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Social capital and resilience in rural areas: responses to change

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Abstract

In this paper we give an overview of the leading thoughts in current literature concerning social capital and its effects on rural resilience. Studying social resilience of rural areas is relevant in the emergence of global change. We demonstrate that social capital can either contribute to social resilience, or restrict it, depending on the nature of social capital. As the “restrictive” type of social capital generally prevails in rural areas, social resilience tends to be weaker here, than in urban areas. However, the nature of rural areas is changing, and the contrast in social capital in rural and urban areas is gradually fading out.

Key words:
Social capital, rural resilience, social resilience

1. Introduction

The countryside is traditionally known for tight social ties and strong community sense. In contrast, in urban areas, social networks are sometimes thought to be of less relevance. Where people involve in strong, life long mutual relationships in villages, cities are characterized by quick and geographic dispersed social contacts. But how much of this apparent social dichotomy in rural and urban areas is still true today? According to a recent study of the SCP (Sociaal Planbureau), social coherence on the Dutch countryside is strong, and local cultural traditions are still alive and kicking (Vermeij & Mollenhorst 2008). Inhabitants of rural areas are more often member of churches and other social networks, and more often involved in voluntary work than urban dwellers. The study however also shows that the differences that characterized rural and urban areas are not as sharp anymore today as they used to be before. Many inhabitants of rural areas have been living in urban areas too, and are regularly travelling outside their village for work or recreation in urban areas. In addition, the study shows that although social networks are perceived to be more important in rural areas, they are actually larger in urban area, and involve more mutual contacts.

Since the provision of natural resources is under increasing pressure due to economic instability, continuing population growth, competing claims on land, and climatic challenges, attention for adaptation towards change is growing. Dealing with change is referred to as resilience, or '*the capacity of a system to absorb disturbance and re-organize while undergoing change so as to still retain essentially the same function, structure, identity and feedbacks*' (Walker et al., 2004). According to Marshall et al. (2007:260), '*resilient systems are flexible, prepared for change and uncertainty, and are essential for the prosperous development of society.*' Where resilience used to be associated in the first place with ecology, or in other words, the capacity of ecosystems to handle disturbance, in recent years, attention for economic and social resilience increases as well. How does the economy respond to the global economic crisis, and, probably even more important: how does society as a whole deal with today's economic, environmental, and social challenges?

Social capital can be seen as the main aspect of social resilience, and could therefore offer more insight in the complex dynamics of resilience towards change and shocks. Social capital is ‘the glue that holds society together’, in the form of trust, reciprocity and exchanges, social networks and groups. In communities that are tightly knit, transaction costs are lower, as costs of enforcing contracts and monitoring are smaller. Knowledge and expertise can be exchanged more easily than in low trust communities, and people might become less risk-averse because of the informal social safety net, created by social capital in the community. However, at the same time, social capital can obstruct development, as dense social networks might be averse towards change, and strong homogeneous communities may discourage exchanges with ‘the outer world’. For this reason, it is important to distinct social capital that stimulates linkages between different groups of people at the one hand, and social capital that enforces linkages within groups, while excluding others, at the other. These forms of social capital are respectively referred to as “bridging” and “bonding” social capital, where the former facilitates exchange of knowledge, experience, and goods, while the latter does not promote mobility and change. After all, it is good to realise that in the end, ‘communities work because they are good at enforcing norms, and whether this is a good thing depends on what the norms are.’ (Bowles & Gintis 2002: F428)

Social capital is thus strongly interlinked with social resilience, and depending on its nature in a positive, or negative way. Hence, the study of the functioning of social capital, or the set of social networks and ingredients like trust, reciprocity, and public involvement, is crucial for our understanding of how communities deal with change.

As the main provider and maintainer of natural resources, rural areas play a specific role in the resilience dynamics. The functions of the rural areas in Europe and beyond are changing at quick pace, and the formerly clear differences are getting somewhat blurred. Despite, and probably *because of* these changing patterns, economic and demographic differences continue to exist between urban and rural areas, and this influences the nature of social capital in the respective regions, as also noted by Hoffert and Iceland (1998: 574).

> *'Relationships in traditional rural societies are often thought to be embedded in networks of close personal ties that govern every aspect of an individual's life. Because personal relationships perpetuate the class structure, these strong relations, though supportive, may limit mobility. In western countries industrialization disrupted traditional systems of control and exchange among kin.'*

Both rural resilience and social capital are concepts that are complex to theorize and to catch in an univocal set of indicators, but that are far more difficult to measure. Social capital is measured in different ways. The analysis of national statistical databases (e.g. Putnam 2000), and individual surveys (e.g., Vermeij & Mollenhorst 2008) are common, while trust games are gaining popularity in recent years (e.g., Barr 2003; Bouma et al. 2008). Measuring trust is hence an interesting challenge to accept, with broad scope for further research and investigation, especially in the light of change, development, and growth in our economic, environmental, and social systems.[1]

The paper is organized as follows. Section 2 starts with an overview of the leading theories about social capital, gives a definition, and discussed the role of social capital in economic development. Section 3 continues with a discussion about the differences between rural and urban social capital, and the factors that contribute to the different characteristics of social networks in urban and rural areas. Section 4 explores the relationship between social capital and rural resilience, and especially the importance of social capital for resilient rural areas in Europe and beyond. Section 5 then turns to the implications of social capital for rural governance, and their mutual relationship. Section 6 concludes.

[1] The discussion on the measurement of social capital is beyond the scope of this paper, but we give an example of a measurement method in the Appendix.

2. Conceptualising social capital

2.1 The social dimension of capital

Social networks have value (Putnam 2000), as they are the very basis of all social interactions and transactions – an idea that is caught in the term "social capital". The concept can be roughly defined by '*institutions, relationships, attitudes, and values that govern interactions among people and contribute to economic and social development*' (Grootaert & van Bastelaer 2002).

Social capital is at the core of the social sciences, bridging economics and sociology, and is popular among present-day academics and policy makers. It was introduced by the sociologist Pierre Bourdieu in the 1970s, put on the economic agenda by James Coleman, and Robert Putnam, who has his roots in the political science, introduced the concept to the wider audience in his analysis on the role of social organisations in American society (Putnam 2000); (Woolcock 1998); (Field 2003). The concept thus merges sociologic, political, and economic theory, and according to Woolcock (2001), *'One of the primary benefits of the idea of social capital is that it is allowing scholars, policy makers and practitioners from different disciplines to enjoy an unprecedented level of cooperation and dialogue.'*

Although most people will intuitively associate capital with money, or financial capital, in the first place (or debt, as the negative end of financial capital), we can distinguish many more types of capital, that might be but that do not need to be related to money. Natural capital refers to all natural resources. Physical capital is a third form of capital, including land, buildings, and all other forms of private or public owned capital. Knowledge, skills and abilities evolving from education and training form human capital, as extensively explained by Coleman. Bourdieu was the first one to add the concepts "cultural capital" and "social capital" to this list (Field 2003)[2]. He defined cultural capital as a form of capital that is used by groups to distinguish themselves from other groups, and to show superiority over those other groups, as Bourdieu pointed

[2] See: Bourdieu (1986), The forms of capital, pp. 241-58 in J.G. Richardson (ed.), Handbook of theory and research for the sociology of education, Greenwood Press, New York.

out in a study on taste and distinction among the French middle class (Field 2003)[3]. Bourdieu saw social capital as a dimension of cultural capital. Social capital refers to networks, groups, common rules and norms, trust and reciprocity (Piachaud 2002). The concept was introduced in economics as it explains how individuals can overcome dilemmas of collective action through cooperation (Lochner et al. 1999). Summarizing: '*Natural capital is what you find, physical capital is what you make, financial capital is what you save, human capital is what you know, and social capital is whom you know.'* (Cramb 2006)

According to Bourdieu, these different forms of capital can sometimes operate independently, must mostly function as complements, together forming new forms of capital. For example, financial capital can be invested in order to obtain more human capital, which could, in turn, lead to more investments in physical capital, but which could also lead to the erosion of natural capital. The most important similarity between these five forms of capital, is that they all accumulate as a stock that in turn produce profit. They all need initial investment and regular maintenance, and the capital stocks grow or decrease over time, depending on the size of the investment and quality of maintenance. The growth of one type of capital can increase the productivity of the other types of capital, thus paying back for the costs of maintenance (Cramb 2006). All forms of capital influence individuals on the micro level, and communities and nations on the aggregate. In general we can assume that the lower the level of capital, the higher the risk of poverty and social exclusion (Piachaud 2002).

There are also important differences between the different forms of capital presented above. In the first place, one of the most important characteristics of social capital is that it needs to be built up together, implicating that the concept social capital is only meaningful on the community level. Where financial, physical, and human capital can be accumulated and owned individually at least to some extent, individual social capital accumulation is a contradictio in terminis. In other words, '*Social capital is a collective dimension external to the individual. Social capital is a feature of social*

[3] See: Bourdieu (1984), Distinction: a social critique of the judgement of taste.

structure, not of individual actors within the social structure' (Lochner et al. 1999)[4]. This implies that social capital should be measured on the community level, instead of on the individual or household level, as will be discussed to further extend in Section 3.

Secondly, trust is more easily broken down than built up. A public misstep, picked up by the media, can ruin ones reputation. However, in communities with higher levels of social capital, reputations are likely less easily destroyed than if social capital is low altogether (Cramb 2006).

A third difference is that stocks of financial, physical, and natural capital tend to depreciate over time, and with use; although natural capital can also appreciate over time if the regenerating power of the good is large enough. Social and human capital however do not devaluate because of use, but rather because of lack of use (Woolcock 1998; Grootaert & van Bastelaer 2002; Cramb 2006): '*Under certain circumstances, the more it is used, the more it regenerates. Social capital is self-reinforcing when reciprocity increases connectedness between people, leading to greater trust, confidence and capacity to innovate'* (Piachaud 2002; Heemskerk et al. 2004).

A final feature of both human and social capital is that they are not only have instrumental value, but they are valued intrinsically too: '*Good health, education, cooperation, and friendships, can be valued for their own sake – above and beyond their instrumental importance as factors of production.*' (Drèze & Sen 1995; Woolcock 1998)

Since the contributions of Bourdieu, Coleman and Putnam, the concept "social capital" attracted the attention of scientists, policy makers, and professionals. A large flow of literature has stressed the importance of social networks, groups, and organisations for economic development in western and eveloping societies alike. Where a search on the keyword "social capital" in a scientific database resulted in 1 hit before 1970, and 3 hits in the 1970s, the amount of hits increased to 12 in the 1980s, suddenly soared to 1584 in the 90s, and since 2000, no less than 21371 publications that

[4] Based on early work of Coleman (1988): "Unlike other forms of capital, social capital inheres in the structure of relations between actors and among actors. It is not lodged either in the actors themselves or in the physical implements of production." S98

mention social capital were issued.[5] The existing studies can be roughly divided into nine fields of interest (Cramb 2007, quoting Woolcock): families and youth behaviour; schooling and education; community life; work and organisations; democracy and governance; collective action; public health and environment; crime and violence; and economic development.

2.2 Social capital and collective action

Social capital has been conceptualised in many differing yet overlapping ways, depending on the context and application of the concept. Before we turn to the practical applications and measurement of the concept, we first present an overview of the leading thoughts and considerations about the concept social capital.

Social capital can be recognised by social interactions and their by-products: trust relations, reciprocity and exchanges, common rules and norms, and networks and groups. These collective by-products are mostly beneficial for society as a whole. In communities where people share trust and reciprocity, interaction is way more easy and efficient than in communities where people do not even know their neighbours. Not only in rural areas where social networks sometimes serve as unofficial insurance systems, are social networks important. Networking is a popular buzz-word among career makers in urban societies, and many people rather find a job through people they know, than just because of their qualifications (Putnam 2000). In other words, social capital reduces transaction costs and increases access to information, which in turn leads to better access to credit and higher returns to investments.

Social capital can fill the gap where governments and markets fall short, for example in case of public structural capital and common pool resources. Common goods are often victim of the lack of suitable control mechanisms, where fisheries are a well-known example. The notion of “the Tragedy of the Commons” describes what can happen to natural resources if people make their choices only based on self-interest, and if their actions are not controlled and anti-social behaviour is not penalized in a so-

[5] Based on a search in Scopus on “social capital”, June 2009.

called decentralized setting (see for example Baland and Platteau 1999). Social capital can trigger incentives to make sustainable choices that are in the interest of the community as a whole, instead of for private benefit only.

> '*A community built around a strong foundation of human, social, and cultural capital will provide a base upon which to build strong and well supported public structural capital. When people understand the real costs, benefits, and purposes of public spaces and services (development of human capital), they tend to respect them more. Social networks can be used to transmit information about the well-being of public structural capital, and social expectations can help protects its integrity*.' (Callaghan & Colton 2008:937)

Social relationships link individuals and broader social structure, and give them access to scarce resources (Hofferth & Iceland 1998). High levels of social capital decrease the costs of monitoring, and therefore free-riding is more difficult in societies with dense social networks. Hence, the risky trade in diamonds is concentrated in tight-knit ethnic communities. It is way more difficult to be corrupt in a community where everybody knows everybody than in individualistic societies (Putnam 2000).

Like other forms of capital, social capital is partly inherited through the social capital of the parents. However, another large part of the social capital stock of an individual evolves over time, through investment in social relationships. Where relationships with family members might be most obvious at first sight, on the long run non-kin ties are at least as important for two main reasons. A first reason is the simple fact that non-kin ties are more numerous than kin-ties, and thus offer a larger number of potential ties. Secondly, the weaker ties (as compared to the stronger kin ties) with non-kin relations provide more information as result of the greater social diversity, as people involved in these weak ties are not directly related (Hofferth & Iceland 1998). As a consequence, these "weak ties" may provide more benefits for society than kin ties, as will be discussed to further extent below.

2.3 Types of social capital

Since social ties come in various appearance, social capital too emerges in many different ways, and can have as many different effects on social and economic development. Therefore, it is important not to focus on social capital as the heading for one single understanding, but to distinguish different types of social capital. As we will show shortly, social capital is not always beneficial for society (Cramb 2006).

Related to the strong and weak ties, which were briefly discussed above, probably the clearest distinction in the literature on social capital is that of bridging versus bonding social capital, as introduced by Putnam.

"Bonding" social capital strengthens ties between people within a group, but excludes those who are not part of the group, which can enforce social differences (Putnam 1993; Grootaert & van Bastelaer 2002; Pretty 2003). A clear, and widely used example is the Mafia, an organisation that is based on strong bonding social capital, but with questionable (or: clear negative) outcomes for society as a whole (Eames 2005). Hence, even though trust within networks is high, members of different networks may not trust each other at all.

The strong linkages that characterise bonding social capital have many important positive effects on communities and individuals, but they can hold back investment incentives if returns to a private investment have to be shared with a larger community, as for example often happens in extended families in large parts of Sub-Saharan Africa. If all benefits have to be shared, this might be a disincentive to be more successful than others in the social network, and thus impeding growth and innovation. Besides, social networks characterized by strong common norms and traditions tend to be more averse to change, and this too could impede growth (Miguel 2005; di Falco & Bulte 2008). Bonding social capital therefore enforces social differences, which will benefit the members of the group, but with averse long term effects for society as a whole.

"Bridging" social capital typically connects different (bonded) groups of people and individuals who are only loosely connected, opening up possibilities for cooperation and innovation (Putnam 2000; Field 2003; Eames 2005). Rural cooperatives that bring together suppliers, farmers, and buyers that exchange knowledge and goods are an example.

Bridging social capital is generally characterized by weak linkages, where bonding social capital generally is referred to as stronger linkages. Networks based on bonding social capital tend to last longer than relationships evolving from bridging social capital. However, the sustainability on both types of linkages depends on the level of trust between the individuals and groups (Eames 2005). Bridging and bonding social capital are also called extra- and intra-community networks respectively (Cramb 2006).

Table **1** gives an overview of the different types of social capital, and the main differences between them.[6]

Bonding social capital	**Bridging social capital**
Embedded social relationships at the micro level	Autonomous social relationships at the micro level
Integration within groups	Linkage between groups
Intra-community	Extra-community
Driven by occupation, or more deeply embedded factors such as culture, religion, ethnicity, and identity	Driven by need for new information, linking heterogeneous groups with common interests
Encourages inward looking groups	Breeds outward-looking networks
Strong ties	Weak ties

Table 1 Bonding vs. bridging social capital
Adapted from (Eames 2005; Cramb 2006)

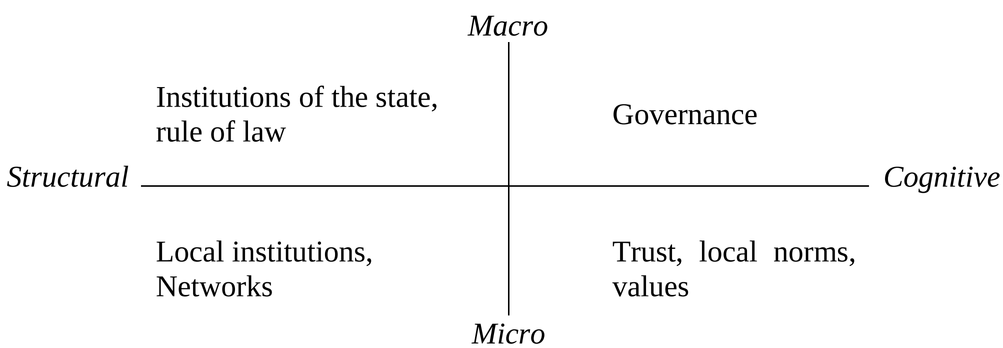
[6] In the analysis of social capital on the Dutch countryside, the SCP too finds that the strong social connectedness has both strengths and weaknesses: '*In the stories of people living in the countryside, the fact that everybody knows each other is an important issue. On the one hand, people like the feeling that they know a lot of people they know. In times of personal hardship, a tight community can play an important role, as indicated by an entrepreneur whose wife was seriously ill. The villagers made a schedule, to take care of the ill lady when the entrepreneur had to work (Simon et al. 2007). On the other hand, community members also see the disadvantages of these tight networks. People are gossiping a lot in rural areas, and it is difficult to get rid of a bad reputation, or a family with a bad name. If you do something that is not appreciated, you can be topic of talks for a long time.*' (Adapted from Vermeij and Mollenhorst 2008:22).

Perhaps, the more conservative nature of rural areas in comparison to urban areas, is partly explained by the bonding type of social capital generally prevails here, and the related role of religion. This leads to less flexibility towards change and innovation than in communities with more bridging social capital. '*Where it concerns ocial vitality, rural areas have no good reputation.*' (Vermey and Mollenhorst 2008:25). This indicates that bonding social capital may form a challenge for social resilience. Later in this paper we will discuss this issue in more detail.

2.4 Macro and micro

In order to be able to recognise and measure different forms of social capital, Grootaert and Van Bastelaer (2002) built a framework that defines the concept along two different axes (see figure 2). Along the vertical axis, social capital is identified at different levels of society. The macro level includes for example functioning of laws, incidence of conflicts and corruption, but also rule of law and institutions of state. The lower end of this axis, social capital at the micro level, is about relationships among individuals and households. Think of the extended family example and relationships among neighbours, but also local rules and norms. The meso level includes networks between individuals and larger structures, like farmers' cooperatives.

Figure 1 Forms and scope of social capital
Adapted from Grootaert & van Bastelaer (2002)



Along the horizontal axis, the authors distinguish structural and cognitive social capital. Structural social capital is characterised by structures that are objective and externally visible, like laws, courts, bingo clubs, and farmers' cooperatives. Cognitive social capital at the other hand is subjective and intangible, like common rules and norms, trust and reciprocity.

Apart from the macro-micro axis and the structural-cognitive axis, it is possible to make a third distinction, which discerns official versus unofficial institutions. Institutions of the state and the rule of law could be labelled as official institutions, while moving to social capital at cognitive and micro level leads to unofficial institutions. However, these two forms of social capital cannot exist without each other: for laws to work, people need to trust the system.

2.5 Social capital, public life, and economic growth

The existence of social capital is an important prerequisite for economic growth. It seems that investments in other forms of capital, like jobs and education, result in higher returns when they are combined with high levels of social capital. Informal social structures can serve as collateral for those who have no access to official forms of capital, thereby increasing market efficiency as people become more responsive to the market (Alesina & La Ferrara 2000; Cramb 2007). As mentioned before, an important feature of social capital is that it lowers transaction costs. Returns become higher and access to credit increases, as more information becomes available at lower costs. As soon as trust increases, it becomes easier to make collective decisions and to implement collective action (think of farmers' cooperatives, informal credit groups, and joint irrigation initiatives). Social capital could support innovative behaviour because it reduces risks. In an environment with a high level of social capital, people are more likely to invest and to join new linkages with others, for example in farmers' cooperatives, and this in turn builds new social capital (Grootaert & van Bastelaer 2002; Cramb 2007).

2.6 Concluding remarks

Social capital can stimulate development in a few ways. First, Robert Putnam showed in various studies that the number of voluntary organisations is positively correlated with the level of government efficacy. The number of voluntary organisations is a proxy for social involvement of people and more mutual trust, both among people, but also trust in institutions. Where people are involved in denser networks (i.e. linking more people), they share more trust and knowledge, which leads to lower transaction costs, and thus more efficiency.

A second mechanism is the result of the former: as trust relationships function as a complement for official rules and regulations, social capital is important in dealing with common goods – goods that typically cannot be regulated by markets, and where governance sometimes falls short, especially in countries where the quality of institutions is weak. Put differently, higher levels of social capital result in lower public property problems, and governance functions more efficiently if combined with high levels of social capital.

Third, because of better access to information and lower transaction costs, dense social networks make it easier to share knowledge and to spread innovations. In other words, development is easier in communities with high levels of social capital. It is important to realise however tat social capital can also keep back development, if the social networks are so dense that change is not appreciated or even discouraged. This means that in the case of innovation and development, we rather refer to bridging social capital, and not to the bonding type of social capital. Better information infrastructure that are provided by social networks leads to lower transaction costs, and to better access to credit, which contributes to development and innovation too. This means that the number of transactions increases and incomes grow.

A final mechanism is that social capital works as an informal safety net. The number and impact of risks are reduced because of greater risk-sharing and more trust (Narayan & Prichett 1999).

3. Rural vs. urban social capital: is there a difference?

3.1 The nature of rural social capital

As rural and urban social networks have different characteristics, social capital can have different implications for rural and urban communities. Hofferth and Iceland (1998) point out that main differences between rural and urban areas in the US are that rural areas have more children and seniors and less young and middle-age adults; more traditional household structures; fewer minorities and lower incomes. It might be possible to generalize some of these findings to the European countryside, but it is important to be cautious in focusing on the rural-urban dichotomy in such terms, as economic, educational and ethnical differences that might have characterized rural areas before, no longer exist in many developed regions (Wiskerke 2007). In some cases, the services sector and net migration flows are growing faster in rural areas, while actually decreasing in urban areas. However, '*from the perspective of rurality as social construction, the rural-urban dichotomy is relevant indeed, and the symbolic contrast between cities and countryside plays an important role in identity, life style and migration*.' (Wiskerke 2007)

Generally, rural communities are geographically defined. The smaller the rural community, the larger the chance that all members of the community can share the same networks, and thus share the same trust relations, and shared norms and values. In cities networks tend to be more geographically dispersed, and are rather based on shared cultures and believes, housing, and education and income levels (Debertin 1996): '*If the rural community is small enough, it is possible that nearly the entire community will function as a single social capital network. This is one feature that makes rural communities inherently different from urban settings*' (Debertin 1996)

The geographic nature of rural communities has consequences for the type of social capital in rural areas. Strong geographic links may either lead to more diverse, *or* to less diverse social networks. For example, Debertin (1996) argues that urban networks are based on equal social characteristics, rather than geographic location, as in the case of rural networks. Consequently, rural networks are sometimes more diverse that urban networks.

Hofferth and Iceland (1998) mention a few reasons why social capital could be higher in rural areas than in cities. In the first place, if communities live in isolation, there is more need for intra-family relationships, where other relationships could partly replace family relationships in urban settings. Rural communities are thus richer in terms of bonding social capital, or strong ties than urban communities. This could lead to a greater sense of mutual responsibility in rural settings, which is in the study of

Hofferth and Iceland especially visible in providing assistance, but not that much in receiving assistance. In their study on American rural areas the authors found that families living in rural communities tend to receive more help from kin than families in urban areas, implicating that people living in rural areas share more strong ties based on kin than people living in urban areas. '*Results show that families living in rural areas are clearly more likely to limit their exchanges to kin only than are urban families*.' (Hofferth & Iceland 1998: 586). The drawback of these strong ties is that social networks in rural areas are, in contrast to urban areas, largely based on geographic location, and that communities are generally more homogeneous in terms of ethnicity, incomes, etc.. This means that there are fewer opportunities to develop weak ties, or linking social capital, that provide extra information and give incentives to change.

Another possible explanation for differences in the type and size of social capital in rural and urban areas is related to geography again: social capital creation demands time. '*Research shows that length of residence, not size of place, is most closely associated with the extend to which individuals feel attached to their communities*' (Hofferth & Iceland 1998: 579). As rural communities tend to be more stable than urban communities due to less migration, rural communities get more chance to build up sustainable networks and hence develop more social capital than urban communities, where the flow of migration is generally much higher. Also on the European countryside, personal strong ties have weakened because of increasing industrialization and rural-urban migration, that does not remain restricted to urban areas.

The discussion above leads to two general observations. In the first place, the anonymity that exists in urban settings is not that common in small rural communities. This can have obvious advantages, but there are disadvantages too, such as too much social control, and strong networks that are rather exclusive for those who do not belong to the community. Secondly, the discussion above suggests that the difference in social capital is rather based on differences in economic performance, demographic characteristics such as length of residence, and geographic location, than on truly different social norms in rural and urban areas (Hofferth and Iceland 1998, Steinbekkers et al. 2006). Even though the 'rural-urban dichotomy' as such is becoming vaguer, there are still large economic and demographic differences that lead to different types of social capital.

4. Social capital and rural resilience

The relationship between social capital, resilience, and sustainable development is aptly phrased in the quote below:

> '*The movement towards sustainable development lies neither in focusing solely on the bottom line immediate needs, nor on the abstract "sustainable future", but in a middle ground that seeks to enhance long and short term community resilience through investments in all the various forms of community capital*'. (Callaghan & Colton 2008)

Literature provides a great number of concepts that refer to the relationship between social capital, resilience, and sustainable development. Although the objective of this paper is to assess the link between social capital and rural resilience, it is useful to place this link in its larger context.

The concepts of social capital and a rural community that is resilient to shocks are related in multiple ways. A sudden worsening financial situation, but also an increasing diversity of ethnicity in neighbourhoods and cultural differences, can lead to social capital erosion (Debertin 1996). The other way around, bridging social capital can lead to more resilience in a community, as people can exchange knowledge, experience, and capital in case of shocks. Alternatively, in societies with a high degree of bonding social capital with strong mutual control and norms, the degree of resilience can decrease, as the capacity of adaptive learning after shocks (or the degree of learning from change and adapting to it, in order to be able to cope with further change in a better way) may be limited.

Callaghan and Colton (2008) define resilient communities as '*those that are able to absorb and/or adapt quickly to change and crisis*'. Rural resilience can be split up in three types of resilience: ecological, economical, and social resilience. Resilient communities are in general characterized by high levels of “community capital”. Community capital includes all kinds of capital a community draws on, including environmental capital (ecological resilience), human capital, social capital, and cultural capital (social resilience) and structural capital and commercial capital (economical resilience). The division of the various capital-types over the three aspects of resilience is debatable however, and the borders are not that strict. For example, human capital (e.g. schooling, health care) is not only important for social capital, but also for economical capital. All kinds of capital, the authors argue, are as important for a community, but some forms of capital do facilitate other forms of capital. Without environmental capital, no other form of capital would exist. Social capital for example facilitates cultural capital, structural capital, and eventually – economic growth, which is dependent of all other forms of community capital (see Figure 2).

Economical and social resilience lead to more stability in the community. Debertin (1996) suggests to subdivide community stability into three categories: economic sustainability, ethnic sustainability and cultural sustainability. For social capital to accumulate at the fastest pace, all three factors may need to be present.

To return to the core of this paper: a larger amount of social capital can lead – if the type of social capital allows for change and innovation – to more social resilience in a community, and eventually to more general resilience. Social resilience can be defined as the extent to which individuals or communities are able to cope with changes in resource policy. General resilience theory refers to three aspects that make communities resilient to change:

> “*(i) the amount of disturbance a system can absorb and still retain the same structure and function, (ii) the degree to which the system is capable of self-organization, and (iii) the degree to which the system can build and increase the capacity for learning and adaptation.*” (Marshall et al. 2007: 360).

In their study about commercial fishing industries in North Queensland, Australia, Marshall et al. (2007) base social resilience on four different pillars: in the first place, risk perception towards change is important. This depends on the alternatives people have, on the financial situation, and on the social capital they have at their disposal. Secondly, human capital plays an important role. The better the skills and experience of people, the less risk averse they are, and better able to cope with change. Thirdly, the perception of the ability to cope with change is important, and lastly the interest people have in actually adapting to change. The more people are attached to the place where they live, and the social networks they are in, thus: the stronger the bonding social capital, the more constraints there are to change. More resource dependency is generally related to a lower ability to cope with change, as people are more attached to place and occupation. Marshal et al. (2007) conclude that high levels of social and economic dependency (as also found in communities with high levels of bonding social capital) obstruct the ability of fishers to anticipate or to respond to change. Generally, like in the case of social capital, the more human capital, financial capital, and (bridging) social capital people have at their disposal, the higher is their social resilience.

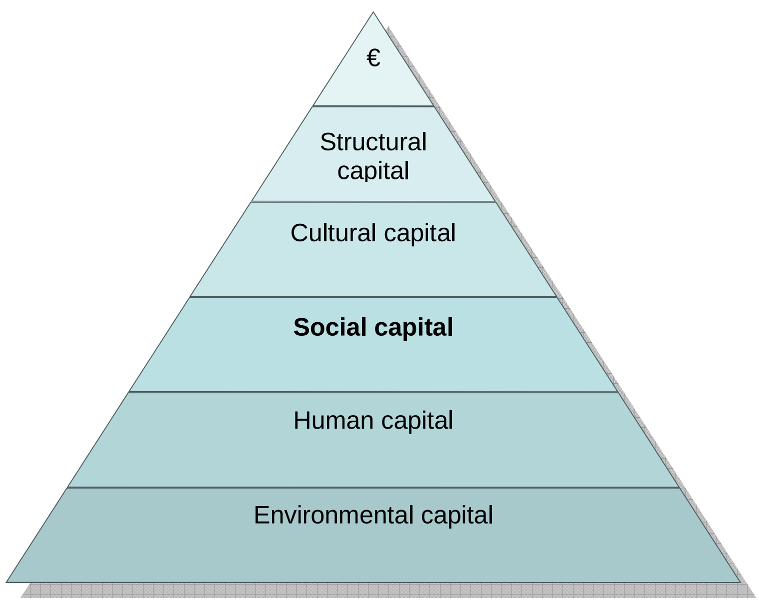


Figure 2 Community capital
(Callaghan & Colton 2008)

Callaghan and Colton (2008) mention two difficulties of balancing community capital. In the first place, as soon as any capital stock changes, the relationship between the different types of capital changes too and a new balance has to been found. Secondly, the right balance of the different types of capital depends on the valuation of capital, and as this is a personal matter, it will be a challenge to define a “community valuation” of capital. Besides, forms of community capital can support and trigger one another, but can also work destructing. Examples are degradation of land, depletion of fish stocks and exclusion on minorities. These often negative spirals are the result from imbalances in the capital pyramid, and will lead to less resilience. Clearly these spirals can work positive as well, and trigger investments and growth, leading to more resilient communities.

Balancing the different types of community capital is important both in rural and in urban areas. However, with natural capital as the very basis and precondition for the development of all other forms of capital, rural areas deserve special attention. These regions are often the most important providers of natural capital, while their inhabitants can play an important role in maintaining, preserving, and even building natural resources.

As resilient communities can better cope with shocks, sudden change will not disrupt development too much. Hence, development in communities that are characterized amongst others by high levels of bridging social capital, and thus resilient, is likely to be more sustainable, than in communities with lower levels of (social) resilience.

5. Conclusion and implications

> ‘*Changing the nature of the relationship between users and a resource can inadvertently compromise human prosperity and affect the ability of social and ecological systems to be resilient*.’ (Marshall et al. 2007: 363)

The quote above indicates the important role rural governance can play when initiating change. Rural governance, social resilience, and social capital are concepts that are partly overlapping, but are certainly not the same. A well-balanced combination of rural governance and social capital can contribute a large deal to the social resilience in a rural area. The study of Marshal et al. (2007) indicates that resilience can be influenced, but the question remains: how?

Social capital can fill gaps where markets and government fall short, providing unofficial institutions that are needed for a society to function, as a complement for official institutions, especially when costs of contracting would be very high.

> '*In contrast with states and markets, communities more effectively foster and utilise the incentives that people have traditionally deployed to regulate their common activity'* (Bowles & Gintis 2002:F424).

Advantages of communities are that networks are likely to be sustainable, and that interactions will be repeated. Especially rural communities are expected to be sustainable, meaning that community members will most probably deal with each other again in future. Individuals thus have the incentive to uphold their reputation. Consequently, free-riders behaviour is difficult, because 'anti-social' behaviour is immediately punished by other members of the community. A third advantage is that because of the frequency of the interactions, transaction costs of monitoring and enforcing contracts are low (Bowles & Gintis 2002). This means that social capital in rural areas is part of rural governance, and that rural governance would not function without it. For these reasons, social capital is a popular concept among policy makers, and among others it was adopted by the OECD and the World Bank. The latter used the term to formulate policies on sustainable development in the mid-1990s (Field 2003).

While the relation of social capital towards rural governance seems clear, the relation of rural governance towards social capital is less so. The question is if social capital is a stock of a given size, inherent to a community, or that social capital stocks can be influenced, built up, and altered, as long as the right policies are applied. Probably the answer lies somewhere in between. On the one hand, social capital is a community characteristic indeed, interlinked with kin, culture and many other factors that are difficult to observe. It is unlikely that social capital can be created. Even if it is possible to establish farmers' cooperatives, and to force farmers to become members which was common practise under socialist regimes in Eastern Europe – this may not create feelings of trust and reciprocity in the community, and it is questionable if it will increase access to information, decrease transaction costs, and increase overall efficiency – on the contrary. Nevertheless, as social capital stocks differ from community to community, can change over time, can be built up and broken down as result of internal social change and external events such as war and natural disasters (Putnam 2000; Field 2003), it is likely that existing social capital stocks at least can be influenced by policies (Callaghan & Colton 2008). Because of the complex nature of social capital, government interest mainly focuses at measuring and monitoring social capital, rather than creating it. However, especially regional governments could play a role in stimulating the growth of existing stocks of social capital.

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Appendix: Social capital research in Europe

The early work of Putnam et al. (1993) on the relation between social capital and the functioning of regional governments in Italy is perhaps the most well-known and influential contribution to the discussion about the relationship between social capital and economic growth. The main finding of the authors is that regionally dispersed patterns of association membership, trust, and cooperation, form an important facilitation for governance efficacy and economic prosperity. The Italian study was based on two decades of empirical data collection, in order to find explanations for the different functioning of regional governments in northern and southern Italy, and economic differences between the regions (Field 2003; Beugelsdijk & Van Schaik 2005a).

Beugelsdijk & Van Schaik (2005a) extended the regional social capital study to 54 European regions (NUTS1 level) in Great Britain, The Netherlands, Belgium, France, Italy and Germany, in order to link social capital to economic development. The authors used existing social capital data of the European Value Systems (EVS) based on measures of trust and association membership. The trust indicator was measured through the question 'in general, do you think most people can be trusted, or you cannot be careful enough in dealing with people?'. Association membership consisted of two indicators: passive membership and active membership, where people belonging to the latter also perform voluntary work for the association, apart from being only a member, as in the first group. Figures 3 and 4 give an overview of respectively the levels of trust and membership in the various European regions, where trust and membership are measured as scores (percentage of the people who answer the trust or membership question positively). The numbers in the maps can thus be read as shares (ranging between 0 and 1).

Beugelsdijk and Van Schaik found in the first place significant regional differences in social capital indicators. Secondly, the maps in Figures 3 and 4 suggest that social capital (either based on trust or organisation membership) is related to

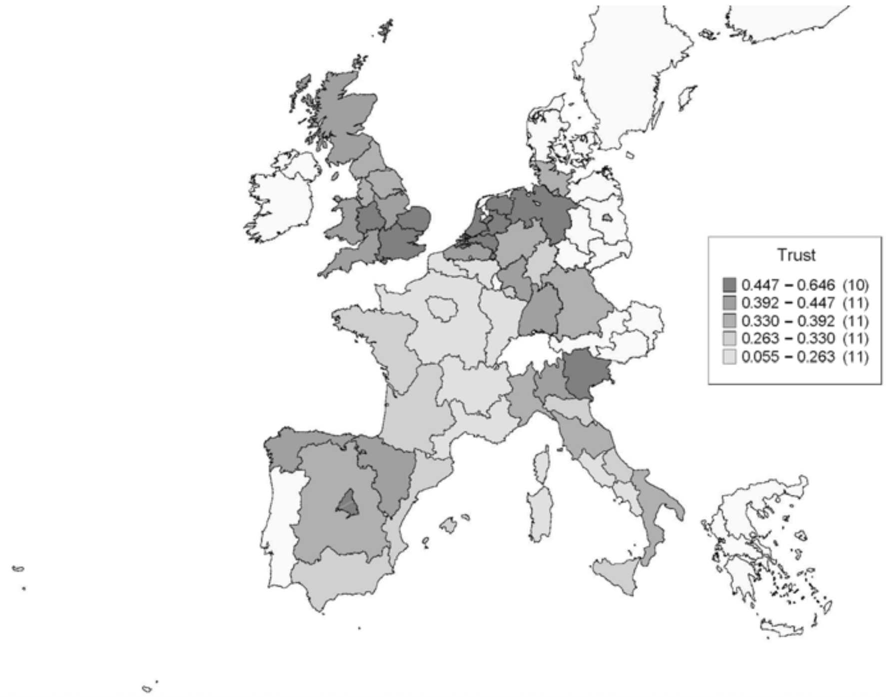

Figure 3 Trust scores in European regions

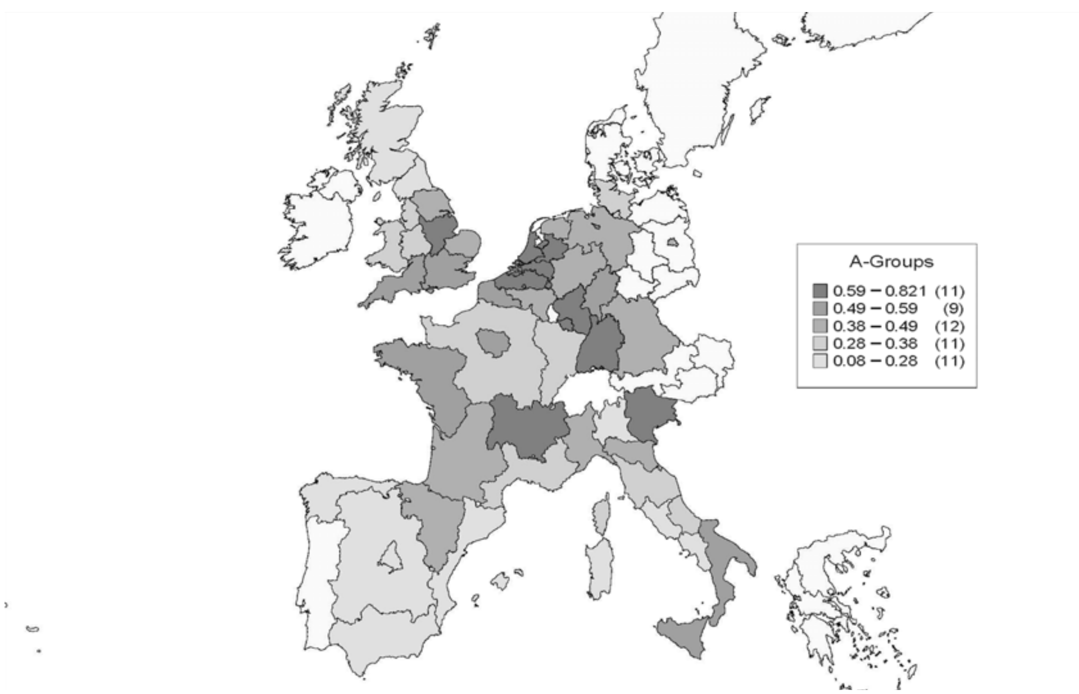

Figure 4 Membership in European regions

(Beugelsdijk & Van Schaik 2005a)

economic performance. Indeed, the authors find that social capital is significantly correlated to regional economic growth.

Some remarks that could improve the quality of the study can be made. First of all, in order to prove a causal link between social capital and economic performance more work should been done, because of endogeneity problems (more trust could lead to better economic performance, but economic performance arguably also leads to more social capital). Controlling for the gross regional product as Beugelsdijk and Van Schaik do, may not be sufficient to solve for this problem.

Secondly, it may be relevant to include country level fixed effects (i.e. factors that are relatively time invariant, such as the quality of institutions, culture, economic performance, and climate), in order to control for the role of regional institutions and others aspects that could influence the social capital indicators.

Finally, as mentioned before, measuring cognitive notions such as trust are not easily measurable. The trust indicator may measure trustworthiness rather than trust, as the answer to the trust question possibly gives more information about the respondent herself, than about the trust within the community (see Glaeser et al. 2000).