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Explaining Swedish Regional Action Towards the EU  
A Case of Fusing Social Capital?

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## Introduction<sup>1</sup>

The membership in the European Union (EU) has, arguably, contributed to the development of more complex governance structures among the member states. Many researchers have used the term ‘multi-level governance’ (MLG) to describe this phenomenon. In short, the MLG literature assumes that a number of actors have become involved in policy-networks that, from a vertical perspective, include actors on the sub-national, national and supranational levels (Marks, 1993:392, 401f; Hooghe & Marks, 2001:2-4; Bache & Flinders, 2004:3), and horizontally involve a number of different types of actors on each level (Marks, 1993:395-397, 404; Kohler-Koch, 1996:366-375; Marks *et al.* 1996a:41f; Hooghe & Marks, 2001:4-25; Bache & Flinders, 2004:3). As a result of this, competences that previously, in principal, fell exclusively upon the state, have been dispersed to include various actors at the subnational and supranational levels, as well (Marks *et al.* 1996b:342; Hooghe & Marks, 2001:2-3, 27-28; Stegmann McCallion, 2007:337).

The conceptions in the MLG literature are very much in line with notions found in EU strategies, initiatives and programs, such as *Europe 2020* (COM 2020, 2010) *Innovation Union* (COM 546 final, 2010), and *Horizon 2020* (COM 808 final, 2011b). In these documents there is an emphasis on the need for cooperation and coordination, both vertically, between levels, and horizontally, among different types of actors at each level. It could also be noted that these ideas are promoted in key strategic documents for economic growth and development at the Swedish national level, e.g. *Regeringen* (2009) and *Näringsdepartementet* (2007) (see Olsson and Miles, non-published material). In relation to this, the focus of this paper is upon the horizontal aspect of MLG at the regional level. That is, cooperation and coordination among regional actors that is carried out in order to enhance their ability to take part in the vertical networks; what we term ‘horizontal regional action’.

However, a central tenet in this paper is that regional actors’ engagement in these horizontal and vertical policy-networks can vary considerably between as well as within regions. Naturally, MLG scholars, such as Jeffery (2000:11), have already, at least partially, recognized this, arguing, for instance, that states’ constitutional structures count for much of the difference in activity, akin to regional action, between regions. However, this paper argues that analytical tools developed in the fusion literature can add to our understanding of these

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horizontal activities among regional actors. In particular, the micro-fusion framework (MFF) developed by Lindh *et al.* (2009:35-43) (see also Miles 2011a, Lindh and Miles 2011), is believed to be a fruitful analytical framework, since it considers factors such as regional actors' attitudes, attention and institutional adaptation to the EU.<sup>2</sup> Lindh *et al.* do not, however, test the robustness of their framework empirically. Furthermore, the hypothesis here is that the inclusion of the concept of bridging social capital can add considerable explanatory value to the MFF, in particular regarding broad forms of regional action. This paper, thus, sets out to construct and test a theoretical framework, based on the MFF and the concept of bridging social capital, where a Swedish region, i.e. Värmland, constitutes the empirical case. The policy area under scrutiny is regional growth and development policy, since this is an area where Swedish regions are likely to be involved in multi-level policy-networks.

## Concepts and Theoretical Framework

Initially, in this section, the concepts of region, regional actor and regional action, as understood in this paper, will be outlined. Subsequently, the micro-fusion framework (MFF) will be presented, followed by a description of the concept of bridging social capital. Finally, the assumed relation between the MFF and bridging social capital is sketched.

Keating (1998:9) has defined the term 'region' as '[...] an intermediate territorial level, between the state and the locality'. Although this definition can entail many different meanings, based on aspects such as functionality, administrative borders or culture/history/identity (see Gren, 2002b:15f; Jönsson *et al.*, 2007:107f), this paper do, for practical reasons, utilize the administrative definition, in order to delimit the geographical meaning of the term. Since this is a study of a Swedish region, this means that a region is understood to be a county (Swedish: *Län*).<sup>3</sup>

It is, however, imperative to stress that the term 'regional actor' is not delimited to politicians and civil servants, as the administrative definition may suggest. Since this study sets out to investigate factors that contribute to broad forms of coordination and cooperation at the regional level, i.e. broad horizontal regional action, the term comprises all individuals that, *de facto*, take part in the strategic work with growth and development policies at the regional level. This definition, thus, potentially entails individuals from the public sector as

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<sup>2</sup> In relation to the MFF there is the macro-fusion thesis (MFT), which can be used to explain why a polity, akin to that described by the MLG, has developed and why there are incentives for regional action. However, there is no space to include the MFT in this paper. For a description of the MFT and its relation to the regional level, see Lindh *et al.* (2009:36f). For a more general depiction of MFT, see Wessels (1997) and Miles (2011b).

<sup>3</sup> An administrative region can of course comprise the other regional aspects as well.

well as persons from academia, the private sector and civic associations, a group of actors that can be captured with the term *quatro helix* in the form developed by Lindh *et al.* (2009:73).

Regional action is to be understood as ‘[...] consciously [...] taken political measures that seek to transmit and promote regional interests in an EU-related framework’ (Lindh *et al.*, 2009:48). Hence, horizontal regional action captures regional actors’ cooperation and coordination in areas explicitly related to the EU. As pointed out by Lindh *et al.* (2009:53f), three different types of horizontal regional action can be distinguished: (a) funding action, (b) learning action, (c) political action. In addition, this paper argues that each one of these can have either a broad or narrow dimension. Although these types of regional action can be applied to both intraregional and interregional action, it should be pointed out that this study is delimited to scrutinizing the former.<sup>4</sup>

Funding action captures horizontal regional action which has as its aim to maximize a region’s amount of EU funding. This can be in the form of different kinds of structural funds, money from research programs etcetera. A broad dimension of this would be that regional actors seek to cooperate and coordinate their funding action across projects and programs. Cooperation between projects is also advocated in, for instance, *Horizon 2020*, where it is stated that the program

[...] will promote exchange of ideas and perspectives by deploying a seamless approach across all of its constituent parts. The same rules will apply, allowing participants to move swiftly between different parts. Bridging actions will be put in place to bring projects and results from one part into contact with related projects in other parts (COM 808 final, 2011:9).

Moreover, the program also emphasizes the need to ‘[...] ensuring better coordination, cooperation and information exchange between the two Union funding programmes [i.e. structural funds and Horizon 2020]’ (*Ibid.*, p. 12; see also COM 546 final, 2010:12). This can be contrasted to a narrow dimension of funding action, where projects and programs are implemented in isolation from one another.

Learning action, instead, comprise horizontal regional action that seeks to promote competence building about how the EU works and how the region can ‘get the best out of the EU’. The latter concerns competence building with the objective to enhance regional actors’ ability to promote regional interests at the EU level, here termed ‘upoad’, as well as forms of learning with the aim of promoting more efficient implementation of EU policies. These types

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<sup>4</sup> In a more extensive study, Olsson and Miles (Non-published material) have studied interregional action, as well.

of competence building activities could e.g. take the form of benchmarking with other regional actors.

A broad dimension of learning action would be that regional actors, across different types of sectors and types of organizations, exchange experiences and knowledge about the EU. This can be differentiated against the narrow dimension, where various sectors and organization types carry out their learning action in isolation from one another. For instance, an activity that can be categorized as a broad form of learning action would be that actors from all or most parts of *quattro helix* come together to exchange knowledge and experiences related to *Europe 2020* initiatives, in order to improve outcomes from implementation.

The importance of a broad dimension of learning action is, at least implicitly, advocated in the working paper assessing the impact of *Horizon 2020*. There it is stressed that the success of the program to a high degree is dependent on ‘[...] the research and innovation community itself – on its readiness to master the application and participation procedures; on industry – on its awareness of the opportunities offered by Horizon 2020’ (SEC 1427 final, 2011:43). Exchange of knowledge and experiences across various sectors and different types of organizations is, arguably, of importance, as a catalyst of such development.

Political action, finally, captures a type of horizontal regional action where regional actors coordinate their surveillance of the EU, here termed *download*, have dialogs about how and what to promote at the EU level, termed *crossload*, and coordinate their *upload* activities. A broad dimension of political action would, for instance, be that regional actors from different organizations cooperate in their *download* and *crossload* activities. An example of broad *crossload* would be that regional actors from different types of organizations seek to coordinate their *upload* activities, and utilize each other’s vertical networks to the EU. An example of broad forms of *download* would be that they exchange their knowledge of EU activities, events and processes.

This type of action is also, implicitly, found in the working paper for *Horizon 2020*, where it is stressed that the success of the program is dependent on ‘[...] the national and regional authorities which collaborate with the Commission to construct conducive framework conditions’ (*Ibid.*, p. 43), and that ‘[i]t is [...] of crucial importance that appropriate interfaces are established with those Directorates-General, policies, programmes and initiatives that concern knowledge triangle issues outside the scope of Horizon 2020’ (*Ibid.*, s. 43). Regional actors from different types of organizations, being effected by aspects of these programs and initiatives, are likely to be valuable resource in this process, especially since they are able to contribute with various perspectives on these issues. Regional actors

from the academia may, for instance, have other and supplementary perspectives compared to regional actors from the public sector. In addition, actors from academia may have a more explicit interest and networks for upload to DG Research, whereas the public sector may be more ‘naturally’ linked to DG Regio. Hence, cooperation between the two might increase their chances for successful and broad upload.

Having defined the concepts of region, regional actor and regional action, the paper now turns to describing the micro-fusion framework (MFF), as outlined by Lindh *et al.* (2007; 2009) – also in Miles (2011a) and Lindh and Miles (2011). The MFF consists of two main variable categories, labeled institutional fusion (IF) and fusion perspectives (FP). The former captures awareness and institutional adaptation, whereas the latter comprises attitudes to regional engagement with the EU.<sup>5</sup>

The IF variables are: horizontal regional action, vertical attention, horizontal attention and institutional adaptation. The first variable has already been treated, why this paragraph focuses on the latter three. Vertical attention is used to illuminate to what degree regional actors are aware of EU related matters of relevance to them. In other words, it seeks to capture to what extent they are aware of the EU’s impact on their region, in the area of growth and development policy. Horizontal attention informs to what extent regional actors are aware of EU-related activities, carried out by other regional actors within their own region. The third IF variable, institutional adaptation, measures to what degree there are intraregional institutions, where regional actors come together to discuss EU related matters. In this paper, institutions are delimited to intraregional forums treating such matters.

The FP variables are: horizontal performance fusion (henceforth, performance fusion) horizontal compound fusion (hereafter, compound fusion) and political fusion (see also Miles 2005). Performance fusion is a variable that measures regional actors’ attitudes toward the utility of cooperating with other regional actors to ‘get the best out of the EU’, i.e. their attitudes toward being involved in horizontal regional action, broad or narrow. Compound fusion, instead, is a variable used, specifically, to capture regional actors’ attitudes to the utility of broad forms of regional action, i.e. with regional actors from all parts of the *quattro* helix. Hence, an important difference between performance fusion and compound fusion is that a regional actor could have positive attitudes toward working with regional actors from the same type of organizations, i.e. positive attitudes toward performance fusion, and at the same time have negative attitudes to working with regional actors from other parts of the

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<sup>5</sup> Since this paper only studies the horizontal aspects of regional action it does not contain the entire MFF. For a complete description of MFF see Lindh *et al.* (2007; 2009), Miles (2011a) and Lindh and Miles (2011).

quatro helix, i.e. negative attitudes toward compound fusion. In such a scenario the actor would be positive towards narrow forms of regional action, but negative to its broad forms. Consequently, it is, arguably, fruitful to include both of these FP variables in a study such as this.

Political fusion, finally, is a variable that illuminates regional actors' attitudes to upload activities directly to the EU level, and thus 'by-passing' the state. In other words, this variable looks specifically at attitudes related main components of political action. As such it could be seen as a component of performance fusion. However, the point in having political fusion as a separate variable is that regional actors may be positive toward funding and learning action, but negative to political action, since it, arguably, demands a more long term commitment. Hence, there is a point in measuring attitudes toward political fusion separately.

The paper will now turn to defining the concept of bridging social capital, as understood in this study. Before doing so, it is, however, believed necessary to say something about the term 'social capital' in general and, in relation to this, why it is the bridging form of social capital that is utilized in this paper. As pointed out by Adler and Kwon (2002:17f), social capital has become something of a 'broad church', applied on different kinds of analytical units and levels and, hence, has come to entail slightly varied meanings.<sup>6</sup> However, Adler and Kwon have come up with a useful definition, integrating the various meanings of the term. In their definition, which, arguably, is useful as a base for defining the concept of bridging social capital,

[s]ocial capital is the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actor (*Ibid.*, p. 23).

In this context goodwill is to be understood as sympathy, trust and forgiveness between actors (*Ibid.*, s. 18).

Specified to the context of this paper, *a regional actor's social capital is understood to be his or her links with other regional actors, and a his or her perception of these actors' will and ability to contribute to his or her strategic work with matters concerning regional growth and development.* A positive perception of others' ability and will to contribute, arguably, implies that there is an existent understanding and appreciation between the actors, i.e. sympathy. If other regional actors are viewed as competent and willing to support one's work, it can also be seen as an indicator of trust. In addition, if an actor has

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<sup>6</sup> A similar critique is also found in De Souza Briggs (1997:111), Nardone, Sisto and Lopolipo (2010:64), Narayan & Pritchett (1997:2), Sabatini (2009:429), and Lappe & Du Bois (1997:119).

these perceptions it is likely that he or she will forgive at least temporary frictions in the exchange, as well.

However, although much research primarily emphasize the positive aspects of social capital (e.g. Bourdieu, 1985; Putnam, 1992, 2001; Coleman 1988; Kitaoka *et al.*, 2011), there are scholars that point to its potentially negative outcomes. Much of these negative outcomes can be traced to homogenous and embedded networks, becoming skeptic to ‘outsiders’, leading to isolation and stagnation (see Katz and Allen 1982:7; Sabatini 2009:439; Gargiulo and Bernassi 1999:299-302; Uzzi 1997:57-60). Since this study focuses upon factors that can contribute to broad and inclusive forms of cooperation and coordination, it is thus imperative that it comprises a type of social capital that incites broad forms of cooperation. The literature on social capital often term this type ‘bridging social capital’, which is characterized for its bridging between actors with diverse perspectives (Eklinder-Frick *et al.* 2011:996), and thwarting effects on tendencies of isolation from and skepticism towards ‘others’ (Woolcock 1998:171-175; Alguezaui & Filieri 2010:901).

So what constitutes this type of social capital? Although researchers are in disagreement about what the primary factor is, Adler and Kwon (2002:18-27) point to three factors that appear necessary in order for bridging social capital to be formed. These are: (a) opportunity, (b) motivation, and (c) ability. In the following three paragraphs, these will be given a brief presentation.

The first factor, opportunity, has its focus on the structure of the network that a given actor is engaged in. Namely, what actors are interlinked with one another and of what quality do these links have. Regarding bridging social capital, the quality of the links is primarily based on the extent to which they entail a diversity of actors and perspectives (although other aspects, such as frequency and regularity in the contacts are important as well). The importance of such links can be illustrated with Granovetter’s (1983:201-205, 214) concept of weak ties.

Granovetter argues that networks composed of actors who are significantly different from one another (which, according to Granovetter, usually consists of weak ties), by representing diverse experiences and perspectives, work as catalysts for new ideas and solutions, as well as thwarting tendencies of skepticism to ‘others’. Actors from dissimilar parts of *quatro helix* are, in this paper, assumed to be significantly different from one another in this respect. In addition, networks that consist of actors from various parts of *quatro helix* are, *ceteris paribus*, likely to have broader external networks with the surrounding world, compared to more homogeneous networks (see also Burt 2005:15-16,

24). Hence, a regional network that consists of actors who are significantly different from one another will, *ceteris paribus*, have greater chances to come up with innovative ideas and solutions (learning), as well as have greater opportunities for learning and funding action together with other regions and for political action towards the EU, because of their relatively broad external networks.

The second factor, motivation, is based on Putnam's concept of 'generalized reciprocity'. Putnam defines this concept as a norm based on the idea that '[...] I'll do this for you now, knowing that somewhere down the road you'll do something for me [...]' (Putnam 1992:182f).

The third factor, ability, highlights that actors' skills and abilities are essential in order for social capital to be generated (see Gabbay and Leenders 1999:2f; Lin 1999:470-473). For instance, if a private company and a University are cooperating to generate innovation, and the company perceives the University as unable to supply results that can be used for this purpose, it is likely that the cooperation will end. In this paper, it is assumed that ability is a prerequisite for motivation. The reason for this is that it is not probable that two regional actors will initiate or establish cooperation without seeing one another as able to contribute to each other's work.

Hence, based on this information, *a regional actor's bridging social capital is understood to be his or her links with regional actors from other parts of quattro helix (opportunity), and a his or her perception of these actors' will (motivation) and ability to contribute to his or her strategic work with matters concerning regional growth and development.*

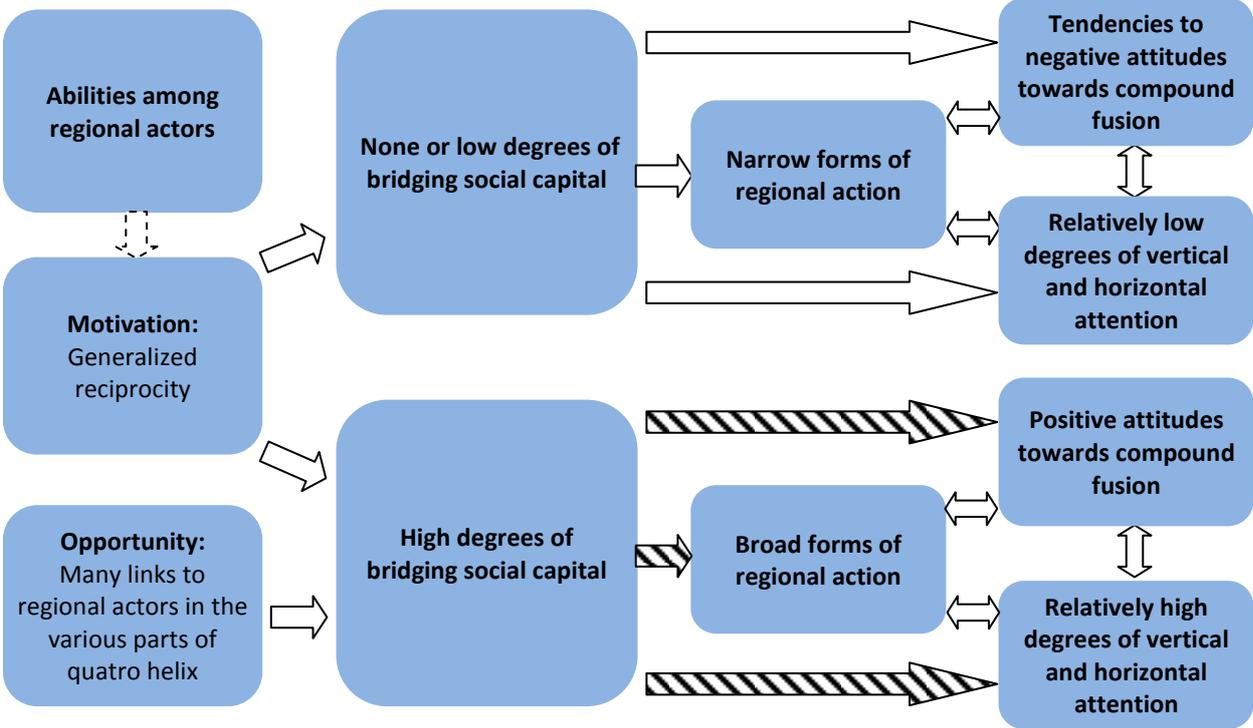
So what relations are there between bridging social capital and the MFF? In this paper it is argued that a high degree of bridging social capital, in the area of regional growth and development, is a basis for generating positive attitudes towards compound fusion, broad forms of horizontal regional action, and relatively high degrees of horizontal and vertical attention.

Regarding the relation between bridging social capital and compound fusion, it is assumed that a regional actor with a high degree of the former will end up having a high degree of the latter if its work with regional growth and development spills over onto areas of regional action. The reason for this is that a high degree of bridging social capital implies that there are already positive attitudes towards broad forms of cooperation. If this is widened to include areas of regional action, there will already be a solid base of positive attitudes towards broad forms of regional action.

The argument is similar for the relation between bridging social capital and horizontal regional action. High degrees of the former imply that there are established and well-functioning networks, on which broad forms of regional action can be based. Again, the key is that the work with regional growth and development spills over the areas of regional action.

It is, moreover, assumed that a high degree of bridging social capital between regional actors, enable more well-functioning information flows. Hence, regional actors with a high degree of bridging social capital and a strong EU focus, have greater possibilities, *ceteris paribus*, for exchange of information about EU related matters, both about matters happening within the region and on the EU level.

Finally, it is assumed that attitudes towards compound fusion, degrees of regional action, and horizontal and vertical attention will mutually reinforce one another. For instance, if there are positive attitudes towards compound fusion, it is likely to promote broader forms of regional action and increased awareness, which in turn generates positive attitudes to compound fusion. The argument thus far is illustrated graphically in figure 1.



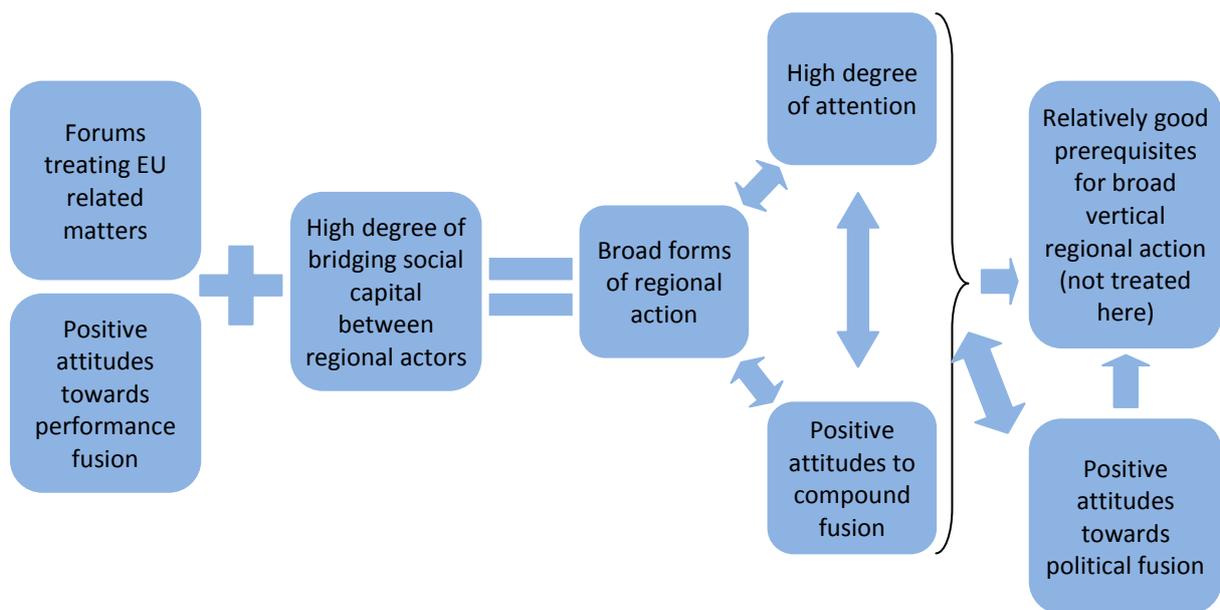
**Figure 1** The assumed relation between bridging social capital, compound fusion, regional action and attention

*Comments:* Solid arrows indicate that there is a causal relationship or interaction. Dashed arrows are used to show that something is a prerequisite for something else, but not necessarily a cause. Arrows with patterns are utilized to emphasize that there need to be spillovers from the work with regional growth and development to areas of regional action, in order for the bridging social capital to have an effect.

The argumentation so far points to the importance of illuminating factors that can contribute to spillover effects on regional actors bridging social capital. In this paper it is postulated that two such factors are: positive attitudes to performance fusion and institutional adaptation. The rest of this section will be devoted to explain the rationale for this.

As previously mentioned, a regional actor with positive attitudes towards performance fusion perceives engagement with other regional actors, in EU related business, as utility generating. Hence, if a regional actor has positive attitudes towards performance fusion and a high degree of bridging social capital, it is probable that he or she will find it meaningful to try to utilize its broad networks for EU related business, as well. The reason for this being that this actor is likely to believe that fruitful results emanating from bridging, in the work with regional growth and development at large, such as extended external networks and promotion of new ways of thinking, could very well come in handy for different forms of regional action.

Regarding institutional adaptation – which, as previously mentioned, is delimited to intraregional forums treating EU related matters – it is assumed that it will trigger an increased degree of EU focus among regional actors. The argument for this being that such institutions promote meetings, where EU related matters are treated, on a fairly regular basis. Thus, EU business is more likely to be and stay on the agenda among regional actors partaking in such institutions. The relation between bridging social capital and the MFF variables are illustrated in figure 2.



**Figure 2** *The assumed relation between MFF and bridging social capital*

In addition to the postulated relations already treated, it is also assumed, as illustrated in figure 2, that positive attitudes towards political fusion will promote an be promoted by the dependent variables. The reason for this is threefold. First, positive attitudes towards compound fusion are assumed to generate openness towards a broad form vertical regional action, i.e. upload to a number of different institutions at the EU level (and national level), which in turn has the potential to spur even more positive attitudes towards compound fusion, since broader forms of regional action can be assumed to be more successful.

Second, broad forms of horizontal regional action are likely to create more extensive vertical networks to the EU (and national) level, at the same time that it is probable that such actions will be more fruitful and thus increase the actors' positive attitudes towards political fusion.

Third, positive attitudes towards political fusion can be expected to work as incentives for higher degrees of attention, at the same time that regional actors that are highly aware of EU related matters will be more likely to target and time their upload more efficiently, and thus be more successful. In such scenarios it is probable that positive attitudes towards political fusion will be incited.

## Methods

In this paper, a web-based questionnaire has been used to collect the empirical data. In order to detect causal relations, linear multiple regression analysis has been utilized. In addition correlation analysis has been used to search for indicators on mutually reinforcing effects between the different dependent variables on the one hand, and between them and political fusion on the other. In this section, a few crucial things, regarding these methods, will be treated.

The web-based questionnaire was sent out to all regional actors in the region of Värmland. Primarily, these actors have been traced using the reputational approach (se Scott, 2000:55f), where key regional actors in the region have been asked to name all the actors in the region that take part in the strategic work with matters concerning regional growth and development. This also includes the EU network of Region Värmland, the regional organization that is assigned by the Swedish state to coordinate the work with regional growth and development. In addition, regional actors detected with snowball technique in the study conducted by Lindh *et al.* (2009) (N = 47) have been included. These regional actors have, according to Lindh *et al.*, the key positions, formal and/or informal, in the EU related work of the region. The inclusion of the regional actors from Lindh *et al.* meant that seven new individuals were added to the population detected with the reputational approach. All in all this resulted in an N of 169 regional actors.

After having sent out two reminders on the questionnaire, the final answer frequency was 47 percent (i.e. 80 respondents). Potential respondent bias was controlled for, partially, by relating the distribution of organization types, based on the concept of quatro helix, represented by the respondents to that of the population, and, partially, by relating the distribution of men and women among the respondents to that of the population. According to these tests there are no indicators on respondent bias. Regarding the distribution of types of organizations, the difference between the population and the respondents is never larger than 2 percentage points. Concerning the distribution between men and women, there is a difference of less than 5 percentage points, with a fairly even distribution in both the population and among the respondents.

Based on the questionnaire, four indices have been created;<sup>78</sup> the remaining variables in the multiple regression models are, instead, dummy coded. All indices are constructed so that

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<sup>7</sup> Borgatta and Bohrnstedt (1980:152-158) give several strong arguments supporting the assumption that indices based on several items, where each item is on the ordinal scale level, as in this case here, approximately acquires

they are on the scale 0-1, where 0 is the lowest and 1 is the highest value. Moreover, the items in all indices have a Cronbach's  $\alpha$  above 0.7, which, according to Field (2009:675f), is a sufficient level.

The first index captures bridging social capital and consists of 16 items. The items measure regional actors' opportunity in that no dialog with a given organization or type of organization gives the value zero on the items concerning that specific organization or type of organization; each organization or type of organization is given two items. On the first item the respondent is asked to evaluate to what extent he or her finds it fruitful to have a dialog about regional development and growth with a given organization or type of organization. On the second item, the respondent is asked to assess to what degree representatives in that organization or type of organization value exchange with him or herself. These assessments, arguably, captures both motivation and ability.

The second index aims to measure broad forms of horizontal regional action, using five different items.<sup>9</sup> Two of the items capture political action, one of them learning action and the remaining two are more generally formulated, thus capturing aspects of all three forms of horizontal regional action. The first item, capturing political action, observes to what extent each regional actor discuss upload-related matters with representatives from the other parts of quattro helix. The second item captures to what degree each regional actor utilizes other regional organizations' vertical networks to promote their interest at the EU level. The item focusing on learning action, instead, observes to what extent each regional actor have discussions with regional actors from other types of organizations on EU policies, strategies etcetera, with the aim to enhance the possibilities of 'getting the best out of them'. The first of the remaining two items captures to what degree each regional actor cooperate with regional actors from other organizations in order to get the 'best out of the EU'. The second item investigates to what extent regional actors coordinate their monitoring activities of the EU, across organizational borders.

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the same characteristics as data on interval scale level. Thus such indices can be analyzed with parametric statistics, such as linear multiple regression.

<sup>8</sup> Since the items of the indices are based on regional actors' subjective assessments, it is likely that some respondents will overestimate whereas others will underestimate their values on the various items. Two actors carrying out the same degree of activity may, for instance, give diametrically different values on the item measuring this very activity. However, in general it is assumed that most actors carrying out a certain degree of activity will assess their degree of activity in a fairly similar manner, thus resulting in a type of normal distribution. Hence, this reliability problem is not believed to cause any significant validity problems.

<sup>9</sup> Triangulation between qualitative and quantitative methods, used in Olsson and Miles (non-published material), indicates that the two more general items in this index were insufficient in capturing broad forms of horizontal regional action. However, since the other items seem adequate, multiple regression models, using this index as the operationalization for regional action, should still give a fairly good indication on the potential effects of bridging social capital on broad forms of horizontal regional action.

The third index measure attitudes towards compound fusion, and is based on three different items. The first item captures general attitudes towards discussing aspects of regional action with representatives from organizations with regional and local mandates. The second item captures these attitudes in relation to representatives from organizations with a mandate from the state, including academia. The third item captures such attitudes in relation to the private sector and civic associations.

The fourth, and final, index measures horizontal and vertical attention, based on four different items. Two items capture horizontal attention, whereas the other two focus on vertical aspects. The first 'horizontal item' points out each regional actor's awareness of other regional actors' work with aspects related to *Europe 2020*. The other item instead measures their awareness of other regional organizations' vertical networks to the EU. Regarding the vertical dimension, the first item measures regional actors' degree of awareness of relevant EU programs. The second vertical item captures the extent to which their respective organizations monitor the EU level.

As mentioned, the main method of analysis in this paper is linear multiple regression analysis. In order to secure accurate results from the regression models, a number of controls and tests have been conducted. First, controls spotting disproportionate amounts of standardized residuals have been carried out. These controls revealed that the index for compound fusion had two values too much above 1.96 (none of these were above 2.58) and transformations could not correct this deviation. However, it does not appear to be a problem, since none of the regression models has a Cook's distance value above 1, indicating that none of the respondents have a disproportionate impact on the models.

Regarding multicollinearity, correlation tests and VIF tests have been carried out, and none of these indicate that there are any reasons for concern in this respect, i.e. none of the models have perfect multicollinearity. It should also be mentioned that the Durbin-Watson test found the standard errors to be independent in every model. In addition, scatterplots, with standardized values, illustrate that all models have homoscedasticity.

It should be mentioned that the Kolmogorov-Smirnov test indicates that the indices for compound fusion and attention are not normally distributed. However, Borgatta and Bohrnstedt (1980:153) emphasize that regression models generally are robust, even when the criteria of normal distribution is not fulfilled. In spite of this, interpretations of the significance levels, where these indices are included, should be a bit more restrictive.

In addition to the independent variables included in the theoretical framework, a number of dummy coded control variables are built-in to some of the regression models. The first one,

‘EU perception’, controls for the degree to which regional actors perceive the EU to be important for their work with matters related to regional growth and development. The second one, ‘EU networks’, encompass all actors in Värmland’s EU networks, including those detected by Lindh *et al.*, hence testing if the predictor variables have an effect on regional actors, no matter their position to EU related matters in the region. The third control variable, ‘public or private’, investigates if being a public or private actor has any significance. The last control variable, ‘Man or woman’, is used to detect potential effects caused by the regional actors’ sex.

Although the theoretical framework makes clear assumptions or hypotheses, two-tailed tests have been used in the regression models. The reason for this is that there are no hypotheses for some of the control variables. However, for the variables that have an expected direction, conversions to one-tailed tests have been carried out, unless otherwise stated.

## **Analysis**

In this section, multiple regression analyses will be carried out with the three different dependent variables, including five different models, for each of them. In addition, correlation analysis between the dependent variables and political fusion is performed.

In the theoretical framework, one of the basic assumptions made is that bridging social capital should have a significant effect on broad forms of horizontal regional action. This assumption is confirmed in all models, in table 1. In addition to being highly significant ( $p < .001$ , even with a two-tailed test), the models indicate that the effect is fairly strong. For instance, the beta-value in the models are between 0.785 and 0.683 (the highest possible value being 1), and the  $R^2$  value in model 1 is .359, meaning that 35.9 percent of horizontal regional action can be ‘explained’ by bridging social capital. However, although positive attitudes towards performance fusion and institutional adaptation have significant and fairly strong effects on horizontal regional action – together with bridging social capital their explanatory value is 44.4 percent – model 2 and 3 indicate that their spillover effects are not very strong. Indeed, both positive attitudes to performance fusion and institutional adaptation (participation in regional forums) decrease the beta-value of bridging social capital. The decreases are, however, fairly small, in particular that caused by performance fusion. Hence, although there is some evidence pointing towards the existence of spillover effects, caused by these variables, they appear to be small, at best.

From model 5 one can conclude that the predictors in the theoretical framework are all significant, even when holding the control variables constant. Hence, the causal effects do

seem to apply to all regional actors and there are no evidence suggesting that the effects of these predictors are spurious. Finally, none of the control variables have significant impacts on the dependent variable.

When instead having compound fusion as the dependent variable, a fairly similar pattern appears. Bridging social capital is a highly significant predictor in all models in table 2, and has high beta-values. Moreover, 32.2 percent of the positive attitudes towards compound fusion can, according to model 1, be attributed to bridging social capital, i.e. when not taking the other predictors into account. However, here too, the spillover effects caused by performance fusion and institutional adaptation appear small, at best; especially regarding the spillover caused by performance fusion. Hence, although the three variables all have significant impacts on the dependent variable and together ‘explain’ 39.1 percent of the positive attitudes to compound fusion, there seems to, mainly, be other variables causing spillovers, here as well.

**Table 1** *Horizontal regional action as dependent variable*

<b>Predictors</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
<b>Bridging social capital</b>	0.785(***)	0.770(***)	0.701(***)	0.721(***)	0.683(***)
<b>Performance fusion</b>	-	0.207*	-	0.229**	0.179*
<b>Institutional adaptation</b>	-	-	0.135*	0.139**	0.137**
<b>EU perception</b>	-	-	-	-	0.075
<b>EU networks</b>	-	-	-	-	0.043
<b>Public or private</b>	-	-	-	-	0.024
<b>Man or woman</b>	-	-	-	-	0.054
<b>Constant</b>	- 0.033	- 0.223	- 0.094	- 0.333	- 0.384
<b>R<sup>2</sup></b>	.359	.396	.379	.444	.480
<b><math>\bar{R}^2</math></b>	.351	.379	.363	.421	.426
<b>N</b>	76	76	76	76	76

\* Significant at  $p < .05$  (one-tailed)

\*\*Significant at  $p < .01$  (one-tailed)

\*\*\*Significant at  $p < .001$  (one-tailed)

(\*)Significant at  $p < .05$  (two-tailed)

(\*\*)Significant at  $p < .01$  (two-tailed)

(\*\*\*)Significant at  $p < .001$  (two-tailed)

*Comment:* The beta value presented here is the non-standardized.

According to model 5, the effects of the predictors in the theoretical framework remain, even when holding the control variables constant, indicating that their effects are not spurious. It can also be noted that the only control variable with a significant value is participation in EU focused networks.

**Table 2** *Compound fusion as the dependent variable*

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5
<b>Bridging social capital</b>	0.717(***)	0.701(***)	0.685(***)	0.664(***)	0.660(***)
<b>Performance fusion</b>	-	0.214*	-	0.229**	0.204*
<b>Institutional adaptation</b>	-	-	0.088	0.100*	0.113*
<b>EU perception</b>	-	-	-	-	- 0.064
<b>EU networks</b>	-	-	-	-	0.086*
<b>Public or private</b>	-	-	-	-	- 0.056
<b>Man or woman</b>	-	-	-	-	0.013
<b>Constant</b>	0.086	- 0.109	0.030	- 0.188	- 0.100
<b>R<sup>2</sup></b>	.322	.364	.343	.391	.437
<b><math>\bar{R}^2</math></b>	.313	.347	.325	.366	.378
<b>N</b>	75	75	75	75	75

\* Significant at  $p < .05$  (one-tailed)

\*\*Significant at  $p < .01$  (one-tailed)

\*\*\*Significant at  $p < .001$  (one-tailed)

(\*)Significant at  $p < .05$  (two-tailed)

(\*\*)Significant at  $p < .01$  (two-tailed)

(\*\*\*)Significant at  $p < .001$  (two-tailed)

Comment: The beta value presented here is the non-standardized.

Instead examining the effects of the predictors on horizontal and vertical attention, all models in table 3 indicate that bridging social capital is a strong and highly significant predictor, here as well. In addition, in model 3 there is some evidence suggesting weak spillover effects caused by participation in regional forums treating EU related matters (institutional adaptation). Moreover, this is a predictor with a significant explicit effect on attention. However, there are no indicators suggesting that positive attitudes to performance fusion cause spillover effects on bridging social capital. Neither is it a significant predictor in the regression models. Hence, here there is a clear deviation from the theoretical framework.

Taking the control variables into account in model 5, the significance of bridging social capital and institutional adaptation remain, suggesting that its effects are not spurious. Moreover, it can be noted that participation in networks with an EU focus has a highly significant impact on regional actors' attention. In addition, women appear to have a higher degree of awareness of EU related matters than men.

**Table 3** Attention as dependent variable

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5
<b>Bridging social capital</b>	0.704(***)	0.708(***)	0.667(***)	0.672(***)	0.587(***)
<b>Performance fusion</b>	-	- 0.208	-	- 0.193	- 0.317
<b>Institutional adaptation</b>	-	-	0.105*	0.099*	0.098*
<b>EU perception</b>	-	-	-	-	0.136
<b>EU networks</b>	-	-	-	-	0.105***
<b>Public or private</b>	-	-	-	-	0.042
<b>Man or woman</b>	-	-	-	-	0.100(**)
<b>Constant</b>	0.119	0.319	0.051	0.242	0.184
<b>R<sup>2</sup></b>	.327	.356	.359	.383	.550
<b><math>\bar{R}^2</math></b>	.318	.338	.341	.357	.503
<b>N</b>	75	75	75	75	75

\* Significant at  $p < .05$  (one-tailed)

\*\*Significant at  $p < .01$  (one-tailed)

\*\*\*Significant at  $p < .001$  (one-tailed)

(\*)Significant at  $p < .05$  (two-tailed)

(\*\*)Significant at  $p < .01$  (two-tailed)

(\*\*\*)Significant at  $p < .001$  (two-tailed)

Comment: The beta value presented here is the non-standardized.

What about the relation between the dependent variables? As mentioned, the theoretical framework assumes that the three dependent variables mutually reinforce one another and, indeed, there are indicators suggesting that this, in fact, is the case. Table 4 illustrate that there are fairly strong correlations between all dependent variables, in particular regarding horizontal regional action and compound fusion, and horizontal regional action and attention. Hence, to a large extent it is the same regional actors that have high values on all of the dependent variables, making it reasonable to assume that these variables do, *de facto*, reinforce each other.

**Table 4** Correlations between the dependent variables

Variables		Horizontal regional action	Compound fusion	Attention
<b>Horizontal regional action</b>	Pearson's <i>r</i>	1	.672***	.665***
	N	79	78	78
<b>Compound fusion</b>	Pearson's <i>r</i>	.672***	1	.407***
	N	78	79	77
<b>Attention</b>	Pearson's <i>r</i>	.665***	.407***	1
	N	78	77	78

\*\*\*Significant at  $p < .001$  (two-tailed)

Comment: Two-tailed tests have been used to emphasize the high significant level.

How about the relation between each dependent variable and political fusion? The correlation analyses presented in table 5 point to evidence for the assumptions made regarding these variables, as well; although the empirical proof are not as strong as those found

regarding the relation between the dependent variables. In other words, the correlations do suggest that a fairly high amount of the regional actors, having high values on the dependent variables, also are positive towards political fusion. Thus, the empirical data make it reasonable to assume that they mutually reinforce one another.

**Table 5** *Correlation between dependent variables and political fusion*

Variables		Horizontal regional action	Compound fusion	Attention
<b>Political fusion</b>	Spearman's $r_s$	0,284**	0,320**	0,397***
	N	78	77	78

\*\*Significant at  $p < .01$  (one-tailed)

\*\*\*Significant at  $p < .001$  (one-tailed)

To sum up, the assumptions made in the theoretical framework do, for the most part, find empirical support. The deviations are, firstly, that the empirical data suggests that the spillover effects caused by performance fusion and institutional adaptation are fairly weak; in particular regarding performance fusion, where the empirical indicators are quite feeble. Secondly, performance fusion does neither have significant explicit effects nor spillover effects on attention. However, except for these two deviations, the empirical framework stands solid after the empirical tests. That is, with the exception of performance fusion's relation to attention, all predictor variables have explicit significant effects on the dependent variables and, although the caveats made should be considered, there are indicators suggesting small spillover effects on bridging social capital caused by performance fusion and institutional adaptation, in particular regarding the latter variable (stronger spillover effects are, perhaps, to be found in the general pressures caused by Europeanization, globalization and interdependence (see Gren 2002a:82-83; Paraskevopoulos and Leonardi 2004:315; Wessels (1997:284-289), no matter the attitudes or institutional adaptation of the regional actors). Moreover, the data suggest quite strong effects caused by the predictor variables, especially from bridging social capital. Finally, the assumptions made concerning the relations between the dependent variables, on the one hand, and their relation to political fusion, on the other, find empirical support.

## Conclusions

Although this paper only examines one region, it points to quite strong evidence suggesting that a high degree of bridging social capital, positive attitudes towards performance fusion and institutional adaptation are important predictors for regional actors' degree of broad regional action, and its related factors. Even though it may be necessary to test the empirical

framework on more regions, it thus seems probable that these factors promote regions' ability to become fused parts in the multi-level policy networks, akin to MLG, as implicitly or explicitly promoted by the EU. At the same time, the importance of these factors implies that differences between (and within) regions, regarding these factors, can contribute to chasms between those regions that have high values on these variables compared to those that do not.

For instance, regions with high values on these variables are more likely to coordinate their forms of regional action, which will enhance possibilities for learning and funding action within the region, at the same time that their higher degree of external networks, *ceteris paribus*, will increase the likelihood for interregional cooperation in these respects, as well as give them more channels, *ceteris paribus*, for upload (political action).

Parallel to this, there is an intraregional dimension that is of interest, from a political scientist's point of view. That is, who are the regional actors within the center of these bridging networks and who are at the periphery or completely excluded? The more extensive study that this paper is based upon do, for instance, suggest that a lack of engagement from the local and regional politicians, in the region of Värmland, concerning regional action, has led to civil servants and regional actors from academia and parts of the private sector taking the lead. In addition to causing democratic deficits, this raises the question, whose interests are promoted and whose are neglected?

However, these are questions to be scrutinized in further studies. The main conclusion to be drawn from this paper is that bridging social capital, performance fusion and institutional adaptation seems to be factors of importance for broad forms of regional action, and that there are evidence suggesting that broad horizontal regional action, compound fusion, attention and political fusion mutually reinforce each other.

## References

- Adler, P.S. & Kwon, S-W. (2002). Social Capital: Prospects for a New Concept. *Academy of Management Review*, Vol. 27, No. 1, pp. 17-40.
- Alguezaui, S. & Filieri, R. (2010). Investigating the Role of Social Capital in Innovation: Sparse Versus Dense Network. *Journal of Knowledge Management*, Vol. 14, No. 6, pp. 891-909.
- Bache, I. & Flinders, M. (2004). Themes and Issues in Multi-level Governance. In I. Bache & M. Flinders (eds.), *Multi-level Governance*: 1-11. Oxford: Oxford University Press.
- Borgatta, E.F. & Bohrnstedt, G.W. (1980). Level of Measurement: Once Over Again. *Sociological Methods & Research*, Vol. 9, No. 2, pp. 147-160.
- Bourdieu, P. (1985). The forms of Social Capital. In Richardson, J.G. (ed.), *Handbook of Theory and Research for the Sociology of Education*: 241-58. New York: Greenwood Press.
- Burt, R.S. (2005). *Brokerage and Closure: An Introduction to Social Capital*. Oxford: Oxford University Press.
- Coleman, J.S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, Vol. 94, Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure, pp. 95-120.
- COM 546 final (2010). *Europe 2020 Flagship Initiative Innovation Union*. Brussels: European Commission.
- COM 808 final (2011a). *Impact Assessment Accompanying the Communication from the Commission 'Horizon 2020 – The Framework Programme for Research and Innovation*. Brussels: European Commission.
- COM 808 final (2011b). *Horizon 2020 – The Framework Programme for Research and Innovation*. Brussels: European Commission.
- COM 2020 (2010). *Europe 2020: A strategy for smart, sustainable and inclusive growth*. Brussels: European Commission.
- De Souza Briggs, X. (1997). Social Capital and the Cities: Advice to Change Agents. *National Civic Review*, Vol. 86, No. 2, pp. 111-117.

Eklinder-Frick, J., Eriksson, L-T & Hallén, L. (2011). Bridging and Bonding forms of Social Capital in a Regional Strategic Network. *Industrial Marketing Management*, Vol. 40, No. 6, pp. 994-1003.

Field, A. (2009). *Discovering Statistics Using SPSS*. London: Sage.

Gabbay, S.M. & Leenders, R.Th.A.J. (1999). CSC: The Structure of Advantage in Disadvantage. In R.Th.A.J. Leenders & S.M. Gabbay (Eds.). *Corporate Social Capital and Liability*: 1-14. Boston: Kluwer.

Gargiulo, M. & Bernassi, M. (1999). The Dark Side of Social Capital. In R.Th.A.J. Leenders & S.M. Gabbay (Eds.). *Corporate Social Capital and Liability*: 298-322. Boston: Kluwer.

Granovetter, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, Vol. 1, pp. 201-233.

Gren, J. (2002a). New Regionalism and West Sweden: Change in the Regionalism Paradigm. *Regional and Federal Studies*, Vol. 12, No. 3, pp. 79-101.

Gren, J. (2002b). *Den perfekta regionen?* Lund: Studentlitteratur.

Hooghe, L. & Marks, G. (2001). *Multi-Level Governance and European Integration*. Lanham: Rowanfield & Little.

Jeffery, C. (2000). Sub-National Mobilization and European Integration: Does it Make Any Difference. *Journal of Common Market Studies*, Vol. 38, No. 1, pp. 1-23.

Jönsson, C., Tägil, S. & Törnqvist, G. (2007). *Europa, quo vadis? Integration och splittring i tid och rum*. Stockholm: SNS Förlag.

Katz, R. & Allen, T.J. (1982). Investigating the not Invented Here (NIH) Syndrome. *R&D Management*, Vol. 12, No. 1, pp. 7-19.

Keating, M. (1996). *The New Regionalism in Western Europe: Territorial Restructuring and Political Change*. Cheltenham: Edward Elgar.

Kitaoka, K., MacGillivray, A., Marx, A., O'Reilly, C. & Soares, J. (2011). *Networks of Prosperity: Achieving Development Goals through Knowledge Sharing* (Executive Summary). Vienna: UNIDO.

- Kohler-Koch, B. (1996). Catching up with Change: The Transformation of Governance in the European Union. *Journal of European Public Policy*, Vol. 3, No. 3, pp. 359-80.
- Lappe, F.M. & Du Bois, P.M. (1997). Building Social Capital without Looking Backward. *National Civic Review*, Vol. 86, No. 2, pp. 119-128.
- Lin, N. (1999). Social Networks and Status Attainment. *Annual Review of Sociology*, Vol. 25, No.1, pp. 467-87.
- Lindh, M., Miles, L., Räftegård, C. & Löden, H. (2007). *Understanding Regional Action and the European Union: A Fusion Approach*. Karlstad: Karlstad University Press.
- Lindh, M., Löden, H., Miles, L., Räftegård, C., & Stegman McCallion, M. (2009). *Fusion Regions? Sustainable Regional Action in the Context of European Integration*. Stockholm: Nordregio.
- Lindh, M. and Miles, L. (2011) 'Fusing Regions? Sustainable Regional Action and European Integration. Nordic Regional Action in a Fusing Europe?' in Reynaert, H., Steyvers, K. and Van Bever, E. (eds.) *The Road to Europe? Main Street or Backward Alley for Local Governments in Europe?* Bruges: Van Broele.
- Marks, G. (1993). Structural Policy and Multilevel Governance in the EC. I A. Cafruny och G. Rosenthal (Eds.). *The State of the European Community: The Maastricht Debates and Beyond*, Vol. 2: 391-410. London: Longman.
- Marks, G., Hooghe, L. & Blank, K. (1996b). European Integration from the 1980s: State-Centric v. Multi-Level Governance, *Journal of Common Market Studies*, Vol. 12, No. 3, pp. 1-23.
- Marks, G., Nielsen, F., Ray, L. & Salk, J. (1996a). Competencies, Cracks and Conflicts: Regional Mobilization in the European Union. I G. Marks, F.W. Scharpf, P. Schmitter och W. Streeck (Eds.) *Governance in the European Union*: 40-63. London: Sage.
- Miles, L. (2005) *Fusing with Europe? Sweden in the European Union*. Aldershot: Ashgate.
- Miles, L. (2011a) 'National Adaptation and Fusion in the Nordic States' in Holbraaten, H. and Hille, J. (eds.) *Northern Europe and the Future of the EU*, 75-93. Nordeuropeaische Studien 89. Berlin: BWV.

Miles, L. (2011b) 'Thinking Bigger: Fusion Concepts, Strengths and Scenarios' in Diedrichs, U, Faber, A., Tekin F. and Umbach, G. (eds.) *Europe Reloaded: Differentiation or Fusion?* 187-210. Europäische Schriften 89. Berlin: Institut for Europäische Politik (IEP) and Nomos

Miles, L & Olsson, D. (2011). *National Political Elites and the Lisbon Treaty: Altered and/or Unaltered Expectations? - An Evaluation of British and Swedish National Policymakers using a Micro-Fusion Framework*. EUPOLIS Final Paper No. 3.

Narayan, D. & Pritchett, L. (1997). *Cents and Sociability: Household Income and Social Capital in Rural Tanzania*. Washington DC: World Bank.

Nardone, G., Sisto, R. & Lopolipo, A. (2010). Social Capital in the Leader Initiative: A Methodological Approach. *Journal of Rural Studies*, Vol. 26, No. 1, pp. 63-72.

Näringsdepartementet (2007). *En nationell strategi för regional konkurrenskraft, entreprenörskap och sysselsättning 2007-2013*, artikelnummer: N7037. Bilaga 1 till regeringsbeslut den 6 september, nr I6, N2007/7152/RT. Regeringskansliet. Tillgänglig på: <http://www.sweden.gov.se/sb/d/2498>, 2011-08-11.

Olsson, D. & Miles, L. (Non-published material). *Regionalt agerande – brett eller smalt? Fallet Värmland*. .

Paraskevopoulos, C.J. & Leonardi, R. (2004). Introduction: Adaptational Pressures and Social Learning in the European Regional Policy – Cohesion (Greece, Ireland and Portugal) vs. CEE (Hungary Poland) Countries. *Regional & Federal Studies*, Vol. 14, No. 3, pp. 315-54.

Putnam, R.D. (1992). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.

Putnam, R.D. (2001). *Den ensamme bowlaren: den amerikanska medborgarandans upplösning och förnyelse*. Stockholm: SNS Förlag.

Regeringen (2009). *Strategiskt tillväxtarbete för regional konkurrenskraft, entreprenörskap och sysselsättning*. Regeringens skrivelse 2009/10:221. Tillgänglig på: <http://www.sweden.gov.se/sb/d/2498>, 2011-08-11.

Sabatini, F. (2009). Social capital as social networks: a new framework for measurement and an empirical analysis of its determinants and consequences. *The Journal of Socio-Economics*, Vol. 38, No. 3, pp. 429–442.

Scott, J. (2000). *Social Network Analysis: A handbook*. Andra upplagan. London: Sage Publications.

SEC 1427 final (2011). *Commission Staff Working Paper: Impact Assessment Accompanying the Communication from the Commission 'Horizon 2020 – The Framework Programme for Research and Innovation*. Brussels: European Commission.

Stegmann McCallion, M. (2007). Multi-Level Governance in Sweden? *Regional and Federal Studies*, Vol. 17, No. 3, pp. 335-351.

Uzzi, B. (1997). Social Structure and Competition in Interfirm Networks: The Paradox of embeddedness. *Administrative Science Quarterly*, Vol. 42, No. 1, pp. 35-67.

Wessels, W. (1997). An Ever Closer Fusion? A Dynamic Macropolitical View on Integration processes. *Journal of Common Market Studies*, Vol. 35, No. 2, pp. 267-299.

Woolcock, M. (1998). Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework. *Theory and Society*, Vol. 27, No. 2, pp. 151-208.