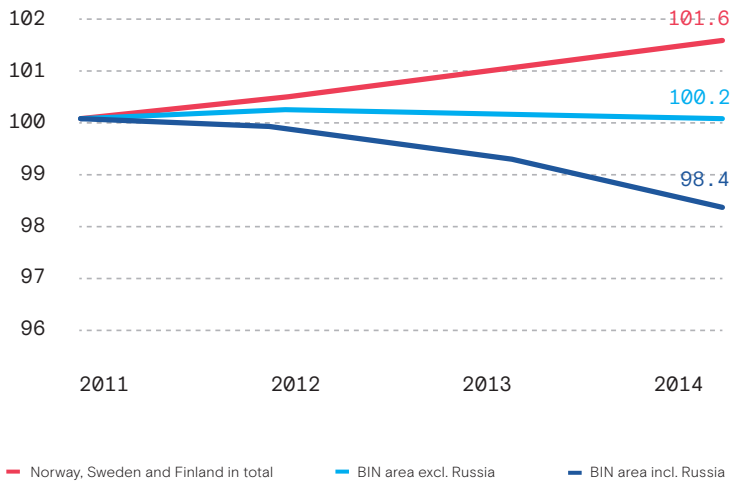
Work creates purpose and financial security.

(03)

Work in the North

Employment development all industries

Index 2011=100, 2011 – 2014



Job creation and losses in the BIN area (excl. Russia)

2012 – 2016

-4.981	-3.509	-1.934	-1.221	-673
Mining, quarrying, manufacturing	Agriculture, forestry and fishing	Unspecified	Information and communication	Financial and insurance activities
2.537	2.648	2.754	5.012	7.771
Other services	Construction	Accommodation and food service activities	Real estate, professional, scientific and technical companies; administrative and support service companies	Human health and social work activities

Job creation and losses in the Russian BIN regions

2012 – 2014

2.131	1.698	1.261	596	-3.650
Real estate, professional, scientific and technical companies; administrative and support service companies	Other services	Accommodation and food service activities	Electricity, water supply, sewerage, waste management	Education
-4.645	-6.170	-6.224	-7.260	
Wholesale and retail trade: repair of motor vehicles and motorcycles	Transportation and storage	Public adm., defence, soc. security	Mining, quarrying, manufacturing	

Section (03)

Work in the North

Work brings purpose to human life and creates financial security. On a country level, employment contributes to economic growth. In order to understand the structure of work in the north it is important to address both employment and unemployment.

Trainee Trine Kvannli, Mo Industripark
photo: Mye i media AS

The BIN area was home to approximately a total of 1,709,000* employees in 2016. In analyzing the prevailing situation in the BIN area, one must keep in mind the historically strong agriculture, forestry and fishing and mining, quarrying and manufacturing sectors providing employment in the BIN area. The nature of work is changing all over the world with the proliferation of digitalization and automation. Furthermore, it is a globally recognized fact that the service business has become a main driver of economic development in Western countries. The BIN area has been the supplier of raw materials and a provider of associated jobs. We need to understand where the future of jobs in the BIN area lies. Is the BIN area able to create new jobs related to the raw materials and what is the role of automation and digitalization in this? The future of employment in the BIN area demands policy measures to address the changing fabric of work.

In this chapter we answer the following questions:

- What are the trends in employment development in the BIN area?
- What are the industries that provide most and least employment in the BIN area?
- What is the situation regarding employment and unemployment rates in the BIN area?
- Are there any differences in female and male participation in the job market?
- What are the industries that create most jobs and what industries are losing most jobs?

Findings:

TRENDS

- Growth in employment has been modest in the BIN area excluding Russia with a growth of 0.2% in 2011-2014, while employment in the Russian BIN regions has decreased by 1.6% during 2011-2014.
- Human health and social work activities, wholesale and retail sectors, real estate, professional, scientific and technical companies, education, mining and quarrying and manufacturing are the principal employment sectors in the BIN area excluding Russia; the principal employment sectors in the Russian BIN regions are mining and quarrying, manufacturing, wholesale and retail trade.

EMPLOYMENT LEADERS

- Human health and social work activities sector, agriculture, forestry and fishing as well as public administration and defence and social security employs more people in the BIN area excluding Russia than the respective shares at the respective national levels.

FEMALE PARTICIPATION

- The development of female employment has been stable in the BIN area since 2012, but has underperformed compared to Norway, Sweden and Finland as a whole.
- Women underperform in labour force participation in all BIN regions, but especially in the Russian BIN regions.

JOB LOSSES AND JOB CREATION

- The biggest job losses have been in mining, quarrying and manufacturing, agriculture, forestry and fishing. The biggest contributors to job creation have been human health and social work activities, real estate, the professional, scientific and technical sector, accommodation and food service activities, construction and other services, professional, scientific and technical sector.

Figure 1

BIN area excl. Russia
Norway, Sweden and Finland in total
BIN area incl. Russia

Employment development (all industries)

Index 2011 = 100, 2011-2014

Figure 1 illustrates employment development expressed as an index (all industries). The BIN area experienced near-zero growth of 0.2% in 2011-2014 [1], compared to 1.6% for Norway, Sweden and Finland in total. However, when we include the BIN regions of Russia in the analysis, employment decreased by 1.6 %.

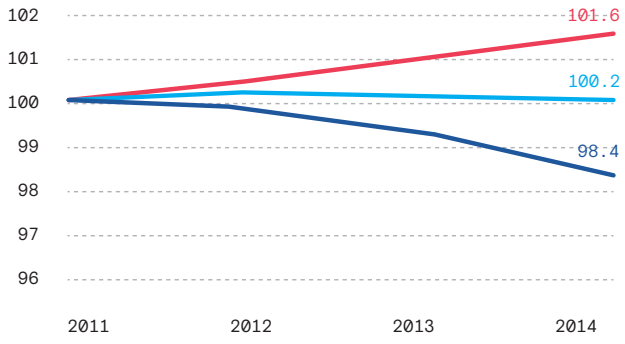


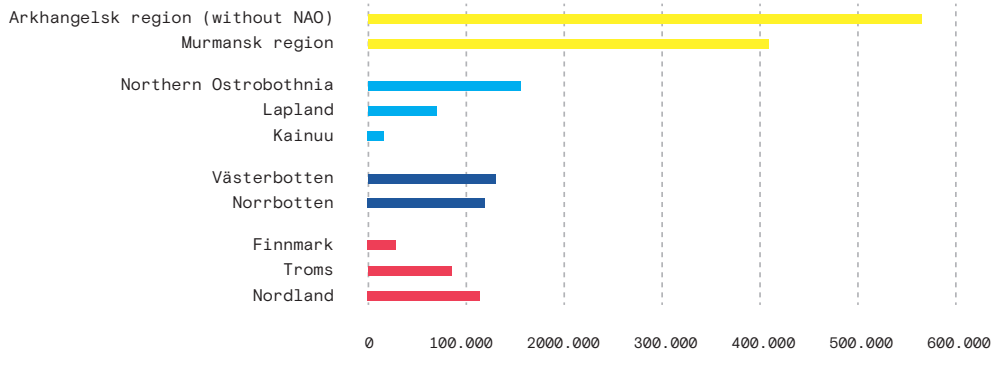
Figure 2

Norway
Sweden
Finland
Northwestern Federal District

Total number of people employed in the BIN area

2016

The BIN area was home to approximately 1,709,000 employees in 2016. This refers to people aged 16+ who are currently employed in the labour market. Figure 2 shows a breakdown of employees by place of work on the regional level. These are the people who actually work in the BIN area. Clearly, the largest number of employees is in the Arkhangelsk (without NAO) and Murmansk regions, and the smallest in the regions of Kainuu and Finnmark. The figures are directly proportional to the respective populations of the regions.



[1] The period of investigation ends in 2014 due to major changes in a way of counting employment in Sweden (2011) and Norway (2014).

Figure 3.1

Norway, Sweden and Finland average

BIN regions (excl. Russia)

Employment by industry in the BIN area (excl. Russia) and in Norway, Sweden and Finland in total

2016

Figure 3.1 illustrates how the BIN area (excl. Russia) measures up against Norway, Sweden and Finland in total employment by industry. In the BIN area employment in human health and social work activities is 3.3 percentage points higher than the 18.8% total for Norway, Sweden and Finland. Employment in the education sector in the BIN area is 0.8 percentage points higher and in public administration, defence and social security 1.6 percentage points higher than the corresponding overall average in Norway, Sweden and Finland. The sparsely populated areas of the northern BIN regions lack economies of scale and hence have more employment in human health and social work activities and education. Moreover, the rapidly ageing population in the BIN area requires more people to be employed in human health and social work activities. The BIN area also employs 2.2 percentage points more people in agriculture, forestry and fishing, which is attributable to the traditionally strong position of this industry cluster. The BIN area employs fewer people in real estate, professional, scientific and technical companies (-2.7 percentage points), wholesale and retail trade, repair of motor vehicles and motorcycles (-1.9 percentage points), which are more prevalent activities in densely populated metropolitan areas. Furthermore, the BIN area lags behind national averages in employment in mining, quarrying and manufacturing by 1.3-percentage points, which is attributable to the loss of jobs in corresponding industries prior to 2016. Information and communication (-1.9 percentage points) and financial and insurance activities (-0.9 percentage points) likewise employ fewer people in the BIN area than in Norway, Sweden and Finland in total.

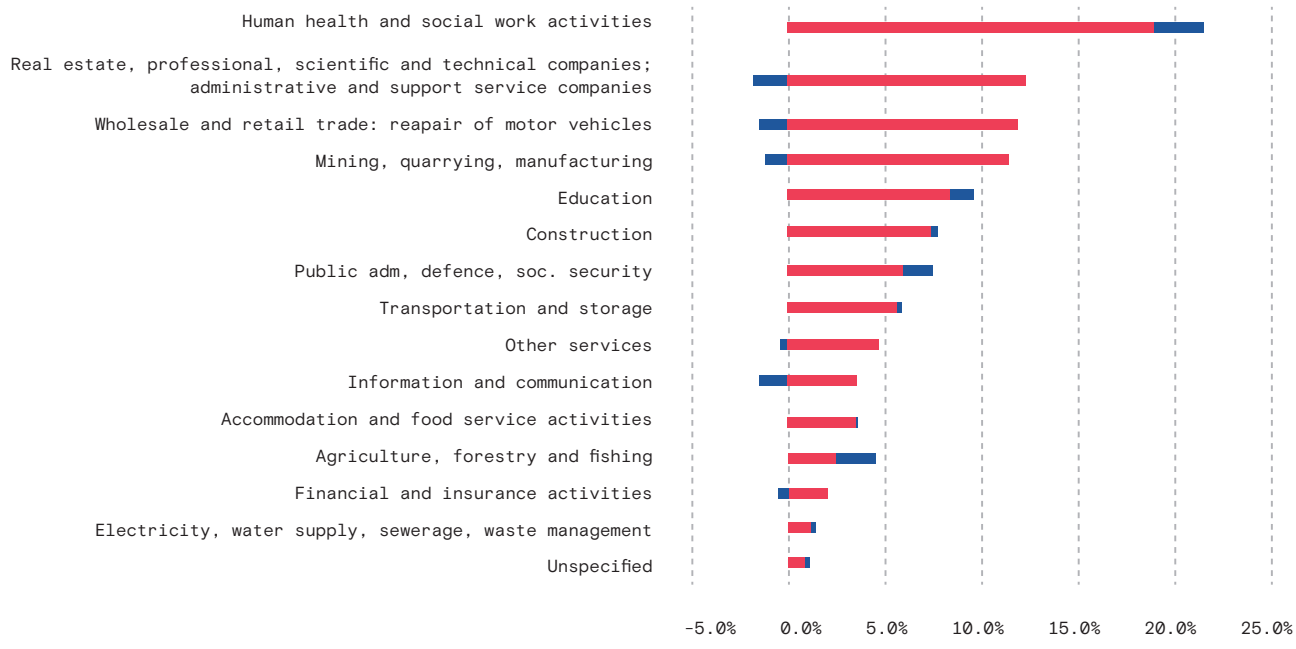
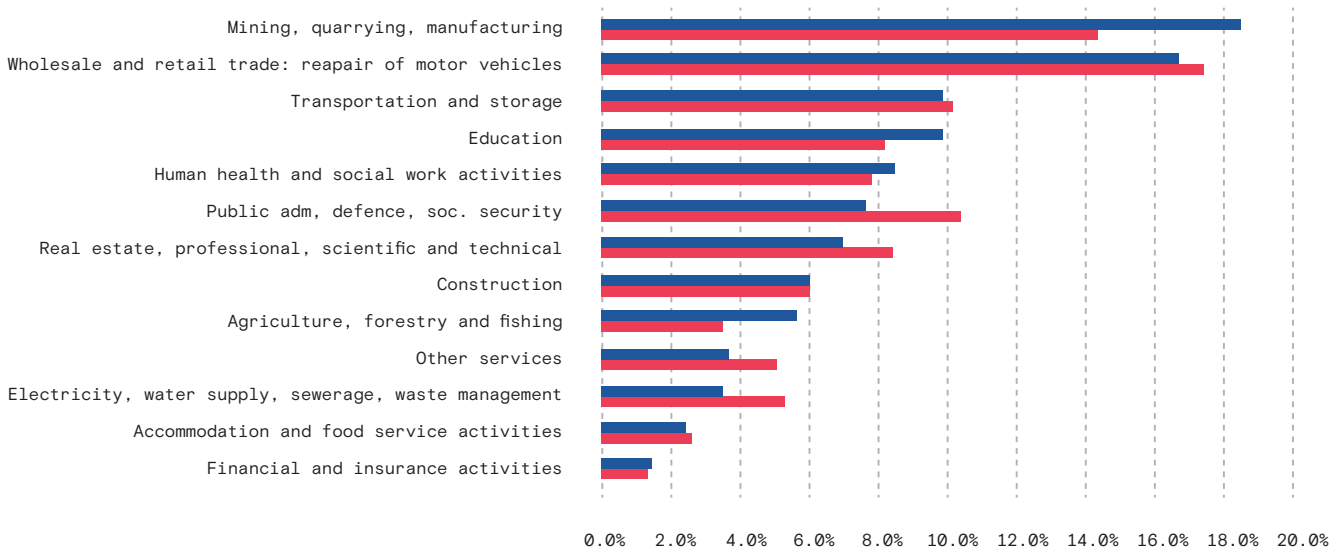


Figure 3.[2]

Employment by industry in the Russian BIN regions

2016

In the Russian statistics employees working in information and communication are included in transportation and storage industry. Figure 3.2 illustrates employment composition by industry in the Russian BIN regions [(2)]. The industries employing most people include mining quarrying and manufacturing, wholesale and retail trade, repair of motor vehicles and motorcycles, transport and storage, education and human health and social work activities. The Arkhangelsk region without NAO outperforms the Murmansk region in mining, quarrying and manufacturing, while the Murmansk region had more people employed in public administration, defence and social security. The Nordic BIN and Russian BIN regions have different employment structures, with Nordic BIN dominated by human health and social work activities, while the Russian BIN regions have more employment in mining, quarrying and manufacturing.



[2] No data available for 2015 for the Northwestern Federal District.

Figure 4

Employment development by gender (all industries)

Index 2011=100, 2011 – 2016

Figure 4 shows that employment development of both males and females in the BIN area (excluding Russia) has underperformed compared to Norway, Sweden and Finland overall by 1.5 percentage points for females and by 2.3 percentage points for males. The loss of jobs in the BIN area in traditionally male dominated sectors such as mining partially explains negative employment growth for males during the period 2011-2014.

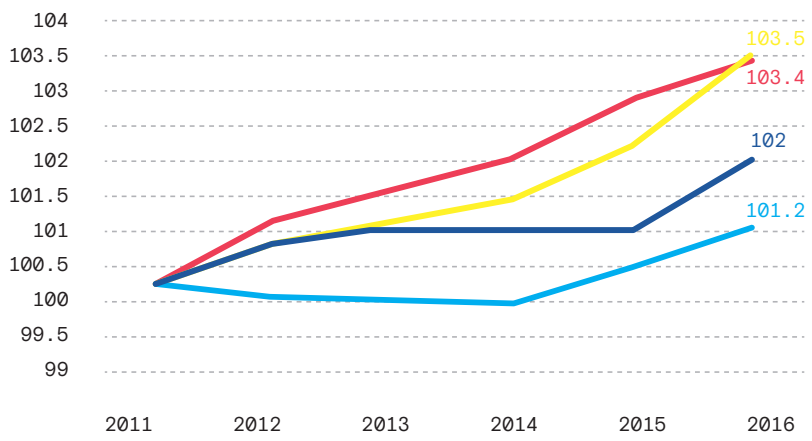
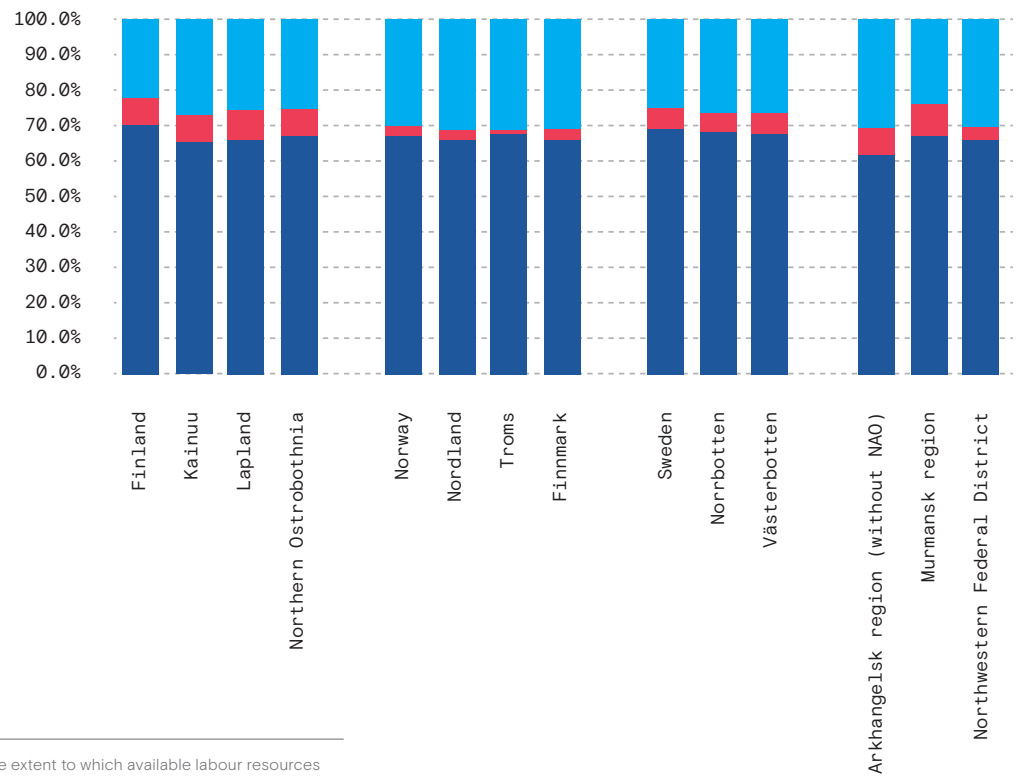


Figure 5

Employment and unemployment rates [3]

2016

Figure 5 shows the employment rates in the BIN areas and also on regional level. Employment rates in BIN areas range 64 - 69%. In all the BIN regions in Finland employment rates were lower and unemployment rates higher than the corresponding national figures. Furthermore, unemployment rates in the Finnish BIN regions were much higher than in any BIN areas. Unemployment rates are decidedly low in Norway (3.0%) and in all its BIN areas (2.1-3.3%) compared to all other BIN countries. At the same time, the share of other economically active population (with current status as neither employed or unemployed) in Norway is significantly higher, in the range of 31-33%. These people participate in employment programmes or receive disability or social benefits. In the Arkhangelsk region (without NAO) the employment rate is significantly lower than in any other BIN regions. Challenges for the labour market in the Arkhangelsk region (without NAO) include ageing population, gender imbalance and unattractiveness of the region to migrants. In Sweden both employment and unemployment rates of the BIN areas are almost the same as the national rates.



[3] Employment rate is a measure of the extent to which available labour resources (people available for work aged 15-65) are actually used. It is calculated as the ratio of the employed to the working age population. The unemployment rate is the number of unemployed people as a percentage of the labour force, where the latter consists of the unemployed plus those in paid or self-employment. (OECD definition).

Figure 6

Unemployment rate difference between males and females 2016

Employment rate difference between males and females 2016

Differences in employment and unemployment rates by gender

2016

Figure 6 illustrates differences in employment and unemployment rates in the BIN area. In all the BIN regions employment rates for males and females are largely the same, except in the BIN regions of Russia. The employment rates of males are significantly higher in the range of 10 percentage points in the Murmansk and Archangelsk regions (without NAO). The high employment share of the mining, quarrying and manufacturing sector probably explains at least part of this. Women's participation in the care of children and the elderly is also traditionally higher. Overall, males have higher employment and unemployment rates in the BIN area and in the corresponding BIN countries.

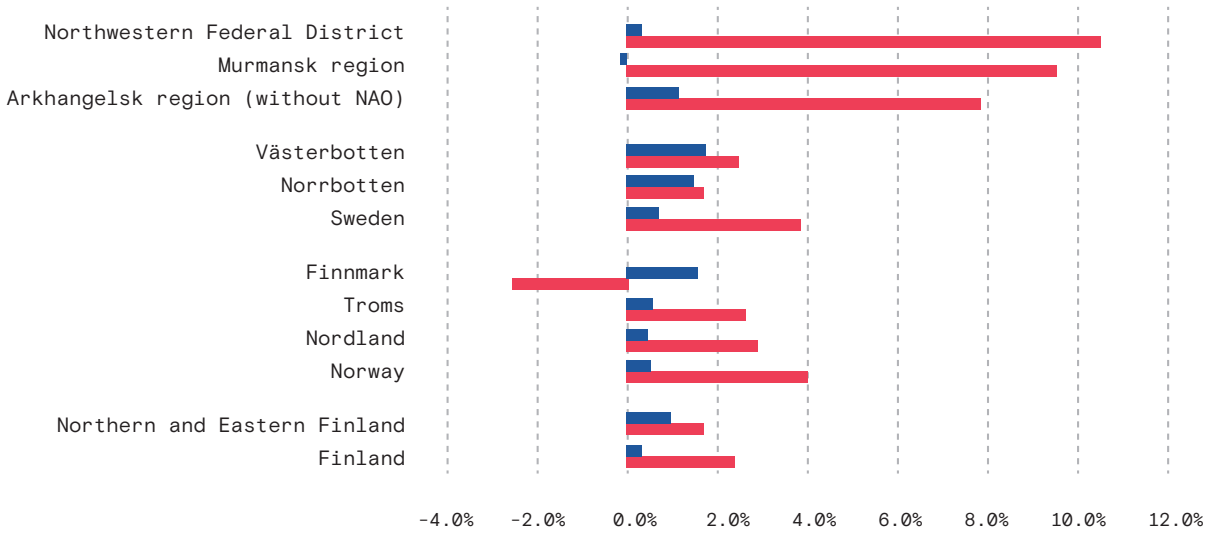


Figure 7

Employment development (all industries), BIN Area, %

2011 – 2014

Differences in employment development (all industries) in the BIN area are shown in Figure 6. During the period 2011-2014 employment decreased overall in Finland (-3.4%) and in all its BIN area regions, especially in Kainuu (-8.7%). This reflects job losses in the forestry sector in the Kainuu area. In Norway and Sweden employment grew by around 3%. The Troms region in Norway showed growth in employment of 3.1%, while Nordland (0.8%) and Finnmark (1.2%) experienced growth well below the national average of 3.4%. In Sweden the Västerbotten region saw a growth 2.8%, while Norrbotten region with its growth of 3.7% outperformed the national average of 3.1%.

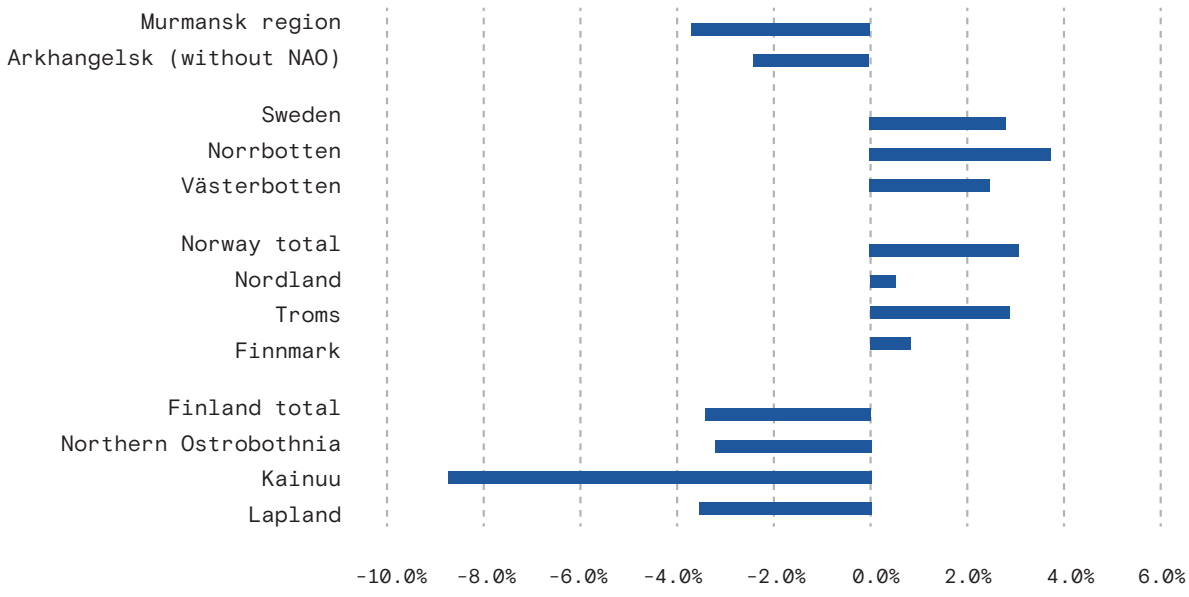
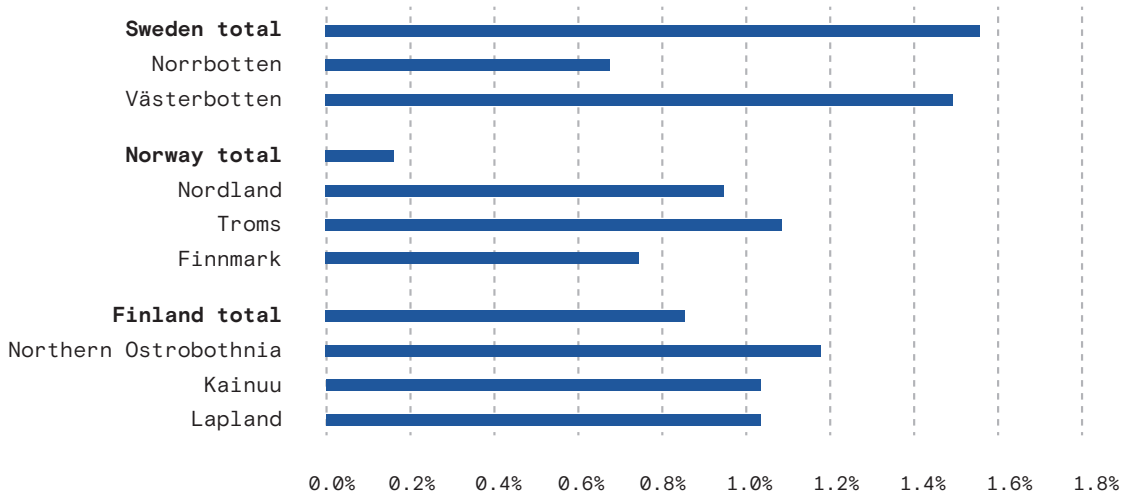


Figure 8

Employment growth (all industries), BIN area excl. Russia, %

2015-2016

Figure 8 shows that employment growth in all BIN regions of Norway (0.7 – 1.1 %) was on average 0.7 percentage points higher than the national level of 0.2% for Norway. Employment growth in northern Norway is higher than in the rest of the country because the economy in the North has been less affected by the oil crisis and the associated job losses in other parts of Norway. There have also been major investments in northern Norway that provide employment growth in the construction sector. In the Finnish BIN regions the growth was just slightly higher, in the range 1-1.2%, compared to the national average of 0.9%. In Sweden the growth of employment in Västerbotten was the same as the national average (1.5 %), but in Norrbotten growth (0.7. %) was clearly behind this. We observe that during the period 2015-2016 the growth was slower than during the period 2011-2014 in the Swedish and Norwegian BIN regions, while at the same time the trend in the Finnish BIN regions turned to growth. According to Danske Bank forecast, the economy in Finland will grow faster than in any other of the Nordic countries [4].



4. Danske Bank, 5/2018. Nordic Outlook – Economic and Financial trends. http://danskeanalyse.danskebank.dk/abo/NordicOutlook050118/$file/NordicOutlook_050118.pdf

Figure 9

Job creation and job losses in the BIN area (excl. Russia)

2012-2016

Figure 9 provides an industry breakdown analysis of the total job creation in the BIN area, during the period 2012-2016. The greatest job loss is observed in mining, quarrying and manufacturing (-4,981 jobs), agriculture, forestry and fishing (- 3,509), unspecified (-1,934), information and communication (-1,221). The main contributors to job creation were human health and social work activities (7,771 jobs), the real estate, professional, scientific and technical sectors (5,012 jobs), accommodation and food service activities (2,754 jobs), construction (2,648) and other services (2,537). Overall employment in the BIN area (Excl. Russia) increased by 11,767 jobs during the period 2012-2016. These figures are indicative of labour market demand for social and health care professionals. These statistics are relevant for planning education in the BIN area.

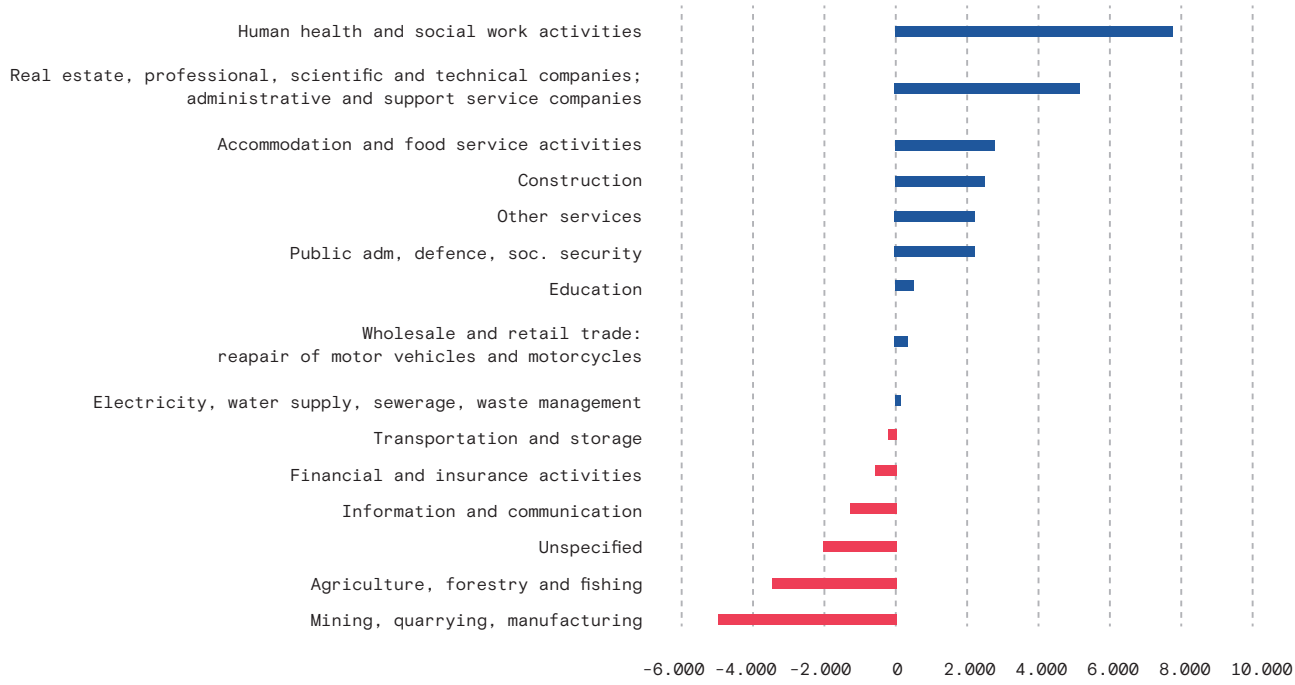


Figure 10

Job creation and losses in the Russian BIN regions

2012-2014

Due to availability of data we present job creation and losses in the Russian BIN regions during the period 2012-2014 separately from the BIN area (Figure 10). In the Russian BIN regions of Murmansk and Arkhangelsk (without NAO) there was also a significant drop in employment in mining, quarrying and manufacturing (7,260 jobs). Transportation and storage as well as public administration, defence, social security lost both over 6,000 employees. At the same time, real estate, professional, scientific and technical companies (2,131 jobs), other services (1,698) and accommodation and food service activities (1,261) provided more jobs. Overall, employment decreased by almost 30,000 in the BIN regions of Russia.

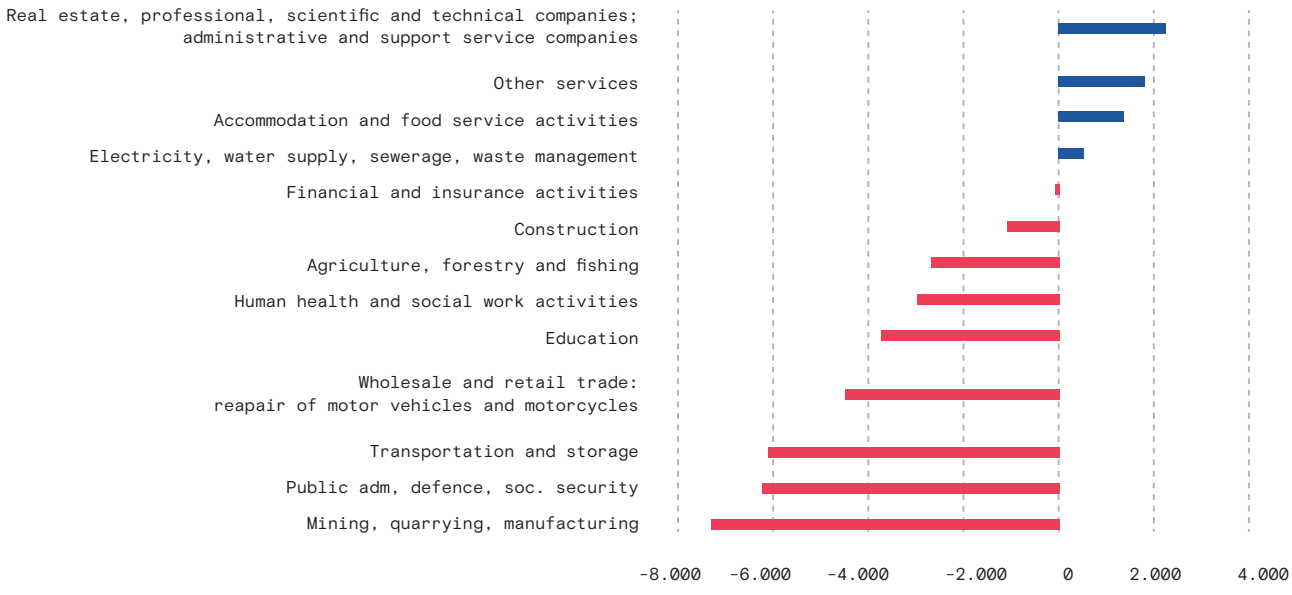


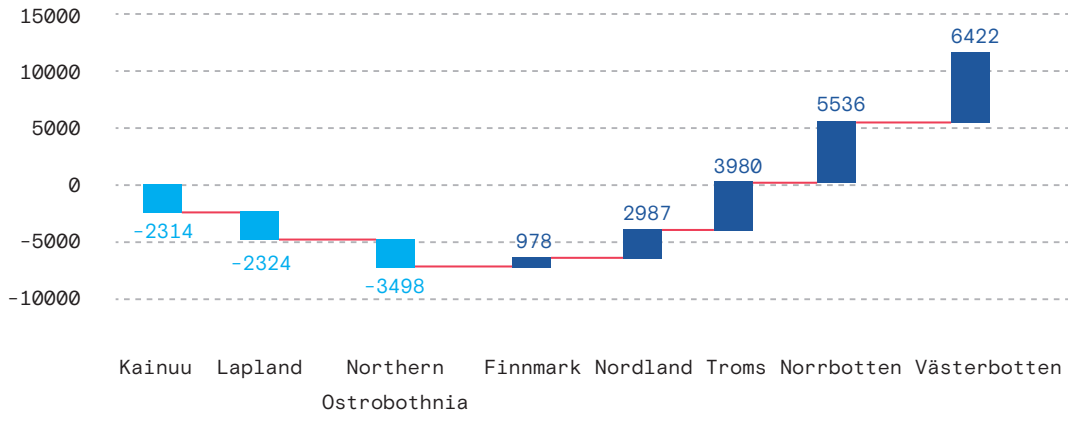
Figure 11

Increase Decrease Total

Balance of job losses and creation on the BIN regional level

2012-2016

Figure 11 illustrates balances of job losses and creation on the BIN regional level (excl. Russia). Västerbotten (6,422 jobs) and Norrbotten (5,536 jobs) were the regions that contributed most to job creation in the BIN area (excl. Russia), 40% of all jobs created were in human health and social work activities, followed by real estate, professional, scientific and technical companies with 21%. The Norwegian Troms, Nordland and Finnmark regions contributed to the creation of 7,945 jobs in total, of which 41% were in construction and 27% in accommodation and food service activities. In the Finnish BIN regions 8,136 jobs were lost mainly in the mining, quarrying and manufacturing sectors (3,456 jobs) and the agriculture, forestry and fishing sectors (1,972 jobs). The period 2015-2016 saw a growth in employment in the Finnish BIN regions, mainly in the sphere of human health and social activities and other services.



Challenges and findings

Recommendations

The future of work in the North depends on the people who live in the BIN area and on those who relocate there. People living in the BIN area have an important role in its economic development. On the other hand, as also elsewhere, global trends shape the development of the economy and affect job opportunities in BIN regions, too. Therefore, it is important to address policy measures appropriately taking account of the needs of future working life. Through lifelong learning we can, at partially respond to changes in the job markets of the BIN regions. The economic development of BIN regions is highly dependent on whether these regions are capable of creating high-quality jobs in the future. Integrated solutions include taking into consideration people, education, connectivity and work in the North. That would also prevent or at least delay the continuing depopulation.

For Policy

- **A** The development in the BIN regions follows the global trend, i.e. the service business has become a main driver of economic development
- **B** The employment growth in all BIN regions in Norway and Finland was higher than the respective national development in the period 2015-2016, which may indicate the increasing role of the Arctic regions in economic growth
- **C** Increasing tourism provides new jobs, which is reflected in the growing number of jobs in accommodation and food service activities
- **D** In the future population ageing will further increase employment in social and health care in all BIN regions. Human health and social work activities is already the main employment sector
- **E** Mining, quarrying and traditional manufacturing industries as well as agriculture, forestry and fishing are losing jobs in the BIN regions. In the future automation and robotics will probably further decrease employment in these sectors.
- **F** Real estate, professional, scientific and technical companies sector contribute to job creation both in the Nordic and Russian BIN regions
- **G** Females are participating less in employment, this can be addressed by offering gender-balanced family related leaves, day-care solutions and flexible working arrangements

For businesses

- **A** The growing sector of human health and social work activities offers new business opportunities e.g. by requiring new digital solutions
- **B** Increasing economic activity in sectors such as tourism, health and social work can provide new jobs in the construction sector