, facilitates the emergence of effective norms which in turn maintain the trustworthiness of others. These norms strengthen the social capital within that network structure. In a more open network structure the violation of norms goes undetected and therefore unpunished, which leads to less trust being developed within the network structure. An open network structure is therefore weaker with respect to social capital. Social capital is seen as connected to the creation of norms and trust within a single and cohesive network structure.

In contrast to Coleman’s (1988) focus on closure, Burt (1992) argues that a sparse network with few redundant ties often provides greater social capital benefits. This is so because Burt’s (1992) notion of “structural holes” does not stress consistent norms fostered by cohesive networks as the main aspect of social capital. Instead he claims that the diversity of information and the subsequent brokerage opportunities created by the lack of redundant ties (structural holes) that exists within a sparse network is the source of value. The existence of structural holes within a network enables an actor to act as an information broker by combining information from different actors within the network. The combination of the information stemming from weakly connected actors might thereby contribute to innovation within the network.

The reason why Burt and Coleman suggest opposing conditions and use of social capital, closed and sparse networks, lies in the difference between their respective internal and external foci and the related difference in assumed goals (Adler and Kwon 2002). A closed and cohesive network provides benefits from social capital within the community, whereas structural holes within a sparse network provide the focal actor with cost effective resources for competitive action. This explains the different views on social capital held by Burt and Coleman. Their views on the usefulness of social capital set them apart as do their internal and external focus. These different aspects on social capital are referred to as the bridging and bonding forms of social capital (Putnam 2000).

There are several negative as well as positive effects of the bonding and bridging forms of social capital. The matrix below (figure 2) provides examples drawn from previous literature exploring the subject. These examples are used as tools of analysis within this paper.
The municipality of Söderhamn (26,000 inhabitants) is situated on the Swedish coast of the Baltic Sea 260 kilometers north of Stockholm. Söderhamn can be described as a traditional industrial community once founded around an important armourer’s workshop and gradually developed around the forestry business (Hammar & Svensson 2000). In 1945 a military air force base was set up in town in succession to previous military installations. At the same time the industrial production expanded in a new direction as the telecom manufacturer Ericsson started a plant in town in 1947. Both the air force base and the Ericsson plant were closed at the turn of the millennium – the Ericsson plant just a year after it was bought by Emerson. These closures reduced employment in the municipality with more than 10 percent.

One of the projects undertaken to compensate for the downsizing included actors from the public, private and academic sectors (“triple helix” cooperation) as this had become a preferred approach for regional actors wanting to stimulate the development of regional industry (Lind 2002). Together with the previous management at Emerson, officials of the municipality developed a cluster initiative together with researchers at the regional university. In 2004 these three actor groups formed the regional strategic network Firsam (Företag i regional samverkan – Firms in regional collaboration) of the triple helix type supported by the EU Regional Development Fund.

Lindberg describes Söderhamn as a typical industrial community that represents the industrialization in Sweden. But what is the important ingredient that characterizes the political and social structure that forms this sort of community? Within the socio-centric focus of network analysis the forces that “bind” a social structure together are in focus (Adler and Kwon 2002). The socio-economic structure of a region has a direct impact upon the forces
that create social capital within its social structure. To describe the socio-economic structure within a region is therefore vital for understanding the formation of social capital among its residents.

The social climate in Söderhamn is often described by the expression “dependence-oriented culture” (bruksanda in Swedish). This can be seen as a characterization of the nature of the local social capital. Forsberg (1997:59) defines dependence-oriented culture as “the filter or lens that redefines and adapts the general economic and social structures to the local context”, thereby claiming that the dependence-oriented culture is a product of the economic and social structures that defines regions like Söderhamn. Dependence-oriented culture has according to Hammar and Svensson (2000) developed out of the historical relation between the locally dominant employer and the workers’ collective. The dominant employer guaranteed employment in exchange for the workers’ loyalty. In these peripheral regions a single employer was thereby expected to provide subsistence for his workers from “cradle to grave”, and the community as a whole was centered on these employers (Bursell 1997:12). This loyalty to a major employer entails the notion that all other commerce except the commerce undertaken by the dominant employer is considered as unwanted competition. Therefore, entrepreneurship is often seen as a betrayal of this loyalty and frowned upon in the local social context.

The dependence-oriented culture is based upon a few and very strong connections, both internally within the society and externally through customer contact. The major employer managed these connections and the majority trusted the collective authority, mostly represented by the trade unions and the political parties, in providing security of employment (Hammar and Svensson 2000). With the collective in focus a strong feeling of disapproval towards individual success is prevalent. Instead a sense of duty towards the rest of the workforce collective and the notion of “pulling your weight” is promoted. Borgström (1996:57) exemplifies the core of dependence-oriented culture by defining it as “a heritage of a collective spirit that hinders individualistic initiative”. The characteristics of the dependence-culture presented by Borgström (1996) resembles Uzzi’s (1997) statement that strong norms in a community may dictate the sharing of resources between members of a tight-knit group and thereby reduce the incentives for entrepreneurship. This notion connects the socio-economic climate of Söderhamn to the risks that are commonly associated with the bonding form of social capital.

The project idea of Firsam was to bring to market the combined competence and capacity of the companies joining the network. The ultimate mission was to find a product idea to develop and produce jointly. Each company should be responsible for a step in the value chain. This demanded joint efforts in searching for new products, product development, marketing and financing.

The Firsam project combined companies connected to Ericsson with local manufacturing companies connected to a prior network initiative called Verkstadscen. The companies with connections to Ericsson either consisted of firms with staff formerly employed by this company or were firms that did the bulk of their business with Ericsson. The know-how of these companies focused on electronics, and they either produced or designed electronic products. We call these firms EC firms.

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The regional strategic network Verkstadscen was a network formed at an earlier stage to make joint purchases of materials for production and to work closely with the vocational
training at the local high school by offering trainee positions. The companies mentioning connections to Verkstadscentrum all had their primary business or know-how in the manufacturing field. Usually these companies were experts in cutting and welding different kinds of metal, or active in the mechanical industry. We refer to these firms as MC firms.

**Methodology**

At the start of the research project participant observations made during the initial phase of the network project, which lasted for approximately half a year in 2004. In-depth interviews with all the involved companies were also held during the first three months. Hence, the participating managers of all the 15 companies included in the Firsam network were interviewed in separate meetings, lasting 60-140 minutes. Very broad and open questions were formulated in order to let the respondents reflect over the cluster initiative. The content of the interviews focused on getting an adequate picture of the respondent’s company, on giving the respondent a chance to express his or her intent in joining Firsam, and portraying the expectations that he or she had on the Firsam collaboration. The respondents’ prior experience of network projects was also discussed in order to get a picture of the respondents’ general attitude towards networking. We met with the same managers for in-depth interviews in 2010 to follow up the development of the Firsam project as well as the managers’ personal development tied to the Firsam venture. The same questions were asked in 2010 to the same individual respondents representing the companies included in Firsam, but in some cases the names of the companies had changed, since some had been bought by other companies. The identity of the firms could however be considered to remain the same, as the same individuals were still present in the firms.

After all the interviews were carried out and transcribed we started to sort the qualitative data. We specifically searched for information that shed light on bonding and bridging activities or attitudes. The concepts used to structure data are therefore empirically derived and then sorted into categories based on a prior existing theoretical framework.

Some quantitative data were also collected through a questionnaire that was filled out by the same respondents. This was also done both in 2004 and in 2010. The questionnaire dealt with issues regarding the respondents’ current contacts with the companies included in the Firsam project. The questionnaires were filled out by the respondents themselves in the presence of the interviewer and collected at once. In the questionnaire the respondents were asked to assess how often their own company worked together with the other member companies of the budding strategic network. The member companies were identified through aided recall as a list of company names was presented to the respondents. The assessments made by the respondents resulting in the quantitative data should be interpreted as a subjective grading by the respondent and not a factual account of how often these companies are in contact.

Besides the collection of primary qualitative and quantitative data, secondary data were collected and included in the analysis. The secondary data consist mainly of protocols, newspaper articles and web based material. These data predominantly serve to portray the strategic and managerial development of the Firsam project and the context of the member companies.
Analysis

According to the literature the dependence-oriented culture is based upon a social context with few and very strong connections, both internally within the society and externally through customer contact (Hammar and Svensson 2000). The traits that characterize the dependence-oriented culture resembles the bonding form of social capital since the connections between individuals are few and very strong. The region of Söderhamn has been described as a region where a dependence-oriented culture dominates the socio-economic climate. A context characterized by the bonding form of social capital thus formed the prerequisites for networking and influenced the design of the Firsam network.

The entrepreneurial business development of the Söderhamn region was described by the respondents as hindered by the dependence-oriented culture, and this was seen as an obstacle to regional growth and something that gave the region bad reputation among outsiders. The respondents found this reputation and regional traits troublesome, which created a sense of urgency in joining forces to make change.

The differences in business cultures and fields of know-how between the EC and MC groups of companies were explicitly described by the respondents. The respondents portrayed the difference in corporate culture between these two groups as so prominent that the differences were even noticeable on the individual level as inherent personality traits. Their different outlooks upon their businesses were so significant that both the companies and the individuals employed seemed to come from different social contexts. Bringing together these two groups was therefore described as a difficult task by the respondents.

Some of the respondents seemed unable to grasp the idea of merging the two separate groups, which might indicate a failure to understand the benefits of working strategically within networks and vertical collaboration. The failure to see these benefits might be a direct consequence of the dependence-oriented culture that enforces a focus upon few and strong ties in the social capital. Over-embeddedness (Molina-Morales et al 2009) in one’s own social context might create a lock-in effect (Grabher 1993, Uzzi 1997, Gargiulo and Benassi 2000, Parra-Requena et al 2009) that hinders actors from appreciating the value of strategic vertical collaboration. The bonding form of social capital prevalent in the region was thereby a hindrance to vertical collaboration within the Firsam project. To create novel connections in this manner contributes to the creation of the bridging form of social capital since bridges between existing social contexts are being made (Putnam 2000).

The characteristics of social capital within the Firsam network therefore

- contributed to a failure to merge two existing groups within the network structure into a cohesive network

There was a commonly expressed discontent towards the network management group’s inability to manage the different business projects undertaken within the Firsam project. A respondent representing the companies expressed that the network management should have been more active in the projects that the strategic network resulted in. The companies themselves expressed that they did not know enough about each other to be able to see the benefits of managing these projects.
When previously unconnected actors in a network structure become connected, the actor that bridges the two different social contexts is referred to as a technology broker (Burt 1992). The technology broker manages the connection and makes sure that information travels along the bridging connection. In controlling the information flow the technology broker is in a position of power within the network that might be used to generate revenue. Attempts to use such technology brokers were made, as the network management group during informal meetings paired different companies together into novel constellations according to individual know-how. In this manner companies from different social contexts were brought together establishing bridging connections between the actors. Still, the management group did not have a direct financial interest in managing the information flow. This seems to have created role confusion when the companies expected the network management to manage the connections in the manner of a technology broker, and the network management believed this to be the role of the companies since the financial benefit was theirs. The practical implication of vertical collaboration within the regional strategic network seemed to resemble technology brokering without a specified broker.

The role confusion of not having a specified technology broker seems to have had a clear impact upon the creation of trust among the companies in the Firsam project. Hargadon and Sutton (1997) claim that ideas from one group might solve the problems of another, but only if connections between existing solutions and problems can be made across the boundaries between them. Since there was no technology broker the connection between the groups was not established. Dhanaraj and Parkhe (2006) claim that the technology broker must orchestrate these connections. Otherwise the boundaries between the actors stop the information flow and network mobility cannot be reached. When the information flow within a network is hindered the benefits for the included actors in collaborating and working strategically within the network become unclear. This is exemplified in the case of Firsam by a widespread mistrust in the network’s appropriability. Fair sharing within a network context is founded upon knowledge of what all the actors are “bringing to the table” in form of know-how and resources (Dhanaraj and Parkhe 2006). When the creation of such knowledge is hindered by low network mobility trust inevitably suffers. This results in irrelevant information being shared since the companies do not know each other well enough to differentiate the irrelevant information from the more pressing issues.

The characteristics of the social capital within the Firsam network therefore

- created role confusion since the role of the technology broker as information orchestrator became unfulfilled
- created high boundaries for technology brokering resulting in low network mobility
- created low network appropriability
- created less relevance of the shared information to the broad aggregate of member firms

Many of the respondents representing the companies within the project stemmed from a social context where few and very strong connections characterize the social capital (Hammar and Svensson 2000). These companies were consequently inexperienced in working strategically within networks. This aspect also influenced the external marketing ventures that the member firms of the Firsam network undertook. The network management group described unwillingness from the companies’ side in participating in network activities connecting the Firsam network to outside actors for marketing purposes. The inexperience of working with network activities in such a manner might therefore lead to criticism of the network
management’s marketing ventures. The respondents representing the companies were probably expecting more traditional marketing strategies, such as advertisements, and therefore misunderstood the absence of these strategies as neglecting marketing ventures altogether. The different social contexts of the companies might have created communication problems between the management group and some of the companies regarding the marketing ventures undertaken within the Firsam project.

The network management group meant that the Firsam project turned out to be more of a product oriented project than a project that focused on making external connections. Some of the respondents attributed this focus to the history of the region and claimed that the companies present in the region all tended to have a focus on production of goods rather than on marketing or business development. The major companies within the region had head offices that dealt with such issues and these offices were usually located in other regions. Both the network management group and the participating companies had a natural focus upon the production and manufacturing of goods and the marketing and business development was consequently described as neglected. The dependence-oriented culture dictates a climate where few and very strong connections characterize the social capital and the socio-economic climate can therefore be described as less than nurturing to making external connections in the form of marketing ventures. The product oriented focus applied in the Firsam project can thereby be attributed to the bonding form of social capital prevalent in the region.

The characteristics of the social capital within the Firsam network therefore

- created a failure to see strategic networking as a marketing tool
- created an internal product focus, not an external market focus

It is evident that the two groups within the Firsam network structure had common traits within their separate groups that created a rift between these two cliques. One of the groups even described a power struggle between the groups. The MC group felt undervalued since the network management had prior connection to the Ericsson Company. A feeling that the Firsam project was governed to support the companies previously connected to the now closed Ericsson factory was expressed. This notion of “us against them” that might hinder network cohesion can easily be interpreted in terms of a social context where few and very strong connections characterize the social capital. The influence of the dependence-oriented culture upon the regional socio-economic climate became evident. The existing socio-economic climate within the region of Söderhamn imposed an abundance of the bonding form of social capital that reinforced existing network structures. The boundaries hindering the creation of an information flow between the two separate groups were too high. Vertical collaboration could not take place and the business ventures undertaken within the network structure therefore failed.

The characteristics of social capital within the Firsam network therefore

- created a feeling of alienation within the subordinate group

**Conclusion**

The negative points highlighted in this paper are summarized in Figure 3. This matrix lists the negative aspects of the bonding and bridging forms of social capital. These aspects serve as a
contribution to the research field of networks since it gives an empirically grounded view of
the negative aspects of social capital in the network formation process.

As this view is lacking in present research according to several researchers (Molina-Morales and Martínez-Fernández 2009, Osborne et al 2009, Alguezaui and Filieri 2010), and as managers of network initiatives often do not have a clear understanding of these differences, conceptual development of the characteristics of social capital and empirical studies of the functions of social capital have implications both for research and for management.

Figure 3: Negative aspects of bonding and bridging forms of social capital observed in the Firsam case

It is not an easy task to assess whether the positive effects of social capital, which are those that conventionally are in focus, outweighed the negative effects that we bring to the fore in this paper. The balance may differ for individual companies too. However, it seems clear that negative effects of an inward-looking and dependence-oriented culture need to be taken into consideration in regional development initiatives, and that social capital as a resource is a coin with two sides.
References


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