

Employment in the North

This chapter provides a historical overview of the employment development in the BIN area and serves the decision maker's needs with regards to labor politics in the BIN area. In this chapter, analysis focuses on trends in employment rates, unemployment rates and job creations for the time-period 2008-2014. According to OECD definition, the employment rate is a measure of the extent to which available labor resources (people available to work aged 15-65) are being 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 labor force, where the latter consists of the unemployed plus those in paid or self-employment. This chapter analyses the trends in the employment growth, taking into consideration industry breakdown and gender factors. Moreover, a detailed analysis of the employment trends on the county level of the BIN area is conducted. Age-group analysis provides a tool to analyze labor market dynamics for the different groups of the population ranging from youth 16-24 to people aged 55+.

For methodological reasons, the analysis of employment is conducted on the industry level as a total, and on all industries except agriculture, forestry and fishing¹. The Labour market in the BIN area is affected by the challenge of an ageing population, and the period under investigation (2008–2014) is affected by the consequences of the global crisis of 2008. Economic trends worldwide indicate a decline in long-term capital investment, population ageing, rising inequality and weakening productivity gains². Moreover, growing automation in production, job outsourcing and price competition from emerging countries have had visible impacts on manufacturing jobs that saw a significant decline over the past decade in all EU countries³. Trends in developed markets reflect a decline in the employment share in middle-skilled and middle-waged occupations and a rise in the employment in high-skilled occupations. These factors have affected the development of the employment market in the BIN area.

The results demonstrate that:

- The lowest unemployment rate was observed in the BIN counties in Norway, the highest in Finland, during 2008-2014
- The growth in employment has been moderate in the BIN area. The growth in employment was negatively affected by the agriculture, forestry and manufacturing sectors, which are losing their importance for employment in the BIN area
- The biggest job losses occurred in mining, quarrying and manufacturing, followed by agriculture, forestry and fishing. The biggest job creation occurred in the of real estate sector, professional, scientific and technical sector and other services reflecting increased demand in highly skilled jobs during 2008-2014
- Great discrepancies can be observed in youth employment in the age group 16-24 on the BIN county level, with drastic decline in Finland and big increase in Sweden.
- Increase in employment for the age group 55+ in the BIN area



Worker
Photo: Fennovoima

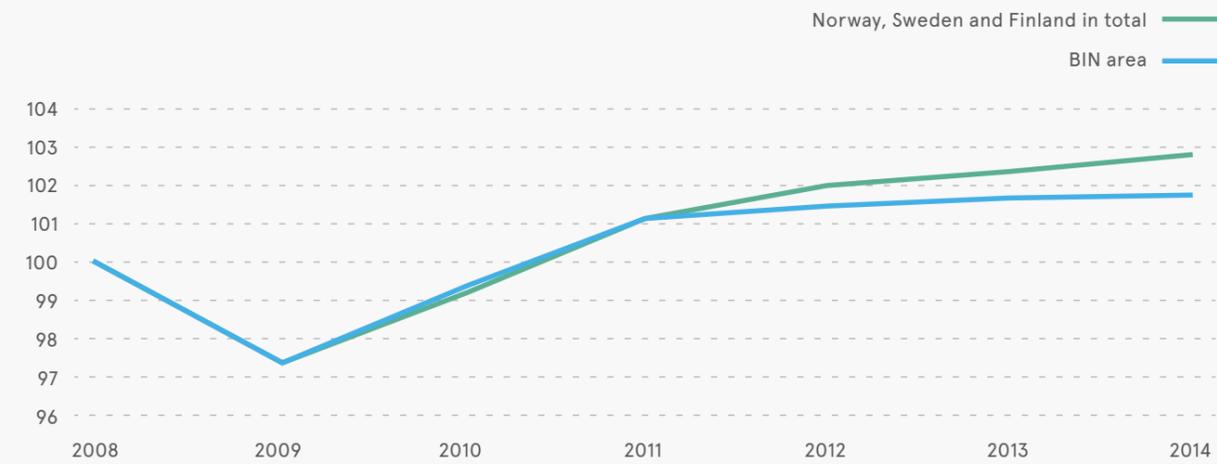
¹ Sweden changed its classification of agriculture, forestry and fisheries industry in 2011.

² World Employment and Social Outlook: Trends 2016, International Labour Office – Geneva: ILO, 2016

³ World Employment and Social Outlook: Trends 2015, International Labour Office – Geneva: ILO, 2015

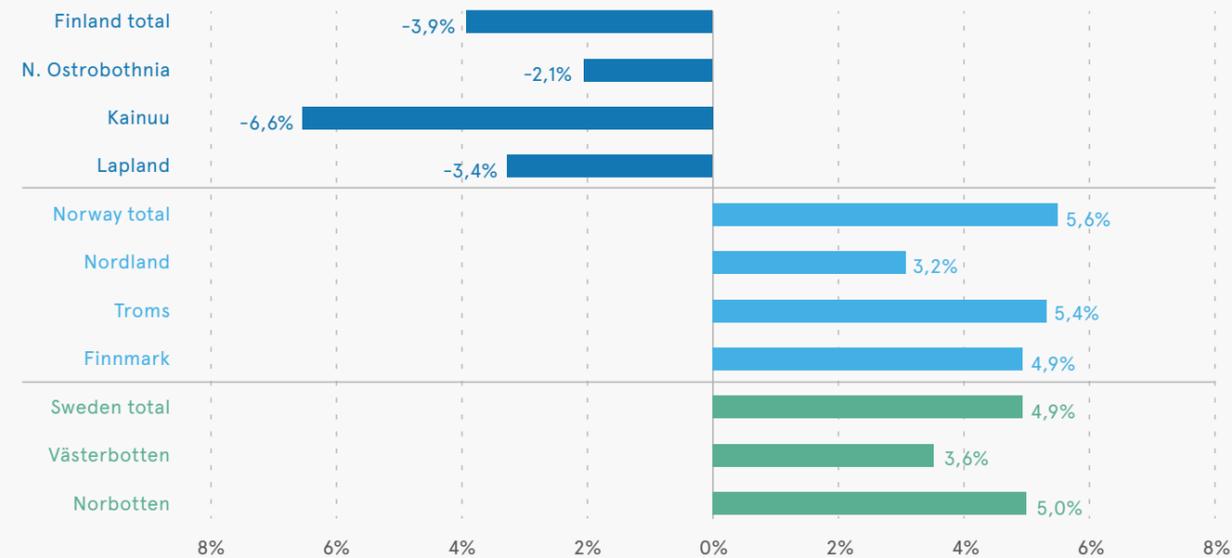
Employment development

All industries except agriculture, forestry and fishing
2008–2014, index 2008 = 100



Employment growth at the BIN county level

All industries except agriculture, forestry and fishing
2008–2014, %



Biggest job creation and losses in the BIN area 2011–2014

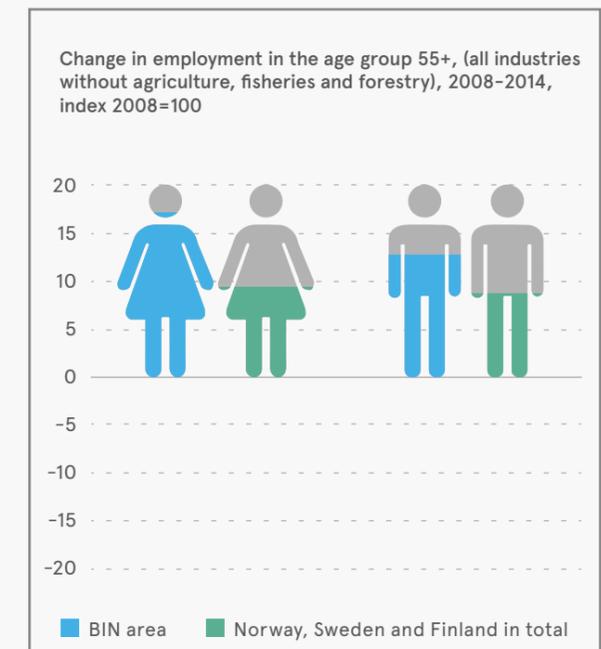
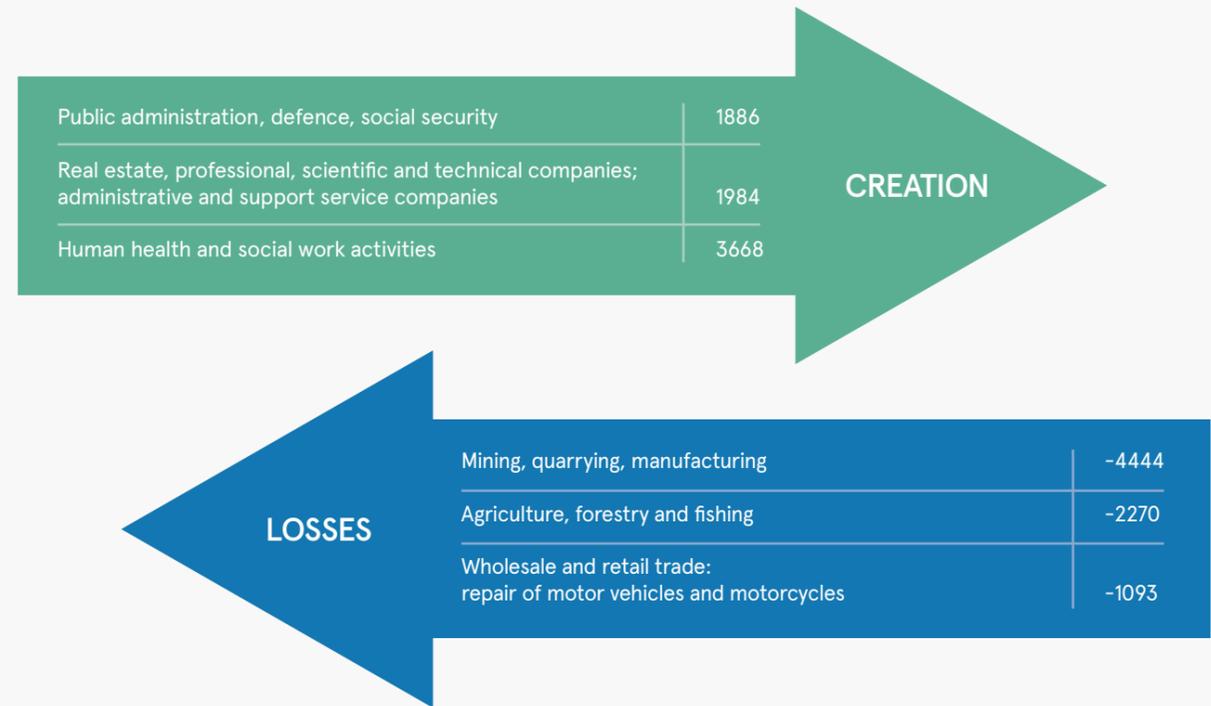


Figure 1 – Total employed persons in the BIN area, 2014

The BIN area was home to a total number of 739,272 employees as of 2014. Employees are people aged 16+ who are currently employed in the labour market. Figure 1 shows a breakdown of employees on a county level, with the largest pool of employees in Northern Ostrobothnia county, and the smallest in Kainuu county, which is proportionate to the population figures of their respective counties.

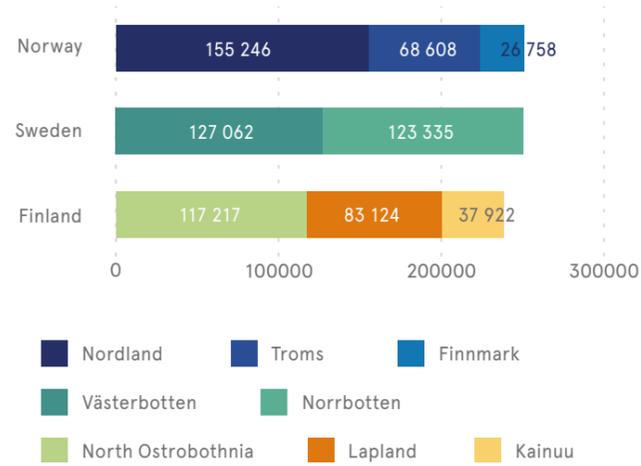


Figure 2 – Median employment rate, 2008-2014

Figure 2 shows the median employment rate in the BIN area on a county level and compares it to the total of Finland, Norway and Sweden. The median is used as a mid-point of a distribution curve, with half of the values falling above it and half below it during 2008-2014. All the BIN counties had an employment rate lower than the corresponding country's median value, which ranged from 66-69%.

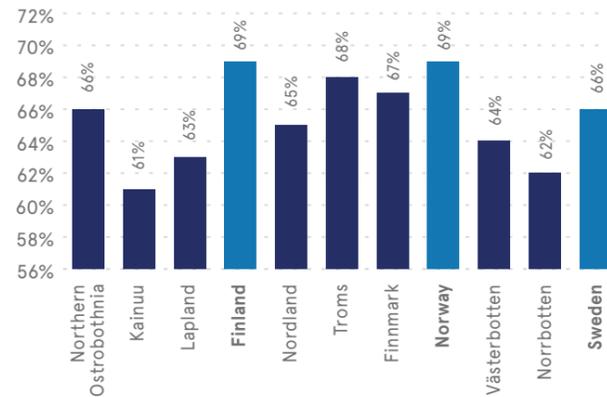


Figure 3 – Median unemployment rate, 2008-2014

Figure 3 reports differences in the unemployment rate⁴. Finland has had the highest median unemployment rate, reaching 10% during 2008-2014, with the BIN counties' unemployment rate as high as 16% (Kainuu). Norway had the lowest median unemployment rate during 2008-2014, as low as 3% and the BIN area counties of Nordland (3%), Finnmark (3%) and Troms (2%) followed the same pattern. In Sweden, there were no differences in unemployment rates between the country's median of 8% and its BIN counties.

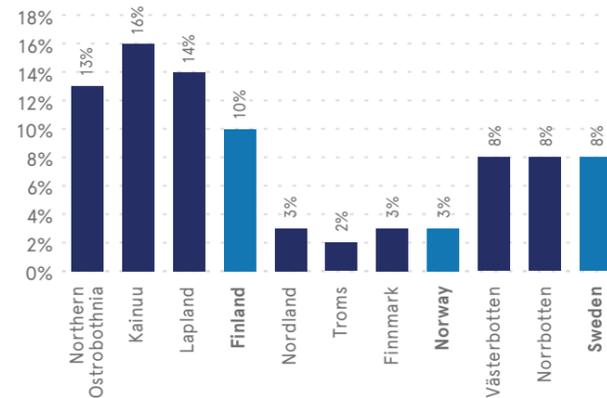


Figure 4 – Employment development (all industries), 2011-2014, index 2011 = 100

Figure 4 demonstrates employment development expressed as index (all industries). The BIN area experienced near-zero growth of 0.2% in 2011-2014, compared to 1.6% for Norway, Sweden and Finland in total.

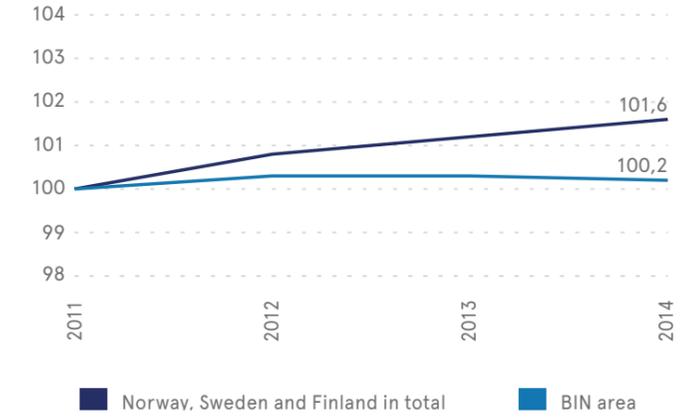


Figure 5 – Employment development (all industries except agriculture, forestry and fishing), 2008 - 2014, index 2008 = 100

An index of employment development excluding agriculture, forestry and fishing, is shown in Figure 5. From 2008 to 2014, the BIN area saw a growth of 1.7%, and Norway, Sweden and Finland in total saw a growth of 2.9%. Therefore, when controlling for agriculture, forestry and fishing, a growth in employment development is observed. This indicates a diminishing role for agriculture, forestry and fishing in the BIN area employment market. The modernization of agriculture and the rise of industry and services within economy have resulted in agriculture becoming a much less important source of jobs.⁵

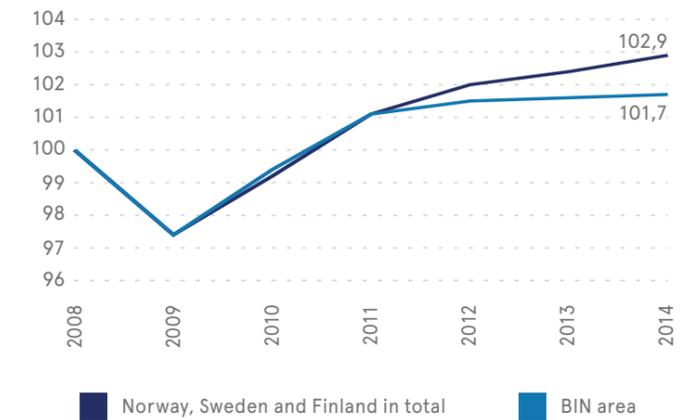
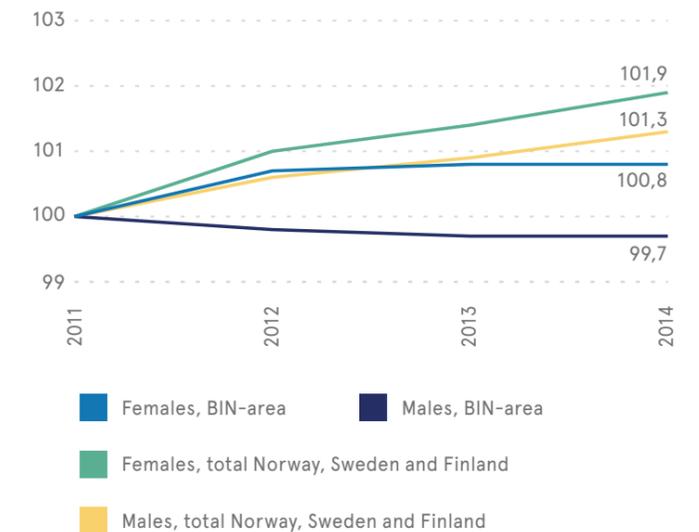


Figure 6 – Employment development by gender (all industries), 2011-2014, index 2011 = 100

Figure 6 demonstrates that employment development expressed as an index (all industries) during 2011-2014 for males in the BIN area has worsened (-0.3%) more than in Norway, Sweden and Finland as a whole, where there was an increase of 1.3%. For females, employment development has remained positive in the BIN area, but underperformed for Norway, Sweden and Finland as a whole by 1.1%.



⁴ The methodology of unemployment rate calculation differs across countries, therefore the comparison in Figure 2 is not direct (Finland uses age group 18 - 64 years, while in Sweden and Norway age group is 15-74).

⁵ Agricultural census in Finland, Norway and Sweden in 2013. (Source: Eurostat)

Figure 7 – Employment development by gender (all industries except agriculture, forestry and fishing), 2008–2014, index 2008 = 100

Figure 7 shows employment development expressed as index while controlling for the effect of agriculture, forestry and fishing. The employment development in the BIN area for both males (1.1%) and females (2.4%) was positive during 2008–2014, but below of the total for Norway, Sweden and Finland for males (2.5%) and for females (3.3%) respectively.

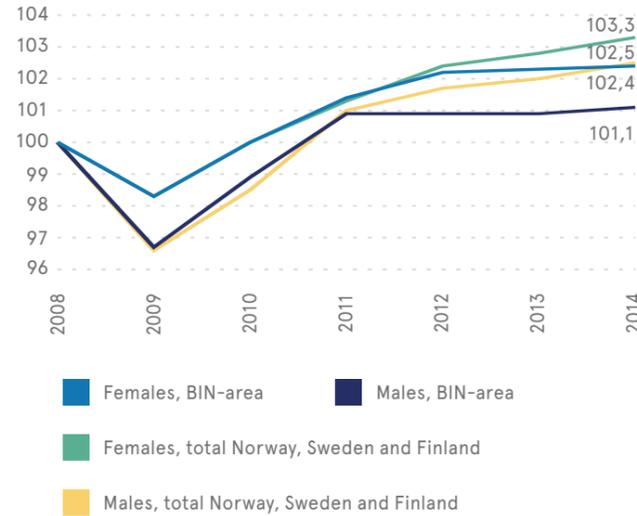


Table 1 – Employment rate per industry (by place of work) in 2014, BIN area compared with the total for Norway, Sweden and Finland

Table 1 provides a breakdown of employment rate per industry in the BIN area (by place of work) as of 2014, compared with the total rate for Norway, Sweden and Finland. The BIN area had higher employment rates in human health and social work activities (20.7% vs 17.5%), education (9.8% vs 9%), construction (7.6% vs 7.1%), public administration, defense and social security (6.9% vs 5.7%) and agriculture, forestry and fishing (4.6% vs 2.5%), when compared to the total for Norway, Sweden and Finland. The public sector accounts for a significant share of employment. The industries providing less employment opportunities in the BIN area include mining, quarrying and manufacturing, wholesale and retail trade, repair of motor vehicles and motorcycles, real estate, professional, scientific and technical companies; administrative and support service companies, information, communication, financial and insurance activities.

Industry	BIN Area	Norway, Sweden and Finland in total
Human health and social work activities	20,7 %	17,5 %
Mining, quarrying, manufacturing	11,2 %	12,1 %
Wholesale and retail trade: repair of motor vehicles and motorcycles	10,5 %	12,5 %
Real estate, professional, scientific and technical companies; administrative and support service companies	10,1 %	12,6 %
Education	9,8 %	9,0 %
Construction	7,6 %	7,1 %
Public adm., defence, soc. security	6,9 %	5,7 %
Transportation and storage	5,5 %	5,2 %
Agriculture, forestry and fishing	4,6 %	2,5 %
Other services	4,1 %	4,5 %
Accommodation and food service activities	3,4 %	3,5 %
Information and communication	2,1 %	3,7 %
Electricity, water supply, sewerage, waste management	1,3 %	1,1 %
Financial and insurance activities	1,1 %	1,9 %
Unspecified	1,0 %	1,0 %
Total sum	100,0 %	100,0 %

Figure 8 – Employment growth by industry groups, 2008–2014

Figure 8 demonstrates that the BIN area underperformed in employment growth across all industry groups compared to the total for Norway, Sweden and Finland. Employment growth in education was 1.3% in the BIN area compared to an average for Norway, Sweden and Finland of 6.4%. Human health and social work saw an increase of 6.2% in the BIN area, as opposed to 8.4% in total for Norway, Sweden and Finland. Industrial activities decreased by 5.0% in the BIN area and by 6.8% in total for Norway, Sweden and Finland. The growth in other service activities was the largest out of all industry groups, compare 11.2% in the BIN area to 12.3% in total for Norway, Sweden and Finland. Public administration, defense and social security grew by 7.5% in the BIN area and by 8.2% in total for Norway, Sweden and Finland. Trade, transport, communication, real estate and business activities grew by 0.5% in the BIN area as opposed to a 3.3% in total for Norway, Sweden and Finland. Results from Figure 8 indicate a growing role for the service economy in the BIN area as well as in the Norway, Sweden and Finland, and a decreasing role of industrial activities.

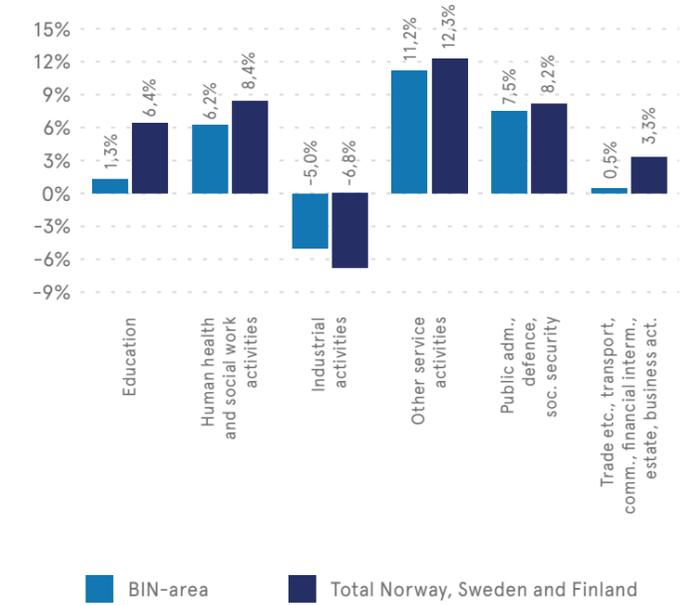


Figure 9 – Job creation and losses in the BIN area, 2011–2014

Figure 9 provides an industry breakdown analysis of the total job creation in the BIN area during 2011–2014. The biggest job loss is observed in mining, quarrying and manufacturing (4,444 jobs), followed by agriculture, forestry and fishing (2,270 jobs). Job losses in agriculture, forestry and fishing reflect the process of urbanization in the BIN area, combined with the modernization of the industry. The biggest contributors to job creation have been the real estate, professional, scientific and technical sector (1,984 jobs), followed by public administration, defense and social security (1,886). This indicates an increased demand for high-skilled labor in the BIN area, as well as public sector domination in job creation on the labor market.

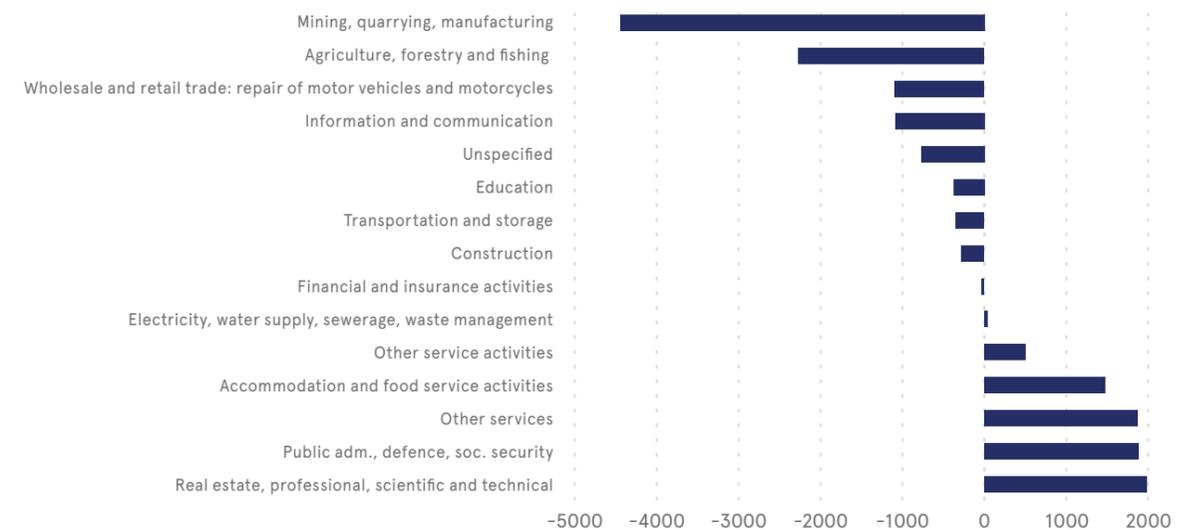


Figure 10 – Job creation and losses for males in the BIN area, 2011–2014

Figure 10 provides an overview of job creation for males in the BIN area during 2011–2014. For males, the biggest job loss occurred in the mining, quarrying and manufacturing sector (3,556 jobs) accounting for 50% of all jobs lost. The highest job creation has been observed in the highly –skilled real estate, professional, scientific and technical sector (1,300 jobs).

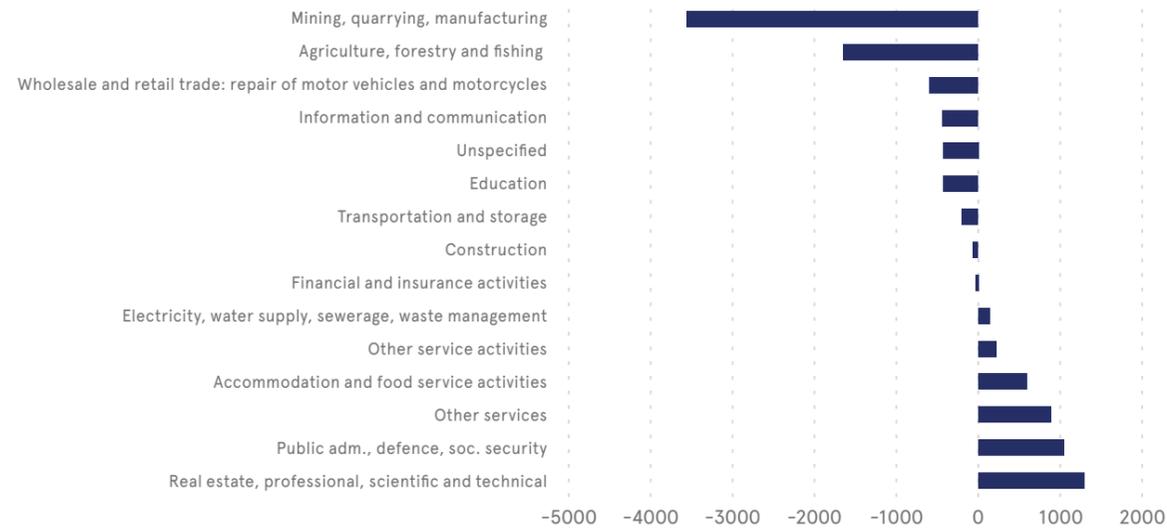


Figure 11 – Job creation and losses for females in the BIN area, 2011–2014

Similarly, Figure 11 provides an overview of job creation for females in the BIN area during 2011–2014. For females, the biggest job loss occurred in the mining, quarrying and manufacturing sector (888 jobs), followed by wholesale and retail trade (658). Job losses for females were distributed more evenly across all the industries. The highest job creation has been observed in the tertiary sector of the economy, corresponding to 1,281 jobs in other services.

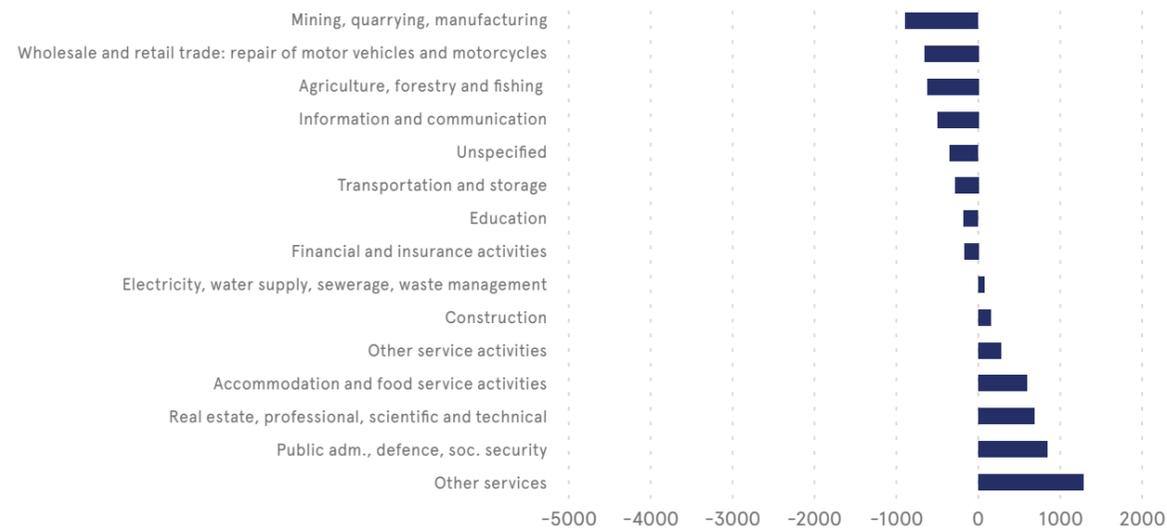


Figure 12 – Employment development (all industries), 2011–2014, %

Differences in employment development (all industries) in the BIN area are depicted in Figure 12. Employment decreased in Finland in total (-3.4%) and in all the BIN area counties, especially in Kainuu (-8.7%). This reflects job losses in the forestry sector in Kainuu county. In Norway and Sweden, employment grew by around 3%. Troms county 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, Västerbotten county had a growth 2.8%, while Norrbotten county with its growth of 3.7% outperformed the national average of 3.1%.

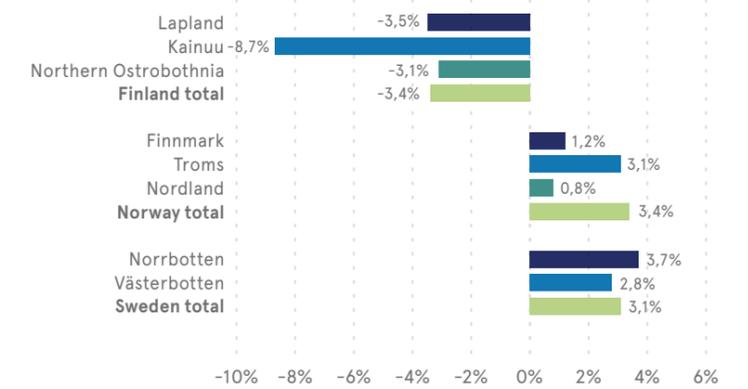


Figure 13 – Employment development (all industries except agriculture, forestry and fishing), 2008–2014, %

Figure 13 demonstrates a trend in employment development when controlled for agriculture, forestry and fishing. In Finland, all counties had a negative trend during 2008–2014, while Northern Ostrobothnia county performed better (-2.1%) than the national average of (-3.9%). In Norway, positive employment development across all BIN counties is observed in the industries excluding agriculture, forestry and fishery, supporting the view of a diminishing role of this sector in employment. In Sweden, there was no significant impact of agriculture, forestry and fishery on the employment development, with growth rates ranging from 3.6% to 5% in the BIN counties of Norrbotten and Västerbotten.

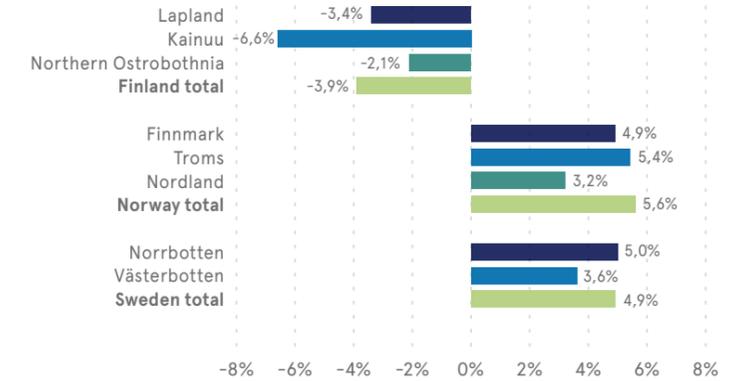


Figure 14 – Employment development (all industries) by gender at the BIN county level, 2011–2014, %

Figure 14 shows employment development by gender during 2011–2014 for all industries. In Finland, employment for males worsened dramatically, especially in the Kainuu county (-12.1%), reflecting job losses in a traditionally male-dominated industry sector within agriculture, forestry and fishery. In Norway, employment in the BIN counties of Troms, Nordland and Finnmark was more favorable for males, ranging from 2.2% to 4.2% growth during 2011–2014, signaling better employment opportunities for males when agriculture, forestry and fishery are included in the analysis. The country-specific profile should be considered when interpreting these results, e.g. fishery is particularly important for Norway, while forestry is important for Finland. In Sweden, on the other hand, employment was more favorable for females, e.g. Västerbotten (3.2%), Norrbotten (4.3%). This result can be interpreted as more equality-based employment opportunities in the Swedish BIN counties than in its Finnish and Norwegian counterparts, even in the male-dominated industries.

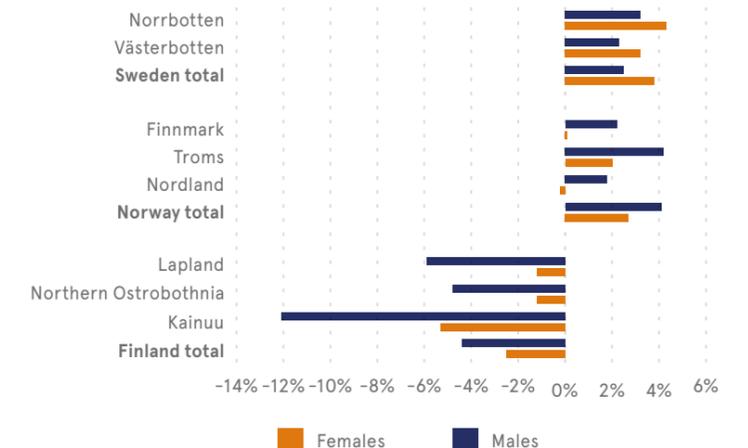


Figure 15 – Employment development (all industries except agriculture, forestry and fishing) by gender at the BIN county level, 2008–2014, %

Figure 15 provides a view on employment development by gender during 2008–2014, when the effect of agriculture, forestry and fishing is removed. In Finland, negative employment development is observed for both genders during 2008–2014, with the only exception being Northern Ostrobothnia county, where employment for females was favorable, with 0.6% compared to the national average of -2.1%. In the Norwegian BIN counties, employment for males was comparable to the national average of 6.4%, while for females it was weaker in Nordland (2.4%) and Finnmark (2.1%) counties when compared to the national average of 4.9%. In Sweden, employment development for males was more favorable in Norrbotten (5.8%) and less favorable in Västerbotten (2.5%), compared to a Swedish national average of 4.4%. For females, employment in the Swedish BIN counties was positive (4.2% and 4.7%), but still below that of the national average (5.5%).

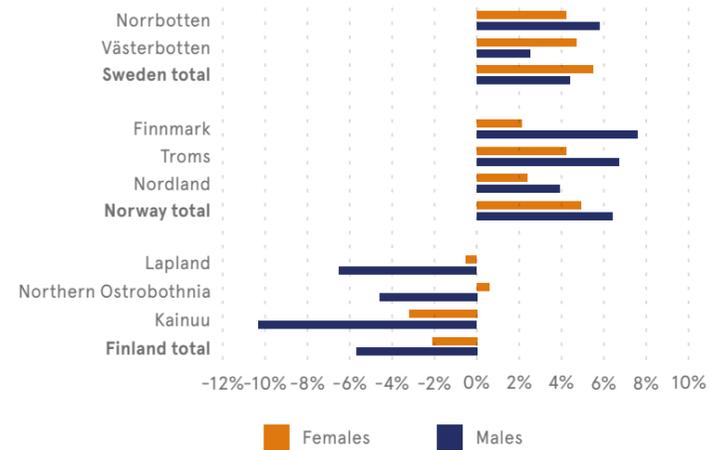


Figure 17 – Employment development by gender in age group 25- 54 years, (all industries except agriculture, forestry and fishing), 2008–2014, index 2008 = 100

Figure 17 provides an overview of employment development (all industries except agriculture, forestry and fishing) for the age group 25–54 for males and females separately. Employment for age group 25–54 in the BIN area has worsened by 2.3% for females and 2.8% for males, while in Norway, Sweden and Finland as a whole it continued to grow during 2008–2014.

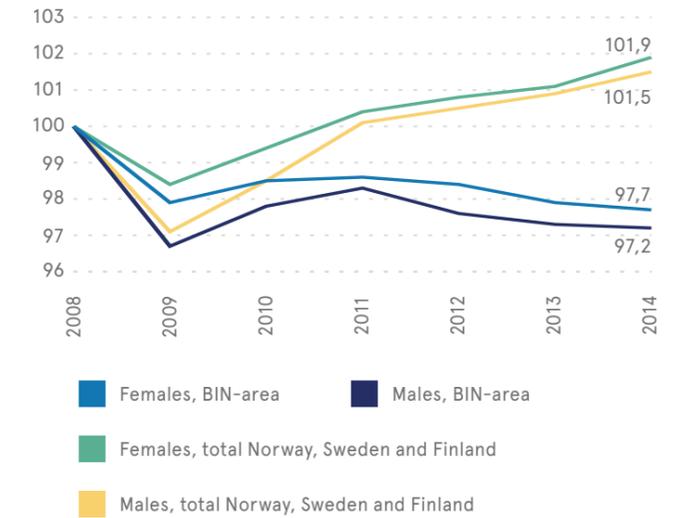


Figure 16 – Employment development by gender in age group 16 – 24 years, (all industries except agriculture, forestry and fishing), 2008–2014, index 2008 = 100

Figure 16 provides an overview of employment development (all industries except agriculture, forestry and fishing) for the age group 16–24 for males and females separately. On average, youth employment in the BIN area has been better for both females (4.3%) and males (2.2%), while the total for Norway, Sweden and Finland has averaged around 0.5% for females and (-2.7%) for males during 2008–2014.

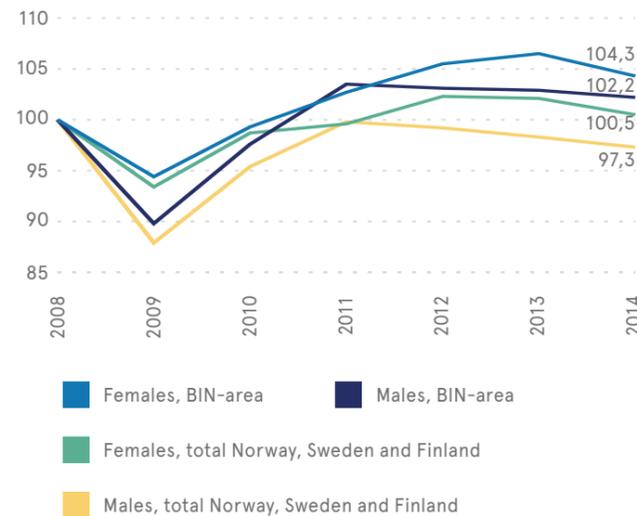


Figure 18 – employment development by gender in age group 55+ years, (all industries except agriculture, forestry and fishing), 2008–2014, index 2008 = 100

Figure 18 provides an overview of employment development (all industries except agriculture, forestry and fishing) for the age group 55+ for males and females separately. The BIN area outperformed Norway, Sweden and Finland as a whole during 2008–2014, with female employment growth as high as 16.5% and male employment growth as high as 13.4%, while the total for Norway, Sweden and Finland was 9.8% for females and 8.5% for males. These dynamics corresponds to the rapidly ageing population in the BIN area.

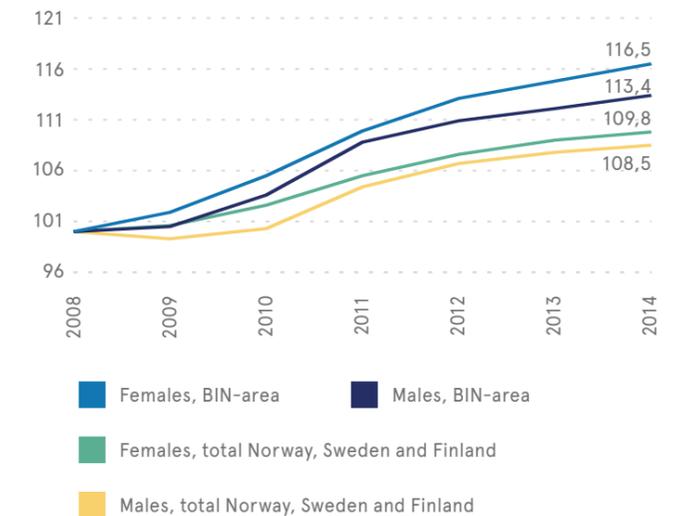


Figure 19 — Employment development by gender in age group 16–24 years at the BIN county level, (all industries except agriculture, forestry and fishing), 2008–2014, index 2008 = 100

Figure 19 provides an analysis of youth employment (all industries except agriculture, forestry and fishing) in the BIN area on a county level during 2008–2014. While the index in Figure 16 demonstrated positive dynamics in employment for the age group 16–24 on average, the county level analysis revealed high discrepancies on the county level. Finland and its BIN area counties had a large deficit in youth employment development, especially for males (e.g. -13% for males in Lapland) that also reflects the trends in unemployment. At the same time, Norwegian and Swedish BIN area counties have performed in creating employment for youth much better than their respective national averages. For example, Troms had 11% increase in male employment and Norrbotten county had 22.8% increase in female employment. This phenomenon deserves a deeper analysis in order to compare governmental actions and other initiatives (e.g. training opportunities, start-up grants, government subsidies for hiring recent graduates) that might have influenced favorable employment development for youth in the Norwegian and Swedish BIN counties.

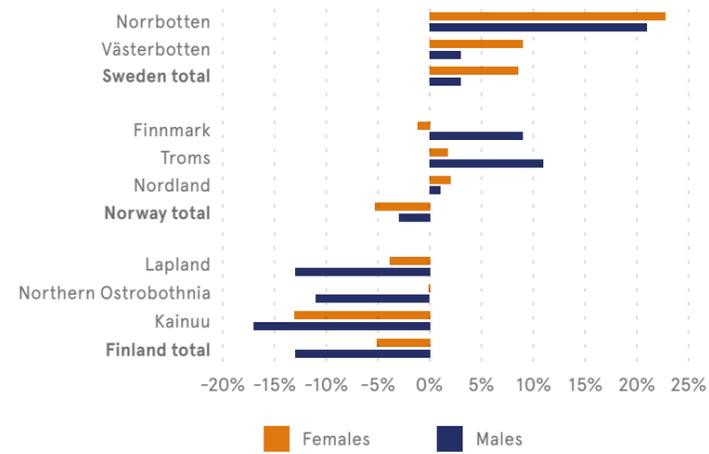


Figure 21 — Employment development by gender in age group 55+ years at the BIN county level, (all industries except agriculture, forestry and fishing), 2008 – 2014, index 2008 = 100

Figure 21 illustrates employment in age group 55+ (all industries except agriculture, forestry and fishing) in the BIN area on a county level during 2008–2014. All BIN counties had a positive growth in employment development for the age group 55+, while Finnish counties succeeded in increasing employment for females in the range of 23–25%. Norwegian counties in the BIN area followed the national averages in employment, 15–16% for females and males aged 55+, with Finnmark slightly underperforming with its 11–13%. In Sweden, employment for females and males aged 55+ was more favorable in the counties of Västerbotten and Norrbotten than in the whole country on average

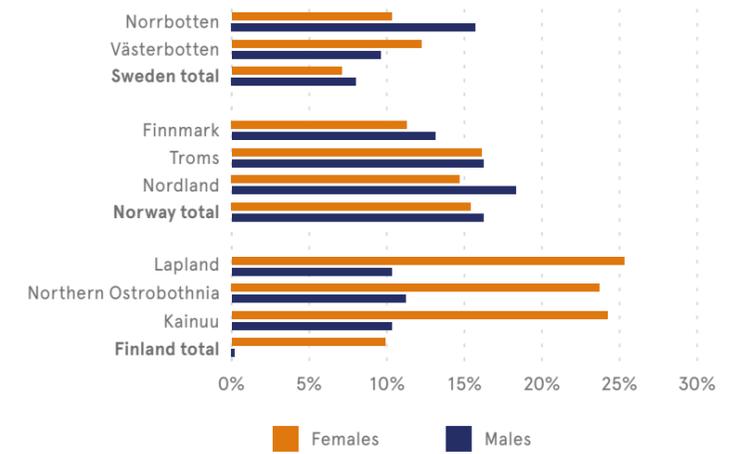
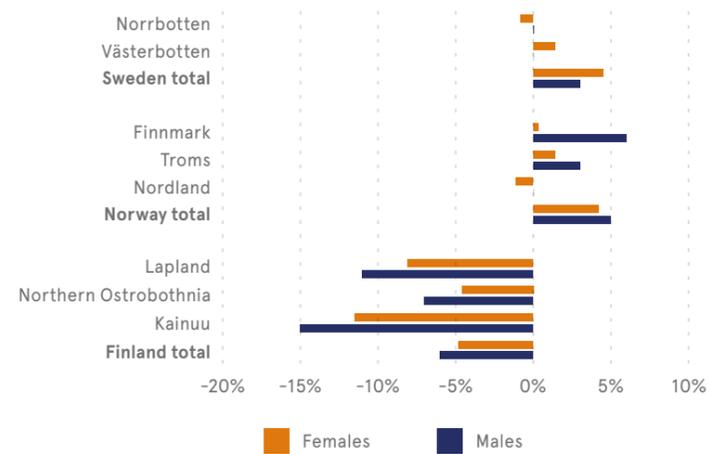


Figure 20 — Employment development by gender in age group 25–54 years at the BIN county level, (all industries except agriculture, forestry and fishing), 2008–2014, index 2008 = 100

Figure 20 demonstrates employment in age group 25–54 (all industries except agriculture, forestry and fishing) in the BIN area on a county level during 2008–2014. In Finland, employment in the BIN area counties weakened in comparison with the national average, e.g. Northern Ostrobothnia county’s labor market suffered from redundancies in the ICT field. In Norway, only Finnmark county performed better in male employment (6%) for 25–54-year olds, while other BIN area counties underperformed. The same pattern is observed in Sweden, where Norrbotten and Västerbotten had near to zero or as low as 1% growth in employment, compared to a growth of 3–4.5% on average in Sweden.



Implications

The chapter on Employment provides a statistical analysis that can be used to evaluate trends in unemployment rates, employment rates and employment development within industries and age groups. County-level analysis brings additional value when counties in the BIN area can be benchmarked against each other. One of the limiting factors of this analysis is industry groupings that do not allow identifying the effects of individual industries, such as, for instance, forestry and agriculture. Learning from neighboring countries and their country and regional policies can shed light on how to create a functioning future labour market in the BIN area. Therefore, we introduce the following recommendations for policy makers and businesses. Job creation requires assessment of changing work and consumption patterns. The BIN area requires new thinking, tools and policies to exploit the potentials for job creation. The BIN area should work jointly towards the goals of developing its labor market.

For policy makers:

- Job creation in the BIN area should be addressed within the potential of the BIN area that has great skilled-labor supply
- Simulate positive experiences from other counties, e.g. finding out how the Swedish BIN counties succeeded in youth employment for the age group 16–24

- Education systems should address how to generate competences that will match the job demands of the future
- A non-standard form of employment (such as job-sharing, crowd or on-demand work) creates challenges for traditional work patterns. The emergence of these forms of employments should be addressed on a regulatory level in order to ensure protection of workers in these areas

For business:

- Business opportunities for companies that require highly-skilled workers
- Expansion of service economy in the North creates investment opportunities and stimulates start-ups in related industries
- The European Commission announced an Investment Plan (2014) that addressed stimulating employment through private sector investment. The aim of the plan is to ensure that small enterprises benefit from the projects and indirectly through credit guarantee schemes and improved access to credit in general. This plan provides conditions for larger private-sector involvement in the development of the economy