

Regions in the Knowledge Economy

Economic Development and Policy in Norra Norrland ?

The Swedish Periphery

by Lars Olof Persson
Nordregio (Nordic Centre
for Spatial Development)
and Department of
Infrastructure, Royal Institute
of Technology, Stockholm.



Université du Québec
Institut national de la recherche scientifique
Urbanisation, Culture et Société



INSTITUT CANADIEN DE RECHERCHE SUR LE DÉVELOPPEMENT RÉGIONAL
THE CANADIAN INSTITUTE FOR RESEARCH ON REGIONAL DEVELOPMENT

ECONOMIC DEVELOPMENT AND POLICY IN *NORRA NORRLAND* – THE SWEDISH PERIPHERY

Lars Olof Persson

Nordregio (Nordic Centre for Spatial Development), Stockholm, and
Department of Infrastructure, Royal Institute of Technology, Stockholm

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and Vânia A Ceccato

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SWEDEN'S PERIPHERY IN NATIONAL AND EUROPEAN CONTEXT

Introduction

There are at least three aspects that make Sweden a special country in a European context. The first aspect deals with the *country's traditional local decision-making*. Of course, there are regions in Sweden that are traditionally more independent than others. They may be more apt to stimulate local co-operation, to better represent different local interests and be able to face changes and new challenges. Nation-wide, Sweden is characterised by a system of strong political decentralisation in which the municipalities (municipalities are also active in local economic development planning) have major responsibilities (for service supply and power of decision particularly in land use planning). This is important in the context of economic performance as it is expected that the closer to the people the decisions are made, the more responsive and effective the system should be.

The second important aspect is Sweden's status as a *welfare State*. Despite the clear evidence of diminishment of the State's role and strong influence on a global market economy during the last decades, Sweden has succeeded in keeping a great part of the welfare system core intact. In fact, these structural changes constitute an ongoing challenge to the current planning system that is struggling to maintain a balance between the quality of life standard attained over the last century, and a series of new demands emerging from the globalisation process. *The equalisation system* among regions and municipalities is a mechanism that directly aims to decrease imbalances. Traditional mechanisms directed at keeping people's quality of life are associated with new policies with a strong welfare content which means the gap between the lagging and leading areas in a regional rural context may be relatively small. When differential economic performance between regions is assessed a sensitive method that goes beyond the analysis of 'hard factors' is highly relevant (especially in consideration of those that are supplied by common national welfare policy). Thus, two identical indicators of infrastructure standard may tell us very little about how resources are used locally. They may hide huge differences as to how similar infrastructure is used to achieve a better economic performance.

Within a European context, one important characteristic of Nordic countries is the extremely sparsely distributed population. The Northernmost peripheral region has a population density of 3 inhabitants/km² against 22 inhabitants/km² of the whole Sweden and an EU average of 116 inhabitants/km². Sweden is an urbanised rural country. According to the definition of 'rural areas' from The Swedish National Rural Development Agency (*Glesbygdsverket*), about 65 per cent of Swedish municipalities are somehow rural but they are far from being homogenous. At least two groups can be identified: the first group is composed of 10 per cent of the most sparsely populated municipalities (*glesbygdskommuner*) located mostly in North Sweden, and the second group constitutes of 55 per cent of the municipalities adjacent to urban areas (*tätortsnära landsbygdskommuner*). This extremely low population density has a clear impact on the potential dynamism of these areas in terms of innovative capacity, industrial sector diversification, labour force competence and mobility, and not least of all, infrastructure and communication.

Local decision-making

Sweden has a long tradition of local decision-making on local matters. The system is relatively decentralised. Since the Middle Ages, there was a well-developed system of local self-government both in rural areas and cities (Häggroth et al., 1993). Nowadays, there are two types of local governments, the municipalities and the county councils. Municipal and county councils services expanded rapidly during the 1960's and 1970's and, despite the cutbacks in the 1980-90's, it is estimated that around one-fourth of the Swedish labour force are employees of municipalities or county councils. In rural regions it is common that about half of the labour market is in public services.

The governing process in Sweden functions on three democratically elected levels: the *Riksdag* at a national level, the county councils at a regional level, and the municipalities at a local level, each with different spheres of responsibility. Assemblies elected by the people govern both the municipalities and the Country Council. There are 289 municipalities in Sweden. These are responsible for local issues in the immediate environment of the citizens (In addition, there are a number of committees whose duty involves dealing with various matters of business that are subsequently raised in the council). Each municipality is responsible not only for

implementation of policies related to urban matters but also for those related to the rural areas, which are part of their territory. The municipalities have traditionally been responsible for operating the compulsory comprehensive schools (including adult education and Swedish language for immigrants), municipal social services (child care, care of the elderly and disabled, etc.) technical and emergency services, land use planning, environmental and primary health care, and recreation and culture.

The county councils operate on the regional level, with the health specialised care system as their dominant field of responsibility and also public regional transport.

As for regional economic development, the county administrative boards have a direct influence on State planning at the county level. The boards are in charge of the regional development funds, which provide financial and other assistance to regional and local business, rural development and development of projects.

Welfare State country

The welfare state principles still constitute the basis for the government's action in Sweden. This means, in practice, that there are mechanisms to equalise the differences in the financial situation of various municipalities (and county councils) – the revenue equalisation system being the most important one. At municipal level, the revenue equalisation system is based on differences in the taxation resources of various municipalities, which in its turn is dependent upon the percentage of population with paid employment (that is, age and economic structure) and on income levels. The lower the taxation resources of a given municipality itself, the larger its grant will be. It is known that the “most expensive” municipalities are those small, sparsely populated ones, and some major cities. At regional level, there is the equalisation system for structural differences in expenditures in order to create equitable financial conditions in various municipalities, since there are municipal costs that go beyond the control of the individual municipality.

The State grant system, which went into effect in 1993, uses the entire block grant appropriation for equalisation of municipal revenue basis. “A system aimed at equalising structural differences in municipal expenditures has been connected to it. This system is financed entirely by the municipalities themselves in the form of

inter-municipal equalisation payments". Municipalities with low costs subsidise those with high costs (Häggroth, 1993, p.82). Besides the regional equalisation system, there is a system of regional incentives to stimulate businesses locating and setting up or expanding in designated priority areas in Sweden, primarily in North-western Sweden. In these areas, "the regional incentives are comprised of five grants, a loan scheme and a concession on social security contributions. The grants include a regional development grant for hard investment, regional development grant for soft investment, employment grant, transport grant, and rural development grant." Unlike most other EU countries, in Sweden some of these subsidies are granted automatically to all companies, which fulfil the requisite eligibility criteria (Aalbu et al., 1999, p.44).

In the last decade, the relations between the State and the local governments have been characterised by a trend toward deregulation. The Local Government Act of 1991 gave the municipalities considerable freedom in structuring their committees, deregulating significant parts of school and social services and opening up participation of the private sector in matters that were strictly public sector business. New forms of solving problems via co-operation/partnership have also resulted owing to changes in the State's role and the deregulation process (for more information about the impact of the partnerships and experiences see Westholm, 1999). At regional level, the so-called Regional growth agreement, announced in the policy bill Regional Tillväxt (1997/98:62), which has a central concept the idea of "partnership" (Dahlgren, 1999) constitute a good example of such a trend. Each County partnership developed its own plans based on their own regional specificity. The idea is that the public sector and private enterprises should jointly fund projects for economic growth in each region.

Part of these structural changes is related to the fact that Sweden (along with Finland and Austria) joined the European Union in January 1995 through a referendum campaign with a relatively close result. The number of Member States was increased to 15, when a northward expansion took place.

Sweden has often been considered "a reluctant European", since Sweden always wanted to take advantages of a common economic market whilst, for political reasons looking suspiciously upon rules that might infringe the country's neutrality status. The ties between Sweden and European Community became tighter during the

1980's, when the country joined the Nordic Council and the European Free Trade Association (EFTA). According to Miles (1997), the Swedish relations with the EC underwent relatively dramatic changes during the late 1980's after which the country went on to become a full member in 1995.

The sparsely populated and remote rural areas

Rural areas in Sweden have several distinct features. The first aspect deals with the concept of rural areas. Rural areas in Sweden include a large extension of the territories, which are heterogeneous in nature. According to The Swedish National Rural Development Agency, they range from areas in adjacent urban centres to areas that are extremely sparsely populated. One of the most important characteristics of the Swedish rural areas is the population distribution – which is extreme sparsely distributed mainly over the northernmost parts of the country, a fact that has traditionally had a strong impact on the establishment of the regional policies.

Moreover, rural areas in Sweden, mostly the most remote ones up North, are also synonymous with an ageing population and population reduction, i.e. a population that increasingly moves towards more urbanised regions and larger labour market areas. In terms of general economic performance, any attempt to make generalisations is a difficult task since there are areas that follow the general trend of economic decline, such as the great part of North Sweden inland, while others are competitive even European-wide, such as areas in Småland. Rural areas in Sweden tend to be specialised in traditional sectors, such as agriculture, forestry and manufacturing. Nowadays, several areas are struggling to establish a more modern and competitive economic structure, through investments in human capital and knowledge-based sectors that are adapted to international demands.

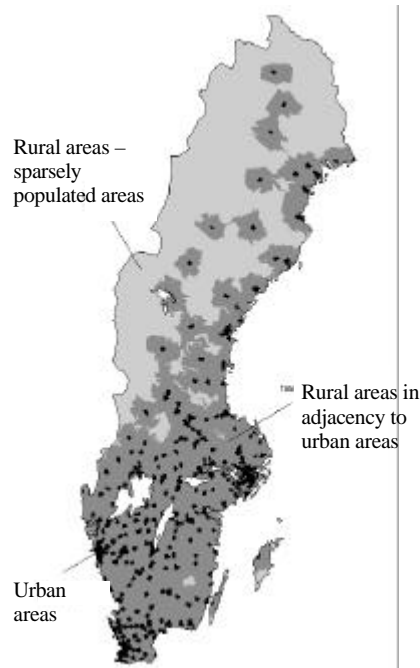


FIGURE 1 - RURAL AREAS ACCORDING TO THE NATIONAL RURAL DEVELOPMENT AGENCY

SELECTED STUDY AREAS

Cases of two study regions

In this case study, Storuman, Sorsele and Lycksele compose a group of municipalities in Northern Sweden regarded as dynamic compared with other municipalities in the same region, the so-called *WPN – Well Performing Norra Norrland*. The *Less Well Performing North Sweden area – LWPN*, is composed of three municipalities, Övertorneå, Pajala and Gällivare located in Norrbotten County¹.

This section contrasts the potentialities and constraints experienced by each region. The *potentialities* of the North Sweden region cannot be limited (Figure 2) to its location and the uniqueness of its environment. The region has a strong potential for tourism (“Europe’s last wild land” – is the current slogan) and has a strategic location

¹ It is worth noting that Gällivare and, to a less extent, Lycksele’s performance may be influenced by the size of urban structure. Both municipalities have larger urban centers than the other municipalities that constitute the study areas, and therefore, more diversified urban functions.

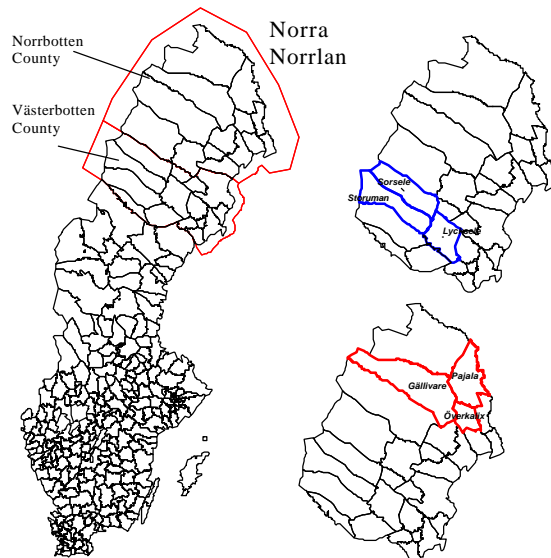
compared to other Nordic countries. The landscape of this huge area is widely varied. It extends from the mountains in the west, along the great rivers and through the vast forests and farming areas. Many natural reserves and protected rivers are found in this region, including Kebnekaise, Sweden's highest mountain. Besides the natural resources, this region has other singularities; for instance, it is a multicultural area. It is the only region in Sweden that has boundaries with two other countries (Norway and Finland). North Sweden is part of the so-called Barents Euro Arctic Region (which also includes Finland, Norway and Russia). The region is also characterised by its long tradition of mining (e.g., iron) and forestry, both of which are still important exporting sectors in Sweden. These traditional sectors combined with the exploitation of watercourses (hydropower) are crucial for the regional economy.

Working against these potentialities, there are several *constraints* such as relative remoteness and size. The region is located in the periphery of Europe and also of the Swedish territory, but is relatively close to the Finland, Norway and Russian. The total area is 165 000 km², which corresponds to almost 40 per cent of Sweden's area and 5 per cent of the EU's area. The region is the EU's absolute largest NUTS II-region, as large as Austria, the Netherlands and Denmark together. The region is also known by the decreasing sparse and ageing population. Such development in terms of population structure has created regional imbalances in education and, consequently, in the labour market during the last decades, especially between the coastal and inland areas. Mining and forestry industry, often named as "male based industry" does not contribute to decrease an always-segregated labour market, in which women are often limited to activities within the public sector. All these tangible barriers are certainly accentuated by a weak and diffuse regional identity (despite the strong rural communities movement during the 1980-90's – *landsbygdsrörelse*) and the historical paternalistic attitude towards the State (which previously was the sole owner of all natural resources in the region) and, more recently, the EU organisations.

Six per cent of Sweden's and 0.1 per cent of the EU total population live in the region. The DORA region's population density shows 1.2 inhabitants/km² while the North Sweden region has almost 3 inhabitants/km² against 22 inhabitants/km² of Sweden compared to EU's average of 116 inhabitants/km² (Table 1). A large part of the population is concentrated in urban areas. In 1999 the inland areas comprised

around approximately 35 per cent of the population while the coastal areas figured at about 65 per cent. Although the total population has increased since the 1970's by about 30,000 inhabitants, the inland part has had a strong reduction in its population. During 1998-1994, nine municipalities noted a population reduction of 5 per cent; among those who had the highest decrease is Överkalix, one of the LWPN municipalities. Birth rate has significantly decreased during the last few years and followed by a negative net migration it constitutes a large problem for the region. The net migration pattern for the coast areas is more balanced than the inland. The inland areas are characterised by a disproportionate age structure as those who frequently move out are young people between 18-24 years old, with women in the majority, while those who migrate into the area are mostly retired or close to retirement age². In the WPN area, the population reduction has been lesser than the entire North Sweden region but higher than the Swedish average. The LWPN area has experienced a constant and substantial population decline during the last 30 years, about -10 per cent per decade, one of the highest in Sweden.

FIGURE 2 - THE NORTH SWEDEN REGION



2 Samlat Program Dokument, Mål 1, Norra Norrland.

Although a significant improvement of education levels has taken place since the 1980's, the WPN is still characterised by a smaller share of population having a university degree (16 per cent) than the national average (24 per cent), which is still higher than the LWPN's figures (14 per cent). In the entire region more women than men have an academic degree, which may partially explain part of the female labour force deficit in several inland municipalities. In terms of educational infrastructure, the relatively high share of college and universities associated with the introduction of new sectors of the economy, such as electronics and telecommunications, and an increasing educational level among the population constitute a promise to further development in the region. Established at Luleå University of Technology in 1994, the Centre for Distance-spanning Technology, CDT, is the only institute of its kind in Sweden. Research, development and programmes of study are conducted in software engineering, data communications and signal processing. CDT's task is to foster collaboration between IT companies and the University in order to effect the practical application of research results. Another example of technological cluster is the mining town of Kiruna, which has become Sweden's space research centre, with a concentration of high-tech in companies and organisations such as Satellitbild, Esrange, IRF, the Swedish Institute of Space Physics, and the cartography unit of the National Land Survey.

TABLE 1 - THE NORTH SWEDEN REGION: POPULATION, SIZE AND POPULATION DENSITY

	WPN	LWPN	North Sweden region	Sweden
Population (1998)	23844	33132	56976	8 854 322
Size (in km ²)	20617.2	26672.9	47290.1	410934.2
Density (inhab/ km ²)	1.2	1.2	1.2	22

Between 1994 and 1998, more than 50 per cent of the municipalities had an increase of business start-ups. Many inland municipalities, including those belonging the North Sweden, have experienced a greater establishment of new business than the municipalities along the coast. In the WPN, there were about 10 new enterprises to 1000 inhabitants against 6-8 in municipalities of the LWPN (a partial explanation for this may be the fact that the region belongs to the Objective 6 programme). Even if

more and more women choose to start a business, the share of female entrepreneurs is still relatively low³. The region is highly dependent upon the public sector as source of employment. The proportion of those publicly employed in the region is significantly greater in North Sweden compared with the country at large, 11 per cent greater for women and 8 per cent for men. The regional labour market is known to be very gender segregated. Male labour force is to a great extent employed in the manufacturing industry while about half of the female labour force in North Sweden works with education and health care, which made the labour market for women extremely vulnerable to cut backs during the 1990's. In the WPN, nine out of ten branches have decreased the total number of employed persons during 1990's while in the LWPN municipalities, all ten sectors decreased. The largest losses were in agriculture, hunting, forestry and fishing followed by non-specified sector and basic infrastructure (electricity, gas and water, etc.). The unemployment rate in the whole North Sweden has dramatically increased during 1990-1999, from 4 to 10. In the LWPN, the unemployment rate reached almost 15 per cent in 1999, including the unemployed labour force engaged in governmental labour market programs against 9 per cent in the WPN.

The *North Sweden region* is composed of six municipalities belonging to a larger region known as North Sweden, which has in total 29 municipalities, two Counties, Västerbotten and Norrbotten. The WPN and LWPN municipalities are, as in other municipalities in Sweden, responsible not only for implementation of policies related to urban matters but also for those related to the rural areas, which are part of their territory.

Besides the traditional institutions, the Sami community, who were once a nomadic people, Norrbotten County (which includes the LWPN municipalities) is to be considered as the main centre of the Sami culture, particularly in Jokkmokk and Kiruna. The new Sami Council has convened in Kiruna since October 1993. Besides the Swedish and Sami languages, a third language, Tornedalen Finnish, is spoken in the border region of Finnish Lapland. The region North Sweden is "a melting pot" of Sami, Finnish and Swedish culture, which has roots in the historical development of the territory and continues to affect the self-awareness of the people since the region

3 Samlat Program Dokument, Mål 1, Norra Norrland.

seems to continuously search for a clearer identity. Still there is much controversy about the region's cultural background. There are those who argue that this diversity is responsible for creating a weak or diffuse regional identity that is often associated with the Northern region. Since the central Scandinavian governments have repressed cultural diversity for centuries, it has been only in recent decades that ethnical local minorities have been able to use their language, express their political rights and traditions and be recognised as a potential for the region. Besides the natural resorts, the Sami culture is argued to be of importance in terms of the region's tourist attraction.

It is difficult to judge the magnitude and impact the recent investments will make in North Sweden in terms of economic performance. Certainly in terms of infrastructure, one of the largest investments in the WPN area is being made in the Bothnia Railway⁴, which will create a link along the coast of Northern Sweden, serving not only high-speed trains but also heavy freight transportation. In the LWP, comparable investments have been jointly made by the County Administration of Norrbotten, the County Council, the region's trade and industry sector and Luleå University of Technology. The effort is co-ordinated via a development company, IT Norrbotten, with support from the EU structural funds. Four municipalities of DORA study areas (out of six) have airports with daily flights to Stockholm (Storuman, Lycksele, Gällivare and since 1998, Pajala).

The northern parts of Sweden have traditionally been known as dependent on State through different types of regional policies since the 1960's. However, during the last few years an attitude change seems to be happening among those who live, work and make decisions there. This change is concretely reflected in several types of policy documents as well as in actions taking place in the area. The project "The guide in Norrbotten", "Vägvisaren" is a good example of this attempt to change peoples' attitude, making the population more active and responsible for their actions in order to have a more prosperous future for the region.

More jobs and increased prosperity through business incentives is the goal of the *Regional Growth Agreement* for the WPN. The agreement is also to contribute to equal opportunities and ecologically sustainable development. The programme has

4 See "The Bothnia Railway", <http://www.vasterbotten.se/>

five working areas: education and skills, as well as research and development; infrastructure, technological development, technology dissemination; environment and market; business development, financing and venture capital; living environment factors: service and culture for growth.

From a European perspective, the North Sweden region is a receptor of structural funds through the Counties of Västerbotten and Norrbotten. For the period 2000–2006, the total number of objectives decreased to three (1, 2 and 3 Objectives) as well as the number of common initiatives to four: Interreg III, Leader +, Equal and Urban. The program Objective 1 in North Sweden was developed to focus on the following areas: development of infrastructure (including IT), development of business; competence development and employment, development of rural areas, environment and culture and the Sami community.

DYNAMICS OF NORRA NORRLAND

Natural resources

Natural resources have historically played an important role in North Sweden's economy. The region's land ownership structure has its roots in forestry and mining activities. The region's natural resources (ore, timber and hydro-power) have largely formed the basis of Sweden's wealth and economy during this century and especially forestry is still an important exporting sector in Sweden (Table 2). Nowadays, these resources contribute in different degrees and ways to the region's economy. North Sweden has also been seen as a tourist receptor defined mostly by its peripheral location and natural landscape (Pettersson, 1999). The reasons behind leisure trips to northern parts of Sweden are in fact related to its variety of natural landscapes or activities related to nature (Turistdelegationen, 1996).

Traditionally the WPN municipalities are characterised by having a nature that promotes tourism, such as skiing and fishing and hiking (during the summer). Infrastructure for tourism already exists and, in certain cases, such as Storuman

(Tärna Mountains⁵), a well-established industry exists that took the first steps in the beginning of the 19th century. Storuman and Sorsele are typical winter resorts – part of the Swedish ‘mountains regions’ *fjällen* and part of Europe's largest nature reserve, *Vindelfjällen*. Although Lycksele is not known as part of the *fjäll* municipalities, the municipality has an increasing tourism infrastructure, attracting people also from abroad that want to experience exotic winter activities, such as snow scooter racing. Festivals with ethnical content (e.g., Sami Weekend Festival in Sorsele) are indications that local resources are perceived more often as assets than in LWPN municipalities.

TABLE 2 - AREA OF DIFFERENT TYPES OF LAND AT AGRICULTURAL HOLDINGS WITH MORE THAN 2 HECTARES

Per cent in parenthesis

	Arable land	Pasture	Forest	Other
Västerbotten (including WPN)	78392(3,0)	4992(1,1)	302254(7,6)	80643(10,0)
Norrbottnen (including LWPN)	42988(1,5)	3652(0,8)	239333(6,0)	85726(11,0)
Sweden	2798574	449651	3997400	773998

Source: SCB Jordbruksstatistik, in: Statistical yearbook, 1999.

Human resources

DEMOGRAPHIC STRUCTURE AND EVOLUTION

The study area of North Sweden has a population of about 57,000 inhabitants and has had a drastic reduction since the 1970's. Birth rate has significantly decreased during the last few years and is followed by a negative net migration that constitutes a large problem for the region (Table 3). The net migration pattern for the coast areas is more balanced than the inland. The inland areas are characterised by an age structure since those who often move out are young people between 18-24 years old, predominantly women, while those who move in are mostly retired individuals or those close to retirement age. Only in the 1990's, the population of North Sweden decreased by 9 per cent, the highest figures are found in the LWPN (Table 4).

5 Arell (1996) presents the evolution of tourism in the Tärna Mountains looking at the actors' perspectives, from a local and to some extent, a relatively close arena, to an arena which is exposed to forces coming from national as international levels.

TABLE 3 - NET MIGRATION (PER CENT)

	WPN	LWPN	North Sweden	Sweden
1970-1979	-6.5	-14.0	-11.0	1.5
1980-1989	-4.8	-7.8	-6.5	1.7
1990-1999	-7.0	-8.3	-7.8	2.4

TABLE 4 - POPULATION CHANGE (ANNUAL RATE) (PER CENT)

	WPN	LWPN	North Sweden	Sweden
1970-1979	-4.0	-9.3	-7.1	2.7
1980-1989	-4.5	-7.9	-6.5	2.5
1990-1999	-8.2	-9.7	-9.0	3.1

Although depopulation and disproportionate age structure are typical characteristics of the northernmost peripheral rural Europe, the worst scenario is found in municipalities belonging to the LWPN area (Table 4). People living in these areas are aware of the importance of demographic structure and population evolution to the regional economy, since depopulation has been one of the most important challenges during the last four decades. In certain areas, the imbalance is not limited to age but also gender (Table 5). Pajala, one of the LWPN municipalities, is nationally known for its lack of women, who often migrate temporarily to larger centres looking for education and jobs (Table 6). The poor diversification of the local labour market associated with 'a traditional male culture' (see the dialogue below) are factors that contribute 'to keep away' the female labour force.

TABLE 5 - POPULATION BY AGE CLASSES – WPN AND LWPN AREAS - 2000

		0-15	16-24	25-44	45-64	65-
WPN	Lycksele	19,9	9,8	23,9	26,3	20,2
	Sorsele	18,5	8,7	21,3	25,4	26,0
	Storuman	18,0	9,5	22,6	27,2	22,7
Västerbotten		19,7	12,1	26,0	25,0	17,3
LWPN	Överkalix	16,7	8,1	20,8	28,1	26,3
	Gällivare	18,9	8,6	25,2	28,7	18,6
	Pajala	17,5	7,9	19,5	28,8	26,3
	Norrbottn	19,1	10,2	25,7	27,1	17,9
	Sweden	19,6	10,4	27,4	25,4	17,2

TABLE 6 - NETTO MIGRATION OF YOUTH (18-24) BY GENDER 1995-1999 FRÅN/TILL ÖVRIGA LÄN

		1995		1996		1997		1998		1999	
		Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
	Lycksele	25	-35	-23	-42	-19	-53	-40	-29	-46	-53
WPN	Sorsele	3	2	-8	-4	-4	1	-17	-8	-9	2
	Storuman	-2	-8	-17	-23	-5	-9	-20	-24	-14	-26
	Västerbotten	357	286	212	160	336	236	273	82	191	8
LWPN	Gällivare	-42	-54	-49	-55	-48	-68	-57	-50	-49	-79
	Pajala	-27	-30	-30	-29	-32	-31	-14	-37	-30	-21
	Överkalix	-17	-8	-8	-12	-21	-21	-1	-9	-15	-17
	Norrbottn	-302	-319	-117	-415	-190	-436	-247	-430	-283	-511

LABOUR FORCE STRUCTURE AND PARTICIPATION RATES

The initial assumption assumed here was that labour force structure and its characteristics (age and gender) relate to economic performance. It was also expected that high participation rates of the labour force would tend to influence positively the economic performance of the area. The leading area should have a better performance in activating labour force than the lagging one.

The economically active population (employed and unemployed) has been quite constant during the last part of the 1990's in Sweden. However, employment change and participation rate have been lower in LWPN than WPN area (Table 7).

TABLE 7 - EMPLOYMENT CHANGE (ANNUAL RATE) (PER CENT)

	WPN	LWPN	North Sweden	Sweden
1985-1992	-7.2	-19.2	-14.0	-3.7
1993-1998	-2.1	-9.4	-6.2	4.7

The large population reduction, with low birth rate and out-migration, leads consequently to a decrease in the labour force. As Table 8 shows, independent of the

method employed in the projections (Nygren and Persson, 2000)⁶, a striking population decrease (more than 50 per cent) in these local labour market areas is expected to occur up to the years 2010 and 2030. The six municipalities of Norra Norland constitute six local labour market areas, of about 60,000 inhabitants in 1999 and can be constituted by not more than 21,000 in the year 2030, if these labour markets continue to decrease in size (alternative B).

TABLE 8 - POPULATION PROJECTIONS FOR THE LOCAL LABOUR MARKET AREAS (THOUSAND INHABITANTS) ALTERNATIVES B/D²

	WPN	LWPN	North Sweden	Sweden
1999	27	33	60	8318
2010	23/24	25/27	48/51	9047/9047
2030	12/16	12/15	21/31	9464/9465

It is important to stress that this dramatic population decrease due to demography is the most important factor behind dynamics of these rural areas in North Sweden. This fact per definition is a consequence of bad economic performance in the past.

The North Sweden regional labour market is known to be very gender segregated. Male labour force is to a high extent employed in the manufacturing industry while about half of the female labour force in North Sweden works with education and health care, which made the labour market for women very exposed to cut downs during the 1990's. The share of public employed in the region is significantly greater in North Sweden compared with the country, 11 per cent greater for women and 8 per cent for men. Several State authorities are located in North Sweden, among them, the National Security organ, had also cut downs with serious implication for male employment of the region.

6 The alternative B is based on a more population concentrated trend to the largest Swedish urban areas, based on a prolongation of the observed migration pattern during 1997-99 while alternative D, represents a more balanced regional trend, based on a prolongation of the observed migration pattern during the whole period 1985-89.

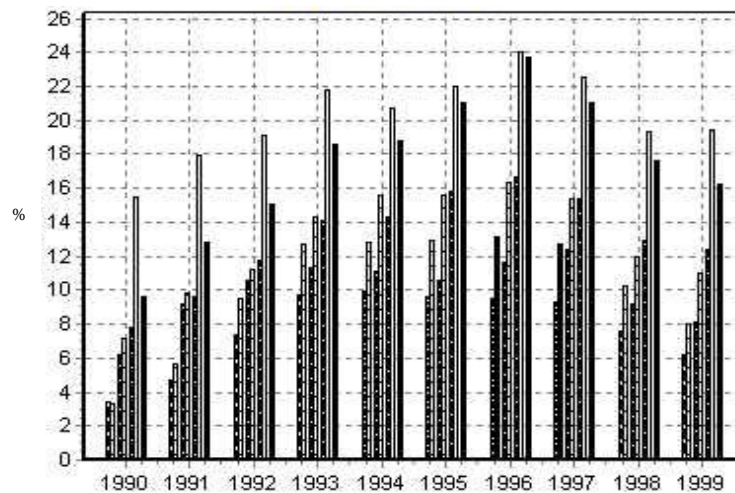


FIGURE 3 - TOTAL UNEMPLOYMENT 1990-1999 (%)

Left to right: Umeå, WPN region (Lycksele, Sorsele, Storuman) and LWPN (Gällivare, Pajala and Övertorneå). Total unemployment (bestående av öppen arbetslöshet samt personer i åtgärder).

TABLE 9 - UNEMPLOYMENT RATE (PER CENT) 1990/1999

	WPN	LWPN	North Sweden region	Sweden
Labour force in governmental financed programs	4.3/8.8	9.8/14.6	4.4/10.5	3.2/7.3
Unemployed labour force	2.3/5.7	4.9/9.0	1.8/7.1	1.3/5.0

The region's unemployment rate is one of the highest in the whole country. The LWPN study area had during the 1990's one of the highest figures (Figure 3 and Table 9). Figure 3 compares the study areas with one of the largest regional municipalities: Umeå, illustrating the status of DORA study areas in comparison with one of the most dynamic centres of the region. Most striking is not that the LWPN area had the highest unemployment figures of the region, but rather that it concentrated one of the highest figures for long-term unemployment, at least higher than the WPN in 1997.

One important dynamic aspect in terms of labour force structure is how well the labour force is capable of matching the labour market demands over time. As may be expected, the WPN municipalities perform better in activating labour force than the

LWPN areas and than the regional average for North Sweden. This might be related to the fact that the Local Labour Markets (LLM's) of WPN areas are characterised by (1) relative high business start-ups during the 1990's; (2) reduction of the surplus of unemployed labour force through out-migration; and (3) high efficiency of the municipalities in placing the unemployed population in governmental financed programs which helps to soften the statistics of unemployment. There is a fourth explanation, i.e., that in places with a biased age structure leading towards an elderly labour force, the high rate of retirement of labour per year tends automatically to lead to more vacancies that need to be filled by new recruitment. This seems to be especially true when comparing their performance in activating students within unemployed labour force. The LWPN Local Labour Market not only shows a worse performance compared with the whole region and the national average but also a more heterogeneous (or more unstable and less sufficient) performance pattern than the one for WPN area from 1991 to 1996. However, the LWPN had a similar performance to the national performance in terms of employing people with primary education. This relatively good performance could be explained by the predominance of traditional economic branches in the area (mining and quarrying, manufacturing, forestry and transport and communication) and also by the existence of a great share of labour force with low education levels - which means that, in relative terms, part of labour demand matches quite well the labour force supply. Besides, as one of the interviewees pointed out, several programmes are financed by public funds for this "un-placeable" labour force. Regardless of the study areas, interviewees are aware of the fact that there is a chronic overrepresentation of long term unemployed labour force, which will hardly find a job.

HUMAN CAPITAL

The starting point here was that 'human capital' invested in the labour force (education, training, skills) would contribute to its improvement and tend to influence economic performance in the area positively. How do the study areas differ in terms of human capital?

One good indicator of the population's educational level is the supply of schools and universities. Table 10 shows the supply of post-secondary schools and temporary university courses by study areas. The study areas perform similarly: both study areas have post secondary schools (except Sorsele) and all municipalities import

temporary university courses (exception is Överkalix) in the near future. As Table 11 illustrates the demand for university education in both study areas and by County is slightly lower in the LWPN municipalities.

TABLE 10 - SUPPLY OF HIGH SCHOOLS AND TEMPORARY UNIVERSITY COURSES BY STUDY AREAS

High School		Temporary university courses
		Euro Sky University (sky university)
Gällivare	Välkommaskolan	Lapplands kommunalförbund /Umeå Universitet Lapplands kommunalförbund /
Pajala	Laestadiuskolan	Luleå tekniska universitet och Umeå Universitet
Överkalix	Överkalix Gymnasieskola	-
Lycksele	Tannbergsskolan	Umeå Universitet /Lär Centrum/ Akademi Norr
Storuman	Luspengymnasiet	Coming soon - Akademi Norr
Sorsele	-	Coming soon - Akademi Norr

TABLE 11 - STUDENTS STARTING UNIVERSITY 1999-2000 IN 1000 OVER 18-64 AGE POPULATION

		Per cent
	Lycksele	15,3
WPN	Storuman	14,9
	Sorsele	13,9
	Västerbottens County	14,4
	Gällivare	9,7
LWPN	Pajala	9,4
	Överkalix	11,0
	Norrbottens County	13,2
	Riket	11,5

Source: SCB, Education statistics.

The sources of investments in labour force skills and education are from supra national (EU) to municipal levels, with small variations among the study areas. Figures from 1998 shows that expenditures of the Swedish national budget and expenditures related to labour market and labour force skills in North Sweden study areas are in general higher than the national average. This can be partially ex-

plained by the fact that North Sweden's unemployment rate in the study areas is higher than in the rest of the country. The same reason may explain the difference in expenditures in labour market and working life between WPN and LWPN. Another interesting area to look at is the one on Education and university research. Here the level of spending is significantly lower than the national average showing that, compared to the national average, few institutions of higher education are located in the North Sweden region (Table 12), (e.g., 2 per cent of the Swedish national budget spent in LWPN area may be explained by a research centre located in Gällivare).

A slight difference between the study areas can be found in 1999 for the category 'education'. The WPN spent more money in education than the LWPN (Table 12), whilst at municipal level, the costs for education seem to be higher in the LWPN than in the WPN. Besides the traditional sources at County Council level, all Swedish municipalities are eligible for projects in the RGA (Regional Growth Agreements). By comparing the two RGAs (where the Counties for WPN and LWPN are located) the common focus of the two study areas on development of knowledge and competence is evident. Two equally important areas of investment are found: education and development of competence as well as development of local SMEs – when comparing the two areas, one sees that the amount towards 'education and competence' in the leading area (WPN) is two per cent higher in the LWPN.

TABLE 12 - AREAS OF EXPENDITURES OF THE SWEDISH NATIONAL BUDGET AND EXPENDITURES TOWARDS LABOUR MARKET, LABOUR FORCE SKILLS AND EDUCATION IN 1998, EURO PER CAPITA

Area of expenditure	WPN	LWPN	National average*
Labour market and working life	984 (12)	1098 (13)	631 (7)
Study support	232 (3)	221 (3)	291 (3)
Education and university research	103 (1)	168 (2)	365 (4)
Total	8106	8559	9447

Data source: NUTEK (2000b)

* Data source: Aggefors & Bodevik (2000), p.59.

A region that performs economically well must also have a great part of the labour force matching the local labour market, which requires, among other things, an educational infrastructure adapted to the region's demands. Figure 4 illustrates differences in perception of entrepreneurs and politicians on how well the high school

education is adapted to the local economy from an independent survey performed by the Swedish Confederation of Swedish Enterprise - SAF, Företagarenkät, SAF/Demoskop (1999). One interesting finding is that neither entrepreneurs nor politicians believe that the high school education is adapted enough to the requirements of the local market (the only exception are politicians in Storuman and Överkalix). In both study areas, entrepreneurs are less satisfied than politicians. Differences in perception are evident among LWPN and WPN entrepreneurs, who are the ones that directly depend on labour force skills and education (demand side). The lowest averages are found in the LWPN municipalities, which certainly indicates the area's disadvantages in terms of educational infrastructure, creating a less attractive area not only for entrepreneurs but also for the future of the young local labour force.

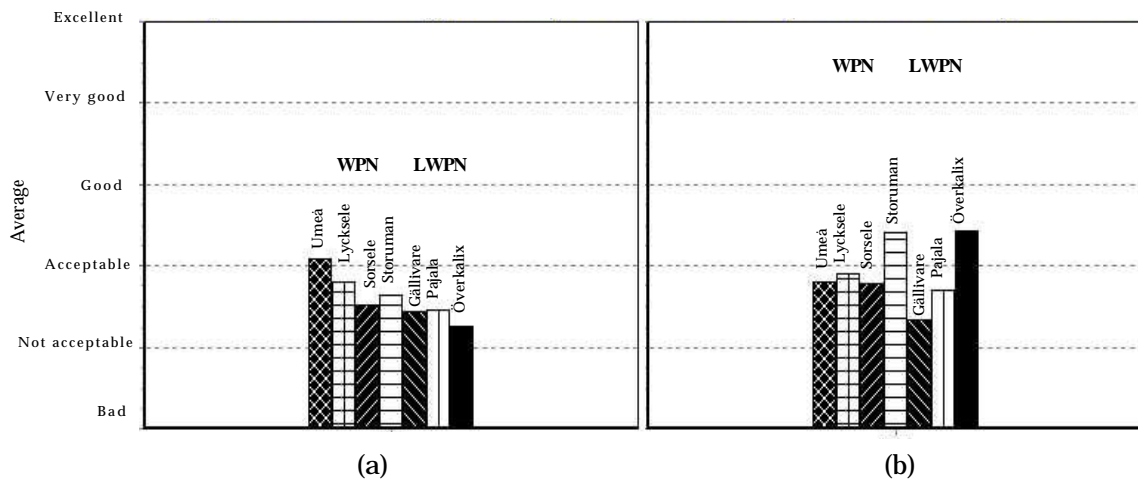


FIGURE 4 - PERCEPTION OF HOW HIGH SCHOOL EDUCATION IS ADAPTED TO ENTREPRENEURS' NEEDS ACCORDING TO ENTREPRENEURS (A) AND MUNICIPAL POLITICIANS (B)

Source: SAF, Företagarenkät, SAF/Demoskop.

Among the interviewees, the majority recognises the lack of (or deficient) educational infrastructure in their municipalities. When higher education exists, it is often un-faceted – that is, it is limited to professional courses directed to the immediate needs of the local market. This may be seen as a good indicator if the labour force was absorbed at the same speed as it was supplied.

Umeå University and Luleå University of Technology are the driving forces behind the industrial, commercial and social development of North Sweden. More than 30,000 students and researchers are involved in advanced studies and spearhead research in technology, medicine and social sciences⁷. However, no universities are located in the DORA study areas, which directly stimulate daily or weekly commuting to these greater regional centres, where the universities are located. There are successful cases in which courses are ministered by distance using IT resources. In other cases, the only solution is out-migration. For these small rural municipalities, the long-term out-migration of young labour force creates a constant demand for labour force with university degrees, such as doctors, teachers, and lawyers, which is often solved by having commuters from neighbouring regions. Besides, as pointed out by the interviewees, in more dynamic rural areas, the constant need for high skilled labour force constitutes a limiting factor for overcoming structural changes in the local economy, for instance, from an economy based on traditional industry to a more knowledge-based one. The opposite could also be said; diversified skilled labour forces tend to function as an attraction factor for new businesses.

Even if there is a constant need for skilled labour force in North Sweden rural municipalities, they seem to be unable to activate this skilled labour force at the same speed as Sweden as a whole. Findings from Ceccato and Persson (2000) show that if one takes Sweden as a whole, the higher the educational level, the easier it is to be activated into the labour market. However, the DORA study areas were not able to follow this trend as fast as other parts of the country did between 1990 and 1996. In general, leading and lagging areas have similar performance in activation rate for labour force with post-secondary education when compared with the national average. Differences can, however, be found for certain categories of labour force when comparing a particular year.

In terms of labour market policy, the majority seems to agree that it is not perfect but it has reached a large parcel of the labour force through short or long-term measures. Regardless of the study area, some controversy exists as whether or not the Swedish labour market policy is equally effective in activating Swedes as it is to

7 <http://www.northsweden.org/english/Default.htm>

employ non-native labour force. The main argument is that unemployment rate among non-native labour force is constantly higher than among Swedes.

Infrastructure

TRANSPORT INFRASTRUCTURE

Transport infrastructure has a special importance when dealing with a peripheral region as North Sweden. This is true since 'transport infrastructure' has a cost reducing or output increasing impact on the economic activities and therefore improves the attractiveness and economic performance of a region. In general terms the region is relatively well served of transport infrastructure. Information on transport infrastructure in the WPN and LWPN areas is limited to general guidelines for each County; therefore, any comparison based on the exact infrastructure supply between the two areas is difficult to make. Only to give an idea, Luleå and Umeå, North Sweden's largest centres, have Sweden's fourth and sixth biggest airports, respectively. The combined traffic volume of these two airports is 1 400 000 passengers per year⁸. It is worth noting Lycksele and Storuman (WPN) Gällivare and Pajala (LWPN) have airports with domestic flights (see Table 13 for the volume of passengers per airport). Whilst Luleå is Sweden's leading bulk goods harbour with approximately 7 million tonnes/year, Umeå is the major harbour for the east-west traffic. The main northern railway line carries 4 million tonnes of freight. A summary of goods transportation can be found in Table 14. A new rapid transit line, the Bothnia line, which will carry rail traffic along the coast, is in its planning phase. The roads and highways play a vital role in binding together these enormous counties, which vary greatly in quality of maintenance and types of users. Seven per cent of Sweden's road network is to be found in Norrbotten, the region with the highest per capita number of automobiles. For passengers, busses are often used for commuting distances between municipalities while for freight, railways are still very common.

8 <http://www.northsweden.org/english/Default.htm>

TABLE 13 - PASSENGER PER AIRPORT 2000

	Passenger/airport	% County	% Sweden
Gunnarn/Storuman	17 473	1,7	0,1
Lycksele	26 202	2,5	0,1
Västerbotten County	1 056 537	100	4,3
Gällivare	51 104	4,1	0,2
Pajala	2 145	0,0	0,0
Norrbottn County	1 234 916	100	5,0
Sweden	24 490 635		100

Source: Luftfartsverket, 2000.

TABLE 14 - GOOD TRANSPORT PER DESTINATION 1999

County	Goods transported	Destination (%)	
	1 000 ton	Within County	Abroad
Västerbotten	18 736	81	19
Norrbottn	12 435	87	13
Sweden	328 900	73	27

Source: SCB, 1998.

One good indicator of how well the transport infrastructure is adapted to the local needs, either for transporting goods or passengers, is the suppliers' and users' opinion about the infrastructure. According to the SAF survey (1999), entrepreneurs (users) are in general much more discontent with the transport infrastructure than politicians (suppliers). A striking difference in opinion is found between entrepreneurs of the WPN and the LWP. Entrepreneurs in Pajala and Övertorneå and, to less extent, Gällivare (all LWP municipalities) judge the infrastructure as unacceptable (Figure 5).

Interviewees also pointed out that the lack of maintenance of railways and motorways is one of the most limiting factors (for several, it was the most important one) for the region's economy, not only in terms of freight but also for passengers.

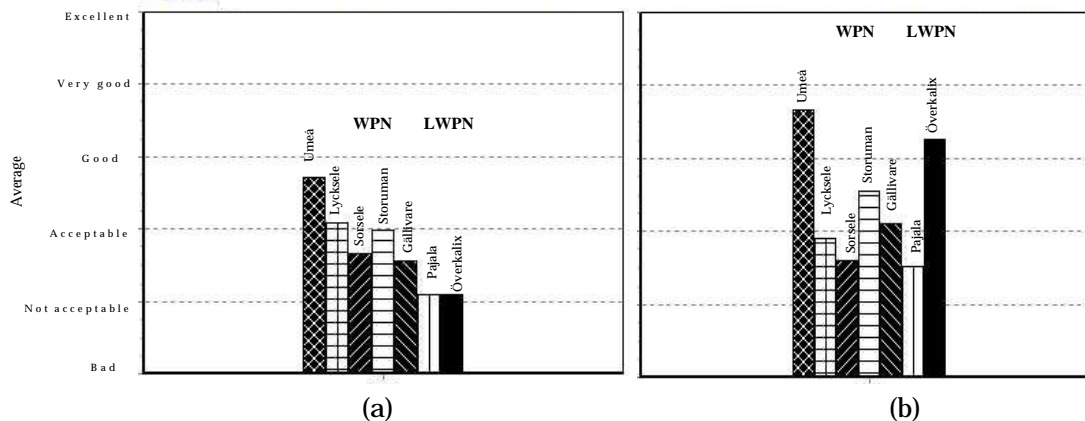


FIGURE 5 - INFRASTRUCTURE IN THE MUNICIPALITIES ACCORDING TO ENTREPRENEURS (A) AND MUNICIPAL POLITICIANS (B).

Source: SAF, Företagarenkät, SAF/Demoskop.

BUSINESS-RELATED INFRASTRUCTURE

Business-related infrastructure is important since it fosters regional growth by cost reducing effects and provides attractive locations for new investments. Business-related infrastructure is composed of essentials used by business (such as industrial parks, technology parks, business districts, R&D infrastructure) or which has a special relevance for the locational decision or cost structure of business (such as energy/water supply, waste treatment, telecommunication).

In terms of technological parks, the regional universities constitute important actors together with local businesses in creating economic dynamism. One example is Umeå University that has made a large investment in information technology in the Umeå Centre for Interaction Technology (UCIT). This is a multi-disciplinary research centre focusing on interaction between humans, information and computers. Researchers from various areas cooperate to solve problems of transition from the industrial to the information society. Several municipalities, including the LWPN's, are actively trying to attract investments in these new areas often concentrated in larger regional centres, where a more complete business-related infrastructure exists. The DORA study areas are very similar in terms of basic urban infrastructure (such as energy/water supply, waste treatment, telecommunication) since it has also been a part of the welfare system. The same could be said about vacant places for

industries and businesses; often there is a good supply that is used to attract new business through special arrangements. As pointed out by interviewees, there is a surplus of apartments and, as they declare, places for new businesses seem to be easily arranged by the municipal leaders, when they are not available

CONSUMER-ORIENTED INFRASTRUCTURE

A well-developed consumer-oriented infrastructure improves the quality of life in a region, here analysed by supply and accessibility to basic services (stores, post offices, pharmacy and schools). While this can be seen as a form of regional success in its own light, it can also be seen as a location factor. This type of basic infrastructure contributes to the attractiveness of a region for new investments by providing a certain level of life quality for the entrepreneur and employees, as well as inhabitants of the region in general.

For those who live in rural areas a good access to services is the fundamental element in their decision of staying in the countryside. Accessibility to public and private services has also been an important aspect of the Swedish welfare system, which has struggled during the last decades to provide and keep equal living conditions over the whole country. What does the accessibility to services in rural areas in Sweden look like? During the 1990's, basic services were closed down over the whole country; thus, people nowadays travel longer to have access to basic services than ever before. How are the DORA study areas performing? Even though the differences are very small between areas, the WPN is performing slightly better than the LWPN regarding population access to stores, post offices and pharmacy, the exception being schools.

According to The Swedish National Rural Development Agency Yearbook (2000), the access to services in rural areas declined during the last decade. Nine per cent of the shops in rural and urban adjacent rural areas disappeared in the last four years (1995-1999) and 20 per cent between 1980 and 1999. The four northernmost counties, which had the lowest access level, were most affected by this reduction process. This reduction has mostly happened at large in certain types of rural areas and urban adjacent rural areas. In these areas, about 230 stores have disappeared during the last three years. It has mostly been small food shops that have been closed and, in few cases, were transformed to "service stores", combining other functions, such as

post office and sales. Table 15 shows changes in the number of stores between 1980 and 1999 by type and the percentage of change between 1996 and 1999.

TABLE 15 - NUMBER OF STORES BY TYPE (1990-1996) AND THE PERCENTAGE OF CHANGE BETWEEN 1996 AND 1999

Type	1990	1996	1999	1996-9 (%)
Least 400 km ² selling area	1860	2000	1950	-2
Other type of daily stores	3360	3000	2130	-29
Service-gas station's stores	2480	2120	2800	32
Others	-	70	10	-90
Total	7700	7190	6890	-4

Source: Based on The Swedish National Rural Development Agency Yearbook (2000), p.9.

Norrland's inland is the region with the highest per cent of the population with the longest travel time to services and where the travel time has increased most of all during the last few years. However, this varies from service to service. In Southeast Sweden, 85 per cent of the population has less than 5 km to a store (43 per cent have less than 1 km). Surprisingly, in North Sweden region, although sparsely populated areas, about 85 per cent have access to stores within 5 km; however more than 6 per cent needs to travel more than 10 km to have access to stores against only 2 per cent in Southeast Sweden. Both in the well performing as well as in the less well performing areas, 75 per cent of the individuals have access to stores within 5km, which is lower than the average for the North Sweden region (85 per cent). In both areas, the percentage of individuals that had lesser travel time to stores decreased between 1996 and 1998.

A Post Office service is a special type of service⁹ since it constitutes a basis for other services in Sweden, especially in small communities. In North Sweden 11 per cent of the population has more than 15 km to a post office against 5 per cent in Southeast Sweden. The LWPN area is slightly better served by post offices than the well performing. Within 5-km distance, 71 per cent of individuals living in the less well performing area had in 1998 access to a post office against 66 per cent in the well performing area.

According to service database from The National Rural Development Agency, the number of pharmacy¹⁰ was approximately 1000 and they were located mostly in rural areas. The share of households in 1999 with more than 10 km to the closest pharmacy or pharmacy representation was on average 4 per cent in Sweden. The data also shows that the Northern Sweden had the most sensitive structure in terms of accessibility to pharmacy; it means people in Northern parts of Sweden need to travel much longer than others living in Southern Counties if the closest pharmacy were to be closed down. More people are travelling longer nowadays than they have done before but this trend does not seem to affect dramatically the North Sweden study areas in terms of percentage of population having access to this pharmacy. However, the WPN area still has fewer people travelling longer than LWPN (Appendix 2).

Regarding schools' supply, 170 schools, about 10 per cent of the total, in urban adjacent rural areas were closed down while the number of rural schools remained the same between 1995 and 1998. However, the rural schools have fewer students, which means that schools are still at risk of being closed down (The Swedish National Rural Development Agency Yearbook, 2000). In rural areas, taxis and school busses are fundamental to make shorter the distances to schools in rural areas in Sweden. Pupils in North Sweden have to travel longer to go to school than their

9 The State has signed a contract with Posten AB, which is the main post office enterprise, which lately has worked with other partners, such as chains of local stores ("post i butik"). This contract states that "a good basic cash service ("kassaservice") must be provided to all clients over the whole country" five days a week and the total number of households that do not have daily post service should not increase. In 1999, about 83 per cent of all post offices also provided cash service. This reorganisation resulted in more stores providing mail services; the number of households with great distances to post office has decreased slightly in the country as a whole. However, the regional differences remain and to a certain extent have been strengthened (The Swedish National Rural Development Agency Yearbook, 2000, p.13). A reduction has happened in places with at least 3,000 inhabitants (The Swedish National Rural Development Agency Yearbook, 2000, p.10).

10 Apoteket A B has the State assignment to provide for the common and health care demand for medicines and has the monopoly of the sales to the society in general.

friends living in Southeast Sweden. In Norra Norrland, contrary to what was expected, students in the LWPN area had to travel less farther to school than those living in the WPN area. Fifty-five per cent of the pupils in the WPN had access to Högstadiet School within 5 km compared with 67 in the LWPN area. The striking difference is found among those who live in rural areas. In the LWPN, only 16 per cent of students had access to school within 15 km against 34 per cent of those living in WPN. Differences between the two pairs of study areas in North Sweden could be related to municipalities' size (larger, more demand) and relative location (distance from the main regional urban centres).

REGIONAL POLICY AND DECISION MAKING

In Sweden, regional policy and policy directed to rural areas are traditionally strongly interlinked. Regional policy was introduced as 'localisation policy' in the mid-60's aiming to increase economic effectiveness by improving regional balance in the country. This was done by state subsidies, which should stimulate industrial investments in the large sparsely populated areas of North Sweden, which were hit by structural change and depopulation (Närings-och Handelsdepartementet, 1997). Additionally, the idea of equal living conditions all over the country and the right to live and work wherever one wants are connected to this policy (Norberg, 1999, p.85-89). During the following decades the state obtained a strong position in the Swedish setting, allowing redistributing 53 per cent of the income differences in the mid-80's, which had a positive spatial effect providing an almost equal income in remote rural areas as well as in city regions in the end of the 1980's (Westholm, 1999).

Within the past years, considerable changes occurred, which had an impact on the role of the Swedish state. An important aspect was Sweden's decision to enter the EU, which demanded adjustments by the institutional setting, for instance, to fulfil the requirements of EU regional policy (Näringsdepartementet, 2000). Facing these changes, Sweden is undergoing a reform adjusting the social welfare system, which includes a modification of regional redistribution programmes as well as downsizing of the provision for basic services and infrastructure. This cutback in public sector expenditures particularly affects rural areas, as they were the primary beneficiaries of support and compensation transfers given by the Swedish state (Persson, 1997). With the 1998 government bill (Proposition 1997/98:62) a new direction in regional policy was proposed: away from supporting weak regions and equalising regional

differences towards promoting regional growth which makes use of spatial differences.

Hence, endogenous potentials should be activated by means of growth agreements, which define the capital accessible for regional development. This change in policy represents a big step, since regional policy is now concerned with all Swedish regions and not only the weak, i.e. sparsely populated areas and regions with industrial decline, having varying aims and means depending on each region's needs and capability (Westholm, 1999). This indicates that systems have become even more decentralised and independent of the central government. In theory, it could be expected that the more decentralised and democratic the system is, the better it would fit the specific regional needs. However, since decentralisation has always been a typical characteristic of the Swedish system, it is difficult to assess how large is the impact of the recent events towards a more decentralised regional policy in the DORA study areas. Thus, in the Swedish case, regional policy decentralisation per se cannot be taken as a differing factor among the study areas.

TABLE 16 - SELECTED AREAS OF EXPENDITURES OF THE SWEDISH NATIONAL BUDGET AND EXPENDITURES TOWARDS NORTH SWEDEN IN 1998, EURO PER CAPITA

Area of expenditure	WPN (%)	LWPN (%)	National average* (%)
Regional balance and development	304 (4)	323 (4)	33 (0,5)
Transport and communications	758 (9)	1072 (12)	374 (4)
General grants to local government	2108 (26)	2003 (23)	956 (10)
Total	8106	8559	9447

Data source: NUTEK (2000b).

* Data source: Aggefors and Bodevik (2000), p.59.

Looking at the areas of expenditures of the Swedish national budget towards North Sweden (Table 16), there exist areas of expenditure besides the social welfare in which the region receives more money per capita from the state than the average. Firstly, 'regional balance and development': here extreme disparities exist between national average and the amount the northern region receives (4 per cent against 0,5). The main reason is that regional policy of the Swedish state aims to stimulate and support economic attractiveness, particularly in Northwestern Sweden. Sec-

only, in area 'transport and communication' the high level of expenditures is explained by the fact of very sparsely population density of the area, which, consequently, results in higher per capita costs for technical infrastructure. The LWPN receives more, 12 per cent, than the WPN, 9 per cent. Thirdly, the expenditure on 'general grants', is also showing evident differences compared to the national average, being more than twice as much (26 per cent in the WPN and 23 per cent in the LWPN).

TABLE 17 - RGA NORRBOTTEN, BUDGET YEAR 2000, EURO PER CAPITA

Area of investment	Sum	%
Knowledge and competence	142	38
Knowledge intensive activities and networks	114	31
Access and good technical infrastructure	49	14
Culture, cultural environment and cultural heritage	58	16
Reindeer business and Sami culture	5	1
Total	369	100

Source: Länsstyrelsen Västerbotten (2000), p.78.

TABLE 18 - RGA VÄSTERBOTTEN, BUDGET YEAR 2000, EURO PER CAPITA

Area of investment	Sum	%
Education and competence	151,94	36
Infrastructure and technical development	36,30	9
International relation and markets	15,84	4
SME development	161,10	39
Quality of Life: Service and culture for growth	41,02	10
Not specified	11,74	3
Total	417,95	100

Source: Länsstyrelsen Norrbotten (2000), p.4-5.

Regional policy spending in different types of regional infrastructure helps to provide preconditions for regional growth. By comparing the two RGA's in terms of issues for improving economic development, the common focus on development of knowledge and competence as a kind of infrastructure is quite obvious in both areas (Table 17

and Table 18). Additionally, the County of Västerbotten (including WPN) addresses the business sector directly with its finances (e.g., 39 per cent directed to SME's and 9 per cent in infrastructure). Looking at the amount of finances available in the development capital, it becomes clear that WPN, or more precise county Västerbotten, was able to obtain a higher amount of money for development purposes than the LWPN (Norrbotten County).

Investments

EU STRUCTURAL FUNDS

The study region North Sweden takes part in various EU Structural Fund programmes, e.g. objective 6 in the previous programming period. The Figure 6 illustrates that WPN received significantly more EU funds than LWPN over the whole programming period; being three times as much. This indicates not only the better performance of the WPN area with regard to the indigenous capacity of local actors to initiate projects but also their stronger economic power to (partially) finance them, in comparison to the LWPN area.

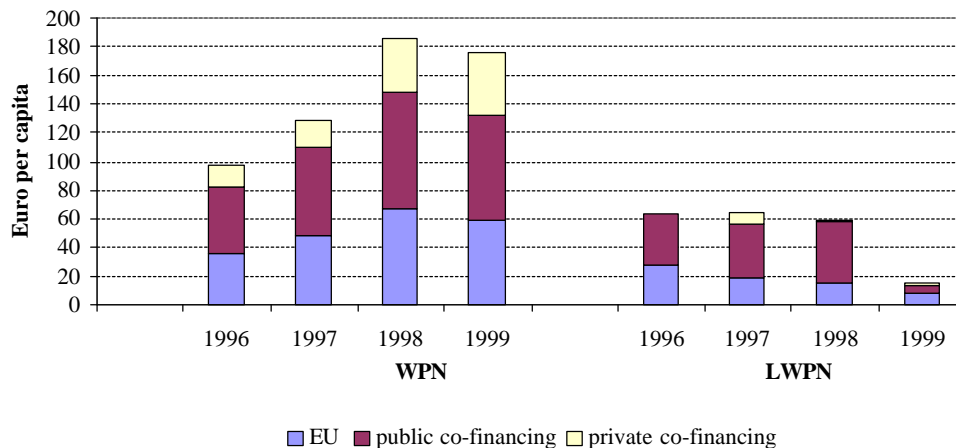
Looking at annual performance, both areas had a fairly equal start in terms of EU funding, but WPN could increase the amount, while LWPN shows a declining trend in terms of EU funding. Here it has to be taken into account that the data collected for the year 1999 might not reflect the final spending because of delayed payments or projects that were not finished at that time. An outstanding feature is the level of private co-funding in WPN, contributing 16 per cent to the total spending right from the beginning, reaching 25 per cent for the year 1999.

On the contrary, LWPN had very low private co-funding for EU projects, which can be interpreted as a low acceptance of EU by the local population as well as a lack of will and resources to actively support local development. The contribution of EU funds to specific projects is for both study areas equal, 35 per cent per definition. Hence, the public sector is the main financier of EU related projects; in LWPN covering in average 60 per cent of the money, even in WPN, but here the public sector is only paying 44 per cent of the budget.

Not all municipalities of the study region North Sweden take part in the LEADER Initiative. In LWPN only Gällivare is active in the LAG-group 'Skogslandet'. The

group 'Inlandslandet' consists among others of the municipalities Sorsele and Storuman, which are part of WPN. Quite apparent (Figure 6) is the difference between the respective LAGs of WPN and LWPN in the available sums of EU money over the period 1996-99 showing the same tendency as valid for the whole EU structural fund payments. But the leading role of 'Inlandslandet' (WPN) is not observable when looking at the number of accepted projects: here the study areas have an almost equal number with 52 projects in 'Inlandslandet' and 49 projects in 'Skoglandet'. Consequently, the projects of 'Skoglandet' have lower budgets than in 'Inlandslandet'. The focus of the LAGs projects lies mostly in developing rural tourism. In the case of 'Inlandslandet' the development of small enterprises and local services is of same importance (Svenska LEADER nätverket, 1999).

FIGURE 6 - SPENDING ON EU PROJECTS IN NORTH SWEDEN, EURO PER CAPITA



Data source: NUTEK (2000a).

NATIONAL SPENDING INCLUDING TRANSFERS TO MUNICIPALITIES

Looking at the overall national spending towards the study areas of North Sweden, see Table 19, the two receive fairly similar amounts of money from the Swedish state. But while having a closer look at the areas of expenditure of the state budget, significant differences can be found in distribution between the study areas.

TABLE 19 - AREAS OF EXPENDITURES OF THE SWEDISH NATIONAL BUDGET AND EXPENDITURES TOWARDS NORTH SWEDEN IN 1998, EURO PER CAPITA

Area of expenditure	WPN	LWPN	National average*
01 The Swedish political system	0	0	57
02 Economy and fiscal administration	0	0	26
03 Tax administration and collection	75	11	79
04 Justice	170	193	284
05 Foreign policy administration and international co-operation	0	0	34
06 Total defence	3	5	570
07 International development co-operation	0	0	153
08 Immigrants and refugees	27	1	58
09 Health care, medical care and social services	252	315	310
10 Financial security in the event of illness and disability	712	710	546
11 Financial security in old age	1015	968	833
12 Financial security for families and children	451	448	482
13 Financial security in the event of unemployment	544	823	496
14 Labour market and working life	984	1098	631
15 Study support	232	221	291
16 Education and university research	103	168	365
17 Culture, the media, religious organisations and leisure	72	25	97
18 Community planning, housing supply and construction	135	91	297
19 Regional balance and development	304	323	33
20 General environment and nature conservation	0	0	16
21 Energy	2	2	10
22 Transport and communications	758	1072	374
23 Agriculture and forestry, fisheries and related industries	146	81	343
24 The business sector	11	0	34
25 General grants to local government	2108	2003	956
26 Interest on central government debt, etc.	Not distributed		1507
27 The contribution to the European Community			282
Total	8106	8559	9447

Data source: NUTEK (2000b).

* Data source: Aggefors & Bodevik (2000), p. 59.

Budget areas with highest expenditures are concerned with different social aspects (no. 9-14), which is true for both study areas. This equally high level results mostly from the Swedish social welfare policy, whereas in the budget areas 10-14 the level for North Sweden region is considerably higher than the national average. Additionally, in area 13, for financial security in the event of unemployment, the level is even higher in LWPN than in WPN. This implies that LWPN's unemployment rate is significantly higher than in WPN. This fact also explains the variation of expenditures for budget area 14, labour market and working life.

One exception is area 12, which is concerned with financial security for families and children. Here the level of expenditure in North Sweden is lower than the national average. This indicates that there are not many families with children in the northern region.

Another interesting area to look at is the one on 'education and university research': here the level of spending is significantly lower than the national average showing that in North Sweden only few institutions of higher education are situated. There exist all in all three more areas of expenditure, where the northern study region receives more money per capita from the state than the average region. Firstly, no. 19 on regional balance and development: here extreme disparities exist between national average and the amount the northern region receives. The main reason is that regional policy of the Swedish state aims to stimulate and support economic attractiveness, particularly in northwestern Sweden. Secondly, in area 'transport and communication' the high level of expenditures is explained by the fact of very sparsely population density of the area, which, consequently, results in higher per capita costs for technical infrastructure. Thirdly, the expenditure area 25, general grants, also shows evident differences compared to the national average, being more than twice as much. Additionally, there exists minor variations within the expenditure area between the study areas (Figure 7), but since it is part of the grant and equalisation system, this will be further examined in a subsequent section.

The change of state budget spending in the years 1997 to 1998 is shown in Figure 7. There exists a common trend in terms of cutbacks for expenditure area 9, health care, in which both of the study areas were confronted with a decline in state support from 1997 to 1998. Another decline occurred in area 13, 'financial support in the event of unemployment', in both of the study areas, which can be interpreted positively,

meaning that the number of unemployed decreased in 1998. Moreover, the amount of study support (area 15) increased, which implies that more young people decided to go for higher education. An opposing trend can be seen in the area 'transportation and communication', where WPN lost income in the same way LWPN's income increased.

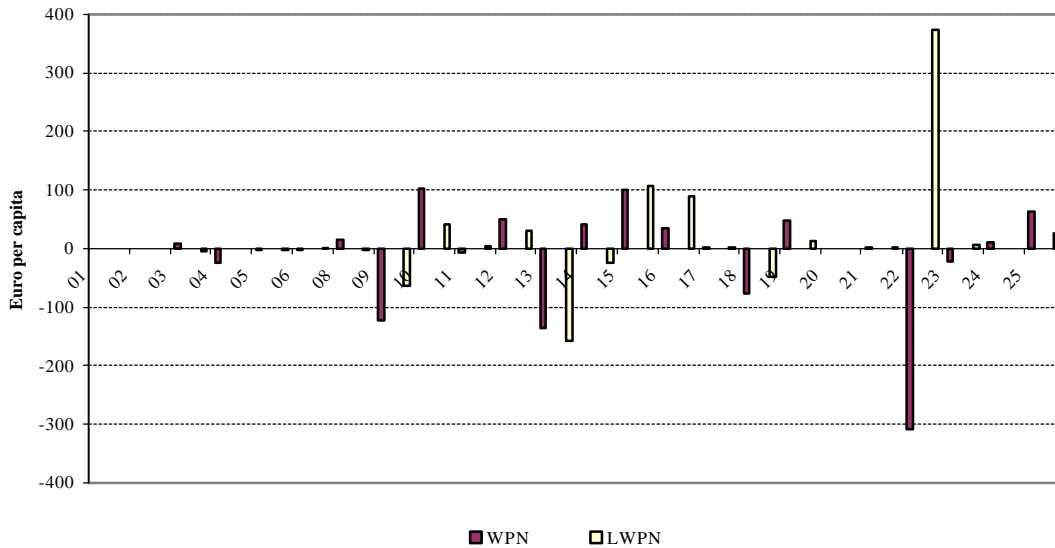


FIGURE 7 - DIFFERENCES IN NATIONAL SPENDING 1997-98 IN AREAS OF EXPENDITURES IN NORTH SWEDEN

Data source: NUTEK (2000b).

Figure 8 shows the level of financial transfers towards the study areas including general state grants as well as intra-municipal equalisation payments. Here it can be seen that in 1996 the two study areas got the same amount of finances out of the financial transfer system. But with the reform of the system, WPN now receives more money than LWPN. In the debate preceding and following the reform of the system, it has been argued that the previous system 'overcompensated' poorer municipalities. Nevertheless, the development trend over the years 1997 to 99 was positive for both areas; indicating that the impact of temporary regulations for the new grant and equalisation system was different for the areas by favouring WPN. Another reason for the steady increase is a result of the data itself, which is given in annual prices. By looking only at the general grant as one component of financial transfers (see Table 19, area no. 25), the figures of 1998 cannot really support the difference, but

looking at Figure 8, the changes between 1997 and 1998 of the national spending, the spending towards WPN increased more than the one towards LWPN.

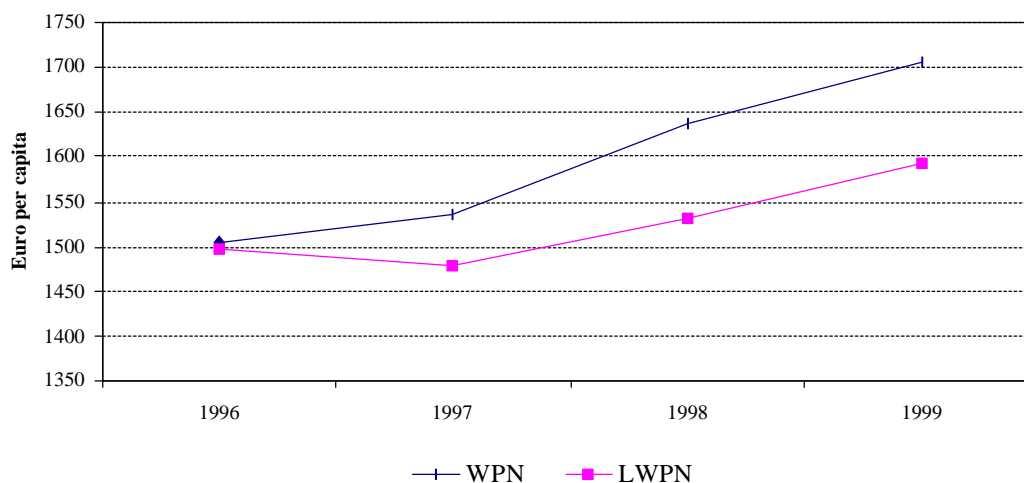


FIGURE 8 - GOVERNMENT GRANTS AND INTRA-MUNICIPAL EQUALISATION TO NORTH SWEDEN

Data source: SCB (1996) p. 58-88 , SCB (1997) p. 40-88, SCB (1998) p. 38-87, SCB (1999) p. 40-87.

SPENDING OF COUNTY COUNCILS AND MUNICIPALITIES

Table 20 shows the various areas of activities run by the Swedish county councils, as categorised by the provider of the data, the Federation of Swedish County Councils.

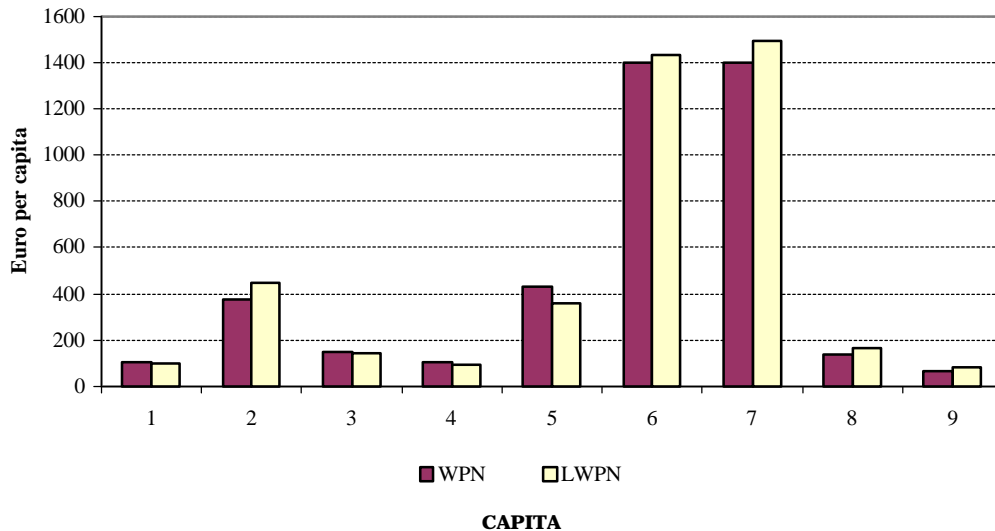
TABLE 20 - CLASSIFICATION OF COUNTY COUNCIL NET COSTS AND NATIONAL AVERAGE 1999, EURO PER CAPITA

No.	Area of activity	National average net costs
1	Health service (including dental service)	1366
2	Social activities	6
3	Care for mentally retarded people	1
4	Education	33
5	Cultural activities	22
6	Diverse activities	69
7	Central administration	38

Data source: Landstingsförbundet (1999).

It also illustrates the distribution of responsibilities in the Swedish system quite apparently showing that the health service sector is the main responsibility of Swedish county councils. There can be found only small differences in costs for certain categories of activities. Variations can be seen in category 6, diverse activities. But as there is no data available on sub-categories of this area, no conclusions can be drawn from this finding. Another interesting aspect is the variation of costs for central administration: WPN has higher expenses than the national average and LWPN has a considerably lower level of costs.

FIGURE 9 - THE NET COSTS FOR MUNICIPAL ACTIVITIES IN NORTH SWEDEN IN 1999, EURO PER



Data Source: SCB (1999b), Vkv4

Figure 9 shows that cost for elderly and disabled people as well as families encompass the highest amount of a municipality's expenditures. Compared to that, the amount of money spent on infrastructure, education, cultural and spare time activities are very low, but are equally important for the development of the region. A general trend regarding municipal costs can be found, e.g. when it comes to expenditures related to families and young children. Here the per capita spending is below national average as a result of the older demographic structure of the North Sweden study region. The opposite trend is true for the spending area on 'care for elderly and disabled people'. Other kinds of costs for activities are higher as a result of low population density in the northern parts of Sweden. Differences between the

study areas can be found in the category 'education', with WPN having more costs for this subject. On the other hand, LWPN spends more money on the care for elderly people caused by a different demographic structure.

AVAILABLE RESOURCES FROM REGIONAL GROWTH AGREEMENTS - RGA

All municipalities of LWPN are eligible for projects in the RGA of the county of Norrbotten. Looking at Figure 9, Norrbotten puts its financial emphasis on developing knowledge and competence in the local population. Here, further use of IT is important as well as a stronger orientation towards the needs of the business sector. Also international relations, especially the Barents regions, are seen as key factors for development in the county.

The RGA of Västerbotten covers the municipalities of the WPN study region (see section on Regional Policy and decision making). Here two equally important areas of investment are to be found: education and development of competence as well as development of local SMEs. Focus of these investments will be on research and development and on offering education for the business sector as well as general development of SMEs. By comparing the two RGAs in terms of issues for improving economic development, the common focus on development of knowledge and competence is quite obvious. Additionally, Västerbotten addresses the business sector directly with its finances. Looking at the amount of finances available in the development capital, it becomes clear that WPN, or more precisely county Västerbotten, was able to gather the highest amount of money for development purposes in the study region.

Interviewees are, regardless of study area, aware of the region's dependence upon public funding, not only to keep their living standard but also as an important element of economic performance (decreasing costs of capital and stimulating business start-ups, increasing competence, etc.). The large majority of the interviewees had difficulty in identifying who the private investors were. However, all agreed on their importance as agents of economic dynamism in the study areas/municipalities.

Economic structure and organisation

Economic structure and organisation deals with how economic activities, production processes and enterprises are organised and how they interact. Economic structures

and organisation influence employment opportunities/constrains for the local population and the prevailing trends. The analysis of economic structures and organisation provides insights into the following: the structure and evolution of employment by sectors and branches (clusters) of economic activities; the mix of branches diversification/specialisation and intersectoral relationships (linkages) in the local economy; the structure and evolution of enterprises (size, branches–origin, ownership, degree of integration local national, international markets), and the social formation of production.

STRUCTURE AND EVOLUTION OF EMPLOYMENT BY SECTORS OF ECONOMIC ACTIVITIES

The region's industrial sector has always had its basis in the local resources. During the middle of the 17th century the use of the region's ore started, based on the iron and copper findings at first place in Kengis, Pajala. 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 study area. An important precondition of the large-scale exploitation was the building of the railway, especially between Luleå and Narvik, which opened in 1888. Another breakthrough for the industrialisation of the region happened when water saw mills were replaced by steam saw mills on the coast. Large, mostly state companies became owners of the woodland instead of villages or single farmers and the largest rivers and its tributaries changed into transportation routes for the wood. Similar developments took place within the ore industry, which was, to some extent, situated on the coastal areas of the northern part of Sweden by means of State intervention. Especially after the Second World War, the importance of agriculture declined and rural areas lost population to urban areas. Since then, the structural problems in the region were tackled by means of regional policy. The implementation of the welfare state required an expansion of public sector all over the country, not least in North Sweden. Between 1970-1980's, the public sector increased exponentially in the area becoming one of the most important sources of employment.

During the 1980-1990's, the public sector and most traditional activities such as agriculture, forestry, mining, faced rationalisation, and structural changes that often led to unemployment. This development of structural changes can be traced in the population trend of the study areas. The population development in the region over

the past 50 years shows large differences between the WPN and the LWPN. In the less well performing, a constant depopulation started already at the beginning of the 1960's. In contrast, the well performing area, faced the problem of out migration later, in the 1980's. One reason for this disparity may lie in the different economical basis of the two regions and, hence, a different vulnerability to economically decline of certain sectors. The emerging rationalisation in mining started the population decline in the LWPN followed by rationalisation in agriculture and forestry. The WPN was hit by changes later.

The population of the region is nowadays mostly employed in the health care and social work, forestry, mining and quarrying and manufacturing and wholesale and retail. Health and medical care is by far the county council's largest enterprise employing about 25 per cent of the labour force of the LWPN. Mining and manufacturing is the second largest sector employing 22 per cent of the labour force followed by wholesale and retail; transport, storage and communication.

North Sweden has about 35,000 work places, most of them, including in agriculture and forestry, do not have any employees. Sixty-nine per cent of the total work places are in the service sector (for Sweden the average is 71 per cent); however, the region has a large share of work places in the forestry sector. The share of employed labour force in, for instance, IT related sectors is only half compared with the figures for the whole country. Among the new sectors, tourism seems to have a good potential for employment (8 per cent of the labour force is employed in the tourism sector, the same share as the Country's average) (Figure 10).

During the 1990's the North Sweden region, as Sweden as a whole, had a strong job reduction. The main reason was a recession caused by the high production costs on Swedish export industry. One important factor was that during the 1980-1990's, the public sector and most traditional activities, such as forestry and mining, faced rationalisation. In the forestry industry these developments resulted in an increase in productivity (through implementation of new machines and techniques) that strongly contributed to the region's job reduction, especially in LWPN area.

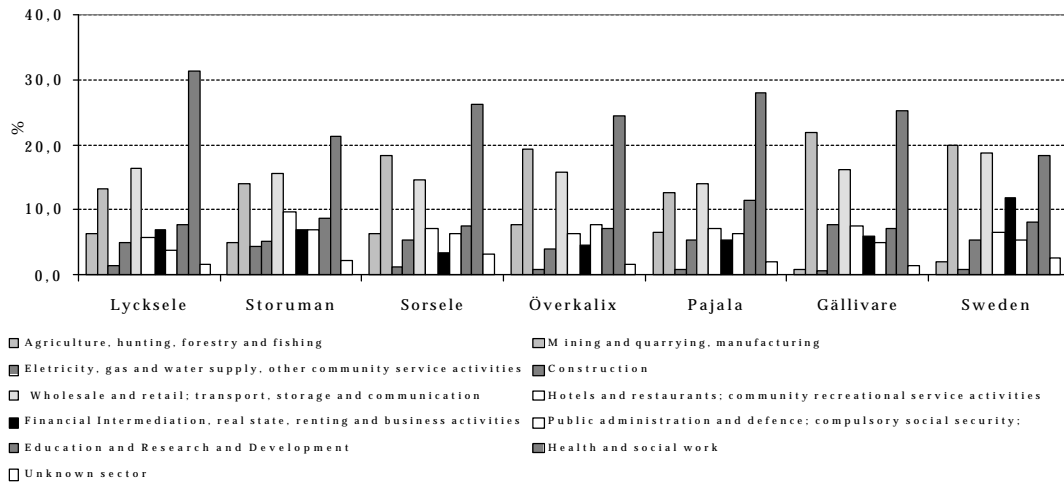


FIGURE 10 - THE NORTH SWEDEN ECONOMIC STRUCTURE, WPN AND LWPN RESPECTIVELY - EMPLOYMENT 1998

SOCIAL FORMATION OF PRODUCTION

About 4 per cent of the total active population of North Sweden are entrepreneurial, which is the lowest share in the whole country. Between 1994 and 1998, more than 50 per cent of the municipalities had an increase of business start-ups (Table 21). Many inland municipalities, inclusive those belonging to the North Sweden study area, have had a higher establishment of new businesses than the municipalities along the coast, possibly influenced by outsourcing process that took place mostly in the forestry industry. Far more important however, is that Objective 6 included measures to promote start-ups. Even if more and more women choose to start a business the share of female entrepreneurs is still relatively low.

TABLE 21 - BUSINESS START-UPS (AVERAGE FOR 92-96 AND 96-98 - ENTERPRISES PER 1000 INHABITANTS)

	WPN	LWPN	North Sweden region	Sweden
1992-1996	10.6	5.6	8.1	8.9
1996-1998	11.8	7.8	10.9	9.3

Even though self-employment through outsourcing is not necessarily related to an increase in lower paid jobs, it keeps linkages of dependency to the traditional eco-

nomic structure, and decreases potentiality towards economic diversity and makes the region more vulnerable to structural changes.

Institutions

INSTITUTIONAL AUTONOMY

Since the Swedish political system is decentralised, the decisions taken at regional level often have an automatic impact at local level, where the policies are in fact implemented. As pointed out previously, within the past years, considerable changes have occurred, which have had an impact on the role of the Swedish state. From outside, adjustments of the institutional setting were adapted to follow the Sweden's decision to enter the EU to fulfil the requirements of EU policy. From inside, rationalisation of public sector and political decentralisation marked the 1990's, culminating in 1998 with the government bill (Proposition 1997/98:62) providing more power to the regions. One of the most important policy instruments nowadays has been the so-called Regional Growth Agreement (RGA), *Tillväxtavtal*, which decrees that all Counties develop defining strategies to contribute to the regional development based on each County specific needs. The background for this initiative was the poor development in many parts of country associated with high unemployment rates and population outflow. The RGA main principle is that a more open co-operation between actors at different levels and a better co-ordination of resources will result in economic growth. Besides this new formal structure, there is also a parallel form of action composed of local organisations (*byarörelsen*) that is traditional in Sweden and is worth noting. Little is known about the impact of these groups to stimulate development but there are over 700 000 people over the whole country (Herlitz, 1998) working ideally in networks to make their communities viable and improve their quality of life.

This recent institutional decentralisation may have long term positive impact on the region's economy since it theoretically improves its autonomy and, consequently, its capacity to solve its own problems. However, decentralisation has always been a typical characteristic of the Swedish system, which makes any specific analysis of the impact of these recent changes on the DORA study areas a difficult task. Thus, in the Swedish case, institutional autonomy per se cannot be taken as a differing factor for explaining performance among the study areas. Of course, even in a given decentral-

ised system, institutions may not function in the same way all over the country – some areas will have institutions that are more efficient in giving ‘voice’ to local actors’ needs than others, and this may be crucial to their economic performance. Besides, frameworks are set regionally and nationally but the way each policy measure is implemented locally may vary in accordance to the politicians’ interests and ideology. This issue is discussed in the next subsections.

Differences between the areas regarding how policy measures are implemented locally may explain why in a very decentralised system as the Swedish, people still believe that more power could be given to local governments. Among the interviewees, the majority believes that the local businesses would cope better if the municipality had more power than it has today. The main argument is that local politicians ‘know better’ about the local problems, and therefore, would better apply resources locally. Surprisingly several interviewees in the WPN area pointed out the danger of giving more power to local actors, for instance, smaller communities tend to have ‘the same people in power for a long time’ which perpetuates ‘the same old ideas’ and limit innovation or even that there is a latent risk for ‘patronage’ that creates unfair competition in local business.

INSTITUTIONAL CO-OPERATION

Besides the common local organisations composed of groups of interests, all study areas have local organisations or networks supporting contact between different local actors, such as politicians, entrepreneurs, employment service agencies, local groups and citizens (as part of EU policies). However, interviewees in the LWPN areas are not always aware of their existence or may have a more negative attitude towards these local partnerships than interviewees in the WPN area. Most of the interviewees recognise the existence of these informal channels and see it as a positive characteristic of their ‘business environment’ or part of the quality of life (‘everybody knows everybody here’). They vary in type, few mentioned they use these informal channels to find new employees, exchange business information, and find potential buyers whilst others use them restrictedly for social and personal reasons. (Regarding the type of these informal contacts, see section on ‘networks’)

In the independent survey performed by SAF (1999), entrepreneurs and politicians were asked their opinion about how well local networks were promoted by the municipalities to support local businesses/entrepreneurs (Figure 11). The politicians evaluated the municipalities' efficiency in promoting networks more highly than entrepreneurs. The average is slightly lower for the LWPN area among entrepreneurs than for the WPN areas. In general, they judge the municipalities' efficiency as acceptable; the highest average was found in Storuman (WPN) and the lowest in Pajala (LWPN). Among politicians, the highest scores were found in the municipalities of Sorsele, Storuman (WPN) and Gällivare (LWPN).

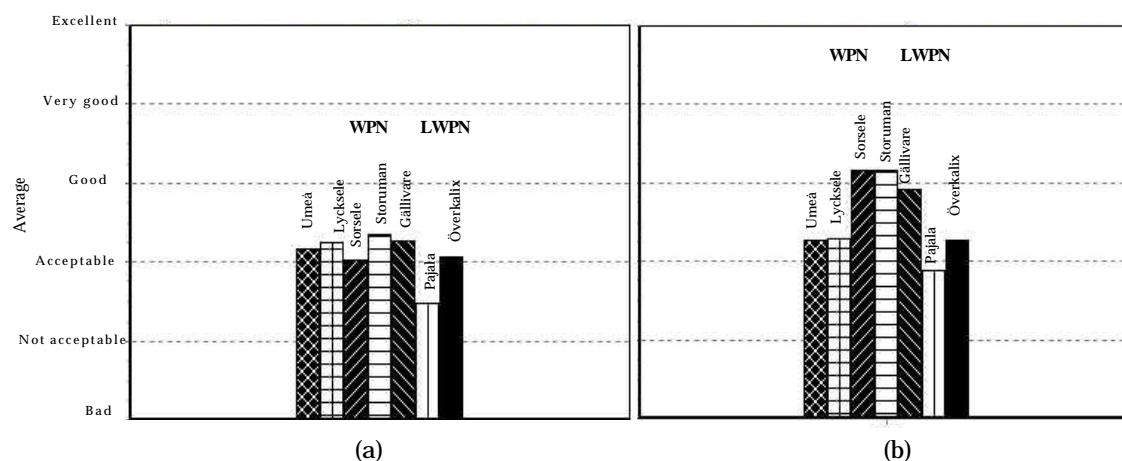


FIGURE 11 - 'NETWORKS' PROMOTED FOR ENTREPRENEURS IN THE MUNICIPALITY ACCORDING TO ENTREPRENEURS (A) AND MUNICIPAL POLITICIANS (B), 1999

Source: SAF, Företagarenkät SAF/Demoskop.

INSTITUTIONAL RESPONSIVENESS AND EFFICIENCY

The hypothesis is that the more open and accessible the policy process, and the more that process influences choice of priorities by public bodies, the better it is likely to be for local economic development. Here we deepen the issue of responsiveness by looking at particular services, which institutions provide, and how well these are provided (efficiency). The general hypothesis is that efficient public institutions are a necessary component in local economic performance.

One good indicator of institutional responsiveness and efficiency is measured in how local actors perceive municipal rules and bureaucracy. Figure 12 illustrates the perception of entrepreneurs and politicians of the municipal rules and bureaucracy according to SAF survey in 1999. In comparison with the whole Sweden, entrepreneurs in all DORA study areas (and Umeå, a North Sweden large urban centre) perceive the local government as bureaucratic. The most unacceptable cases were found in the LWPN municipalities, Gällivare being the worst example, both according to entrepreneurs and politicians themselves (the only exception is among politicians in Överkalix). These findings indicate that even though there seems to exist a common platform to stimulate business locally (business association, networks, municipal joint companies), entrepreneurs feel that this is not enough in North Sweden, and especially in the LWPN area.

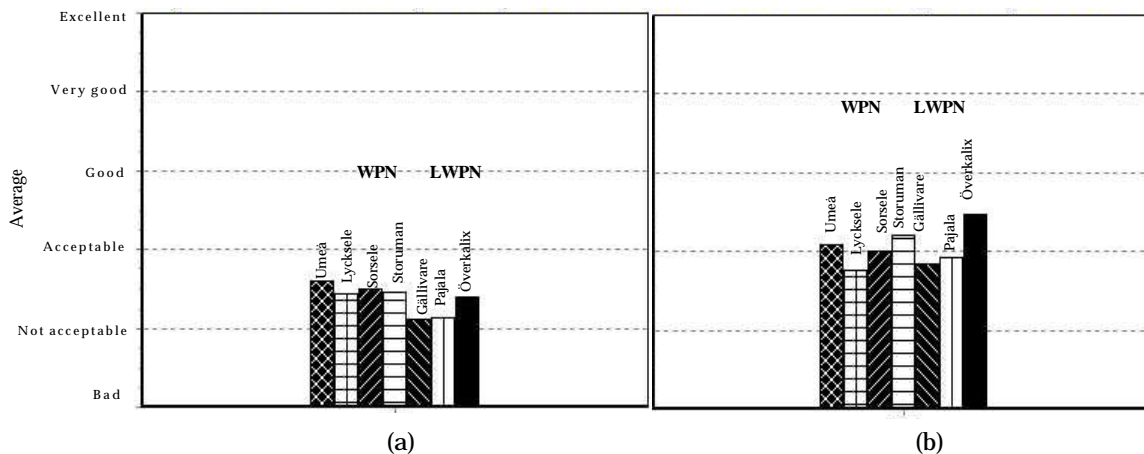


FIGURE 12 - THE PERCEIVED MUNICIPAL RULES AND BUREAUCRACY ACCORDING TO ENTREPRENEURS (A) AND MUNICIPAL POLITICIANS (B), 1999.

Source: SAF, Företagarenkät, SAF/Demoskop.

The picture of having the LWPN areas as the less ineffective and more bureaucratic is not as clear as the survey results showed, when looking at the answers from the interviewees. Many recognise that is not an easy task to try to turn a negative trend after so many decades downhill, they believe that politicians 'do what they can' for their communities.

Networks

LOCAL EMBEDDEDNESS

Local embeddedness¹¹ stands for the extent to which entrepreneurs and local actors are embedded into the social networks of their locality. The initial hypothesis is that strong local embeddedness via the informal social networking activities of owner/managers aids local economic development through the exchange of information, ideas and the processes of innovation.

In North Sweden, as in other parts of the country, partnerships promote co-operation between local organisation, entrepreneurs and local government through LEADER projects¹². The projects involve municipalities in LWPN areas (such as, Skogslandet, in Gällivare) and in the WPN areas (Sorsole and Storuman). One of the most known examples is the LEADER group Stad och Land - Hand in Hand (*City and Countryside - Hand in Hand*). The local action group is run by a board of directors whose 22 members represent the public, private, co-operative and non-profit sectors. The project bases its intervention on the synergies between the city and countryside, including the university.

Regarding businesses, all study areas in North Sweden have the traditional business organisations (*Företag föreningar*) and also other types of networks, often promoted by the municipalities, meant to give support and stimulate entrepreneurship.

Municipal development of joint authorities/companies (*Kommunal utvecklingsbolag or fond*) is a typical Swedish approach to stimulate business locally. They are also common in the study areas, generally owned by the municipality in conjunction with local businesses (which often have majority representation on the board). In general, these formal organisations are set to further stimulate and support development of the local businesses but also attract new ones to the municipalities. They differ in activities performed but often they include projects and development work, consultancy, financing and other activities supporting existing businesses and competence.

11 Granovetter, M. (1985).

12 In countries that already had a rural development policy, LEADER often intervened to fill any gaps or improve what already existed. Thus, in the Nordic countries the local action groups (LAGs) adopted very targeted themes for their action programmes, such as equal opportunity for men and women in Sweden. For the other Member States, the LAGs often had horizontal strategies for economic and social development with strong community involvement (Jouen, 2001).

They are focused on attracting new businesses that suit the traditional economic structure of the municipalities, especially those unaffected by the region's geographical location. They also have a broader approach, which includes stimulating businesses in new branches from locals and implementing complete new sectors (IT-centre in Överkalix or medical technology in Gällivare) with enterprises coming from the country's largest centres.

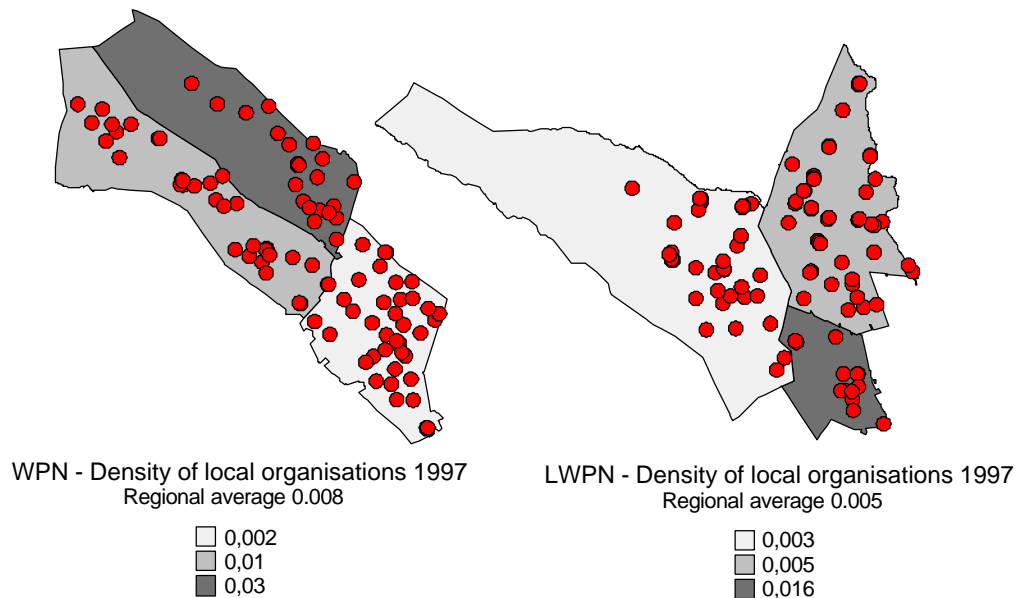


FIGURE 13 - DENSITY OF LOCAL ORGANISATIONS, ORGANISATIONS/INHABITANTS, 1997

There are reasons to believe that even though all the study areas have municipal joint companies, they do not function in the same way across the study areas; that is to say, the ones in the LWPN are less efficient in stimulating/attracting new business than the WPN area. One indicator is the differences in business-start ups between the leading WPN (12 per 1000 inhabitants) and the lagging area, LWPN (8 per 1000 inhabitants).

As pointed out before, all study areas have local organisations or networks supporting contact between different local actors, such as politicians, entrepreneurs, employment service agency, local groups and citizens, even though they are not always

aware of their existence or are in other cases, critical about their role as a non-elected democratically organisations. Traditionally in Sweden, there is also a parallel form of action composed of local organisations. They vary in type, from leisure organisations, networks for supporting (female) entrepreneurship to those directly involved in stimulating local development. They also vary in number throughout the DORA study areas. Figure 13 shows the density of local organisations per inhabitant/municipality for the study areas and illustrates few initiatives of local partnership in both study areas, which provide strong evidence to the relation between the existence of social networks and economic performance.

GLOBAL COMMUNICATIONS

Strong global communication links, in respect of formal and informal networking activities, between entrepreneurs and individuals or organisations in the rest of the world, aid local economic development through the exchange of information, ideas and the processes of innovation. This involves an examination of whether there are strong formal and informal communication links between local entrepreneurs and the rest of world, and if such networks are beneficial to the development of the local area.

Most of the interviewees, especially the entrepreneurs, declare having contact with other areas/enterprises/countries. For enterprises dependent upon a local market, these contacts are outside the limits of the municipalities. Among those who have a broader market, the extent and type of these contacts vary; sometimes the contact results from the fact that they are part of a large enterprise that is headquartered in Stockholm or in another country, or most of the clients/subcontractors are found outside the study area. No clear pattern was found among the study areas.

However, when entrepreneurs and politicians judged how well their contact was with universities in the region, those belonging to LWPN areas declared themselves to be less satisfied than those in the WPN area as shown in Figure 14 (entrepreneurs were considerably less satisfied). It is worth noting that the entire North Sweden assessed their contact with the regional universities as nearly unacceptable. This can certainly be explained by the fact that the region still has a very traditional economic structure less dependent upon knowledge-based services/activities that universities may provide to the region, so, entrepreneurs would take little advantage in keeping such

networks. Another interpretation would be that they already see the potential in having such contacts but little support is given to establish in practice these contacts. The 'more positive perception' among politicians may also be related to the fact that politicians are nowadays actively involved in building an educational infrastructure locally (promoting temporary university courses, such as in Lycksele, Sorsele and Storuman and Pajala) which has not yet impacted on the entrepreneurs' demands for labour force.

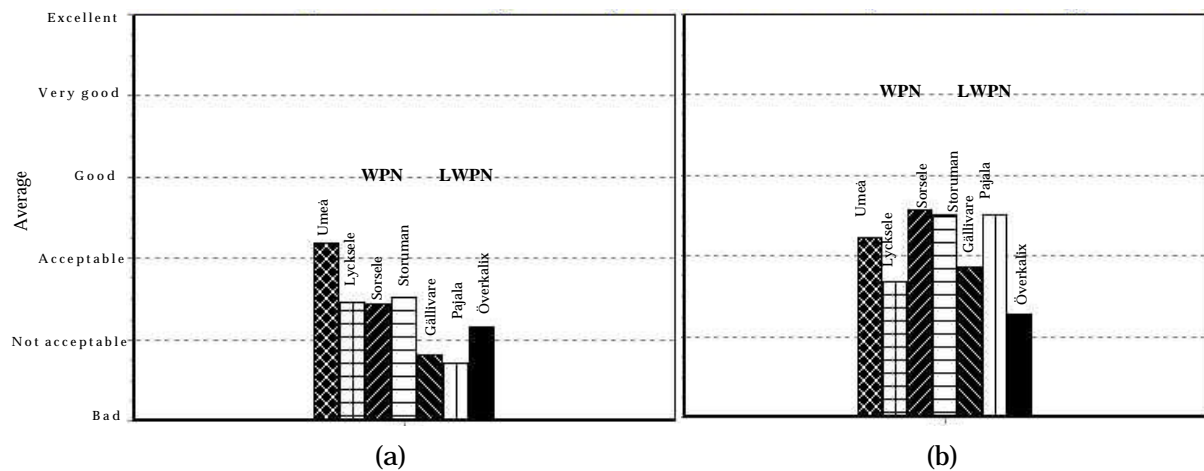


FIGURE 14 - ENTERPRISES' CONTACT WITH UNIVERSITIES IN THE REGION ACCORDING TO ENTREPRENEURS (A) AND MUNICIPAL POLITICIANS (B), 1999

Source: SAF, Företagarenkät SAF/Demoskop.

INFORMATION TECHNOLOGY AND INNOVATION

The initial hypothesis was that formal and informal networking activities, facilitated by the use of information technology, aid local economic development through the exchange of information, ideas and the processes of innovation.

At study area level, all municipalities have homepages, sometimes with basic information in English, mostly related to tourism. Interviewees in the WPN areas use as much Internet/email as those living in LWPN (mostly public officials and entrepreneurs). Little can be said about the use of information technology as an instrument to facilitate network activities in our study areas by looking at figures at County

Council level. Perhaps, there is some indication that part of the WPN has the higher access to computer and Internet, at home and work than the LWPN (Table 22).

TABLE 22 - ACCESS TO COMPUTER AND INTERNET - HOME AND WORK 1998 (16-64 AGED POPULATION)

County	Computer home (%)	Access to Internet (%)	Access to internet/computer(%)
<i>Home</i>			
Västerbotten	56.2	30.1	53.6
Norrbottn	47.9	26.9	56.0
Sweden	52.1	29.2	56.0
<i>Work</i>			
Västerbotten	64.7	47.1	72.9
Norrbottn	59.0	39.0	66.1
Sweden	59.1	38.5	65.1

Source: Statskontorets undersökning av internetanvändning. Tilläggsundersökning till AKU maj 1998 med halva AKU urvalet.

Culture

'Culture' subsumes here local traditions, identity, values and beliefs, attitudes, religion, history and leadership as well as political beliefs and allegiances. All these aspects are expected to influence indirectly economic performance.

FORMS OF COMMUNITY AND IDENTITY

Regardless of the area of study, interviewees rarely declare associating their identity to their municipality (or study area). Instead, most of them declare themselves to be a person from a larger geographic area, from "inland" or from North Sweden 'a Norrlänning'. This broad self-labelling stands for honesty, a specific accent, for being a quiet person that speaks to say something important. This may indicate a kind of lack of attachment to the local communities, where they work and live, but also that people living in North Sweden are relatively mobile, which influence their identity, making it much more diffuse.

RELIGION

Religion refers to the organised expression of being tied to a shared notion of the world. We wished to investigate the degree to which communities are formed around participation in organised religious activities or despite them. In WPN areas there seems to be a stronger influence on daily life from various religious groups (State church and Free church groups often co-operate with each other) than in the LWP areas. Interviewees in the WPN areas more often knew about the existence of religious groups, events and other gatherings supported by these organisations. However, most of the interviewees were sceptical about the direct influence of the religious groups in the local economy.

VALUES, BELIEFS AND ATTITUDES

The intention here is to characterise the people of an area, as seen by themselves and others (self-labelling features) and their attitude about entrepreneurship in general. These features may be an important part of the story of what makes particular areas distinctive. People were asked if they find these stereotypes to be accurate or meaningful in relation to DEP.

People in WPN areas are more positive towards entrepreneurship than the LWP area - at least according to entrepreneurs and municipal politicians' perception of the business climate in these areas (Figure 15). This difference between study-areas is also confirmed when entrepreneurs declare their perception of municipal politicians towards entrepreneurship (Figure 16). A complementary picture of the local attitude is given by histories surrounding features that are pointed out by the interviewees as representative of their local/regional identity.

At first glance a uniform regional/local identity cannot be detected in the study areas. Rather, they vary from a very negative picture they have about themselves (from 'people coming from North as being lower educated', 'here everything goes slowly', 'tradition of dependence upon central government', 'focus on the bad side of things instead of looking at the possibilities to making things', lack of co-operation between entrepreneurs – instead there is a clear envious behaviour among people, 'clear traditional gender roles, chauvinism') to a very positive one, sometimes mythic and over valuing the region's resources ('highly reliable as an individual', 'place where quality of life is taken for granted but is in fact better than other places in Sweden',

nice people). However, if one compares the labels said to characterise them, a clear pattern comes up. Interviewees in the LWPN area tend to be more critical about themselves than interviewees in the WPN area, which certainly has an influence on the way they see their future possibilities for the area.

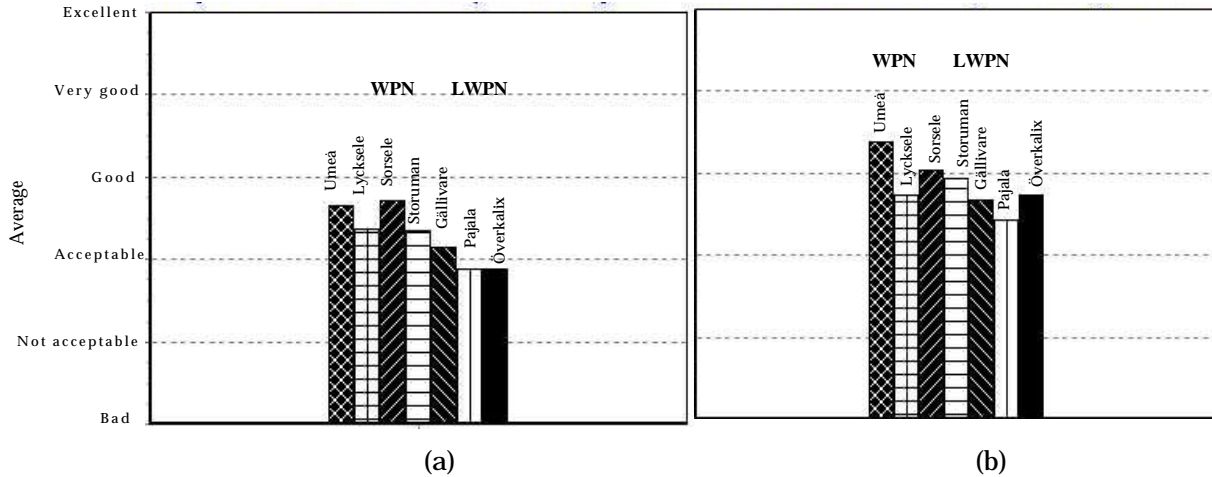


FIGURE 15 - GENERAL ATTITUDE TOWARDS ENTREPRENEURSHIP ACCORDING TO ENTREPRENEURS (A) AND MUNICIPAL POLITICIANS (B), 1999

Source: SAF, Företagarenkät SAF/Demoskop.

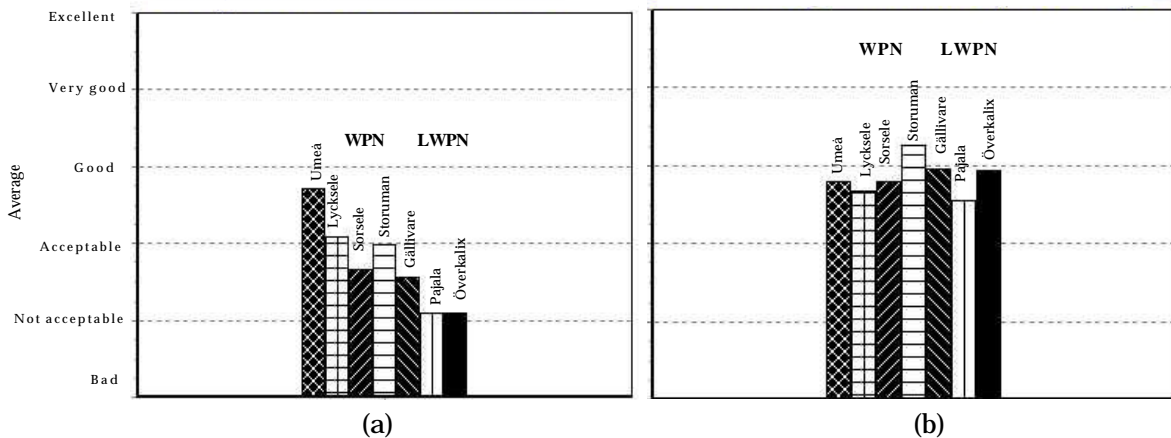


FIGURE 16 - MUNICIPAL POLITICIANS ATTITUDE TOWARDS ENTREPRENEURSHIP ACCORDING TO (A) ENTREPRENEURS AND MUNICIPAL POLITICIANS (B), 1999

Source: SAF, Företagarenkät SAF/Demoskop.

According to the interviewees, media (also the local and regional) often helps spread a more negative stereotype of the region, regardless of the study area. Many pointed out that the local media is often interested in focusing on demoralising local actors, especially politicians, by writing about 'temporary scandals' on their personal life than to focus on local issues that matter to general population. They believe also that outsiders ('people in South Sweden') have a negative picture of North Sweden, that sometimes, they think that it fits to the reality (*jante lagen*¹³ is strong there', envious behaviour between locals) and in other cases, not ('dependents of the system', low skilled). No clear pattern was found among the study areas.

MULTICULTURALITY

Multiculturalism in rural areas is perceived either as a potential resource that might contribute to the economic development, or as a burden for the hosting society. The initial hypothesis here was that areas able to take advantage of being a multicultural community tend to be economically better off.

TABLE 23 - PERCENTAGE OF FOREIGN CITIZENS 1995

WPN	Storuman	1,8
	Sorsele	1,1
	Lycksele	3,7
Västerbotten County		3,3
LWPN	Överkalix	2,1
	Pajala	4,0
	Gällivare	2,7
Norrbotten County		4,3
Sweden		6,1

13 In Sweden there's a phrase for fear of success 'Jante lagen' (The Jante Law). Loosely translated, that means, "Don't think you're anyone." But the interviewees also associated this term to the envious feeling among neighbours, locals that prefer to make favours to someone else outside their community, only to not give the possibility to the neighbour be someone better than he/herself. This has been declared to happen often among entrepreneurs working in the same branch in one of the LWPN municipalities.

Foreign population composes a very small parcel of the total population of DORA study areas (Table 23). They tend to be lower than the regional and national average. Most of the interviewees declared themselves to believe that it is not easy to be a newcomer in their communities, especially for foreigners. More often in WPN area, interviewees state being aware that there are some types of conflicts between newcomers (not necessarily, foreigners) and the native population.

OUTLOOK FOR SWEDEN'S PERIPHERY

The current as well as the future economic performance of the rural areas of North Sweden is deeply rooted in the history of this peripheral region. Exploitation of the enormous natural resources (forests, waterfalls, and minerals) started as large-scale state ventures in the second half of the 19th century. Settlements in a few small mining towns as well as colonisation of riverside land suitable for subsistence farming – even north of the Arctic Circle - were encouraged by state incentives such as tax relief programmes. Investments and maintenance of the heavy infrastructure, first the large rivers for timber floating to coastal sawmills, later the numerous dam construction for power plants and railways for ore export, became large sources of primarily male employment. The employers were the large state-owned and managed companies.

The economic performance of this large region with a sparse and scattered settlement has to a large extent contributed to the wealth of the Swedish economy throughout the 20th century and will no doubt continue to do so in the future. However, the direct impact of the exploitation of natural resources on the regional and local economy has been and still is very limited, because of the colonial type of economy implemented by the state companies. Direct impact on the regional income has largely been derived by the local input of labour in forestry, transportation, mining and farming. Employment in these sectors has been declining – except for a few periods of boom in ore export – during the whole second half of the 20th century. Long term high unemployment and net out migration has been the inevitable result.

The current demographic structure of the rural areas and small towns in Norrland's interior, owing to continuous net population loss, has become severely biased toward the elderly population. Prolongation of the population trends from the last 30 years

and assuming persisting low fertility rates result in a reduction of the population numbers by 30, 40 or even 50 per cent within the next 30 years. At the same time, service production for the benefit of the local ageing population has eventually become a domination source of employment. These services are provided by the public sector, and largely funded by state transfers to the rural municipalities with their shrinking local income tax base.

Hence, we conclude that economic performance of these rural areas is today largely decided by the households' incomes from public sector jobs, with a nationally set wage level. It is likely that the proportion of the public sector in the local economy will increase in the future, due to the increasing demand for services to the economically non-active population.

Industrialisation programmes and incentives to small business – outside traditional forestry, mining and agriculture – in North Sweden came first into practice in the mid-1960's. Investment grants, transport subsidies, and retraining programmes have been some of the major ingredients in the national regional policy ever since. It is probably true that the main challenge has been to encourage entrepreneurship in this region, which has been so much dependent on state management and a working class attitude towards economic development and job creation.

It should be noted carefully that very little investments in buildings, machinery and human capital have been made in this region without substantial public co-funding in the recent 35 years. After Sweden's accession to the EU in 1995, national regional policy has been completed with structural funds, leading to an increasing public support to the small firms and industrial networks in the region.

Hence, differences in start-ups, investment activity and economic performance of SME between rural regions very much reflect the local stakeholders' and private entrepreneurs' ability and willingness to respond to and benefit public incentives.

Economic performance from the wholly or nowadays partly state-owned raw material and energy resource production units in the region is almost entirely at the benefit of owners and shareholders outside the region. We have not considered these resources in analysing and comparing economic performance between regions.

It is against this general economic background for Northern Sweden that we should evaluate the differing performance of two sub regions in North Sweden, the well

performing and the less well performing study areas. Indeed, we have found indicators of differing performance between the two regions. However, we should also remember that the two areas are not homogenous, the WPN consisting of two very sparsely mountain areas and one small service centre in the forest belt. The LWPN consists of two of Sweden's most remote rural municipalities and one mining town with more or less no rural hinterland. Explanations of differing performance "on the average" have to take the local heterogeneity into consideration.

Having said this, we conclude that the factors, which primarily explain differences in economic performance between rural areas in North Sweden, are to be found in the history of economic transformation of the regions. The well performing area has natural assets and established service functions which have been more easily identified and exploited by local entrepreneurs, encouraged by public incentives. Cultural attitudes are more characterised by the individualistic and co-operative mentality in the well performing region. On the other hand, collectivism and working class culture dominate attitudes in certain parts of the less well performing region. More so in the LWPN it is often said by workers that provision of employment should be a responsibility of the State, not the private firms. It is only in recent time that entrepreneurship has been fully accepted by the majority of the local population.

The relatively slower rate of modernisation and renewal of the local economy in LWPN during the last decades is a push factor for young out migrants, which in turn has added to the ageing of the remaining labour force with little qualifications for the few new jobs created. Hence, we have found that WPN is an example of the old saying that success feeds success, while the corresponding saying could be translated for the LWPN to the vicious circle of "few successes means less encouragement for others to try".

Accessibility in geographical terms is clearly better in several parts of WPN than in LWPN, the latter region containing Sweden's most remote areas at the Finnish border. Finally, we conclude that private and public stakeholders in WPN have managed to actively take advantage of the abundance of public funding and programmes for regional development than the LWPN, whose population and stakeholders have been more adjusted to passively consume the benefits of the Swedish welfare state.

A TYPOLOGY OF REGIONS

One dominating feature for rural areas in Sweden is that they, as many regions outside metropolitan regions, are in a *varying rate of depopulation*. The reason is a negative natural reproduction rate, low fertility rates and net loss of migrants.

Secondly, these areas are to a *varying extent dominated by a sparse settlement*, where the northern areas are particularly sparsely settled.

Thirdly, some of them – particularly in northern Member States - are located at the *periphery of the country*. Some regions in Southern Europe are relatively closely located to regional centres with higher education facilities and other services.

These three varying features concerning the demographic and spatial structure of the areas are important to keep in mind in designing strategic policy recommendations for each of the types of areas. The guiding principle is that, for a general policy for these regions, there is a need for flexibility and local influence.

The Importance of Realistic Objectives

No doubt, depopulation is one of the most complicated problems to be addressed by policy, particularly if the objective is set to regenerate the population structure. This will be pronounced in the regions that already have a long history of population decline. In addition, an increasing proportion of labour demand will come from the ageing local population's need for basic services. Many small regions are facing the risk that more or less their entire future labour supply has to match jobs and positions offered in health care and social services for immediate local consumption. Besides the associated financial problems, which have to be solved within the national welfare system, we expect this development to become a challenge to both labour market and regional policy in the decades to follow.

We anticipate that in specific regions, the public sector will give priority to training, recruitment and motivating an increasing share of the local labour for this demographically determined welfare and service production. At the same time, this is likely to further reduce the local supply of labour for economic activities in the private sector. This clearly counteracts the regional policy goals stressing the importance of economic growth and well functioning local labour markets in all regions. Evidently,

it has to be put into question whether the labour supply problem can be solved by traditional labour market mechanisms in these regions. It could be questioned which incentives to economic development and restructuring of the economy are feasible in these regions, which are likely to experience permanent shortage of labour due to the demographic structure of the local population.

A Need for Flexibility

A call for flexibility in policy design and implementation will also increase the need for active and competent regional and local partnership. They always have a key role for the proper implementation of regional and structural policies. It might, however, be argued that in cases of depopulation the need for a regionally based understanding of the resources, problems and future possibilities will be very important. Policies need to address this and facilitate an active role for the local and regional partnership.

Flexibility is also needed when it comes to selecting measures. Traditionally, regional policies have tended to rely upon direct grants and operational aid. This might in some cases, when provided for by the guidelines for regional aid, be unavoidable. More emphasis may, however, in the future be placed on an active role of the private sector, a shift to loans instead of grants and a more elaborate working partnership between the private and the public sectors. Moreover, such a shift in emphasis may provide a much-needed increase in the "leverage effect" of public spending (including the transfers from the structural funds). The evolution of entrepreneurship, with active use of start-up grants and other policy measures targeting the SMEs will form an important part of such a shift in development strategy.

The analysis of the differing performance of depopulating areas suggests that there is at least a three-dimensional variation between 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 noticed that in many countries the national labour market

policy levels out much of the variation measured this way, between local labour markets. 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. The size and diversity of the local labour market, which are 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 *performance of the service infrastructure* and supplies between the regions studied. Again particularly the Northern European regions stand out as vulnerable to cut backs of public services, and also having accessibility problems of quite another dimension than the Southern European regions.

Given this three-dimensional specification of the performance, a strategy for each of the regions has to take the causes of these differences into consideration.

Figure 17 illustrates the characteristic structure and differing performance of two hypothetical depopulating regions in a sparsely populated environment. Figure 18 illustrates tentatively the differing performance of two depopulating regions with a more dense settlement structure.

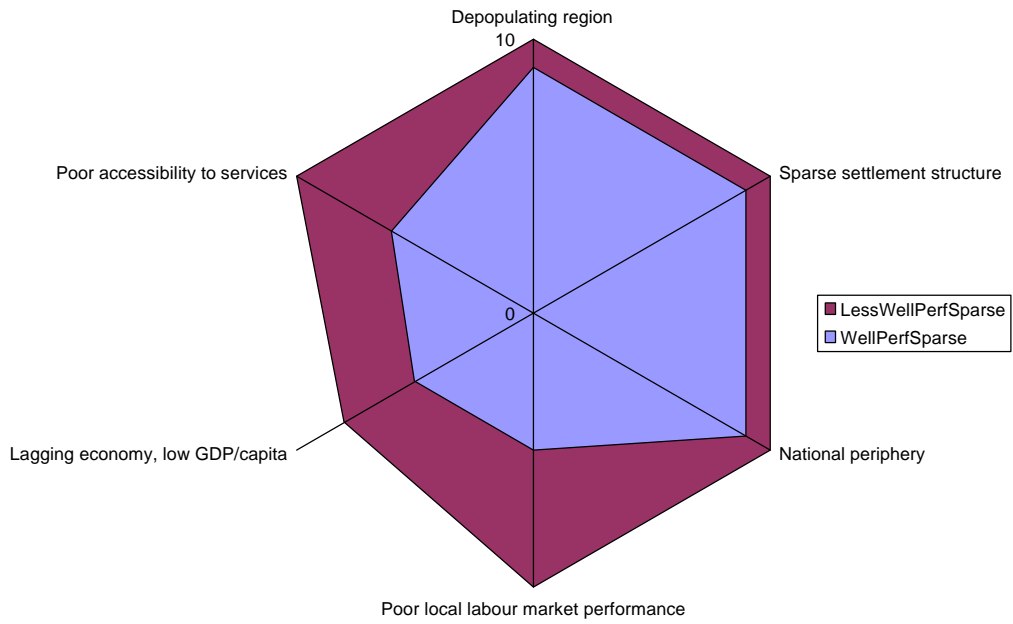


FIGURE 17 - TENTATIVE CHARACTERISTICS OF ONE WELL AND ONE LESS WELL PERFORMING DEPOPULATING REGION IN SPARSELY POPULATED REGIONS IN SWEDEN

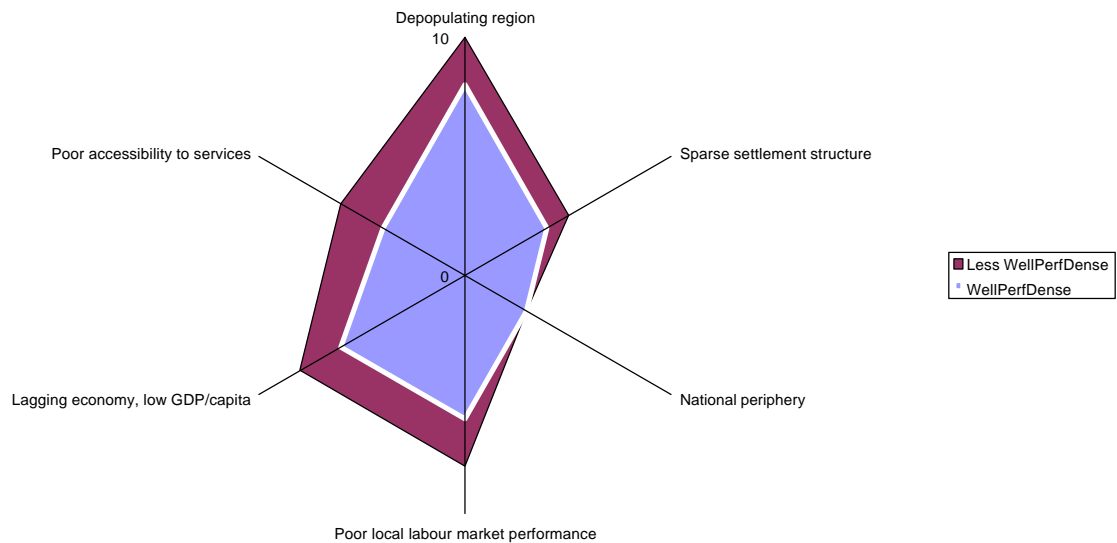


FIGURE 18 - TENTATIVE CHARACTERISTICS OF ONE WELL AND ONE LESS WELL PERFORMING AREA IN MORE DENSELY POPULATED REGIONS IN SWEDEN

TOWARDS A FRAMEWORK FOR POLICY

Let me outline the contours of a dual regional policy design, with one set of measures aimed directly at encouraging economic growth and better functioning of the regions and another set aiming at equalising the living conditions for the population.

Measures for economic growth

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

- (a) The structural measures should be directly aimed at improving the accessibility through communication infrastructure. In more densely populated EU regions the road infrastructure and public transportation network should be of particular importance in such strategy, in order to "enlarge" the local commuting area and 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 peripheral areas, this strategy has limited effect because of the long distances. Here, a modern ICT-infrastructure has to be invested by means of

public intervention. The future development of these regions into a modern knowledge-based economy depends on the modern technology to overcome geographical distances. Investments in such infrastructure may be an important element in a strategy for development of regions facing depopulation. It may attract businesses by lowering their installation costs and thus enhancing the advantages of the region concerned. Investments in telecommunications networks and educational facilities as well as the existence of public services such as nurseries and hospitals may increase the possibilities of changing the negative trend. Diffusion of broadband techniques, facilitating telemedicine and learning at distance are associated elements.

It is furthermore important to develop a working relationship between the structural policies at the EU level, national level and activities pursued at the regional level. The aim should be to achieve complementarity between EU and national policies. This has to be addressed also by an adaptation of the guidelines for regional aid to increase the scope for national policies.

- (b) Stimulation of endogenous factors should aim at improving the capacity of the networks in the rural areas and between rural areas and urban centres. These networks have to be built upon historical economic and cultural traditions grounded in each region. The improvement of the competence of the workforce is of outmost importance. As we have seen, one characteristic of regions facing depopulation is that the skilled and educated are the first to leave. It is accordingly important to provide opportunities to increase the competitiveness and competence of those that 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.

Measures for improved living conditions

The *second element* of the dual policy suggested here, i.e. measures to maintain the relatively equal living conditions between regions, is deeply rooted in most European welfare states' tradition. Equality of living conditions includes transfers to local governments/municipalities for providing services transfers to individuals for compensating low incomes and severe other measures. There is a strong need for better co-ordination of these efforts between differing sectors. There is also a need for

reorganisation and new technology used in basic services, particularly to cut costs and improve quality and accessibility. This is a major and challenging task in the remote and depopulating regions.

Implementation of this dual strategy should be done in co-operation between local/regional actors and the nation state, in order to adapt to local conditions, i.e. according to the type and tradition of the depopulating areas in consideration.

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