

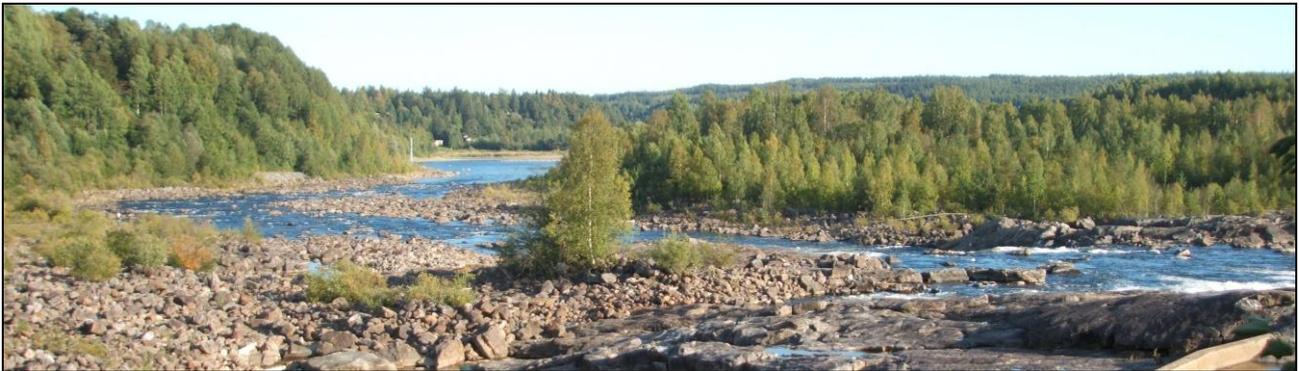


DERREG

Developing Europe's Rural Regions
in the Era of Globalization



CASE STUDY CONTEXTUAL REPORT 2



Övre Norrland

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WP 5
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1. Introduction

1.1 Location and Geography

Övre Norrland (or Upper Norrland in English) is a National Area of Sweden (part of the NUTS classification) comprised of the two most northerly counties (*Län*) in the country, Norrbotten Län and Västerbotten Län (Figure 1). Övre Norrland has international borders with Norway to the West and Finland to the North and East, with the Gulf of Bothnia also forming part of its Eastern border (Figure 2). With an overall area of more than 165,000 km², the region comprises one third of the total national territory of Sweden and encompasses contrasting landscapes, from plains bordering the coast of the Gulf of Bothnia (where the biggest urban centres are located), sand archipelagos in front of the coasts, rocks, mires and hills in the interior (covered extensively by coniferous forests), and high and steep mountain areas in the west with a number of glaciers, low-vegetation patterns and harsh climate conditions. The extreme NW of the region, within Norrbotten County, extends over 100 miles inside the Arctic Circle and features tundra conditions as well as the Kebnekaise mountain range, home to Sweden's highest peak, Mount Kebne (6,926ft/2,111m). The geographical peripherality of Övre Norrland has been reinforced discursively by representations in the Swedish media and cultural stereotypes.¹

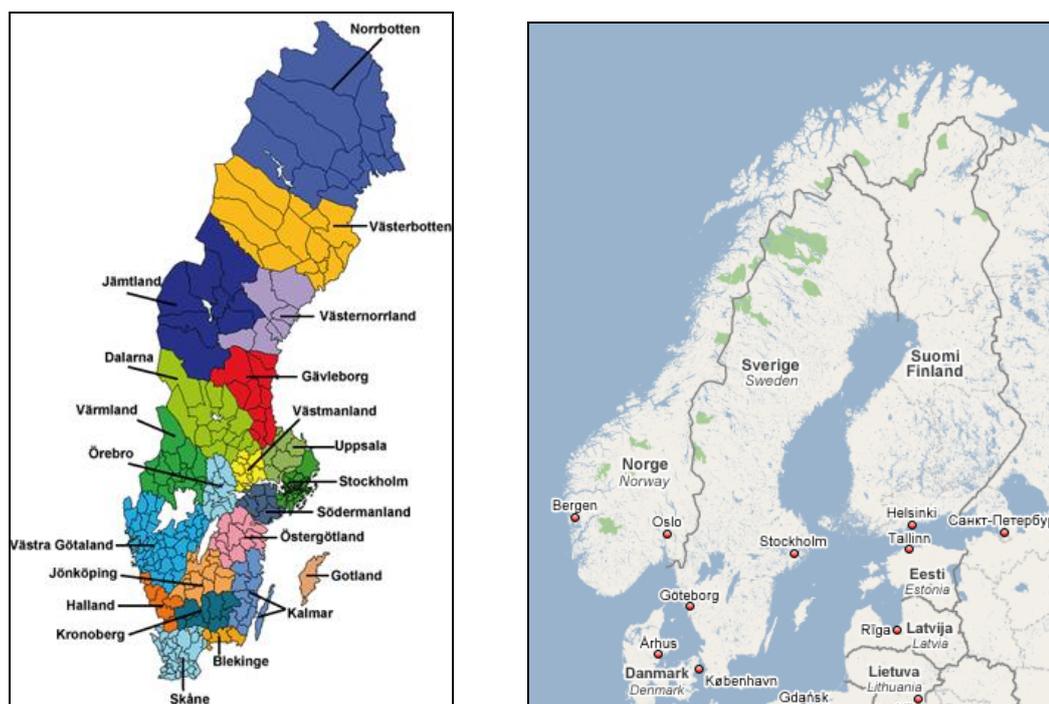


Figure 1: Map showing Sweden's 21 counties; Figure 2: Location map of Sweden within Europe²

In 2007, the population of Övre Norrland was 509,467 people which combined with the large land area, gives the region one of the lowest average population densities in Europe at 3.3 persons per km² and making it the mostly sparsely populated of the ten DERREG case study regions. It is also one of the most peripheral regions in Europe, with 100% of its population classified as residing in 'predominantly rural' areas by Eurostat (in 2005).³ This population is

¹ See Eriksson (2008), Eriksson (2010).

² Source: Wikipedia Commons. Available at: http://sv.wikipedia.org/wiki/Fil:Sveriges_län.png

³ Source: EU Rural Development Report 2008

concentrated in small or medium-sized settlements which are unevenly distributed across the region, with the approximately two-thirds of residents living in the coastal fringe where the important towns of Umeå (112,728 residents in 2007), the capital of Västerbotten County, Skellefteå (71,862), Luleå (73,406) and Piteå (40,902) are located, as well as much of the region's agricultural land. These four towns collectively comprise 58.7% of the entire region's population, with a further 34.9% living in towns with between 5000 and 30,000 residents, many of which are widely spaced across the regions forested inland areas, and the remaining 6.4% of the population living in settlements of fewer than 5000 people.

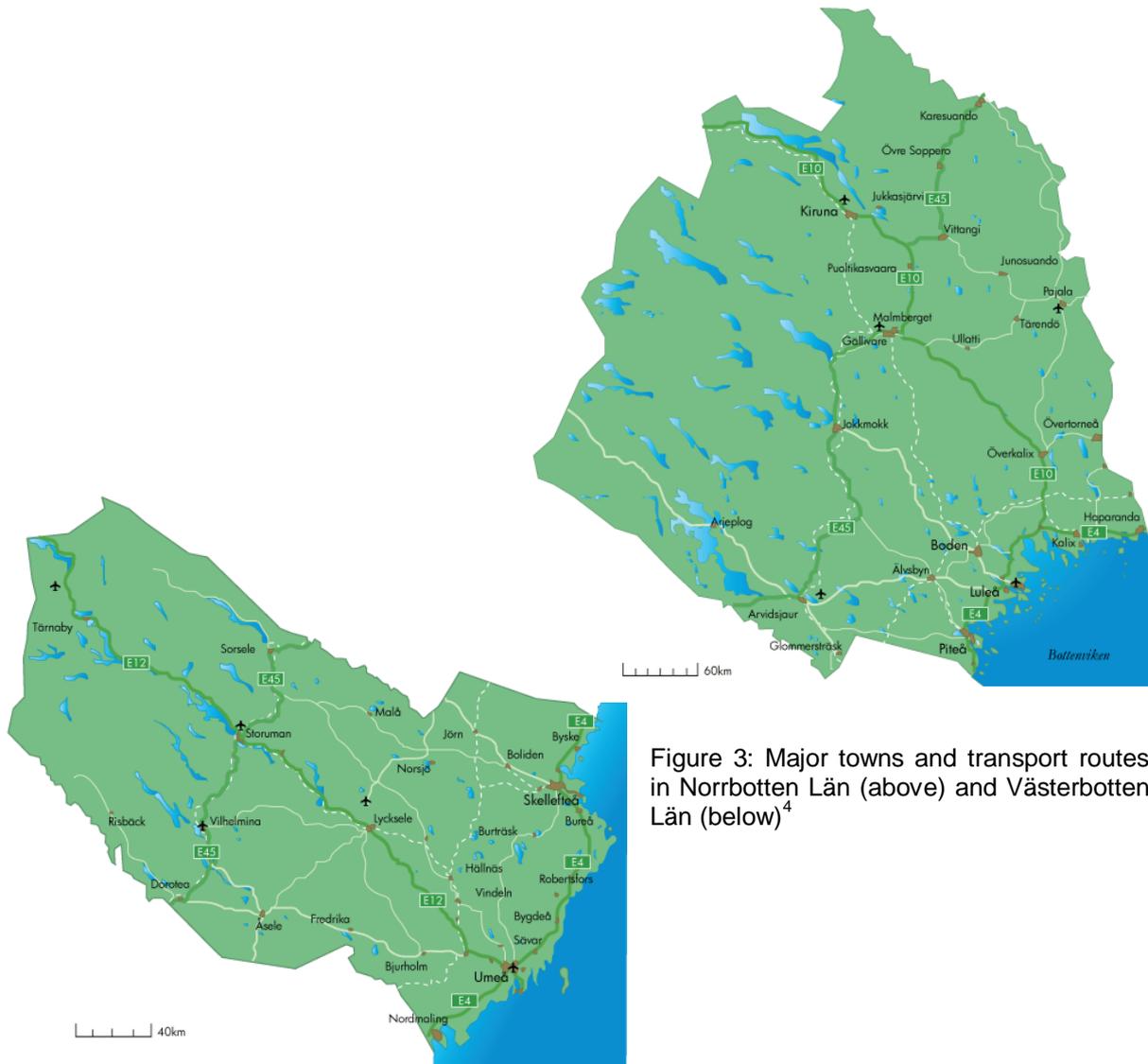


Figure 3: Major towns and transport routes in Norrbotten Län (above) and Västerbotten Län (below)⁴

Övre Norrland has a low score of 29,400 on ESPON's potential accessibility index in comparison to other European NUTS 2 regions, with travel times from Umeå to the Swedish capital Stockholm taking approximately 8 hours by both road and rail. The main overland road and rail links in the region are concentrated along a North-South axis (figure 3), with the E4 motorway connecting the main settlements and industrial areas along the Gulf of Bothnia with Stockholm and the rest of central and southern Sweden, as well as with Finland to the

⁴ Source: <http://www.utbildningsguiden.nu/SE/SV/map.asp?region=2&symbol=10>

north along its 1,590 kilometres length. Other motorways (the E10 and E12) run on an east-west orientation, linking the region with Norway to the west. Several regeneration projects relate to improving the region's infrastructure and accessibility which are crucial for the economy of Upper Norrland. The three main regional projects called *Bothnia Line*, *Haparandabanan* and *North Bothnia Line* are part of the trans-national mega-project *Botniska Korridorerna* or *Bothnian Corridor* that covers both the Swedish and Finnish sides of the Gulf of Bothnia joining the east-west and north-south trans-national transport axes in Sweden, Finland, Norway and Russia.

There are two important inland railway lines in the region which continue to play a key role in the mining industry; firstly, the 'Malmbanan' (Ore Railway) running from the port of Luleå to the mines at Kiruna, and secondly, the 'Ofotenbanen' line from Kiruna to the port of Narvik in Norway. Whilst the shipping of exports from these ports plays a vital role in Övre Norrland's economy, specifically for the supply of industrial raw materials and petroleum products, there is only one passenger ferry route operating out of the region which connects the port of Umeå-Holmsund with Vaasa in Finland. Just under a quarter of goods shipped from ports in Norrbotten, and around an eighth of goods from ports in Västerbotten, are transported to foreign ports.⁵

Due to the region's large land area and sparsely distributed population, air transport connections are important for predominantly domestic travel, with Umeå airport operating more than hourly connections to the International airport at Stockholm. However, there are currently no east-west air connections between Övre Norrland and Northern Norway or Northern Finland, although regular flights have operated between Luleå airport and Murmansk in northern Russia. Övre Norrland has 11 airports in total, 6 in Västerbotten and 5 in Norrbotten, with the biggest airports in terms of passenger numbers being Luleå with 995,300 passengers handled in 2008, followed by Umeå (820,000), Skellefteå (241,847) and Kiruna (207,431).

1.2 Government and Politics

Övre Norrland is one of eight National Areas of Sweden (Riksområden in Swedish),⁶ which are second level subdivisions (NUTS2) created for statistical purposes within an EU context (Figure 4). The eight 'national areas' are made up of 21 pre-existing administrative counties, with Övre Norrland containing two of these counties; Västerbotten and Norrbotten (classified as NUTS 3 regions) (see Table 1).

Each county in Sweden has its own *Länsstyrelse* or County Administrative Board which has the responsibility to fulfil the goals defined by the Swedish Parliament and the Government, and to coordinate the development of the county in line with the goals set in national policies. The *Länsstyrelse* is led by a *Landshövding* or Governor appointed by the central government for a period of six years. Additionally each county in Sweden has a *Landsting* or County Council, which is a policy-making assembly elected by the residents. The County Councils have local taxation powers and the responsibility for cultural issues, health care, infrastructure, communications and regional development planning.

NUTS 1	NUTS 2	NUTS 3	LAU 1	LAU 2
Norra Sverige (North Sweden)	Övre Norrland	Norrbottens Län	n/a	14 municipalities
		Västerbottens Län	n/a	15 municipalities

Table 1: Hierarchy of administrative/statistical units for Övre Norrland

⁵ Source: 'Facts about Norrbotten, 2007', www.bd.lst.se/publishedObjects/10005044/eng_bd07.pdf

⁶ Source: <http://www.unpo.org/content/view/full/6439/139/>

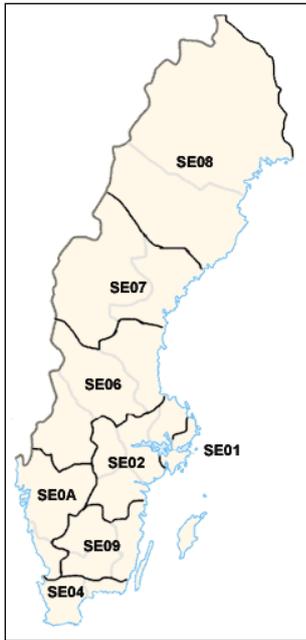


Figure 4: National Areas of Sweden (NUTS 2)⁷

Local level administration is constituted by municipal self-government entities called *Primärkommun* or more commonly known as *Kommun*, which are independent bodies from the County Councils. There are 15 municipalities in Västerbotten and 14 in Norrbotten (29 in Upper Norrland in total). Municipalities' responsibilities include local services, schools, emergency services, and city planning among others (Figures 5 and 6)



Figure 5: Municipalities of Västerbotten county⁸



Figure 6: Municipalities of Norrbotten county⁹

Elections are held every four years in Sweden defining the three levels of administrative divisions in the country (the parliament, the county councils and the municipal assemblies).

⁷ Source: Wikipedia Commons. Available at: http://en.wikipedia.org/wiki/File:Sweden_nuts2.png

⁸ Source: Wikipedia Commons, available at: http://en.wikipedia.org/wiki/File:V%C3%A4sterbotten_County.png

⁹ Source: Wikipedia Commons, available at: http://en.wikipedia.org/wiki/File:Norrbotten_County.png

The political complexion of Övre Norrland is dominated by the Swedish Social Democratic Party (*Socialdemokraterna*), the oldest and largest political party in Sweden, whose traditional policies of a strong welfare state, work-place equality and environmentalism have contributed to the high quality of life now enjoyed by its citizens, with Sweden ranking 7th on the UN Human Development Index for 2009.¹⁰

The Social Democrat's dominance in Övre Norrland was demonstrated in the 2006 general election to the Swedish Riksdag where, despite losing support nationally and thus the election itself to the centre-right Moderate Coalition Party (*Moderaterna*), the party still polled 44.1% of the votes in Västerbotten (the highest percentage among all 21 counties in Sweden) and 42.8% in Norrbotten. The Moderate Coalition Party obtained second place in both counties with 11.35% in Västerbotten and 10.35% in Norrbotten which, in contrast, corresponds to the two lowest percentages of votes among all counties in Sweden.¹¹ This situation was replicated at the municipal level, where the highest numbers of votes for the Social Democrats nationally were registered across the municipalities of Upper Norrland, with 60.9% in Haparanda and 60.7% in Arvidsjaur (both in Norrbotten), respectively.

In local government, the Social Democrats held 31 of the 71 seats of Norrbotten county council after the 2006 elections, followed by the Norrbotten Medical Care Party (13 seats), the Moderate party (8), the Left party (6), the Centre party (4), the Liberal party (4), the Christian Democrats (3) and the Greens (2). The Social Democrats also controlled all 14 municipalities in Norrbotten, and have had majority control of 9 of the municipalities since at least 1976.¹² In Västerbotten, the Social Democrats held 32 of the 71 seats on the county council after the 2006 elections, followed by the Moderates (8), Centre Party (8), Liberal party (7), Left party (7), Christian Democrats (6) and Greens (3). The Social Democrats controlled 9 of the 15 municipalities in Västerbotten, and were the largest single party on the 6 municipalities with non-socialist majorities. The left-leaning politics reflects the historical significance of mining and other resource industries in the region's economy, as well as a core-periphery electoral cleavage.¹³

2. The Regional Economy

2.1 Economic History

The economy of Övre Norrland has historically been based on the region's abundant natural resources, progressing from early subsistence uses of the forests, fish and pastures (for reindeer and other husbandry), to the extraction of economic value through the production of timber and food stuffs. However, it was the opening up of larger scale mining and metal production during industrialisation that brought jobs and a sizeable permanent population to the region. Harsh climatic conditions and the lack of transport infrastructure had restricted the expansion of the region's economy until the end of the nineteenth century, when the construction of railways connecting Övre Norrland with Stockholm and southern Sweden, as well as with neighbouring Norway, led to the massive expansion of the region's iron-ore industry. The so-called Ore Railway, finalised in 1902, has been one of the country's most important rail lines for more than a century due to its key role for the national mining industry, connecting the mines in Kiruna and Malmberget, both in Norrbotten Län, to the ports of Narvik and Luleå.¹⁴

¹⁰ Source: <http://hdr.undp.org/en/statistics/>

¹¹ Source: http://www.val.se/in_english/previous_elections/2006/index.html

¹² Source: 'Facts about Norrbotten, 2007', www.bd.lst.se/publishedObjects/10005044/eng_bd07.pdf

¹³ Source: 'Facts about Västerbotten, 2009', www.ac.lst.se/files/k888rr71.pdf

¹⁴ Source: http://www.bd.lst.se/publishedObjects/10000502/Norrb_engelsk_070816.pdf

At the start of the 1990s Sweden faced its worst financial crisis since the 1930s, leading to economic recession and increased unemployment throughout the country, with Västerbotten and Norrbotten counties both seriously affected. In response, a period of widespread economic restructuring ensued which saw the diversification of Sweden's export sector away from its reliance on traditional industries such as steel, paper and pulp towards services, IT and telecommunications, making it less vulnerable to international trade fluctuations. Following a period of recovery, the territories of Övre Norrland have undergone steady economic growth with the traditional primary sector industries of forestry, mining (iron ore) and quarrying remaining a strong source of wealth creation, alongside extensive service sector expansion (see Figures 7 and 8). In Västerbotten, the gross value added for the industrial sector increased by 30.3% between 1995 and 2005, and by 31.4% for the service sector. The picture in Västerbotten was very similar, with a GVA increase of 29.6% in industry and 27.3% in services for the same period, whilst in both counties the agricultural sector has been relatively stagnant.

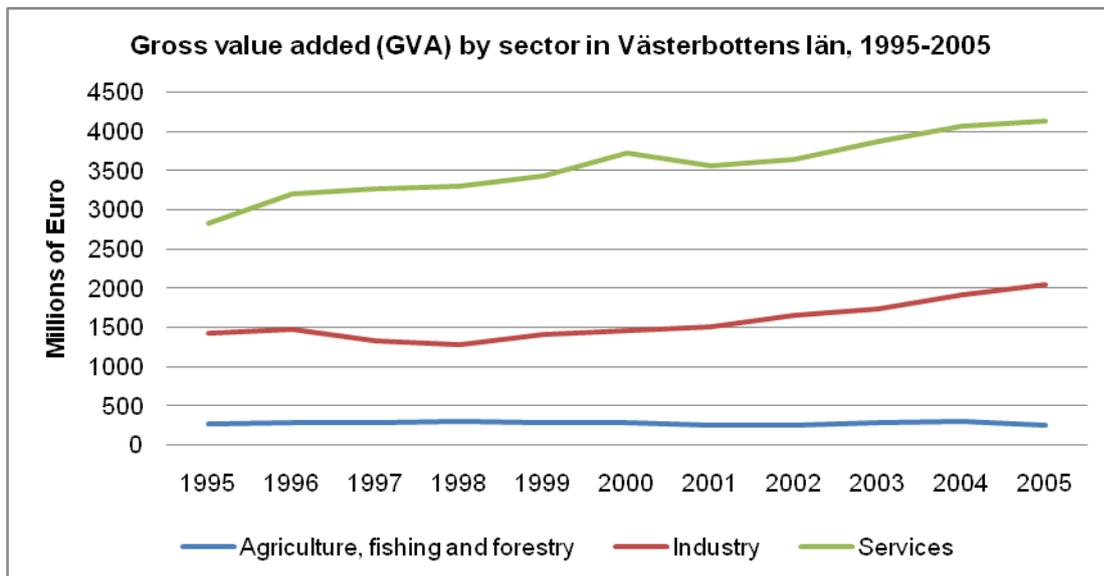


Figure 7: GVA by Sector in Västerbotten län, 1995-2005 (Source: Eurostat)

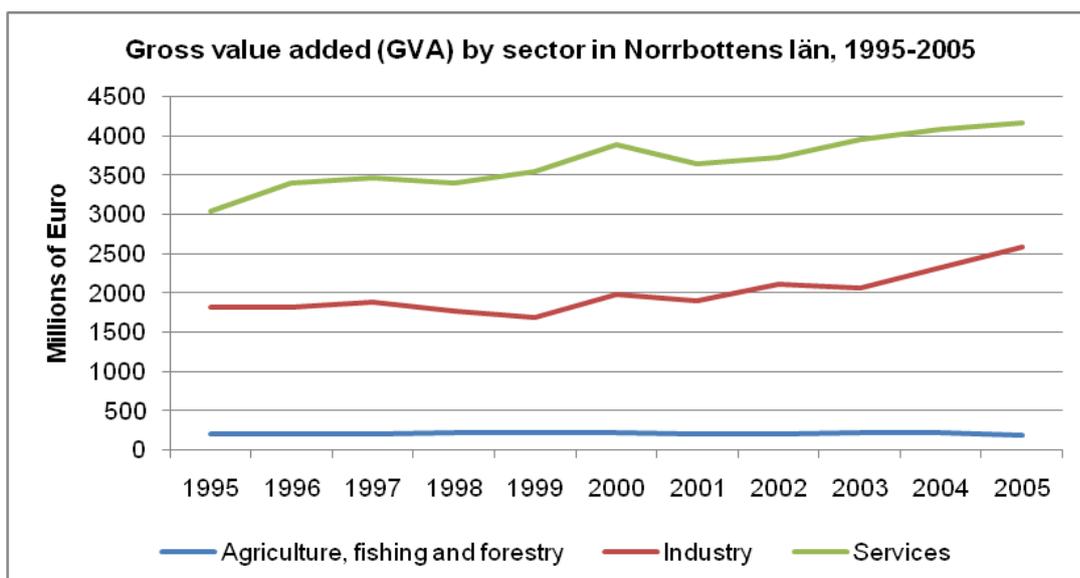


Figure 8: GVA by Sector in Norrbotten län, 1995-2005 (Source: Eurostat)

Despite comparable rates of growth, the service sector has become the dominant regional employer as figures for the Övre Norrland NUTS 2 region illustrate (Figure 9), with employment in public, financial and other services (including tourism and hospitality) collectively increasing from 173,700 to 183,600 between 2001 and 2007 whilst industrial sector employment shrank slightly from 41,600 to 36,900 over the same period. Following the recovery from recession, a sustained period of economic growth since the mid-1990s led to a more than 50% increase in the GDP per capita in both counties of Övre Norrland between 1995 and 2006 (Figure 10). This rose from €20,100 to €31,000 in Västerbotten and from €21,800 to €34,300 in Norrbotten län, with the latter 2006 figures for both NUTS 3 regions placing them 31.3% and 45.2% above the EU average, respectively, and only behind Overig Groningen in terms of the highest GDP per capita amongst DERREG case study regions.

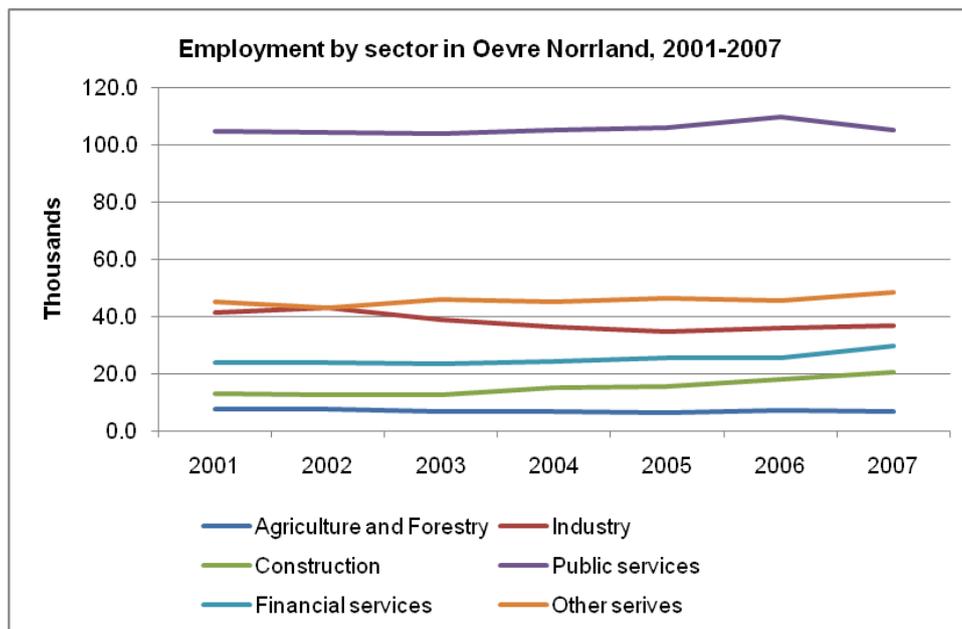


Figure 9: Employment by sector in Övre Norrland NUTS 2 region, 2001-2007 (Source: Eurostat)

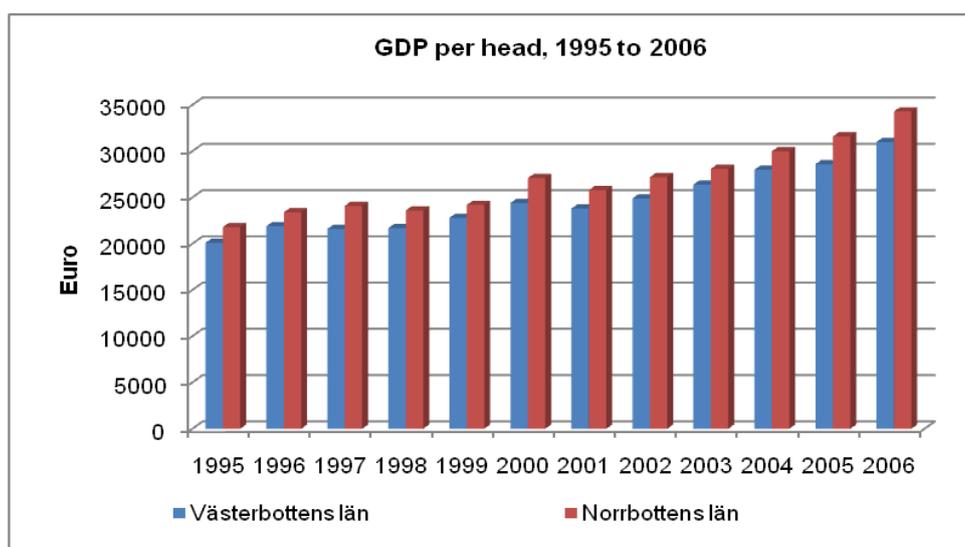


Figure 10: GDP per head of population in Västerbotten and Norrbotten län, 1995-2006 (Source: Eurostat)

Yet there are significant geographical variation in economic development, with urban areas having grown more over the period from 1993 to 2006 (almost 90% under the whole period) than intermediate municipalities (approx. 60%), which in turn have grown more than sparsely populated municipalities (just below 50%). The consequence of this trend is the stronger concentration of regional wealth in the 5 urban municipalities. However, another important factor for fostering economic growth besides the territorial characteristic is the presence of natural resources, with the inland municipalities of Kiruna, Gällivare and Jokkmokk amongst the municipalities with the highest level of GDP per employed persons in Sweden. While the adjacent municipalities of Pajala, Övertorneå and Övertorneå, a priori faced with the same territorial constraints, belong to the Swedish municipalities with the lowest level of GDP per employed persons.¹⁵

2.2 Present Economic and Employment Structure

The service sector has become firmly established as the most important employer in the economy of Övre Norrland, employing 71.4% of the region's working population in 2007 compared to 23.2% in industry, 8.3% in construction and just 2.7% in agriculture and forestry. This percentage of service sector employment is equal second highest (with Saarland) out of the ten DERREG case studies at the NUTS 2 scale, after Groningen. Public sector employment accounts for a large proportion of this, as well as a growing tourism and hospitality sector centred on towns such as Luleå and the region's strong IT and telecoms sector.

This dominance is, however, less pronounced in terms of GVA, where services contributed 64.2 % of the regional GVA in Västerbotten in 2005, compared with 31.7% from industry, and 60.0% in Norrbotten, compared with 37.2% from industry.¹⁶ These higher percentages of gross value added in comparison to the proportion of the workforce employed in industry are reflective, on the one hand, of the exploitation of the region's high value natural resources, such as iron ore (at Kiruna and Gällivare), copper and gold (both at Gällivare), which remains a key driver of the regional export economy. At the same time, the industrial sector has been undergoing restructuring towards high-tech and strong knowledge-based companies involving collaborations with service and research companies.

The employment rate among the active population (aged 16-64) of Övre Norrland was 72.7% in 2006, the highest amongst the DERREG NUTS 2 scale regions. This figure is the latter end of a period of recovery since the financial and economic crisis on the early 1990s, which at the time saw increased unemployment as the numbers of persons employed contracted across rural and urban municipalities in Övre Norrland . In 1999, unemployment stood at 11.5% of the economically active population of Övre Norrland which was considerably higher than the Swedish average of 7.6%, reflecting the impact of the recession on the region's primary industries.¹⁷ By the 2000s, Övre Norrland had entered a phase of expansion of the labour market with economic activity rates increasing steadily from 64.2% in 1999 to 69.7% in 2007 as the actual size of the economically active population also grew from 240,100 (122,700 in Västerbottens, 117,400 in Norrbottens) to 266,000 persons (136,700 and 129,700, respectively) according to Eurostat. Despite this steady growth, levels of unemployment in Övre Norrland have fluctuated, rising from approximately 16,900 registered unemployed persons (6.9% of the economically active population) in 2003 to 22,400 (8.7%) in 2005, before levelling out again in 2007 at 18,100 (6.8%, reflecting population growth).

¹⁵ Source: DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and Structure; see also Pettersson (2001)

¹⁶ Source: Eurostat

¹⁷ Ibid

There are, however, significant geographical variations in unemployment rates, with unemployment in 2007 standing marginally above the EU-27 average (7.2%) in Norrbottens at 7.8%, but below the EU-27 average in Västerbottens at 5.8%. Youth unemployment (ages 15-24) follows a similar spatial distribution, with rates of 18.4% in Västerbottens and 20.1% Norrbottens län in 2007, respectively. The average figure for the whole of Övre Norrland of 19.2% was the second highest across DERREG case study regions after Dresden and considerably higher than the EU-27 average of 15.5%.¹⁸

Long travelling distances mean that the majority of the economically active population work within the region itself, with only 3.6% commuting to a different NUTS 2 region.¹⁹ There are very significant commuting patterns within the region of people travelling in to work in Luleå and Umeå from surrounding municipalities.

Many of the largest employers are in the public sector, including Luleå University of Technology, Umeå University, local government, the Swedish armed forces, police and rail administration. Major private sector employers in Norrbotten county include SSAB, one of the world's leading producers of high-strength and cold-rolled steel, based in Luleå (1675 employees); mining companies LKAB (1675 employees) and Boliden (525 employees), which operate mines and production facilities in Kiruna and Gällivare, respectively; and the forest industry, concentrated in Kalix and Piteå, where Billerud (425 employees), Smurfit Kappa (625 employees) and SCA produce paper and board products mainly for export. Similarly in Västerbotten, forestry and mining remain large regional employers, with Boliden running mining operation throughout the county whilst foreign mining companies such as Anglo American and Blackstone Nickel have also provided investment and jobs.²⁰ Volvo has a factory in Umeå with 1,200 employees. Around seven in ten workplaces are one-person enterprises with no employees, but these include a large number of farms.

As illustrated in Table 2, just under one-third (30.9%) of the working population of Övre Norrland are employed in clerical and non-manual occupations, including service and retail, making this the region's largest occupational sector and the largest proportion of service sector employment across the 10 DERREG case study areas. Just under one-quarter (23.7%) of the workforce are employed in professional and managerial occupations, with slightly less in technical occupations (20.4%) and semi- and unskilled- manual work (18%), and just about one-eighth in skilled manual or craft occupations (12.2%). There are distinct gender dimensions to this occupational structure in Övre Norrland, with analysis showing higher proportions of female workers employed in public services, such as administration, education and health care, in contrast to more male workers in traditional economic sectors such as mining, construction, forestry or agriculture.²¹

From 1998 to 2007, the total number of firms created in the counties of Västerbotten and Norrbotten has nearly doubled, with the growth of solo (self-employed) and small to medium sized enterprises (SME's) contributing towards the high levels of service and non-manual employment now seen in the region. The numbers of new firms being created also increased each successive year over this period, with 2475 newly-started enterprises in 2007 compared to 1373 in 1998. The breakdown of those firms created in 2007 by sector is shown in Figure 11.

¹⁸ Ibid

¹⁹ Source: Eurostat

²⁰ Source: <http://www.isa.se/Global/Contact-ISA/Regional-network/Vasterbotten-County/>

²¹ Source: DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and Structure

	Västerbotten		Norrbotten		Övre Norrland	
	Number	%	Number	%	Number	%
Senior officer and managers	5653	5.0%	5267	5.0%	10920	5.0%
Professionals	22204	19.8%	18409	17.4%	40613	18.6%
Professional and managerial occupations	27857	24.8%	23676	22.4%	51533	23.7%
Technical and associate professionals	22187	19.8%	22187	21.0%	44374	20.4%
Clerical and secretarial workers	8714	7.8%	8023	7.6%	16737	7.7%
Service and retail workers	25601	22.8%	24973	23.7%	50574	23.2%
Clerical and non-manual occupations	34315	30.6%	32996	31.3%	67311	30.9%
Skilled agriculture and fishery workers	1095	1.0%	920	0.9%	2015	0.9%
Craft and related trade workers	11088	9.9%	13464	12.8%	24552	11.3%
Skilled manual and craft occupations	12183	10.9%	14384	13.6%	26567	12.2%
Plant and machine operators and assemblers.	14407	12.8%	11769	11.2%	26176	12.0%
Elementary occupations	6848	6.1%	6259	5.9%	13107	6.0%
Semi- and un- skilled manual work	21255	18.9%	18028	17.1%	39283	18.0%
Armed forces	127	0.1%	1269	1.2%	1396	0.6%
Total workforce	112271		105541		217812	

Table 2: Occupational Structure of the Övre Norrland labour market in 2007, at NUTS 2 and 3 (Source: Statistics Sweden)²²

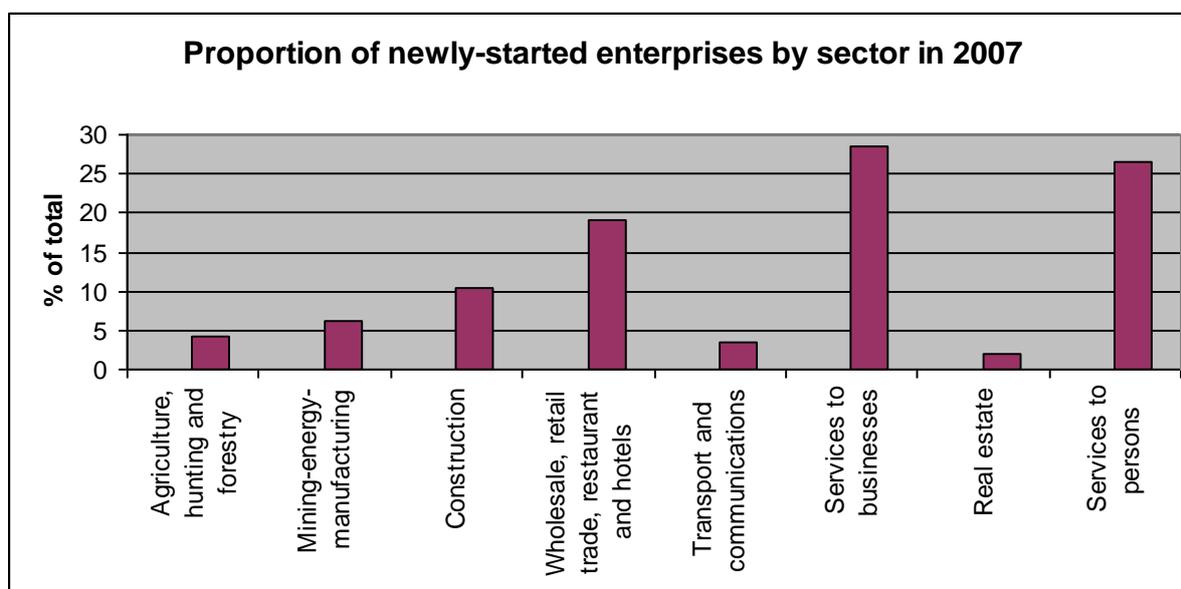


Figure 11: Proportion of newly-started enterprises in Övre Norrland in 2007 by business sector²³

²² Source: http://www.scb.se/default___2154.aspx

²³ Source: Swedish Institute for Growth Policy Studies (ITPS): <http://www.itps.se/Default.asp?langId=1>

The number of firms in the retail, hotel and restaurant sector increased by just under 10% between 1997 and 2008, from 7173 to 7784 firms, whilst a much larger rate of growth of over 60% was seen in real estate, renting and business services firms which increased from 6094 to 10,139 units over the same period.²⁴ The agriculture, hunting & forestry sector has also witnessed a large growth in one-person enterprises in particular, increasing from 16,144 in 1997 to 24,523 in 2008 across all municipalities in Övre Norrland. This is suggestive of these activities often being a secondary form of income for the business owner.

However, these patterns of growth are subject to regional variation, with analysis suggesting a trend in the more rural, sparsely populated municipalities of Övre Norrland towards large business units, with the number of one person- and small firms decreasing as the number of medium and large firms have increased. The move to larger firms may express the necessity for building larger business in order to consolidate and sustain the competitive edge of the rural firms, as SME's struggle to establish themselves in a peripheral location. In comparison, in urban municipalities such as Umeå, Kiruna or Piteå the trend has been to the formation of smaller, more flexible units.²⁵

Bankruptcy is a rare phenomenon in Övre Norrland that mainly impacts self-employed businesspeople and small firms. In 2008, the total number of firms being bankrupt was 220 which represents a large decrease from the figure of post-economic crisis Sweden in 1994 of 607. Not surprisingly, the sectors that are the most vulnerable to bankruptcies are the ones that show a strong proportion of smaller businesses (except for the agriculture sector): manufacturing, wholesale & retail and real estate & business services.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Sparsely Populated municipalities															
<i>Solo-firm</i>	44	40	35	42	27	28	22	16	23	20	15	11	14	9	14
<i>Small firm</i>	49	21	36	33	21	38	28	51	30	23	23	24	30	12	21
<i>Medium firm</i>	5	8	7	4	4	4	5	5	5	6	3	2	1	2	3
<i>Large firm</i>	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0
Intermediate municipalities															
<i>Solo-firm</i>	123	95	71	85	77	51	31	49	35	54	42	26	39	24	29
<i>Small firm</i>	109	72	92	84	53	67	64	58	52	73	68	55	35	38	56
<i>Medium firm</i>	14	12	14	8	7	6	8	10	21	14	16	4	5	6	5
<i>Large firm</i>	0	0	1	0	1	1	0	3	1	0	0	0	0	0	0
Urban municipalities															
<i>Solo-firm</i>	130	126	90	118	79	71	63	68	69	78	61	47	51	46	28
<i>Small firm</i>	117	90	105	96	74	69	53	88	89	64	57	61	53	62	55
<i>Medium firm</i>	16	11	18	13	12	10	11	17	16	14	6	8	8	8	9
<i>Large firm</i>	0	0	2	0	0	0	0	2	1	0	0	1	1	0	0

Table **Error! No text of specified style in document.**: Bankruptcies in Övre Norrland in Urban, Intermediate and Sparsely Populated Municipalities, 1994 to 2008. Reproduced from DERREG Deliverable 1.1 (Original source: ITPS)

2.3 Rural Primary Industries

As suggested above, the agricultural sector has been relatively stable in Övre Norrland during the past decade, yet this stability is in contrast to the picture across Sweden where the significance of agriculture in the national economy declined more dramatically. In Sweden, the gross value added produced by the agriculture sector decreased by 20% from 1995 to 2006, whereas in Övre Norrland it increased slightly by 4% from €476 million to €496 million. As a proportion of the regional GVA this actually represented a decrease from 4.9% to 3.4%, yet this is still significantly higher than the national picture where agriculture accounted for only 1.4% of GVA in 2006.²⁶

²⁴ Source: Statistics Sweden

²⁵ Source: DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and Structure

²⁶ Source: Eurostat

Employment in agriculture, forestry and fishing in Övre Norrland declined from 11,689 persons in 1989, prior to Sweden's economic recession, to just 4620 in 2001. Since this low point, however, the sector has shown signs of renewed growth with employment figures increasing to 5845 in 2007, with the highest proportion of these based in 'intermediately rural' municipalities.²⁷ This may be related to the growth in one-person enterprises mentioned above.

At the same time, the actual number of farms in Övre Norrland fell from 5,240 in 2000 to 4,640 in 2005 and has continued to decrease. Of those 4,640 farm units, smaller farms tend to predominate with just over 50% having land holdings of 10 hectares or less, while 34% are between 10 and 50 hectares and 16% over 50 hectares. This gives a mean farm size of 25 hectares, which is the second smallest out of Sweden's eight national areas after neighbouring Mellersta Norrland.²⁸ Half of the owners of these farms 2005 were aged 54 and above, with one-fifth aged over 65, whilst the overwhelming majority of farmers across all ages were male (88.5%) according to Eurostat.

Agricultural land covers only 0.8% of the total land area of Övre Norrland. The majority of this is arable production, concentrated towards the eastern coastal plain, whereas much of the interior is covered by forest (44.9% of total regional land use) and mountainous/upland areas (17.5%). All of the 4,640 farms in Övre Norrland were classified as 'less favoured areas', the highest proportion amongst the DERREG case study regions, with lower mean temperatures, a shorter growing season and difficult terrain. This difficulty is reflected in statistics provided by the EU Rural Development Report (2008) which show that cereal yields across 26.7% of the utilized agricultural area in Övre Norrland are less than 60% of the EU-27 average, whereas this figure is only 1.2% across Sweden nationally. The difficulties of sustaining a living from farming in Övre Norrland are shown by the fact that 70% of farmers had another, non-agricultural, income in 2005.

Barley and potatoes are the region's main crops, with combined cereal production yielding a total of 36,400 tonnes from 13,600 hectares in 2008 which was the lowest output across the DERREG NUTS 2 case study regions. Livestock populations are also relatively small given the region's total land area and, again, reflect the fact that much of this land is largely unsuitable for agriculture. Sheep, pig and dairy cow populations each fell between 15 and 30,000 heads in 2007, whilst just over 170,000 tonnes of cow's milk was produced; the smallest output across the NUTS 2 case study regions. Reindeer herding is practised in Övre Norrland, and especially in Norrbotten, with 32 *čearrus* or reindeer herding districts in Norrbotten operated by over 700 companies with around 163,000 deer, and 7 *čearrus* in Västerbotten operated by 103 companies with around 55,000 deer. Winter grazing takes Norrbotten reindeer herds into both Västerbotten and Norway.

2.4 Tourism

Tourism is a growth area of the Övre Norrland, with increasing numbers of visitors attracted to the vast unpopulated expanses of mountains and forests and their potential for year-round outdoor recreation. According to Eurostat, the number of tourists visiting Övre Norrland increased by 79% over a ten-year period, from 884,756 tourist arrivals in 1998 to 1,580,949 in 2007. The vast majority of these were domestic visitors, with just 424,377 (27%) of visitors in 2007 coming from outside Sweden which was itself an increase on the 1998 figure of 18% (Figure 12).

Most foreign tourists in Övre Norrkand are from neighbouring countries. In 2006, 65% of overnight guests in Norrbotten were from Sweden, 24% from other Scandinavian countries,

²⁷ Source: Statistics Sweden

²⁸ Source: EU Rural Development Report 2008

9% from the rest of Europe, and 1% from outside Europe.²⁹ Similarly, 75% of overnight stays in Västerbotten in 2007 were by Swedish visitors, with 20% by visitors from Norway and Finland, 2% by German visitors, and 3% by visitors from other countries. The longer-term trend suggests that visitors from Norway have increased in number and significance since 2000, but that tourism from outside Scandinavia has fluctuated yet always been proportionately small (Table 4).

Tourism employs 2,400 people in Norrbotten and around 5,000 in Västerbotten, mostly women. Employment in tourism has increased significantly since 2000, as has the economic contribution of the sector. The tourism industry was estimated to have a turnover of 7,300 million SEK (€770 million) in Västerbotten in 2007, up 70% on 2000.³⁰ The importance of tourism is higher in particular high-amenity areas, including winter sports areas such as the Tärna mountains, with 9.7% of the locality's workforce employed in tourism in 1997. Over a third of in-migrants to the Tärna mountains area found jobs in tourism.³¹

Of the 1,580,949 visitors to Övre Norrland in 2007, over a half (58.2%) stayed in hotels or similar accommodation whilst over a quarter (28.8%) stayed at campsites, with this proportion of visitors camping more than in any of the other case study regions by a considerable margin (second is Vzhodna Slovenija with 15.3%) and suggesting the region's attraction for outdoor recreation.

The tourism infrastructure in Övre Norrland has is expanding in conjunction with visitor numbers, with 73,945 bed places available across all types of tourist establishments in Övre Norrland (31,536 in Västerbotten and 42,409 in Norrbotten) in 2006, an increase of 23% from 2000 and the second highest figure out of the DERREG NUTS 2 regions after Galicia.³² This includes the beds available at one of Sweden's most popular international tourist attractions, the Ice Hotel, located near Kiruna in Norrbotten county and built entirely of ice and snow. Kiruna has also been selected as the launch-site for Virgin's space tourism venture, due to become operational in 2012.

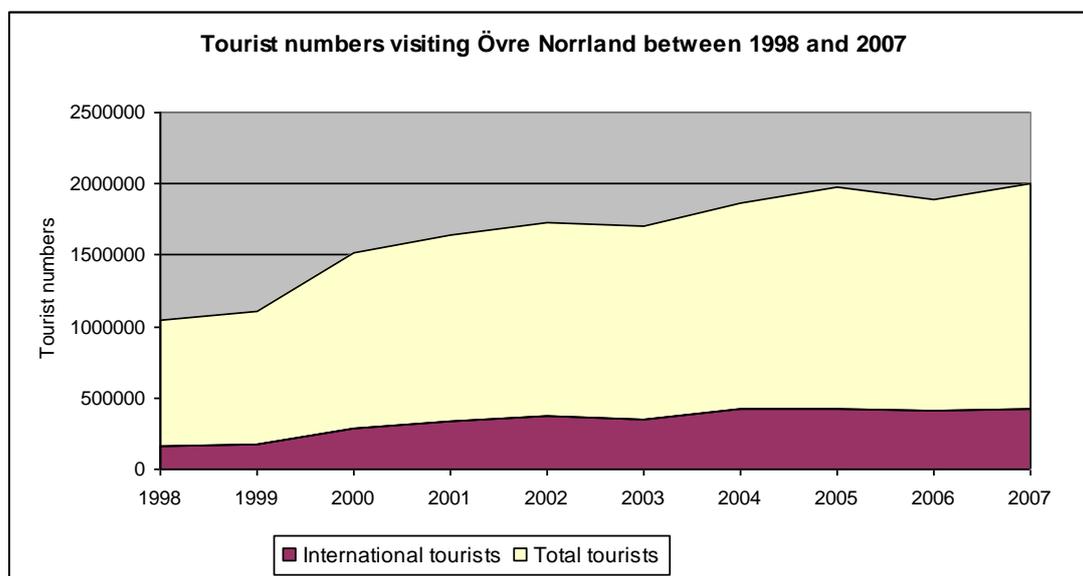


Figure 12: Numbers of tourists (domestic and international) visiting Övre Norrland, 1998-2007 (Source: Eurostat)

²⁹ Pantzare Information (2007), Facts About Norrbotten 2007 (www.bd.lst.se)

³⁰ Source: 'Facts about Norrbotten 2010', 'Facts about Västerbotten 2009'

³¹ Müller (2006)

³² Ibid.

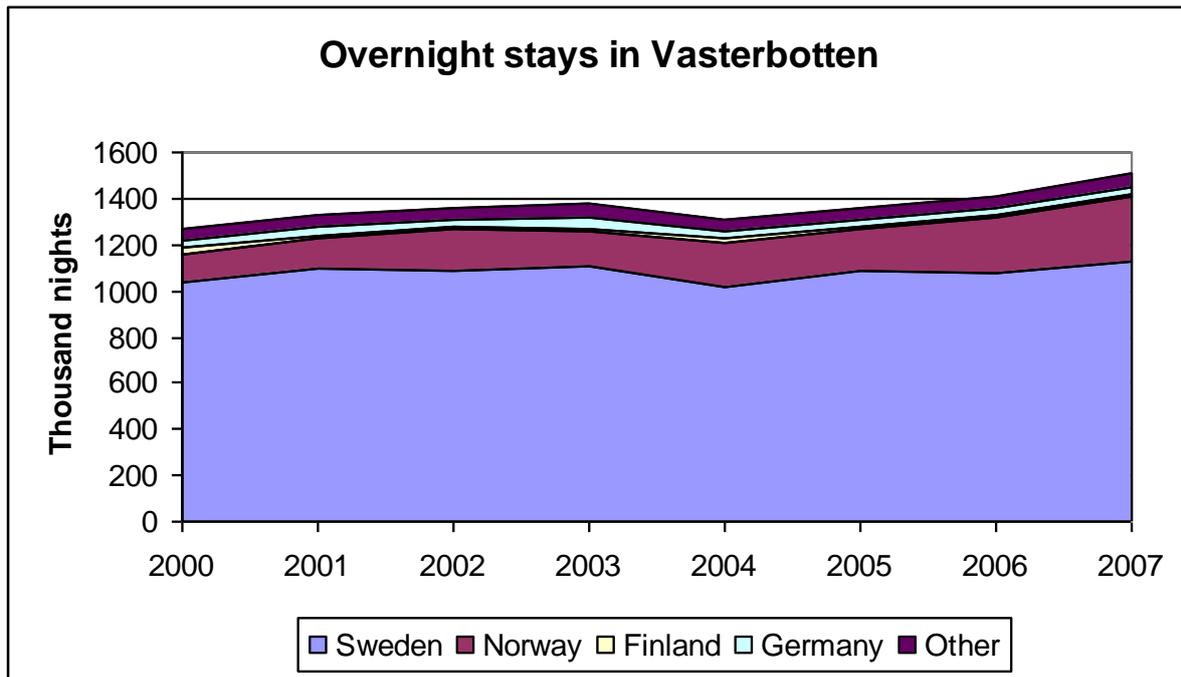


Figure 13: Overnight tourism stays in Västerbotten, 2000-2007, by visitor origin.
(Source: Facts about Västerbotten 2010)

A further distinctive aspect of tourism in Övre Norrland is international 'shopping tourism', especially around the northern border city of Haparanda. With improvements to transport connections across the region, Haparanda has developed as a transnational commercial centre for the 'Barents region' of northern districts of Norway, Sweden and Finland and the Murmansk peninsula of Russia. The municipality lobbied for IKEA to invest in the town in 2005, and the arrival of the superstore prompted a wave of investment worth SEK 1 billion (€105 million), resulting in a fall in unemployment from 12% in 2005 to 4.7% in 2007.³³ Local officials projected that 2 million tourists could be attracted to Haparanda, including at least 20,000 from Russia, with a bus service planned from Murmansk. Together with the neighbouring Finnish city of Tornio, Haparanda now markets itself with the slogan 'International Meeting Place'. Tourism related industries now account for over a fifth of female employment in Haparanda.

2.5 International Integration

Foreign direct investments in Sweden amounted to SEK 2,122 billion (€225 million) at the end of 2008, of which SEK 982 billion was in the manufacturing sector. At the end of 2008, companies based in the Netherlands, the United Kingdom and Luxembourg were the largest holders of direct investment assets in Sweden.³⁴

The region of Övre Norrland holds natural resources of potentially global importance, whether it is related to mining (gold, iron ore, copper), energy (hydropower, geothermal sources) or forestry (paper pulp). These resources are often exploited by Swedish large

³³ Sources: Duval Smith, A. (2007) 'Blizzards, reindeer, darkness: new Klondike is hottest place in Europe', *The Observer*, 7 January 2007; Wiles, D. (2008) 'Hip Haparanda feels the IKEA effect', <http://www.sweden.se/eng/Home/Business/Economy/Reading/Hip-Haparanda-northern-town-feels-the-Ikea-effect/>

³⁴ Source: Statistics Sweden

corporations that are well integrated in worldwide networks of supply and demand. Around 90% of forestry products from Norrbotten are exported, with a value of over SEK 5 billion (€570 million).³⁵ In the region, the exploitation of the resources is dependent on specific competences that are shared by a wide network of subcontractors that can be either local or international, for instance, in the form of specialised skills. The search for niche competences in different localities is a driving force for foreign involvement in local enterprises.

Since 2000, the number foreign-owned firms and the number of persons employed in a foreign-owned firm have increased in both Västerbotten and Norrbotten, and across all types of municipalities (Urban, Intermediate and Sparsely populated). Yet, most of these firms are located in the urban municipalities, and thus most of the persons employed in a foreign-owned firm are working in the largest regional centres. The average size of the foreign-owned firm in Övre Norrland has been rather stable since 2000, fluctuating between 15 and 20 employed persons per firm. Only 4% of the foreign-owned firms located in Övre Norrland are situated in a sparsely populated municipality, compared to 33% in Intermediate municipalities and 62% in urban municipalities. This can not be solely explained by the size effect of the local economy: the specialisation of the larger local economies (Kiruna, Umeå, Luleå, Skellefteå, Gällivare) is an important parameter too. Indeed, the specialisation of the larger local economies of Övre Norrland in knowledge-intensive, capital-intensive or export oriented economic activities has more potential to attract foreign investors, as these may be more easily integrated in transnational production systems.³⁶

Foreign investments in Västerbotten across different sectors include:³⁷

- Mining: Anglo American, Blackstone Nickel, Dragon Mining, EVE Ventures, GoldOre Resources, Metso Minerals, Norrland Resources/Mitchell River Group, Outotec, Phelps Dodge, SRK
- Wood: Byggma, Consultec, CSCE/Mitek, Finndomo
- Life Science: GE Healthcare, Merck Sequant
- Cleantech: Clean Air Group/Plymovent, EPO, Inpipe, Kuusakoski, Midroc Environmental
- Manufacturing: Armstrong, Brunswick, Danica, Franke, Isringhausen, Komatsu, PSI Group ASA, Saint-Gobain, Solifer Group, Soucy, Wipro Engineering
- ICT: Protegrity, Tieto Enator,
- Real Estate: Cordea Savills, Nordvestor

At the same time, there is at least one significant transnational corporation based in the Övre Norrland region. The state-owned mining company, LKAB is head-quartered in Luleå and operates iron ore mines and processing plants at Kiruna and Malmberget in Norrbotten. Most of the company's product is exported through the ports at Luleå and Narvik (Norway) to steelmills in Europe, North Africa, the Middle East and South East Asia. Exports account for 75% of the company's annual sales of around 5 billion SEK (€500 million). LKAB employs over 3,700 people, including around 600 outside Sweden; it has sales offices in Belgium, Germany and Singapore, and has an interest in subsidiary companies operating in Finland, Greenland, the UK, the Netherlands, Greece, Turkey, China, Germany, the USA and Hong Kong.³⁸ Two of the region's other major employers, mining company Boliden and steel-maker SSAB are Swedish-based and owned corporations with significant international

³⁵ Source: Norrbotten county board (2003), 'Perspectives on Norrbotten'.

³⁶ Source: DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and Structure

³⁷ Source: <http://www.isa.se/Global/Contact-ISA/Regional-network/Vasterbotten-County/>

³⁸ Source: www.lkab.com, Norrbotten County Authority (2003) 'Perspectives on Norrbotten' www.bd.lst.se, and wikipedia, en.wikipedia.org/wiki/LKAB

activities. SSAB has employees in 45 countries, whilst Boliden also has mining operations in Ireland, and smelters in Finland and Norway.³⁹

There are around 2,340 import companies in Norrbotten and 890 export companies, the large majority of which have an annual turnover of less than 250,000 SEK (€26,000). Nearly three-quarters of export companies in Norrbotten trade within the European Union, with around two-fifths trading within Scandinavia. Less than one in ten export to each of the Far East, rest of Asia, South and Central America, North America, and Africa. Over three quarters of import companies in Norrbotten trade within the EU, with only a fifth importing from elsewhere in Scandinavia and a similar proportion trading with South and Central America.⁴⁰ Examples of smaller enterprises in the region trading internationally include Polarica in Haparanda, which sells berries and game meat in central and eastern Europe; Älvysbyhus, which manufactures prefabricated housing for sale in Sweden, Finland, Denmark and Norway; Liko, which manufactures and sells patient lifts for healthcare internationally; Polaris Optics, an eye-wear manufacturer with subsidiaries in the UK and Japan; and Polarbageriet, a bakery exporting frozen bread.⁴¹

3. Population and Migration

3.1 Population and Development

Övre Norrland experienced a small increase of its population over a 15-year period between 1980 and 1995 of 3.6%, or 18,523 persons, reaching a peak population of 527,423 in 1995 before decreasing again over the next decade or so to just 0.01% below the 1980 population figure in 2008. The natural population trend of a moderate decrease is caused by the death rate exceeding the birth rate, although the gap between them has decreased in recent years with the crude birth rate increasing from 9.2 in 1999 to 10 in 2007 while the crude death rate fell from 10.8 to 10.5 over the same period.

1980	1985	1990	1995	2000	2003	2005	2008
508,900	508,900	512,972	527,423	514,804	508,862	509,460	508,195

Table 4: Population of Övre Norrland, 1980-2008
(Source: Eurostat)

Broken down at the NUTS 3 level, however, there are geographical variations within Övre Norrland, with the population of Västerbottens län actually increasing in recent years by 2400 between 2001 and 2006, while Norrbottens län fell by 3700 over the same period. This population growth in Västerbottens län was related to a small net population gain from migration during that period (Figure 14). There has also been a very distinct shift in the population from the interior districts to coastal areas, and especially to the major towns of Luleå and Umeå, since the early 1980s (Figures 15 and 16).

At the regional level, out-migration has marginally exceeded overall in-migration in Övre Norrland since 1990, with 232,597 people moving into the region between 1990 and 2007 and 255,621 moving out, resulting in a net loss of 23024 people or 4.5% of the 1990 population. However, both in-migration and out-migration have fluctuated over this period as shown in Figure 17, with out-migration peaking at more than 14,000 departures between 1997 and 2001 and again in 2007, whilst in-migration was at its highest in 1994 at 14640 arrivals before a drop off. Numbers of in-migrants increased again during the following decade 1997-2007, resulting in a small net population gain of just over 2000 persons between 2002 and 2006. And this trend of gentle population increase in Övre Norrland is

³⁹ Sources: www.boliden.com and www.ssab.com

⁴⁰ Source: 'Facts about Norrbotten 2010'

⁴¹ Source: Norrbotten County Authority (2003) 'Perspectives on Norrbotten'

predicted to continue over the next 10 years according to Eurostat, with the population projected to exceed 511,000 in 2020.

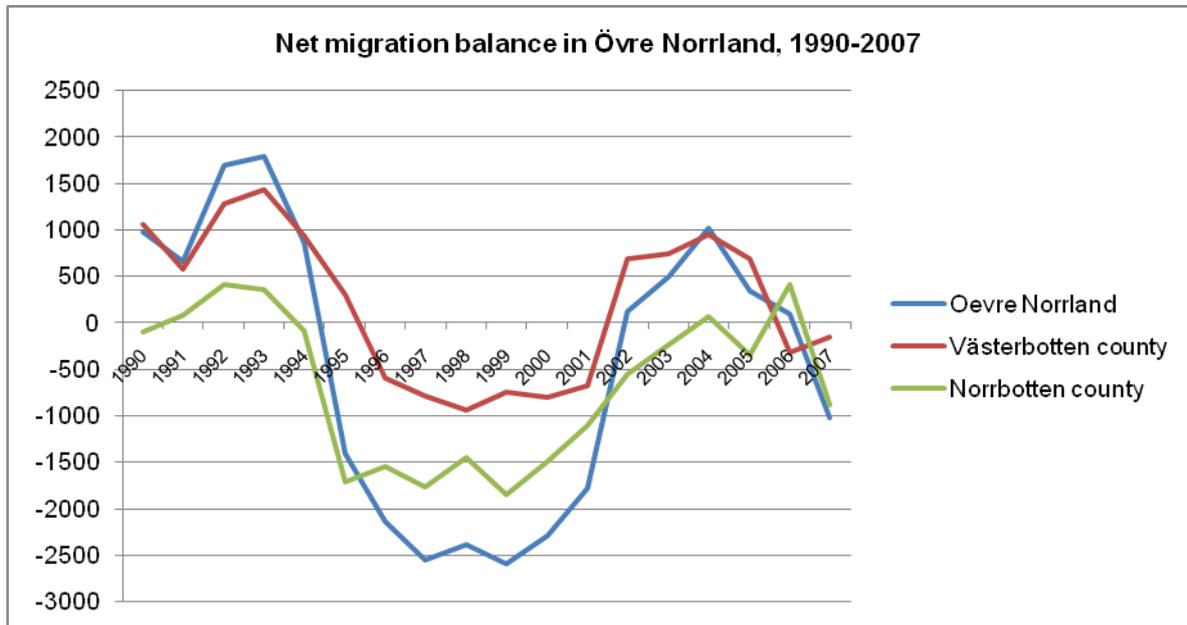


Figure 14: Net migration balance in Övre Norrland, at NUTS 2 and 3, between 1990 and 2007. (Source: Eurostat)

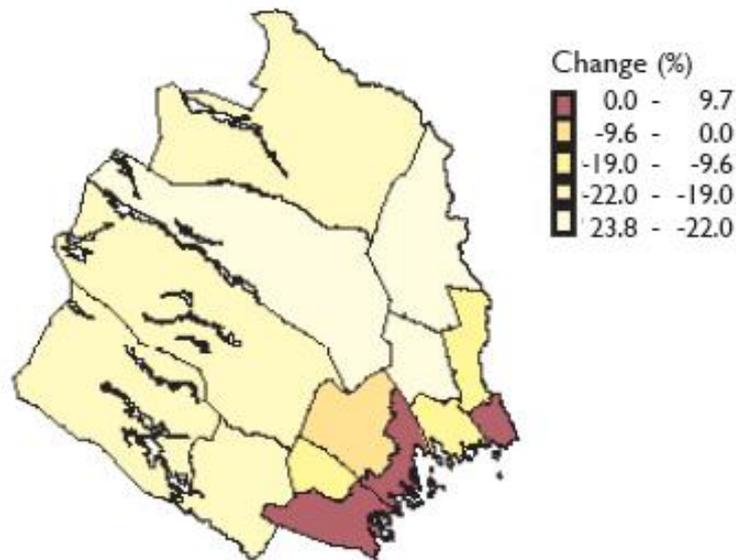


Figure 15: Population change in Norrbotten by municipality, 1981-2006 (Source: 'Facts about Norrbotten' 2007)

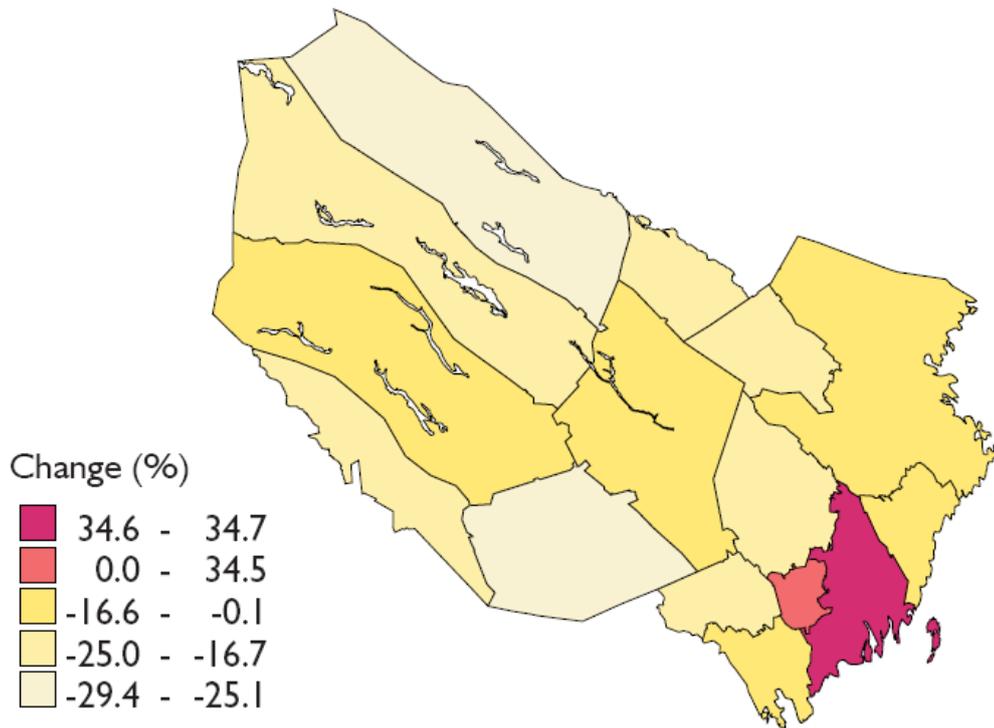


Figure 16: Population change in Västerbotten by municipality, 1983 – 2008
(Source: 'Facts about Västerbotten' 2009)

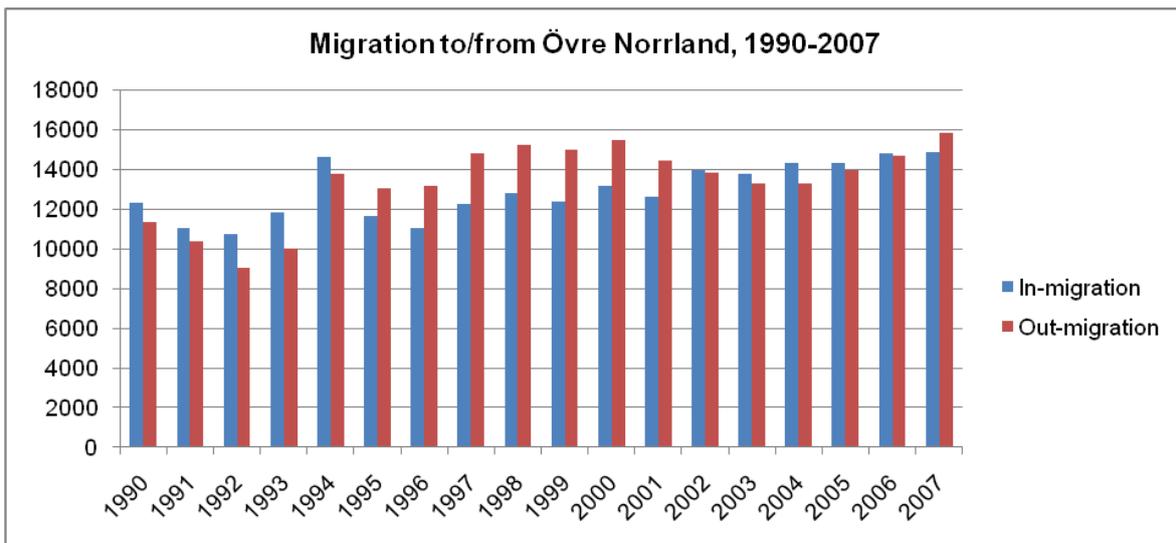


Figure 14: In-migration and out-migration to/from Övre Norrland, 1990-2007.
(Source: Eurostat)

The longitudinal pattern of migration to and from Övre Norrland has shadowed the economic fortunes of the region. Out-migration exceeded in-migration during the period of economic restructuring in the mid 1990s, but economy recovery in the early years of the new century helped to push in-migration back above out-migration. The slight balance towards out-migration recorded in 2007 may reflect slowing economic growth at the start of the global recession. A notable proportion of the out-migration from Övre Norrland is constituted by women and young people who are unable to find service sector employment in the region due an over surplus of labour. Regional Development initiatives supported through the EU Structural Funds programme are attempting to redress this trend of depopulation through job creation initiatives focused on innovation and entrepreneurship.

3.2 Demographic and Household Characteristics

The median age of residents in Övre Norrland is 35 (33 in Västerbottens län and 36 in Norrbottens län). The proportion of residents aged under 15 is 18% while 12.9% of the population are aged 70 plus, with 4.6% over 80; the second highest proportion across the DERREG case study regions after Galicia in Spain (Figure 15). Whilst the proportion of residents aged over 65 in Västerbotten is roughly in line with the national average, in Norrbotten it is above the Swedish average at 20%. In several more peripheral municipalities of Norrbotten, over a quarter of the population is aged over 65. Overall, the age profile of Övre Norrland has become more elderly, due to increasing longevity and the significant out-migration of younger people. The number of residents aged between 25 and 39 years in Norrbotten has fallen from around 60,000 in 1980 to around 40,000 in 2009. The number of residents aged between 65 and 79 nearly doubled over the same period.⁴² The balance of the male to female population has remained relatively stable in recent years, decreasing very slightly from a ratio of 0.99 women to every man in 2000 to 0.98 in 2008.

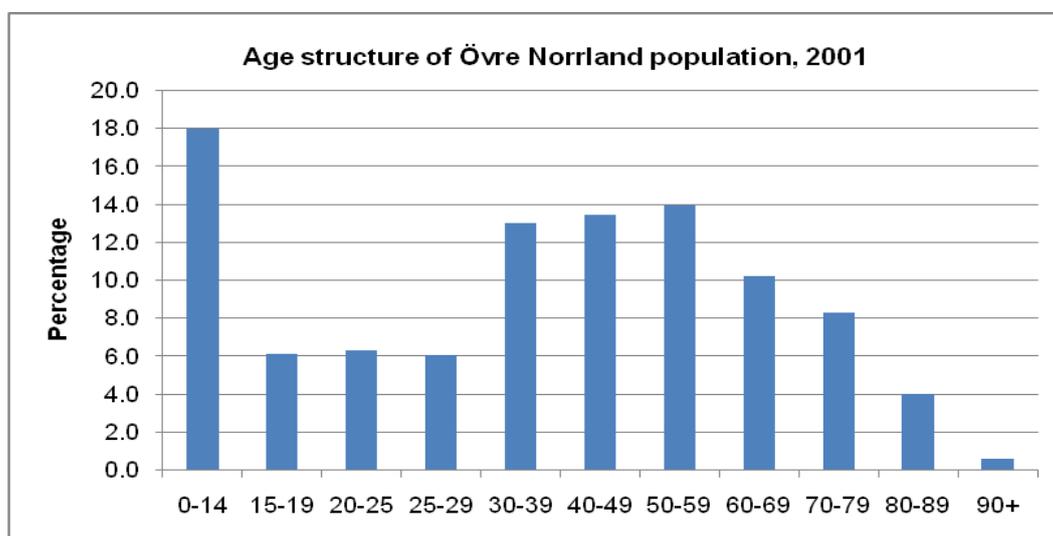


Figure 15: Age structure of Övre Norrland population, 2001.
(Source: Eurostat)

The last comprehensive survey of household structure in Övre Norrland was conducted in 1990, with smaller sample-surveys conducted in the years since. The data from 1990 indicated that 36% of private households in Övre Norrland were single occupancy and 29.5% had 2 residents, while only 6.6% were 5 or 6 person households, giving a smaller typical household size than most other DERREG cases study regions excepting those in Germany. Property prices in the region have increased substantially over the past two

⁴² Source: 'Facts about Norrbotten, 2010'.

decades although the rate of increase has varied within the region, with the real estate price index for permanent homes showing a 99% increase from 1990 levels by 2008 in Västerbotten and a 57% increase in Norrbotten over the same period.⁴³ However, this rate of increase is below the national average for Sweden, and property remains comparatively cheap in relation to the rest of the country. The average selling price of an owner-occupied flat in Norrbotten was 321,000 SEK (€34,000) in 2008, compared to a national average of 1,073,000 SEK (€113,000).⁴⁴

3.3 Non-national Residents

Övre Norrland is a multi-cultural and multi-lingual area, and apart from Swedish, national minority languages such as Finnish, Meänkieli and Saami are spoken. There is a long history of Finnish migration into Övre Norrland extending back to the seventeenth century and often officially encouraged, including during the twentieth century. At the same time, both Swedish and Finnish settlement historically represented the displacement of the indigenous Saami people in parts of the region.

In 2001, there were 13,443 non-Swedish residents in Västerbottens län and 18,619 in Norrbottens län, accounting for 6.3% of Övre Norrland's population. This is roughly comparable with some of the other DERREG case study regions such as Ourense in Galicia and Overig Groningen in the Netherlands, which had 6.8% and 7.2% of their populations constituted by non-national residents, respectively. Many migrants born outside Sweden successfully apply for citizenship, and as such figures for Norrbotten show that the number of residents in 2006 born outside Sweden (8.3%) was significantly higher than the number of foreign citizens living in the county (4.6%).

A substantial proportion of the non-national residents in Övre Norrland are Finns, reflecting the region's border with Finland. The border town of Haparanda has the highest proportion of both persons born outside Sweden (39%) and foreign citizens (28%) in its population of any municipality in Sweden.⁴⁵ The other municipalities on the Finnish border, Pajala and Övertorneå, also have a relatively high presence of non-national residents, with 12% and 24% of the population respectively born outside Finland. However, the non-Swedish population is much smaller in municipalities in south-eastern Norrbotten, away from national borders, and in Västerbotten.

In addition to cross-border migration from Finland and Norway, international migration in Övre Norrland includes amenity migrants, migrant workers and political refugees. There has been net international migration into Norrbotten, for instance, throughout most of the period since 1970 (with the exception of the early 1980s), but there was a notable spike in 1994, when Bosnians, Serbs and Croats fleeing the war in the former Yugoslavia were automatically granted residence permits. Yet, a concurrent peak of domestic out-migration from the county in 1994 suggests that many refugees arriving in Sweden in Norrbotten subsequently moved to other parts of the country.⁴⁶ Net international migration into Norrbotten has also increased since 2000, and especially in 2005, which may reflect EU enlargement as well as the arrival of asylum seekers from Afghanistan, Iraq and Africa (Figure 18).

⁴³ Statistics Sweden

⁴⁴ Source: 'Facts about Norrbotten, 2010'

⁴⁵ Sources: 'Facts about Norrbotten', 2007, 2010.

⁴⁶ Source: 'Facts about Norrbotten, 2007'

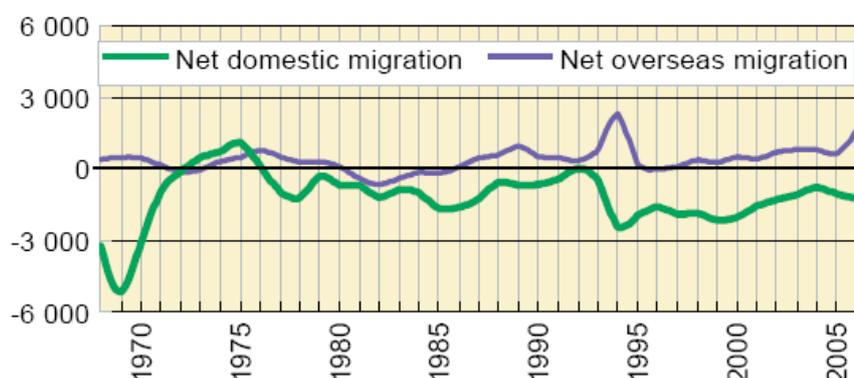


Figure 18: Net migration to/from Norrbotten county, 1970-2005
(Source: 'Facts about Norrbotten', 2007)

There is also evidence of increasing migration from outside Europe. In 2008, 23% of the 1,951 non-national migrants moving to Norrbotten were from Africa (especially Eritrea and Somalia), constituting the largest single migrant group, ahead of Finns at 13%.⁴⁷ Statistics for Norrbotten show a significant increase in the number of residents from Afghanistan, Iraq, Iran, Somalia, Burma and Eritrea between 2006 and 2008, with other relatively numerous minority populations in 2008 including Finns, Norwegians, Thais, Russians, Germans, Poles, Danes, Britons and Colombians (Table 5). The Thai population in Övre Norrland is particularly associated with migrant workers (often entering Sweden on a tourist visa) employed in fruit-picking. A recent report has highlighted concerns about the exploitation of migrant workers in this sector, as well as about labour trafficking (Yimprasen, 2009). More broadly, non-Swedish nationals in Övre Norrland have greater difficulty in finding work than Swedish nationals. In 2007, nearly 20% of asylum seekers in Norrbotten were unemployed, compared with just over 10% of all residents born outside Sweden, and less than 10% of residents born in Sweden.⁴⁸

Country of origin	2006	2008	Change 2006-8
Finland	6147	5870	-4.5%
Norway	700	616	-12.0%
Thailand	475	596	+25.5%
Germany	306	368	+20.3%
Russia	412	333	-19.2%
Iraq	271	308	+13.7%
Poland	181	238	+31.5%
Afghanistan	154	237	+53.9%
Burma	117	232	+98.3%
Iran	199	213	+7.0%
Somalia	123	186	+51.2%
Denmark	161	171	+6.2%
Great Britain	132	144	+9.0%
Colombia	94	126	+34.0%
USA	120	115	-4.2%
China	122	99	-18.9%
Pakistan	103	86	-16.5%
Eritrea	38	85	+123.7%
<i>Total foreign citizens</i>	<i>11680</i>	<i>10817</i>	<i>-7.4%</i>

Table 5: Significant groups of foreign citizens resident in Norrbotten, 2007 and 2008
(Source: 'Talking about Women and Men in Norrbotten', 2008 and 2009)

⁴⁷ Source: 'Facts about Norrbotten, 2010'

⁴⁸ Source: 'Facts about Norrbotten, 2010'

Not all international migrants to Övre Norrland are migrant workers or refugees, however. There is also some evidence of small-scale amenity migration, including the purchase of second homes or holiday homes. Research by Pettersson (1999) identified over 150 purchases of second homes in Övre Norrland by non-Swedish nationals in the early 1990s, mainly by buyers from Germany, Norway and Finland (Table 6).

	1990	1991	1992	1993	1994	1995	1996	Total
German	2	0	5	11	17	7	9	51
Norwegian	5	3	1	7	4	9	16	45
Finnish	6	0	0	3	4	10	11	34
Other	4	3	3	2	6	3	6	27
Total	17	6	9	23	31	29	42	157

Table 6: Purchases of second homes in Västerbotten and Norrbotten (Övre Norrland) by non-Swedish nationals, 1990-96. (Source: Pettersson, 1999)

4. Environment and Sustainable Development

4.1 The Regional Environment

The environment in Övre Norrland is geographically varied, with a transition from rolling plains and more fertile agricultural lands in the east, bordering the coast of the Gulf of Bothnia, to densely forested swathes across the interior, and rising to high alpine mountain ranges, glaciers and arctic tundra conditions in the extreme north and west (Figure 16). Native species of northern Sweden include bear, elk, the wolverine, the golden eagle and the rare Arctic Fox.⁴⁹



Figure 16: Satellite view of Övre Norrland landscape (Source: Google Earth)

⁴⁹ Source: <http://www.visitsweden.com/sweden/Regions--Cities/Northern-Sweden/>

In 2005, nearly 45% of the region's total land area of 16,529,560 hectares was covered by forest, while open moorland and natural grassland/heathland each constituted approximately 15% of the region's territory. Mountainous areas extend over 2,894,000 hectares or 17.5% of the land area, with agriculture and built-up areas each constituting only 0.8% of land use, respectively. This distribution of land use has remained fairly consistent since 2000, with a 1.2% increase in the forested area over those five years compensated by a comparable reduction in un-forested mountain uplands. About half of the forest area in Norrbotten is owned by commercial forestry companies.

The region of Övre Norrland is classed by the European Environment Agency as incorporating three dominant land cover types, variously distributed across its large geographical area; these are composite landscape, open semi-natural landscape and forested landscape.⁵⁰ Water covers a sizeable 7.2% of the land area of Övre Norrland, with major rivers including the Torne, Lule, Kalix and Pite in Norrbotten and Skellefte and Ume in Västerbotten, all flowing from the mountains (north-west) to the Baltic Sea (east). The Skellefte River (or *Skellefteälven* in Swedish) is one of the Sweden's major rivers which has been used extensively for producing hydro power. With a length of 410 kilometres, it begins in Norrbotten, where it drains the lakes Hornavan, Uddjaur and Storavan near Arjeplog, before flowing south-east into Västerbotten and into the Gulf of Bothnia.

Figures available from the European Environment Agency for the nearest atmospheric monitoring station to Övre Norrland were collected in Norr Malma near Uppsala, which is over 500km south of Umeå and closer to urban centres such as Stockholm. Nonetheless, atmospheric concentrations of nitrogen oxides and particulate matter were the lowest across the DERREG cases study areas.

4.2 Protected Areas

The vast sparsely populated expanses of Övre Norrland are home to a considerable number of natural reserves, bird sanctuaries and national parks. The distinctiveness of this landscape was recognised with the designation of the Laponian Area of Norrbotten county as a Unesco World Heritage Site in 1996, although the area had already enjoyed national protected status since the early twentieth century. The designation was also intended to protect the traditional way of life of the indigenous Saami people, based on the seasonal movement of reindeer herds across the natural landscape but which is being threatened by the advent of motor vehicles. Covering a total land area of approximately 9,400 km² of mostly high mountain land and extending above the Arctic Circle, the Laponian Area is composed of four national parks—Sarek, Padjelanta, Stora Sjöfallet and Muddus— together with the nature reserves Sjaunja and Stubba (Figures 19 and 20).

⁵⁰ Source: European Environment Agency, CORINE land cover database

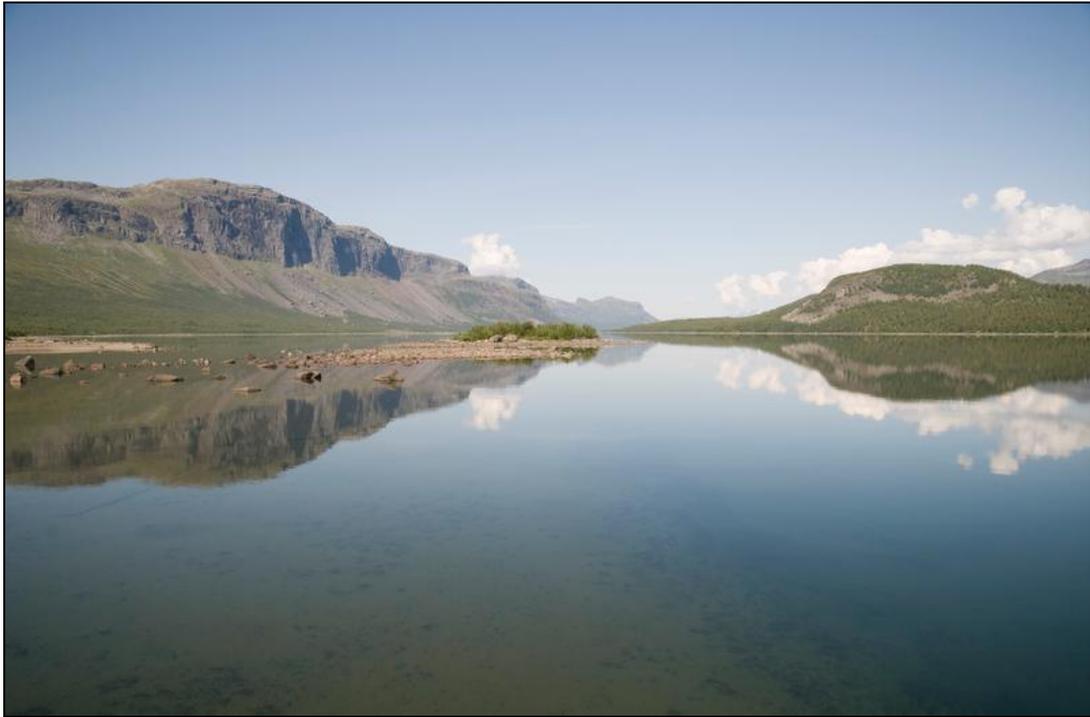


Figure 19: Protected landscape of the Laponian area
(Source: UNESCO)

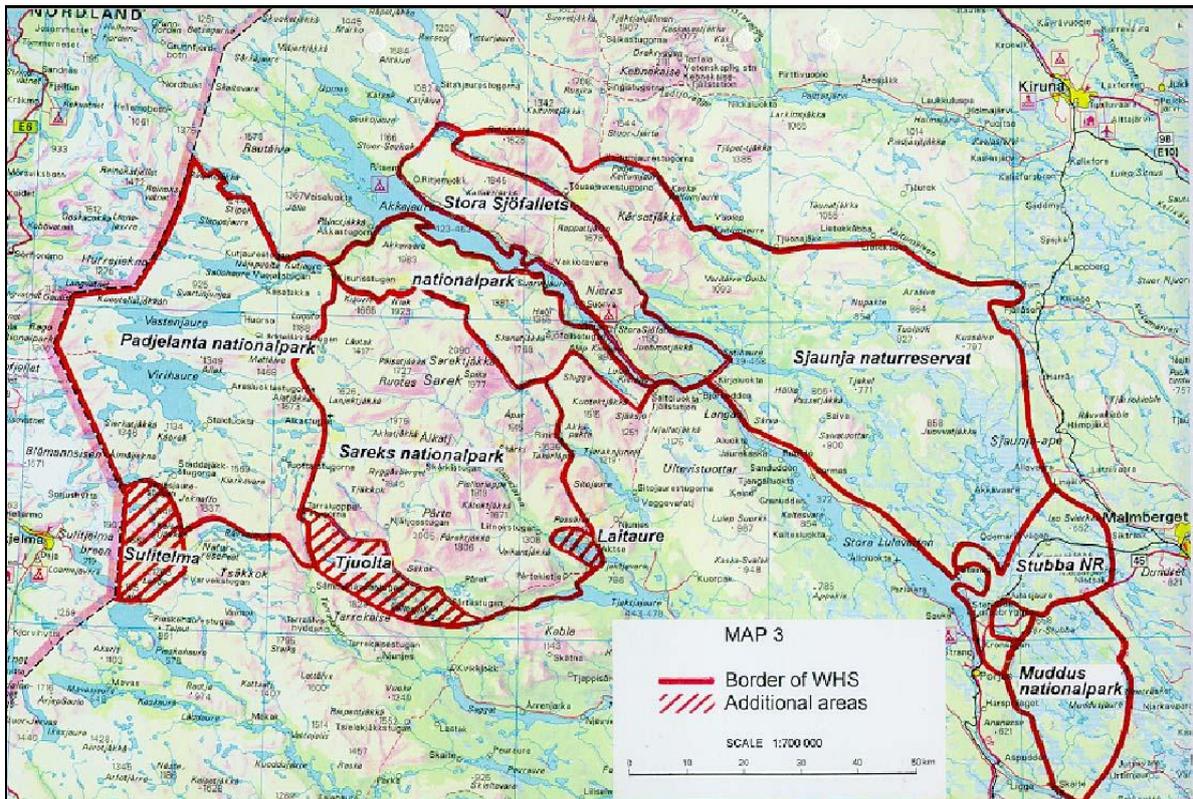


Figure 20: The Laponian Area UNESCO World Heritage Site
(Source: UNESCO)

A further UNESCO World heritage designated site, The Struve Geodetic Arc, is a chain of survey triangulations stretching from Hammerfest in Northern Norway to the Black Sea, through 10 countries and over 2,820 km. Nationally, Övre Norrland has 9 designated national parks, of which 8 are entirely terrestrial and one, Haparanda Archipelago, a mix of terrestrial and aquatic area on the eastern coast of Norrbotten County incorporating a large number of islands and skerries and is home to over 200 bird species. Amongst the most famous of the National Parks is Sarek which was founded in 1909 and, together with the adjacent Stora Sjöfallet and Padjelanta parks, forms Europe's largest national park, covering a total area of over 5,200 km² of largely trackless mountainous and glaciated wilderness in north-west Norrbotten.⁵¹

Additionally, Övre Norrland has a total of 484 Natura 2000 'Special Areas of Conservation' (SAC) and 'Special Protection Areas' (SPA) which is significantly more than in any of the other DERREG case study regions (231 are located in Västerbottens län and 263 in Norrbottens län). There are also 8 Ramsar sites (wetlands of international importance) located within the region.

4.3 Sustainable Development

Övre Norrland is a key region in Sweden's national sustainable development policy which includes ambitious plans to become the world's first virtually oil-free economy by 2020. Sweden is already well ahead of most other EU countries in terms of the proportion of its energy consumption coming from renewable sources, which in 2003 stood at 26% compared to the EU average of just 3%.⁵²

Energy production in Övre Norrland is based almost entirely on hydroelectric power, with over 20 hydro power stations located in the region and no carbon-based. In Norrbotten, several of these are largely located around the town of Jokkmokk where up to one-tenth of Sweden's total electricity is produced,⁵³ whilst Västerbotten is home to Sweden's second largest hydroelectric power station, Stornorrfor, located on the Ume River close to Umeå. In terms of energy generation, Stornorrfor is actually Sweden's largest hydro power station with an average annual production of nearly 2,300 GWh. Collectively, the hydro-, wind- and combustion- power stations in Övre Norrland produce around a fifth of Sweden's electricity. A significant proportion of this energy is consumed by the mining and steel-making industries in Norrbotten, but over half is exported to other parts of Sweden although there is not at present any international export of energy from the region. In addition to energy production, Övre Norrland is now home to research and development centres in the area of renewable energy sources and climate change mitigation, including Energitekniskt centrum (the energy engineering centre) in Piteå and the Abisko Scientific Research Station near Kiruna.

Given the relative low significance of agriculture in the regional economy, sustainable agriculture is less of a focus for sustainable development policies in Övre Norrland than in many of the other DERREG case study regions, with 25,400 ha of certified organic farmland in the region accounting for just 0.02% of utilized agricultural land under organic farming.⁵⁴

However, there is a growth in recent initiatives promoting locally produced food. Part of the incentive for this comes from the state level, with a national strategy from 2008 aimed at promoting Sweden as a new culinary nation in Europe (*Sweden - the new culinary nation*). At the county level, Rural Development Strategies produced by the County Administrative Boards of both Norrbotten and Västerbotten support local food production, further

⁵¹ Source: <http://www.visitsweden.com/sweden/Regions--Cities/Northern-Sweden/Nature-experiences/National-Parks/>

⁵² Source: http://www.energy.eu/renewables/factsheets/2008_res_sheet_sweden_en.pdf

⁵³ Source: http://www.bd.lst.se/publishedObjects/10000502/Norr_engelsk_070816.pdf

⁵⁴ Source: EU Rural Development Report 2008

processing of agricultural products and marketing of the counties and specific places within as culinary regions. Specifically in Västerbotten, support has been granted to a project preparing a 'food festival' and food tourism brochure.

4.4 Environmental Issues

A major ongoing environmental concern in Sweden is limiting the country's climate impact through the reduction of greenhouse gas emissions and, as discussed above, Övre Norrland plays a key role in the development of a non-carbon energy industry being responsible for 22% of the total energy production of Sweden. Therefore the issue of guaranteeing a permanent and sustainable production of energy in the region is always in the local and in the national agenda. At the same time, most of the greenhouse gas emissions in Sweden come from transport and industry (including emissions from refineries, coke oven plants and gas flaring).⁵⁵

A major environmental issue in Övre Norrland is therefore the continuing expansion of the region's mining industry and its potential impact on the natural environment. The region has approximately ten currently functioning mines and plans for a significant number of new mining projects are underway, including doubling production of iron-ore in Kiruna as well as new ventures in the mining of gold, uranium and other minerals. In May 2010, the Swedish Environment Court approved the construction of a major new iron ore mine at Gruvberget near Svappavaara by LKAB. It is suggested that this expansion could bring conflicts with the regional tourist-industry and/or indigenous reindeer-herders. More specific environmental concerns relate to the use of hazardous chemicals in the production process, like cyanide for extracting gold. The mining of uranium in the region has met with protests due to its potential usage in nuclear weapons.⁵⁶ There are also tensions over the impact of environmental regulations on the forestry industry.⁵⁷ An additional issue is the quality of Sweden's aquatic areas, with the acidification of lakes, watercourses and forest land seen to be declining following the impact of targeted policies. The Umeå Marine Sciences Centre carries out environmental monitoring of the Gulf of Bothnia where a specific environmental issue involves dealing with marine eutrophication. In spite of the economic importance of resource industries, there is an active environmental movement in the region and the Green Party is aligned with the dominant Social Democrats in a red-green coalition in opposition to the centre-right parties.

5. Regional Development and Innovation

5.1 Regional Development Programmes

Since Sweden joined the European Union in 1995, the Övre Norrland region has qualified for support through the EU Structural Funds, primarily on the basis of its peripherality and low population density. Initially support was delivered through Objective 6, which specifically targeted peripheral regions, and then between 2000 and 2006 as part of the Objective 1 region of Norra Sverige. Objective 1 provided assistance of €391.4 million to co-finance a programme with priority areas including the development of infrastructure and industry as well as skills and employment, in order to assist new business start-ups in the region and help the transition from education to the labour market in order to reduce the out-migration of young people. Additional priorities included rural development, environmental protection and a Sami programme.⁵⁸

⁵⁵ Source: <http://www.sweden.gov.se/sb/d/5400/a/43486>

⁵⁶ Source: *Nordregio Journal*, 2009(3). Available at: <http://www.nordregio.se>

⁵⁷ See Keskitalo and Lundmark (2010)

⁵⁸ Source:

http://ec.europa.eu/regional_policy/country/prordn/details.cfm?gv_PAY=SE&gv_reg=678&gv_PGM=5&LAN=7&gv_PER=1&gv_defL=7

In the 2007-2013 round of the Structural Funds, northern Sweden, including Övre Norrland, has qualified for support from the Regional Competitiveness and Employment programme as a 'phasing-in region', with a total budget of around €485 million, including €243 million through the European Regional Development Fund (ERDF). This represents approximately 12.9% of the total EU investment for Sweden under the Cohesion Policy for 2007-13. The purpose of the 'North Sweden' programme is to contribute to sustainable economic growth and regional competitiveness by supporting new businesses and job creation, and developing the region's transport system and IT-infrastructure. The identified priority areas for the programme and breakdown of funds are outlined in Table 7.

In addition, Övre Norrland will benefit from EU Structural Funds delivered through several Cross-border Cooperation programmes. The Botnia-Atlantica programme links Västerbotten with neighbouring counties in central Sweden, districts of western Finland and the Nordland region of Norway (Figure 21). Administered by Västerbotten county authority, it has a total budget of €66 million to finance projects under the themes of environment, communications, cohesion, competence, business and society.⁵⁹ The Northern Periphery programme connects Övre Norrland with neighbouring parts of central Sweden, as well as with regions in northern Finland, northern Norway, north-west Scotland, Iceland and Greenland (Figure 22). Its programme includes measures on 'transportation, logistics and transport infrastructure', 'access to the information society', 'sustainable use of nature and natural resources', 'business innovation and development of human resources', 'household related service provision' and 'public management and spatial planning'.⁶⁰ The INTERREG 4 Nord project includes Norrbotten and northern municipalities in Västerbotten, together with regions in northern Finland and Norway (Figure 23). It has a total budget of €74 million to fund projects under the themes of 'development of industry and commerce', 'research, development and education', and 'regional functionality and identity', as well as a sub-programme focused on 'borderless development' for the Saami.⁶¹

Priority Area	Key Strands	% of total programme funding	EU Contribution for 2007-2013, Euro
Innovation and renewal	1) Entrepreneurship and creation of new businesses 2) Innovative environment 3) International co-operation 4) Regional attractiveness	73%	177 125 070
Accessibility	1) Co-operation between different modes of transport 2) Regional enlargement 3) Information and Communication technology	23%	55 806 529
Technical assistance		4%	9 705 483
Total			242 637 082

Table 7: 'North Sweden' programme ppriorities and Structural funds allocation, 2007-2013

⁵⁹ Source: <http://www.botnia-atlantica.eu>

⁶⁰ Source: <http://www.northernperiphery.net>

⁶¹ Source: <http://www.interregnord.com/en.aspx>

Cross-border cooperation over mountain and sea



Figure 21: The area covered by the Botnia-Atlantica programme
(Source: www.botnia-atlantica.eu)

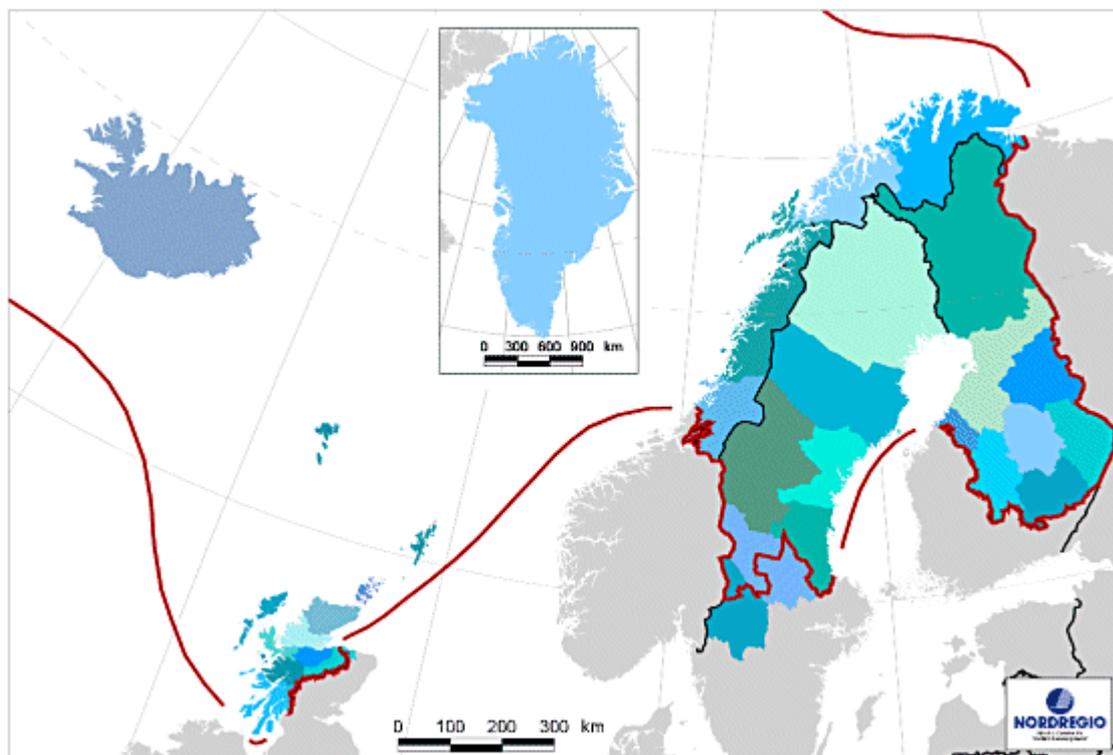


Figure 22: The area of the Northern Periphery programme
(Source: www.northernperiphery.net)

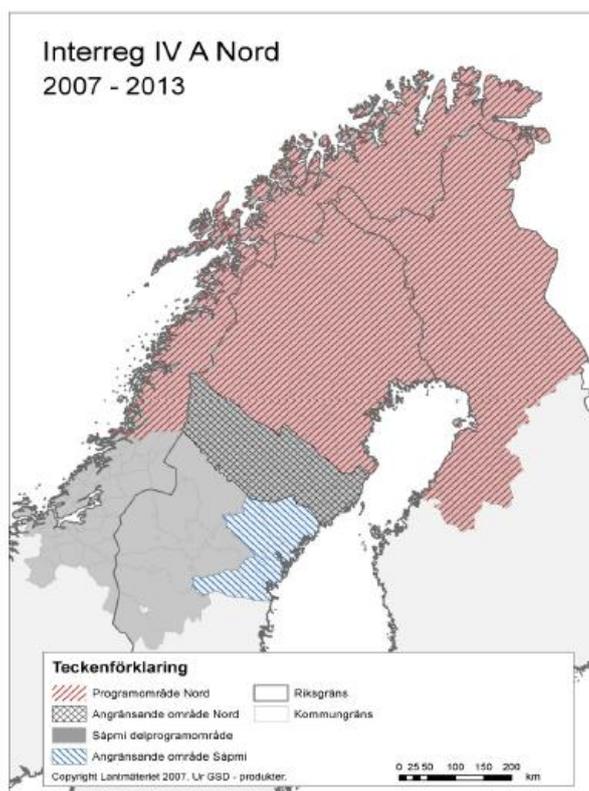


Figure 23: Area covered by INTERREG IV Nord (red hatching)
(Source: www.interregnord.com)

Övre Norrland also receives assistance for rural development through the national rural development plan for Sweden, administered by the Swedish Board of Agriculture. This includes support for LEADER groups, seven of which cover the territory of Övre Norrland (Figure 24 and Table 8).

Norrbottnen and Västerbottnen county authorities maintain a joint office in Brussels to represent their interests with the European Commission, reflecting the significance of European funding to regional development in Övre Norrland. However, regional development is also supported by national and local government. Västerbottnen county administrative board, for example, made grants totalling SEK 71 million (€7.5 million) to 200 companies in 2008, supporting investments of SEK 232 million (€25 million) in total that were aimed at creating 350 new jobs.⁶² The majority of the county's investment has been directed at firms in inland areas of Västerbottnen, thus supporting the lagging economy of the interior districts.

Additionally, there is active civil society participation in rural development through the Village Action movement, the "*Länsbygderåd*". The movement is comprised by Village Action Groups working on a broad basis to promote local development and to take care of the common interests of the district and represent it in various contexts. Nationally, there are 4,700 village actions groups and 40 member organisations, many of these large national NGO's. On a county level, there are 24 county networks working with information and advisory services in all Sweden. There are 2 of these networks in Upper Norrland, one for each county, formed by the respective local action groups (89 in Västerbottnen and 91 in Norrbottnen). The movement came as a reaction to the depopulation of the Swedish countryside especially in sparsely populated areas such as Övre Norrland with the main

⁶² Source: 'Facts about Västerbottnen 2009'

objective of improving national rural policies by stimulating cooperation and advising and supporting local groups.

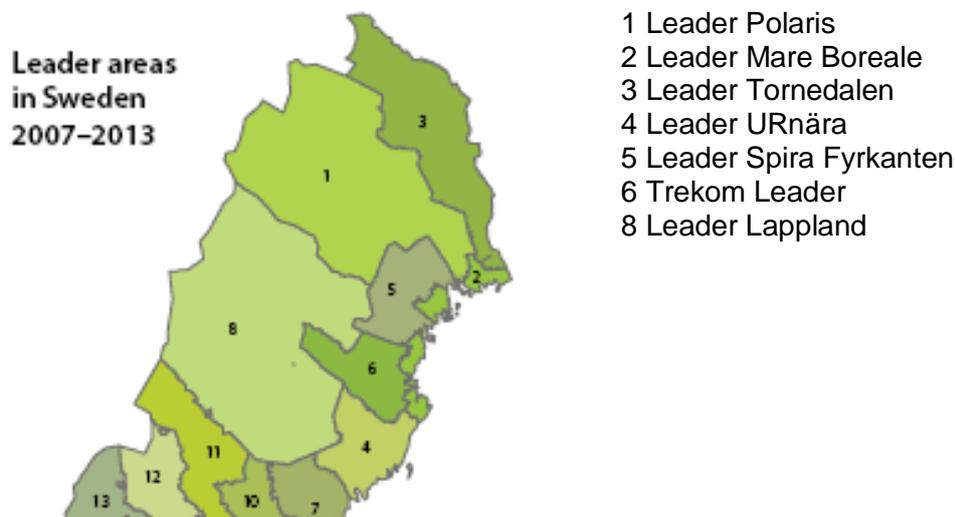


Figure 24: Leader areas in Övre Norrland
(Source: <http://www.jordbruksverket.se>)

Leader Group	Area	Population	Priorities
Leader Polaris	Gällivare, Jokkmokk, Övrekalis, parts of Kiruna and Kalix.	66,000	Communications, infrastructure and IT Innovation & entrepreneurship Experience, nature & culture tourism Visibility and marketing
Leader Mare Boreale	Parts of Skellefteå, Piteå, Luleå, Kalix, Haparanda	36,000	Developing local attractivity through nature & environment Economic growth in business and tourism Awareness of local qualities and distinctiveness Infrastructure
Leader Tornedalen	Pajala, Övretorneå, parts of Kalix and Haparanda	23,000	Local commitment and collaboration Quality of life Entrepreneurship & the business sector Alternative energy production
Leader URnära	Bjurholm, Nordmaling, Vännäs, Vindeln, Umeå	66,000	Local business sector Knowledge & attitudes towards business Diversity with an emphasis Youth participation Environmental awareness The natural & cultural landscape An attractive region National and international cooperation

Leader Spira Fyrkanten	Älvsbyn, Boden and parts of Luleå and Piteå	26,000	Attractivity based on natural and cultural values Entrepreneurship & business initiatives based on the land, forests and rivers A positive living environment for inhabitants Youth participation in the local community
Trekom Leader	Malå, Norsjö, part of Skellefteå	34,000	Nature and environment Business sector Housing and population Infrastructure & social services Attitudes
Leader Lappland	Arjeplog, Arvidsjaur, Sorsele, Storuman, Dorotea, Vilhelmina, Lycksele, Åsele.	45,000	Natural and cultural values Tourism Entrepreneurship Population influx Youth measures International networks

Table 8: Leader groups in Övre Norrland
(Source: Swedish Board of Agriculture (2010), 'Leader areas in Sweden, 2007-2013)

5.2 Regional Skills-base and Infrastructure

Övre Norrland is a hub of advanced research across a number of fields, including IT and high-tech, biomedicine and medical sciences, earth sciences among others. Primary sector companies are characteristically high-tech, strong knowledge-based companies with well-established collaborations with regional research centres and universities. The largest university in Övre Norrland is *Umeå University* founded in 1965 with around 29,000 students, 9 campus schools, 50 different study programmes plus 800 other courses. Umeå University has additional campuses in Skellefteå and Örnsköldsvik and a considerable number of research centres associated in a variety of fields such as biomedical engineering & physics, microbial research, marine sciences and plant sciences.

The Luleå University of Technology (LTU) founded in 1971 is another major driver for research and innovation in Upper Norrland. With around 15,000 students (of which nearly half are concentrated in the technological sector) the university research activities comprises 70 research subjects divided in 13 different departments. Luleå University has also campuses in the cities of Skellefteå (specialised in wood technologies and computer game engineering), Piteå (specialised in music and new media) and Kiruna (specialised in space studies). *Norrland's University Hospital* or *Norrlands Universitetssjukhus* (NUS) is the major hospital in northern Sweden and is also a teaching hospital for Umeå University, with the Faculty of Medicine as the responsible body. *The Swedish University of Agricultural Sciences* or *Sveriges Lantbruksuniversitet* is also based in Umeå and is home to the main campus of the Faculty of Forest Sciences.

Övre Norrland is now home to numerous research and innovation institutions with €389 million invested in research and development activities in 2005 whilst the sector accounted for 2.5% of regional employment, the highest percentage across DERREG case study regions.⁶³ The region is home to institutions of wider European importance, including the European Space Agency (ESA) which bases one of its tracking stations as part of the

⁶³ Source: Eurostat

European Space Tracking (ESTRACK) network in Kiruna. The North European Aerospace Test range (NEAT) is also located in Övre Norrland and is Europe's largest overland test range including also the test ranges of Vidsel and the Esrange Space Center (established in 1964 by ESA).

There has also been substantial industry investment in research and development. The steel-maker LKAB operates an experimental blast furnace at Luleå and is building a laboratory for pellet research (AggloLab) at Malmberget. It also funded the establishment of the Hjalmar Lundbohm Research Centre for Mining and Metallurgy at LTU.⁶⁴ Other private sector research activities include Mefos, a metallurgical research company based in Luleå; Sicomp, in Piteå, which undertakes research in fibre-composite engineering; and Arena Arctica at Kiruna airport, which provides climate testing for aircraft. Automotive cold climate testing is estimated to employ around 1,000 people in Norrbotten, and the German conglomerate Bosch undertakes winter testing of components in the region.⁶⁵

In terms of educational attainment, approximately 26% of the adult population (aged 25+) of Övre Norrland have a tertiary qualification; whilst it also has the highest proportion of adults aged 25 to 64 participating in education and/or training out of the DERREG case study regions at 17.2%.⁶⁶ Pupils and Students in all levels of education (ISCED 0-6) accounted for 28.5% of the total regional population in 2007 which again was the highest proportion across the DERREG NUTS 2 regions and was slightly higher than the Swedish national figure of 26.9%.⁶⁷

Municipalities, universities and IT companies in Övre Norrland are members of the InternetBay initiative aimed at developing Internet connections in northern Sweden and Finland. In 2000, 61.2% of the population of Västerbotten and 69.5% of Norrbotten had Internet access at home, giving an average of 65.4% for Övre Norrland. This placed Norrbotten second out of Sweden's counties after Stockholm (71.4%).⁶⁸ More recent national data shows an increasing trend in subsequent years, with Internet access amongst Swedish men (aged 16-84) reaching over 80% by 2007 and around 75% amongst women.⁶⁹

6. Summative Analysis

The contemporary economic, social and environmental situation of Övre Norrland is characterised by:

- One of the sparsest population densities in the European Union in one of the most peripheral locations on the northern margins of Europe, extending inside the Arctic Circle with vast uninhabited areas due to harsh environmental conditions.
- The concentration of two-thirds of inhabitants in a belt of coastal towns along the Gulf of Bothnia with a gradient of decreasing population density moving inland to remoter rural municipalities, interspersed by several larger inland settlements located around industrial centres.
- Sustained economic growth following the national economic recession of the early 1990s leading to a standard of living considerably higher than the EU average but which varies spatially within the region, with greater degrees of socio-economic development and prosperity concentrated in urban areas compared to more sparsely populated rural areas.

⁶⁴ Source: www.lkab.com

⁶⁵ Source: 'Perspectives on Norrbotten', 2003

⁶⁶ Source: EU Rural Development Report 2008

⁶⁷ Source: Eurostat

⁶⁸ Source: Regionfakta (www.regionfakta.se)

⁶⁹ Source: Statistics Sweden

- An abundance of natural resources including forests, minerals and water which continue to drive a strong primary industrial sector based on paper and pulp production, mining and hydroelectric power, but which has also diversified in recent years towards hi-tech, scientific and research-based activities and collaboration.
- The continuing growth of a dominant service sector concentrated in urban municipalities which accounts for the majority of regional employment and new business growth.
- A relatively small agricultural sector due to difficult climatic conditions and territorial constraints across much of the region, with a recent expansion of diversification generating one-person enterprises as a second income.
- A rapidly growing tourism sector based on the region's unspoilt natural environment and the opportunities it presents for outdoor recreation, serviced by an improving accommodation and transport infrastructure.
- A relatively stable population over the last three decades of just over half-a-million residents, peaking in the mid-1990s before a period of net out-migration recovering to net in-migration during the early 2000s. Net out-migration of younger residents has contributed to an increasing elderly age-profile, especially in more peripheral districts.
- Strong regional and local government institutions with proactive involvement in economic development informed by a dominant social democratic political approach, and high levels of public sector employment and employment in state-owned industry.

Övre Norrland is the largest, least densely populated and most distantly located from major population centres of the DERREG case study regions. In van der Ploeg et al's (2008) typology of European rural regions, Övre Norrland clearly fits in the category of 'peripheral areas', characterised by the limited significance of farming, along with Alytus county and Comarca de Verin. Yet, whilst Övre Norrland shares some characteristics with these regions, the broader analysis of its social, economic, geographical and political context also reveals significant differences. The historical and contemporary importance of mining and forestry and the presence of heavy industry in Övre Norrland, for example, shows similarities with Direktionsbezirk Dresden, although the economic health of these sectors is stronger in Övre Norrland. With geographical location, population density and resource-exploitation industries emerging as key defining characteristics, Övre Norrland may be positioned as illustrative of an alternative category of 'resource-rich peripheral regions', alongside other regions in Scandinavia, Finland and parts of eastern Europe and the former Soviet Union.

The engagement of Övre Norrland with globalisation has been strongly conditioned by the position of its resource-related industries and by the reconfiguration of its spatial context resulting from improvements in communications technologies, infrastructure development and the liberalisation of borders in the far north. On the one hand, therefore, the experience of globalisation in Övre Norrland has concerned the development of new connections with the broader circumpolar transnational region, with stronger ties forged with parts of Norway, Finland and Russia. On the other hand, the global significance of its resource-related industries, and its policy of accepting political refugees, have created connections to very distant parts of the world, including China, Thailand, Afghanistan, Iraq and Somalia. Notable expressions of globalisation evident in Övre Norrland from our initial analysis include:

- The integration into global networks of trade and commerce of the region's resource-related industries, notably mining, forestry and steel production, with the majority of outputs from these industries exported.

- The growing significance of international capital and transnational corporations in key industries in Övre Norrland, including Anglo-American mining, Blackstone Nickel, Byggna, GE Healthcare, Bosch and Smurfit Kappa.
- The transnational activities of Swedish companies based in, or with a significant presence in, Övre Norrland, including LKAB, Boliden, SSAB and Volvo.
- The development of strong communication links and economic relations with neighbouring regions in Norway, Finland and Russia with commercial benefits, as exemplified by the development of Haparanda-Tornio as a cross-border retail centre serving the greater Barents region.
- A small but expanding population of non-Swedish nationals, including notable groups of migrant workers (from Thailand and Poland) and political refugees (from Afghanistan, Burma, Colombia, Eritrea, Iraq, Iran and Somalia).
- Recognition of large areas of the region as sites of international environmental importance, including the Laponian UNESCO World Heritage Site.

The nature of these global or transnational relations, together with the distinctive socio-economic character of the region, creates both opportunities and vulnerabilities for future regional development. The opportunities are presented by:

- The 'global resources boom' with high levels of demand for minerals mined in Övre Norrland, especially from China and India.
- The potential of the region to offer unique services for globalized niche markets, for example in climate-testing of vehicles and machine components, missile testing and space tourism.
- The extensive research and development infrastructure provided by the region's universities, research institutes and leading companies, with established global networks and customers and a strong applied industrial focus.
- The potential to develop international tourism in the region through the valorisation of its natural environment and cultural heritage, as well as through unique high-profile tourist attractions such as the Ice Hotel and the Virgin space-port.
- The capacity to develop a transnational regional market for retail, tourism and services within the Barents region, with half-a-million people living within a 130 kilometre radius of Haparanda.
- Extensive renewable energy resources able to make Övre Norrland self-sufficient in energy and hence shielded from the impact of declining global oil reserves, and with the capacity for the export of electricity to neighbouring countries.
- The availability of significant support for regional development activities, and especially for transnational cooperation, from EU Structural Funds and local government.

At the same time, however, our initial analysis suggests that regional development in Övre Norrland is vulnerable to both global and endogenous pressures and challenges in a number of ways. These include:

- The vulnerability of the region's resource industries to global markets and fluctuations in demand, and by extension to decision-making by transnational corporations and foreign governments.
- Global competition to traditional heavy industries in the region, including steel-making, truck-manufacture and paper milling, especially from south east Asia.
- The potential for conflicts to develop over the exploitation of the region's natural environment by resource industries and the environmental impact of resource extraction, involving both local and international environmental groups.
- The growing socio-economic disparity between districts within the region, including the drift of population from inland to coastal municipalities, creating a challenge distributing wealth within the region.
- The challenge of maintaining a balance between population and employment opportunities, especially for younger people, breaking the cyclical pattern of population expansion and contraction of recent decades.

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