European Journal of Spatial	Development-http://www.nordregio.se/EJSD/-ISSN	1650-9544-Refereed Art	icles
Oct 2003-no 7			

## Differential Economic Performance (DEP) in the periphery: Evidence from Swedish rural areas<sup>1</sup>



Contact details of the authors:

Nordregio – Nordic Centre for Spatial Development, Box 1658, SE-111 86 Stockholm, Sweden.

Abstract. Understanding Differential Economic Performance (DEP) at the local and regional level is a key element in devising practical strategies and programmes for sustainable regional development in different contexts. This paper contributes to the understanding of the factors underlying persistent differences in DEP between rural localities. The basic hypothesis is that the DEP of rural areas can be explained by a combination of 'tangible' and 'less tangible' factors and the way in which these interact in specific national, regional and local contexts. Natural and human resources, infrastructure, economic structure and investments are together with institutions, networks and community values the most decisive factors that help to characterise DEP for the Swedish case studies. Findings show that such factors not only define the different opportunities and constraints for local development, but also illustrate how effective the local and regional system is in tapping into resources and opportunities and in ameliorating constraints. This sheds light on the importance of taking a broader perspective regarding policies towards regional development, making them much more focused on contextual and environmental aspects than uni-faceted, sectoral measures. The paper also provides a discussion of the implications of the results for policy and gives an account of new research questions for future studies.

**Keywords:** Differential economic performance, tangible and less tangible factors, Sweden, dynamics of rural areas.

#### 1. Introduction

Understanding Differential Economic Performance (DEP) at the local and regional level is a key element in devising practical strategies and programmes for sustainable rural and regional development. Internationally reported experience shows, for instance, how entrepreneurship has been highly dependent on aspects related to the environment in which enterprises are historically embedded. In recent decades, much focus has been laid on the less tangible factors of this regional environment, such as those related to social relations and institutional performance, for example by Granovetter (1985), labour markets, by Doeringer and Terkla (1990), institutional capacity, business culture, community and identity and image and quality of life addressed by Wong (1998) and aspects regarding the relationship between the cultural and economic aspects of regional development highlighted by Danielzik and Wood (2001). Such evidence is thus indicative of the need to define policy measures in a broader context than before, thus combining aspects aimed at creating environmental advantages (Maillat, 1998), rather than focussing only on firms themselves.

From a practical point of view, at the European level, the Cork declaration supported the idea that more must be known in order to promote sustainable rural development (The Cork Declaration, 1996). Academically, as pointed out by Bryden et al (2001), this is an issue of enduring theoretical significance for a range of social scientists including economists, economic geographers, political scientists, anthropologists and sociologists. This paper aims at improving the understanding of the factors underlying persistent differences in DEP between rural localities. The empirical work took place in Sweden.

The structure of this paper is as follows. Section two starts with a brief review of the literature regarding DEP assessment with a focus on rural areas. In section three, a methodology combining tangible and less tangible factors is presented in an attempt to develop an interdisciplinary approach to DEP. After this comes a summary of the results for two Swedish study areas in section four. This summary is divided into themes that illustrate the interrelationships between the factors that underlie DEP. Conclusions and policy implications are presented in section five. This final section also includes a set of research considerations as well as suggestions for future work.

#### 2. Theories of DEP: focus on rural areas

Many studies have recently been carried out involving regional differential economic performance in rural areas. They focus either on one aspect of the rural economy, such as employment dynamics (e.g., RUREMPLO, 1999), economic structure (Roberts and Thomson, 2000), regional images (Leat and Williams, 2000) or strictly on the causal relationship between two or more tangible factors, such as infrastructure and economic development (e.g., Kilkenny, 1993; Kilkenny, 1998), between less tangible factors and economic performance, such as, social capital and employment (Westlund and Westerdahl, 1996), culture and economic success (e.g., Danielzik and Wood, 2001) and institutional settings and entrepreneurship (Davidsson, 1995). Little is in fact understood however about which factors underlie and explain persistent differences in economic performance between rural areas.

An attempt to empirically assess DEP through a more complex approach was performed by the OECD (1996). The study is a comparative study of the characteristics and dynamics of regional labour markets in OECD Member countries. The report is divided into three parts. The first justifies the reasons for introducing a territorial dimension into employment analysis and policies, the second provides the main results from a territorial approach to labour market analysis from different countries and, the third part explores more in-depth topics that are important for rural development. The study adopts a set of indicators that addresses four rural development concerns: Population and migrations; Social well -being and identity; Economic structure and performance and, Environment and sustainability. Although the degree of a region's rurality correlates with certain employment features, it does not necessarily imply that rural areas lack dynamism. The rural-urban spectrum covers a broad range of development situations, and rural regions can be engines of job creation.

Fuller and Nichol (1999) investigated the dynamics of the rural economy in both leading and lagging areas in Canada by assessing 40 variables (by factor analyses) and 8 factors dealing with economic dynamics, socio-economic stress, labour force participation and age, unemployment levels, commuting patterns, structure of employment. This study provides among other things an example of the complexity of working with leading and lagging concepts in rural areas. For instance, some study areas led on some factors and lagged on others, implying that assessment of the social and economic performances should consider these diverging dimensions. Therefore, the use of combined variables or factors is fundamental, as the focus on one single variable can produce a distorted view of reality.

Schneider et al. (2000) assessed Putnam's hypothesis of the positive impact that interpersonal trust has on the economy and on the effectiveness of political institutions (Putnam et al., 1993) in a wider sample of regions by analysing quantitatively the role that political culture has on economic growth in the regions of the European Union. The authors incorporate a neoclassical growth model with political cultural variables. Findings show, in accordance with standard models of economic growth, that economic rather than cultural factors are the most forceful determinants of growth in the European regions. Only one dimension of political culture – the intensity of social communication, has the expected positive impact on the regional economy.

One of the most comprehensive studies in Europe on rural development and employment was the RUREMPLO Project (1999), Terluin and Post (2000). The analysis is based on the development of rural regions in the EU against the background of a downward trend in the agricultural labour force. A quantitative analysis of socio-economic characteristics during the 1980s and 1990s for all EU regions was performed to reveal the forces behind employment dynamics (18 case studies in leading and lagging rural regions in nine EU Member states). The results show that leading areas tended to have employment growth both in industry and services associated to population growth. Leading rural regions were characterised by a better-developed road infrastructure than lagging regions and in leading areas infrastructure was not a serious economic constraint for entrepreneurs, whilst the poorer condition of infrastructure in lagging regions hampered economic

development. On the whole, actors in leading regions exhibited a better-developed capacity than actors in lagging regions. This is reflected in the way in which they cooperate with other actors inside and outside the region, in which they face challenges, in which they innovate and in which they launch projects in line with the strengths and needs of the region. Due to the higher capacity of actors in leading regions, both internal and external networks are rather strong. For the future, initiatives towards job creation in rural areas should take the strengths of each area into consideration; integrate infrastructure into a broader development concept; follow a multi-sectoral approach in employment creation that goes beyond tourism; involve a wide range of local actors in the development process and strengthen both internal and external networks.

Most of these studies take inspiration, as described by Terluin (2000), from regional economic growth theories (e.g., traditional models, pure agglomeration, local *milieu* and territorial innovation models) and theories of economic development (endogenous, exogenous and mixed endogenous/exogenous approaches) that together help explain DEP. Regardless of the theoretical framework assumed there is still a need, as Reimer (2000) pointed out, for going beyond the analyses of economic and demographic approaches in future studies, including less tangible factors in the analysis such as, institutional processes, the ability of regions to self-organise and partially also, local culture.

In Sweden, one interesting example is the study by Davidsson (1995) that although focused only on the importance of cultural factors for entrepreneurship, does apply a broad approach towards it. In the study, values and beliefs, assumed to be related to entrepreneurial behaviour, as well as entrepreneurial intentions, were investigated in six case study areas. 'The results suggest that the prevalence of certain values affect levels of entrepreneurship measured as regional rates of new firm formation. There was no clear indication that beliefs about the individual and societal outcomes of entrepreneurship influence new firm formation' (1995:41). The results indicate some intricate relationships between institutional structure, culture and entrepreneurship.

Empirical examples that combine tangible and less tangible indicators to explain DEP are still uncommon in the literature, especially in those studies related to peripheral rural areas. Given current trends at the international level, DEP cannot be associated with only one explanatory factor, but rather with a set of factors – of both a tangible and a less tangible nature, that together have a synergetic effect on the economy. Thus, this paper attempts to contribute to a better understanding of the importance of tangible and less tangible factors as a way of tracing differential economic dynamism in rural areas. As such, particular attention will be paid to the processes and dynamics of two pairs of leading and lagging areas in rural Sweden.

# 3. Dynamics of rural areas: a DEP method combining tangible and less tangible factors

The empirical case studies presented in the following sections are based on the results of a common methodology implemented by an international research project entitled, DORA – Dynamics of Rural Areas<sup>2</sup>. The core research question can be stated as: *Why do rural areas in apparently similar economic, social and environmental circumstances have markedly different performance over relatively long periods of time?* 'Similar circumstances' here is regarded as rural areas having an analogous access to resources that hypothetically would allow them to have a similar level of economic performance. The general research hypothesis is that the differential development of rural areas can be explained by a combination of 'tangible' and 'less tangible' factors and the way in which these interact in specific national, regional and local contexts. Such factors not only define different opportunities and constraints as regards local development, but also illustrate how effective the local and regional system is into tapping resources and opportunities and in ameliorating constraints.

This project exemplifies an attempt to combine qualitative and quantitative methods to assess economic performance. We agree with Philip (1998) who argues that researchers should think beyond this myopic quantitative - qualitative duopoly when it comes to designing a suitable methodology for their research, and select quantitative or qualitative methods, or a combination of the two, that best satisfies the needs of specific research projects. This attempt refers to the combination of individual, qualitative and *less tangible*<sup>3</sup> data from surveys, with aggregated, quantitative and *tangible data*, often from conventional statistics approached primarily through the objectified public record, which allows for fairly straightforward descriptive analyses. *Tangible* factors concern natural and human resources, infrastructure, investments and economic structure, while *less tangible* factors refer to market performance, institutions<sup>4</sup>, networks<sup>5</sup>, community and culture and to the quality of life (Figure 1).

As with many of the other tasks of the methodology development, the process of choosing variables and factors took place through discussion within and between all research teams. An extensive literature overview provided the basis for choosing the factors, based on key studies, such as Granovetter (1985), Putnam et al (1993), RUREMPLO (1995), Davidsson (1995), OECD (1996), Maillat (1998), Fuller and Nichol (1999). Each factor and its constituent variables should follow an explanatory logic helping to assess DEP and have some relevance to rural areas in the four countries: Scotland, Sweden, Greece and Germany, as explained in detail by Bryden et al (2001). To make the analysis of these ten factors possible, each factor has been broken down into variables and specific hypotheses were attached to them (approximately 80 in total).

The final choice of factors and variables was grounded on the knowledge of the interdisciplinary research teams. The guiding principle behind the selection of factors, variables and research questions/hypotheses was that each should conform to an explanatory logic, helping characterise differential economic performance (DEP), as follows:

$$X (1...n) --> DEP$$

where X is a factor, and 'n' refer to variables and the arrow to a causal effect. This conceptual model should not be interpreted as a neo-classical production function, rather as an indication of the combined influence of variables/factors to DEP in an integrated way. Thus, each factor was understood to function as 'a composite' of aggregated variables that influence the DEP in rural areas. It was expected that certain less tangible factors would produce a synergetic effect on the relation between tangible factors and DEP, whilst in other cases, they would themselves play a major role in defining economic performance.

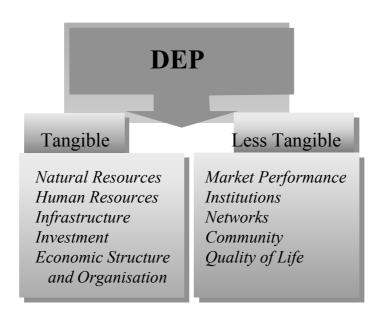


Figure 1. Tangible and less tangible factors.

A comparison between study areas and regions was performed by combining information from fieldwork with the available aggregate statistics. A database was built in data management software to support the analysis of the interviews. The analysis was facilitated by using keywords and simple search functions (such as, by study area and variable/factor) available in the database. The analysis focuses mainly on the differences between the matched pairs of study areas (successful and less successful case studies comparison) in the chosen region as well as on attempts to explain differences in economic performance by looking at the dynamics of each region. For the Swedish study areas, analysis of the available public record data was performed and later incorporated in the analysis of factor-by-factor. One example here was the assessment of employment by Ceccato and Persson (2002).

The main goal of the fieldwork was to gather information about how local actors perceived of their area in terms of the potentialities and constraints that they judge to lead to the DEP. Key-actors were chosen for interview: civil servants, politicians,

entrepreneurs, NGO's and related associations and individuals. The interviewed groups were chosen in consultation with the national steering group<sup>6</sup>. The need for a fair distribution by gender was also taken into consideration. Interviews consisted of a guided conversation based on a common schedule, or as described by Fontana and Frey (1994), a 'semi-structured, somewhat directive, field formal interview' (Appendix 1). The Swedish version of the common schedule was used as a basis for the interviews and is available upon request. Since the transfer of the interviews was time and resource consuming, a sample of about 15 for each study area over the total performed interviewees (126 in total) was selected, with due attention paid to the representativeness of each interviewed group and to the quality of the interview. Photographs were used as a way of registering samples of the reality we found interesting in our study areas and of providing more meaningful insight for the research.

As the research was expected to 'trace' the local economies' evolution, the longitudinal design was tackled in the following way: Official statistics from several years and/or decades combined with data gathered from other sources provided a historical overview of factors that help explain the DEP among regions/study areas. The analysis factor-by-factor started by combining and contrasting the evidence from fieldwork and the available aggregated official statistics against the stated hypotheses for each individual variable/factor and study area. The contrast between areas was done using tables, maps and graphs. The data was attached to geographical units that vary by county, study areas and municipality-level. Each factor was systematically addressed, even if it was not regarded as important in explaining differential economic performance.

The less tangible factors, on the other hand, concerned use and perceptions of that which is 'there', that is to say, how things function in practice and how people experience them subjectively, when approached by interview. Quotations from the interviews were directly transcribed into the analysis of each variable when they reflected a general view of a certain aspect of the discussion or a general view of the interviewed group. In other cases, contrasting dialogues were transcribed in order to show the diversity of opinions among interviewees, and not least, conflicting interests between groups that were crucial to help explain DEP. Preliminary tests revealed trends in the responses by group and study area despite the fact that no rigorous statistical analysis was effectuated by group. For the less tangible factors, the longitudinal aspect was regarded by focusing on 'local myths, historical facts and on-going processes' described by local actors through the interviews that could shed light on the historical reasons for DEP. For an extensive discussion on the viability of this methodology at the European level, see Courtney et al. (2001).

The factor-by-factor analysis was completed with a summarising assessment of a set of factors and their interrelationships, which helped to characterise the differential economic performance of each study area and their 'dynamics'. It should be emphasised here that there was not *one single factor* to be considered in determining whether the study areas were performing well or less well; here *the interrelations* between factors that characterise DEP are the main focus. In several cases, it is difficult to indicate precisely the directions of the correlations between economic structure, values, behaviour and DEP

or even the circumstances under which they take place. Therefore, instead of trying to explain DEP, our intention is to identify correlations between factors and to propose a possible explanation for DEP. The 'dynamics of each region' will be briefly presented in the next section.

## 4. Differential Economic Performance in the periphery: the dynamics of Swedish rural areas

The criteria for choosing the Swedish case study areas are discussed below, followed by two sections on the dynamics of the two regions. Each region has a set of factors that better help to characterise the DEP. Despite the fact that the argumentation of this section looks mostly 'qualitative', it is in fact based on an extensive analysis of data from official statistics (sometimes quantitative) and interviews that when necessary are made visible to the reader. For more detailed information, see Bryden et al (2001).

The selection of regions and case study areas (matched pairs) was performed according criteria relating to 'contrasting economic performance', based on net-migration, (un)employment, population change, regional GDP, business start-ups and policy status. One region is in the North of Sweden, Norra Norrland, and another in Southeast Sweden, Sydöstra Sverige. Within each of these two regions, a study area set has been selected – a Well Performing area and a Less Well Performing (Table 1). The Northern Swedish region was in Objective 6 during 1995-1999, and is currently in Objective 1. The Southeast Sweden region was an Objective 5b area during 1995-1999, thereafter it was in Objective 2. The region of Southeast Sweden is entirely classified as 'significantly rural' according to OECD criteria. In the North Swedish region, all municipalities are also 'significantly rural' except for Gällivare, which is 'predominantly urbanised' (mining town). It was decided to use the denominations, 'Well Performing' or 'Less Well Performing' to avoid other labelling denominations used in other studies that often dichotomise the study areas (using either "god" or "bad" subjective value labels), such as Lagging areas and Leading areas. Moreover, in the Swedish case, the choice of study areas with contrasting performance was rather difficult, particularly in northern Sweden. The data suggests that there are no dramatic differences in performance between the municipalities, as virtually the whole northern region has for decades experienced chronic unemployment problems and population out-migration. In this sense therefore, the definition of lagging and leading would not be suitable in the Swedish case.

Table 1. The regions and study areas

Regions	North Sweden	Southeast Sweden
'Well Performing' WP	Storuman, Sorsele &	Kinda, Boxholm, Ödeshög,
	Lycksele	Ydre & Aneby
'Less Well Performing'	Överkalix Pajala &	Hultsfred & Vetlanda
LWP	Gällivare	

#### 4.1 Dynamics in North Sweden

Findings show that the study areas in North Sweden differ in terms of the availability and use of natural resources and landscape, human resources, investments and in the capacity to build networks. Aspects related to quality of life are judged to be very similar for North Sweden. The dynamics of these areas are illustrated below in three themes and in Appendix 2, which summarises the interaction of these factors for each study area in terms of strengths and weaknesses.

#### - Natural resources, traditional economic structure<sup>8</sup> and links of dependence

The economy of the North Sweden region can be characterised as having a long dependence on natural resources (either as raw material or experience/use of landscape) and more recently, on the public sector. North Sweden's natural resources (ore, timber and hydro-power) have largely formed the basis of Sweden's wealth and economy during this century. If one goes back to the history of the region, one realises that the links of dependence go back to the 14<sup>th</sup> century and that its economic exploitation has always been imposed by harsh climate and physical conditions. The original pursuits of hunting and fishing were combined with small-scale agriculture and an early concentration on livestock farming; later on the cultivation of grain occurred. However, these activities were to a significant degree dependent on the climatic circumstances needed for agriculture. In the 17th century the north of Sweden was still seen as an 'exotic' area. In the middle of the 17th century, the use of the region's ore started, but not until the exploitation of iron and copper ore in Gällivare in the late 19th century, did mining gain real importance in the region, particularly for the LWPN – Less Well Performing North area. Improvements in the infrastructure made the large-scale exploitation of natural resources possible but this did not lead to the region's economic dynamism in national terms. The region's links of dependence perpetuated through the formation of the Swedish welfare state, since North Sweden was regarded as a deprived and dependent area. In the mid-1960s, regional policy was introduced and the region became a receptor of public funds. Institutional channels were built to draw investments to the region lately the WPN – Well Performing North area has succeeded better in this role than the LWPN. The decentralisation of public institutions from the central regions combined with the need to keep people from moving out resulted in the growth of the public sector in the remote areas of Sweden. The proportion of those publicly employed in the region is significantly greater in North Sweden when compared to the country as a whole, being some 11 per cent greater for women and 8 per cent for men. Most striking is not the fact that the LWPN area had the highest unemployment figures of Sweden, but rather that it exhibited one of the highest figures for long-term unemployment, at least higher than the WPN (SAF, 1999).

Latterly, new sectors, few of them still based on the existent resources, such as tourism, have gained in economic importance. Even though modern sectors remain in a rather embryonic stage in the study areas, they seem to give 'a modern face' to the region, including space technology, telecommunications, medical technology, energy and environmental research. Tourism activity has always had a stronger potential in the WPN area than in the LWPN area, since the former is constituted by a privileged landscape (*fjällen*). Figures from SCB (2001) show, for instance, that the WPN area performs better than does the LWPN in terms of the available capacity of tourism infrastructure and use.

The differences between the studied areas are not limited by their original potentialities, but rather to the way in which people see them from a future perspective. The WPN area seems to be dependent on natural resources in a traditional way though it also has a tradition of seeing them in a more creative way, through tourism, for instance, or at least through the promotion of 'quality products and services' (Ilbery and Kneafsey, 1998). As exemplified by this respondent, natural resources are more often perceived as an asset for the tourism industry in the WPN than in the LWPN:

'The natural resources such as raw goods are not so very different from those in the rest of Sweden, but there is a special environment here. The environment can be offered to our customers for training centres and conferences – and as such, that is appreciated - people think that it's fun to drive snow scooters even if they have to drive in a line with a leader ahead and 40 scooters behind, 'tooting' their horns. They consider it great fun anyway. They tell their friends, 'It's fun to travel to Lycksele for training centres and conferences, 'and that's the way the word is spread. Nature is one of the assets we have here. One has become more 'service-minded' every year that passes, every year it just gets better and better and one can find more adventuresome facilities here now than there were ten years ago. It's happening in the entire part of North Norrland, that people are beginning to understand that you can attract tourists to come here and pay for things, if we just organise ourselves' (Entrepreneur, WPN).

#### - Remoteness, chronic demographic imbalances and cultural and economic isolation

The region's peripheral location in relation to the main centre in Sweden and Europe associated with chronic demographic imbalance has contributed over the centuries to its cultural and economic isolation. In comparison with the WPN area, the LWPN area has the disadvantage of being the northernmost Swedish part of the territory, and thus faces large obstacles related to its geographical isolation. Although policy measures taken in the 1960's were set to decrease 'market failure' or the disadvantages related to its location, the region still faces higher costs of production (consumers/subcontractors far way, difficulties in attracting a skilled labour force) than does the rest of Sweden. Differences in DEP between the WPN and LWPN areas can thus be partially related to differences in competitiveness determined by the remote geographical location (Bryden et al, 2001). Such geographic isolation could possibly be made less burdensome if population reduction was not also a constant challenge for the region's economy and welfare. The population development of the region over the past 50 years shows large differences between the WPN and the LWPN areas (SCB, 2000a). One reason for this disparity could lie in the different economic bases of the two regions and, hence, in their variable vulnerability with regard to the decline of certain sectors. During this process, the study areas have reacted differently not only in the volume of population moving out but also concerning the type of groups that leave. One example of this is that the LWPN area is known for having a deficit with regard to its young female labour force since they have no other choices than to move out to study or work, as the local labour market is predominantly restricted to males. Pajala, one of the LWPN municipalities, is nationally known for its deficit in women. In 1999, for every three people moving out, two were female between the ages of 18-24 (SCB, 2000).

Small culture differences between the areas also play a role in this process. The idea that the each individual has an important role to play in the local process may not be a common characteristic of the study areas. One reason for that might be related to the fact that the whole Northern region has been characterised by strong left wing ideas, dominated by the Communist/left party and the Social Democrats, where the concept of 'class' has always overcome the concept of the 'individual'. But there are differences one example being the difference in political preferences between the study areas. While the WPN has had a variation of political parties composing the majority in the municipal council since the 1970's, the LWPN area consistently opted for a more stable left wing majority. Another example here is the striking difference in opinion found between entrepreneurs in the WPN and LWPN areas. Entrepreneurs in Pajala and Överkalix and, to a lesser extent, in Gällivare (all LWPN municipalities) judge the infrastructure as unacceptable (Figure 2).

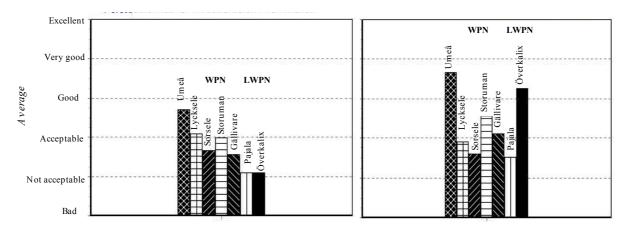


Figure 2. Infrastructure in the municipalities according to entrepreneurs (a) and municipal politicians (b).

Source: SAF, Företagarenkät, SAF/Demoskop

There are also differences in how well valued individuals are by their role as *eldsjälar* or, in other words 'community entrepreneurs' as defined by Johannisson et al., (1989). They are individuals working locally and who are strongly attached to community development and community well-being (see also, Johannisson and Bång, 1992). This may also explain the variations between areas regarding the local actors' efficiency in starting new businesses, building networks, creating an overall better business climate and struggling for investments in the area. The WPN area seems to be more outwardly based. Interviewees in the WPN area also pointed out more often that they saw EU membership as being more positive than did those in the LWPN area. Institutional barriers are also seen to exist by the interviewees more often in the LWPN area than in the WPN area.

#### - Values, self identity and entrepreneurship

Any discussion about the identity of North Sweden must take its historical process of settlement into consideration. The settlement of this enormous region was not always a harmonious one, and was far from being free of conflict. This process was often based on impositions from central government, from language standardisation ('Sweden-isation' of the territory) to land invasion originally 'owned' by the region's original inhabitants. One

can affirm that the region has several different regional identities as a result of, among other things, each group's struggle for survival as a group over the centuries. The region of North Sweden is 'a melting pot' of Sami, Finnish and Swedish culture, all of which have roots in the historical development of the region and thus still affect its selfunderstanding. Besides, the region also benefits from a rich cultural exchange in the Barents region, i.e., the northernmost counties of Sweden, Norway, Finland and northwestern Russia. With so many cultural influences, the region seems to be continuously in search of a clearer and less diffuse identity. The diffuse identity is important, not so much in itself, but in the way it is used or perceived as a resource or an obstacle. At the individual level, the interviewees have not always perceived this diversity as a positive characteristic. Interviewees indicate through their histories negative auto-stereotypes of themselves that may influence their action and expectations in the future, as already mentioned by Sabel (1993). Collective identity nevertheless remains diffuse, and is certainly composed of a combination of several influences that are rarely associated with their municipality. This diffuse identity may also be related to the fact that people living in North Sweden are relatively more mobile than those in the rest of Sweden – for both social and work reasons. This mobility however flags up the risk of creating individuals with a low attachment to local community issues imposed partially by daily life routines - thus, geographical identity may be a function of where the person lives and works.

Moreover, differences in political preferences combined with the area's traditional economic structure plays an important role in defining differences in mentality. Large forestry industries and mining enterprises created a culture of dependence between 'big lords' (*storherrarna*) and employees – a polarisation that militates against social cooperation and this is something that has undoubtedly contributed to the lack of tradition regarding activities that require the more individualistic type of behaviour (or a specific type of personality, as pointed out by Miner, 1997) that stimulates entrepreneurship. This seems to be true especially for the LWPN area (similar results were found by Danielzyk and Wood, 2001 for English and German study cases). People in the WPN revealed a more individualistic but co-operative behaviour than did their counterparts from the LWPN.

Regardless of the study area, interviewees believe that outsiders ('people in South Sweden') have a negative picture of North Sweden, often reinforced by the Media, as pointed out by this Public Official:

'We are known to be quiet, and very thorough with everything and dependable. That is correct about the 'thoroughness and the dependability', but as for being quiet, there are some who are and some who aren't. What is unfortunate is the film 'The Hunters', which gives a picture of the northerner, which is absolutely untrue. The film was perhaps ironic, I don't know. People seem to believe it though, and think that our culture is lawless, that we have a view about women that is terrible. That is certainly not good. It is difficult to change. It is the way things are: if you have negative publicity, a negative picture of things, it's terribly difficult to find the positive' (Public official, WPN).

In other cases, they believe that this outside-image fits to the reality. 'Jante lagen' is strong there', which generally translates as, 'envious behaviour between locals', or in

other cases, 'dependents of the system' or a low skilled labour force with no perspective for the future. These differences in values are considered as an important if not the most important factor that together with the most tangible ones explain why there are still differences in North Sweden with regard to DEP despite the efforts made through policy measures.

#### 4.2 Dynamics in Southeast Sweden

The study areas differ from each other most in terms of infrastructure (particularly as regards communications) and investments as well as in certain aspects of the local culture. The most important factors that help to trace DEP in Southeast Sweden are related to human resources, investments, networks and, to a lesser extent, infrastructure, economic structure, market performance and culture. The interactions of these factors are presented in the illustrated themes presented below, and summarised in terms of weaknesses and strengths in Appendix 2.

#### - Independence, depopulation and entrepreneurial spirit

The region of study Southeast Sweden does not consist of a homogeneous geographical and cultural entity. In the past, the region was a powerful centre as local dynasties, and families that were important driving forces in the development of the Swedish kingdom resided in the area. These families were closely connected to the church, which thus attained a strong position in the region from quite an early stage. This religious component has always been part of the region's identity, and it culminated with the 'Free Church-oriented society' in the northern part of Småland in the 19<sup>th</sup> century (which includes part of the WPSE – Well Performing Southeast municipalities). Moreover, the region's location afforded the possibility of trading and for the development of close cultural connections with the neighbouring countries. During the struggles of the late Middle Ages until the end of the Swedish-Danish wars in 1677, the local people developed a strong self-confidence, which resulted from their success in negotiations with the central power. This relative independence can also be seen in the so-called Dackefejden of 1542, a revolt of farmers against the growing central power, one of the biggest in Swedish and Nordic history, which was initiated in the Småland frontier area.

In the 19th century, a general expansion in terms of population accompanied by increased agricultural productivity took place, which had long-lasting consequences for the region, as the gap between population growth and livelihood widened. In the period 1815-65 in particular, the population increased substantially, leading to considerable out migration to Denmark and Germany and later, to USA. In the 1850s, the United States was the main destination of out migration, and the famine of 1867-68 in particular contributed to the massive wave of migration to North America, which eventually culminated in the 1880s. Indeed, as regards this migration process, parts of Småland provided one of the most enduring examples of emigration to America during the period 1860-1930, with a loss of 50 percent of the total population. It took almost 100 years for the rural areas of the region to recover and to reach their former levels of population. The population development in the different counties of the region of Southeast Sweden over the past 50 years basically follows the pattern outlined below. Initially there was a population decrease in the 1960s up to the early 1970s and thereafter a more positive development may be recognised (SCB, 2000). However, the traditional branches of the economy have

lately seen weak performance with a concomitant knock-on effect on employment. Moreover, this has not been compensated by positive developments in other more expansive branches, thus leading to large flows of out-migration.

The past has certainly influenced the way in which Southeast Sweden is known in comparative terms across Sweden – as 'an independent region' – always receiving very little help from the central government and latterly, from the EU (especially when compared to the northernmost regions). This has been part of the region's identity as stated by several respondents:

I have felt this, as an inhabitant of Småland province. The Smålanders have never got anything for free. We have always been prepared to drudge and toil for our way of living, and being able to live where we want. We want to maintain what we have. That is why I have the position I do today and try to forge together various authorities and pull them in the same direction (Local entrepreneur, WPSE).

Put a Smålander on a boulder in the sea and he will manage. Another sign of a Smålander is that he only opens his wallet to put money into it... (Representative of a local organisation, WPSE).

At the study area level, the WPSE is the one that manages to acquire more public resources, which signals the existence of local/private capital that attracts more investments, a s well as local actor capacity to organise themselves with regard to receiving these investments. This indicator includes the (at current time of writing) last year's national budget (Aggefors & Bodevik, 2000), EU projects (NUTEK, 2000a; 2000b), Agriculture and Industrial investments in the 1990's (Jordbruksverket, 1999, SCB, 2000). It is difficult to assess how these differences in investments between the study areas affect their capacity to do business. The areas also differ as regards other indicators that indicate long-term economic stability. Findings from the shift share analysis show that the employment reduction for both areas is due the negative national trend during the 1990's. As with many other parts of Sweden, the public sector and most traditional activities such as agriculture, forestry, and mining, faced rationalisation throughout the 1980-1990's, with consequent structural changes that often led to unemployment. While the WPSE area has a predicted employment change similar to the actual one, the LWPSE area, suffers from not only of a less favourable industrial structure but also from a constraining local context. Nine out of ten sectors have decreased the total number of employed persons during 1990's. The largest losses were concentrated in agriculture, the construction sector, manufacturing, forestry, and other non-specified sectors.

European Journal of Spatial Development-http://www.nordregio.se/EJSD/-ISSN 1650-9544-Refereed Articles Oct 2003-no 7

Table 2. Political majority in the municipal council in WPSE and LWPSE areas, 1973-1998

		1973	1976	1979	1982	1985	1988	1991	1994	1998
	Aneby	В	В	В	В	В	В	В	В	В
WPSE	Boxholm	S	S	S	S	S	S	O	S	O
	Kinda	В	В	В	В	В	O	O	O	O
	Ydre	В	В	В	В	В	В	В	В	В
	Ödeshög	В	В	В	В	В	0	0	0	0
LWPSE	Hultsfred	В	В	0	0	0	0	0	S	0
	Vetlanda	S	S	S	S	S	0	0	O	0

S = Social democrats and left party

Among the less tangible factors, differences in local culture between the study areas may explain at least in part differences in economic performance. The first one refers to differences in political preferences between the WPSE and LWPSE areas and in particular the way in which the national and regional political frames of reference are adapted locally. The leading areas could be characterised by a more individualistic culture, based on the historic role of small property farmers (that knew how to cooperate) to more collectivistic ideas rooted in a more traditional manufacturing-related culture of the LWPSE area. The WPSE tend to be dominated by conservatives (with the exception of Boxholm) while the LWPSE varies by having Social Democrats as the majority in the municipal council and occasional undefined majorities at other times (Table 2). The individualistic-conservative type of culture, which dominates here, also seems to be based upon linkages of trust between local actors through close contacts, cultivated through, among other things, the Church.

#### - Periphery in transformation: from sawmills to hard rock

The region has its socio-economic structure signified by a dependence on the primary and secondary sectors (agriculture, forestry and manufacturing industry) while other types of industry and the private service sector are underrepresented as compared to Sweden as a whole. The manufacturing sector receives a significant contribution from forestry and the timber industry. Sawmills, pulp mills, the paper industry, and factories manufacturing wooden house parts have thus become the backbone of the regional economy over the past few decades. Findings from Persson and Ceccato (2001) however show that there are differences between the study areas. Well performing areas tend to be included in clusters composed of traditional private business, especially in SE Sweden, while lagging areas tend to be part of clusters in which the public sector (State, county or municipality) is responsible for most of employment.

B = Conservative party and Liberals

O= Undefined majority (less than 50 per cent of either S or B)

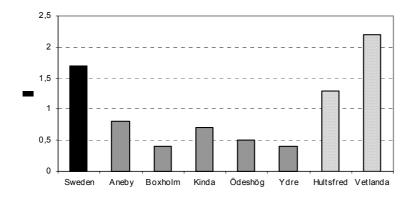


Figure 3. Long time unemployment 1997 (>100 days unemployed labour force)
Left to right: Sweden, WPSE region (Aneby, Boxholm, Kinda, Ödeshög, Ydre) and LWSE (Hultsfred, Vetlanda).
Source: SCB, 1999.

In the LWPSE, where the unemployment rate has constantly being high and depopulation has been endemic in recent decades (Figure 3), the emergence of new economic branches have been a positive reaction to this negative trend and are now regarded as part of the solution to the area's economy. In the WPSE, tourism activities are now emerging strongly, giving clear signals of the renewal of the local economic structure. However, the most interesting example is certainly the case of Hultsfred (LWPSE), which has witnessed the progressive development of a non-traditional branch based on music and the culture based-industry, which seems (from its beginnings in the early 1980's) to have rescued the 'future' for those living there. Rock City is the trade name for a set of activities that are associated with the music/IT/experience industry. This became an entrepreneurial cluster that initially started with the organisation of a nationally renowned rock festival (the Hultsfred rock festival) that subsequently led to the establishment of several other activities, including research, and education in the music/IT/experience industry branch that is unique in Sweden. The municipality has recently received from Government the assignment of creating an industrial development centre for the Swedish music industry.

#### - Values, attitudes and local conflicts

In the past, religion and politics were united driving forces in the development of the SE Sweden region, mostly in the WPSE area (part of Småland). Interviewees in the WPSE area confirm that the area has many religious groups. People were generally cognisant of the existence of religious groups, events and other gatherings supported by these organisations. They also believed that religion is often a factor that helps to 'bring people together'. Although they are often more conservative, people are willing to co-operate and built networks. Interviewees living in the WPSE area are clearly more confident about their identity (what they and others feel/think about themselves). The local identity has a lot to do with the traditional label of 'being a *Smålänning*', which often stands for 'capable, hard-working, stingy, creative people', but also for aspects of the basic

economic structure, or aspects related to local traditions, such as, the strong perpetuation through generations of the Folk sagas and legends.

The whole of Southeast Sweden has a relatively positive attitude towards entrepreneurship (as compared to other parts of Sweden). However, these communities are far from being free-of-conflict. They are also characterised by facing many battles that are not always solved internally. One example being the conflicts between newcomers (particularly, foreigners) and the native population, especially in the LWPSE as is illustrated by this respondent:

**Conflicts here?** There are some conflicts among the Swedes and the immigrants. In Stora Haga many immigrants feel segregated. ...(Entrepreneur, LWPSE).

Other examples involve conflicts between known traditional branches (farmers and those working in manufacturing) or between modern and traditional branches. Besides the traditional political divergences alluded to above, and illustrated in Table 2, there are conflicts between the main centre and the communities belonging to municipality. Certainly, what creates the difference between the WPSE and LWPSE municipalities is not the lack of conflicts *per se*, but rather having 'the right mentality' to transform these divergences into something more positive for the local economy.

#### 5. Conclusions, policy and research implications

#### 5.1 Concluding on DEP in Swedish peripheral rural areas

A comparison of the two regions shows that natural and human resources, infrastructure, economic structure and investments (tangible) are still important factors for development, but that historical legacies, community values and the capacity to build networks (less tangible) are decisive factors in better understanding DEP for the Swedish regions. *Natural resources* have always been a more significant determining factor for the economy of North Sweden than for that of Southeast Sweden. North Sweden has an abundance of natural resources, mostly forestry, water and ores that is unchallenged by any other Swedish region. However, a large share of its territory is composed of reserves, protected rivers and forests that are still under-exploited for 'experience' tourism purposes.

Both study areas have problems in preventing their populations from simply moving away. This is a chronic problem in North Sweden that associated in particular with extremely sparse and ageing populations; and it explains to a large extent the historical lack of economic dynamism in the region. The disadvantages in terms of *human resources* suffered by North Sweden are also added to by the additional burden of having a relatively poorly educated labour force and by the permanent out-flow of the young (female) labour force towards the larger regional centres, given the lack of available opportunities available to them.

Linked to these obstacles regarding human resources is the problem of 'peripherality' itself, something which fundamentally impacts upon both regions. Southeast Sweden has

a larger and more diversified transport *infrastructure* than that of North Sweden, but both regions report problems with road network maintenance. The remoteness of North Sweden is a factor that plays against the transport infrastructure and directly affects the capacity of local enterprises to compete in national and international markets.

The traditional *economic structure* (highly dependent on exports) associated with a strong dependence on State activities as the source of employment made North Sweden more economically vulnerable than the Southeast region. Linked to this, Southeast Sweden's proximity to larger labour market areas, and to large regional university centres, which allows for the integration of local labour markets into areas of 'greater economic dynamism', is one of the regions' major advantages.

Another factor that goes some way to explaining DEP, is the disparities found in *funding or investment* for development purposes between the study areas. The North Sweden region can be regarded as a 'winner' in terms of national and EU investment – but this also means that the region's links of dependence are stronger than those in the Southeast. Therefore, the role of *institutions* is also important in determining the flow of investment – in this sense, North Sweden has, since the 1960's, had a long tradition of being more apt to search for funds and consequently, of attracting more private investment. However, at the study area level, institutional barriers at the local and regional levels in North Sweden are perceived as being larger than those in Southeast Sweden, which certainly creates obstacles for the region's development.

Differences in *community* values are also evident between the regions. While Social Democrats and left wing politicians in municipal councils dominate North Sweden, a more diversified political majority is to be found in Southeast Sweden. This is followed by a negative-attitude towards EU membership in North Sweden and a relatively positive-attitude in Southeast Sweden. The South- east region is also more diversified in terms of ethnic groupings. The label 'individualistic, co-operative behaviour' fits more comfortably into images of Southeast Sweden than it does in North Sweden, where a strong 'collectivistic consciousness' predominates. In general terms, Southeast Sweden has a more outward looking attitude, and is ethnically and politically more diversified than is North Sweden.

'Aspects of culture' and a 'willingness to build *networks*' are strongly related to economic performance in the study region not in the *collective sense*, but rather in the *individual one*. This means that the importance of local culture as an explanatory factor of DEP relies on a specific group of people that individually 'make the difference' to the area. They work in a more institutionalised fashion in North Sweden than they do in the Southeast, where traditional forms of networks still function (familiar, religious, etc) in combination with other *Institutions*. Thus, well performing areas would have more individuals that can be regarded as 'community entrepreneurs' than the lagging ones. Lagging areas would instead have more individuals that have a poor image of themselves and/or of where they live (e.g., Jantelagen spirit).

These findings reinforce the need to refocus regional policies on the broader context, that is to say, beyond the sectoral and small-scale measures that are expected to stimulate development. And more importantly, these results elucidate the impact of long-term trends on the economic structure of the regions, and in particular on local culture and image, the positive development of which are fundamental in preventing entrepreneurs from re-locating away from the area and for stimulating 'the right culture' for the establishment of new businesses.

#### 5.2 Policy implications towards peripheral rural areas

The analysis of DEP in rural areas in Sweden suggests that there is at least a threedimensional variation between the areas. Firstly, the economic performance measured in GDP or similar per capita, varies considerably, but much more due to the presence of valuable natural assets – mineral, energy – in some areas than due to the productivity of the labour force and differing investment rates. Secondly, the performance of the local labour market differs, whether this is measured as unemployment rates or labour activation rates for different segments. However, it should be noted that the national labour market policy levels out much of the variation measured this way, between local labour markets in Sweden. The differing rates of freedom of choice for the individual is subject to a larger variation, shown for instance by the fact that the public sector has a dominating role as an employer particularly in the Northern regions, even in the well performing areas. The size and diversity of the local labour market, which is very difficult to change by means of policy, is decisive for the freedom of choice at the individual level. Thirdly, there are significant differences in the performance of the service infrastructure and supplies between the regions studied. This plays a role in keeping people from moving out. Again the Northern regions stand out as vulnerable to cut backs in public services, and also for having accessibility problems of quite another dimension than those of the SE regions. Given this three-dimensional specification of the DEP, we suggest that a strategy for each of the regions has to take these differences into consideration. We thus suggest a dual regional policy design, with one set of measures aimed directly at encouraging economic growth and the better functioning of the regions, and another set aiming at equalising the living conditions for the population. The suggestions are not intended to be directly applicable to rural areas all over Europe rather they should be seen as guidelines for peripheral areas that face similar problems to those of Sweden.

The first set of measures – for stimulating economic growth – consists of (a) structural efforts and (b) stimulation of endogenous growth.

(a) The structural measures should be directly aimed at improvements in accessibility through the communications infrastructure. In the Southeast Sweden study areas, the road infrastructure and the public transportation network should be seen to be of particular importance in such a strategy, in order to make possible the 'enlargement' of the local commuting area and to get these rural regions into closer contact with regional centres with a much more varied labour market and modern industrial sectors within the new economy.

In Northern areas, this strategy will have a limited effect because of the long distances involved. Here, a modern ICT-infrastructure has to be created by means of public intervention. The future development of these regions into a modern knowledge based economy depends on the availability of modern technology to overcome geographical distances.

(b) The stimulation of endogenous factors should aim at improving the capacity of networks in the rural areas and between rural areas and urban centres. These networks have to be constructed around historical economic and cultural traditions grounded in each of the study areas. The improvement of the competence of the workforce is of utmost importance here. As we have seen, one characteristic of regions facing depopulation is that the skilled and educated are the first to leave. It is thus important to provide opportunities to increase the competitiveness and competence of those who remain. Resources ought to be available for the diffusion of 'best practices' and networking between regions. Community initiatives and innovative actions are important measures with a view to these needs.

The second element of the dual policy that we suggest regards measures to maintain the relatively equal living conditions between regions is deeply rooted in the Swedish welfare state tradition. The equality of living conditions includes transfers to local governments/municipalities for providing service transfers to individuals for compensating low incomes and several other measures. There is a significant need however for the better co-ordination of these efforts between differing sectors. There is also a need for reorganisation and for new technology to be used in basic services, particularly to cut costs and to improve quality and accessibility. This is a major and challenging task in the remote and depopulated regions.

Implementation of this dual strategy should be done co-operatively between local/regional actors and the State (including its National Boards for sector policy implementation – roads, labour market, higher education, etc), in order to adapt to local conditions, that is to say, according to the type, tradition and characteristics of the rural areas in consideration.

#### 5.3 Research implications

Despite the success of the present research in identifying the reasons for DEP at the study area level in Sweden, the need remains to perform a more detailed analysis, perhaps at the municipal level. Such a detailed analysis should focus on undertaking a critical analysis of local entrepreneurial spirit, focusing on the conditions for business development in rural areas, given employment reductions in the traditional sectors of economy.

Findings highlighted gender differences in the labour market of Swedish rural areas, in which women are often limited to activities within the public sector and men to mining, manufacturing and forestry industries, which were subsequently perceived as being predominantly 'male-based' – these are issues that should be further assessed as a research topic in its own right. Further knowledge is also needed in assessing changes in

gender roles given the structural adjustments that are taking place in certain Swedish rural areas (e.g., the enlargement of the Local Labour Market Areas)

Results from the Swedish case studies readily illustrate the importance of culture as an important factor in tracing DEP, highlighting the role of a specific group of individuals that independently make 'the difference' to the area. Moreover, the analysis of factors such as the role of *Community* and *Networks* highlighted some specific areas of research that would benefit from further and/or deeper analysis. One such example is the impact of religious groups in building the values of local communities – an aspect that was perhaps not deeply assessed in the current study. Our forecast is however that a rapid development will occur concerning the impact of less tangible factors on DEP, not only in the identification of new factors, but also in the gathering of deeper knowledge about how such factors affect economic processes. In this context, it is important to be able to report on the positive experience gained by using an exploratory methodology of analysis that combines tangible and less tangible factors to explain DEP, as was done in the current research.

The research approach — with a division into two regions each having two-study areas, has proved to be useful as a methodological framework for this exploratory project. The analysis shows that differing economic performance in rural areas in Sweden reflect differences in both the regional and the local contexts. The impact of not only the local and regional, but also of differing national contexts, on DEP in rural areas across Europe,

<sup>1</sup> An earlier draft of this paper was presented to the European Regional Science Association, *European Regional Development Issues in the New Millennium and Their Impact on Economic Policy*, Zagreb, Croatia, 29<sup>th</sup> August - 1st September 2001 and benefited from the comments from the participants.

<sup>&</sup>lt;sup>2</sup> DORA is a joint European project co-ordinated by Arkleton Centre, Scotland. Further information on DORA can be found on the project website at: <a href="http://www.abdn.ac.uk/arkleton/dora1199.htm">http://www.abdn.ac.uk/arkleton/dora1199.htm</a>.

<sup>&</sup>lt;sup>3</sup> The research teams decided on use of the term 'Less tangible factor' because there was common agreement that many factors could be regarded as partially tangible and partially intangible, especially regarding the type of data and approaches (quantitative and qualitative) used in the analysis. Thus, in order to capture such complexity, the term 'Less tangible' was judged to be more suitable than 'Intangible'.

<sup>&</sup>lt;sup>4</sup> 'Institutions' here refers mainly to public sector institutions, specifically to states, government and governance in the local arena, within the framework of the EU. It is seeking to get at the ways in which activities of different levels and layers of government facilitate or hinder local economic development, especially, but not only, in relation to the private sector and community initiatives. The basic hypothesis is that by bringing government closer to the people governance can be made more responsive and effective. In this study, this was assessed through three basic attributes: Institutional autonomy; institutional co-operation; and, Institutional responsiveness and efficiency.

<sup>&</sup>lt;sup>5</sup> Two types of networks are assessed: the formal and informal ones. Emphasis is also given to the so-called internal and external networks; that is to say, internal networks are those that take place between any group of individuals within the local community. External networks, on the other hand, relate to those involving a process of information and exchange between members of the local community and the outside world, whether it is the region, country or the international community. Based on these assumptions, our initial hypothesis was that 'strong, efficient networking activities, whether spatially proximate or otherwise, within, and between, the various sectors of economy and society aid local economic development through the exchange of information, ideas and the processes of innovation'.

<sup>&</sup>lt;sup>6</sup> A new element in this project has been the involvement of practitioners (policy makers, rural development actors) in small national steering groups to assist with the development, implementation, interpretation and dissemination processes. These meetings have provided an opportunity to discuss results and obtain a group perspective on them, which could well provide teams with additional insights, and indeed provide another perspective on the findings.

<sup>&</sup>lt;sup>7</sup> It should be noticed that the selection of regions and study areas was done in the same way in all countries participating in the DORA project. This two-by-two principle was applied in order to ensure coverage of the variation of rural areas within Europe and to allow for international comparison. In this case, 'business start ups' was measured by number of enterprises per 1000 inhabitants (1992-1998) while 'Policy status' indicated whether or not the area was covered by any Objective Areas of the EC support programme.

<sup>&</sup>lt;sup>8</sup> By economic structure we mean how economic activities, production, processes and enterprises are organised and how they interact, which consequently affect employment opportunities. The analysis of economic structure and organisation provides insights into the following: the structure and evolution of employment by sectors and branches, the mix of branches diversification/specialisation, and inter-sectoral relationships in the local economy. This factor also includes structure and evolution of enterprises and their degree of integration to the local and national economy.

<sup>&</sup>lt;sup>9</sup> In Scandinavia there's a term for fear of success 'Jantelagen' (The Jante Law), which has its roots in the book by the Danish-Norwegian author Aksel Sandemose. Loosely translated, 'Jantelagen' is used as synonym of 'Don't think you're anyone', an attitude that may hinder any type of personal initiative, such as the one needed for entrepreneurship. In this study, the interviewees associated this term with the envious feeling among neighbours: locals that prefer to do favours for someone else outside their community, so as not to give their neighbour the possibility of being someone better than themselves. This it is suggested often happens among entrepreneurs working in the same branch in one of the LWPN municipalities.

is thus gradually becoming better understood, and is thus now yielding up the more informed data needed by policymakers at the EU level.

#### 6. References

Aggefors K.; Bodevik K, (2000) Stadsbudgetens regionala fördelning, Rapport 17, NUTEK, Stockholm background report for: Näringsdepartementet, 2000.

Bryden, J.; Timm, A.; Courtney, P.; Atterton, J.; Hart, K.. Schrader, H.; Hachmöller, G.; Koch, B.; Masurek, L.; Efstratoglou, S.; Papadopoulos, A.; Efstratoglou, A.; Kouroussi, E.; Persson, L.O. & Ceccato, V. (2001) *Dynamics of Rural Areas (DORA). Final Report*. With the financial support of the European Commission (FAIR6-CT98-4162). The Arkleton Centre for Rural Development Research, University of Aberdeen, UK

Ceccato, V.; Persson, L. O. 2002 'Dynamics of rural areas: An assessment of clusters of employment in Sweden.' *Journal of Rural Studies* 18:49-63.

Courtney, P; Atterton, J; Ceccato, V (2001) 'The DORA project – methodological considerations at the European level.' Paper presented for *the 5th Conference of the European Sociological Association, 'Visions and Divisions'*, RENCORE Research network, August 28-September 1, 2001, Helsinki, Finland.

Danielzik, R.; Wood, G. (2001) 'On the relationship between cultural and Economic aspects of regional development: some evidence from Germany and Britain.' *European Planning Studies*, 1:70-83.

Davidsson, P. (1995) 'Culture, structure and regional levels of entrepreneurship.' *Entrepreneurship and regional development*, 7:41-62.

Doeringer, P. B. (1990) 'How intangible factors contribute to economic development: lessons from a mature local economy.' *World Development*, 9:1295-1308.

Fontana, A.; Frey, J. H. (1994) 'Interviewing: the art of science.' *In Handbook of Qualitative Research*, in Denzin, N.K. and Y.S. Lincoln (London, SAGE), 361-376.

Fuller, T.; Nichol, P. (1999) Dynamics of the new rural economy: an exploration of community-sponsored research from Huron County. Chapter 2, Guelph, ON: University of Guelph.

Granovetter, M. 1985 'Economic actions and social structure: the problem of embeddeness.' *American Journal of Sociology*, 3:481-510.

Ilbery, B.; Kneafsey, M. (1998) 'Product and place: promoting quality products and services in the lagging rural regions of the European Union.' *European urban and regional studies*. 4:329-341.

Johannisson, B.; Persson, L.O; Wiberg, W. (1989) *Urbaniserad glesbygd – verklighet och vision*. Stockholm, Arbetsmarknadsdepartementet, Ds 22, Stockholm.

Johannisson, B.; Bång, H. (1992) *Nyföretagande och regioner, modeller, fakta, stimulantia*. Stockholm, Arbetsmarknadsdepartementet, Ds 79, Stockholm.

Jordbruksverket, (1999) 'Jordbruksstödens storlek och fördelning i Sverige, EU och OECD,' Rapport 1999:2, p. 9-37.

Kilkenny, M. (1993) 'Rural-urban effects of terminating farm subsidies.' *American Journal of Agricultural Economics*, 75:968-980.

Kilkenny, M. (1998) 'Transport costs and rural development.' *Journal of Regional Science*, 8:293-312.

Leat, P.; Williams, J. B. (2000) 'Rural competitiveness through quality and imagery across lagging regions of the European Union.' International Conference: European Rural Policy at the Crossroads, Aberdeen, Scotland, 2000.

Maillat, D. (1998) 'Innovative milieux and new generations of regional policies.' *Entrepreneurship and regional development*, 1:1-16.

Miner, J. B. (1997) 'A psychological typology and its relationship to entrepreneurial success.' *Entrepreneuship and regional development*, 4:319-334.

NUTEK, (2000a) EU project database, (http://saturn.nutek.se/cgi-bin/natdb/natdb.sh)

NUTEK, (2000b) Database on regional distribution of the state budget. (www.nutek.se)

OECD (1996) Territorial Indicators of Employment: Focusing on Rural Development, Paris: OECD, 184p.

Persson, L. O.; Ceccato, V. A. (2001) *National Report of DORA: Dynamics of Rural Areas* (FAIR6-CT98-4162), Stockholm, Nordregio, 159p.

Philip, L. J. (1998) 'Combining quantitative and qualitative approaches to social research in human geography – an impossible mixture,' *Environment and Planning A*, 30:261-276.

Putnam, R.D.; Leonardi, R.; Nanetti, R.Y. (1993) *Making democracy work: civic traditions in Modern Italy*, (Princeton: Princeton University Press).

Reimer, B. (2000) 'Leading and lagging sites in rural Canada,' paper presented at the International Conference: European Rural Policy at the Crossroads, Aberdeen, Scotland, 2000.

Roberts, D.; Thomson, K. J. (2000) 'Sources of structural change in peripheral rural areas: the case of the Western Isles, 1988/89 to 1997,' paper presented at the International Conference: European Rural Policy at the Crossroads, Aberdeen, Scotland, 2000.

RUREMPLO, (1999) Agriculture and employment in the rural regions of the EU. FAIR-CT96-1766, (http://europa.eu.int/comm/research/agro/fair/en/nl1766.html)

Sabel, C.F. (1993) 'Studied trust: building new forms of co-operation in a volatile economy,' In: R. Swedberg (ed.) *Exploration in Economic Geography*, (New York: Russel Sage Foundation).

SAF – Svenska Arbetsgivareföreningen (The Confederation of Swedish Enterprise), (1999), *Lokalt företagsklimat undersökning*, (http://www.svensktnaringsliv.se/extern/start/index.asp)

SCB – Statistiska centralbyrån (Statistics Sweden), 1998-2000, Sveriges databas (Database of Sweden), Statistiska centralbyrån, (www.scb.se)

SCB- Statistiska centralbyrån (Statistics Sweden), (2001), Available capacity of tourism infrastructure/ Use of tourism infrastructure. Statistiska centralbyrån, (www.scb.se)

Schneider, G.; Plumper, T.; Baumann, S. (2000) 'Bringing Putnam to European regions on the relevance of social capital for economic growth.' *European urban and regional studies*. 4: 307-317.

Terluin, I. J. (2000) 'Theoretical framework of economic development in rural regions', paper presented at the International Conference: European Rural Policy at the Crossroads, Aberdeen, Scotland, 2000.

Terluin, I. J.; Post, J. H. (2000) 'Employment dynamics in leading and lagging regions of the EU: some key issues', paper presented at the International Conference: European Rural Policy at the Crossroads, Aberdeen, Scotland, 2000.

The Cork declaration (1996) (http://www.rural-europe.aeidl.be/forum/forum2/corde-en.htm)

Westlund, H.; Westerdahl, S. (1996) *Contribution of the social economy to local employment*. The Swedish co-operative institute, the Swedish institute for social economy (<a href="http://www.socek.se/material.html">http://www.socek.se/material.html</a>), 102p.

Wong, C. (1998) 'Determining factors for local economic development: the perception of practioners in the North West and Eastern Regions of the UK.' *Regional Studies*, 8:707-720.

## Appendix 1. Analysis of tangible and less tangible factors

Tangible factors, subject to empirical analysis by means of official statistics generally for the period 1990-2000	Less tangible factors, surveyed by semi structured interviews in April and May 2000
Natural resources - Availability of natural resources - Environmental legislation and planning restriction  Human resources - Demographic structure and evolution - Labour force structure and participation rates - Human capital	Institutions - Institutions autonomy - Institutional co-operation - Institutional responsiveness and efficiency  Market performance - The capital market performance - Natural resources market performance - Market of good and services
Infrastructure - Transport infrastructure - Business-related infrastructure - Consumer-oriented infrastructure - Regional policy and decision making  Investment - EU structural funds - EU agricultural spending - National spending including transfers to municipalities - Spending of county councils and municipalities - Available resources from Regional Growth Agreements - RGA	Networks - Local embeddedness - Global communications - Information technology and innovation  Culture - Forms of community and identity - Religion - Values, beliefs and attitudes - Local traditions and history  Quality of life - Living standard and safety - Environment quality and recreation - Multi-culturality
Economic structure and organisation - Structure and evolution of employment by sectors of economic activities - The mix of branches and linkages in the local economy - Social formation of production	

Appendix 2. Summary of strengths and weaknesses by study areas

		d WEAKNESSES				
	Study areas: Sour		Study areas: Northern Sweden			
	WPSE	LWPSE	WPN	LWPN		
Structural assets	Strength: rich nature and traditional (agriculture) and more innovative use of natural resources	Strength: Good location in relation to Baltic countries  Weakness: relatively	Strength: better served by natural resources (water and mountains landscape)	Strength: Strategic place in relation to East-West and North-South perspective		
	Strength: good road links (E4), main corridor to South Sweden, Europe  Weakness: small	poor terrestrial transport links (highways) that lead to certain extent to isolation	Strength: Attempts in making a more innovative use of natural resources (e.g. Storuman)	Weakness: Extremely peripheral – high production costs and low business and labour force attractiveness.		
	municipalities, low diversified economy and dependence of other local labour markets		Weakness: Remoteness – the poor market performance in relation of other Swedish regions	Deficient transport infrastructure		
Endogenous growth factors	Strength: historical links between local affluent families and religion. Traces of a 'Free church oriented society'	Strength: The long industrial tradition (manufacturing and forestry based business)	Strength: Attempts in making a more innovative use of natural resources (e.g., Storuman)	Strength: Well-built public sector, creates jobs and helps to keep a balanced welfare all over the country		
	Strength: Closeness to larger labour market areas	Strength: fostering non-traditional branches, music and culture based industry, that attracts	Strength: A more positive attitude towards EU led to less institutional barriers and greater	Weakness: less cohesive social groups strong 'jantelagen' spirit		
	Weakness: small municipality size, weak taxation basic and greater receptor of transfers	also specialised post secondary education  Weakness: more apparent conflicts -	amount of EU funds  Strength: some social capital – more often individuals that 'make the difference'	Weakness: traditional economic structure created culture of dependence, 'big lords and 'workers' and lack		
		between locals, disbelieve in modern branches	Weakness: traditional economic structure	of entrepreneur-ship spirit		
Demography and quality of life issues	Strength: relatively low long term lost of population	Strength: better services supply since the urban areas are	<b>Strength</b> : The good living standard	<b>Strength:</b> Easy contact with nature, safe place		
	Weakness: past depopulation through emigration to	Weakness: lost of population since the	Weakness: less population outflow in regional terms, labour force	Strength: relative goo salaries and living standard		
	Germany and USA	1970's, high long term unemployment	mismatching	Weakness: extremely sparse ageing population, outflow of young (female) labour force		