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**PANEL III
SOCIAL CAPITAL AND CLUSTERS**

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PANEL III: SOCIAL CAPITAL AND CLUSTERS

This background paper aims to launch the debate on the role of social capital in shaping inter-firms relations within local clusters and contributing to the identity of clusters. Three main questions will be raised. Firstly, is there a link between social capital and clusters? Second if the response to this question is positive then do clusters with high levels (or specific types) of social capital perform better, and third, what are the implications for policy makers?

The LEED programme started looking at the role of social capital in cluster development early in the nineties and organised in 1999 an international Conference in Mexico entitled «Local Economic Development: Social capital and Productive Networks». The conferences organised in 2001 and 2002 with the French government at La Villette, Paris further raised questions about social capital as a cluster ingredient. Moreover, the series of seminars organised in 2001 and 2002 in transition economies entitled «Clusters as Motors for growth and innovation» all put forward the central role of trust, collaboration and social-civic exchange as keys to cluster development.

The method used in this paper links literature on social capital with the work done by the LEED Programme on clusters of enterprises. This document is not a presentation of existing programmes on social capital and clusters, best or bad practices. Further research with case studies should start at the beginning of 2003 with the objective of releasing a publication on the subject as a follow up to the conference.

IS THERE A LINK BETWEEN SOCIAL CAPITAL AND CLUSTERS?

Definitions

Considering side by side the definitions of social capital and of clusters, is the first step towards understanding what links the two concepts and realising how deeply intermingled they are.

The OECD defines **social capital** in the publication *The Well being of Nations* (2001) as '*networks together with shared norms, values and understandings that facilitate co-operation within and among groups*'. The main interest in studying social capital from the economic and social points of view is that relations among individuals can represent a positive resource for the economy and society.

According to Robert Putman (2001): '*the central idea of social capital is that networks and associated norms of reciprocity have value*'. One question that immediately arises from this definition is what kind of value does social capital give rise to? The World Bank defines social capital as '*institutions, relationships, networks and norms that shape the quality and the quantity of a society's interactions*', putting the focus on the social dimension. There is one important step to take from studying social

capital from a sociological and civic perspective, to the economic and firm level. Research has been done to understand the impact of social capital on economic growth. Many of these studies are done at the macro-economic level. This paper aims to look at the particular role of social capital at the micro level: on the performance of firms in local clusters.

Rafael Gomez in an OECD research paper produced for the Mexico conference in 1999 treats social capital as a resource which is less tangible than physical capital but which is productive, because it facilitates the completion of certain objectives: *'social capital is composed of social resources that provide useful 'capital' for individuals'*. These individuals are involved in entrepreneurial activities at local level and *« social capital it is one resource available in neighbourhoods where self-employed live »*. Evidence from Gomez and others suggests social capital might play an important role for inter-firm relations at local level and it could thus be instrumental for clusters of firms.

Local clusters are defined as geographically concentrated firms of different sizes, horizontally and/ or vertically linked and operating in the same line of business (OECD 2000). Given the economic importance of clusters, they were recognised as tools for economic development and for upgrading of international competitiveness of national industry. Clusters can be very diverse but involve particular relationships among firms, thus the strong interest in understanding the part that social capital (social interactions producing an added value) play among these inter-firm relationships. Clusters occur only when there is a sufficient number of firms, sharing common needs, attracting resources and services that wouldn't be available to an isolated firm. By putting in common some of their functions (suppliers and buyers networks, training, human resources, marketing, exportation, research) the firms achieve economies of scale and of scope that a small enterprise alone couldn't reach. Clusters often have external reputation and renown. They have a common identity outside, and a specific way of functioning inside the cluster.

Clusters have been the subject of extensive research. When we look at the features of clusters in detail, social interaction is very present in all basic characteristics of cluster building:

- In some leading OECD countries growth theorists and empirical studies showed that innovation is fundamental to long term growth. Innovation in clusters is based on collaboration, proximity and networks and spurs through a process of mutual learning, emulation, positive role models, personal contacts. Local clusters are places of exchange among firms and much of this exchange is of a social nature.
- Firms in clusters benefit from lower transaction costs due in some cases to personalised negotiations, fewer bureaucratic procedures, lower information costs stemming from local and personal information flows, better co-ordination because of direct contacts and often trust-based relations among economic agents. All these elements directly enter in the definition of social capital. But does it mean that social capital is a necessary ingredient to cluster building?

Why is there an interest in linking the concept of social capital with the concept of clusters?

The policy interest in clusters is driven by research showing that firms can achieve increased efficiency and competitive advantage through cluster formation. This can translate into economic advantage for the localities and regions concerned.

Clusters are based on specific interactions among firms, a mixture of co-ordination, co-operation and competition, extensive use of market exchanges and connected industries vertically and/or horizontally with suppliers, users and research institutions. The OECD Publication the Well Being of Nations

asserts that '*firms can benefit from norms of co-operation, trust embodied in various types of intrafirm and interfirm networks*' (p. 57) introducing through this affirmation the concept of social capital as one of the possible features of cluster efficiency. The value of social capital in clusters would then be to reduce transaction costs, hence increase efficiency, knowledge transfer, innovation and productivity. Can social capital be one resource for cluster innovation, access to technology and thus local dynamism?

Some studies have already started making the interface between the social capital literature and the literature on agglomeration economies, in order to assess the role of social capital in local labour markets, neighbourhoods or as in this paper, clusters. The sources of development of social capital are multiple as defined by the OECD study (p 45): 1) Family, 2) School, 3) Local community, 4) Firms, 5) Civil Society, 6) Public sector institutions, 7) Gender 8) Ethnicity. Many of these sources of social capital are also central elements in clusters formation and development: firms, family links, education, community, women's networks, ethnically related groups, public, private and non-governmental institutions.

It is important to underline that studying the link between social capital and cluster performance does not mean asserting that social capital is a positive value per se for clusters. The multitude of factors influencing cluster performance and the examples of successful clusters with limited social exchanges also call for caution not to overemphasise the role of social capital in cluster formation.

Limits and difficulties in measuring social capital in clusters

Difficulties arise first in evaluating the existing degree of social capital within a cluster. The lack of data and problems of definitions are major impediments to grasping the significance of social capital as an ingredient of cluster development. Second, problems appear when defining and limiting the boundaries of clusters. Clusters are often entities in flux, and difficult to delimit. Third, measuring the impact that social capital has on the performance of firms and of clusters is a complex exercise which has to take into account many other factors that impact on cluster performance. All these reasons make the subject of «social capital and clusters» complex and quite difficult to approach.

Measuring social capital usually mixes comparative, quantitative and qualitative data. The World Bank considers that how you measure social capital is how you define it, and the work of the World Bank is focused on social capital as a tool for fighting poverty. Consequently, in order to measure social capital in clusters it is first necessary to determine the factors that express the level of social capital in clusters.

Among these factors one can quote: associational membership, use of informal networks in business transactions, participation in advisory or mentoring programmes, use of communication media (letters, phones, Internet), belonging to a school or university network, voluntarily activities, degree of trust in institutions, willingness to work and collaborate with other companies and the feeling of belonging to a specific entity. Clusters experiences show that going through the same institute or university is a source of both social capital formation and cluster development. Research is needed to make the link between the presence of these factors in clusters and cluster performance.

Social capital as one variable among others

Linking social capital and clusters shouldn't lead to excessively value the role of social capital in cluster expansion. There are contradictory conclusions about the origin of external economies in

clusters. Krugman (1994) asserts that economies of scale captured through market size are drivers of cluster growth. According to Stuart Rosenfeld (2002) *'some external economies are driven purely by the size of the market created by the scale of business and jobs opportunities and not by trust based relationship or organisational membership commonly termed social capital'*. For other authors like Storper (1999) trust and conventions are critical.

They are some unintentional externalises and other 'soft' external economies that do depend on relations, connection, communication or knowledge. Social capital can be a resource for clusters producing positive externalities for firms. Stuart Rosenfeld also notes that in clusters with social capital, knowledge and innovation are transferred more readily. The OECD (2001) also considers that social capital can facilitate regional systems of innovation (p58). However, Putman (2000) compares Silicon Valley and Route 128 and notes that two different types of clusters, one with horizontal and university based links among entrepreneurs and the second one with more traditional hierarchical and professional relations have two different types of social interactions. Performance seems to be independent of nature of these social interrelations among entrepreneurs. These conclusions show the complexity of the issue and call for deeper analyses. There is no one model of social capital and no one type of impact on cluster performance.

Negative impact of social capital in clusters

Analysing the level of social capital in a cluster can also show the limits of the cluster approach. One negative aspect of social capital is that people lacking the right connections are not integrated in the local labour market. This can mean for clusters: exclusion of outsiders, limited mobility, poor socio-economic advancement and lack of adaptability to change. Woolcock (2002) considers that strong ties can lock firms into a situation of blocked development process and stagnation.

Beyond the ability to adapt to change, which is crucial to entrepreneurial innovation, looking at clusters through the social capital lenses allows also to reflect on the question of equity in clusters. The publication Just Clusters by Stuart Rosenfeld (2002) looks at clusters from the original perspective of socio-economic equity. Rosenfeld notes that clusters development in a given area can transform a neighbourhood, raise the prices of property, lead to protecting the local community from outsiders, exclude people who don't have the 'right' connections and impact especially on low or middle income people. As Portes and Landolt (1996) put it: *'the downside of social capital is that the same strong ties which are needed for people to act together, can also exclude non members such as the poor'*. Despite the lack of data and the limits to measuring a moving reality, analysing the role of social capital in clusters attracts attention on an extra ingredient of entrepreneurship development: after 'knowledge' and 'know how', **'know-who'** is also a central notion.

There are many ways in which social capital and clusters interact. The 'level' and 'type' of social capital within a cluster matters on the identity of this cluster. But does it matter on the performance of enterprises within the cluster?

DO CLUSTERS WITH HIGH LEVELS OR SPECIFIC TYPES OF SOCIAL CAPITAL PERFORM BETTER?

Clusters and economic performance: is social capital an important variable?

According to the World Bank, social capital has been identified as an integral component of social and economic development at both macro and micro level. Putman (1995), Helliwell (1996) and Fukuyama (1995) have found that regional measures of social capital correlate positively with various indices of economic performance. These studies at the macro economic level showed that greater social capital translates into improved economic performance. Putman's research showed that the areas with a lower level of social capital have lower economic performances. These conclusions have nevertheless been contradicted by research done in the UK, Denmark and Wales, which shows the complexity of the social capital notion applied to regional performance, and will be discussed further.

At a micro level, Rafael Gomez (1999) showed that social capital can improve a self-employed person's productivity, increase labour market earnings and produce knowledge spill-overs. Martin Paldam and Gert Tinggaard Svendsen (2000) argue that social capital can be important for production in three ways: 1) as a factor of production putting in parallel physical and human capital 2) as a determinant of transaction costs 3) as a determinant of monitoring costs. According to the economic rationale, entrepreneurs would make the rational choice to maximise their personal profit by deciding to interact and invest in social relations. There is also an interest in social capital as a facilitator for financing firms in clusters. Entrepreneurs linked by social relations will be more likely to put in common financial resources or to seek credits jointly. This is of particular importance for small and medium sized enterprises, which face the challenge of finding creation and expansion capital.

Social capital and clusters: focusing on SMEs performance and innovation

The results of the extensive research conducted in Denmark, Ireland and Wales (2002) showed that social capital is consistent with high performance, innovation and knowledge intensity.

The research led by Philip Cooke and Nick Clifton looked at government programmes promoting collaboration among SMEs with the objective of improving the capacity to innovate, through increasing social capital (by supporting networking among SMEs). According to Philip Cooke and Nick Clifton '*social capital in the world of real economy is a kind of entry ticket to doing business*'.

Nevertheless, it does not appear to be a necessary condition. The results showed that the most competitive regions in the United Kingdom are indeed the most pronounced users of social capital, but areas that perform worst in all regions also rely on a different type of social capital, rooted in local culture. Firms with a greater innovation capacity tend to also show higher trust in collaborators, exchange information outside the normal commercial links, rate higher external information, develop strategic contacts and consider co-operation as more beneficial than other SMEs. However, from a cluster perspective it appears that these highly innovative SMEs who perform well are global rather than local in their contacts. They are less locally focused on the social and professional contacts they develop. Hence, innovative SMEs are high users of social capital but not necessarily of local social capital.

Analysing the role of social capital in clusters helps in sizing a very important feature of clusters: social capital seems to be an important factor of innovation and improved performance. But this is true when the business is less locally focused and more internationally oriented. Contrary to the findings at

macro economic level, social capital is also highly valued in less well performing areas, but is not a sufficient variable to lead to improved economic performance.

Social capital seems a significant variable for SMEs and clusters because it produces untraded benefits. Formal and/or informal partnerships, networks and cluster based initiatives where mutual trust, credibility, reputation and the exchange of personal favours can contribute to the SMEs profitability, turnover and innovation rate. There is therefore a space for policies targeting social capital to improve SMEs performance.

Is the question of social capital as a source of cluster economic performance central?

Until now we have considered cluster performance as an objective and social capital as a possible tool to achieve this objective. However, we can also take a different perspective considering clusters as privileged places to create social capital and that social capital building is the objective and not the means.

In the publication the Well Being of Nations, the OECD recognised that social capital contributes to realising the human potential and social cohesion, and contributes to fighting poverty. Stating the importance of social capital in clusters raises, therefore, the question of whether cluster policies should broaden their scope, and put forward the objectives of social cohesion and equity, beyond the objective of entrepreneurial innovation and performance.

The literature on social capital usually deals with civic engagement, neighbourhoods, community building, corporate social responsibility, housing schemes, neighbourhood regeneration programmes, partnerships, safety and health projects or education and non-governmental activities. Studying social capital in clusters therefore opens up the debate beyond clusters as motors for economic growth and innovation, to clusters as places for civic engagement and community building. It helps to define the scope and role of clusters beyond the economic rationality of entrepreneurs. This is particularly interesting for post-communist countries in transition, where the civil society is still «under construction», where social capital is a complex data and clusters an already widely used concept. However it is important to decide whether the cluster policy is part of a business or social agenda, or both.

POLICY ORIENTATIONS

Can social capital be created in clusters?

Research showed that social capital is difficult to construct, as research on local clusters showed that clusters are difficult to create. Studies on local clusters such as those done by Porter, showed that top-down policies aiming to build clusters from scratch are often unsuccessful and that public authorities should refrain from trying to create clusters (Bologna Charter 1999). Rather, public intervention should play a catalyst role, supporting existing or emerging clusters. That is to say that clusters stem from particular historic, cultural and social roots.

Research on social capital has often led to the same types of conclusions: Putman (1993) insisted on the pre-condition of a non-hierarchical social organisation, Fukuyama (1995) on decentralised governments and Evans (1996) on competent public administration as explanations of strong levels of social capital in some regions and localities. Clusters and social capital are both deeply related to the

local context and this local culture is at the origin of individual experiences such the Italian industrial clusters where social ties and business ties are interacting in a particular way. Nevertheless, other empirical studies showed that supporting social capital through promoting business networks can have a positive impact on the performance of firms. Wales, for instance, sought to create supplier clubs and business networks to compensate for the lack of spontaneous networks, and this with a positive response. Apart from the question of whether social capital might be created in clusters, a more specific question is: what kind of social capital do policy makers want to promote and can one type of social capital be transformed in a different type?

These diverse conclusions and questions call for caution on the part of authorities designing cluster policies. They show that policies in favour of social capital have to be decided at local level according to the local context.

Is social capital more important for certain clusters than others?

Clusters in remote areas and impact of social capital

Studies show diverse results on the significance of social capital in cluster formation and development in **remote and rural areas**. Indeed, some studies, such Worlds Apart by Cynthia Duncan (1999), show that in poor rural communities there is a lack of trust among people and, as a consequence, less interaction among individuals and entrepreneurs. This reduced social capital might explain the difficulties of cluster development in remote areas. However, there are other significant elements that lack in underdeveloped areas and which impact on cluster development, such as the lack of demand and suppliers' proximity to networks, poor education and the lack of training institutions. Social capital might take different forms. Strong family ties due to a difficult socio-economic context are forms of social capital but do not favour exchanges outside a close knit community and hinder cluster development in remote areas. Encouraging trust, networking and co-operation in such zones can lead to cluster formation and improved local economic performance.

Clusters in transition economies and (re)constructing social capital

Transition economies today face a paradoxical situation. They need, on the one hand, to rebuild social capital - in parallel with the civil society - at the level of associations, networks and foundations. They need to rebuild trust in administrations and public institutions. On the other hand, they need to control or canalise the existing social capital that feeds informal networks, personal connections, family ties, black market and mafia organisations.

Despite national differences, all five cluster seminars organised by the LEED Programme of the OECD during 2001 and 2002 in Slovenia, Slovakia, Poland, the Czech Republic and Hungary showed a common main obstacle to cluster development. This obstacle is the mistrust and difficulty for entrepreneurs to consider co-operation among firms and fair collaboration with competitors. This difficulty often arises due to a lack of trust in public institutions, law, administration and in other entrepreneurs, inherited from years of often forced co-operation during the socialist and communist period. Martin Paldam and Gert Tinggaard Svendsen (2000) consider that *'when a country has to be rebuilt, social capital is crucial. Many studies of the 70 years of the Soviet Union give the impression of a system that went unusually far in destroying social capital, as all non party social structures and private, independent initiatives were ruthlessly eliminated. People thoroughly learned to trust*

nobody'. The authors consider that social capital is the glue that holds together society. The slow path of transition in post communist countries is, according to them, due to this lack of social capital.

Paradoxically, it is also the development of negative social capital, parallel networks and black market exchanges that hinder the development of transition economies. Robert Putman stressed in his studies that the building of social capital is a very slow process, enforced by people themselves. Policies can act in order to accelerate this slow process. It is nevertheless important to research further how public authorities can act in order to avoid becoming counter productive and leave enough space for self-enforcement.

What should policy recommendations take into account?

Designing policies targeting social capital in clusters seems a risky process because social capital is a self-enforcing, cultural and long-term process. It can also be a negative variable that leads to immobility, exclusion and limitation of economic reforms. But it is also a variable among others, which in a specific environment can improve cluster performance. Moreover, from a social point of view supporting social capital can become an objective in itself, therefore policy makers should carefully evaluate its place in cluster policies.

Innovation, internationalisation, social capital: keys for clusters

Philip Cooke and David Willis consider that policies dealing with SME innovation should look together at clusters, networks and social capital: *'Innovation enhances SMEs competitiveness, networks are repositories of innovation knowledge for SMEs and synergetic social capital can be employed by public policies to stimulate linkage'*. The research on Denmark, Ireland and Wales showed that policies that supported the construction of social capital through networking activities, with the objective of improving SMEs' performance, produced results. The SME population that was surveyed showed improved business performance. Integration, synergy and linkages were the key words that emerged from this research.

Beyond these positive results the research also showed that social capital for innovative firms was not necessarily a 'local' element but, on the contrary, often a global feature and what mattered were the linkages built outside the local SMEs' networks. These findings are important for cluster policies as they underline the relationship between social capital and the internationalisation of business activities.

What kind of institutions for clusters?

To evaluate the role of social capital in cluster development, one common practice is to measure the number of associations, networks, private, public and non-governmental organisations that exist. Studies on social capital are, in this case, useful for policy makers in order to help them determine what institutions may play a crucial role in cluster development. Social capital means communicating across professional boundaries, exchanging with universities and educational institutions. This places public-private-NGO partnerships at the core of cluster policy. Concrete measures targeting social capital can involve: support voluntarily activities, capacity building, education and networks, partnerships, professional cluster consultants and business support centres.

Policy recommendations should nevertheless take into account the self-enforcing and bottom-up dimensions that are common to both social capital and clusters. As Martin Paldam and Gert Tinggaard Svendsen (2000) write '*Governments and international organisations are third parties. They may aim at increasing social capital, but their interference might do more harm than good to social capital*'.

QUESTIONS FOR DEBATE

1. Is social capital a significant factor among the variables shaping the performance of firms and clusters?
2. Is social capital a local or global factor? Is geographical proximity or psychological proximity more important in terms of social capital?
3. Do existing cluster examples show that trust can be built and what does this mean for local development policy?
4. Does social capital act as a barrier to breaking negative path dependencies in a declining cluster ?
5. How can the negative features of social capital in clusters be limited: exclusion of specific socio-economic groups, insularity, immobility and criminal networking?
6. Should cluster supportive policies aiming to develop social capital try to achieve more than micro economic development goals and impact on community building, equitable growth and greater social cohesion?

Key words on social capital and clusters

Proximity, reciprocity, reliability, network(s), association(s), community, interrelation, interaction, inclusion/exclusion, communication, norms, values, culture, behaviour, trust, public good, societal investment, communal property.

BIBLIOGRAPHY

- Cooke Philip and Wills David, 'Small firms, social capital and the enhancement of business performance through innovation programmes', Centre for Advanced Studies, University of Wales, 1999
- Cooke Philip and Clifton Nick, Social capital and SME performance in the United Kingdom, June 2002
- Duncan Cynthia, Worlds Apart : Why poverty persists in rural America, New Haven, Yale University Press, 1999
- Durlauf S. 2001, 'On the empirics of social capital', WP U. Wisconsin
- Gomez Rafael, 'The effect of social capital and neighbourhood characteristics on the performance of credit constrained micro-entrepreneurs', International Conference on Local Economic Development : Social capital and Productive Networks, Mexico in 1999
- Knack & Keefer 1997, 'Does social capital have an economic payoff : a cross country investigation', Quarterly Journal of Economics
- Krugman 1999, Spatial economy
- OECD, Fostering entrepreneurship (1999)
- OECD, Clusters in transition countries: motors for growth and innovation (2002)
- OECD The well being of nations, 2001
- Paldam Martin and Tinggaard Svendsen Gert, 'An essay on social capital: looking for the fire behind the smoke', European Journal of Political Economy, Vol. 16 (2000)
- Putman Robert, Making democracy work: Civic traditions in modern Italy, Princeton University Press 1993
- Putman Robert, Bowling alone : the collapse and revival of American community', New York, Simon and Schuster 2000
- Rosenfeld Stuart, Just clusters 2002
- Servon J Lisa , Credit and social capital: the community development potential of US micro-enterprise programs, Housing Policy Debate Vol9 , Issue 1 1998
- Woolcock, Social capital and economic development- towards a theoretical synthesis and policy framework. Theory and society, 1998