



MURMANSK COUNTY AND NORTHERN NORWAY:

An analysis of key economic and social indicators

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Preface

The very last years increased attention has been paid to the so-called northern areas. This is at least true for Norway, and it is related to the disclosure of oil and gas reserves in the Norwegian and Barents Sea. On the Russian side the planned realisation of the Shtokman field outside Murmansk has directed attention to the northwestern part of the federation. Due to high demand and thus high prices on ferrous and non ferrous minerals and metals extraction and processing of ores is also planned to be expanded in both Murmansk county (oblast in Russian) and Northern Norway.

In this report we ask; what is the economic and social situation in the two regions; Murmansk county and Northern Norway, facing these considerable prospects?

Using historical data we analyse the development the last 10-15 years. Based on these data we discuss what can be expected in the next years. We focus on a few main indicators; population dynamics, life expectancy, population distributed on age and gender, growth in GRP, growth in investments, employment as distributed on industries, the labour force, employment and unemployment, wages and income, educational level, and the social security system.

Data is mainly provided by the two main statistical bureaus; Murmanskstat and Statistics Norway.

It has been an intention to compare the two regions with respect to the mentioned indicators. This is done in order to discuss whether the regions are complementary when it comes to human, economic and natural resources, and to what degree this may be used to strengthen the position of Murmansk county and Northern Norway in a national setting in the future.

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Project leader



Summary

After the dissolution of the Soviet Union and the formation of the Russian Federation (RF) the new state followed advises from international economic experts and started a rapid transition from a centrally planned economy to a more market oriented economic system. For most parts of RF and for a majority of the population this implied a severe aggravation of their living conditions including a significant reduction in the material living standard.

After 15 years of economic and social hardship there are strong evidences of economic recovery. National and regional economic growth rates exceed those in many OECD countries. However, the economic remedy has left deep marks. It also has changed the relationship between the regions of the country, not at least it has changed the relationship between the centres Moscow and St Petersburg and the more peripheral regions.

Due to special economic incentives introduced under the centrally planned system people in Murmansk region used to have a higher real disposable income compared to the national average. In addition, economic growth, measured as growth in GRP was at the same level or higher than the national average. Life expectancy was also for many years higher in Murmansk compared to the national average.

The recession following the economic transition changed this fortunate situation in many respects. Since 2000 the growth in GRP has lagged behind the national economic growth. The personal real disposable income fell nationwide, and in Murmansk county it has still not reached the level from 1991. In addition, the wage rate relative to the Russian average has diminished. Due to higher prices nominal wages are still higher in

Murmansk. However, real wages are now below the national average.

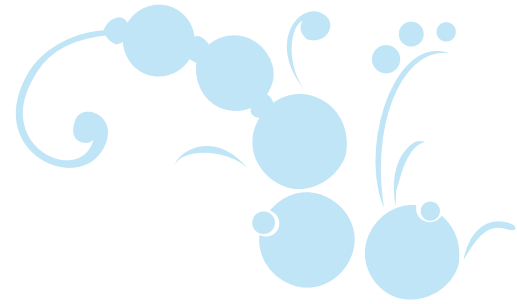
Murmansk county lost nearly 30% of the population during the period 1990-2006 whereas the reduction in population nationwide was 5% in this period. This has also resulted in a very unfortunate population structure. In 2006 only 15% of the total population was below 15 years against 27% in 1989. As a result there has been a significant reduction in kindergartens and primary schools. On the other hand, the number of higher education institutions has increased. But, many of the new educational institutions are jeopardized because of the very low number of youth and young people in the region in the years 2009-2017.

In 2003 the life expectancy dropped below the national average. Hence, in many respects the economic transition process has implied an economic and social setback for the county relative to the national average.

Also, economically, Northern Norway has lagged behind the country as a whole during the high cycle period starting in 2003. Whereas the population in Norway increases Northern Norway experiences a net reduction in the population. This has also happened in earlier high cycles. The economic growth (up to 2004) was far lower in Northern Norway compared to the national average. The average income is lower than the national average, and the median income has developed more slowly (up to 2002).

Hence, the two regions share some characteristics when it comes to social and economic development. This implies that they are faced with a few common challenges in the next years. A consequence of the negative population dynamics is that the companies have to import labour from outside the region in order to increase the economic activity. Given a very tight labour market in all parts of Norway and increasing employment in most parts of Russia, the real wages must increase more than the national average, or one must rely on foreign labour. Increased exchange of labour between the two regions will, however, not be a sustainable solution to a permanent economic growth in the whole region (Murmansk county and Northern Norway).

Although the two regions depart severely when it comes to employment as distributed on industries, some similar characteristics can be seen. In Northern Norway the greatest bulk of the employment (43%) is to be found in the public sector whereas in Murmansk county about 27% of the employment is in this sector. The largest single industries in Murmansk county are trade and transportation, with manufacturing in-



dustries as the third largest. In Northern Norway trade is the second largest single industry, and transportation also has a relative high share of the employment. Trade and transportation is vital for the economic activity in regions located far from larger population centres.

Several indicators do now show a positive trend. The growth rate for capital investments has been equal to or higher than the national averages since the end of the 1990s. This may indicate certain expectations about future economic activity in the region. The wages, especially in the Russian part of the region, have risen substantially since 2000. Though this has mainly taken place in the private sector, the very last years the wages also in the public sector has increased. This has contributed to reduce the share of people living below subsistence minimum from 25% in 2000 to 20% in 2005. In Murmansk county unemployment has decreased from almost 15% in 2000 to less than 7% in 2006, which has also contributed to reduce the share of people living below subsistence minimum.

On the Russian side of the region, both on regional and federal level efforts are now taken to promote childbearing. This includes a “mother capital” which is a federal one-time payment equal to 250.000 RUR for each child beyond the first one. In addition there are three newly introduced one-time regional benefits for families with children, amounting to 6.000-6.500 RUR.

So, what are the prospects and challenges of the region the next years?

Huge deposits of gas and some smaller deposits of oil in the Barents Sea will need large investments and developments in infrastructure for transportation and handling of the resources. Increasing prices on metals and minerals, which are abundant in the region, makes the mining and processing industry (more) profitable. Due to more attention in media (worldwide) more people are attracted to the region, as tourists, researchers and in business. This provides a potential for developing the tourism industry.

Despite of rising wages it is a question whether the region is able to attract sufficient labour, and especially labour with the demanded qualifications. In Murmansk county there is a tendency that the youth choose higher education within “fashionable” subjects as banking, law and economics. On the other hand the regional economy is in need of people with secondary level education within construction and industrial activity. The same pattern is partly present in Northern Norway. There is a general need for highly educated labour, but the supply show that there will be a general lack of engineers, economists and

natural scientists. Here we may find an interesting complementation between the Russian and Norwegian side of the region. In Murmansk county the unemployment among women with higher education has increased, whereas the unemployment rate in general has decreased. This is explained by a narrow labour market in the county, with a high demand for labour with secondary education. In Northern Norway, however, there is a lack of labour in health care. Also, with an intention to increase the activity in the service sector highly educated labour is necessary. Hence, exchange of highly educated women between Murmansk county and Northern Norway may imply a win-win situation in the region as a whole.

Another way to see the “mismatch” between the demand and supply of labour is to challenge the businesses to make use of the available labour. There is a general tendency that businesses resist employing highly educated workers, and instead wants the traditional educational backgrounds.

Both Northern Norway and Murmansk county has been marginalised during the 1990s and first years of the 2000s. This is true both economically and with respect to the population. The question is whether the two regions manage to use the many opportunities inherent in the extraction and development of the abundant natural resources of the region to retain its relative national importance? Or may it develop a new regional dynamic? Traditionally, both regions have been strongly controlled from the national capitals and centres. This is indicated by the fact that a high share of the companies within industrial manufacturing has head office in the capital, whereas the production plant(s) are located in Murmansk county or Northern Norway. May this be changed with the realisation of some of the huge investments projects in the region? Or will the whole region including Northern Norway and Murmansk county become a satellite circling around its respective capitals and centres, with people and capital moving in and out on demand?



Demography

Access to people, in the form of labour, is crucial for the economic development of a region. People is a scarce resource in most northern regions. This is also the case in Northern Norway and Murmansk county, as will be shown in the next three subsections.

1.1 Population dynamics

In the early 1990's the population in Murmansk county was nearly 3 times as high as in Northern Norway. In 2006 it is not even two times as high.

Separating the two regions, however, gives a more detailed picture of both.

In both regions the tendency is a decrease in the population. In Murmansk county it starts in 1991, and in Northern Norway it starts in 1997. In Murmansk county the decrease was caused first of all by deep political and socio-economic transformations, accompanied by dissolution of the Soviet Union and the subsequent economic crisis and transition to market system in the "new Russia" – the Russian Federation. The main factor of population decline was out-migration of residents to other Russian regions. Natural decrease (when death rate exceeds birth rate) was, and still continues to be an additional factor of population drop. This situation is typical for most of the Russian peripheries and in Murmansk county the natural replacement rate is a little bit better than the Russian average.

In total, for the period 1990-2006 the population in the county dropped by 334.000 people, which is 28 % of the

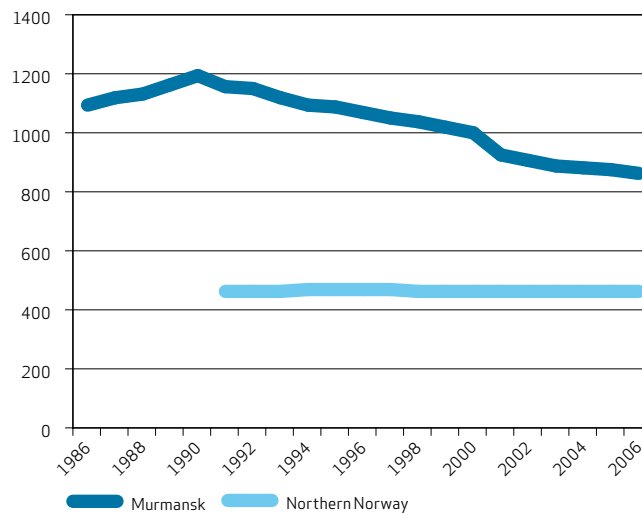


FIGURE 1.1
Population dynamics in Murmansk county and Northern Norway, 1986-2006, 1000 persons.
Source: Murmanskstat, Statistics Norway

level in 1990. Of them 297.000 were lost due to emigrational outflow and 37.000 thousand were due to a natural decrease. In 2006 Murmansk county had 865.000 inhabitants.

Northern Norway has just above 462.000 inhabitants in 2007. This is slightly more than in 1991 when the population started to increase, and reached a peak of almost 470.000 in 1996. The last 10 years are characterised by a gradual decrease in population except for one year (2000). The decrease was more marked in the beginning of the period. In the last part of the period it has stabilized.

Explaining the dynamics

Whereas both regions have net out-migration there is a natural increase in



the population in Northern Norway, but natural decrease in Murmansk.

The most obvious reason for emigration from Murmansk county is the aggravation of the situation at the labour market and devaluation of the state northern guarantees and bonuses, which were anticipated to compensate harsh climatic and other unfavorable condition for people living in the extreme North. Wages in the north Russia has approached the national level, whereas they earlier were far higher.

There are a few circumstances hampering further emigration. First of all it is unaffordable for most people to move to the south as prices for housing is far higher there compared to in Murmansk county. In addition, the state assistance program

FIGURE 1.2A
Dynamics of population in Murmansk county, 1000 persons.
Source: Murmanskstat

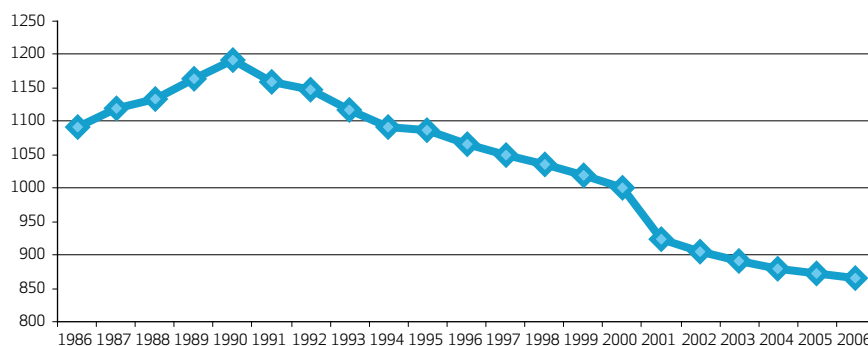
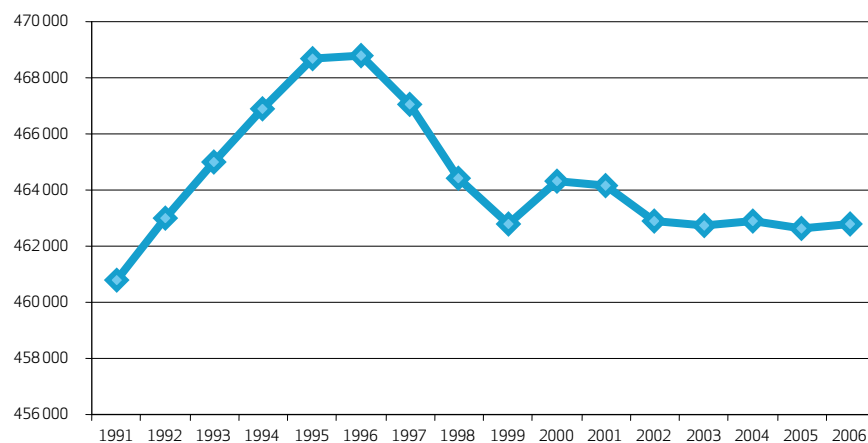


FIGURE 1.2B
Dynamics of population in Northern Norway, number of persons.
Source: Statistics Norway, PANDA



for resettlement of certain categories of people from Northern regions to other parts of Russia has not been sufficient to contribute to all the people eligible for assistance. Therefore the program has had less impact on the general migration process compared to if it had worked intentionally.

The positive population growth in Northern Norway from 1990 to 1995 is caused by a positive natural increase and a close to zero net out-migration. The negative population growth from 1995 can mainly be explained by increased out-migration from the North to the South of Norway. This trend diminished from 1999 when the national economy went into a downturn with increased unemployment. Some moved back to the North in this period. In 2003 a new upturn started, which led to increased out-migration in 2006 (and 2007).

Northern Norway the emigration is especially high in high cycles. One reason is that the supply of attractive jobs is larger in the bigger cities, especially in the capital. The wage-level is also higher in and around these cities.

One must take into account that the development in the three Northern Norwegian counties does not quite follow the same pattern. For instance Troms has the population dynamic of Troms been more positive than the other two. Troms has actually experienced a continuous growth, except for two years

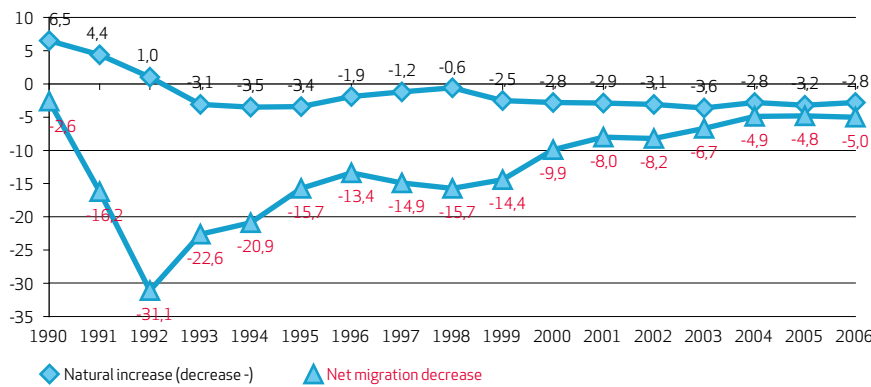


FIGURE 1.3A
Natural and migration change of population in Murmansk county, 1000 persons.
Source: Murmanskstat

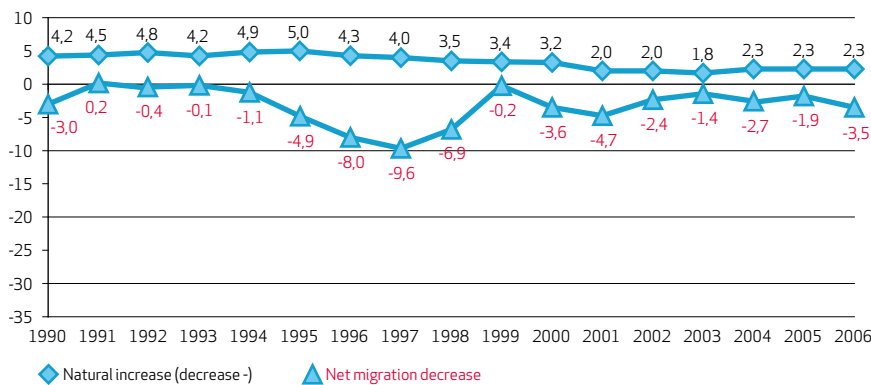


FIGURE 1.3B
Natural and migration change of population in Northern Norway, 1000 persons.
Source: Statistics Norway, PANDA

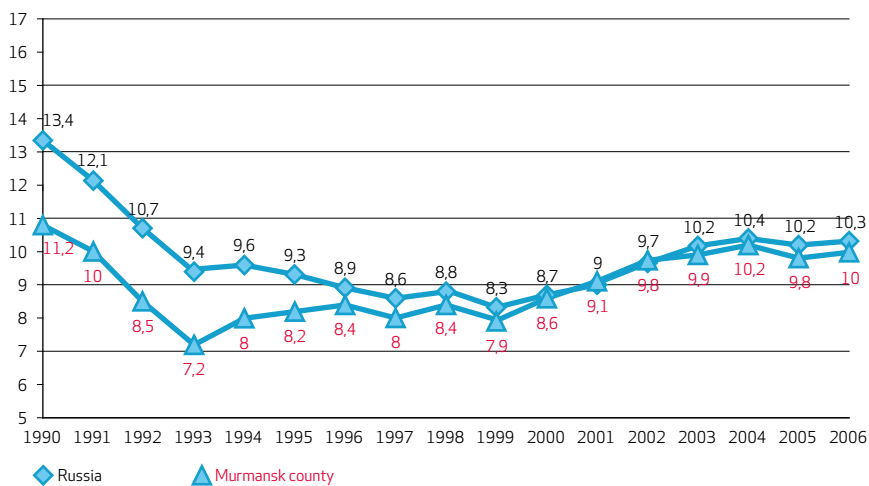


FIGURE 1.4A Birth rate per 1000 persons, 1990-2006, Murmansk county and Russia.

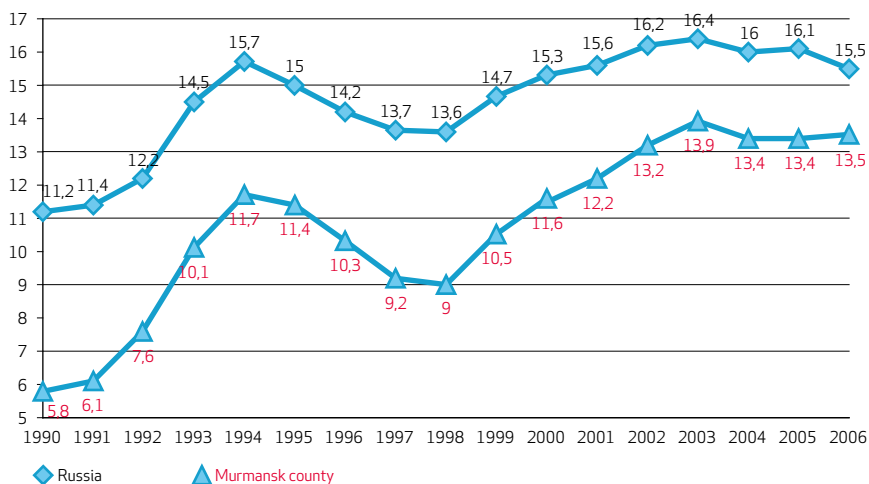


FIGURE 1.4B Death rate per 1000 persons, 1990-2006, Murmansk county and Russia. Source: Murmanskstat

(1998, 1999). 1996 was the turning point for Nordland and Finnmark when the population growth turned and started to decrease.

The figures above neither takes into account an important division between the population centres and the periphery of Northern Norway. All the major cities like Bodø, Tromsø and Alta have experienced a population growth mainly caused by a younger and more fertile population and an influx from surrounded districts, while the districts in general have an aging population and people leaving for work in the population centre in the North or Southern Norway.

Going behind the somewhat aggregate data in figures 3, the natural increase (decrease) may be decomposed in birth-rates and death-rates. These rates for Murmansk county and Northern Norway respectively is shown below.

In spite of some improvements for the recent years, the birth rate in Murmansk county today is almost 2 times lower than the necessary level for simple reproduction. It amounts about 1,3 births per one woman during her life, whereas the rate necessary for reproduction is 2,15.

In the end of 1980 total death rate amounted about 6 per 1000. During many years death rate in Murmansk county was lower than the Russian average. This was to a large extent explained by a higher share of young persons. However, by 2006 the death rate in the county approached the country's average. That is first of all explained by growth of death rate for able-bodied persons, which now exceed the average for the nation. Especially in 2003 the demographic situation in Murmansk county aggravated, and the death rate increased to 13,9 per 1000.

The birth rate in Northern Norway

has traditionally been higher than the national average, but both curves have decreased over the last 15 years. In 2002 the north Norwegian birth rate reached the national rate of 12,2 per 1000 and has after this been below the national average.

Fertility has been high in the periphery, but this has changed from 2000 and forward. Young women have moved to the centres, from the periphery, and thus decreasing the overall fertility rate in Northern Norway.

The death rate in Northern Norway has been relatively stable around 10 per 1000, but with a small decrease in the end of the period. This is slightly above the national average and

mainly explained by a higher number of old people in the North.

The natural increase in Northern Norway is positive over the whole period which means that more children are born than people dying. The natural increase has anyway gone down from the top of 4,9 in 1994 to 2,3 in 2007.

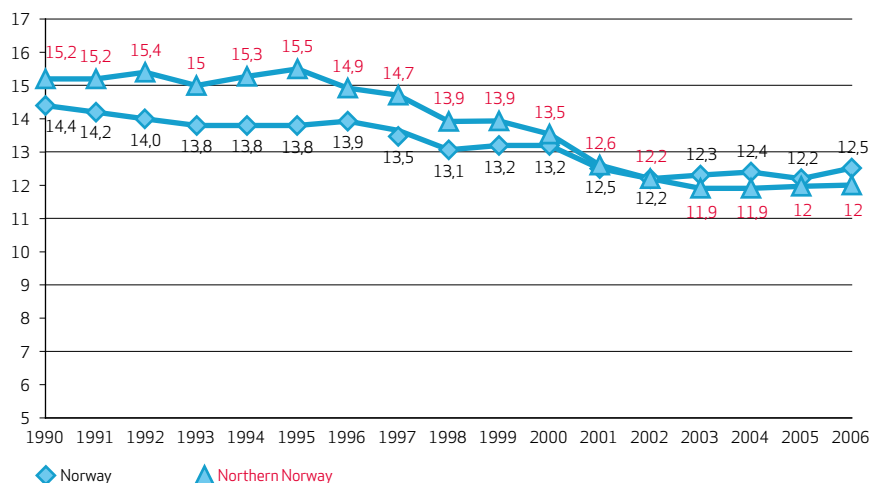


FIGURE 1.5A Birth rate per 1000 persons, 1990-2006, Northern Norway and Norway. Source: Statistics Norway, PANDA

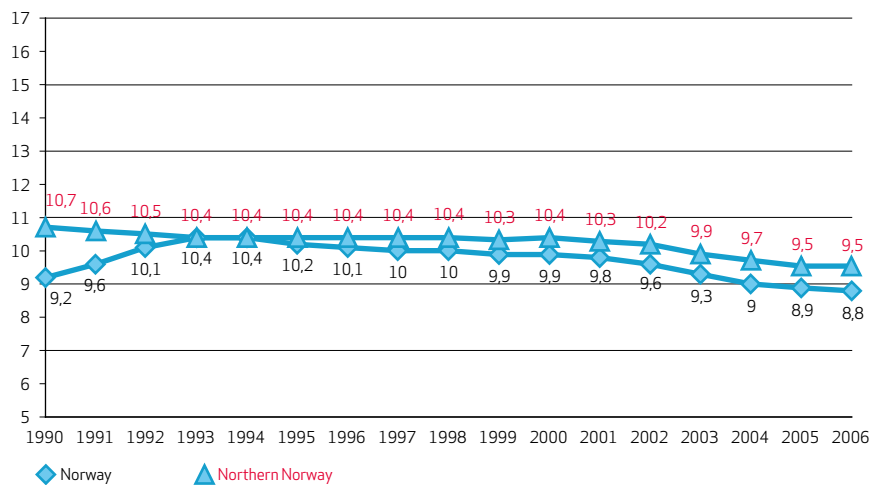


FIGURE 1.5B Death rate per 1000 persons, 1990-2006, Northern Norway and Norway. Source: Statistics Norway

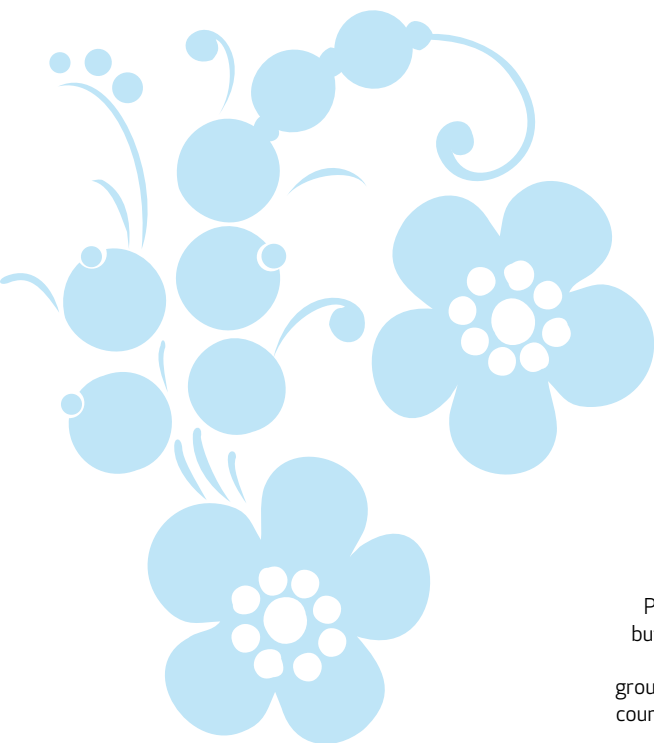
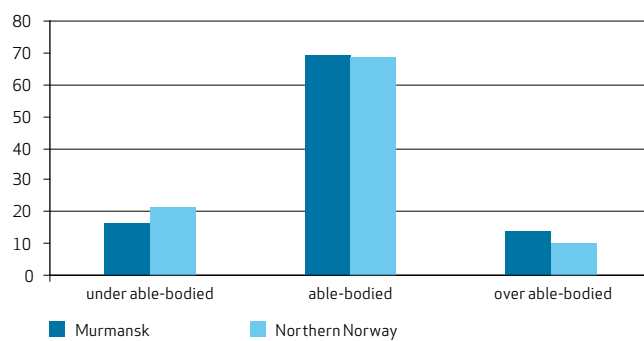


FIGURE 1.6
Population distributed according to aggregate age-group, %, Murmansk county and Northern Norway.
Source: Murmanskstat, Statistics Norway

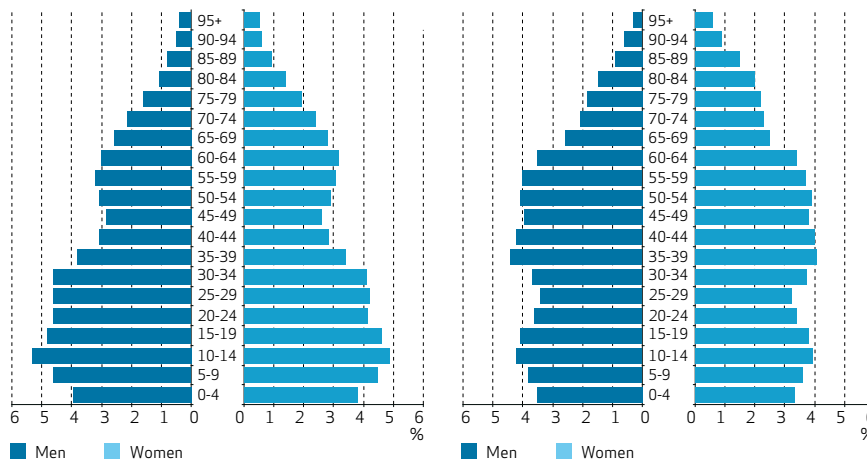


All age groups above 70 years in Murmansk county are included in one category (70+). This implies that this aggregate age-group corresponds to the 5 upper age groups in Northern Norway. Hence, the top of the pyramids are not comparable between the regions. However, due to low life expectancy most of the people above 70 in Murmansk will be between 70-75.

FIGURE 1.7A Structure of population by gender and age, Murmansk county, by the end of 1989 (left) and by the end of 2006 (right).
Source: Murmanskstat



FIGURE 1.7B Structure of population by gender and age, Northern Norway, by the beginning of 1981 (left) and by the beginning of 2007 (right).
Source: Statistics Norway, PANDA



1.2 Population structure

In an economic context it is of importance how the population of a region is distributed with regard to age. We can distinguish between three aggregate age groups; under able-bodied age, able-bodied age and over able-bodied age. Able bodied age includes those age groups which are eligible for the labour market, i.e. 15-55 (Russia), 16-67 (Norway).

The share of people in able bodied age is relatively equal in the two regions. Murmansk has a higher share of over able-bodied, and thus a lower share of under able-bodied.

The 1989 population pyramid for Murmansk county shows a pattern of relative sound development with a good proportion of children. In 1989 a "gap" in the number of people in the age of 16-19 is observed. This is explained by the fact that the parents of these age groups, which are now 40-50 years old, were born in 1941-1945. Due to the war the birth rate was very low during these years. On the other hand, there was a birth boom after the war, and this is visible as a bigger proportion of 25-35 years old.

It is visible from the pyramid for 1981 that Northern Norway at this time had a younger population compared to the national average. But from the 20 years old and up to 40 there is a considerable gender differences. There are fewer women in Northern Norway in this age group than the national average, and this is mainly due to out-migration of women from the North.

The pyramids for 2006/2007 deviate from a sound development of the population in both regions. In Northern Norway the share of elder people is above the national level, and the share in the most fertile age-groups 20-35 is lower. Only the age group of 10-19 is

above the national average. The nearest 20 years, the growth of people above 80 will increase in Troms and Finnmark. Right now it is highest in Nordland.

The 2006 pyramid for Murmansk county does not correspond to the name "pyramid", which would be the case with a natural distribution of population by age groups. In 2006

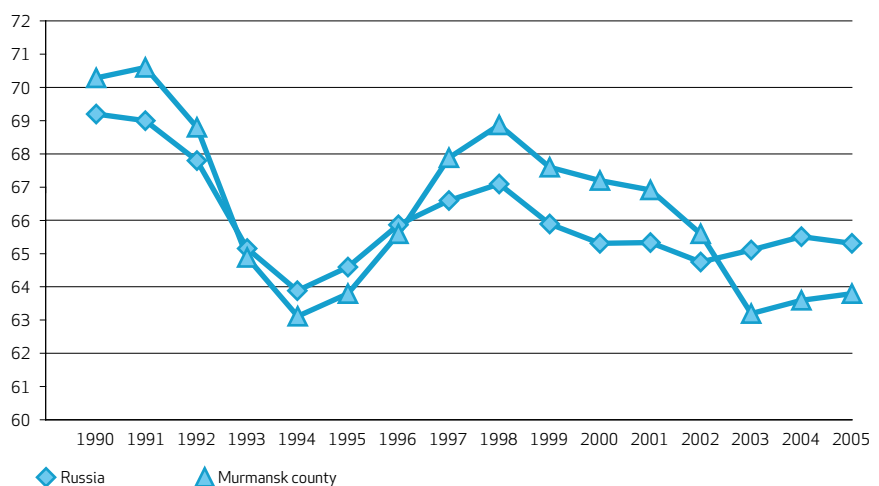


FIGURE 1.8A Life expectancy at birth, years, 1990-2005, Murmansk county and Russia. Source: Murmanskstat,

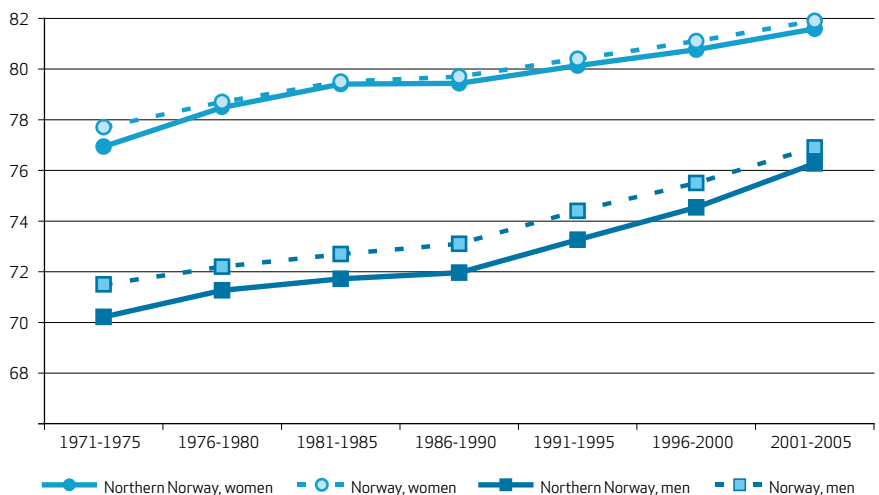


FIGURE 1.8B Life expectancy at birth, years, 1971-2005, by gender, Northern Norway and Norway. Source: Statistics Norway, PANDA

there was a new “gap” in numbers in younger age groups, especially 5-9 years that is explained by the influence of two unfavourable factors; the second wave of consequences of the war of 1941-1945, and birth rate slump during the crisis of 1990s.

In 10-15 years there might be a problem with labour in both regions as there will not be sufficient young people to enter the workforce.

1.3 The quality of life

Life expectancy may be taken as an indicator of the quality of life. In that case decreasing life expectancy may be a result of the aggravated living conditions, or the vice versa. Taking into consideration the economic development in the two regions in the period 1990-2005, such a correlation seem plausible when looking at the development in the life expectancy in Murmansk county and Northern Norway respectively.

Life expectancy in Murmansk county has decreased since 1998, and since 2003 it is lower than the Russian average. Important explanations to this are that the death rate increased for most diseases. This is partly due to the crisis in the health care system. In addition people die of acute diseases as social stresses, aggravation of life conditions and unhealthy lifestyles. Life expectancy has grown slightly since 2003, but is still lower than the national average.

In Northern Norway the life expectancy has increased continually since the 1970s. For women it is on the national average, whereas for men it lies a bit below. One reason for the latter is the slightly more unfavourable health conditions in Finnmark, which is usually explained by lifestyle. More people smoke, and death caused by other reasons than sicknesses are also more common especially among men in Finnmark. This includes accidents and violence related cause of death.

1.4 Conclusions and future prospects

None of the regions has a favourable situation when it comes to population dynamics. In table 1 the main forces behind the population dynamics are systemized.

In both regions the net outmigration causes a highly unfortunate situation.

In Murmansk county the program designed for older people to move to the south has got the adverse effect that it is the young people that leave the county. The explanation is that most old people can't afford to move to the south and take over a flat there, even with the financial support from the program. Then many of them give the right to the flat in the south to their grandchildren, which



thus get the opportunity to move away from the region.

In Northern Norway young people move out mainly during high cycles. Then the supply of jobs is high, and jobs are usually better paid in the south, especially in the larger cities.

Expectations about the future are important. As an example preparatory investment in oil and gas sector may serve as a signal that in the future increased economic activity will take place in the region. This may attract new people to the region, which will reduce the net outmigration because it increases immigration.

In Murmansk county, due to very low birth rates since 1992 and onwards the number of people finishing school and about to enter work or starting their studies in 2007-09 and the following years will be very low. This will be most notable in 2010. From 2000 the birth rates started to increase slightly, which implies that from 2017 the situation may improve.

In Northern Norway the number of young people is already decreasing, and the share of people below 20 years is expected to decrease further in the next decade.

Due to increased birth rates one may expect natural population increase in Murmansk county. The reason is that on both federal and regional level there are strategies/programs to promote childbearing. A clinic for pregnant women and newly born children is going to be built in Murmansk. Infrastructure around childbearing is being improved. Salaries to medical staff working with birth and children are increased. Financial aid is given to pregnant women in the form of a certificate which she can deliver to any gynecologist to have treatment for free. There is a strong tendency to try

	Migration	Natural population change	Population dynamic
Murmansk county	High out-migration since 1991	Low birth rates and very high death rates, result in a natural decrease	Strong negative population dynamics
Northern Norway	Net outmigration	Birth rates below national average, death rates above national average, result in a weaker natural increase in population than the national average	Slightly negative population dynamics, significantly weaker than the national average

TABLE 1.1 Forces in the population dynamics in Murmansk county and Northern Norway, 1991-2006

to increase birth rates in Russia now, and Murmansk county follows national trends very tightly in this.

One also hopes to stabilize and even decrease death rates. This shall be done by stabilizing the economic situation. TV stations make propaganda for a more healthy life stile. It is not very much effort in this as of today, and it is a question to which degree these will have an effect. On the other hand there is no strong strategy to reduce the death rates, and thus one can't expect them to decrease considerably.

Whereas the life expectancy in Murmansk county has decreased since 1998, it has increased in Northern Norway. Since 2003, however, it has stabilized and increased slightly in Murmansk. Anyway, taken together, we get a situation with a considerable gap in life expectancy between Northern Norway and Murmansk county. This points to a considerable gap in the quality of life in the two regions. In the case that the gap grows it will increase the pressure on interregional migration.



Economy and industrial activity

2.1 Gross Domestic Product

One of the most important indicators of economic activity is Gross domestic product (GDP) as well as dynamics of its change. The figures 1a and 1b show that the general developments of GDP are similar in both regions. First, the main trend was a positive growth rate in both regions throughout the period of 1995-2005. Though, in 1998 Northern Norway and Murmansk county experienced a negative growth rate. Financial crisis occurred in Russia in 1998. In Norway, this downward trend in 1998 can be explained by relative high interest rates that led to a reduced growth rate in the demand from the households. Second, the average growth rate is lower than the national level for both regions. The growth rate was higher in Murmansk county compared to Northern Norway. On average the annual rate was 1,9 % in Murmansk county and in Northern Norway the rate was about 1 %.

If new large investment projects are realised in the region, mainly related to the oil and gas industry, the growth rate will most likely accelerate further.

2.2 Employment by sectors

Economic structure can be described by how employment is distributed by sectors. Absolute numbers of employed people, numbers of employed people distributed by sectors, relative shares and % changes for Murmansk county and Northern Norway are presented in the appendix (tables A1 and A2). Table 2.1 presents a comparison of the rela-

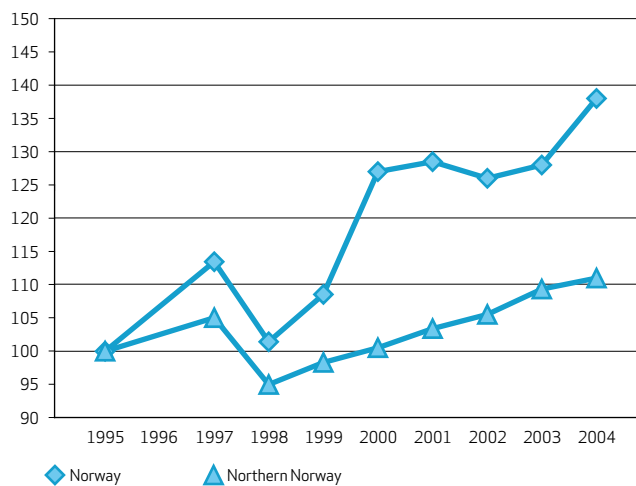


FIGURE 2.1A
Gross Product, real changes in Norway and Northern Norway.
Source: Statistics Norway. 1995=100

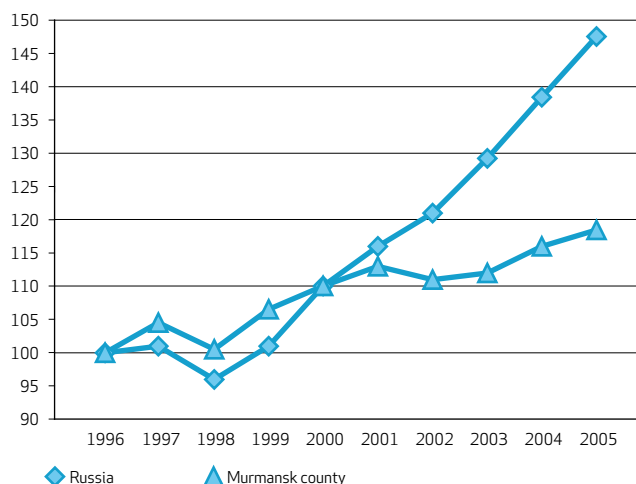


FIGURE 2.1B
Gross Domestic Product/Gross Regional Product, real changes in Russia and Murmansk county.
Source: Murmanskstat 1996=100

ve indicators (% share of employed people by sector for 2006 and the relative changes from 2000 to 2006) for Murmansk county and Northern Norway.



Table 2.1 shows that the number of people employed has increased in both regions from 2000 to 2006. In Northern Norway the increase was 2,6 %, and in Murmansk county it increased with 3 %. The table shows that in Northern Norway the three most important sectors are health care and social services, trade, and education. In 2006 these sectors made up a share of almost 45,7 % of the total number of employed people. In 2000 the share was 42,7 %, which means that the number of employed

people increased in these sectors. In Murmansk county the highest shares of employed people are in trade, transport and manufacturing industries. In 2006 these sectors accounted for 40,1 %. In 2000 the share was almost the same (39,2 %). The reason is that one of the three leading sectors – manufacturing industry – decreased its share of the total number employed people (from 13,8 % in 2000 to 11,8 % in 2006). Trade has experienced a growth from 2000 to 2006 (from 15,3 % in 2000 to 16,1 % in 2006).

Another distinctive feature, which could be noted, is that there is a more even distribution of employees among the various sectors in Murmansk county compared to Northern Norway.

	Northern Norway		Murmansk county ^a	
	Share	Change	Share	Change
Agriculture, hunting and forestry	2,9	-8,1	0,9	-38,8
Fishery and fish farming	3,2	-14,1	2,9	-21,2
Extraction of minerals	0,3	2,6	4,9	-19,3
Extraction of oil and gas	0,1	42,0	-	-
Manufacturing industry, incl:	7,6	-14,2	11,8	-12,2
- food and beverages;	3,0	-21,6	3,0	31,5
- basic metals;	0,6	-29,6	2,7	-37,7
- machineries and equipment;	0,4	7,7	1,2	-22,4
- transport means and equipment.	0,4	-34,6	2,5	-16,5
Production and distribution of electric energy, gas and water	1,0	-3,6	5,0	11,4
Construction	7,2	8,4	5,2	17,3
Wholesale/retail trade; repairing of auto-transport, domestic	13,0	3,5	16,1	8,3
Hotels and restaurants	3,2	-10,0	2,1	34,8
Transport and communication	7,6	-4,8	12,2	24,7
Financial activity	1,2	-13,0	1,0	18,4
Operations with real estate, leasing	1,3	43,5	7,1	0,3
Public administration, defence and obligatory social security	9,1	-8,9	9,2	14,6
Education	9,9	8,6	8,9	-3,7
Health care and social services	22,9	14,9	8,2	0,8
Deliveries of other communal, social and personal services, incl:	9,4	15,1	4,7	14,7
- data processing, research and other commercial services	5,5	22,0	... ^a	... ^a
- culture and sports	1,4	20,5	... ^a	... ^a
Total	100	2,6	100,0	3,0

TABLE 2.1.
Employment by sector, % share of employed people in 2006 and relative changes from 2000 to 2006, Northern Norway and Murmansk county
Source: Statistics Norway; Murmanskstat
Classifications are according to NACE codes

^a Murmanskstat does not publish data for data processing, research and other commercial services, and culture and sports separately. These sectors are included in deliveries of other communal, social and personal services.

A striking difference between the two regions is that a major share of the employed people in Northern Norway are in the social services, while in Murmansk county the major share is employed in manufacturing and services like transport and trade. The relative high share of people employed in trade is a relatively new phenomenon, which appeared due to the market transformation starting in the beginning of the 1990s. This sector is still increasing, but not as fast as before. With regard to hotels and restaurants there has been a decline in the number of people employed in Northern Norway. In Murmansk county the growth rate in this sector has been very strong, though the % share of the total number is still very low.

In Murmansk county the service sector is growing while primary sectors (agriculture and fishery) and the manufacturing industries are declining. In Northern Norway there has also been a decline in agriculture, fishery and in the manufacturing industries. But some of the service sectors have also experienced a decline like hotels, transportation and financial services. In Murmansk county the decline in the primary sector and most of the manufacturing industries can be explained by rationalisation of industries due to market reforms. The growth in the service sector can be explained by the fact that it was underdeveloped for a long time. Real estate and leasing makes up a relatively larger share of the total number of employed people in Murmansk (7,1 %) compared to Northern Norway (1,3 %). In the case of Norway there was a strong growth in this sector between 2000 and 2006. But this growth is not expected to continue because the supply of housing is relatively high, and demand has slowed down. In Murmansk county the demand for housing is increasing. A large share of employed people within real estate and leasing are within the municipal housing sector.

The primary sector is declining in both regions, which represents a global trend. The employment in Northern Norway is highly dependent on the public sector, and the employment has increased in all public services in the period 2000 to 2006.

Future prospects

In Murmansk county transport and communication and construction are expected to have a strong growth rate, as the former rapid growth in these sectors is expected to continue. The growth of the employment in transport will take place mainly due to increase in transit transportation of oil and coal for exports. The % share of this sector is expected to increase the next years. Hotels and restaurants have experienced a strong

growth in recent years and is expected to continue to grow due to an increasing number of visitors, including foreigners, to the county. This sector has been underdeveloped, and there are huge potentials to develop it further. Employment in the health care and social services will increase the next years, but the growth rate is expected to be low.

In Northern Norway the strongest growth has taken place within extraction of oil and gas, although this sector was the smallest in 2006 (0,1%). We expect a continuation of the employment growth within extraction of oil and gas. There are some activities taking place among businesses to prepare for an increased activity within this sector. However, it is not clear how fast this development will take place. The development of the tourism industry is uncertain, although there are high expectations in terms of increased activity within this sector. Many municipalities have plans to develop tourism, but so far these expectations have not been realised. It is expected that there will be an increase in health care and social services due to an aging population.

2.3 Investments

Investments and their dynamics reflect, on one hand, current state of economic processes and, on the other hand, give indications of future prospects of economic development both on the regional and the national level. Therefore, an analysis of investment activity is of a great interest. The indicator which is used makes it possible to compare the level of investment activity on two aspects – regional-national and inter regional (national). The figures 2a and 2b show the relative change of the real (deflated) value of capital investments

(investments in fixed capital) over a certain period of time. Figure 2a shows the dynamics of the capital investments in the period 1991 to 2006 in Murmansk county. Figure 2b shows the dynamics of the capital investments in the period 1995 to 2004 in Northern Norway. The figures show that the pattern of the dynamics in Russia and Norway is quite different.

In Murmansk county and in Russia, there was a dramatic decline of investments from 1991 to 1998. The lowest level was reached in 1998. This was due to the transformation period, which was characterised by instability and uncertainty. An excess of production capacity was a major reason for why the capital investments declined in this period. In 1999 the econ-

omy started to recover, which implied a gradual increase in the investments. However, the investment level was in 2006 only 63 % of the level in 1991. In Murmansk county, there has been almost no investments in the public sector and in new dwelling construction since the beginning of the 1990s and until recently. The investments have primarily taken place within manufacturing, transport and communication.

Figure 2.2b shows that the average growth rates of capital investments have on average been positive in Northern Norway and for Norway throughout the period 1995 to 2004. An interesting feature is that Northern Norway has on average experienced a stronger growth than the average growth rate in Norway. Real estate is one of those sectors that have attracted a major share of investments.

Future prospects

At present in Murmansk county several large-scale investment projects are prepared, that can accelerate investment activity in the county. The largest group of projects by size of investment is related to the development of oil and gas resources of the Arctic shelf, and, first of all, Shtockman gas-condensate field. It is planned to construct a gas processing (LNG) plant and a pipeline system from the Barents Sea coast to the border with the Republic of Karelia on the territory of the county. The sum of investments is estimated to be about \$ 17 billion in the period 2009-2015.

Another promising direction of investments is transport-reloading capacity of the Murmansk seaport and other infrastructure related to the seaport. According to the plans of the government and large transport companies it is envisaged to increase cargo reloading

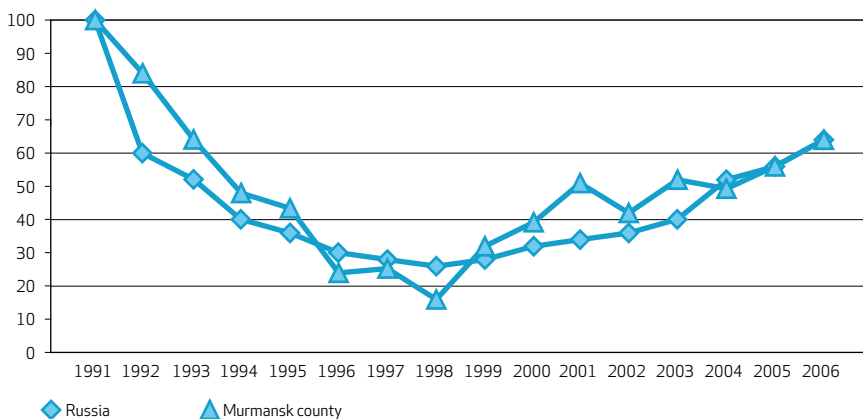


FIGURE 2.2A
Dynamics of capital investments in Murmansk county and Russia.
Source: Murmanskstat, deflated value, 1991=100

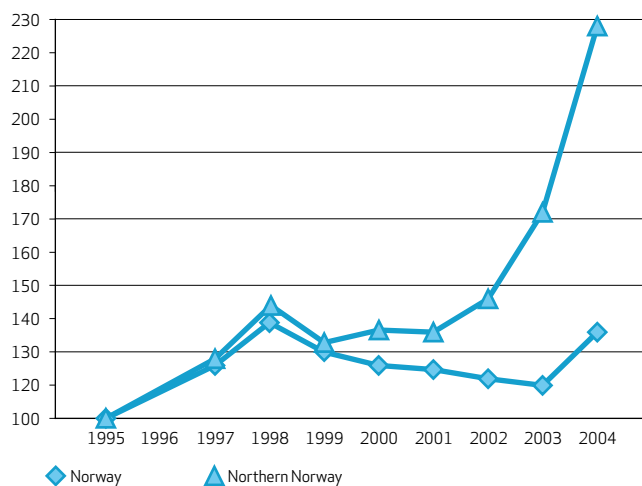


FIGURE 2.2B
Dynamics of capital investments in Northern Norway and Norway.
Source: Statistics Norway, deflated value, 1995=100

by 2015 to almost three times compared to the level reached lately (from 26 mln tons in 2005 to 72 mln tons in 2015; mainly transit export deliveries of oil and coal). The indicated growth of transport and port facilities will require large investments and will be lead to several thousands of new jobs.

The third important direction of future investment activity in the county is construction of large new mining enterprises as well as modernization of existed ones. Among them, in particular, a mining-beneficating combine on the basis of platinum group metals deposit Fyodorova Tundra. The project will be the first large green-field investment project carried out by a foreign investor in Murmansk county. This is one of the world largest mining companies "Barrick Gold Corporation" having its headquarter in Canada. Sum of investments are estimated to be about 17 bln RUR in the period 2009-20012.

The growth rate of capital investments has been relatively stronger in Northern Norway compared to the growth rate of total capital investments in Norway in the period 1995 to 2004. This development could be explained by a relatively low level of capital investments in Northern Norway in 1995. In 1995 the share of capital investments in Northern Norway was 6,3 % of the total capital investments in Norway. In 2004 the share was 10,7 %. Future activity within the oil and gas industry will be decisive with regard to how the growth rate develops.

2.4 Business structure

The Norwegian and Russian data on business structure are not comparable. However, we have used the data that is available to describe characteristics of

Manufacturing industry, main sectors:	N	O
Food products, beverages and tobacco	58	34
Textiles	6	1
Wood and wood products	1	5
Publishing and printing	31	7
Chemical and mineral products	11	19
Metal industry	1	1
Machineries and equipment	13	24
Furniture and other manufacturing	3	3
All industries	124	94

TABLE 2.2 Location of the head office by main sectors, absolute numbers
Source: Proff Forvalt, May 2007
N: Head office is located in Northern Norway; O: Head office is located in other parts of Norway

the business structure in the two regions. An aspect of interest is to what degree firms in Northern Norway and Murmansk county are affiliations of larger companies that have their main office outside the region.

Table 2.2 shows where the head office is located, within the Northern Norway or outside, for all manufacturing industries in Northern Norway per May 2007. 57 % (124) of the companies have their head office within Northern Norway. Only one company within the manufacturing industry, located in Northern Norway (Troms), is listed on the stock-exchange in Oslo which is Biotech Pharmacon ASA. 13 companies are part of a foreign enterprise. These companies have 1 to 3 employees. The location of the head office by main sectors is not reported for the service sector.

Most businesses within the manufacturing industry, transportation and communication that are located in Murmansk county (except small companies with less than 100 employees) are parts of financial-industrial groups and holding companies controlled by owner-interests located outside the region. There is a lack of transparency of these ownership structures.

A characteristic of both regions is that a large share of the companies is controlled from outside the regions. This is a typical phenomenon for northern economies.

In Northern Norway micro-businesses (less than 10 employees) make up the major share, 75%, of the total enterprises (governmental and commercial enterprises). Table 3 shows that the number of enterprises in the different categories of sizes has increased from 2002 to 2007 except for one of the categories. The number of enterprises with 250 employees and more has declined with 16,2% (from 37 to 31). In 2006 only 6,5 % of the total number of employees worked in small companies in Murmansk county.

Future prospects

Russian policies declare, both on a national and on a regional level, to favour the development of small businesses. However, this has so far not resulted in a substantial increase of small businesses. Lately, previous privileges, like tax incentives, for small business have been withdrawn. Following this development we can not expect very high increase in new small businesses in Murmansk county.

The presence of small businesses is important for a healthy dynamic in a business,

because small businesses can serve niches that large companies ignore or do not find profitable. However, to be very small in terms of number of employees involves some constraints. Few people, minor turnover and marginal profits mean that the company primarily spends its resources to operate the business on a day to day basis. This will often take place at the cost of long term planning and investments. Thus, a major challenge for the micro-businesses in Northern Norway is to establish strategic alliances in order to position themselves toward larger projects. This will be of critical importance to ensure orders from large projects within the oil and gas sector.

	2000		2006		% change 2000-06
	Mln \$	% share	Mln \$	% share	
Food and beverages	67,5	86,08	137,9	86,31	104,37
Raw materials	0,2	0,26	0,2	0,14	-
Chemicals and related products	4,3	5,51	0,0	0,00	-99,89
Machinery and other equipment	1,1	1,46	1,1	0,68	-
Other manufactured commodities	5,2	6,68	20,6	12,88	296,00
Total	78,3	100	159,8	100	104,10

TABLE 2.3 Exports from Northern Norway to Russia.

Source: Statistics Norway

	2000		2006		% change 2000-06
	Mln \$	% share	Mln \$	% share	
Fish and crustaceans	121,7	80,1	81,9	29,8	-32,7
Apatite concentrate	22,4	14,7	43,4	15,8	93,8
Ferrous metals	7,9	5,2	19,0	6,9	140,5
Non-ferrous metals	-	0,0	130,8	47,5	-
Total	152,0	100	275,1	100	81,0

TABLE 2.4 Export from Murmansk county to Norway.

Source: Murmanskstat.

	2000		2006		% change 2000-06
	Mln \$	% share	Mln \$	% share	
Fish and crustaceans	8,5	44,3	10,4	47,7	22,4
Other chemical products	10,0	52,1	7,4	34,0	-26,0
Equipment and mechanical accessories	0,7	3,6	1,9	8,7	171,4
Ships	-	0,0	2,1	9,6	-
Total	19,2	100	21,8	100	13,5

TABLE 2.5 Import from Norway to Murmansk county.

Source: Murmanskstat

The business structure is expected to be dominated by micro-businesses also in the future. There is also a tendency within the seafood industry that companies located in Northern Norway are acquired by larger companies with the head office outside Northern Norway.

2.5 Exports and imports

The economies in Murmansk county and Northern Norway are to a large extent export oriented. In Murmansk county the share of export value in GRP accounted for approximately 25% during the last few years.

The structure of the export from Murmansk county is characterized by groups of goods as (1) "metals" (2) "foodstuffs and agricultural raw materials", and (3) "mineral products". The first group represents mainly non-ferrous metals (nickel, copper, aluminum), the second group refers to seafood products, and the third group refers to apatite and iron ore concentrate. The shares of these groups of the total value exported from Murmansk county in 2006 accounted for respectively (1) 66.3%, (2) 21%, (3) 11.2%.

In Northern Norway the structure of exports is quite different. A major share of exported commodities from Finnmark and Troms is seafood products. Processed goods make up the major share exported from Nordland, and seafood products is the second largest commodity exported. The figure shows that for Northern Norway processed goods made up the major share of 50% of the total exported value in 2006. Seafood products has the second largest share of approximately 48%, and raw materials has a share of approximately 2%.



The major share of goods exported from Northern Norway is exported to EU. In the case of Troms, Russia is one of the eight most important countries. Nordland has a greater variation with regard to export markets. EU is important and Germany dominates, but Japan and Russia are also among the eight most important countries. In Finnmark the eight most important export markets were in EU.

As table 2.3 shows, food and beverages which primarily consist of seafood, is the most important commodity exported to Russia from Northern Norway. The value exported from Northern Norway to Russia has doubled in the period 2000 to 2006. Murmansk county exported for a larger value to Norway than Northern Norway exported to Russia in 2006. Table 2.4 shows that Murmansk county exported for 275 mln \$ to Norway, and Northern Norway exported for 160 mln \$ to Russia.

The growth of exports from the Murmansk county to Norway in 2006 compared to 2000 can be explained by the appearance of a new kind of commodity group: “non-ferrous metals”. The value of exported fish dropped by 32,7% from 2000 to 2006. The exports experienced a growth rate of 81 % from 2000 to 2006. Imports to Murmansk from Norway experienced a growth of only 13,5% in the same period.

Future prospects

Exports of seafood products is the most important commodity exported to Russia from Northern Norway, and this is expected to continue. However, the value generated in the Russian market makes up a minor share of the total exported value. It is therefore assumed that there are great potentials to increase exports to Russia. The retail sector is developing fast, which implies that there is a potential for increasing demands of various kinds of seafood products. To succeed with higher growth rates of export values to the Russian market requires advancements of competencies in the sales organisations located in Northern Norway. This implies that personnel specialise to deal with customers in the Russian market, and language skills should be emphasised.

It is expected that the commodity structure of the foreign trade in the Murmansk county will not experience significant changes in the next 5 years. However, since the value of exports to a large extent is determined by changes of world prices of non-ferrous metals, dynamics of export values are therefore assumed to be influenced by macroeconomic factors.

2.6 Concluding remarks

This chapter shows some features of the economic development and industrial activity in Murmansk county and Northern Norway. One characteristic is that GRP/GDP grows in both regions, but the growth rate lags behind the national levels. The structure of the economic activity is very different in the two regions. The largest sector with regard to number of employees in Murmansk county is trade (16,1 %). In Northern Norway health care and social services is the largest sector (22,9 %). Both sectors are expected to grow in terms of number of employees. This is explained by the fact that in Murmansk county this sector is still underdeveloped, and in Northern Norway the population is aging. Murmansk county has experienced a dramatic decline in capital investment activities in the 1990s, but this is picking up and is expected to continue due to underinvestments in a number of sectors like transport and communication. Northern Norway has experienced a strong growth in capital investments since 2001. This has primarily been driven by developments within the real estate.

The business structure is very different in the two regions. Northern Norway is dominated by micro-businesses (less than 10 people), and few large companies (250 and more employees). Murmansk county is dominated by large companies and few small businesses (less than 100 employees). In both regions, a relatively large share of the head offices are located somewhere else. This means that important decisions regarding future activities and investments are made outside these two regions. Current business structures (micro-businesses in Northern Norway and large companies in Murmansk county) are expected to dominate also in the future.

There are trades taking place across the borders. But Murmansk county exports more in terms of value to Norway than Northern Norway exports to Russia. It is pointed out that Norwegian exporters within the seafood industry have great potentials to increase exports to Russia. But this requires investments in personnel to ensure successful business relations and dealings with customers in the Russian market. It is expected that the structure of type of commodity exported from Murmansk county and Northern Norway will remain the same the following years. Exports from Murmansk county are expected to be dominated by non-ferrous metals, and exports from Northern Norway is expected to be dominated by seafood products.



Labour market, wages and income

The quantity and quality of the labour is crucial for the economic development of a region. In this section we go deeper into the quantitative side of the labour market. This means the access to labour in the two regions. We also discuss and compare wages and income in the two regions. Comparing the development of wages and income gives a basis for drawing conclusions about the relative attractiveness of working in Murmansk county and Northern Norway respectively. In section four we go into the qualitative side of the labour market, discussing education level and professions of the labour force. In section four we also present the educational system in the two regions.

3.1 The labour market

Table 3.1 presents the main indicators of the access to labour in the two regions; number of able bodied population, number of people in the labour force, and their distribution on employed and unemployed.

Though the nominal number of able bodied persons and persons in the labour force in Murmansk county is nearly twice the corresponding numbers in Northern Norway, the relative indicators are quite similar for the two regions. In both regions the able bodied constitute just above 70% of the total population, and of these 71-72% are in the labour force.

The biggest difference is to be found in the division of the labour force on employed and unemployed. In Murmansk

	Murmansk county		Northern Norway	
	1000 persons	%	1000 persons	%
Able bodied ¹	595	70 [*]	331	71,5 [*]
Labour force	514,6	72 ^{**}	235	71 ^{**}
Employed	480	93,3 ^{***}	226	96 ^{***}
Unemployed (ILO methodology)	34,6	6,7	8	4
Unemployed (Officially registered)	17,6	3,5	5,5	2,4

TABLE 3.1 Population, labour force, employment and unemployment, Murmansk county and Northern Norway, 2006, 1000 persons and % .
Source: Murmanskstat, Statistics Norway

^{*}share of total population, ^{**}share of able bodied, ^{***}share of labour force

county the unemployment level is higher compared to Northern Norway. However, as will be shown, unemployment is decreasing rapidly in both regions at the moment.

In Murmansk county the labour force has decreased substantially since 2000, while in Northern Norway it has had a minor reduction. In both regions the number of employed persons has increased, however in Northern Norway only slightly. The increase in employment in Murmansk county is due to the fact that more people in the labour force get a job. At the moment (autumn 2007) the registered unemployment in Norway is at a record low level of 1,9%, and in Northern Norway it is 2,7%.

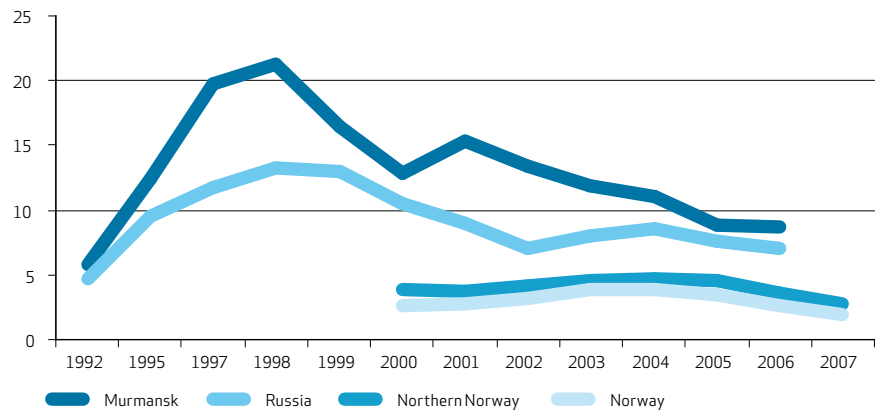
In both regions the unemployment is higher than the national level. In Murmansk county the difference has been substantial, whereas in Northern Norway the unemployment level is only slightly above the national average. Also, in Northern Norway the changes in unemployment level are parallel with the national changes. This is not the situation in Murmansk county after 2000. Then the unemployment rate increased in this county whereas it decreased in Russia as a whole. On the other hand, between 2002-2004 the unemployment level in Murmansk county decreased whereas the Russian average increased

At the regional labour market in Murmansk county the most complicated situation is for the following social groups:

¹Able bodied implies people in age groups eligible for paid work. In Russia 15-72 years, in Norway 16-74 years. Due to higher life expectancy the upper age limit for these groups is higher in Norway compared to in Murmansk.

youth having no work experience and often acquiring fashionable but not demanded professions; persons in pre-pension age losing jobs for one or another reasons (especially women); workers of low paid sectors and professions; indigenous population – the Kola Sami. Share of youth in the age of 16-29 in total number of people registered as unemployed fluctuates within 40 – 45 % (the average for North-west

FIG 3.1
Unemployment level,
1992-2007, %.
Source:
Murmanskstat,
Economic
monitoring,
Statistics Norway



	Northern Norway			Murmansk county		
	Labour force	Employment (% of labour force)	Unemploy- ment (% of labour force)	Labour force	Employment (% of labour force)	Unemploy- ment (% of labour force)
2000	235.000	226.500 (96,2)	8.412 (3,8)	542.300	469.600 (86,6)	72.700 (13,4)
2001	235.700	227.500 (96,3)	8.174 (3,7)	530.000	460.800 (86,9)	69.200 (13,1)
2002	236.200	227.300 (95,9)	8.902 (4,1)	526.500	472.100 (89,7)	54.400 (10,3)
2003	233.100	223.000 (95,4)	10.124 (4,6)	516.700	463.900 (89,8)	52.800 (10,2)
2004	234.400	224.000 (95,3)	10.378 (4,7)	517.100	451.500 (89,0)	55.600 (11,0)
2005	233.700	223.500 (94,4)	10.191 (4,6)	523.300	477.400 (91,2)	45.900 (8,8)
2006	234.000	226.000 (96,4)	7.908 (3,6)	514.600	480.000 (93,3)	34.600 (6,7)
2007*	233.000	227.000 (97,3)	5.939 (2,7)	n/a	n/a	n/a

TABLE 3.2

The development in the labour force, employment and unemployment in Northern Norway and Murmansk county 2000-2006, persons and %.
Source: Murmanskstat, Statistics Norway
* preliminary numbers for the first three quarter of the year

Russia is 31 %), share of women is 50–52 %. Annually the regional employment service registers 3.500-4.000 school-leavers and graduates of secondary and higher education institutions. As a rule only 41-45% of these get a job during first weeks after registration at employment office.

The main reasons of the complicated situation with employment is low degree of economy diversification, prevalence of towns with a single industrial enterprise (a monopolist-employer) and poor development of small businesses. Moreover, during a number of years the main problem at the regional labour market was misbalance between supply and demand of labour force both in quantitative and professional-qualification terms. Educational boom in the region resulted in increase in number of over-educated workers relative to the demand.

From 2007 Norway has relaxed the conditions for workers from all EU-countries, including the former East-European countries, to come to work in the country. This, however, is not the case for Russian citizens. As a consequence, there was a substantial increase in persons especially from former East-European countries coming on short term working permissions to Norway, and Northern Norway. There are processes to let the same conditions be valid also for Russian workers. Up to now the number of Russians citizens working in Northern Norway has been limited. One expects this to increase when the some of the formal barriers are removed. On the other hand, Murmansk county also have labour immigration.

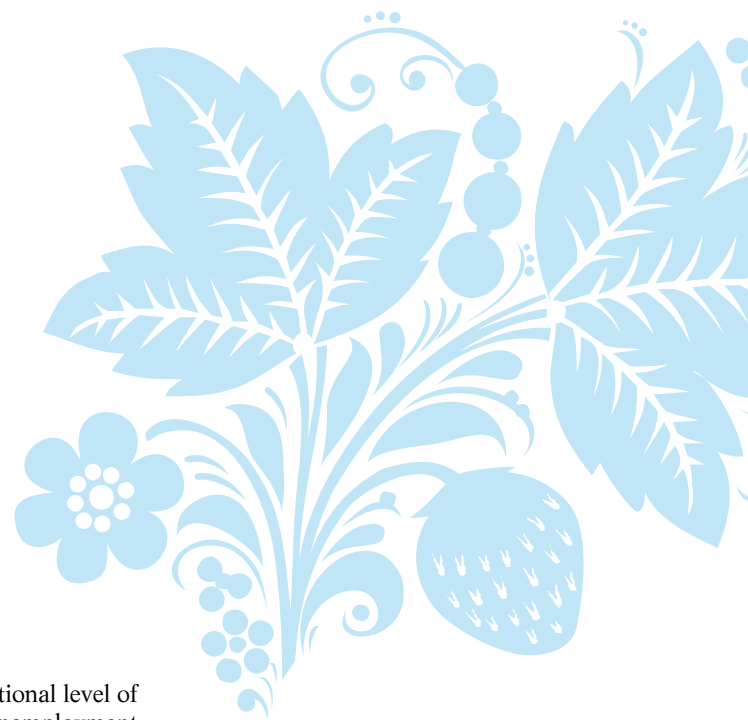
Future prospects

Murmansk county has overcome a period of very high unemployment rates and

is now approaching the national level of 6-8%. Further decline in unemployment rates is expected in the nearest future. However, the mismatch between supply and demand when it comes to professions and qualifications is expected to continue unless effective regional policies is implemented to balance it.

In Northern Norway the unemployment rate has reached a record low level, and the labour market is expected to be tight also in the next years. This is not at least due to high expectations and good prospects for new economic activity in the region. It can be mentioned; oil and gas extraction and processing, are marine related industries (bio technology) and tourism.

Easier access to short term working permissions for Russians to Norway, and taking into account the tight labour market in Norway, labour migration from Russia to Norway can be expected to increase in the nearest future. However, unemployment in Murmansk has decreased significantly the last years, and some industries even lack qualified workers. In addition the national government in Russia has started programs to call back Russians who live and work abroad. This is due to expectations that the economy will grow substantially the nearest future, and then labour is needed. In this perspective we can not expect a high inflow of workers from Murmansk.



	Murmansk county		Northern Norway	
	Roubles	PPP-units	NOK	PPP-units
Income per capita	12.580	1.057	15.833	1.649
Nominal wage per employee	15.162	1.274	n/a	n/a
- national average	10.634	894	30.555	3.183

TABLE 3.3 Monthly income and wage in Murmansk county and Northern Norway, 2006. Source: Murmanskstat, Economic monitoring, Statistics Norway

	Murmansk county (2006)	Norway (2005)
Wages	58	60
Transfers	12,7	21
Entrepreneurial income	13,9	6,5
Capital income	14,9	12,5
Total aggregate income	100	100

TABLE 3.4 Structure of income by sources, %. Source: Murmanskstat, Statistics Norway

state organisation (different types of pensions and social security).

Table 3.3 shows average wages per worker and average income per capita (above 17 years) in Murmansk county and Northern Norway in 2006. In Norway data on wages is not regionalised, and we thus only have national averages here.

The PPP-units (Purchasing Power Parity) express the purchasing power of the wage and income in the actual region when measured in one and the same money-unit (international dollar). Unfortunately, it is not possible to get regional PPP-indicators, which imply that the wages and income in the two regions are transformed into PPP-units based on the national price level. For Murmansk county this will be somewhat misleading as the living expenses are higher in the north of Russia compared to the national average. Hence, the income and wages in Murmansk county, measured in PPP-units would be lower if the actual, local price level were used. For Northern Norway this bias is of less importance.

The purchasing power of the income per capita in Murmansk county is 1.057 and in Northern Norway 1.649. Hence, the average monthly income per person in Murmansk county is almost 2/3 of the income in Northern Norway. The big difference, however, is to be found in wages. In Norway, the wage level is only given as national average. Comparing the national average wage level measured as in purchasing power between Norway and Russia shows that this is 3,5 times higher in Norway. Though we do not have specific figures for Northern Norway, we know that the wage level is lower here compared to at least central regions as Oslo and Stavanger. In Murmansk county the average wage

3.2 Wages and Income

There is a distinction between income and wages. Wages constitute one part of the income, and for a majority of the inhabitants in the age groups 16-67 it constitutes the most important part of the income. This is the part of the total income that is generated in the labour market. The difference between income and wages consists of pensions, social security, income from different types of capital (bank account, shares, properties, etc). This part of the income is partly generated in the capital markets and partly as part of the general welfare



level is substantially above the national average. On the other hand, so is also living costs, which means that the average wage measured in PPP-units is lower than shown in the table. Consequently, it is difficult to draw conclusions about the relative wage level, measured in PPP-units between Murmansk county and Northern Norway. Most arguments indicate that this is lower than on the national level. This implies that the wage ratio measured in PPP-units between Murmansk county and Norway is certainly less than 3,5.

In Norway wages per employee is two times higher than income per capita. This may indicate that wages is very important relative to other forms of income in Norway. In Russia, statistics show that wages are less important among forms of income, counting for less than 50% of total average income. However, in Murmansk county the wages' share exceeds national average accounting by 58% in 2006. In this respect the county follows the pattern observed in most of northern resource-based regions of RF where wages form the main source of population income.

Two other important sources of income are capital and entrepreneurial incomes. To capital income belongs renting out a flat, bank accounts (interest rate), share dividend. Entrepreneurial and capital income is lower in Murmansk county compared to Russian national level. At the same time, in Murmansk county entrepreneurial income count for 14% of total income, whereas in Norway this share is only 6,5%. The smaller share of entrepreneurial income in Norway can be explained by much higher relative and absolute level of wages as well as social transfers, compared to that on the Russian side. Social transfers (scholarship, pensions, subsidies for flat, transfer

Year	2000	2001	2002	2003	2004	2005	2006
NOK	23.600	24.695	26.355	27.260	28.240	29.160	30.555
Real %-change*		4,1	5,35	0,95	3,1	1,6	2,0
RUB	3.747	5.387	7.223	8.645	10.177	12.510	15.162
Real %-change*	15,6	14,4	10,9	1,5	4,8	9,5	11,8

TABLE 3.5 Gross average wages per month, Norway and Murmansk, current prices. * corrected for inflation.

Year	Nordland	Troms	Finnmark	Murmansk
2000	0,82	0,88	0,82	1,66
2001	0,85	0,89	0,86	1,66
2002	0,83	0,88	0,84	1,63
2003	0,83	0,88	0,83	1,57
2004	0,82	0,87	0,82	1,52
2005	0,8	0,84	0,78	1,46
2006	n/a	n/a	n/a	1,39

TABLE 3.6 Income rate in Northern Norway relative to the national average and wage rate in Murmansk county relative to the national average, 2000-2006. Source: Murmanskstat, Statistics Norway

to buy medicine etc) are less important in Russia than in Norway due to their small size.

On the other hand transfers count for a higher share of total income in Norway compared to Murmansk county. This is the way the Norwegian welfare state has organised the system for people having problems with reaching a sufficient (minimum) income level in the (labour) market.

In Norway it is more important to have a paid job to be well off. Having a job increases the total income significantly. In Russia, on the other hand, you can be rather poor even if you have a job. You can even have a job and still be under subsistence minimum. Also, the gap between the best and the lowest paid employees in a company is very large in Russia. On the other hand, the wages in Murmansk county has increased rapidly since 2000, more rapid than the wages in Norway, as is shown in table 3.5. In spite of this, the real wage level in Murmansk county still has not reached the level of 1991. It is expected that it will reach this level in the near future.

In 2006 wages rose in those sectors with the lowest wages.



Among these sectors are science, health care and education. This is due to national policy aimed at rise of wages in so-called “budget sphere” (public sector). Of special importance here is the political agenda to make Russia rich and strong. The wages in the private sector in Murmansk county rise due to market forces, especially increased demand for labour. Expectations about lack of labour in the future also induce companies to increase the wages to attract sufficient labour. This means that the two regions might converge when it comes to the difference between wages and income.

Before the 1990s Murmansk county was one of the most prosperous territories of the USSR. Here, due to high wages and the northern bonuses, the average income level exceeded the country’s average by two times and more. During the market reforms of the 1990s, economic slump and changes in the state social policy led to a considerable decrease of living standard in the county. In 1992, the price liberalization provoked a deep fall of real disposable income.

In the years of economic slump the decrease in real income level was deeper in Murmansk county than in the country as a whole. One of the main reasons was a low degree of diversification of the resource-based economy and thus limited possibilities to receive incomes from alternative economic activities.

In 2000 the personal real income started to grow. At this time it accounted for only 50% of the level in 1991. During the period 2001-2004 income growth rates in Murmansk county lagged considerably behind the Russian average. The main reason was the chronically slow growth rate of wages coupled with a high rate of inflation.

Only in 2005, there was a noticeable growth, 9,5%, which continued in 2006, and which exceeded the average Russian level. However, real per capita income has still not reached the level from 1991.

The income level in Northern Norway is lower compared to the national average. Table 3.6 shows that the difference has increased in the period 2000-2005. One possible explanation to this is that the share of persons on social security in Northern Norway is higher compared to the national average. As wages has increased steadily, whereas total income has varied during the period, it is reasonable to assume that average pensions and other social security payments has not increased at the same pace as has wages.

It is necessary to comment upon the big difference between the average income/wage ratio between north and the nation as a whole in Russia and Norway. Statistics from Murmansk county show that the average wage in Murmansk county is about 1,5 times higher compared to average wages in Russia as a whole. In Norway it is the other way around. Average income in the three northernmost counties constitutes about 80% of national average income. In this comparison it must, however, be taken into consideration the differences between wages and income. As the price level in Murmansk county is about 50% higher than the national average, real wages, expressed in terms of purchasing power, in the county is lower compared to the national level. In Norway the price level is higher in the capital.

Sector and territorial income differentiation remains a serious problem in Murmansk county. Average wage in the public sphere financed from the budget (education, culture, etc.) as well as in the agriculture sector is less than half of the wages in manufacturing sectors. Regarding territorial differentiation, level of average wage is higher in those administrative districts where enterprises of atomic power engineering and non-ferrous metallurgy are located¹, as well as in the administrative centre of the Oblast – the city of Murmansk². The lowest wage level is in coastal and rural districts. For example, in 2006 in the Terskiy district on the White Sea coast average wage amounted 9.6 thousand RUR, i.e. 64% of the regional average.

Future prospects

Due to political reasons (Putin policy) and economic prospects it is expected that wages will continue to increase in Russia and Murmansk county. At which level it will increase is uncertain, but it is expected that the wage growth will be substantial in

¹ Thus in 2006 in the town of Polyarnye Zori average wage amounted 25,7 thousand RUR, i.e. it was almost 2 times higher than the region’s average

² In 2006 in Murmansk average wage was by 13% higher than the region’s average (16.8 thousand RUR)

the next years. One factor that decides the wage increase in Murmansk county is the development of the mining sector, which in turn is dependent on world market prices on minerals and metals.

Also in Norway it is expected that real wages will grow substantially in 2008, at least 5-6%. However, if the growth rate of the wages in Murmansk county from the last 2-3 years continues, the gap in (real) wages between the two regions will diminish. This, in turn, will contribute to make it less attractive for labour from Murmansk county to go to Northern Norway to work.

Year	Murmansk county*	Norway	Finnmark	Troms	Nordland
2000	100	128,4	120,6	128,9	125,8
2001	126,5	131,8	124	132	129,5
2002	172,1	137,2	129,6	137,8	135,9
2003	205,1	n/a	n/a	n/a	n/a
2004	234,4	n/a	n/a	n/a	n/a
2005	290,9	n/a	n/a	n/a	n/a

TABLE 3.7 Dynamic of median income in Murmansk county, Norway, Nordland, Troms and Finnmark, 2000-2002 (2005). Index: Murmansk 2000=100, Norway 1993=100. Source: Statistics Norway
*authors' calculations. In Russia indicator of median income is not used in official statistics.

3.3 Income distribution

To what degree a person is poor can be measured directly or indirectly. The direct measure implies to measure its consumption, whereas the indirect measure implies to measure income. In Norway mainly the latter measure is applied.

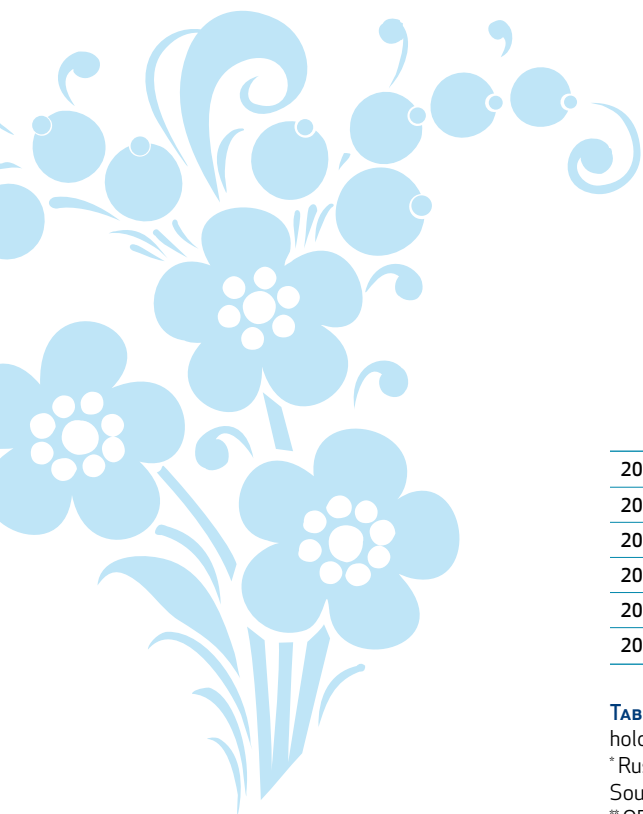
Poverty, however, is a relative concept, at least in parts of the world where hunger is not widespread. In these parts of the world poverty depends on the real average income in the region a person lives and the consumption pattern in this region. Hence, often measuring poverty on a national level may be misleading, as it covers up regional differences in consumption pattern and living costs.

Considering poverty as a relative concept the relevant basis for comparison is not the EU or OECD median income, but rather the national (Norwegian) or regional (county) median income. The national and regional median gross income is calculated each year, based on individual data (selvangivelsen). Table 3.7 shows the dynamic of median income in Norway and the three northernmost counties for the years 2000-2002,

and in Murmansk county for the whole period 2000-2006.

The median income in Nordland and Finnmark lies below the national median income in the whole period. The median income in Troms lies on the national average. As the basis year for the index is not the same the figures are not comparable between the regions. What is important is, however, the dynamic of the index. It is obvious that the growth rate is far higher in Murmansk compared to Norway, and each of the Norwegian counties.

Unfortunately, there is no data on the share of the population living in households with income below 50% and 60% of the median income level in Norway. Data on income distribution is in Norway mainly given on a national level, and they are related to the EU and OECD poverty limits. In Russia indicator of median income is not used in official statistics, but it is possible to make calculations based on existing data and get figures on the share of population with



	Income below subsistence minimum, Murmansk county	Income below 50% of regional median income*, Murmansk county	Income below 60% of regional median income*, Murmansk county	Households with income below the OECD poverty limit**, Norway	Households with income below the OECD low income limit**, Norway
2000	24,9	15,6	22,7	-	-
2001	22,3	15,0	22,1	6	10
2002	22,6	16,2	23,3	5	9
2003	21,2	16,3	23,4	5	9
2004	19,8	15,8	23,1	5	9
2005	20,3	14,8	33,1	6	10

TABLE 3.8 Share of population (%) in Murmansk county and Norway belonging to households with income below poverty- and low income limits.

* Russian statistics don't present these data. Figures are based on our calculations.

Source: Statistics Norway

** OECD's poverty limit is defined as a person with income less than 50% of the median income of all persons, and the low income limit is less than 60%.

	2000	2001	2002	2003	2004	2005	2006
Murmansk county	0,363	0,364	0,367	0,374	0,374	0,373	0,377
Norway	0,262	0,229	0,264	0,274	0,283	0,327	n/a

TABLE 3.9 Gini coefficient, Murmansk county and Norway.

Source: Murmanskstat, Economic monitoring, Statistics Norway

less than 50% and 60% of the county median income, which is a far better concept for measuring poverty seen as a relative concept.

Table 3.8 shows that the share of the population in Murmansk county with income below subsistence minimum decreases, whereas the share of the population with income less than 60% of regional county median income has increased. Assuming that the subsistence minimum is lower than 60% of the regional county median income, this implies that in general the population is

materially better off in 2005 compared to in 2000.

A measure on income inequality is the Gini coefficient. Roughly spoken the Gini coefficient expresses the deviation from an equal (uniform) distribution. The higher the coefficient the more unequal the distribution is. In table 9 the Gini coefficient for the distribution of income among Norwegian households and in Murmansk county is given.

The degree of population differentiation by income in Murmansk county is considerably lower than the Russian

average. This implies that Murmansk county has a more even income distribution than has the country as a whole. Nationwide the tendency has been an increase in the differentiation of population by income level during almost the whole 2000s. Decile coefficient³ has been continuously growing and only in 2004 some indications of its decrease appeared. This year it amounted to 11,7, in 2003 it was 11,3. In Russia as a whole it reached 14,8 in 2004, and it was 14,5 in 2003. In 2005 the decile coefficient in Murmansk county was 11,7, whereas 14,9 was the Russian average. A low level of population differentiation by incomes and almost zero growth of real incomes during the period 2001-2004 indicate that a broader strata of the population in Murmansk county faced the problem of a low income level compared to in the country as a whole. To a certain extent, this assumption is proved by poverty statistics: poverty level⁴, which before 2002 was stably lower than the Russian average, from 2003 began to exceed average values for the country.

Only during the last two years (2005-2006) the growth in the real income level in Murmansk county corresponded to the Russian average level, and poverty level began to decrease in 2006. The positive trends of the last years are confirmed not only by statistics but also by results of sociological surveys of the province's population⁵. In 2006 the share of the population referring themselves to "poor" and "very poor" decreased considerably and accounted for 35%, whereas it was 50% in 2005.

When it comes to Norway there is a continuous increase in the coefficient, implying an increasing income gap in the population in the period 2000-2005.

Future prospects

In Murmansk county further reductions in the share of population with income below subsistence minimum is expected in the next years. The differentiation of the population by income will continue. The decile coefficient (Gini coefficient) will increase. This implies that the gap between the poor and the rich in Murmansk has increased throughout the period and it will not become smaller in the future. The Putin policy – as of today – is not welfare state oriented in general. Rather, it is directed towards forming a middle class. Under Putin's presidency a flat tax rate was introduced (13%), which is normally regarded as not having any distribution effects in the form of reaching a more even income distribution. It is expected that the next step in the coming years may be strong national policy to fight poverty.

Also in Norway the income gap has increased since 2000. Continuous emphasis on market solutions in most sectors, and a reluctance to use progressive taxation to affect income distribution, implies that the gap will probably continue to increase.

3.4 Concluding remarks

The increase in real wages has been larger in Murmansk compared to Northern Norway the last years. This is mainly due to wage increases in the private sector, but the very last year also public sector wages have started to rise. At the same time the increase in wages in Northern Norway has been moderate. Hence, the wage gap between the two regions has narrowed. Still, measured in purchasing power parities the wages are 2,5 times higher in the Norwegian part of the region.

Wages are expected to grow in both parts of the region. Intentions of reducing labour migration obstacles will in isolation contribute to a levelling of the real wages, corrected for the local price level.

In both Murmansk and Northern Norway the income level relative to the national average has decreased during the last years. This is unfortunate when it comes to the regions' competitiveness regarding attracting labour in the future. The situation is further aggravated taking into consideration the very small youth cohorts in the regions entering the labour force in the next years. Thus in order to attract labour to the region in the future real wages have to rise more than the national average.

³ Decile coefficient evaluates degree of social stratification and is defined as ratio of income level of 10% of population having the highest incomes and 10% of population with the lowest incomes.

⁴ Poverty level is defined by statistics as share of population having incomes lower than the fixed subsistence minimum, in total number of population.

⁵ Since 2000 sociological surveys of the Murmansk province's population are regularly carried out by the Institute for Economic Studies of the Kola Science Centre RAS.



Education



4.1 Definitions

There are several challenges comparing education and educational levels cross-country as the classifications of educational categories in Norway and Russia do not coincide. We have found it useless to put together incomparable figures, and have chosen to present figures in tables and figures separately for the Norwegian and Russian sides. We make comparisons in the text to avoid measuring errors. There is also some challenges comparing educational levels over time as educational reforms in both countries has changed the content of the categories.

Categories of educational levels

The definitions of educational categories in the Russian federation are as follows:

- Primary general – 4 years of education at primary school
- Basic general – 9 years of education at secondary school
- Secondary general – 10¹-12 years of education at secondary school
- Primary vocational² – 2-3 years of education at professional school
- Secondary vocational – 3-4 years of education at professional college
- Incomplete higher – 4 years of education at higher institution
- Higher – 5-6 years of education at higher institution³.

Statistical data on distribution of population according to number of years of education in Russian federation (RF) are

given only for census years with 2002 as the last one. There are also data for educational level of the employed population, they are registered yearly on the basis of surveys.

The Norwegian definition of educational categories has 4 levels:

- Below upper secondary level – 10 years of compulsory education
- Upper secondary education – includes intermediate level courses based on completed upper secondary level, but which are not accredited as tertiary education. 3 years in duration, 13 years in total
- Tertiary education short – comprises higher education up to 4 years in duration in colleges and universities, up to 17 years in total (below master level)
- Tertiary education long – comprises higher education in colleges and universities more than 4 years in duration, more than 17 years in total (master and above master level)

4.2 Educational level of the population

Both on a federal (RF) and county level (Murmansk) there is a tendency of increased educational level for the population. Up to the last census (2002) the percentage of the population with higher education in Murmansk county exceeded the national average.

In Murmansk county 15,5% of the population above 15 years had higher education, which is at the national average of 16%. The share of the population with only compulsory education was 34,7%, which is 4,3% lower than the national average. Hence, Murmansk county still exceeds the national average in terms of the educational level of the population.

Figures from Northern Norway show a slightly different picture. In 2005, 36,8 % of the population had an educational level corresponding to below upper secondary level⁴. If we compare Northern Norway with the national average, we find that at the national level the share of people with lower education is some lower; 34 %. Thus, the tendency in Northern Norway differs from Murmansk county as there are more people with low education.

¹10 years before education reform in RF. Secondary general level is compulsory.

²Vocational implies professional.

³Post-graduate education is included in this category.

⁴Figures are not completely comparable as on the Norwegian side it also includes uncompleted upper secondary education.

TABLE 4.1
Distribution of the population 15 years and older⁵ by educational level, 2002, Murmansk county and Russia.
Source: Rosstat, Murmanskstat

Education categories	Murmansk county, people	Share in the county's population in the age of 15 and over	Russia, people	Share in Russia's population in the age of 15 and over
1. Higher	113.231	15,5 %	19.408.000	16,0 %
2. Incomplete higher	18.263	2,5 %	3.760.300	3,1 %
3. Secondary vocational	219.150	30,0 %	32.872.300	27,1 %
4. Primary vocational	114.689	15,7 %	15.405.100	12,7 %
5. Secondary general	138.795	19,0 %	21.227.500	17,5 %
6. Basic general	86.199	11,8 %	16.739.400	13,8 %
7. Primary general	28.489	3,9 %	9.340.100	7,7 %
8. No primary general	10.227	1,4 %	1.231.000	1,0 %

	Murmansk county	Northern Norway
Low/Primary (5-7)	34,7	36,8
Medium/Secondary (3-4)	46,7	40,4
High/Tertiary (1-2)	18,0	20,4
Unknown (8)	1,4	2,5

TABLE 4.2 Educational level of the population in Murmansk county (2002) and Northern Norway (2005), % of the total number of persons in the age groups 15 (16) years and older. Numbers in brackets refer to education categories (1-8) listed in table 4.1.
Source: Murmanskstat, Statistics Norway

In table 4.2 figures from Murmansk county and Northern Norway are put together for comparison. We must emphasize that they are not completely comparable. First, the Norwegian data are for the age groups 16 years and older, while the Russian data are from 15 years and older. They are also not from the same year; the latest data from the Murmansk county are mainly for 2002 and data from Northern Norway are for 2005. As we stressed in the introduction to this chapter, the educational categories are not quite the same and they do not include the same amount of years. To make a sensible comparison, we classified educational categories for both countries as low, medium, high and unknown categories. In the Low category we include the Norwegian primary category and the Russian general category. In the Medium category we include secondary from Norway and vocational from Russia, and in the High category we include tertiary in Norway and higher in Russia.

With all the pre-conditions mentioned above, we can interpret that more people in the Murmansk county have education above the compulsory level than in Northern Norway. Most people in the Murmansk county are in the medium educational category, 46,7 % while 40,4 % are in this category in Northern Norway. The percentage of people with higher education from universities and colleges is slightly higher on the Norwegian side with 20,4 % compared to 18 % in Murmansk.

4.3 Educational level of employed persons and gender aspects

As to the employed population, in the Murmansk county, 24,9 % of the employed females and 22 % of the employed males had higher education⁶. The share of people having secondary vocational education among employed in Murmansk county is also higher among females.

The Russian national trend is that the females increase their educational level quicker than the males⁷. This especially concerns higher education. Share of

the females with higher education in Murmansk county grows quicker than the Russian average as shown in fig. 4.1.

Worth noticing is the fact that the educational level among employed females in Murmansk county is increasing significantly, while the male educational level has practically no increase since 2000. This trend can to a certain degree also be found in Northern Norway.

A static view of the present educational level in Northern Norway shows a population with general lower education level compared to the national average. 41 % of the male population and 35 % of the female had upper secondary education as the highest education in 2005. This is 6-7 % below the national average.

The population with higher (tertiary) education in Northern Norway is about 5 percent lower than the national average, but here is the gap between males and females considerable. 24 % of the females and 18 % of the males had higher education in 2005. This gender gap has increased gradually since 1994, and the women are now approaching the national average level. The level of tertiary education among men used to be higher than among the women in the period prior to 1994.

It is also interesting to see that women in Northern Norway “passed the men” with respect to higher education many years before the women on national level.

The general lower educational level in Northern Norway compared to the national average can be explained by older generations not able to take upper secondary or higher education due to lost educational possibilities during the war or limited educational possibilities in the remote parts of the region. The

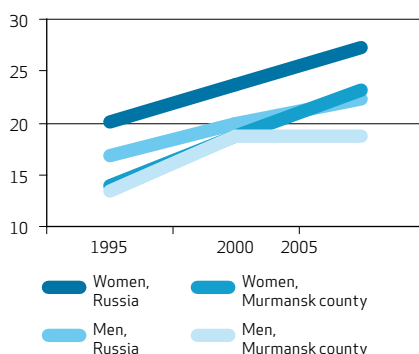


FIGURE 4.1 Changes in employed persons with higher education % of corresponding employment group, Murmansk county and Russia. Source: Rosstat, Murmanskstat

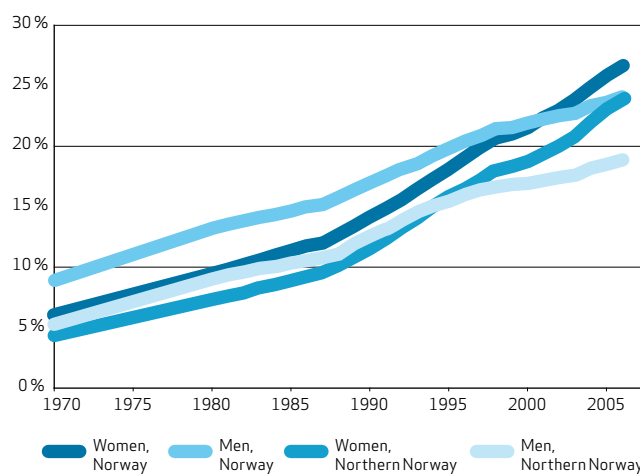


FIGURE 4.2 Changes in percentage of population with higher education in Northern Norway compared to national level, women and men. Source: Statistics Norway

educational possibilities are today much better and it is easier (practically and economical) to study outside the region.

To sum up; the two regions share the trait of increased educational level. On the other hand the two regions differ in educational levels. The percentage of people with medium education is higher in Murmansk county than in Northern Norway, while the percentage of people with higher education is slightly higher in Northern Norway. Share of population with only compulsory education is higher in Northern Norway. Generally, one can say that the educational level in Murmansk county is slightly higher than in Northern Norway.

⁵ Number of population in the age 15 and over in the Murmansk county in 2002 – 730, 5 th. people (total population - 889,8 th. people).

⁶ For employed population it would be possible to use data for more recent years, however here we prefer to use data of the census of 2002 to make these figures comparable with those for the whole population 15 years and over. The percentage is given for corresponding group of population.

⁷ In the lowest age group (above 50) the situation is opposite: the corresponding percentage for males is 19,4 % and 13,3 % for females.

	1986/87	1990/91	1995/96	2000/01	2005/06	2006/07
1. Number of pre-school educational institutions	582	601	443	333	309	n/a
- number of children, thousand people	93,2	89,1	51,3	38,2	38,6	n/a
2. Number of state institutions providing general education	255	268	273	264	238	237
- number of students, thousand people	174,3	189,1	175,6	141,9	103,2	87,8
3. Number of state educational institutions of primary vocational education	27	27	26	27	21	19
- number of students, thousand people	15,8	13,3	11,0	11,0	10,2	9,6
4. Number of state secondary vocational educational institutions	8	10	11	11	11	14
- number of students, thousand people	8,7	8,7	8,7	12,3	11,4	12,9
5. Number of non-state secondary vocational educational institutions	-	-	-	1	2	n.a.
- number of students, thousand people	-	-	-	0,1	0,5	n.a.
6. Number of state higher educational institutions	2	2	2	2	2	2
- number of branches.	-	-	n.a.	9	14	14
- number of students, thousand people	6,7	6,4	8,2	14,7	27,3	27,1
7. Number of non-state higher educational institutions	-	-	1	2	2	2
- number of branches	-	-	-	4	11	12
- number of students, thousand people	-	-	0,4	3,4	11,7	10,8

TABLE 4.3

Main indicators of activities of educational institutions of Murmansk county. Source: Murmanskstat

4.4 Educational institutions

Since the 1990s, the educational institutions in Murmansk county has gone through a period of serious transformations. In effect, the main outcome has been a considerable decrease in the number of general education institutions (both pre-school and school institutions) and an increase in the number of higher education institutions.

Due to a sharp decline of the birth rate and the fact that the number of children attending pre-school institutions was reduced by 60 %, the number of pre-school institutions has been halved. Buildings of former kindergartens have been sold to private businesses. The number of schools decreased by 7 %, as the number of pupils has been halved. Number of primary vocational institutions (professional schools) decreased by 30 %.

At the same time there is a boom in the number of higher education institutions. This is partly due to the national trend of regionalization of higher and secondary vocational education. At the initially low number of students in the beginning of the 1990s, today Murmansk county is one of the leading regions in the Russian Federation when it comes to growth rates of higher institutions students' number.

Today there are 13 secondary educational institutions and 15 branches of such educational institutions, 4 separate higher educational institutions as well as 14 branches of state higher educational institutions and 11 branches of non-state ones in Murmansk county. As the county's system of higher educational institutions is largely based on branches of the institutions located outside of Murmansk county, paid education is more widespread than in RF as a whole: 55% of students compensate education costs themselves while in RF it is 44%. The number of registered students in higher educational institutions in Murmansk county increased rapidly in the period 1995-2006. Today it is 38.000 people.

The situation in Northern Norway is quite different. The numbers of higher institutions are limited to 8, one university in Tromsø and 7 colleges in Tromsø, Bodø, Narvik, Nesna, Harstad, Alta and Kautokeino. This number has been stable

	All			Men			Women		
	1996	2005	2006	1996	2005	2006	1996	2005	2006
University of Tromsø	6 434	5 860	5 840	2 963	2 507	2 439	3 471	3 353	3 401
Bodø College	2 996	4 594	4 265	1 173	1 537	1 418	1 823	3 057	2 847
Narvik College	601	1 180	1 196	426	754	740	175	426	456
Nesna College	971	939	931	321	268	286	650	671	645
Harstad College	960	1 477	1 489	313	418	435	647	1 059	1 054
Tromsø College	2 556	2 951	2 880	945	841	854	1 611	2 110	2 026
Finnmark College	1 764	1 827	2 099	517	499	611	1 247	1 328	1 488
Saami College	181	144	112	45	33	26	136	111	86
Norway	187 697	223 607	222 975	80 688	90 196	88 705	107 009	133 411	134 270

TABLE 4.4
Number of students registered in the higher educational institutions, Northern Norway, 1996, 2005, 2006. Source: Statistics Norway

during the last decades. The youngest of the institutions is Sami College founded in 1989. Most of the institutions have permanent branches in other Northern locations and several courses are offered decentralised often with the use of audiovisual means. A reform process in higher education is presently going on in Norway, and Tromsø University and Tromsø College will unite as one institution in 2009.

A general increase in number of students took place in the beginning of the period, but this has now stabilised. The number of male students actually dropped from 2001 to 2003. The last couple of years are characterised by a stable number of registered students in higher educational institutions in Northern Norway; just above 19.000. This is exactly half the number of students in Murmansk county.

The University of Tromsø has actually experienced a drop in number of students, while most of the colleges have increased the number. Only the Saami College has a negative development in number of students during the last decade.

A closer look at the gender differences at each institution gives a clear indi-

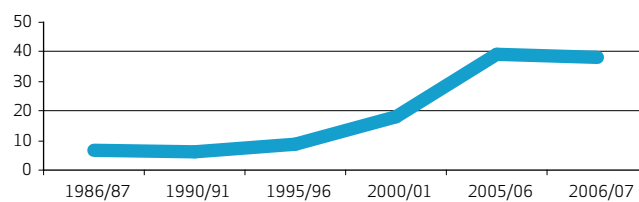


FIGURE 4.3
Number of students registered in Murmansk county, 1986-2006. Source: Murmanskstat

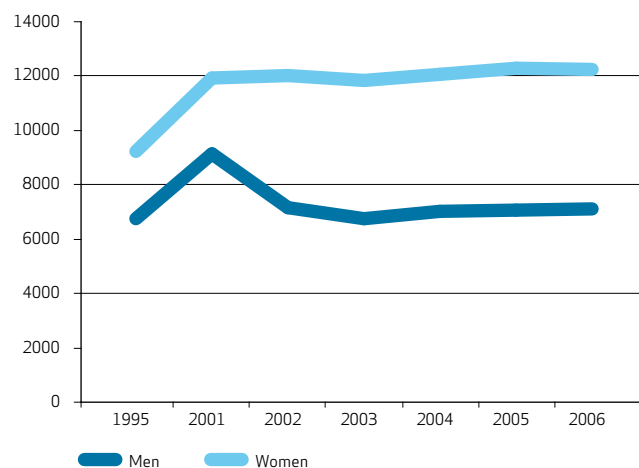
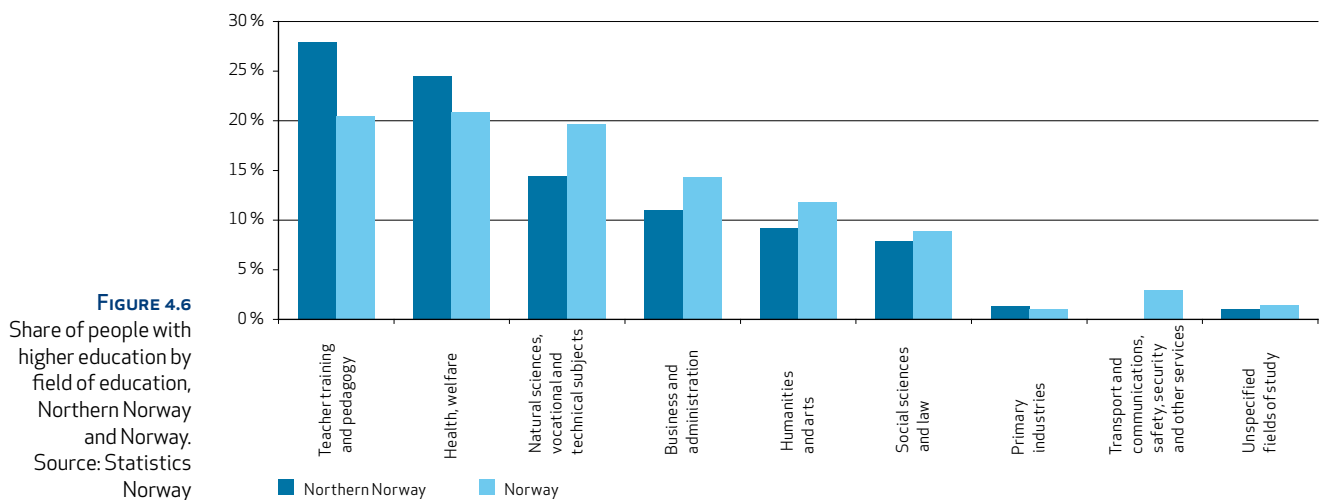
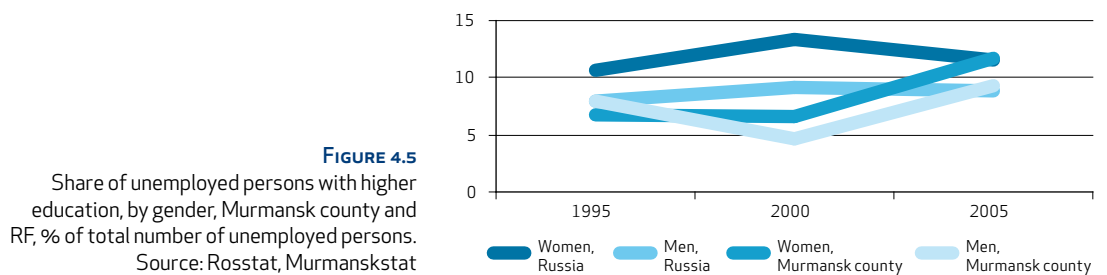


FIGURE 4.4
Number of students registered in Northern Norway, according to gender, 1995-2006. Source: Statistics Norway

cation of dissimilar fields of education offered at the colleges and university. Only Narvik College has a bigger share of male students, and this is mainly because of technical fields. All the other institutions are dominated by female students, and they more than twice outnumber the males at Nesna, Harstad, Tromsø, Finnmark and Saami college.



4.5 Present educational level and labour market demand

One important question is to what extent the educational level of the population is in accordance with the demand in the labour market in the region. To answer this question we have some data from Murmansk county about the high level of unemployment among people with higher education. Corresponding data is not available in Northern Norway. However, data on fields of education among the population of this region are available and can be used as an indicator.

The most striking aspect is that while in Russia as a whole the share of unemployed persons with higher education decreases, in Murmansk county the number of unemployed with higher education grows.

In general, after receiving a higher education people improve their positions at the labour market. In Murmansk county, due to a narrow and still very much industrial-oriented labour market, they often do not manage to use the advantages of the higher education for improvement of their work situation. This especially concerns females, as the county's labor market traditionally has a higher demand for male employees. Put together with the data on educational level of the county, it implies that the economy lack people with primary and secondary vocational training.

There are two serious problems of vocational education in the Murmansk county. The first one is disproportion in the received types of education (professions) and labour market demand. Today the most popular specialties among university entrants are economics, banking, management, law. At the same time, the considerable number of educated for these professions specialists are redundant for the regional labour market. Another problem is a considerable disproportion between extents of training of specialists on different education levels (number of years). Share of young specialists with higher education in total number of graduating students accounts for over 70%, and those with secondary

and primary vocational education – only 30 %. At the same time, demand for personnel in the Murmansk county is exactly the opposite: over 70 % of announced vacancies are working professions that need secondary and primary vocational education and less than 30 % - office staff, managers and engineers' positions that need higher education.

The unemployment rate is very low in Northern Norway, and to our knowledge there is no particular educational group or field of education that presently have problems finding work. To the contrary, most branches lack labor. The educational institutions of Northern Norway has during the last years put focus on the need to build up educational programs for work in petroleum related industries. This industry is relative young in the North of Norway, and the need for regionally educated personnel is significant. This has resulted in energy programs at a new campus in Hammerfest and petroleum related programs in Tromsø and Bodø. It is still early to see how these students will be able to fit the demand of the market.

Figure 4.6 shows that the fields of education among the persons in Northern Norway are quite different from the national average. There are more people educated within the fields of teacher training and health/welfare, and less people within the fields of natural sciences, business and administration. The question is if this education fields match the present requirements in the labor market.

Even though Northern Norway has a higher degree of persons with education within teacher training and health services compared to the national level, there is no reason to believe that there is a surplus of people within these educational categories. There is still a need for more teachers in the schools and more health care workers, particularly as the old age group is increasing. There is certainly a deficit of people in Northern Norway with higher education within natural sciences, business and administration. The emerging petroleum boom in the North is expected to need more engineers and technical personnel.

4.6 Conclusions and future prospects

In the next few years, one can expect a noticeable decrease in the number of students in the Murmansk county due to a birth rate slump during the crisis of the 1990s. The Russian government plans to change the financing system of educational institutions by introducing per student funding (allocations). This may result in a worsening of the financial situation of educational institutions in Murmansk county, especially for

those of higher and secondary vocational education expecting a sharp decline in the number of students. Some regional branches of central educational institutions might be closed due to lack of students.

The latest tendency of a general decrease in unemployment and high demand for labour in the nearest future can have changed today's situation of "over-supply" of people with higher education to the county's labour market. Within a longer prospect (in 10 years) the oil and gas industry, transport and communications are expected to be more intensively developing in the Murmansk county. In this connection, we expect, first, a growth of demand for specialists in construction, and later, for specialists working for these industrial sectors. Some of the higher educational institutions in the county have already started to open construction specialties.

The north Norwegian higher educational institutions struggle to recruit students from Northern Norway. This is a challenge on several levels. Lack of labor makes it easy to find work, even with a low or unfinished education. It is about keeping the students from North in the North and to attract students from southern Norway and from abroad. It is also a question about supplying educational programs that are in need in the region and of interest for the students. The educational institutions must act in a global educational market and orient itself to changes in demand. The development of petroleum activities in the North is one example of a need to supply the market with new educational programs. The population curve is relatively positive as the upcoming educational age cohort (now 10-19 years) is bigger than the present age cohort in higher educational institutions (20-30 years).



Social Security

The level of social security the state/region/municipality can offer their citizens is important for the wellbeing of the population of the region. A part of the population will always be outside the labour force, and will not have sufficient means to make a decent living. Social security support can help lifting the poorest and reduce the number of people living on an income below the subsistence minimum.

A positive population dynamic is, among other things, dependent on birth rate. Child benefit and family allowances can be important stimuli for young people deciding on having children or not, and the amount of born children. Financial support and child care are also important for a quick return of parents to the work force after maternity/paternity leave.

This chapter aims at giving an overview of the system of social security and utility rate in the two regions. The system of providing social security is very different on the Russian and Norwegian side, and it is therefore a challenge to make a good parallel comparative analysis. We have decided to give a presentation of the two regions separately, and try to sum up the differences in the end of the chapter.

5.1 Social security recipients in Murmansk county

State social assistance in RF and in the Murmansk county is granted to support the following groups of population:

1. the war and labour veterans, persons suffered from political repressions, pensioners by age (referred to as "special population categories")
2. disable people
3. citizens who finished military service and members of their families
4. poor families and poor lonely people
5. families with children and single parents.

All administrative levels, federal, regional and municipal, are responsible for contributing to the social assistance. However, at present the biggest part of the financial means for this purpose is provided by the regional budget.

Social assistance to groups 1-3 is provided on a regular monthly basis as long as the person confirms that she/he be-

Population group	1-3	4-5	Total
Number of persons	185.700	60.800	246.500
Payment from regional budget, mln RUR	1.288	137	1.425

longs to a special population category. Social assistance to groups 4-5 (so-called "addressed social aid") is meant for a shorter time period. For poor citizens who are considered as "unemployed able-bodied persons", the total period of address state social aid cannot exceed six months during one calendar year. An exception is made for people identified as "being in extreme life situation".

In Murmansk county 21,7 % of the population belonged to the groups 1-3 and received the corresponding social assistance in 2006. About 7 % of the population belonged to groups 4-5. This means that altogether about 30 % of population received social assistance of various types. There is a tendency of slight increase in the number of people in groups 1-3 and a decline in the number of people in groups 4 and 5. This is explained by income growth and introduction of more accurate system of registration of those who need social assistance.

Types of social assistance are financial and natural aid. Financial aid includes social benefits/allowances, housing and transport subsidies, payments for child care, payments for stay in stationary institutions of social services as well as payments for children's organized rest/vacation and other. Natural aid implies free of charge food, food sets, coupons for bread.

TABLE 5.1

Number of people receiving social aid and amount of aid by group of population, 2006.

Source: Murmanskstat



Years	Number of people	Share in the total number of population
2003	100.800	11,5 %
2004	74.100	8,5 %
2005	64.900	7,5 %
2006	60.800	7,0 %

TABLE 5.2 Dynamic of number of people received addressed social aid at the expense of regional budget in Murmansk county. Source: Murmanskstat

Annually from the budget of the Murmansk county over 1 425 RUR is spent on social assistance¹. The biggest part of this sum is spent on social assistance to persons in groups 1-3. Less than 10 % of total sum is spent social assistance to persons in groups 4-5.

Below is a closer inspection of the social assistance to the different groups.

The war and labour veterans and persons suffered from political repressions. Social assistance to these groups (monthly allowances) is provided from both federal and regional budgets. In Murmansk county there are 105.000 persons receiving allowances/benefits from the regional budget and 53.000 persons receiving this kind of assistance from the federal budget. Except monthly allowances (or benefits, as reduction in prices for medicaments, etc), these groups of people have 50 % reduction on payment for housing and communal services (heating, etc). They are also provided with transport subsidies for intra-towns transport communications through so-called "social transportation tickets".

Former officers and soldiers and their families. This group of people accounts for almost 90.000 people (27.000

– those who finished military service, and 63.000 – members of their families). In 2007 special regional program for 2008-2010 was adopted with the aim to improve socio-economic situation of this group of people. The program includes measures on professional re-training of former military officers and soldiers, cash allowances etc. The program budget is 15 mln RUR.

Pensioners by age and disable people. There are 27.000 pensioners by age and 43.000 disabled people in the Murmansk county. Social services for elderly and disabled people are rendered both for those living at home and at special medical-social institutions.

The most demanded kind of social assistance is services for elderly and disabled people living at home. The main goal is to maximally prolong the people's being at home, to keep the necessary contacts with relatives, neighbors and friends. 17 towns and districts have 22 departments of social services for elderly and disabled people living at home. They provide services to more than 3 000 people. This means that only 11% of elderly and disable people have opportunity to get social assistance of this kind.

In the county there are 5 functioning state stationary institutions for medical-social services (4 boarding houses for elderly and disabled people, 1 boarding house for mentally ill children) where at present over 1.400 people live with full state provision. Obviously, there is very acute need in increase of number of stationary institutions, taking into consideration that only 2% of elderly and disable people have opportunity to stay in such institutions.

Due to the fact that many elderly people need not only social but also medical help under the home conditions, in the county specialized departments of social-medical services at home are being organized.

Poor families and people. This group accounts for about 61.000. Social assistance (addressed social aid) in this case is provided to those families and people with income which is lower than the regional subsistence minimum. About 2.500 persons receive both natural and financial aid, the rest of the people in this group get financial aid in the forms of monthly allowances/social benefits, housing subsidies, payments for child care etc. There is a tendency of noticeable decline both in number of people in this group and the share of poor people receiving addressed social aid. This is explained by a general income growth and the introduction of more accurate system for registration of those who need social assistance. Positive results in overcoming poverty were reached due to rise of

¹Regional statistics does not report on amount of financial means for social assistance coming from the federal budget

wages in the public sector, and to realization of the Plan of the Murmansk county's government on combating poverty.

However, it should be noted that by regional statistics, in 2006 the share of the population living on income under subsistence minimum (20 %) was 3 times higher than the share of the population receiving addressed social aid as poor strata (7 %). It means that only 1 out of 3 persons with income under subsistence minimum applies for addressed social aid. One reason is the very low monthly allowances. In 2006 it was 187 RUR (7,6 USD) per capita while monthly subsistence minimum is 5256 RUR (214 USD).

Families with children and single parents. Families with children receive social assistance mainly in the form of monthly cash benefits, subsidies for children's organized rest/vacation and subsidies for child care. Since 2005 children benefits are mainly paid from regional budget (formerly these benefits were granted from federal budget). Today regions of RF may decide on benefits' size and categories of population eligible for receiving this kind of assistance, as well as introduce new kinds of benefits.

In Murmansk county there are two main kinds of social assistance to families with kids: unconditional assistance granted to all families and assistance granted only to poor families. Unconditional assistance (universal benefit) includes once-a-time payments to families having newly born child and monthly payments during the first 1,5 years after a child is born. In the county once-a-time payment makes 11200 RUR (8000 RUR in RF) and monthly payment makes 980 RUR (700 RUR in RF).

As regards to poor families, in Murmansk county the right to get monthly cash benefits per child is granted to families with average per capita income below the subsistence minimum fixed in the county. In 2006 about 18.000 parents received monthly cash benefits for 24.000 children. In 2006 the total sum granted for children benefits was about 56 mln RUR.

In 2006 monthly children's benefit on the average provided only about 4 % of the child's subsistence minimum (in the first quarter of 2006 child's subsistence minimum in the Murmansk county amounted to 5211 RUR).

The Government of Murmansk county plans to increase children benefits in 2008 and to make it the highest among the regions of North-West Russia. The increase is planned from 150-300 to 300-600 RUR. However, it does not solve the problem of extremely small size of children's cash benefits. In 2007, four new children and family once-a-time benefits have been introduced in the Murmansk county.

Benefit type	Sum in Russia	Sum in Murmansk county*
Monthly benefit per child in poor families	100	150
Monthly benefit per each child for poor families with many children	200	300
Monthly benefits per child for single mothers	200	300
Monthly benefits per children whose parents avoid alimonies	150	225
Monthly benefit for children of military servicemen who are away from families	150	225

TABLE 5.3 Monthly cash benefit per child for families with average per capita income under subsistence minimum in RF and Murmansk county in 2006, RUR. * Sum in Murmansk county with the regional coefficient taken into consideration Source: Rosstat, Murmanskstat

Benefit type	Amount, RUR
Benefit for families having newly born (or adopted) two or more children	2100
Benefit for families having newly born (or adopted) third child	2100-2940
Benefit for poor families having a child entering school	1400
Yearly benefit for couples married for 50, 60 and more years	3000-6000

TABLE 5.4 New children and family once-a-time benefits introduced in Murmansk county in 2007.

On federal level, in 2007 new important for demographic policy of RF benefit was introduced. It is so-called "mother's capital" which is to be given after giving birth to the second child. It's amount is 250.000 RUR and it can be spent on child's education or on improving family dwelling. There are several special regional programs underway aimed to improve children and family situation in the Murmansk county, such as "Support of families in the Murmansk Oblast", "Children of Kola North", "Improvement of demographic situation in the Murmansk Oblast".

Regarding subsidies for child care it should be noted that the conditions and sizes are decided by regional government and municipalities. Average monthly child care (kindergarten) payment is about 1000 RUR. Payment reduction can vary from 25 % to 100 %. The main conditions for receiving

Family allowances	Amount per month
Ordinary rate pr child:	Kr 970
Finnmark supplement pr child:	Kr 320
Svalbard supplement pr child:	Kr 320
Small child supplement to single parents:	Kr 660
Extended family allowances for single parents:	Kr 970

TABLE 5.4 Family allowance, amount per month, Norway, 2007.
Source: NAV (Norwegian labour and welfare offices)

reductions are low family income, being a single parent, being in extremely difficult life situation. Generally, since the beginning of the 1990s the number of day care centers for children in the county reduced almost by 50 % mainly due to sharp drop of birth rates. Today, along with increasing birth rates, reduced number of day care centers starts to affect negatively the employment rate among women, unless they go for private nanny solutions which are possible only for well-off families.

The main problem in providing social assistance in the Murmansk county is lack of financing of this activity. Social assistance should be rendered at the expense of budgets of all of the levels – federal, regional and municipal. However, receipts of funds for these purposes, both from the federal budget and municipal budgets, are quite limited. Beside improvement of financial provision, there is an urgent need to expand the net of houses for aged people and to increase quality of services in the existing institutions.

5.2 Social security recipients In Northern Norway

Social assistance is granted to inhabitants not able to provide financial means for a day to day living. The assistance is meant as a short time emergency assistance, and is usually provided to people

outside the workforce, either unable to work or not able to find work. Support will only be granted on an individual basis where costs of living are related to expenditures. The grant will be taken from municipal budgets. This means that each municipality can decide the rates for calculating the grant, which thus may vary between municipalities.

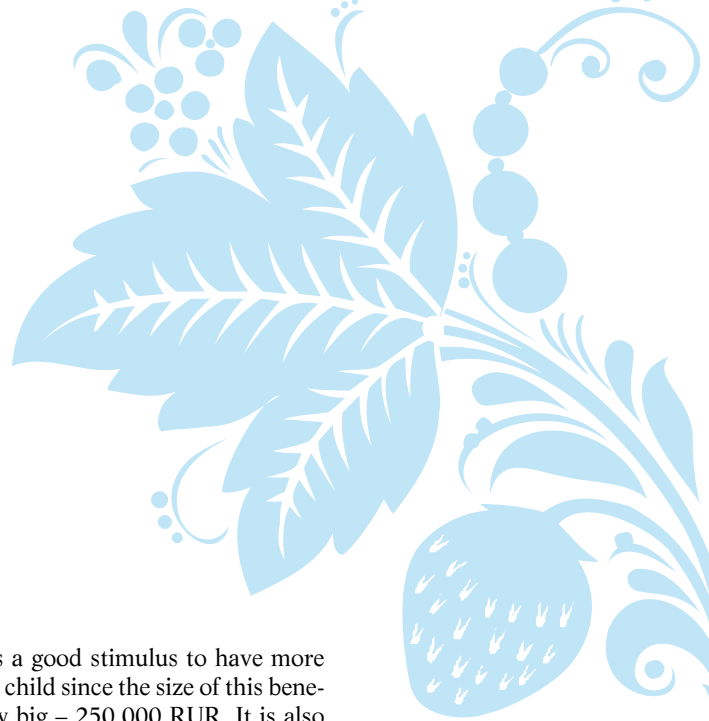
2,8 % of the Norwegian population received social assistance in 2006. The number of people has decreased mostly due to increased employment. There are regional differences. Finnmark county is at the top of the list with 4 % of the population receiving social security in 2006. Nordland is also slightly over the national average with 3,1 % while Troms is under the national average with 2,6 %. The average for Northern Norway as a whole is 3,2 %, slightly over the national average. The high number of recipients in Finnmark needs some special attention. One explanation often used is the fluctuation in the labour market with more people in seasonal and low paid jobs. The limitation of alternative employment in the small communities is also one possible reason, and inhabitants bound to their place of living might be unwilling to move to find employment. Social stratification, with more people outside the labour force is also a trait of small communities that we find in Finnmark

The regional differences are more visible when it comes to the amount received in social assistance. The national average of social assistance in 2006 was kr 37.600 per year, while the average in Northern Norway was hardly kr 26.000. This illustrates that the calculated social assistance in the North, based on income and costs of living, is far below the national average mainly because of lower costs of living.

Family allowances are granted for children resident in Norway under the age of 18. The allowances are universal and not related to income. It is though necessary to apply for the allowances as there are different additional supplements related to place of residence and family situation. The ordinary rate is kr 970 per child per month, and for children residing in Finnmark there is a supplement of kr 320. Single parents will be entitled to allowances for one extra child.

Small changes in the family allowances system has taken place during the last years, and the lack of indexation has lead to actual reduced payments. The provision is still important to subsidise the costs of having children, particularly for the poorer families. The reduction during the last years is related to the introduction of a new cash benefit.

Cash benefit was introduced in 1998 with a purpose of giving parents an option (to be able economically) to stay at



home while the children are small (up to 3 years). The condition for receiving full rate cash benefit is that the child is not in a day care centre that receives a public grant. In 2007 a full rate cash benefit amounted to kr 39.636 per year per child.

The municipalities have an important role in building new day care centres, and earmarked federal transfers has made this one of the priority goals of municipalities nationwide. The goal of 100 % coverage (all children applying for day care will get an offer) within 2007 is very close to fulfilment in the Northern regions. It is mainly the big cities struggling to reach the target. The financial support to families, availability of day care centres and reduced fees, has made it possible for more parents to enter the workforce. This is important for the industries in Northern Norway already struggling to find enough labour, and it is important for keeping up the relatively high birth rate. This situation is far more favourable than on the Russian side.

5.3 Conclusions and future prospects

Despite the increase in salaries, living standards and reduced unemployment in Murmansk county, many inhabitants are still in need for support. Based on the data above we draw the conclusion that the safety net for inhabitants not able to provide sufficient money on a day to day basis is better on the Norwegian side compared to the Russian side. The rates provided in Northern Norway are more in line with actual need of people, while in Murmansk county it is haunted by lack of financial means. It must though be said that considerable improvements have been introduced to reduce the number of poor people on both federal and regional level in Russia. Today more money is spent on social security than few years ago. However, the gap between Northern Norway and Murmansk is still considerable. The percentage of people receiving addressed social aid (group 4 and 5 in table 5.1) is much higher in Murmansk county, with 7 %, compared to 3,2 % of the population in Northern Norway. Also, on the Russian side more population groups receive social assistance than in Norway.

The amount of child benefit is very small in Murmansk, and a universal benefit is only granted for kids up to 1,5 years old. Benefit for older children is only given for the lower income families, and the rate is extremely low. This benefit is universal on the Norwegian side, and the amount can make a difference particularly among the poorer families. The recent federal introduction of new kind of benefit – “mother’s capital” in

Russia is a good stimulus to have more than one child since the size of this benefit is very big – 250.000 RUR. It is also interesting to see that both Murmansk county and Northern Norway have additional regional supplements to the child benefit to support families with children living in the Far North.

Public spending on child care has increased in Northern Norway, while it has decreased in Murmansk county. In Northern Norway nearly all children under school age have access to day care centres, while children on the Russian side have a poorer coverage, and those that can afford it will go for private nanny options.

It is expected that salaries and employment will continue to increase on the Russian side. This may result in certain decrease in number of people who are in need of social assistance in Murmansk county. However, it is not realistic to think that this decrease would be considerable since the initial level of living standard of those who are in need is very low and inflation rates are quite high. The year of 2008 in RF is announced as Year of the Family. Thus, it is sensible to expect more attention from all levels of power to family and children issues. This may imply a growth in existing cash benefits for families with children and introduction of new types of family and children benefits. The future situation for Northern Norway is also relative positive as the employment rate is very high and one expects a tight labour market the next years. Low unemployment rate will make it easier to find work, also for those who have been temporarily outside the work force.

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