

Nordregio

NORDREGIO REPORT 2024:14

The Common Nordic Labour Market 70 Years and Beyond

Anna Lundgren, Debora Pricila Birgier,
Nora Sánchez Gassen and Gustaf Norlén

Contents

Preface 4

Sammanfattning 5

Summary 7

1. Introduction 9

1.1. Methods 10

2. The common Nordic labour market 1954–2024 14

2.1. The context of the common Nordic Labour market 14

2.2. Migration in the Nordic labour market 1954-2024 23

2.3. Commuting on the Nordic labour market 57

2.4. Discussion: Looking back at 70 years of cross-border Nordic labour market mobility 65

3. Looking forward: The Nordic common labour market the next 70 years 68

3.1. Supply and demand on the future Nordic labour market 70

3.2. Future supply and demand from a regional perspective 91

3.3. Discussion on the future of supply and demand in the Nordic Labour Market 99

4. Concluding remarks and looking towards the future 102

4.1. Future perspectives on the common Nordic labour market 111

References 115

Appendix 128

Appendix 1: Stakeholder Groups 128

Appendix 2: Survey questionnaire [2] 129

Appendix 3: Interview questionnaire 136

Appendix 4: Classification of levels of education, skills levels, labour markets sectors, occupations 138

Appendix 5: Survey results 144

About this publication 148

This publication is also available online in a web-accessible version at:
https://pub.nordregio.org/r-2024-14-nordic-labour-market-70-years/

Preface

In 2024, the common Nordic labour market celebrates its 70th anniversary. This has been emphasised by the Nordic Council of Ministers and by the Swedish Government, which holds the chairmanship of the Nordic Council of Ministers in 2024, and will be celebrated in Malmö on 18-19 June, 2024.

This report has been commissioned by the Nordic Council of Ministers Committee of Senior Officials for Labour (EK-A). The report is written by the Nordregio researchers Anna Lundgren, Debora Pricila Birgier, Nora Sánchez Gassen, and Gustaf Norlén.

We want to thank Nordic experts on labour market issues for sharing their knowledge on the Nordic labour market with us; Tapio Bergholm, University of Finland, Katrine von Simson and Johannes Sørbø, Norwegian Labour and Welfare Administration, Emilie Krogsgaard Larsen, Danish Agency for Labour Market and Recruitment, Jóngeir Hjörvar Hlinason, Directorate of Labour Iceland, Dan Grannas, Ministry of Employment Sweden and Kenth Häggblom, Åland Statistics.

We also want to thank the Nordic Council of Ministers Committee of Senior Officials for Labour (EK-A), the Nordic Labour Market Committee, the Nordic employers' organisations and Nordic trade unions, local and regional authorities, cross-border organisations and services, the labour market organisations EURES network, and the European Labour Authority for distributing our survey across their networks and sharing their knowledge on cross-border labour market mobility with us.

Finally, we thank our Nordregio colleagues, who at different stages in the process have helped us and contributed with their knowledge and comments, Maja Brynteson, Linnea Löfving, Ágúst Bogason, Hilma Salonen, Anna Sophie Liebst, Elin Slätmo, Anna Vasilevskaya, Anna Granath Hansson, and Rolf Elmér.

Stockholm, 7 June 2024

Sammanfattning

I denna rapport blickar vi bakåt på 70 år av gemensam nordisk arbetsmarknad. Vi blickar också framåt och studerar förväntat utbud och efterfrågan på den nordiska arbetsmarknaden, och diskuterar utmaningar och möjligheter för en ökad integration av den nordiska arbetsmarknaden. Rapporten baseras på deskriptiv statistik, dokumentstudier samt en enkät och intervjuer.

Den gemensamma nordiska arbetsmarknaden som innebär att invånare i Norden kan arbeta i ett annat Nordiskt land formaliserades i en överenskommelse mellan de nordiska regeringarna 1954. Att arbeta i ett annat nordiskt land hade varit vanligt förekommande redan tidigare, särskilt efter andra världskriget då det var stor efterfrågan från det svenska näringslivet på utländsk arbetskraft.

Under den studerade perioden finner vi att möjligheten att söka arbete och få bättre livsvillkor i ett annat nordiskt land har påverkat den nordiska migrationen. I tider av ekonomisk nedgång och hög arbetslöshet har möjligheten att söka sig till ett annat nordiskt land varit ett alternativ för nordborna. Den största strömmen av migranter under den studerade perioden kom från Finland till Sverige under 60-70 talet med mer än 400 000 migranter. Den näst största strömmen var återvandring av finska migranter från Sverige till Finland. Medan migrationen mellan de nordiska länderna Danmark, Finland, Norge och Sverige är större i absoluta tal, visar statistiken att invånare på Island, Färöarna, Grönland och Åland är mer benägna att flytta till ett annat nordiskt land. Även här återfinns mönstren av betydande återvandring.

I takt med globaliseringen, ökad levnadsstandard i alla nordiska länder och EU- och EES-medlemskap som möjliggör för invånarna att söka jobb i hela EU, har den nordiska migrationen stabiliserats på en relativt låg nivå sedan 1990-talet. Den senaste statistiken visar att nära en halv miljon personer (449 300, 2022) är födda i ett annat nordiskt land än det de bor i, vilket innebär 1.6% (2022) av den totala befolkningen i Norden. Detta kan jämföras med EU där mer än dubbelt så många bor i ett annat Europeiskt land än det de är födda i (3,9%, 2021).

Bland de som väljer att migrera är det ungefär 20% som väljer att flytta till ett annat nordiskt land. I valet av vilket land man flyttar till så förefaller geografisk, språklig och kulturell närhet spela en viktig roll. För att ta del av den gemensamma nordiska arbetsmarknaden kan man också pendla, eller arbeta på distans, något som blivit alltmer vanligt förekommande efter pandemin. Studier visar att ca 40% arbetar helt eller delvis på distans. Även om statistiken när det gäller pendling är bristfällig, spelar närhet en viktig roll också vid pendling och distansarbete.

Den nordiska överenskommelsen om en gemensam arbetsmarknad är omgärdad av andra nordiska avtal, institutioner, organisationer och gränsöverskridande

samarbeten som på olika sätt bidrar till att stödja den nordiska arbetsmarknadsintegrationen. Medan det nordiska lagstiftningsområdet går tillbaka ända till 1880-talet, skedde omfattande institutionalisering av det nordiska samarbetet på 1950-1960 talet (t ex Nordiska rådet 1952, socialförsäkringsavtal 1955, passunion 1958 och Helsingforsavtalet, 1962) som sedan har kompletterats med ytterligare samarbete, deklarationer och institutioner för att underlätta den fria rörligheten och en ökad nordisk integration. Vidare på näringslivsområdet är de nordiska länderna viktiga handelspartners med omfattande samarbete. Trots detta, visar många studier att olika gränshinder, bland annat gällande skattelagstiftning, socialförsäkring och problem med elektronisk identifiering, verkar hämmande på en ökad arbetsmarknadsintegration. Men även andra hinder lyfts fram, såsom språkliga hinder och svårigheter för familjer att flytta med. Det är viktigt att notera att dessa hinder inte bara har bäring på migration till ett annat nordiskt land, utan utgör också i hög grad hinder vid pendling och distansarbete.

Blickar vi framåt, visar prognoserna att arbetskraften i arbetsför ålder (16-64 år) förväntas öka i de nordiska länderna samtidigt som arbetskraften blir äldre. Även om sysselsättningen över lag är hög i Norden, finner vi stora regionala skillnader. Också när det gäller befolkning i arbetsför ålder och utbildningsnivå finner vi stora regionala skillnader. Den arbetskraft som förväntas efterfrågas 2035 är framförallt högutbildade . De arbetsmarknadssektorer som väntas öka mest är företag och annan service (Business & other services) och den offentliga sektorn (Non-marketed services). Även om det finns nationella och regionala variationer, så visar prognoserna i allt väsentligt likande mönster mellan de nordiska länderna. Med stor efterfrågan på liknande arbetskraft inom de nordiska länderna, och därtill upplevda administrativa hinder för att flytta eller ta ett jobb i ett annat nordiskt land, finner vi få indikationer på att arbetskraftsmobiliteten i Norden kommer att öka i en nära framtid - med mindre än stora insatser görs för att öka attraktiviteten att bo och jobba i ett annat Nordiskt land och minska hindren för den fria rörligheten.

I det avslutande kapitlet i rapporten utmanar vi tanken och ställer frågan "Tänk om...". Vi flyttar fram perspektiven och ställer frågor som "Tänk om vi inte hade några gränser i Norden?" Vad skulle det innebära för den gemensamma nordiska arbetsmarknaden? "Ett helt och fullt integrerat Norden, vad skulle det innebära?" "Vilken strategisk infrastruktur behöver komma på plats för att göra det mer attraktivt att bo och jobba i ett annat nordiskt land?" Och, slutligen med fokus på nästa generation, "Hur ser den nordiska sammanhållningen för nästa generation ut?".

Summary

In this report, we look back at 70 years of a common Nordic labour market. We also look ahead and study forecasts of supply and demand in the Nordic labour market and discuss challenges and opportunities for increased integration of the common Nordic labour market. The report is based on descriptive statistics, document studies, a survey, and interviews.

The common Nordic labour market, which means that residents of the Nordic Region can work in another Nordic country, was formalised in an agreement between the Nordic governments in 1954. Working in another Nordic country had already been common, especially after the Second World War when the Swedish business sector had a high demand for foreign labour.

During the period studied, we find that the possibility to seek employment and improve living conditions in another Nordic country has impacted Nordic migration. In times of economic downturn and high unemployment, the opportunity to move to another Nordic country has been an option for Nordic residents. The largest flow of migrants during the period studied came from Finland to Sweden in the 60s and 70s, with more than 400,000 migrants. The second largest flow was the return of Finnish migrants from Sweden to Finland. While in absolute numbers, the migration between the Nordic countries Denmark, Finland, Norway and Sweden is greater, statistics show that residents of Iceland, the Faroe Islands, Greenland and Åland are more likely to move to another Nordic country. Here, too, the same patterns of significant return migration can be found.

In line with globalisation, increased living standards in all Nordic countries, and EU and EEA membership, which makes it possible for citizens to look for jobs throughout the EU, Nordic migration has stabilised at a relatively low level since the 1990s. The latest statistics show that close to half a million people (449,300, 2022) were born in a Nordic country other than the one they live in, which equates to 1.6% (2022) of the total population in the Nordic Region. This can be compared to the EU, where more than twice as many live in a European country other than the one they were born in (3.9%, 2021).

Among those who choose to migrate, about 20% choose to move to another Nordic country. In choosing a country to move to, geographical, linguistic and cultural proximity seems to play an important role. However, to take part in the common Nordic labour market, you can also commute, or work remotely, something that has become increasingly common after the pandemic. Studies show that about 40% work fully or partially remotely. Although commuting statistics are limited, proximity also plays an important role in both commuting and remote work.

The Nordic agreement on the common labour market is reinforced by other Nordic

agreements, institutions, organisations and cross-border co-operation that contribute in various ways to supporting Nordic labour market integration. While cooperation in the legislative area dates back to the 1880s, extensive institutionalisation of Nordic co-operation took place in the 1950s and 1960s (e.g. the Nordic Council in 1952, the social security agreement in 1955, the passport union in 1958 and the Helsinki Treaty in 1962), which has since been supplemented by further cooperation, declarations and institutions to facilitate free movement and increased Nordic integration. In the area of business and industry, the Nordic countries are also important trading partners with extensive cooperation. Despite this, many studies show that various barriers to freedom of movement, including tax legislation, social security and problems with electronic identification, have an inhibiting effect on increased labour market integration. But other obstacles are also highlighted, such as language barriers and difficulties for families to move. It is important to note that these barriers not only have a bearing on migration to another Nordic country, but also constitute significant obstacles when commuting and working remotely.

Looking ahead, the forecasts show that the working-age labour force (16-64 years) in the Nordic countries is expected to increase s, even as the overall labour force ages. Although employment is generally high in the Nordic countries, we find large regional differences. We also find large regional differences in the working-age population and level of education. The labour force that is expected to be in demand in 2035 is primarily highly educated. The labour market sectors that are expected to grow the most are business and other services and the public sector (non-marketed services). Although there are national and regional variations, the forecasts show essentially similar patterns between the Nordic countries. With a high demand for similar labour within the Nordic countries, and perceived administrative barriers to move or take a job in another Nordic country, we find few indications that labour mobility in the Nordic countries will increase in the near future - unless major efforts are made to increasing the attractiveness of living and working in another Nordic country and reducing barriers to freedom of movement.

In the final chapter of the report, we challenge the current state and ask the "What if..." questions . We advance perspectives and ask questions such as "What if the Nordic region was without internal borders?" What would this mean for the common Nordic labour market? "What would a fully integrated Nordic Region look like? "," What strategic Nordic infrastructure needs to be put in place to make it more attractive to live and work in another Nordic country?" And, finally, with a focus on the next generation, "What would Nordic cohesion for the next generation look like?".

1. Introduction

The common Nordic labour market was formalised by an agreement in 1954 between the Nordic countries and celebrates 70 years in 2024. However, the Nordic countries were at the vanguard of facilitating free movement of labour already before. The common Nordic labour market stands out as unique for the duration of its existence and the degree of freedom it offers to its citizens, *"for a long time the Nordic countries have constituted a region without any significant institutional barrier to labour mobility across national borders."* (Pedersen & Røed, 2008, p 20).

The common Nordic labour market serves two main purposes; it enables people to search for jobs on a wider labour market which may reduce unemployment and improve income prospects in the long term, and from a social perspective, it may reduce the negative impacts of economic cycles by attracting labour from a larger region during an upswing and reducing unemployment during a downturn (see e.g. Pedersen and Wadensjö, 2008). This implies that over time Nordic labour market mobility has fluctuated, mainly influenced by country-specific economic cycles, such as during 1960-1970s when Sweden received many migrants, especially from Finland.

While migration between the Nordic countries has been fairly stable at low levels since the 1990s, international migration has increased. However, Nordic labour market mobility also involves commuting across national borders and working remotely has increased, especially after the pandemic. Despite that cross-border labour market mobility plays an important role in specific cross-border regions and local areas such as the Greater Copenhagen area and the Swedish-Norwegian border, helping to recruit staff to key economic sectors and maintaining public and private sector services, cross-border commuting in the Nordic Region is less common than European average (Lundgren & Wøien Meijer, 2022).

Those figures may be an indication that the common Nordic labour market is not running as smoothly as may be perceived, and a sign of many practical and administrative obstacles still remaining.[1] However, they could also be a sign of the high standard of living and quality of life that is found in all Nordic countries. That may imply that there are simply no major pull or push factors prompting people to move or apply for a job in a neighbouring Nordic country. A third explanation could be that other destinations are more popular. The European Economic Community (EEC) also identified the free movement of labour as a key element of the Treaty of Rome, with Denmark entering the EEC in 1973, followed by Sweden and Finland entering the European Union in 1995, Iceland and Norway becoming members of

1. "Border database", for example, provides a list of known cross-border obstacles between the Nordic countries: https://www.norden.org/en/border-database.

the European Economic Area (EEA) in 1994. In addition, the Nordic countries are also part of the Schengen Agreement.[2] That means citizens in the Nordic countries can benefit from free mobility not only in the Nordic Region, but also on the European labour market.

The Nordic Council of Ministers adopted a vision in 2019 to become the most sustainable and integrated region in the world by 2030. The common labour market can be expected to play a role in accomplishing the vision of the Nordic Council of Ministers. Recent years have seen an increasing lack of labour in various industry sectors, including a lack of healthcare workers in the public sector. Estimates indicate that demand for labour will continue in the future. Given the long tradition of mobility between the Nordic countries, it is pertinent to ask whether the common Nordic labour market can contribute to addressing the current and foreseen lack of labour, and if so how?

This report aims to shed light on development of the common Nordic labour market in the past 70 years and also look ahead to its potential. The focus is on labour migration and commuting between the Nordic countries. However, working in multiple countries or working remotely – which has become more common after the pandemic – will also be discussed.

In the first section of the report, we look back on how the common Nordic labour market has evolved over the past 70 years. We delve into the figures on migration and commuting and changes over time in the various countries and territories. Further, we discuss the role of the common agreement on Nordic cooperation and labour market mobility in the Nordic Region. In the second section, we start by looking into statistics on current and forecast supply and demand for labour in the various countries and self-governing territories of the Nordic Region, and discuss the potentials for a more integrated Nordic labour market. The third section of the report is based on the two earlier chapters, as well as the results of a survey of stakeholders and findings from interviews. In this final section we draw a number of conclusions from the previous 70 years and present some prospects for a more integrated Nordic labour market.

1.1. Methods

We will use an economic approach to labour migration focussing on movements and resettlements in geographical locations primarily motivated by labour market considerations. In the literature of geographical mobility, three topics are usually at focus; driving forces for migration, implications of migration and performance of migrants in the labour market of the host country (Borjas, 2014; Borjas & Chiswick,

2. Greenland and the Faroe Islands are not part of the EU. Further, Greenland, the Faroe Islands and Svalbard do not belong to Schengen, which means that special rules may apply to living and working in those areas (https://www.norden.org/sv/info-norden).

2019; De Haas et al., 2019).

The main methods used are desktop literature and document studies and descriptive statistics. The literature includes both grey literature, of which many publications from the Nordic Council of Ministers, and research literature pertaining to the topic. The descriptive statistics is to a large extent based on the statistics provided by the national statistical offices and the Nordic Statistics database.

The second part of the report which is looking towards the future is mainly based on descriptive statistics from CEDEFOP (The European Centre for the Development of Vocational Training). It is also based on a survey to stakeholders who are engaged in the Nordic labour market and cross-border mobility conducted in March 2024 and five interviews with labour market experts in the Nordic countries (March-April 2024).

Definitions

In the current report we will use several terms which are significant to our understanding of mobility across the Nordic Region and are the basis of our statistical analysis.

Cross-border Commuting – This concept refers to people who have their residence in one country but their workplace in another. Cross-border commuting usually implies that people more or less regularly move back and forth between the workplace and their home. Opportunities for long-distance work improved since the Covid-19 pandemic, so that physical visits at the workplace are potentially required at a less frequent scale than previously.

Emigration flows – Emigration refers to the process of moving away from one country to take up residence in another. Emigration flows measure the number of people who emigrate during a specific period of time (usually a year) regardless of the place where they were born.

Immigration flows – Immigration refers to the number of people who move to a country from abroad to establish residence there. Immigration flows measure the number of people to immigrate during a specific period of time (usually a year) regardless of the place where they were born.

International migration – The movement of people across country borders with the purpose of taking up residence in the receiving country.

Migrant stocks – The number of migrants living in a country at a specific point in time. Migrants are defined as people who have migrated to their current country of residence.

Nordic migration – The movement of people between the Nordic countries and autonomous territories.

Nordic migrants Nordic migrants are defined as people who were born in one

Nordic country but have taken up residence in another one for the purposes of work, study or family reunification.

Working age population – In our study it refers to those aged 15 to 64. Working age population measures the share of the working age population in the total population.

Limitations

The common Nordic labour market is a wide topic that can be approached from different perspectives and by using different methods. In this section we discuss a few limitations.

The literature search conducted has been focusing on research literature and grey literature on the common Nordic labour market and topics related to this issue. To a large extent the snowball principle has been used in searching for literature, using Scopus and Google scholar and references from existing literature. It should however be acknowledged, that a more focused and systematic literature review has not been conducted within the limited time of the project (2023-2024). The literature consulted in this project is mostly written in English and Swedish. Publications written in the other Nordic languages could not be systematically taken into account.

The survey conducted within the project was sent out to stakeholders engaged in the common Nordic labour market in March 2024, with the aim to increase knowledge about what is perceived as the main hurdles for the further development of the common Nordic labour market. The survey questions were developed by the research team with input from labour market experts and it was sent out to key stakeholders for further dissemination in their networks. This means that we do not know the exact number of recipients and hence cannot calculate a response rate. Nevertheless, the survey had 62 respondents representing a fairly equal distribution from the Nordic countries (See appendix 5), and we can draw certain conclusions from these results which are presented further on in the report. To complement the survey and gain more indepth knowledge about the developments in the individual countries, five interviews with experts on labour market (See appendix 3).

The lack of comparable statistics regarding migration and especially commuting flows across the borders in the Nordic Region has been identified as a problem (e.g. Nordiska Ministerrådet 2019; Brun et al. 2021). Data on Nordic migration flows and stocks is available but does not usually provide detailed information about migrants' education, labour market status or area of economic activity for the each Nordic country of origin. Furthermore, an effect of the freedom of movement between the Nordic countries is that it makes it difficult to know the motivation of people moving or commuting, compared to international migration when a work permit is needed. While some improvements have been made with regard to

sharing comparable data and statistics across the national borders, several obstacles relating to cross-border statistics remain (Brun et al. 2021; Nordic Council of Ministers, 2022; Antilla et al. 2023).

While CEDEFOP provides extensive cross-national forecasts of skill and labor demand, it operates under certain assumptions regarding factors such as changes in population size, sector and industry expansions, and educational enrollment. These assumptions involve projections about the future that are based on estimations. It's important to note that readers should focus on overall trends rather than placing significant emphasis on specific numbers. Furthermore, since 2015, concerns about confidentiality have resulted in substantial restrictions on the level of detail available to researchers from the Eurostat Labour Force Survey. As a result, information on occupations (ISCO) and education (ISCED) classifications is aggregated. Additionally, although subject matter specialists from individual countries participate in peer review and validation processes, the use of standardized models and assumptions may restrict the incorporation of localized data and contextual factors.



Photo: Fredrik Ohland, Unsplash.com

2. The common Nordic labour market 1954–2024

In this section we will delve into the development of the Nordic labour market since the agreement on the common Nordic labour market was adopted in 1954. How has it evolved over time? What flows of migrants and commuters across the Nordic borders have there been and who are those who have taken the opportunity to work in another Nordic country? We will look into statistics on migration and commuting stocks and flows and will discuss the key elements of the common Nordic labour market. However, we will start by presenting a short background and to the common Nordic labour market.

2.1. The context of the common Nordic Labour market

Nordic common history goes far back, for example, to the Kalmar Union in the 14th century. And while Finland was a part of Sweden until 1809, Norway and Sweden formed a union until 1905. The Scandinavianism was promoted in the 19th century and followed by a wave of Nordism after the Second World War, based on political and cultural collaboration between the sovereign Nordic countries. It resulted in a range of common Nordic agreements and institutions, such as the Nordic Council (1952), passport free Nordic travels (1952) and the Common Nordic labour market (1954) aimed at supporting and facilitating Nordic cooperation and mobility. The

Helsinki Treaty in the 1960s and the establishment of a Nordic Council of Ministers in 1971 further deepened Nordic collaboration (Hilson, 2008). The aim of the Helsinki Treaty is to maintain and enhance cooperation between the Nordic countries in the legal, cultural, social and economic fields, as well as transport infrastructure and environmental protection. The signatory Nordic countries have also undertaken to consult one another on matters of common interest that are raised in European or other international organisations and conferences.

However, the golden days of Nordic cooperation in the 1950-1960s were followed by a decline in interest among the Nordic countries as other territorial frameworks for international collaboration competed for political attention. Those include the European Community (EC) established in 1958 and later transformed into the European Union, the European Free Trade Association (EFTA) established in 1960. Due to differing geopolitical contexts and historical experiences, the Nordic countries took different paths (Hilson, 2008; Lindroth, 2021); Denmark became a member of the European Union in 1973, while Sweden and Finland did not join until 1995. Norway and Iceland are members of the European Economic Area (EEA). While Åland is a member of the EU, the self-governing territories of Greenland and the Faroe Islands are not members of the EU or EEA. As of 2024, all Nordic countries are also members of NATO. However, while the EU/EES has legislative power, Nordic cooperation through the Helsinki Treaty is intergovernmental and cannot make legally binding decisions for the Nordic countries. Yet another major difference between Nordic cooperation and the EU pertains to the financial resources allocated to such cooperation. The legislative cooperation within the EU has proven effective and has over time replaced some of voluntary Nordic cooperation (Letto-Vanamo and Tamm, 2015), and Nordic agreements have to a large extent been aligned with European legislation, although it has also been possible to make Nordic exceptions (Leino-Sandberg, Leppävirta & Miettinen, 2016).

The Nordic countries are strong economies with a highly educated population and with innovative and competitive business and industry sectors which put the Nordic countries high in international rankings. The interaction between the Nordic countries is strong; they have a long tradition of being trading partners. Despite the EU single market and increased globalisation, the Nordic countries remain among one another's top three trading partners.

The vision adopted by the Nordic Council of Ministers in 2019 for its future work, namely that the Nordic Region will become the most sustainable and integrated region in the world (Nordic Council of Ministers, n.d.), the Nordic way of addressing the financial crises (Borring Olesen & Strang, 2015) and the changing geopolitical situation seems to have sparked increased political interest in the Nordic cooperation (e.g. Regeringen, 2021; Regeringen, 2023; Finnish Government, 2024).

One important aspect is the Scandinavian languages which have common features and can be understood across the national borders to some extent. While Swedish is also an official language in Finland, Åland is Swedish-speaking and Danish is

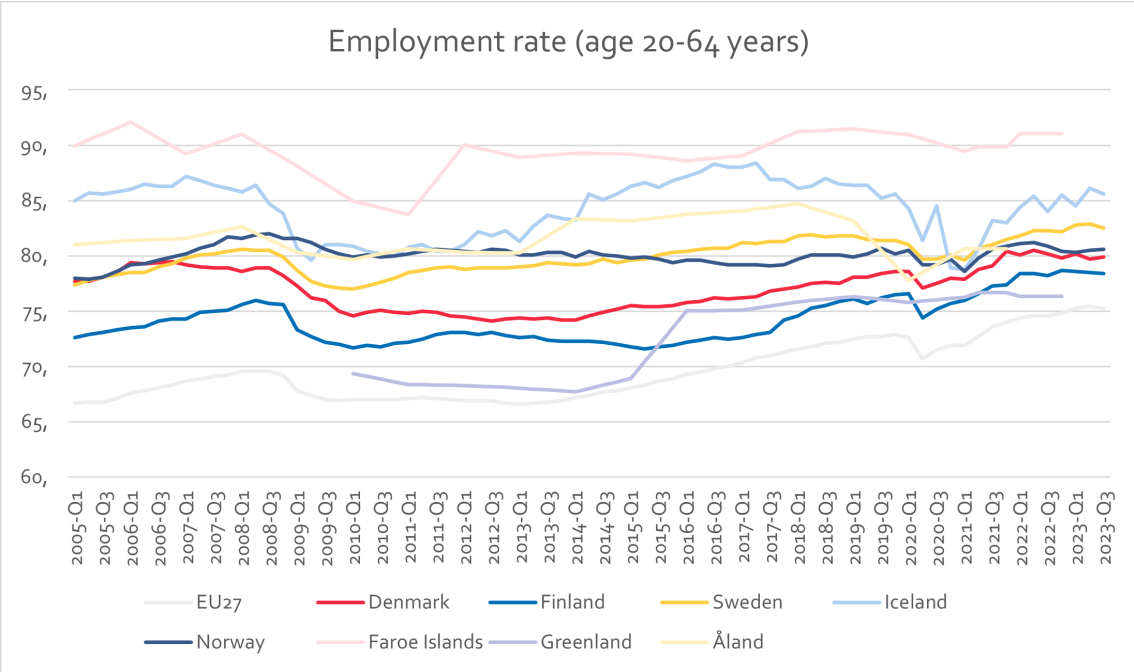
taught in Icelandic schools. The Nordic countries also have many other cultural similarities, not least in terms of how society is organised, which is often referred to as the Nordic model of welfare states (see e.g. Petersen, 2019).

Key features of the Nordic labour market

Development of the Nordic welfare states, based on a common set of values such as equality, universality of political and social rights, and popular participation, has resulted in shared characteristics between the countries. This includes internationally high standards of living, a large public sector mainly financed by taxation, a comprehensive system of cash benefits and services in the case of unemployment, and a labour market model based on a high level of organisation in trade unions and employers' organisations, tripartite agreements between the social partners and collective bargaining. It is also a model that has proven to support stability and structural change (Alsos and Dølvik, 2021; Rolandsson and Ilsøe, 2023).

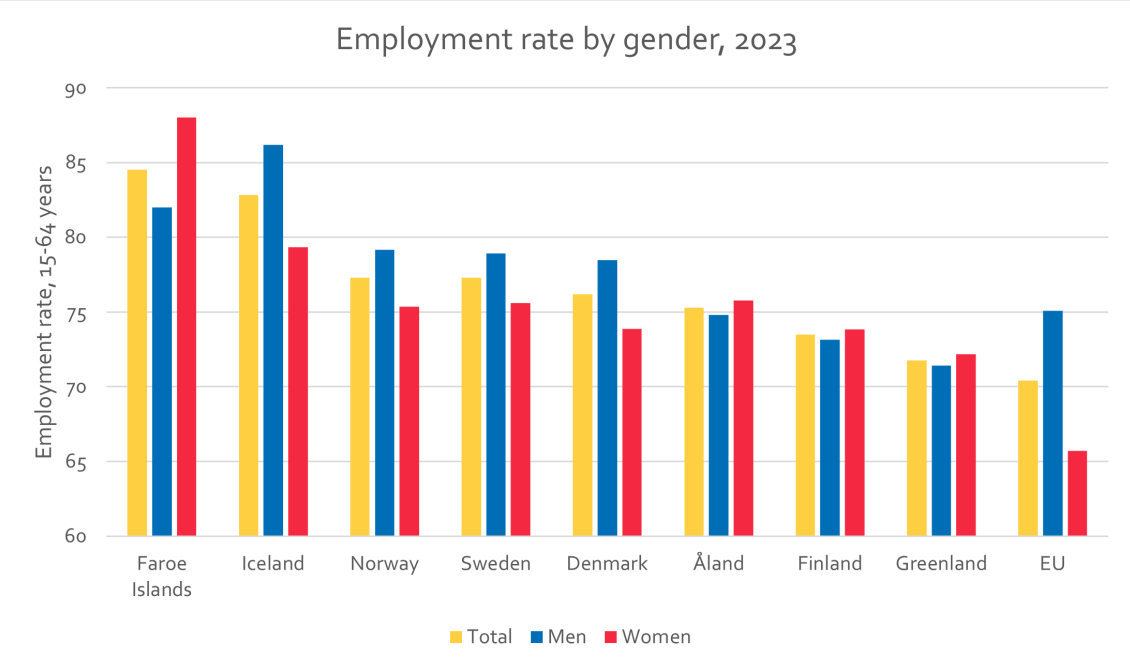
One important element of the Nordic welfare states is high labour market participation, which is also important in terms of sustaining financing of the Nordic welfare state model. Labour market participation has increased during the period examined in this report, partly due to women entering the labour force and increasing numbers of people aged over 65 years working.

Figure 1. Employment rate (20–64 years), Q1 2005–Q3 2023.
Data source: Eurostat and NSIs (Labour Force Survey, except GL and AX).



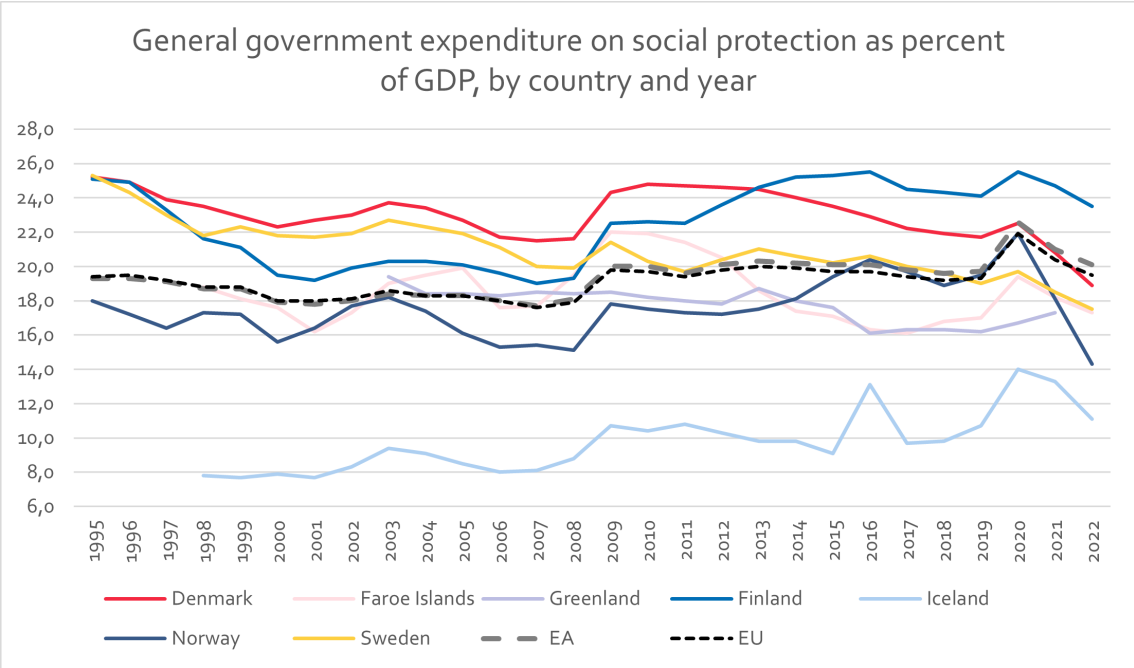
Another key characteristic of the Nordic labour market is a strong gender balance on the labour market. Nonetheless, while Nordic countries are leading in many aspects of gender equality – as is most evident in terms of employment – remaining inequalities such as gender segregation on the labour market seem difficult to tackle (OECD 2018; Andréasson, Randall and Norlén, 2020).

Figure 2. Employment rate by gender 2021 (November).
Data source: Nordic Statistics. Åland: ÅSUB



The successive development of social legislation and measures to support development of the Nordic welfare states started at the turn of the 20th century with social legislation – including insurance for industrial accidents, as well as sickness, pension and unemployment insurance. Nonetheless, while the Nordic countries share basic values and have many shared features in terms of the labour market, they have also developed independently and at different pace, for example as regards policies in the labour market and the financing of the welfare sector. Social expenditures, measured as a share of GDP (which is sometimes used as an indicator for the level of development of the welfare state) increased in all Nordic countries from 1950, and particularly during the period 1970-1980 (Petersen, 2019). However, since 1995, social expenditure as a share of GDP has shown a more diverse pattern across the Nordic territory (Nordic Statistics, 2024).

Figure 3. General government expenditure on social protection as percent of GDP, by country and year.
Source: Nordic Statistics, 2024, https://pxweb.nordicstatistics.org:443/sq/5acc5342-aa8f-4db1-a590-9e753d7c48b7).



The Nordic model in the labour market area, which includes macroeconomic policies aimed at full employment, fostering of collective bargaining and universal welfare systems, including access to re-skilling and up-skilling, has played a significant role in previous transitions and is considered to be a critical factor also for the future of work in the Nordic Region (Alsos and Dølvik, 2021; Jesnes et al. 2020). The Nordic countries show many similarities with regard to promoting active labour market policy, which implies a combination of institutional support and benefits and in-cash government benefits. The institutional set-up and the type and levels of support, however, vary between the Nordic countries (Petersen, 2019; Nordic Health and Welfare Statistics, n.d.).

To address the current challenges of the green transition and its impact on the labour market, various initiatives have been taken at differing levels of government, including at the Nordic level, as well as by the business sector, employers' organisations and trade unions, to map out future educational and skills needs, organise collaboration and implement measures and roadmaps, (Lundgren et al., 2023; Nordic Council of Ministers, n.d.).

A key feature of the Nordic labour market, is the application of collective agreements to regulate wages and working conditions between the social partners (i.e. trade unions, employers' organisations and to a limited extent the government) compared to the European continental law-based model (Kristiansen, 2019). The OECD has suggested that the high economic performance and standards of living

in the Nordic countries can partly be attributed to the system of collective bargaining and strong social partners (Høgedahl, Nergaard and Alsos, 2022).

Despite an internationally downward trend of unionisation, in international comparison the Nordic countries have a high union density: in 2016 the figure was around 65% in Denmark, Finland and Sweden, 84% in Iceland and 52% in Norway. As many as 80-90% of employees are covered by collective bargaining agreements (Logue, 2019). However, within the Nordic Region, there are also substantial differences between the countries with regard to the implementation of collective agreements and aspects such as working conditions, settlement of disputes, systems for financing unemployment insurance and the role of the trade unions (Petersen, 2019; Høgedahl, Nergaard and Alsos, 2022). As a result of European Union membership and implementation of EU regulations such as employment law, in recent years European courts and EU legislation has however become more prominent in the Nordic countries (and as members of the European Economic Area, Norway and Iceland are bound by the same EU legislation as the EU members Denmark, Finland and Sweden) (Kristiansen, 2019).

Nordic agreements and institutions – paving the way for a joint labour market

Nordic cooperation is based on several common agreements and declarations. The Helsinki Treaty forms the basis for Nordic cooperation in the Nordic Council and Nordic Council of Ministers. It was signed by Denmark, Finland, Iceland, Norway and Sweden in 1962 and has since been amended several times, with the latest amendments being in 1995 (Nordic Council of Ministers, n.d.)

The Treaty mainly covers legal, cultural, economic and social cooperation. That includes cooperation on the labour market, transport, communications and environmental protection. While all the articles of the Treaty aim to enhance Nordic cooperation and increase mobility and interaction in various areas – for example through the removal of barriers to trade and consultation on economic policy and cross-border transport – there are two articles in particular relating to mobility on the common labour market:

"The High Contracting Parties shall seek to preserve and develop further the common Nordic labour market in accordance with the guidelines drawn up in previous Agreements. Employment services and vocational guidance shall be co-ordinated. There shall be a free exchange of trainees (...)". (Article 14, Helsinki Treaty).

Article 15 concerns social benefits for citizens residing in another Nordic country:
"The High Contracting Parties shall endeavour to ensure that the citizens of each Nordic country, when resident in another Nordic country, shall, as far as possible, enjoy the same social benefits as are provided for the citizens of the country of residence." (Article 15, Helsinki Treaty).

To complement the Helsinki Treaty and further support Nordic integration, other agreements and joint declarations have been adopted, such as the agreement on a

common Nordic labour market (1954) (which will be described in more detail below), passport-free travel (1952) and the Nordic Passport Control Agreement (1958), the Nordic convention on social security (1955) the agreements on the legal status of Nordic institutions and their staff (1987/1988) and the right to use another Nordic language in the Language Convention (1981) (Nordic Council of Ministers, n.d.).

The first agreement on a common Nordic labour market was signed in 1954. The current agreement was updated in 1982 and includes a protocol signed by the five Nordic countries (Nordic Council of Ministers, n.d.). Under the agreement, nationals in the Nordic countries have the fundamental right to take up a job in another Nordic country. The preamble states, inter alia, that the countries shall support a balanced labour market and equality in working life between women and men. The first articles state the right to work in another Nordic country without a work permit and the obligation to treat other Nordic nationals the same way as national employees. National public employment services shall support persons seeking employment in another Nordic country, as well as employers seeking employees from another Nordic country. Information between the countries on employment, vacancies, unemployment, forecasts and anticipated trends on the labour market, information on planned measures to maintain or achieve full employment and information on working and living conditions shall be exchanged by the national authorities regularly. Furthermore, the authorities shall provide information on regional and national development plans that could imply major changes in the demand for labour from another Nordic country (Article 4, Agreement on Common Labour Market).

To further support a common Nordic labour market, that agreement was followed by other conventions and declarations from the 1960s and onwards, such as on validation of credentials for public sector occupations in the field of healthcare (Pedersen, Røed & Wadensjö, 2008), the Nordic agreement on taxation (1996), and in the 2020s declarations with regard to changing labour relations and life-long learning in response to digitalisation and the green transition (Nordic Council of Ministers, n.d.)

To implement the agreement, a Nordic Labour Market Committee was appointed. According to the agreement, the committee shall be constituted of two representatives from each country and report to the Nordic Council of Ministers for Labour. The main function of the committee is to observe trends on the Nordic labour market and discuss labour market policy measures, submit proposals for measures of common Nordic interest, follow migration patterns between the Nordic countries and suggest policy measures for cooperation between the national labour market authorities. Furthermore, it shall support exchange of information, promote Nordic comparability of national labour market statistics and maintain contact between the social partners in the Nordic Region.

The Nordic Council of Ministers for Labour (MR-A) outlines the priorities for the cooperation in the Nordic Councils of Ministers in the field of the labour market. Taking the previously mentioned Nordic vision as a point of departure, the program for the period 2020-2024 focuses on long term challenges related to technological

developments and digitalisation and the green transition with the aim of sharing knowledge, best practice and contributing to development of labour market policies in the Nordic countries. The Nordic Councils of Ministers for Labour is supported by the Nordic Council of Ministers Committee of Senior Officials for Labour (EK-A) which observe trends and discuss labour market policy measures, and by the previously mentioned Nordic Labour Market Committee. Finally, there is also an informal Nordic cooperation between the national public labour authorities in the Nordic countries.

Nordic organisations and institutions supporting the common labour market

Apart from joint Nordic institutions targeting Nordic labour market issues such as the previously mentioned Nordic Council of Ministers for Labour, the Committee of Senior Officials for Labour, and the Nordic Labour Market Committee, Nordic cooperation benefits from several other institutions aimed at facilitating interaction and mobility across the Nordic borders, of which a few of the most important are mentioned here.

The Nordic Council, the official body for inter-parliamentary cooperation between the Nordic countries was established in 1952. With its 87 members, its advisory role to the Nordic Council of Ministers and the right to hear the national Nordic governments, the issues of Nordic mobility and integration in various fields are recurrent themes on the agenda of the Nordic Council.

The Freedom of Movement Council (Gränshinderrådet) is composed of ten members representing the Nordic countries and self-governing territories, the secretariat of the Nordic Council of Ministers and the Nordic Council. It was established in 2014 with the aim of identifying and helping to eliminate cross-border mobility obstacles. It currently focuses on five areas; digitalisation, validation of skills and education, cross-border statistics, census and tax-related cross-border barriers. An analysis of how the council's work can be further improved is expected to be presented and further discussed by the Nordic Council of Ministers in the second half of 2024 (Nordiska ministerrådet, n.d.).

The Freedom of Movement Council administers a database of cross-border obstacles, which are reported on by Info Norden and the cross-border information services, offices serving to share information and assist individuals and firms that wish to study, work or do business in another Nordic country. According to the latest annual report from the Freedom of Movement Council, five cross-border obstacles in different areas were resolved in 2023 (Nordiska ministerrådet, 2024), and further analyses of obstacles related to taxation (which is often mentioned as a key area for increasing cross-border mobility) have been conducted (Lundgren & Rasborg, 2023).

Nordic Statistics is a database with statistics from the national statistical offices.

It is regularly updated in collaboration between the Nordic countries and the Nordic medical and social statistical committee (Nomesco-Nososoco), which is a permanent committee under the Nordic Council of Ministers and the Nordic Committee on Social Policy. It was set up to coordinate the social statistics of the Nordic countries and to make comparative analyses and descriptions of the scope and content of social welfare measures. The Committee is composed of three representatives from each country, as well as a number of substitutes.

While Nordplus co-finances Nordic exchange and cooperation in the field of education, Nordjobb works to increase mobility and knowledge about Nordic languages and culture by providing information and supporting young people taking up a job in another Nordic country.

However, EU-funded institutions and initiatives aimed at removing barriers to trade and free movement, such as Solvit and b-solutions, and the European Labour Authority (ELA) also contribute to solving cross-border obstacles between the Nordic countries (Europeiska kommissionen, n.d.; Association of European Border Regions, n.d; European Labour Authority, n.d.). In 2022, the Swedish National Board of Trade identified five key areas for further Nordic cooperation to remove barriers, namely mutual recognition of goods, European standardisation, implementation of the EU Services Directive and of EU law, and increased cooperation between the national Solvit organisations, including regular exchange of information with the Nordic Freedom of Movement Council (National Board of Trade Sweden, 2022).

While the European Labour Authority (ELA) works to enable businesses and citizens to reap the benefits of the internal market by ensuring the enforcement of EU rules regarding labour mobility and the coordination of social security, the European Employment Services (EURES) is a network of employment services in the EU and EES area that works to facilitate free movement by providing information and employment support services to employers and workers across Europe (European Labour Authority, n.d.).

Finally, in this context should also be mentioned the Nordic Council of Ministers' vision which was adopted in 2019, aiming at becoming the most integrated and sustainable region in the world by creating a green, competitive and socially sustainable Nordic Region in 2030. The vision guides the work of the institutions of the Nordic Council of Ministers. It is frequently referred to by other organisations and stakeholders involved in Nordic cooperation, and its progress is evaluated on a yearly basis, including indicators pertaining to the common Nordic labour market focusing on migration, commuting and international trade (Nordic Council of Ministers, 2023).

To sum up, despite differences between the Nordic countries in the labour market field, they share many key features and are supported by a rich array of institutions and initiatives, which – as part of their agenda or as their chief mission – aim to facilitate the mobility of workers and integration of the Nordic labour market.

2.2. Migration in the Nordic labour market 1954-2024

In this section we will look into migration between the Nordic countries. We will consider both migration flows and migration stocks, starting with migration flows.

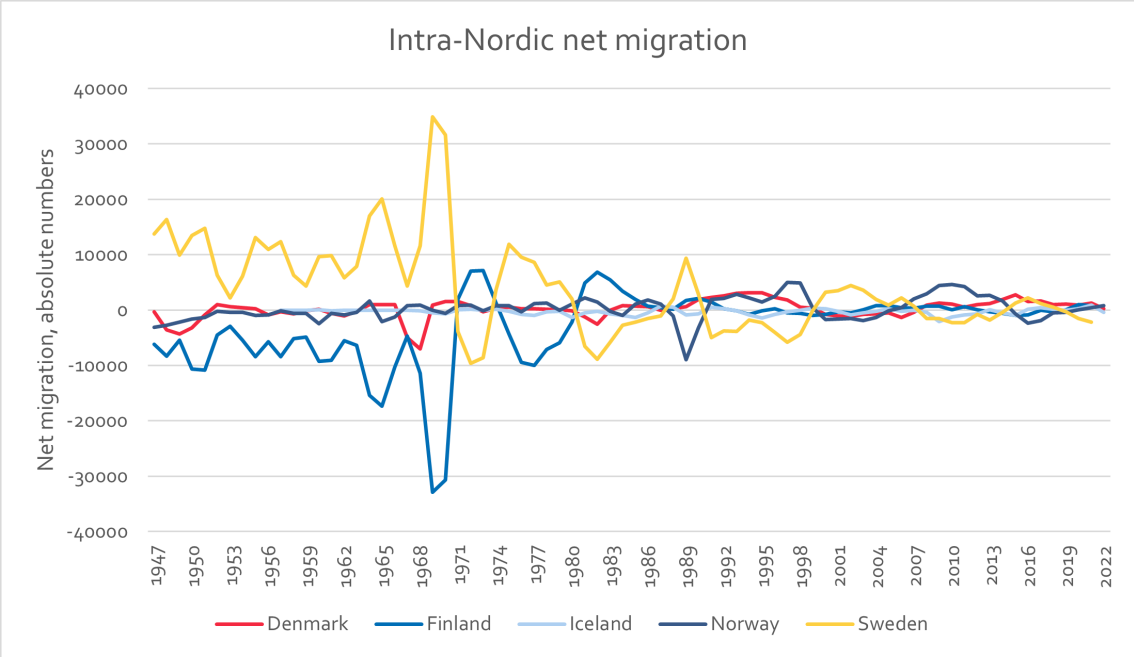
Migration flows between the Nordic countries 1954-2024

In the 19th and 20th centuries, the Nordic countries were countries characterised by emigration, with overseas migration to the US in large part. That changed after the Second World War. In particular, Sweden – which did not take part in the war – took in refugees from the other Nordic countries as well as from the Baltic countries. The economic growth created a large demand for labour, especially in Sweden. That, together with the free mobility between the Nordic countries that was formalised in 1954, opened the doors to labour migration (Pedersen, Røed & Wadensjö, 2008).

Figure 4 shows intra-Nordic net migration between 1947 and 2022, i.e. the net sum of people migrating to another Nordic country minus those emigrating to another Nordic country.[3] It shows that intra-Nordic migration was most intense in the 1950s to the 1970s and that migration between Finland and Sweden stands out relative to the migration flows across the other Nordic countries. It may also be noted that over the whole period only Sweden and Norway had net in-migration.

3. The availability of data varies between countries, with data available in Sweden from 1947, in Norway from 1957 and in Denmark from 1980. In the other countries the data are available from 1990. However, since out-migration to one country is in-migration to another, the Swedish, Norwegian and Danish data could also be used for the other countries. Data for the self-governing territories is not always accessible and has been displayed when available.

Figure 4. Intra-Nordic net migration 1947-2022.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)



Sweden

Figure 5. Immigration to Sweden from the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)

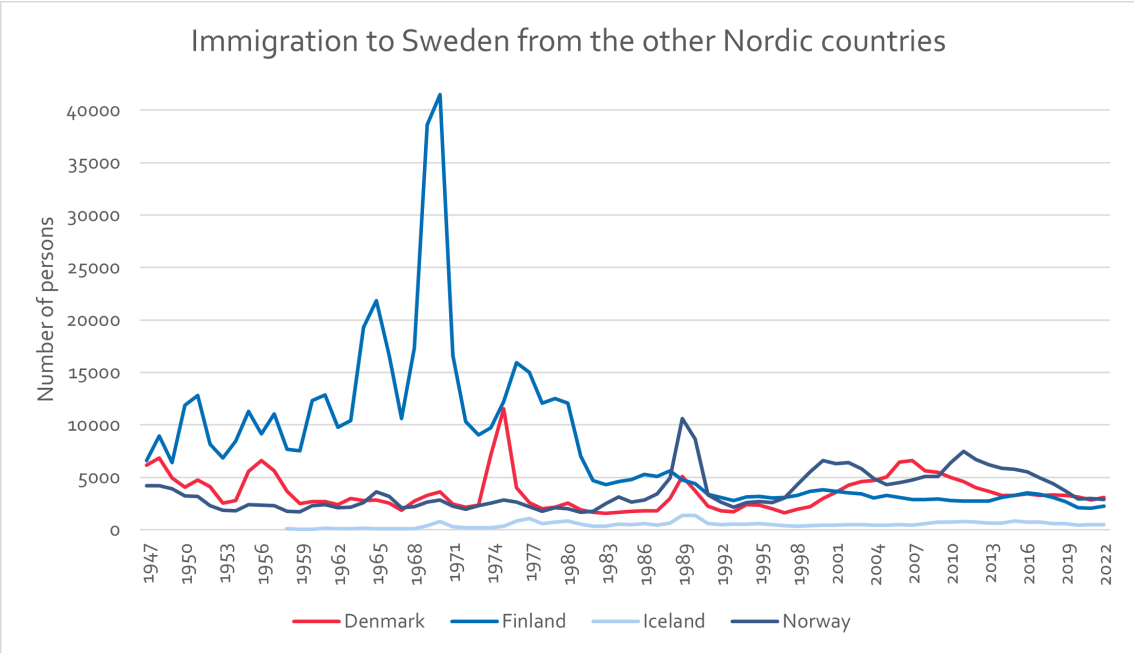
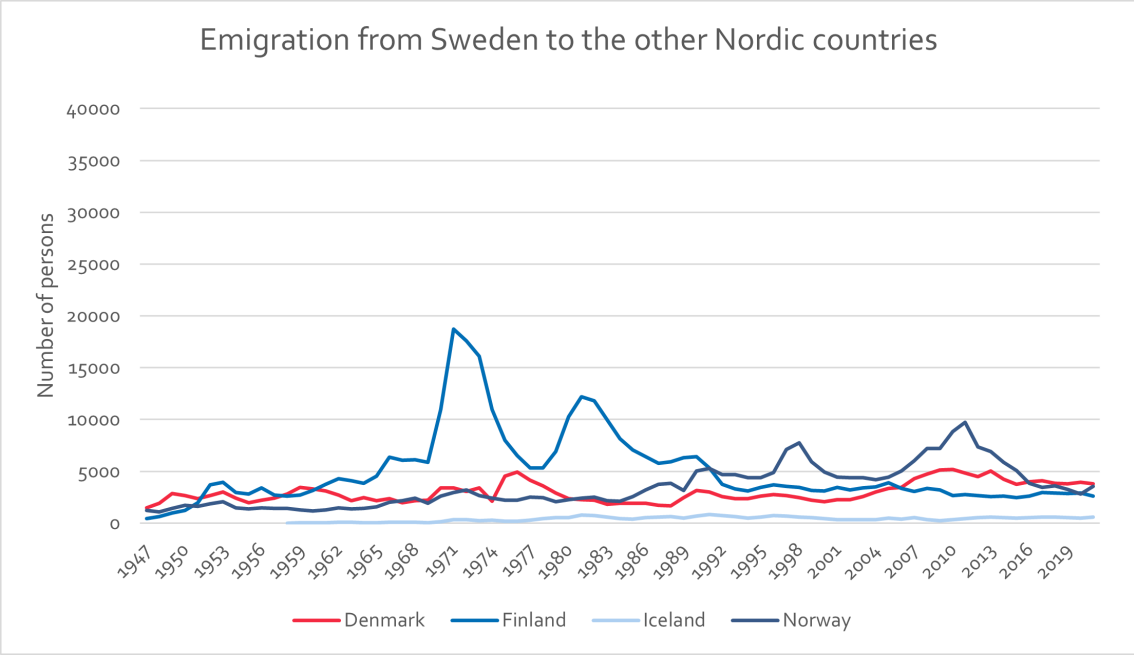


Figure 6. Emigration from Sweden to the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)



As mentioned previously, the Swedish economy grew rapidly after the war and there was a need for more workers, with many immigrating from southern Europe and from the Nordic countries, especially Finland. Since free movement was in place even before 1954 in practice, the data do not show any immediate effects of the free mobility agreement.

Immigration remained high in the 1960s. However, at the end of the decade, there was political will to have stronger control of migration. From 1967, citizens outside the Nordic Region were no longer allowed to apply for work permits while in Sweden and employers now increasingly turned to Finland to find workers. Immigration from Finland peaked in 1969 and 1970 at around 40,000 people per year.[4] The high migration was however also seen as a problem and the Swedish government decided that employers would have to pay for up to 240 hours of education for non-Scandinavian speakers. In 1973, it was also agreed that Swedish employers should stop recruiting directly, but instead go through employment offices. That may have been one factor that decreased migration, but other factors also played a part, such as the slowing economy in Sweden while the Finnish economy was catching up. Although immigration from Finland never returned to the high level of the early 1970s, it was still fairly high throughout the 1970s and early 1980s (Pedersen, Røed & Wadensjö, 2008).

4. Part of the peak in 1969 and 1970 might be explained by a change in the registration of Nordic migration, which means that some of those who were registered in those years might have immigrated earlier (Pedersen, Røed & Wadensjö, 2008).

Besides migration from Finland, immigration from Denmark in 1975 stands out. It was mainly caused by increased unemployment in Denmark after the oil crisis. (Pedersen, Røed & Wadensjö, 2008). In 1989, migration from Norway increased, from fewer than 5,000 people in 1988 to over 10,000 in 1989, but then decreased to around 3,000 people from 1991. Explanations for the increase include a downturn in the Norwegian economy at the end of the 1980s, a time when the Swedish economy was still booming (Johansson, Persson & Rissander, 1997).

From 1998, immigration from Norway to Sweden increased again and Norway has since been the country accounting for the highest number of immigrants with a high share of Swedish citizens, indicating that migration from Norway is driven by re-migration to a large extent.

Danish immigration to Sweden increased in the mid-00s after the opening of the Öresund Bridge, peaking in 2007 at 6,615 immigrants from Denmark, of which less than 20% was Swedish re-migration. One explanation for the Danish migration was more restrictive rules for family reunification for international refugees in Denmark from 2002 compared to Sweden, meaning that some Danes moved to Sweden to be able to reunite with their partner, i.e. so-called "love refugees" (Pedersen, Røed & Wadensjö, 2008; Bratu, Dahlberg & Nikolka, 2022).

While Sweden has been a net receiver of migrants from the other Nordic countries since 1954, the largest part of emigration has been re-migration of people who immigrated earlier, such as in the 1970s and 1980s when many re-migrated to Finland. In fact, re-migration to Finland makes up the second largest migration flow since 1954. In general, a lot of intra-Nordic mobility has been temporary and a high share have re-migrated. (Pedersen, Røed & Wadensjö, 2008; Gravesen et al., 2003).

Norway

Figure 7: Immigration to Norway from the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)

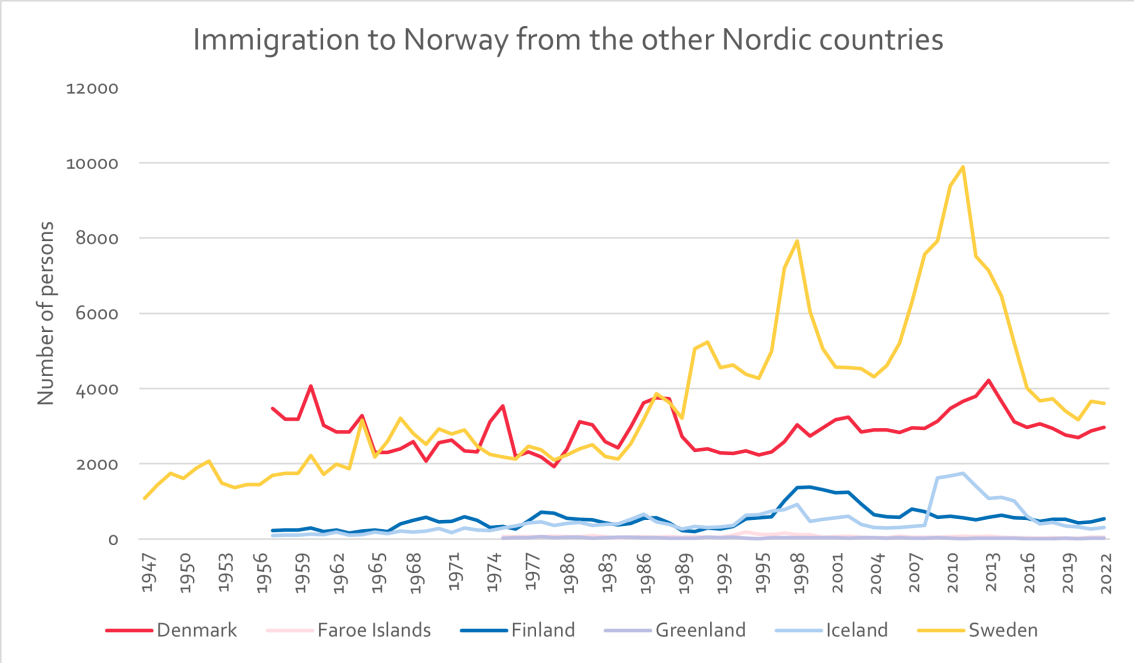
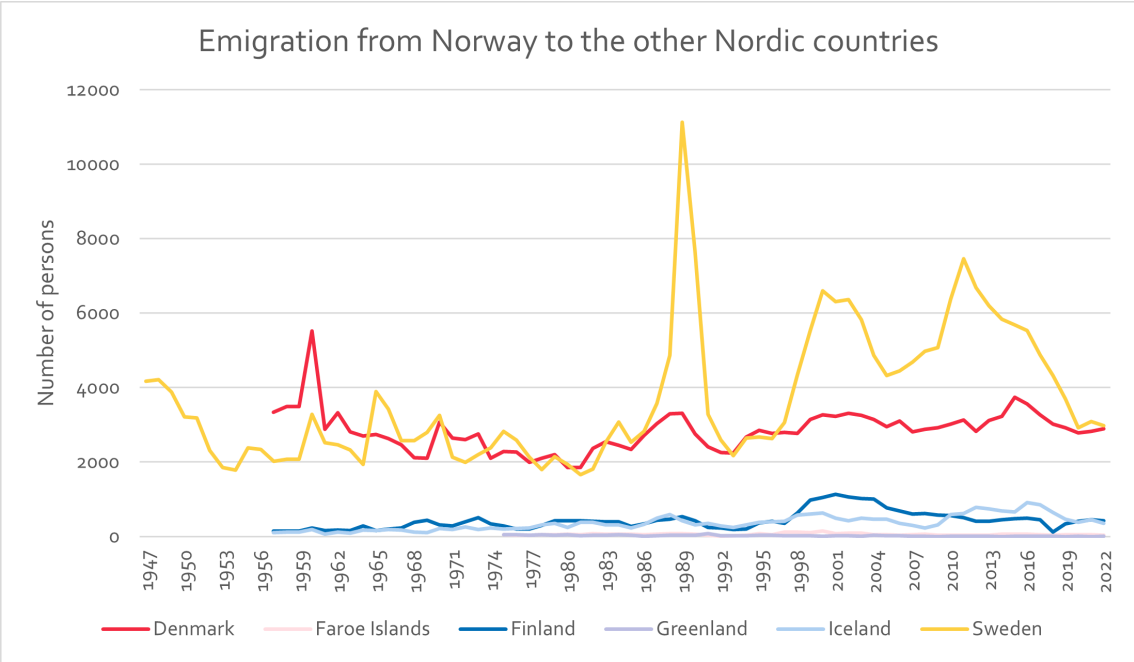


Figure 8: Emigration from Norway to the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)



Intra-Nordic migration patterns in Norway have been fairly stable over the years, with some exceptions, which mainly concern migration to and from Sweden. The biggest peak was in 1989 when over 11,000 people migrated to Sweden. As explained earlier, that coincided with a downturn in the Norwegian economy and many of those soon moved back to Norway. Of the migration from Sweden in 1990 and 1991, more than 70% were Norwegian citizens moving back to Norway.

Two other peaks of Swedish immigration to Norway, in 1997 and 2010-2011, were also followed by two waves of emigration, indicating that most people that immigrate only stay for a short period. Since 2013 there has been a steep decline in immigration from Sweden to Norway. That decline is also apparent in the number of Swedes that are working in Norway. The number peaked in 2013 and afterwards decreased somewhat until the pandemic. Since the pandemic the number of Swedes working in Norway has increased again.

Danish emigration and immigration to Norway is the second largest group and has been remarkably stable over time, with immigration ranging from 2,000 to 4,000 people per year and emigration of around 2,000 to 3,000 people for the majority of the time period.

Denmark

Figure 9: Immigration to Denmark from the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)

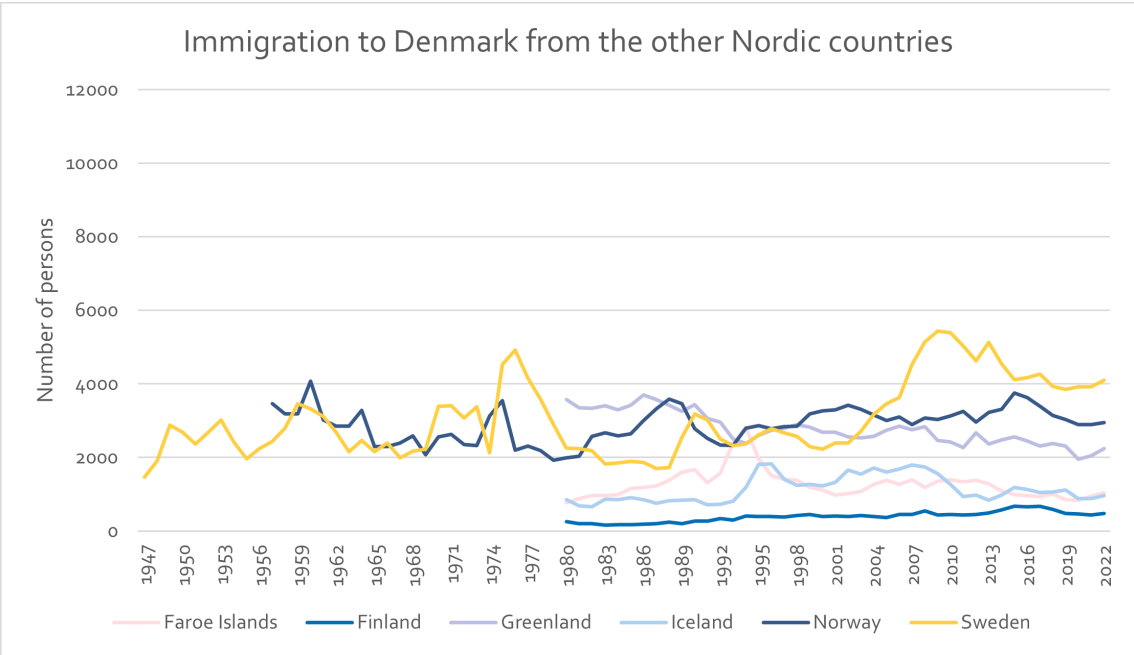
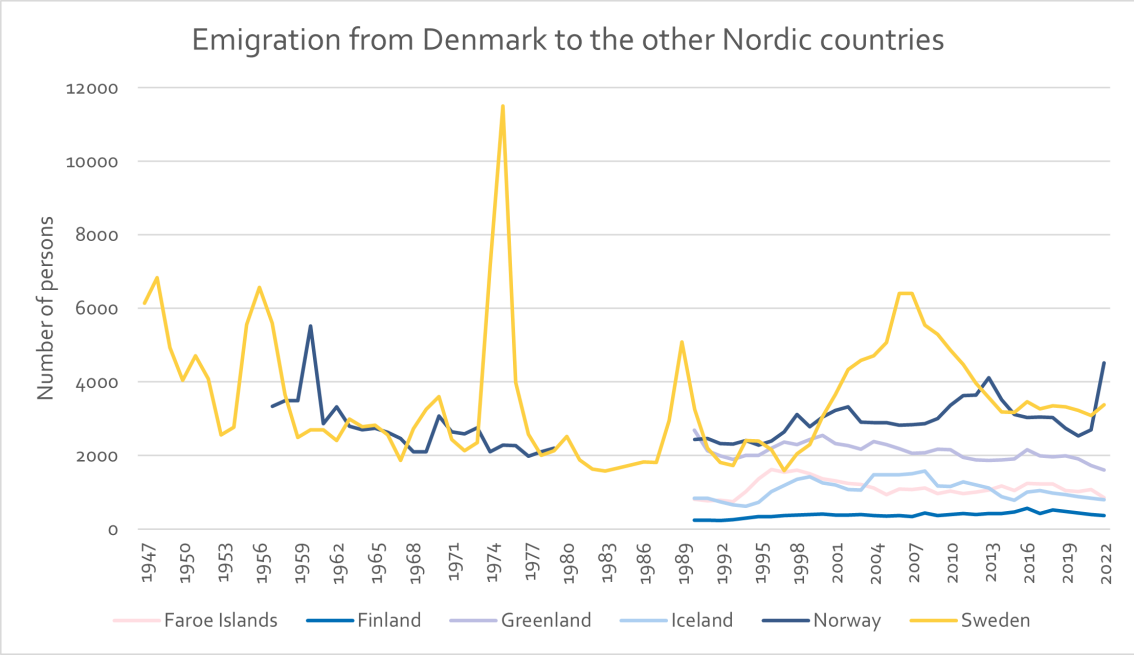


Figure 10: Emigration from Denmark to the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)



The biggest migration flow from Denmark was the emigration to Sweden in 1975, when almost 12,000 people emigrated.[5] That migration was driven by a downturn in the economy during the oil crisis. Most of the people who migrated to Sweden later returned to Denmark (Pedersen, Røed & Wadensjö, 2008). There was also a peak in the emigration to Sweden in the mid 00s. As mentioned earlier, part of the explanation may lie in the changed rules for family reunification, which led people to move to Sweden. (Bratu, Dahlberg & Nikolka, 2022). The subsequent peak in immigration from Sweden was mainly driven by return migration.

Norway accounts for the second largest group of migrants to and from Denmark. However, what mainly stands out in Denmark is the high immigration from Greenland and, to a lesser extent, from the Faroe Islands. Although the figure has decreased somewhat over time, around 2,000 to 3,000 people move from Greenland to Denmark annually. Around 1,000 per year immigrate from the Faroe Islands. There was a clear peak in 1993-1995; in 1994 almost 3,000 people immigrated to Denmark, amounting for more than 6% of the whole Faroese population. That immigration was caused by an economic decline in the Faroe Islands, with mainly young people emigrating (Minorityrights, n.d.).

5. For Denmark we only have full coverage of data on immigration from 1980 and data on emigration from 1990. The data from Norway and Sweden have been used to look at the migration patterns from these countries over a longer time period. Because of the smaller flows the picture looks more scattered than for Sweden, Finland and Norway.

Finland

Figure 11: Immigration to Finland from the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)

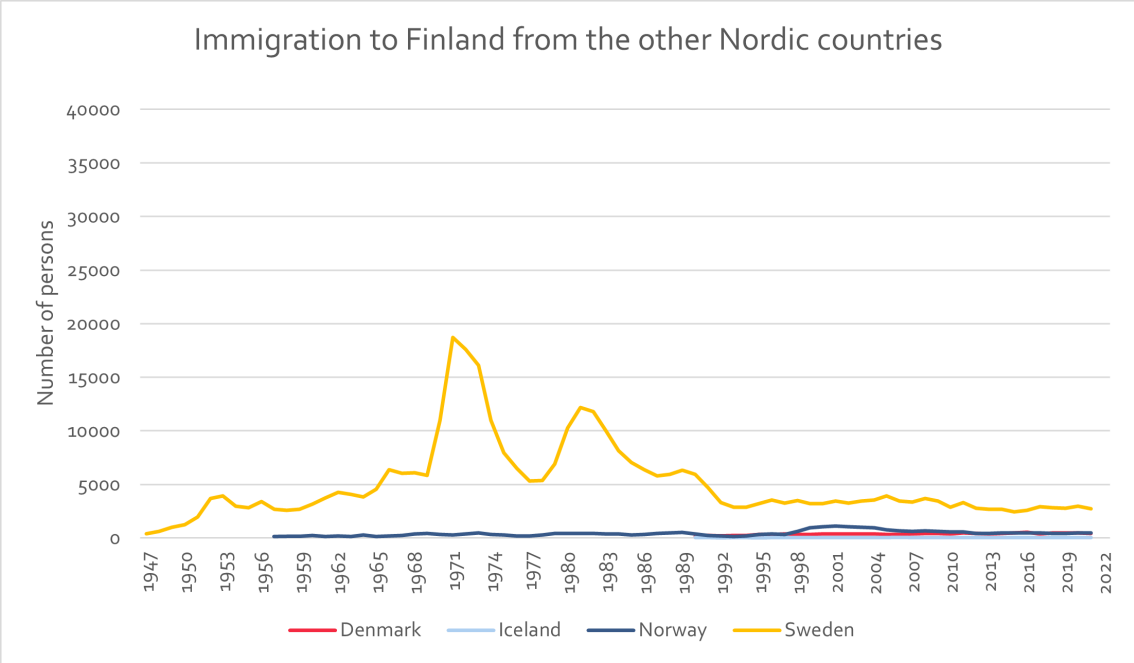
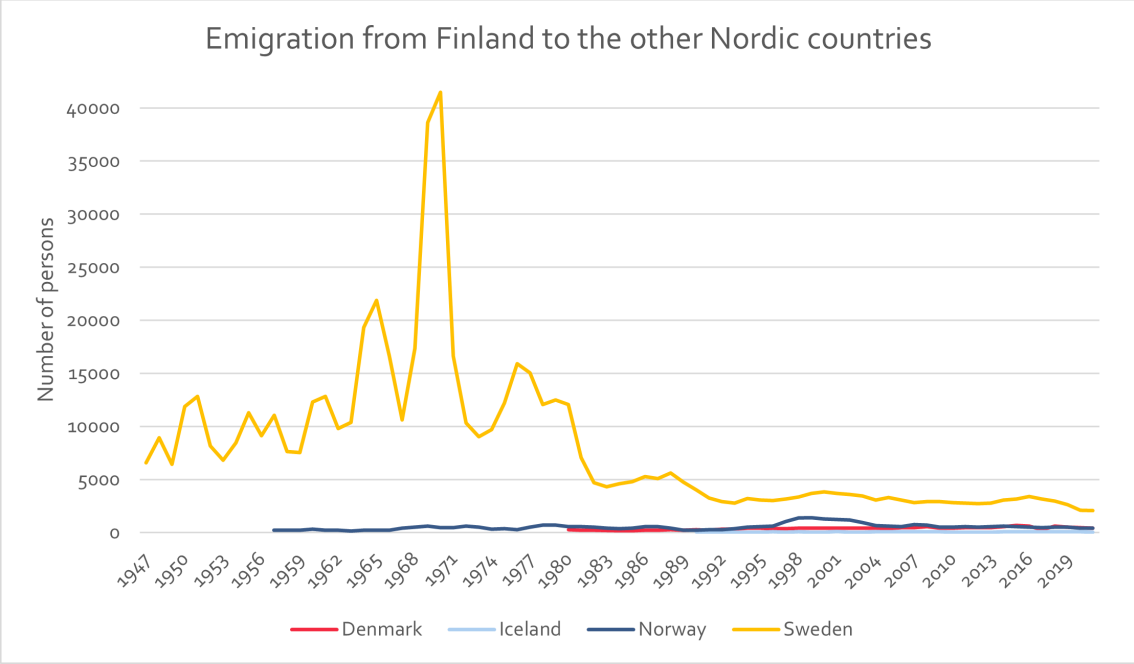


Figure 12: Emigration from Finland to the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)



Intra-Nordic migration to and from Finland mainly concerns emigration to Sweden and return migration from Sweden. Emigration from Finland to Sweden was fairly high even before the agreement on the common Nordic labour market in 1954. As mentioned previously, the strong economy and new policies requiring a work permit for non-Nordic citizens in Sweden in 1967 led to even greater demand for labour from Finland, and the emigration peaked in the end of the 1960s and early 1970s with more than 40, 000 people registered. The emigration remained high until the early 1980s, and has since stabilised at around 3, 000 people per year.

Out-migration from Finland is indeed a mirror of in-migration since a majority of those who out-migrated to Sweden returned to Finland. Since 1983 Finland has had a positive intra-Nordic net migration of 21,000 people.

Iceland

Figure 13: Immigration to Iceland from the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)

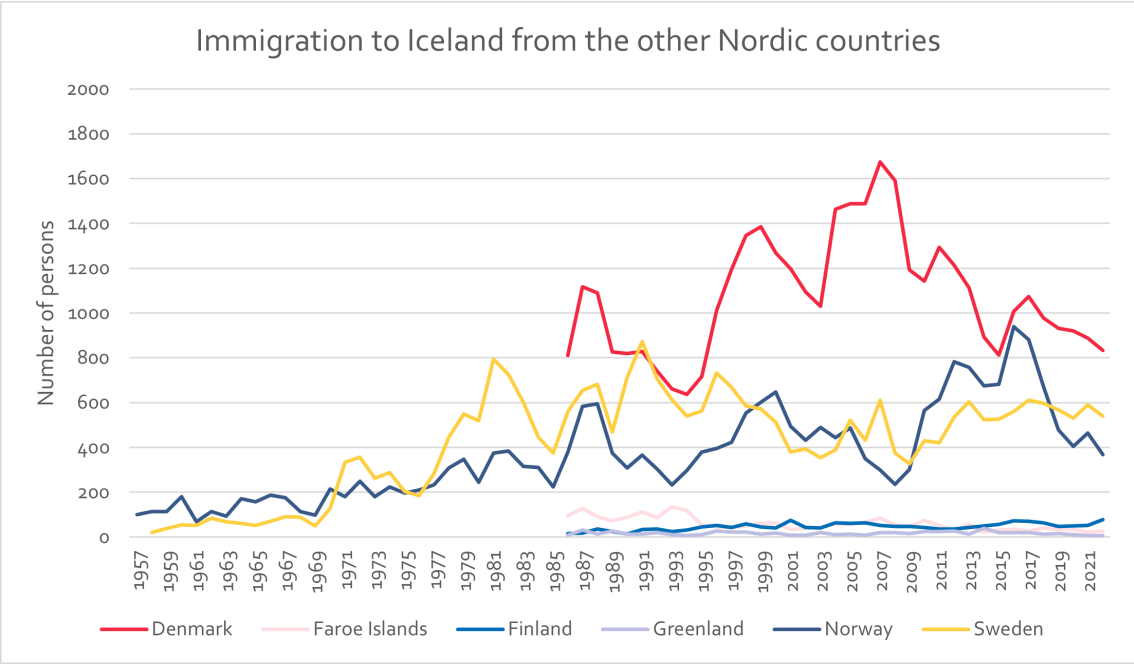
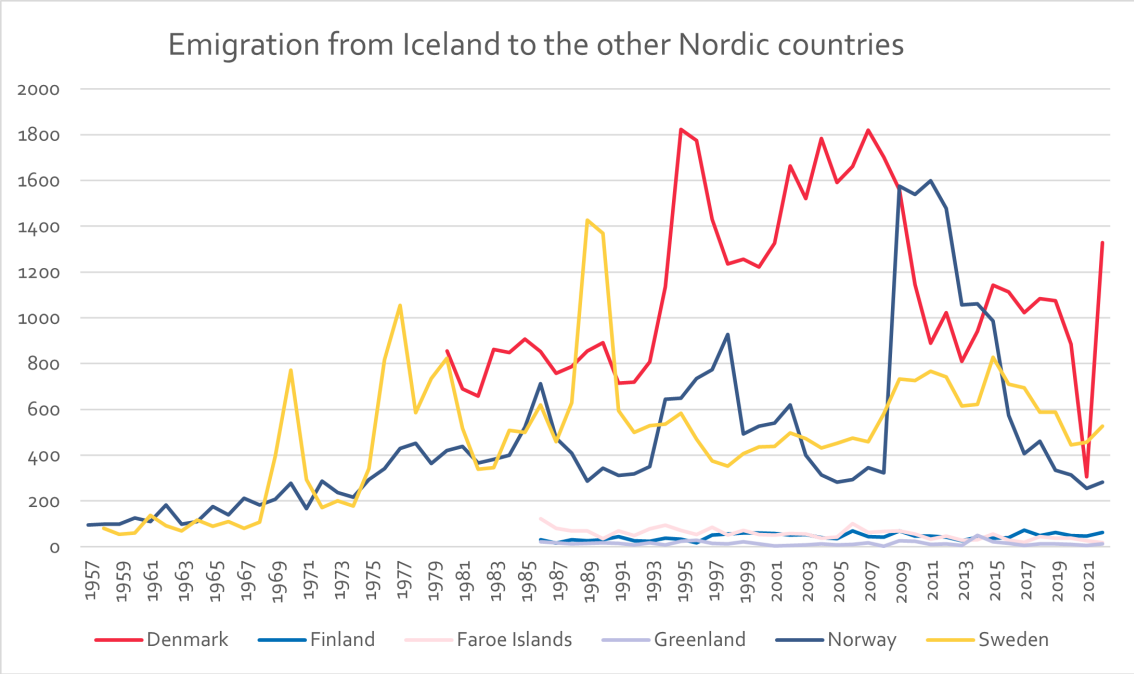


Figure 14: Emigration from Iceland to the other Nordic countries.
Data source: Own calculations based on Nordic Statistics (from 1990) and NSIs (before 1990)



While the other Nordic countries show fairly stable patterns with a few peaks, Icelandic migration patterns are fairly volatile, with migration to Denmark, Sweden and Norway. Migration to Sweden occurred in waves during the 60s, 70s and 80s, peaking in 1989. The largest numbers of immigrants to Iceland come from Denmark. Denmark has also been a popular country for emigration from Iceland and in the 1990s until the financial crisis of 2008, by far the highest number of people emigrated to Denmark. Iceland was hit hard by the financial crisis and there was a big shift in emigration to Norway in 2009. 2009 was also the year with the biggest net out-migration (around 5,000 people) from Iceland since 1887.

A clear majority of immigration to Iceland consists of re-migration; as many as around 80% of those who immigrated to Iceland from Norway, Denmark and Sweden were Icelandic citizens.

Why do Nordic migrants move?

Compared to the extensive research on migration from economically disadvantaged nations to affluent nations, there has been a lack of research on the drivers of emigration from economically prosperous and politically stable countries. That means that research questions such as whether emigration from wealthy nations is voluntary or involuntary, incentivised by better economic opportunities abroad or driven by personal aspirations remain largely unanswered.

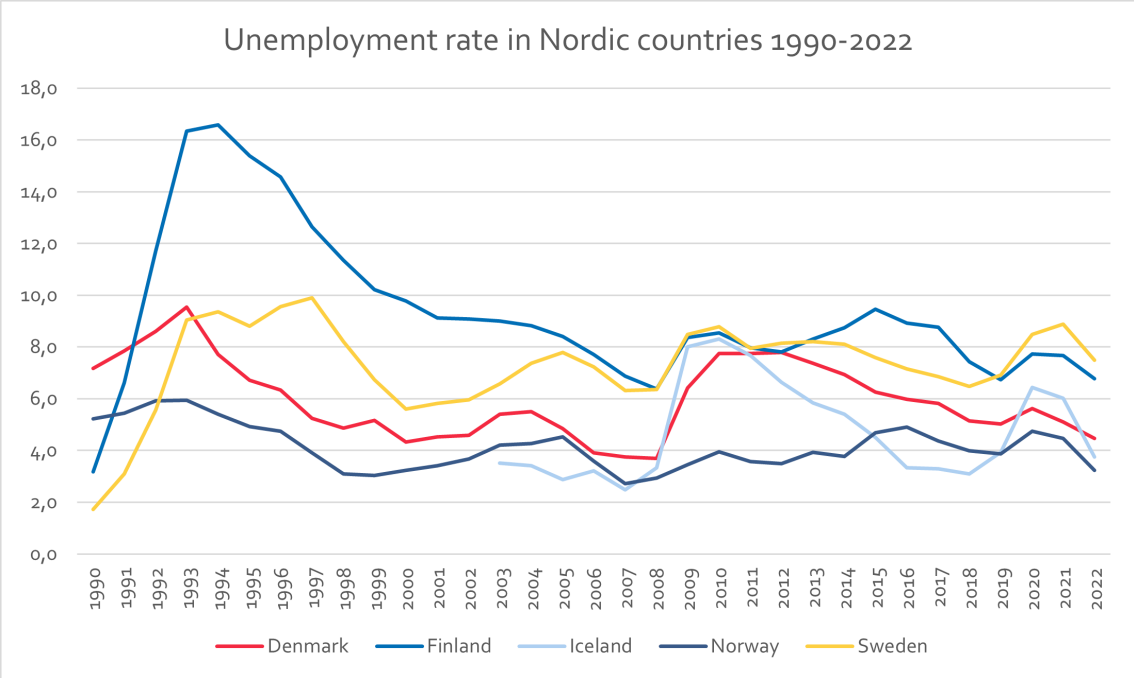
Yet the growing body of literature demonstrates that highly skilled individuals are more likely to emigrate from rich nations, including studies in Sweden and Denmark

(Birgier et al., 2022; Borjas et al., 2019; Erlinghagen et al., 2021; Haberfeld et al., 2020; Monti, 2020; Rosso, 2019; Weber & Saarela, 2019). Previous studies on cross-Nordic migration indicate that emigration tends to be temporary (Jensen & Pedersen, 2007; Monti, 2020; Weber & Saarela, 2019), predominantly comprising young individuals (Birgier et al., 2022; Fuentes Monti & Tønnessen, 2023; Koikkalainen et al., 2016; Nekby, 2006) and that economic circumstances alone are not sufficient explanation for such migration flows, with other factors also being important (Birgier et al., 2022; Fuentes Monti & Tønnessen, 2023; Hedberg & Kepsu, 2003, 2003; Weber & Saarela, 2019, 2023). Moreover, the costs and benefits of migration and re-migration need to be taken into account (McCann et al., 2010; Tervonen, 2015; Vadean & Piracha, 2010; Weber & Saarela, 2019).

Before delving further into migration flows across the Nordic Region, Figure 15 illustrates unemployment rates among Nordic countries from 1990 to 2022. It is evident that, in the majority of years, Norway has consistently had lower unemployment rates than all other Nordic countries, maintaining remarkable stability ranging from 2.7 to 5.2%. While previous studies focusing on the years 1960-2003 identify Sweden as the main recipient of migration due to its size and other factors (Pedersen et al., 2008), Figure 15 reveals that Norway had a much more stable labour market in the period 1990-2022. It is noteworthy that during the pre-crisis years of the 1990s (between 1990 and 1991), Sweden and Finland experienced remarkable low unemployment rates. In the case of Finland, following the collapse of the Soviet Union, a significant influx of immigrants coincided with the economic crisis of the 1990s, resulting in extremely high levels of unemployment, peaking at 16.6% in 1994 (Pedersen et al., 2008).

Furthermore, the impact of the 2008 economic crisis on unemployment levels is evident across all countries except Norway. The most pronounced effect is observed in Iceland, where unemployment more than doubled from under 3% to 8.5% in just one year. However, the effect is also marked in Denmark, Finland and Sweden.

Figure 15. The unemployment rate in the Nordic countries 1990-2022.
Source: OECD (2024) Infra-annual Labour Statistics: Monthly Unemployment Rates (Database)



Figures 16-20 illustrate the immigration and emigration patterns of Nordic migrants across various Nordic labour markets, juxtaposed with the respective unemployment rates, between 1990 to 2022. As discussed in the preceding section, immigration and emigration flows of Nordic migrants exhibit significant variability over time in all Nordic countries, but two main trends emerge.

First, during periods of economic crisis, such as the economic downturn of the 1990s – marked by elevated unemployment rates – overall migration flows, both inbound and outbound, among Nordic countries tend to diminish in the initial stage relative to pre-crisis levels, with emigration rising as the downturn persists. That trend is particularly conspicuous in Sweden, Norway and Finland. Second, distinct cross-border migration patterns can be observed during specific intervals.

As mentioned earlier, previous studies on migration in the Nordic Region also highlight the temporary nature of migration, with individuals often migrating for relatively short periods before returning. For example, between 2008 and 2012, emigration from Sweden to Norway increased, coinciding with elevated unemployment levels in Sweden and other Nordic nations, contrasting with Norway's comparatively low unemployment rate.

When examining the Norwegian patterns, two key observations present themselves. First, emigration and immigration flows largely reflect trends observed in Sweden. In Norway, immigration nearly doubled from 2004 to 2011, primarily attributed to emigration from Sweden, which significantly contributed to that surge. During that period, Sweden experienced fluctuating unemployment rates of

between 6 to 8%, while Norway's unemployment rate ranged from 2.7 to 4.5%. Second, following each substantial influx of immigrants, there is a subsequent surge in emigration within two to three years, with a considerable proportion of individuals returning to their home country. Those patterns are most pronounced during the periods from 1995 to 2000 and from 2007 to 2011. Post-2008, Norway consistently maintains substantially lower unemployment rates, averaging between 3-4%, than other Nordic nations, which often experience rates twice as high. That divergence may partially account for the marked influx of migrants from other Nordic countries to Norway during this period.

Finally, a striking example of the impact of economic downturn is observed in the case of Iceland. Between 2008 and 2009, unemployment more than doubled, leading to a nearly 50% increase in emigration to other Nordic countries (while emigration to other destinations increased by just 2%). Additionally, in 2009, immigration to Iceland from other Nordic countries dropped to less than 2,000 individuals (compared to over 2,700 in 2007).

Figure 16: Immigration and emigration flows between Sweden and other Nordic countries, alongside the unemployment rate.
Source: Nordic Statistics data and OECD (2024) Infra-annual Labour Statistics: Monthly Unemployment Rates (Database).

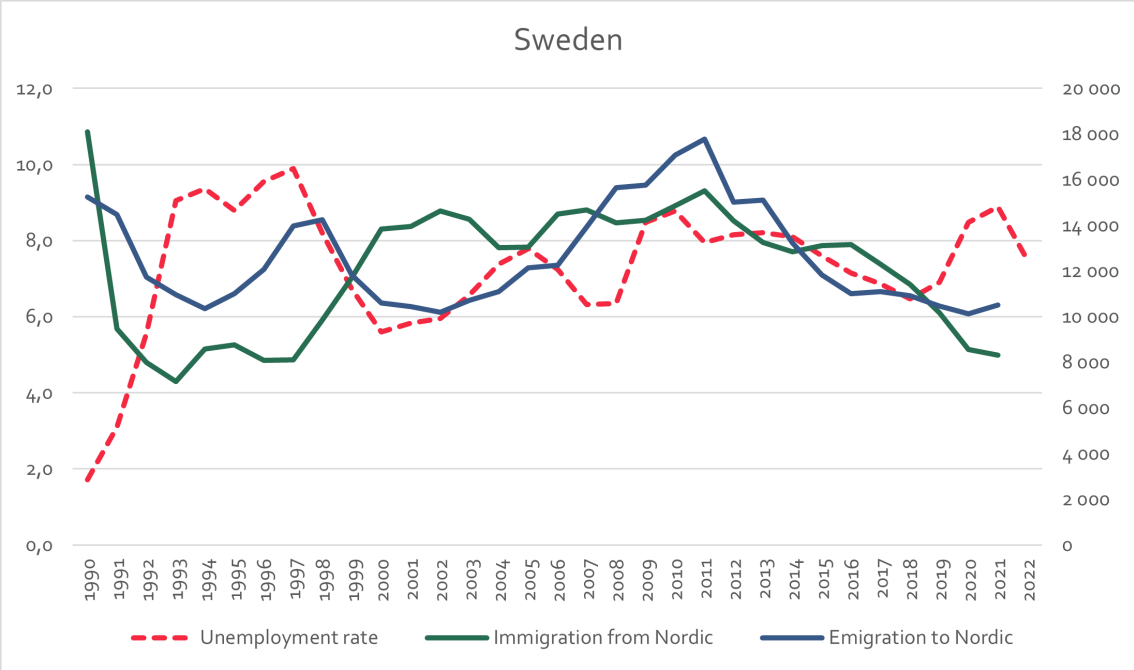


Figure 17: Immigration and emigration flows between Norway and other Nordic countries, alongside the unemployment rate.
Source: Nordic Statistics data and OECD (2024) Infra-annual Labour Statistics: Monthly Unemployment Rates (Database).

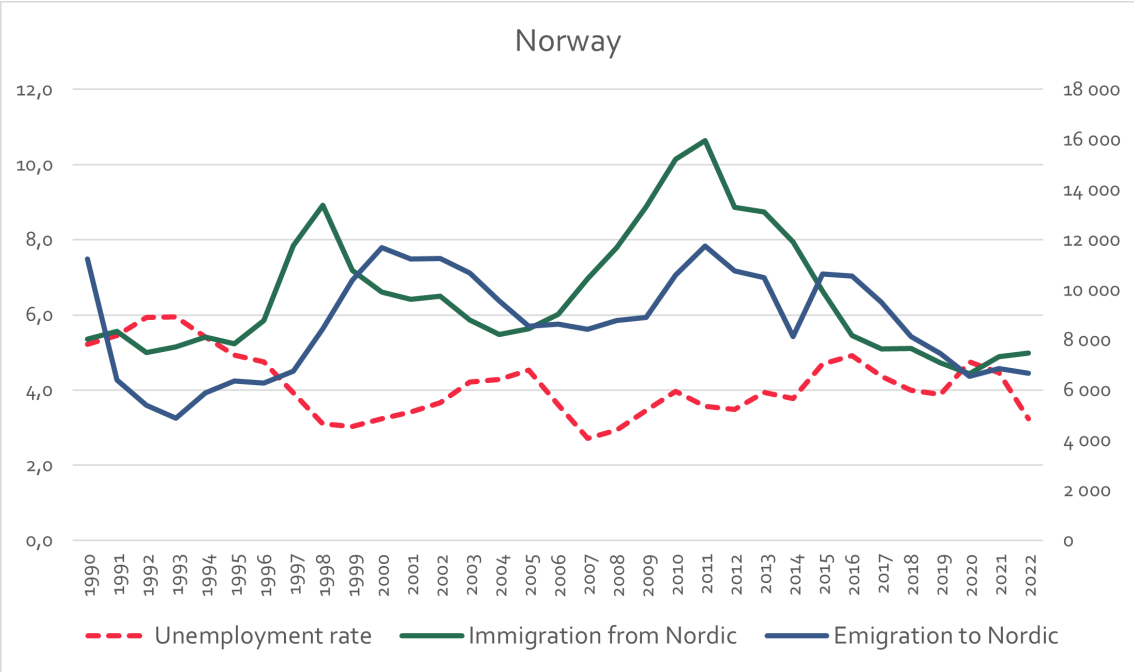


Figure 18: Immigration and emigration flows between Demark and other Nordic countries, alongside the unemployment rate.
Source: Nordic Statistics data and OECD (2024) Infra-annual Labour Statistics: Monthly Unemployment Rates (Database).

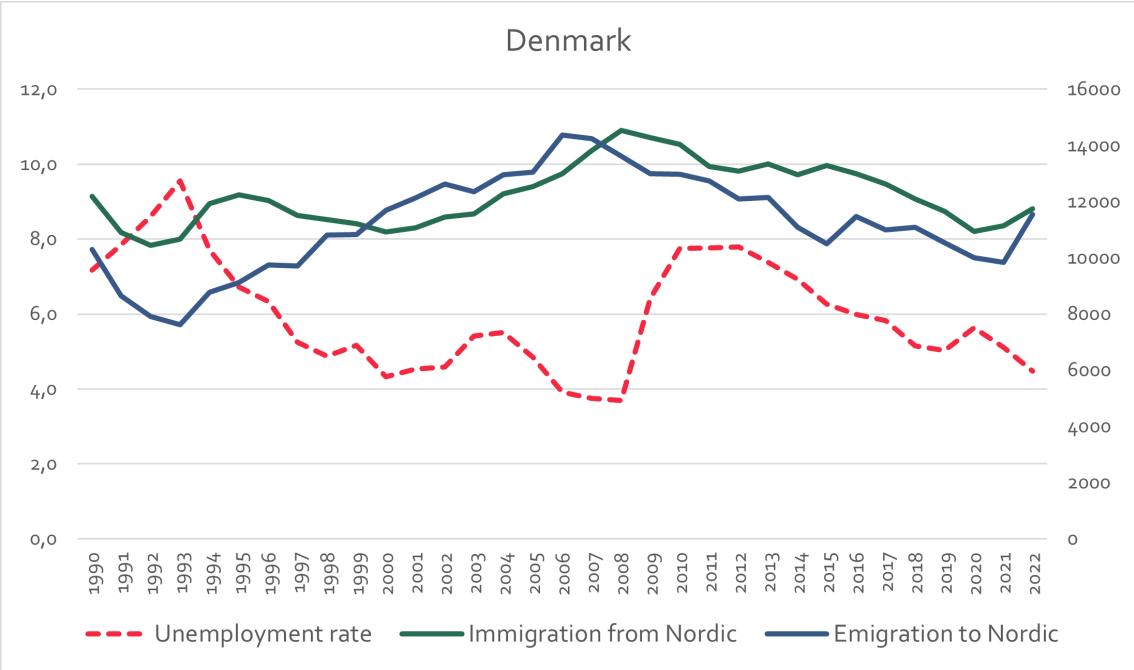


Figure 19: Immigration and emigration flows between Finland and other Nordic countries, alongside the unemployment rate.
Source: Nordic Statistics data and OECD (2024) Infra-annual Labour Statistics: Monthly Unemployment Rates (Database).

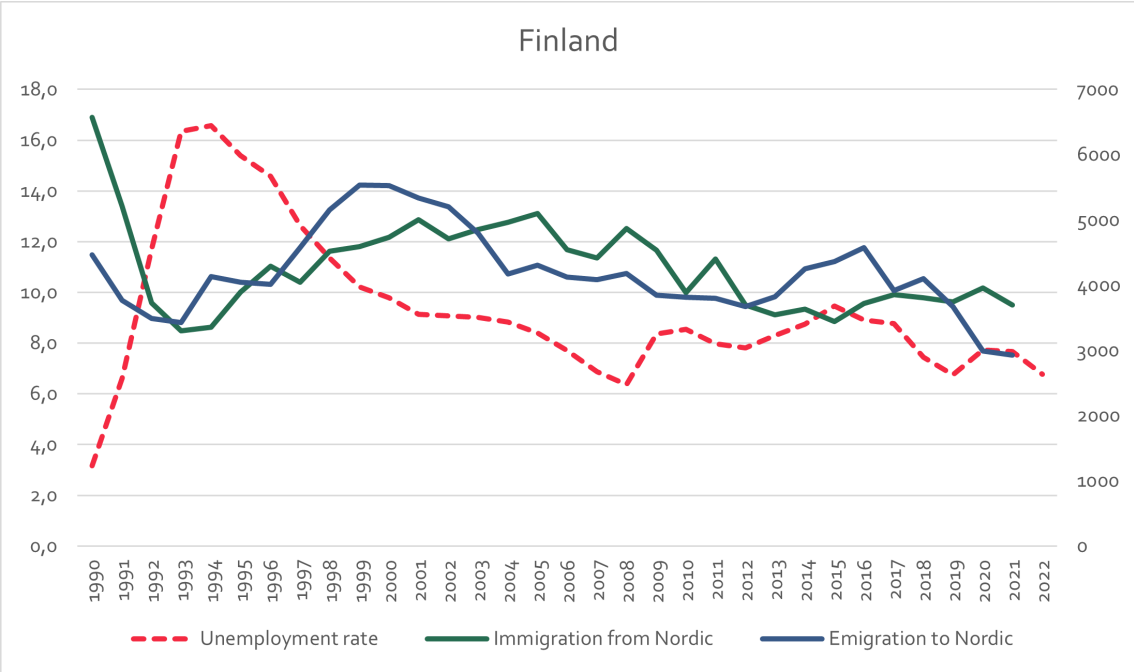
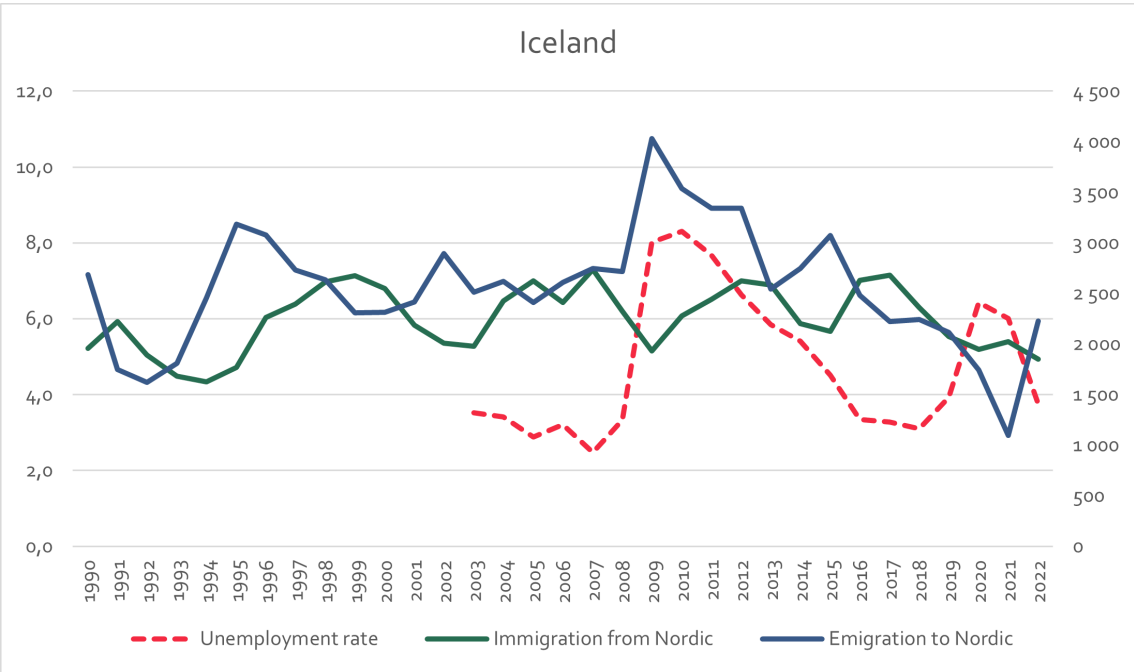


Figure 20: Immigration and emigration flows between Iceland and other Nordic countries, alongside the unemployment rate.
Source: Nordic Statistics data and OECD (2024) Infra-annual Labour Statistics: Monthly Unemployment Rates (Database).



In conclusion, while the research literature on why people migrate from developed countries is relatively limited, economic circumstances form only one part of the explanation (Birgier et al., 2022; Fuentes Monti & Tønnessen, 2023; Hedberg & Kepsu, 2003, 2003; Weber & Saarela, 2019, 2023). The statistical data from 1990-2022 indicate that high levels of unemployment in a particular Nordic country can lead to increased emigration flows. That was evident in Finland during the early 1990s, with significant emigration to Sweden and, to some extent, between 2008 and 2012, with increased immigration to Norway. That confirms previous studies on migration flows within the Nordic Region, which indicated that unemployment and structural change at specific times could act as a financial incentive for migration (Pedersen and Røed (2008). In other words, intra-Nordic migration was also shaped by an imbalance in employment opportunities. Individuals tended to relocate when faced with job scarcity in their home country and greater prospects elsewhere in the Nordic Region (Fischer and Straubhaar 1996, Pedersen, Røed and Wadensjö 2008). However, the robust social security systems in Nordic countries allowed many to stay put even in times of prolonged unemployment (Fischer and Straubhaar 1996).

How does Nordic migration relate to international migration?

The period examined here, i.e. 1954 until today, is one of increased levels of international migration globally. As a consequence, the share of Nordic migration has decreased in most parts of the Nordic Region. It is only in Åland, the Faroe Islands and Greenland that the share of Nordic migration is higher than other international migration.

Figure 21 shows the proportion of emigrants to other Nordic countries relative to total emigration since 1990. While significant variability is evident across the Nordic nations, two notable trends emerge. First, in the 1990s, the proportion of emigrants relocating to other Nordic countries was considerable, ranging from 30 to 70%. Second, there has been a declining trend in the share of emigration to other Nordic countries as a proportion of overall emigration flows in most Nordic countries, reaching approximately 20% by 2021. The most pronounced drops occurred in the early 1990s, concurrent with the economic crises experienced across the region, with partial recoveries observed after 1996, 1997 and 1999 for Sweden, Finland and Norway respectively.

Iceland is a distinct case, with a predominant proportion of emigration being to other Nordic countries, marked by a few but significant declines (1992, 2008 and 2015) and harmonisation with the levels of other Nordic countries. One decline took place in 1992, coinciding with the economic crisis prevalent in the Nordic Region during that period, while the other occurred in 2008, coinciding with the substantial economic downturn experienced in Iceland in particular. It is noteworthy that in 2008, despite an overall increase in emigration (see Figure 13), a larger portion of individuals leaving Iceland opted for destinations outside the Nordic Region.

It is pertinent to highlight that, among the Nordic countries, Denmark has the most stable pattern, with the share of emigrants relocating to other Nordic countries comprising approximately 30% of total emigration for most periods until 2007, followed by a gradual decline, reaching its lowest point in 2019 of 14%.

Figure 21 further illustrates the proportion of Nordic immigrants relative to the total immigrant influx in each Nordic country by year. That figure underscores a discernible declining trend, with Nordic immigrants accounting for between 10 to 20% of total immigration by the end of the period in question.

Figure 21: Emigration flows to Nordic countries as a share of total emigration flow.
Source: Own calculation based on Nordic Statistics data

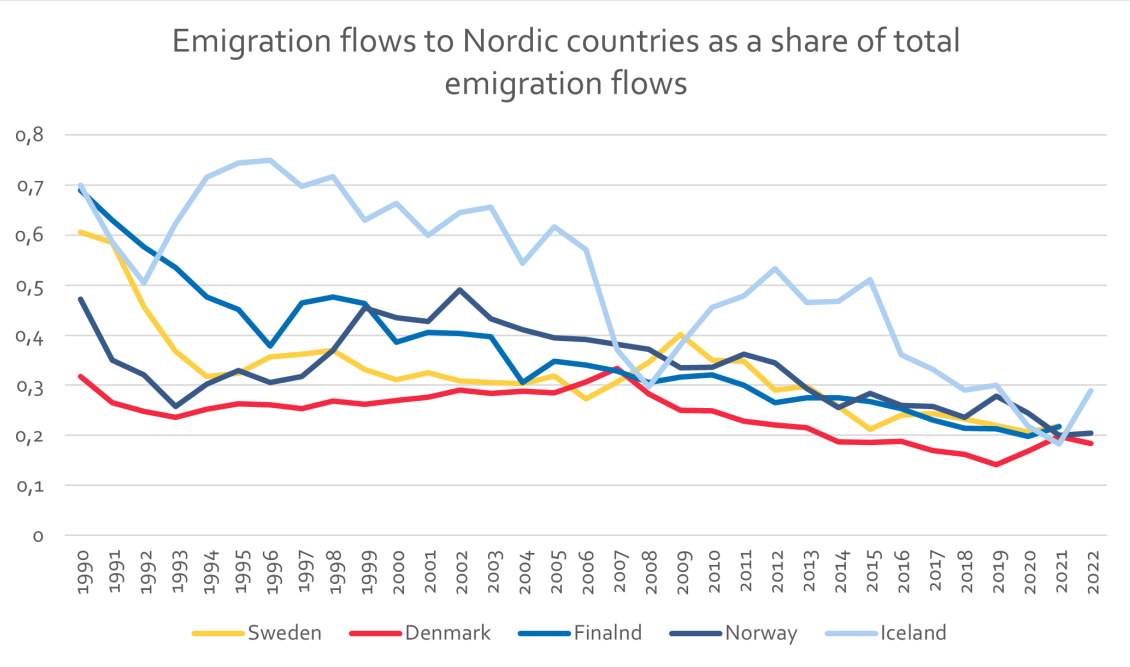
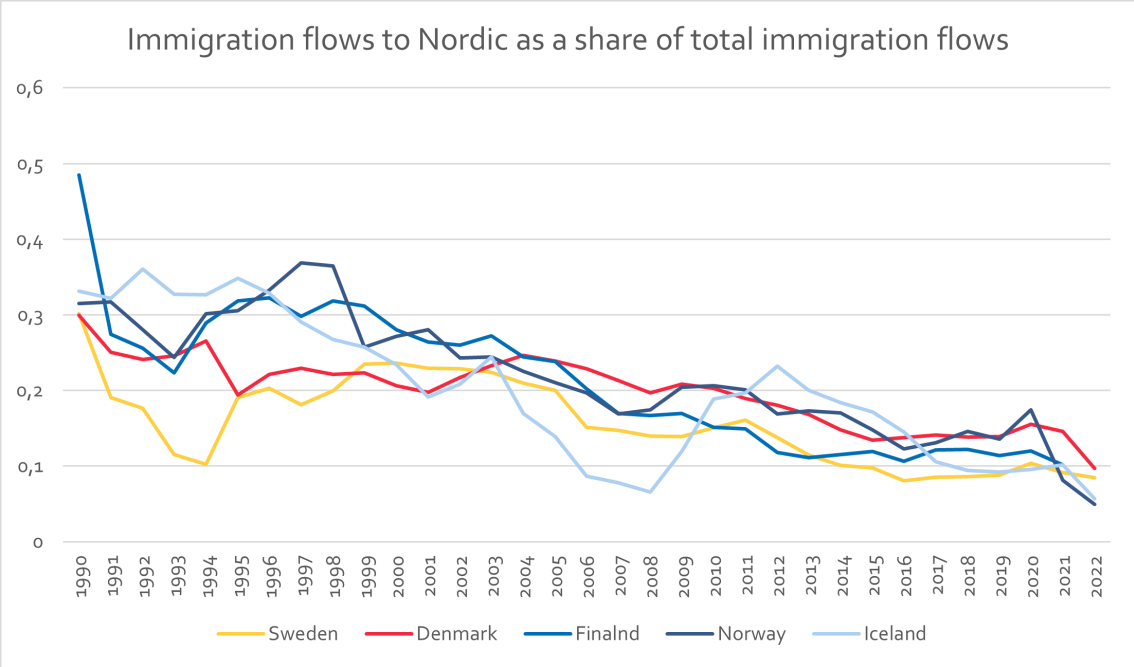


Figure 22: Immigration flows to Nordic as a share of total immigration flows.
Source: Own calculation based on Nordic Statistics data



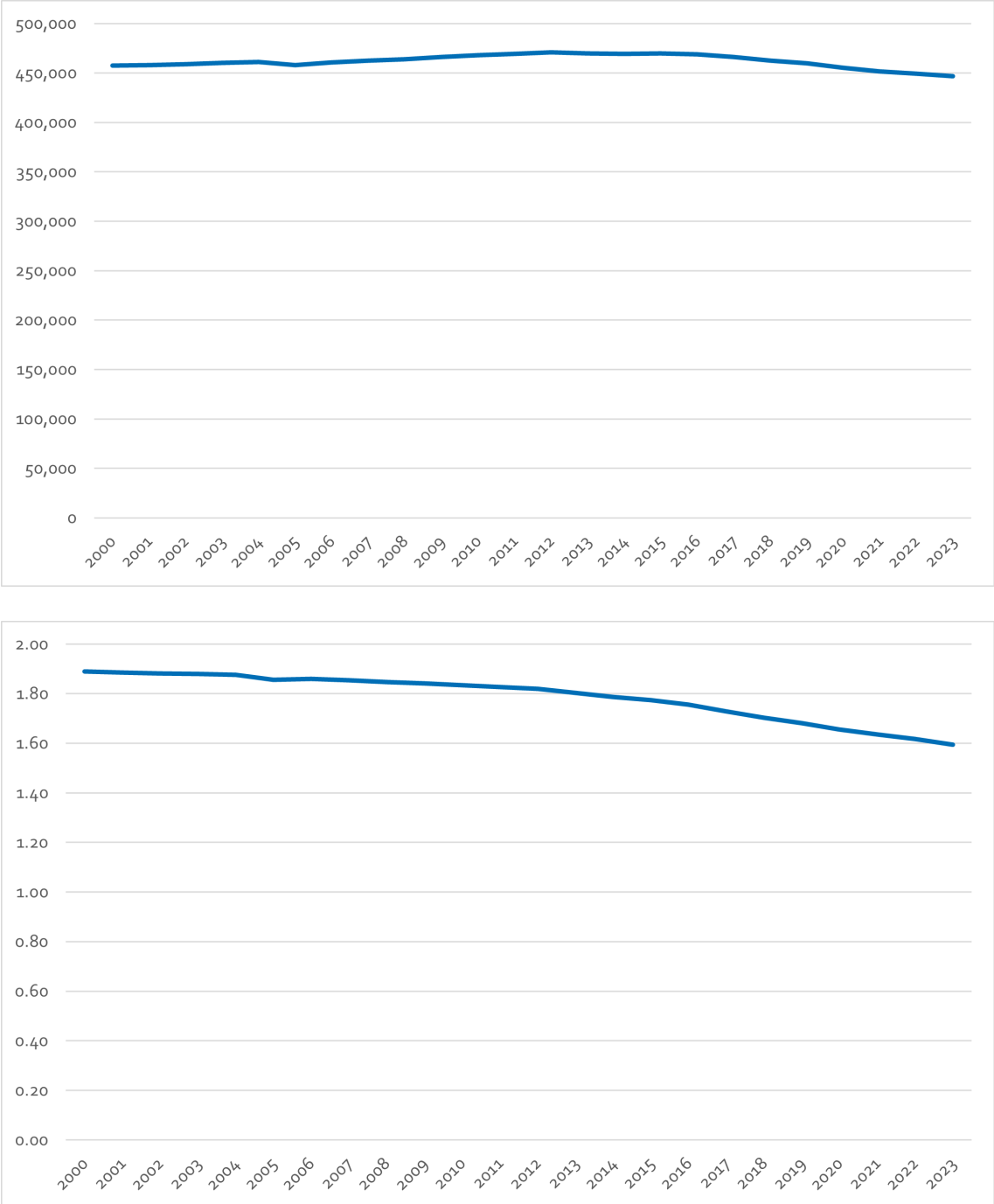
How many Nordic migrants live in another Nordic country?

At the beginning of the millennium, in 2000, there were 457,600 Nordic people living in a different Nordic country from the one in which they were born (Figure 23). That corresponds to 1.9% of the entire Nordic population. In other words, one in fifty Nordic-born people had moved from their birth country to another Nordic country.[6] By 2012, that number had increased to roughly 470,700 people. Nonetheless, since the total population living in the Nordic Region increased even more rapidly during this period, the share of Nordic migrants declined to 1.8%. That downward trend has persisted since then and even accelerated slightly during the pandemic, when movement and mobility in the Nordic Region became more challenging (Lundgren & Wøien Meijer, 2022; Lundgren & Bogason, 2022).

In 2023, around 446,500 Nordic people were living in another Nordic country, corresponding to 1.6% of the total Nordic population. That implies that fewer people are taking advantage of the freedom of movement that the common Nordic labour market offers. The share of Nordic migrants among the total population is also lower than the comparative number of internal migrants in the European Single Market, which allows freedom of movement to EU citizens. At EU level, 3.9% of European citizens of working age lived in an EU member state other than their country of birth in 2021 (European Commission, 2023).

6. Note that we do not have information concerning the proportion of Nordic citizens living in other countries outside the Nordic Region.

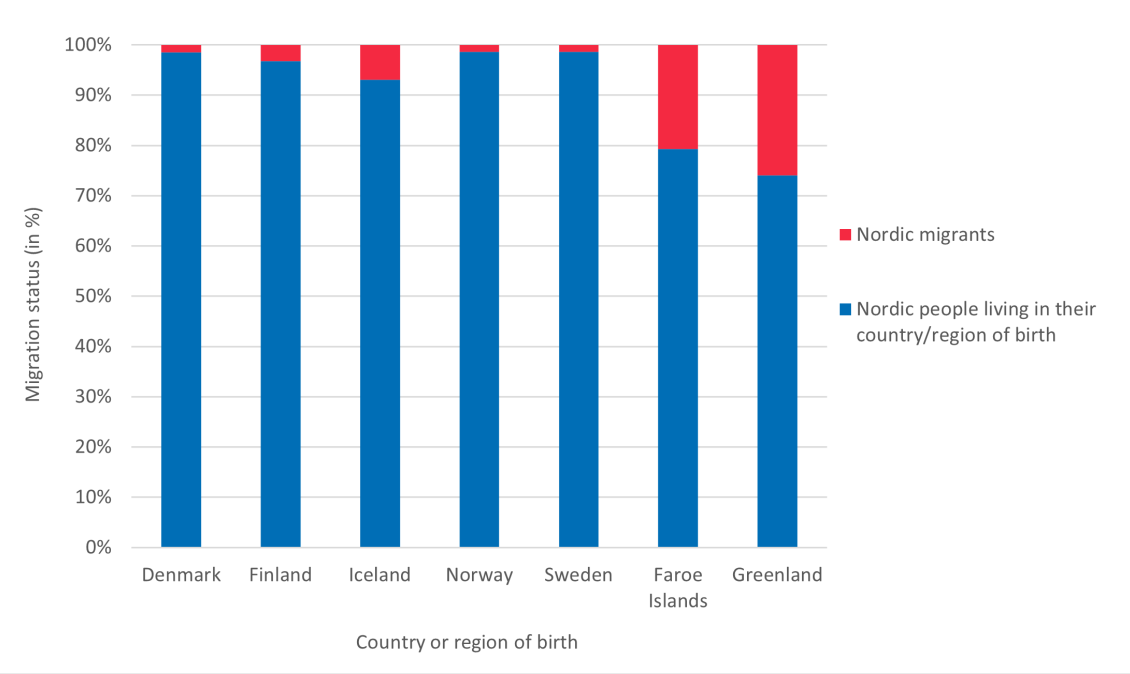
Figure 23: Nordic migrants, 2000-2023 (in absolute numbers and in percent)
Source: Own calculations based on Nordic Statistics Database.



In Nordic comparison, people from some countries and autonomous regions are more prone to move than others, as seen in Figure 24. The figure considers all people who were born and still live in the Nordic Region and then distinguishes between those who live in their country or autonomous territory of birth and those who live in another Nordic country or

territory.[7] As can be seen, people born on the Faroe Islands and Greenland are more prone to move within the Nordic Region than people born in the five Nordic countries. 26% of people who were born in Greenland lived elsewhere in the Nordic Region in 2023. Among Faroese-born people, 21% had moved to another Nordic country or autonomous territory. In the five Nordic countries, the propensity to move is substantially lower. Between 7% of people born in Iceland and 1% of those born in Sweden, Norway and Denmark lived elsewhere in the Nordic Region in 2023. In other words, the propensity to migrate to another Nordic country is higher in Nordic countries and regions which have smaller population sizes and a more remote location.

Figure 24: Nordic migrants and Nordic people living in their country or autonomous region of birth, 2023 (in % of population).
Note: Existing statistics show the composition of Nordic migrants who live in Åland, but data are not available regarding the residence of people from Åland abroad. People born in Åland who live elsewhere in the Nordic Region are registered as Finnish born in the statistics of other Nordic countries.
Source: Nordic Statistics Database.



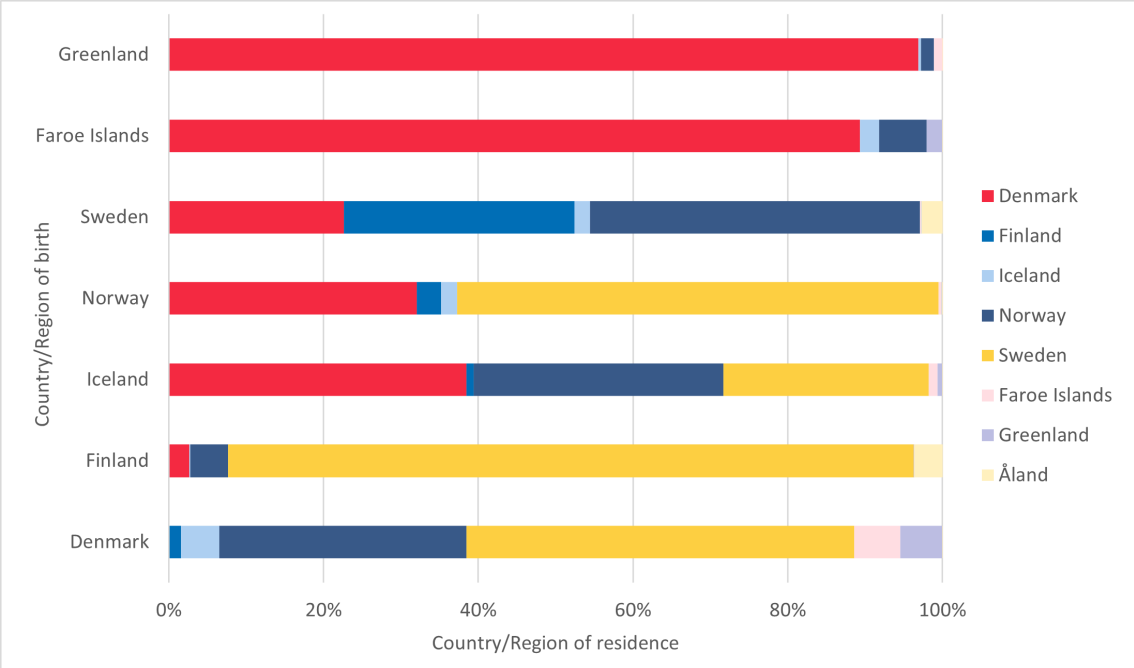
Where do Nordic migrants live?

Interesting patterns emerge when analysing where Nordic migrants live. Some Nordic countries appear to be more popular destinations than others (Figure 25). Proximity, a shared language and migration history all seem to play a role

7. Note that the figure does not include people who were born in one of the Nordic countries or autonomous regions and have since moved to third countries outside the Nordic Region. Those emigrants are not included in the statistics that were used to create the figure.

(Pedersen, Røed & Wadensjö, 2008; Lundgren & Wøien Meijer, 2022). Most notably, among people who were born in Greenland and the Faroe Islands, almost all live in Denmark. Indeed, according to Mortensen Nolsøe (2017) and Hayfield (2017), a Faroese expression states that "half of all Faroe Islanders have lived in Denmark at some stage of their lives", contributing to an ingrained "culture of migration". According to the same studies, key reasons for Faroese people to move to Denmark include access to more diverse education and career opportunities. Importantly, as many as half of all Faroese islanders who have completed tertiary education abroad return to the Faroe Islands later in their lives, thereby counteracting a permanent brain drain (Mortensen Nolsøe, 2017). Similarly, many young people from Greenland move to Denmark to study and consider their education not only as important for themselves, but also for Greenland's future (Flora, 2017).

Figure 25: Nordic migrants by place of birth and place of residence (in %), 2023
Note: Data on the number of Faroese- and Greenland- born people living in Sweden and Finland are not available. For Åland, data availability is limited: available statistics show Nordic migrants who live in Åland, but data are not available regarding the residence of people from abroad. People born in Åland who live elsewhere in the Nordic Region are registered as Finnish citizens in the statistics of other Nordic countries.
Source: Nordic Statistics Database.

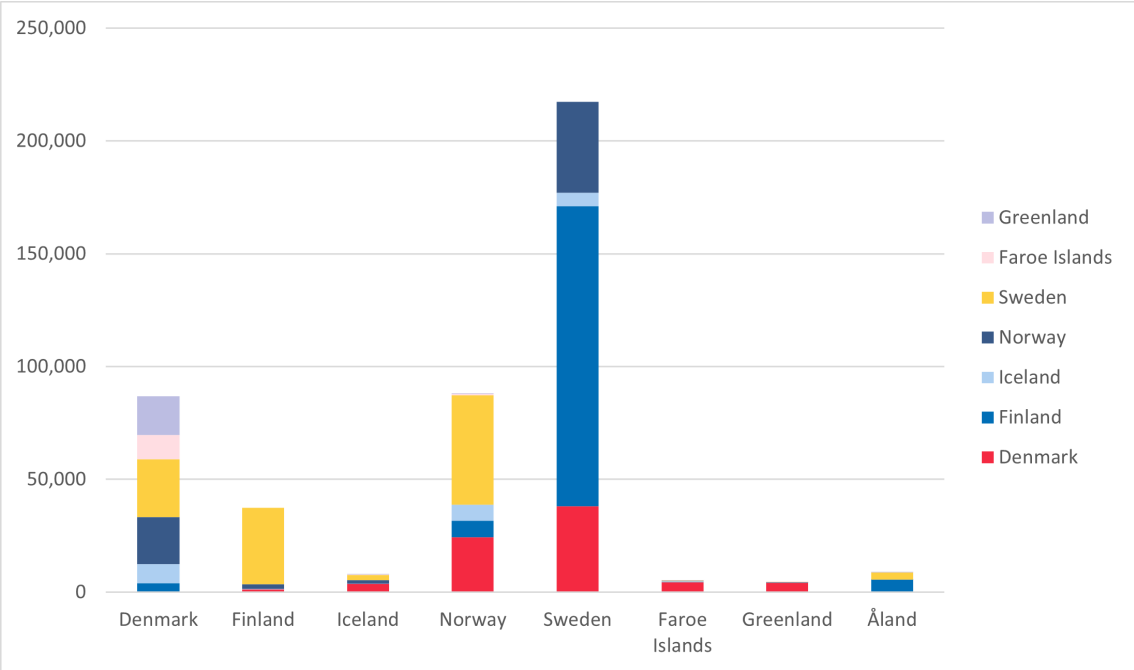


Among Finnish migrants in the Nordic Region, a large majority (89%) live in Sweden. Sweden was a particularly important destination country for Finnish emigrants during the late 1960s (see Chapter 2.2). Many Finns moved to Sweden during this period to work and many of them have remained. Åland and Norway also host groups of Finnish-born migrants (between 4% and 5% of Finnish migrants in the Nordic Region).

For the other Nordic countries, patterns are more mixed, with less pronounced preferences when it comes to choosing a country of destination. Among Swedish-born migrants in the Nordic Region Norway is a popular place to live, but so too are Denmark and Finland. There are fairly large numbers of people born in Iceland living in Denmark, but also in Norway and Sweden, while many migrants from Denmark have settled in Sweden and Norway.

Looking at the absolute number of Nordic migrants, Sweden is the most popular destination (Figure 26). Around 217,300 Nordic migrants live there according to the most recent data, with the majority (around 133,000 persons) coming from Finland. Denmark and Norway host relatively equal numbers of Nordic migrants, namely around 87,000 and 88,000 persons respectively. In both countries, the largest group of Nordic migrants come from Sweden. The other Nordic countries and autonomous regions have smaller groups of Nordic migrants.

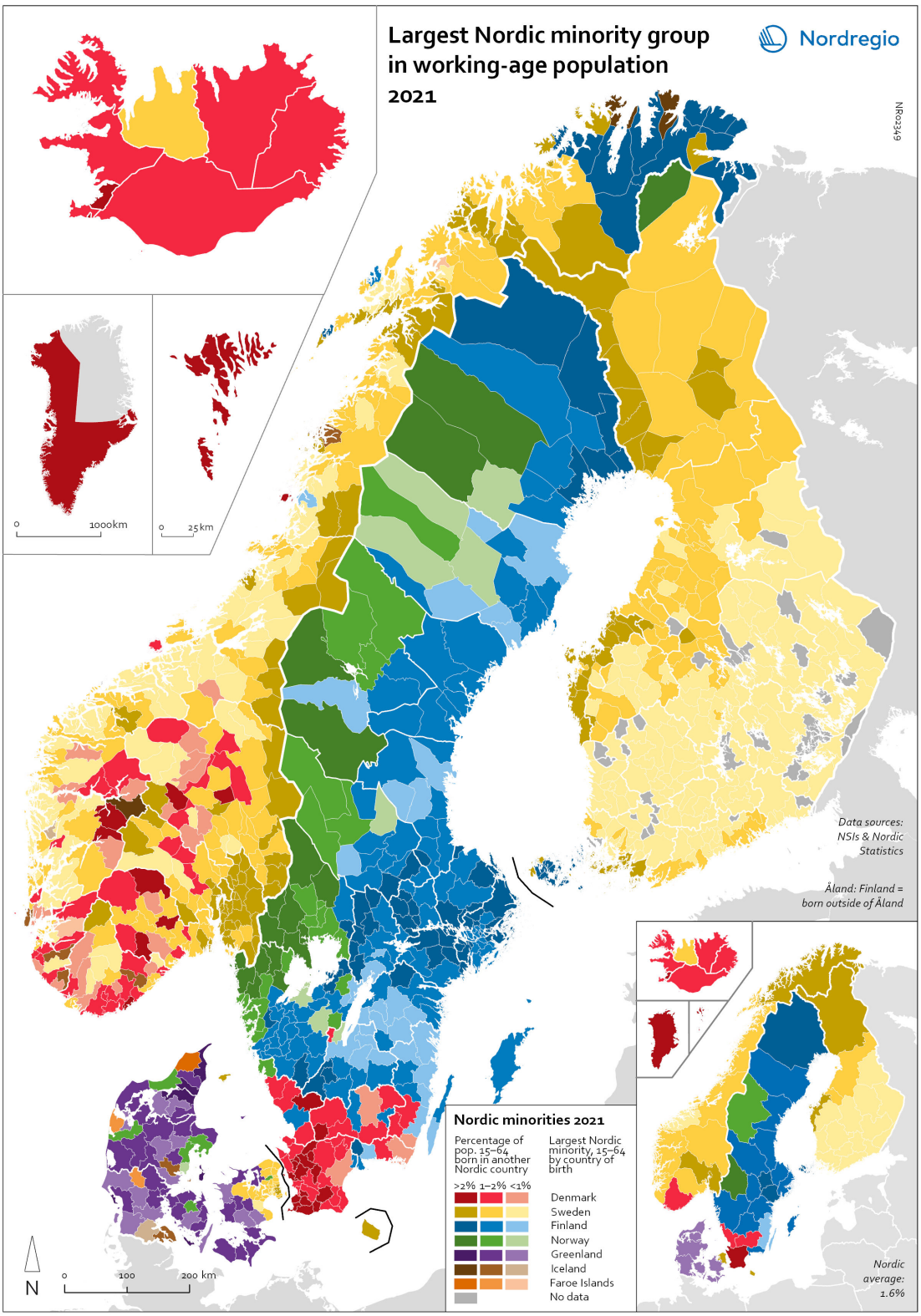
Figure 26: Total number of Nordic migrants living in each Nordic country and autonomous region (2023)
Note: Data on the number of Faroese- and Greenland- born people living in Sweden and Finland are not available.
Source: Nordic Statistics Database.



When Nordic citizens move to another Nordic country, many prefer to settle close to their country of birth, as indicated by Map 1. For each Nordic municipality, the map shows the largest Nordic minority group that has settled there. The darker the colour, the larger the Nordic population as a share of the total local population. As can be seen, many migrants from Finland have settled in the northern and eastern parts of Sweden and northern Norway. Swedish-born migrants live in greater numbers in municipalities across Finland, in Norway and across the Öresund Strait

in Denmark, while many Norwegians live just across the Swedish border. Danes have settled in larger numbers in southern Sweden and southern Norway again, in closer proximity to their country of birth.

Map 1: Largest Nordic minority group in working-age population 2021.
Source: Norlén et al. (2022)



Who are the Nordic migrants?

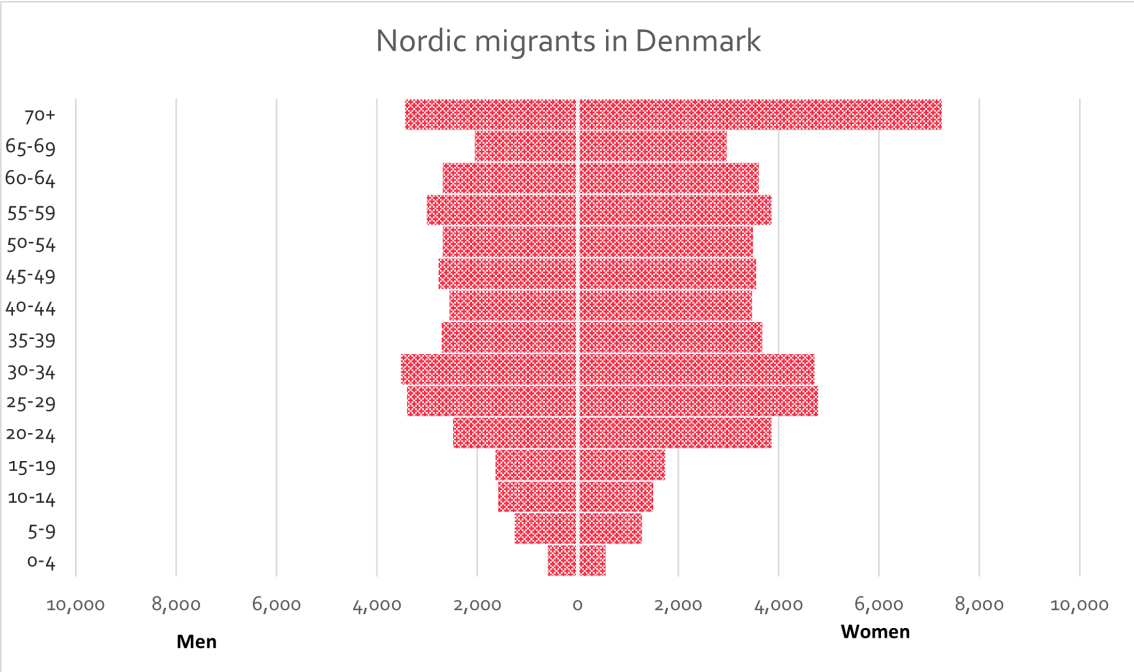
Existing research literature on international migration tells us that migrants tend to be young (Yeung et al., 2023; Rogers and Castro, 1981). Possible reasons for this are that young people have not yet invested in property and careers in their home countries to the same extent as their older peers, are less likely to have started a family[8] and are therefore more prone to try their luck abroad. Young people are also still in an orientation phase in their lives, when migration may be an attractive option. Hence, they may move to study abroad, find work or follow a partner who already lives in another country. People in middle age or older, by contrast, are usually more established in their careers, may have acquired property and may have children of school age, all of which make migration less likely (Fischer and Straubhaar, 1996). Due to the greater propensity to migrate at a young age, migrant populations in countries of destination often tend to be fairly young. Nonetheless, if migrants settle and stay in their countries of destination in the longer term, they also contribute to population ageing as they themselves age.

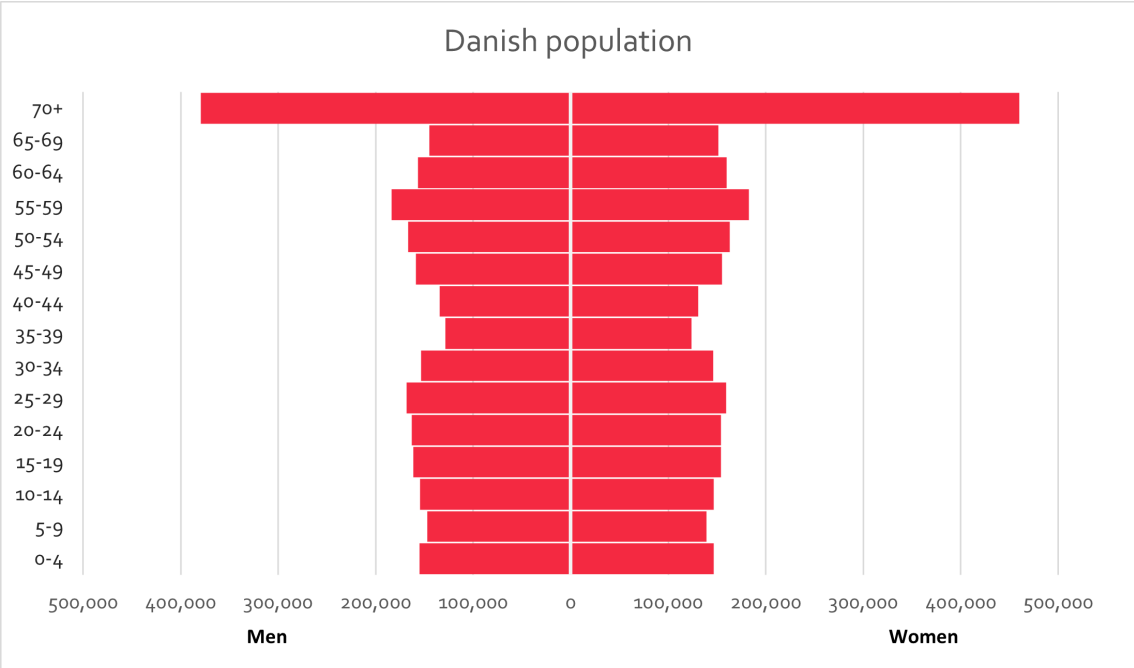
A comparison of the age and sex structure of Nordic migrant populations in the Nordic countries paints a diverse picture. That is evident in Figure 27, which compares the age and sex structure of native-born populations in each country with the age and sex structure of the resident Nordic migrant populations (Nordic migrants). In Iceland and on the Faroe Islands, Nordic-born populations are fairly young, with an overrepresentation of people in lower age groups. In Iceland, many Nordic migrants are in the core working ages, which is likely a reflection of the good job opportunities in the tourism sector in particular. Such job opportunities attracted many immigrants to Iceland both before and after the pandemic. People of working age are also overrepresented among Nordic populations in Denmark, Finland and Norway. In Norway, Greenland, Åland and Sweden, there are large groups of Nordic immigrants of retirement age. Those groups are particularly overrepresented in Sweden, with a majority of these older Nordic migrants coming from Finland. That is a reflection of Finnish-Swedish migration history. Many Finnish migrants who came to Sweden in the 1960s and 1970s to work have settled and have now reached retirement age.

8. Note, however, that some young migrants already have children and very young children also tend to be overrepresented among international migrants. That changes once children reach school age, when families become less prone to move internationally.

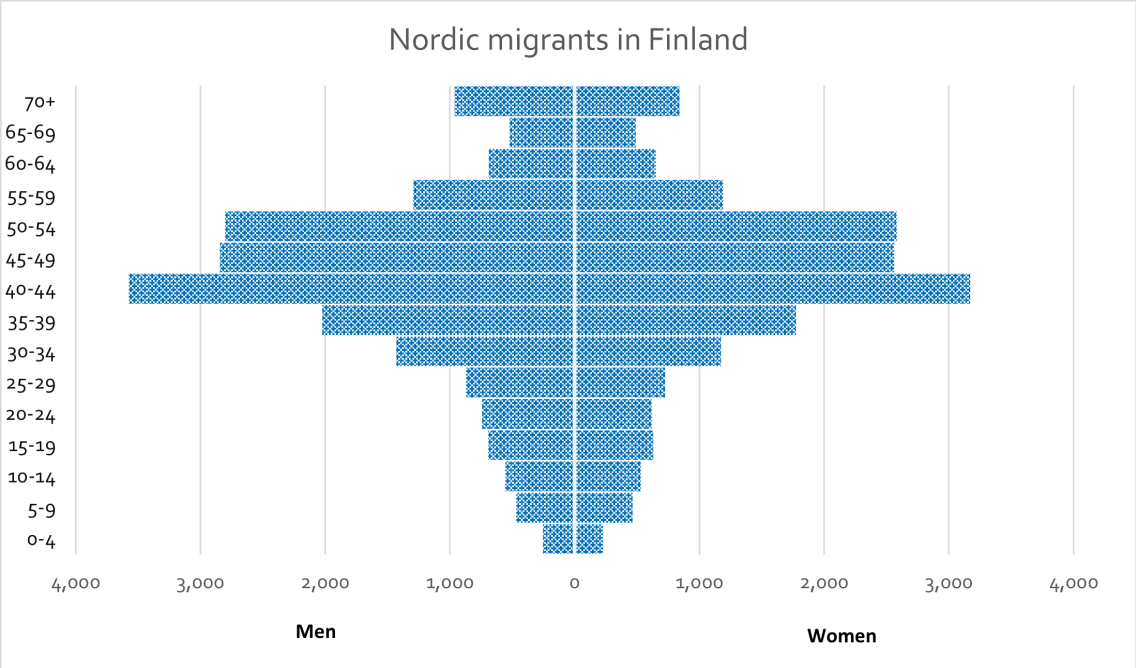
Figure 27: Native-born populations and Nordic migrant populations by age and sex in each Nordic country (2023).
Note: The population pyramids show the population born in each Nordic country and autonomous region who still live there (first pyramid for each country) and the Nordic migrants who were born elsewhere in the Nordic Region but now live in the given country/autonomous region. The left-hand side of the population pyramids show the male populations, the right-hand side female populations.
Source: Nordic Statistics Database.

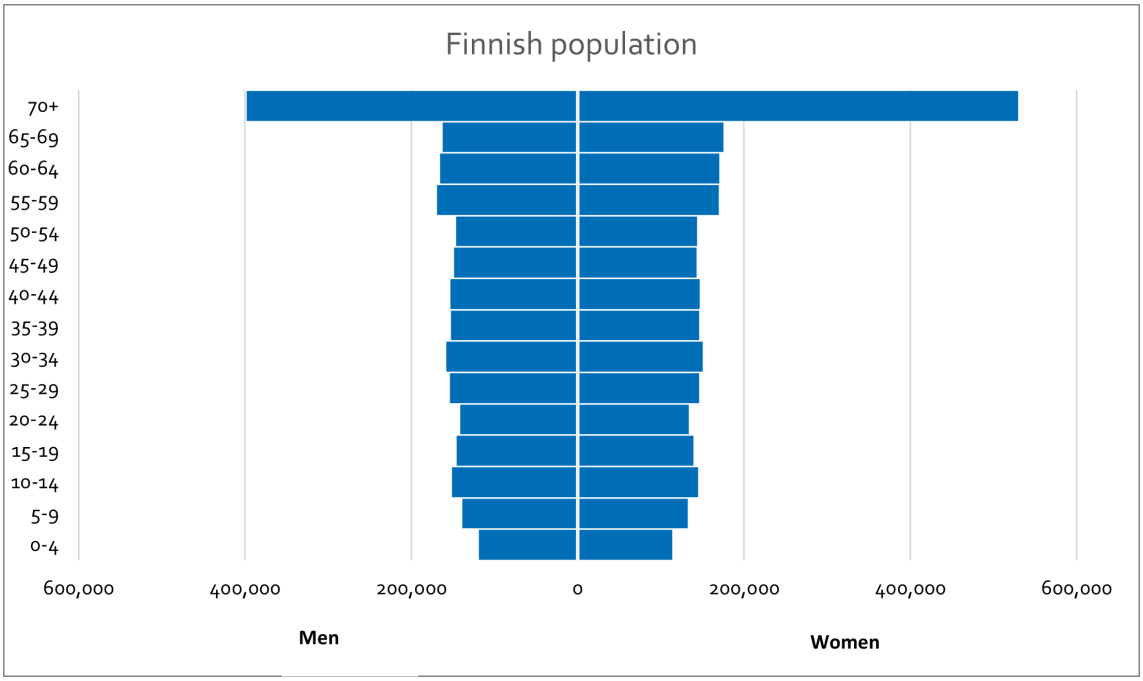
Denmark



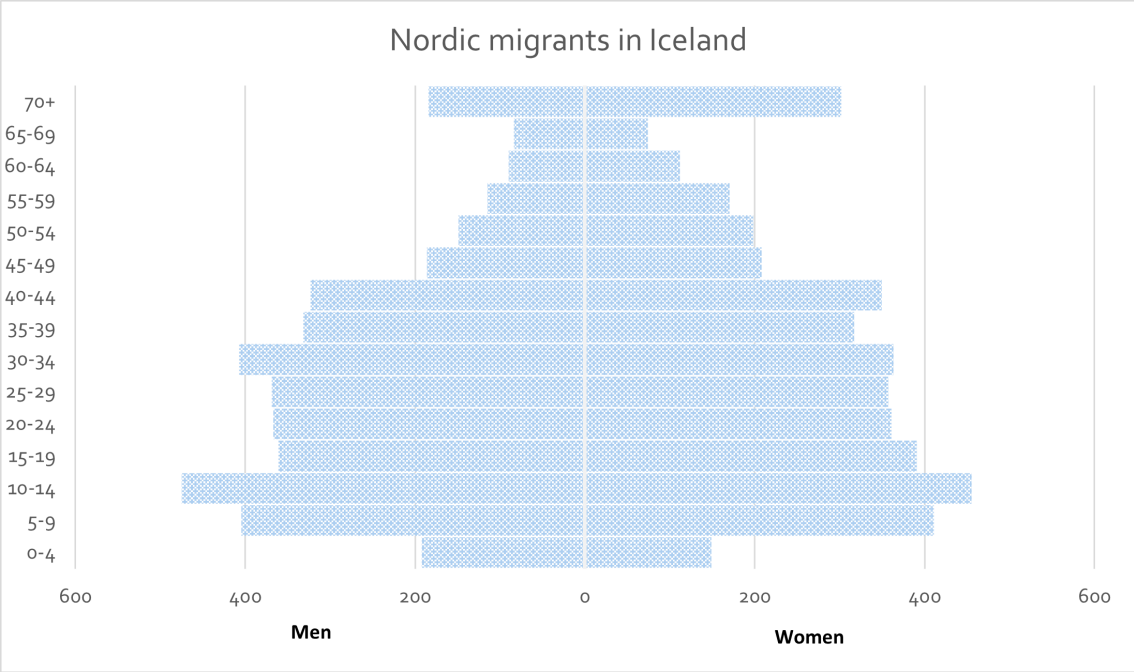


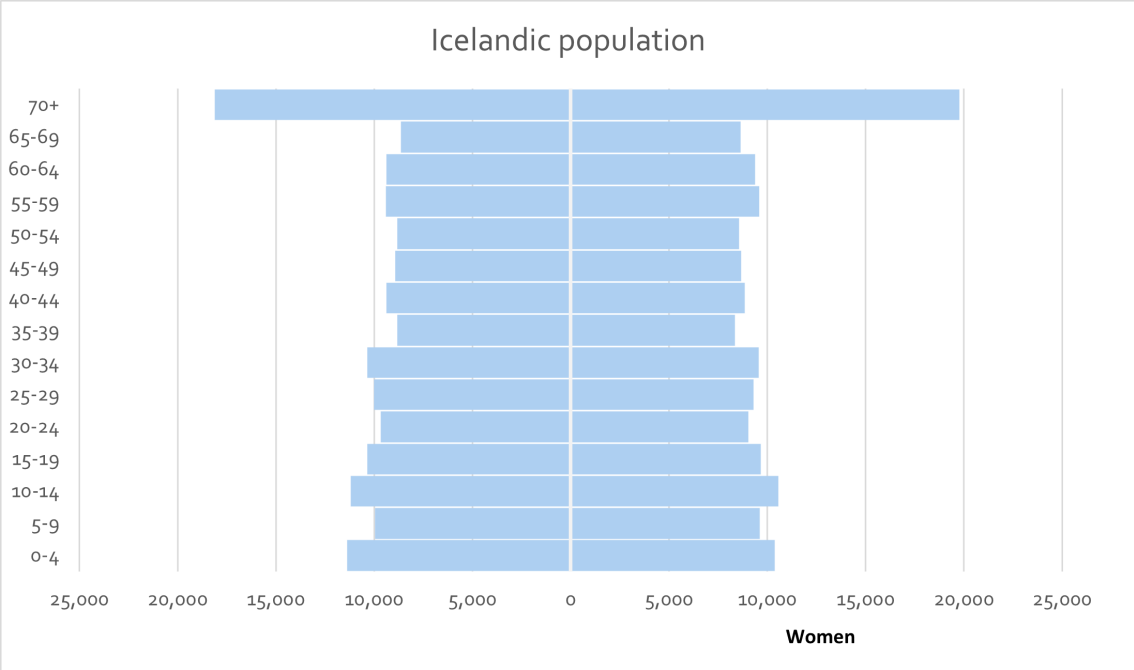
Finland


Nordic migrants in Finland
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
4,000
3,000
2,000
1,000
0
1,000
2,000
3,000
4,000
Men
Women

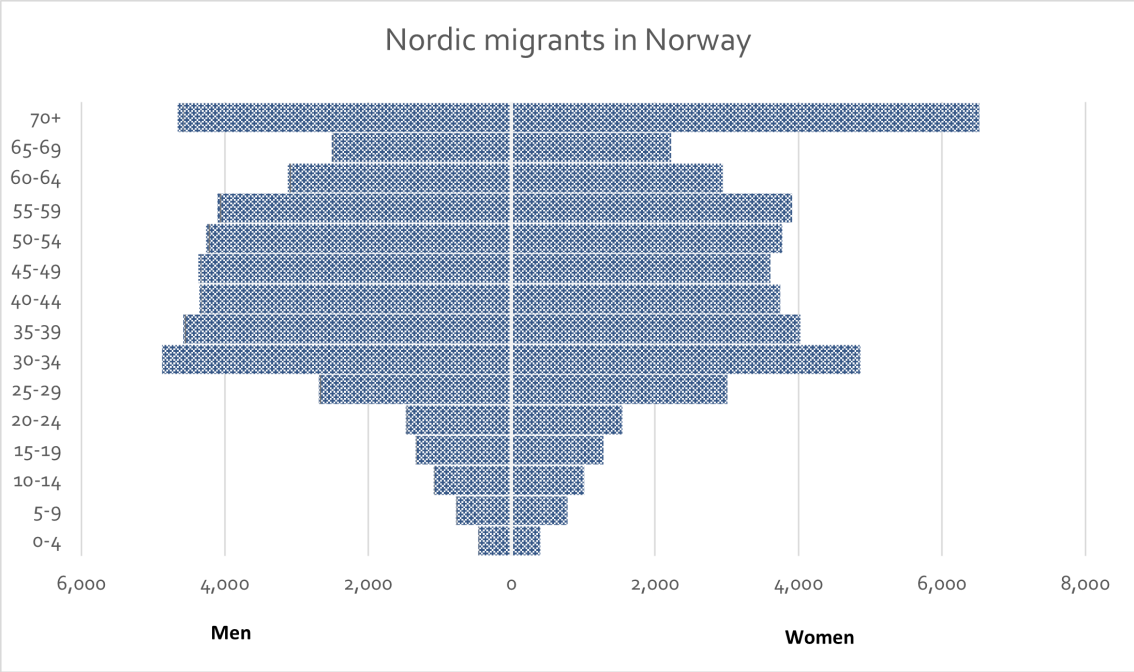

Finnish population
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
600,000
400,000
200,000
0
200,000
400,000
600,000
Men
Women

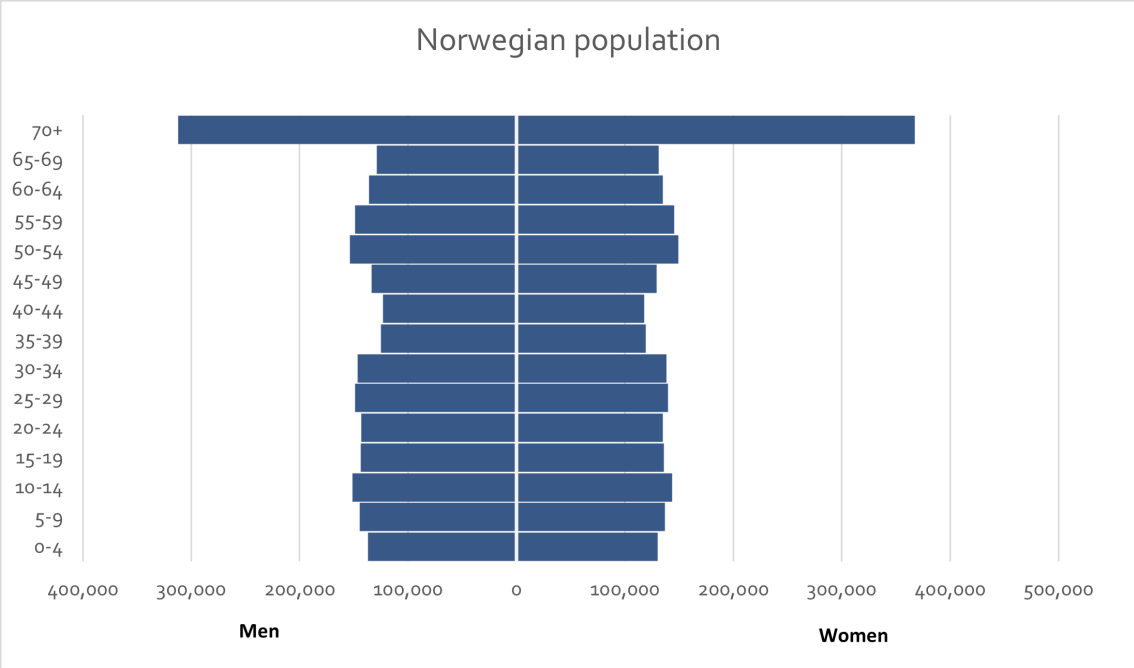
Iceland


Nordic migrants in Iceland
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
600
400
200
0
200
400
600
Men
Women

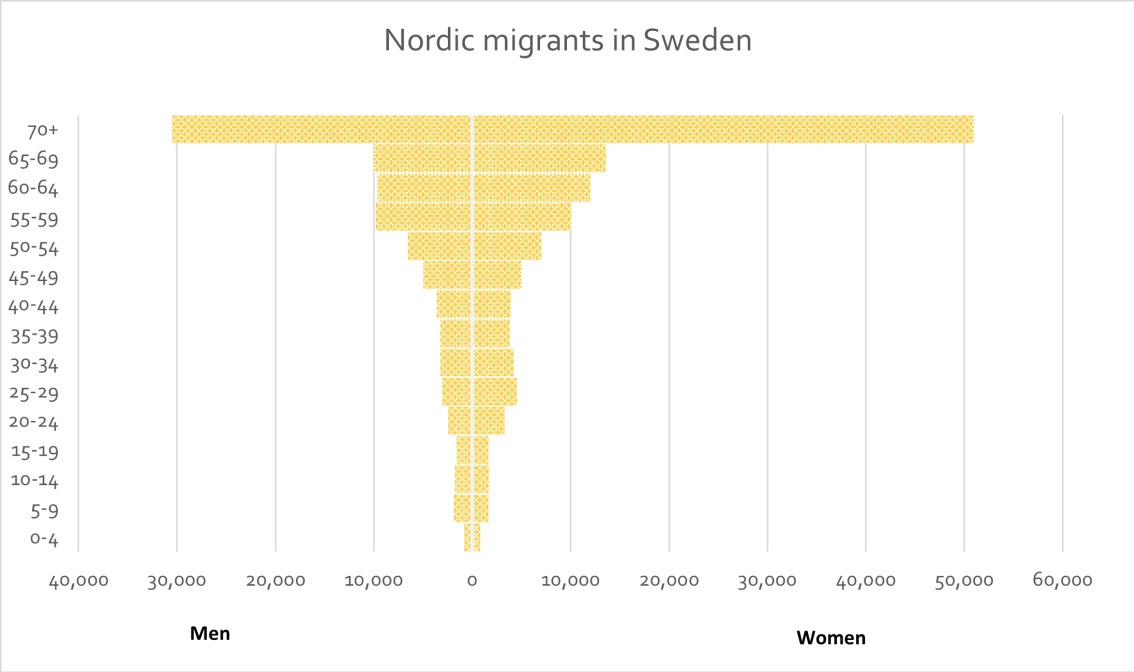

Icelandic population
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
25,000
20,000
15,000
10,000
5,000
0
5,000
10,000
15,000
20,000
25,000
Women

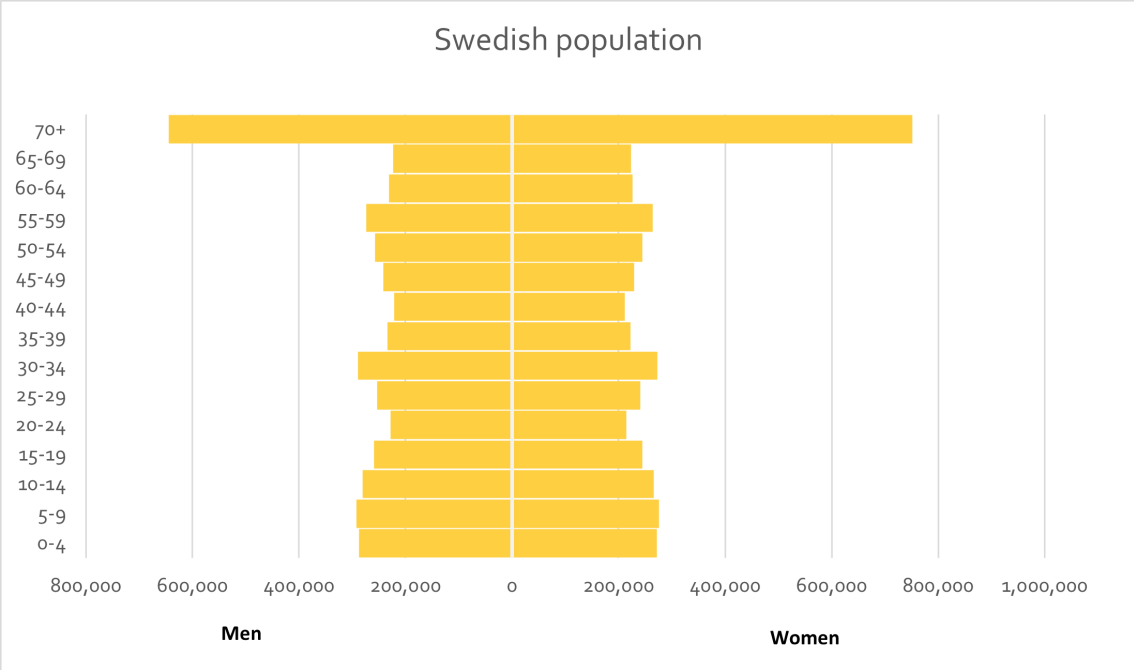
Norway


Nordic migrants in Norway
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
6,000
4,000
2,000
0
2,000
4,000
6,000
8,000
Men
Women

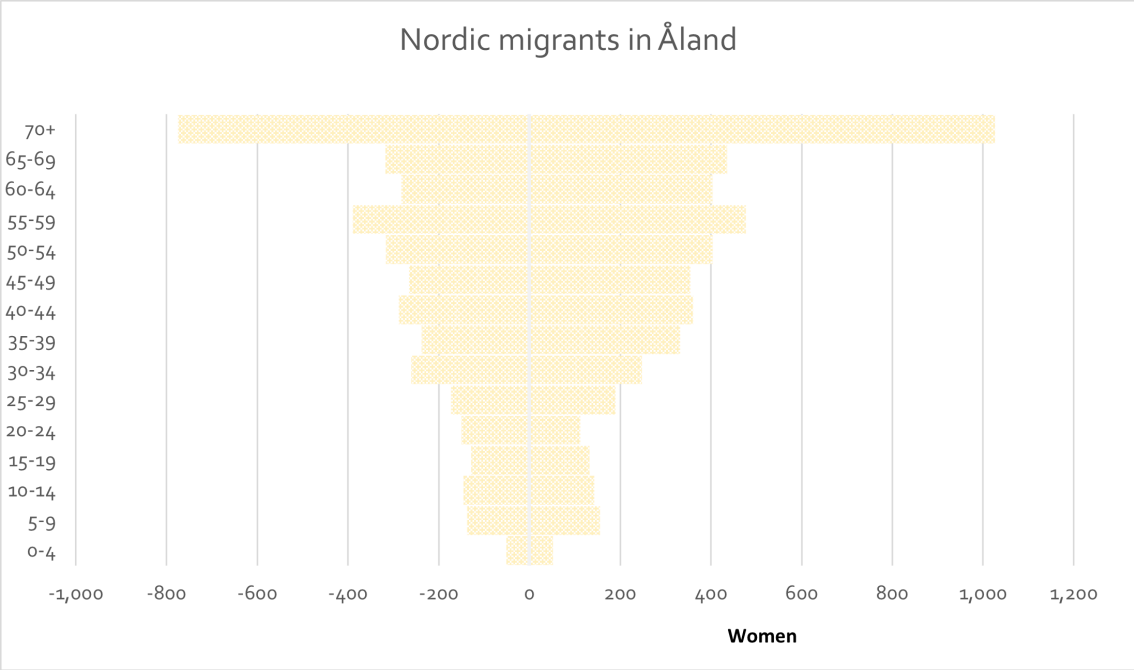

Norwegian population
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
400,000
300,000
200,000
100,000
0
100,000
200,000
300,000
400,000
500,000
Men
Women

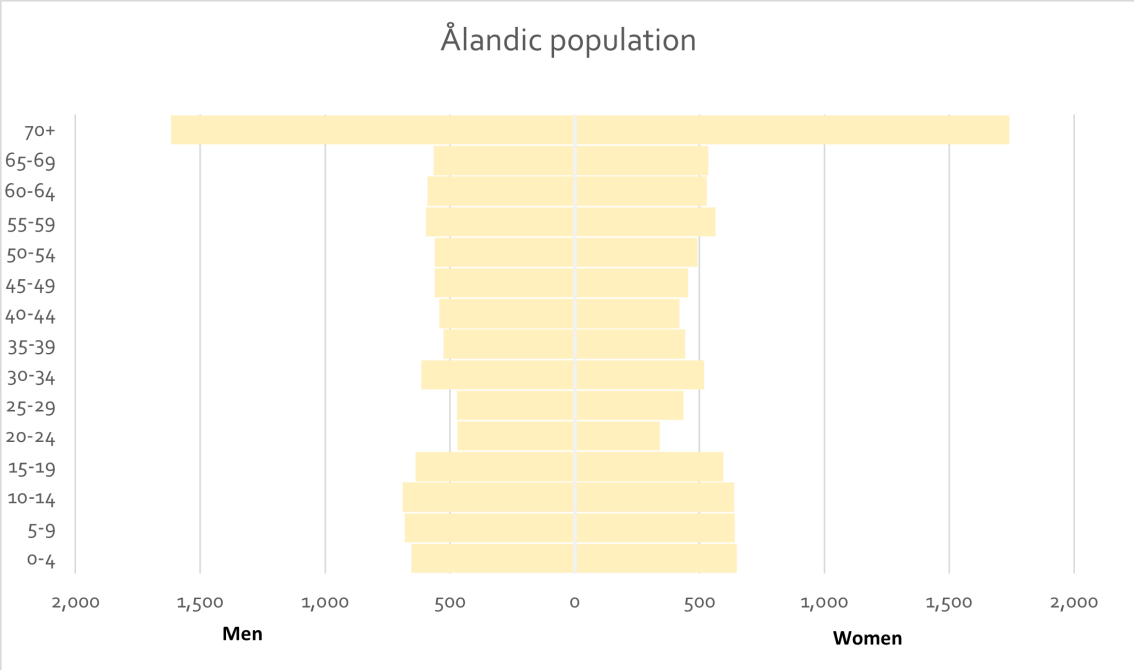
Sweden


Nordic migrants in Sweden
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
40,000
30,000
20,000
10,000
0
10,000
20,000
30,000
40,000
50,000
60,000
Men
Women

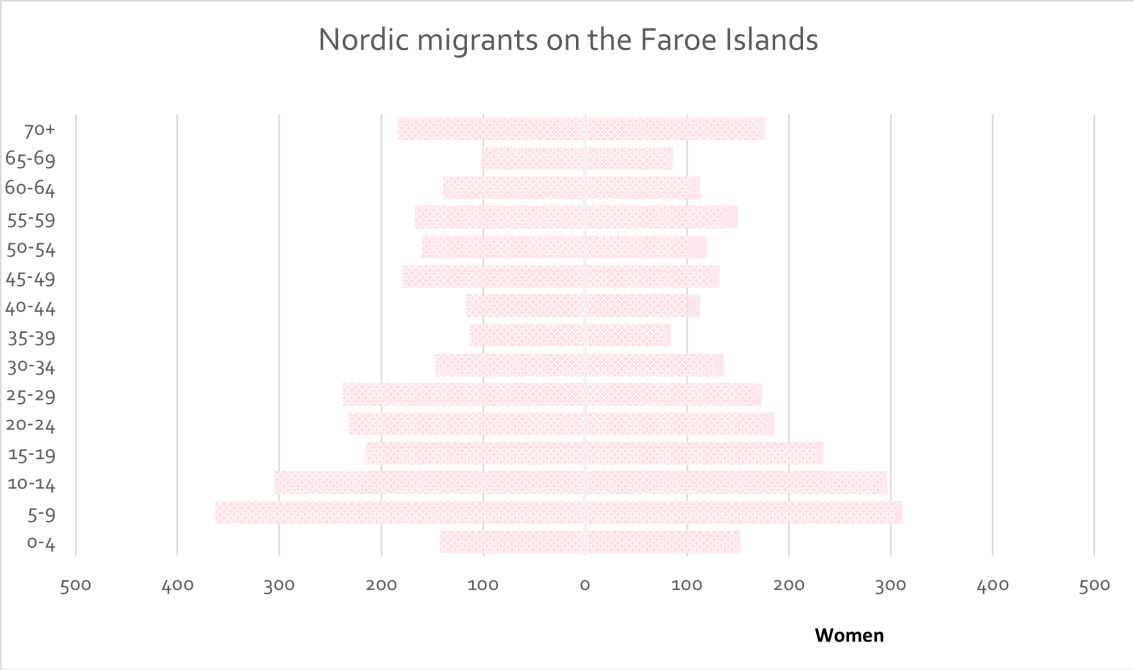

Swedish population
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
800,000
600,000
400,000
200,000
0
200,000
400,000
600,000
800,000
1,000,000
Men
Women

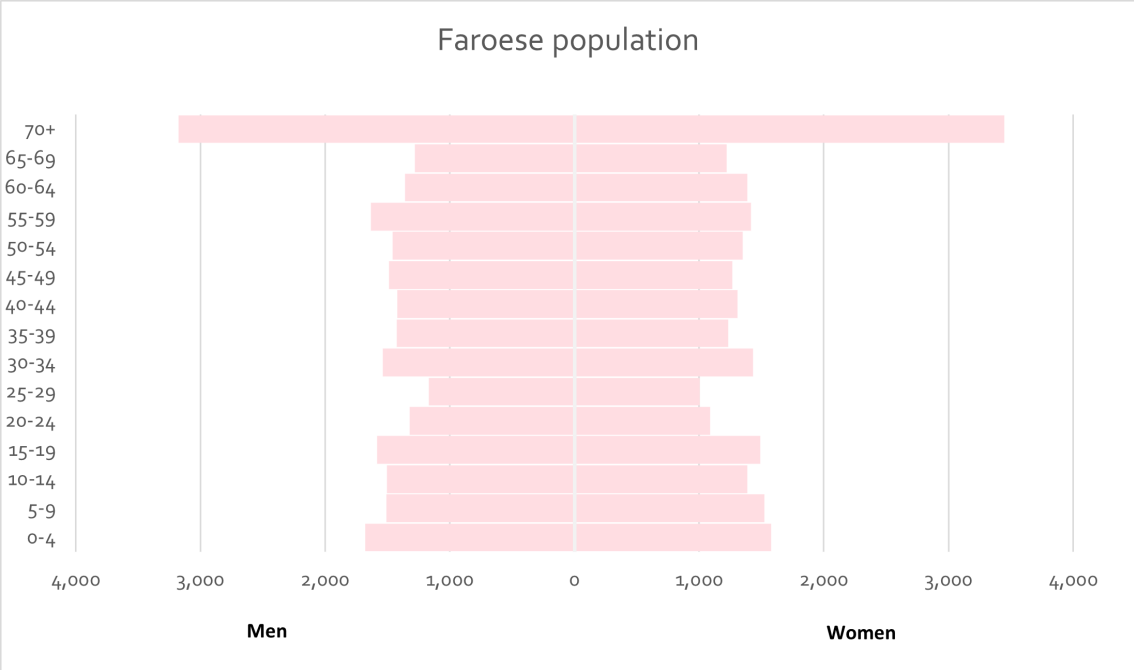
Åland


Nordic migrants in Åland
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
-1,000
-800
-600
-400
-200
0
200
400
600
800
1,000
1,200
Women

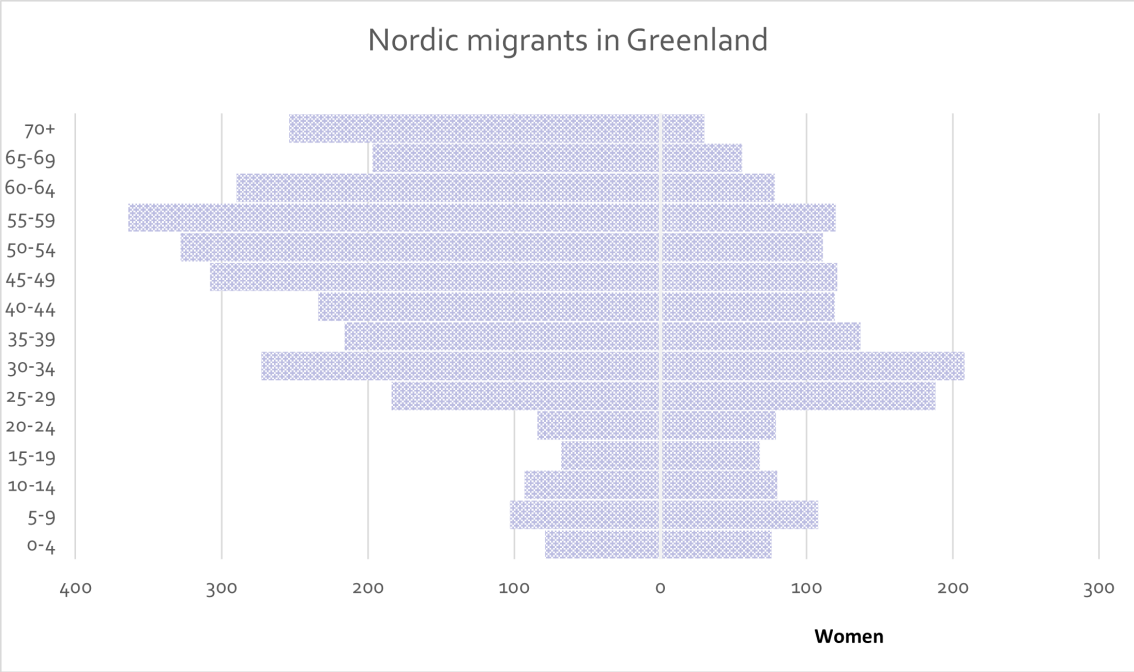

Ålandic population
70+
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4
2,000
1,500
1,000
500
0
500
1,000
1,500
2,000
Men
Women

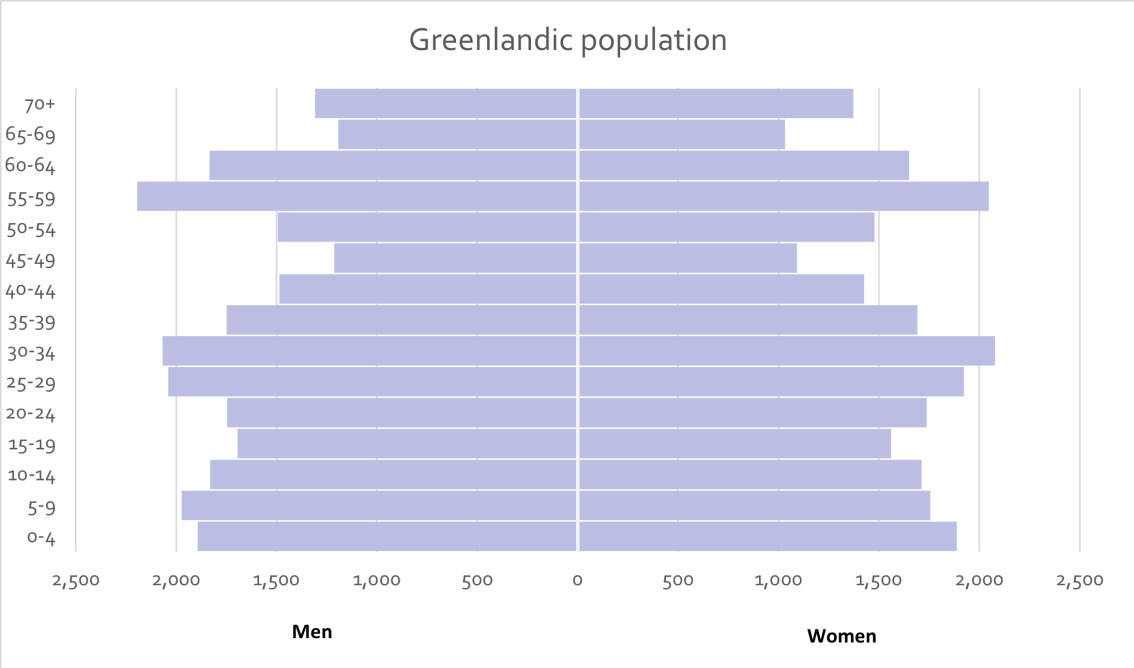
Faroe Islands





Greenland

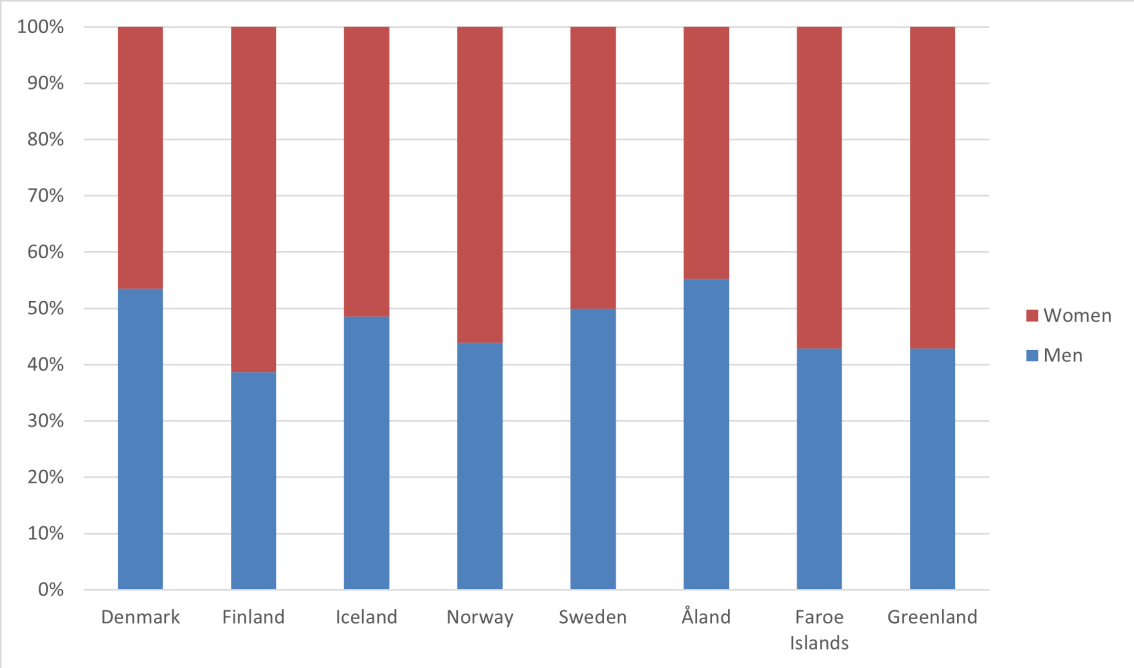




The academic literature on international migration tells us that men have traditionally been overrepresented among immigrants, including in the Nordic Region (Fischer and Straubhaar, 1996). Nonetheless, that has changed during recent decades as women have also become more likely to move abroad for studies or work. In the Nordic context, women are in fact overrepresented among Nordic migrants in several countries today (Figure 28). Most notably, women form the majority of Nordic migrants in Denmark (58%), Sweden (57%) and Åland (55%).

Conversely, men make up the majority of Nordic migrants living in Finland (53%), the Faroe Islands (53%) and Greenland (66%). The gender ratios of Nordic immigrants are more balanced in Norway and Iceland.

Figure 28: Gender balance of Nordic migrants, by Nordic country of residence (2023)
Source: Nordic Statistics Database.



At the time of writing, there are no open access, up-to-date and comparable statistics on socio-economic characteristics of Nordic migrants. The most recent comparable datasets about Nordic migrants were produced in the context of a collaboration between the Nordic Statistical Institutes and are available in the Nordic Statistics database.[9] The available datasets show the activity status, occupation, industry and family status of Nordic people who moved to a Nordic country other than their country of birth in 2015. That means that the dataset does not cover the entire stock of Nordic migrants, but just the cohort that moved in that particular year. In addition, no data were exchanged between Sweden and Norway and Sweden and Denmark, so such data are lacking. Due to the somewhat dated but also limited and incomplete nature of the datasets, they were not considered here.[10] A European-wide census was conducted in 2021 and may provide new possibilities to study socio-economic characteristics of Nordic migrants. EU aggregates and national-level data from the census are scheduled to be released in late June 2024.

9. https://www.norden.org/en/news/what-do-we-really-know-about-integration-nordic-region
10. Several of the Nordic Statistical Institutes also publish a number of datasets, which provide some information on socio-economic characteristics of Nordic migrants. However, those datasets are dispersed and not available for all countries. They do not therefore lend themselves to a comparative analysis of the characteristics of Nordic migrants.

In addition, existing academic studies can provide some indication of the socio-economic profiles of Nordic migrants, for example in terms of their skill levels. Those studies have been reviewed in earlier publications (Fischer and Straubhaar, 1996; Pedersen, Røed and Wadensjö, 2008). The reviews show that before the 1980s Nordic migrants tended to have relatively low levels of formal education. That, however, has changed during recent decades and Nordic migrants now tend to have medium or higher levels of education and are often white-collar workers. That is driven in part by the expansion of education in the Nordic countries during the past decades, with increasingly high proportions of Nordic people attaining higher levels of education.

2.3. Commuting on the Nordic labour market

In addition to facilitating migration across the Nordic borders, the common Nordic labour market also sets out to facilitate cross-border commuting. The extent of cross-border commuting between the Nordic countries and trends over time are difficult to assess since comparable and relevant long data series are not available.

Over the years, however, various projects have attempted to fill that gap and have produced cross-border commuting statistics for specific periods of time. Those include, for example, the Nordic Map of Commuting, several editions of which were published between 2004 and 2013 (*Nordisk Pendlingskarta,* see, for example, Nordic Council of Ministers, 2005 and 2013). The project involved a collaboration between the national statistical institutes of the four big Nordic countries and made it possible to identify Nordic citizens who had their regular residence in one Nordic country but received income from an employer in another Nordic country. It showed that a fairly small group of around 25,400 people commuted to another Nordic country in 2001.[11] In 2009, it was estimated that around 70,000 engaged in cross-border commuting, with men more likely to commute than women (Nordic Council of Ministers, 2013; Hanaeus, 2013). Despite the total number of commuters being relatively modest, such commuting has affected many municipalities across the Nordic countries and had an important impact in some of them in terms of meeting labour demands (Nordic Council of Ministers, 2005).

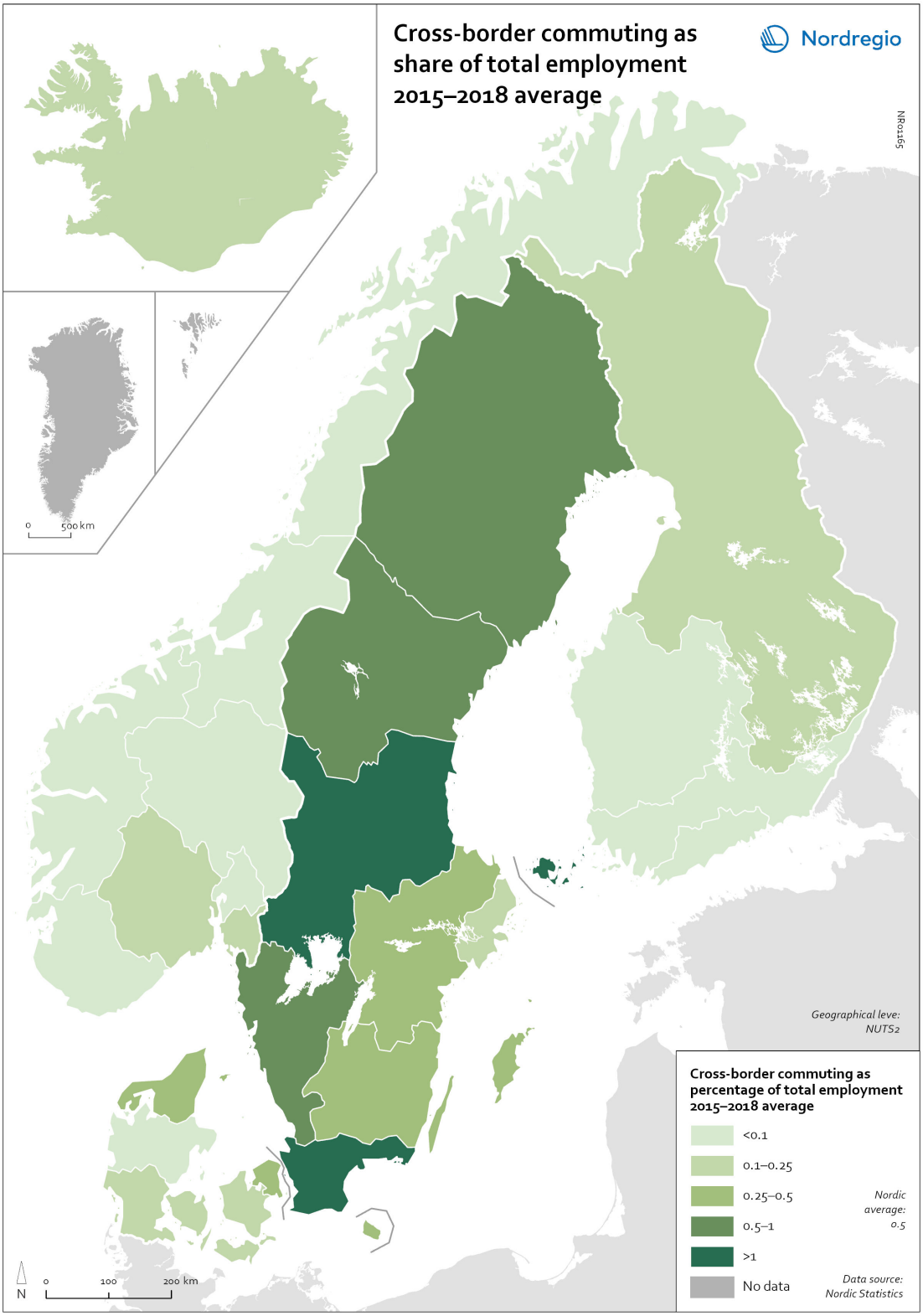
More recently, a Nordic project collected and harmonised Nordic commuting data for the years 2015-2018, including persons who regularly cross country borders to go to their workplace and digital commuters who do most of their work in their place of residence (Brun et al., 2021). Approximately 51,200 people worked in another Nordic country during this period, corresponding to 0.2% of the working age population. Swedes were particularly likely to commute, with Denmark and Norway being the preferred destinations. During the studied period of 2015 to 2017, commuting numbers declined markedly. That may be attributed to various factors, including declining levels of youth unemployment in Sweden and a weaker Norwegian currency, which reduced incentives for young Swedes to look for a job in Norway (Nordic Council of Ministers, 2021).

The harmonised Nordic commuting data also suggest that commuting plays a differing role for various regions and municipalities (Map 2). For example, in some regions in southern and central Sweden and in Åland, over one percent of the total workforce commuted to a job in another Nordic country in the period 2015-2018, while the equivalent percentage is much lower in large parts of Norway and Finland. In some municipalities, commuters may make a strong contribution to the

11. Considered were commuters between Sweden and Norway, Sweden and Denmark, Sweden and Finland and Norway and Denmark.

local labour market, with cross-border workers representing over 10% of the working age population (Nordic Council of Ministers, 2021).

Map 2: Cross-border commuting as share of total employment in NUTS 2 regions, 2015-2018 average



As documented in several studies, border restrictions – such as during the Covid-19 pandemic and the migration crisis in 2016/2017 – had a heavy impact on cross-border commuters, who could not always reach their workplaces (Giacometti & Wøien Meijer, 2021; Creutz et al., 2021; Lundgren & Wøien Meijer, 2022; Region Värmland, 2023). For example, only commuters working in key sectors (e.g. healthcare) were allowed to cross the Norwegian-Swedish border during certain periods of the pandemic. Furthermore, administrative hurdles such as an increase in required documents, different testing regimes and often unclear and changing information made it more difficult to commute. During interviews, commuters also reported that they were viewed with suspicion and as possible carriers of infection, both in their communities of residence and at their workplaces. Such experiences may have affected the trust and willingness of people in border regions to work across borders, at least in the short term. Indeed, during the pandemic the number of cross-border workers in Värmland (Sweden) who work abroad – mostly in Norway – decreased from an estimated 4,625 persons in 2020 to 3,789 in 2021 (Region Värmland, 2023).

Case studies of cross-border commuting

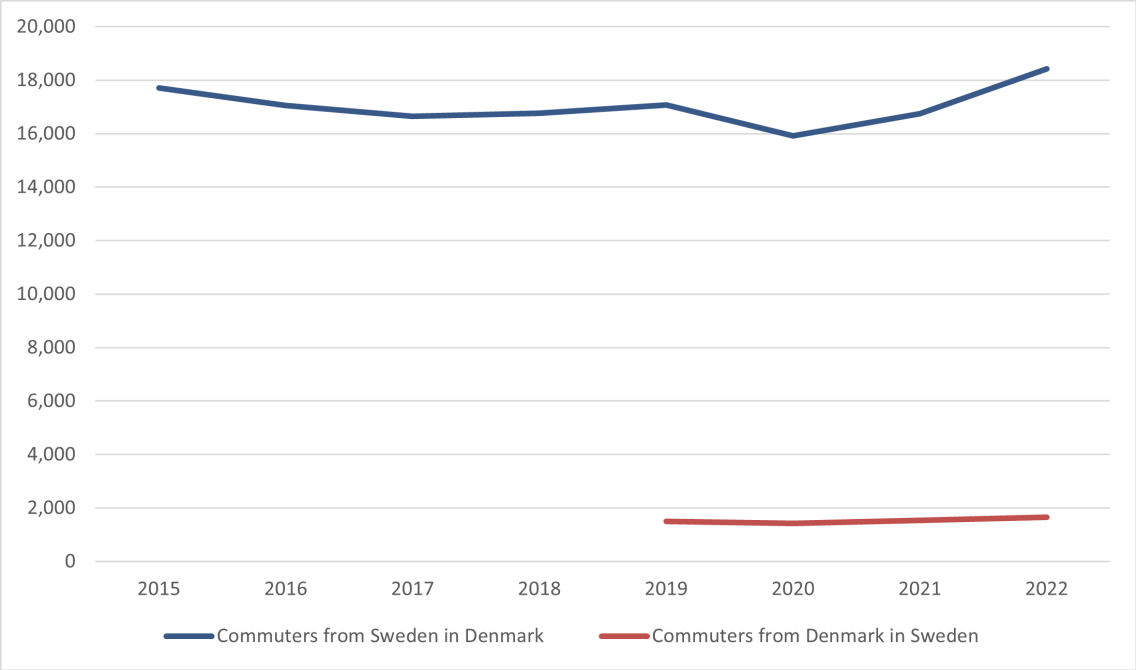
While there is a lack of up-to-date harmonised Nordic statistics on cross-border commuting, we will draw from statistics published by Ørestat, Statistics Norway, Region Värmland and Statistics Åland to shed further light on specific aspects of cross-border commuting.

Commuting in the Öresund region

Since the Öresund Bridge opened in 2000, cross-border commuting between Sweden and Denmark increased rapidly, in particular from Skåne to Själland (Region Skåne, 2022). The bridge has thereby become a vital part of integration between Sweden and Denmark. Data from Ørestat show how the number of cross-border commuters between Denmark and Sweden has developed since 2015 (Figure 29). The number of Swedish residents who work in Denmark has been consistently higher than the number of Danish people working in Sweden. Prior to the pandemic, between 17,000 and 18,000 Swedes commuted to Denmark for work, with the majority working in Copenhagen and Tårnby. Copenhagen Airport is located in the latter municipality and provides jobs for many commuters from Sweden (Bogason & Norlén, forthcoming). With the onset of the pandemic, that number dropped to just below 16,000 people. Since then, however, the number of commuters has recovered and indeed surpassed pre-pandemic levels. In 2022, 18,400 persons commuted from Sweden to Denmark. Preliminary statistics from 2023 and 2024 suggest that the number of commuters has increased still further since then (Øresundsinstitutet, 2023). Data for the years 2019 to 2022 suggest that a much smaller number around 1,500 to 1,600 persons commute from Denmark to

Sweden. Many of those commuters work in Malmö and Lund.

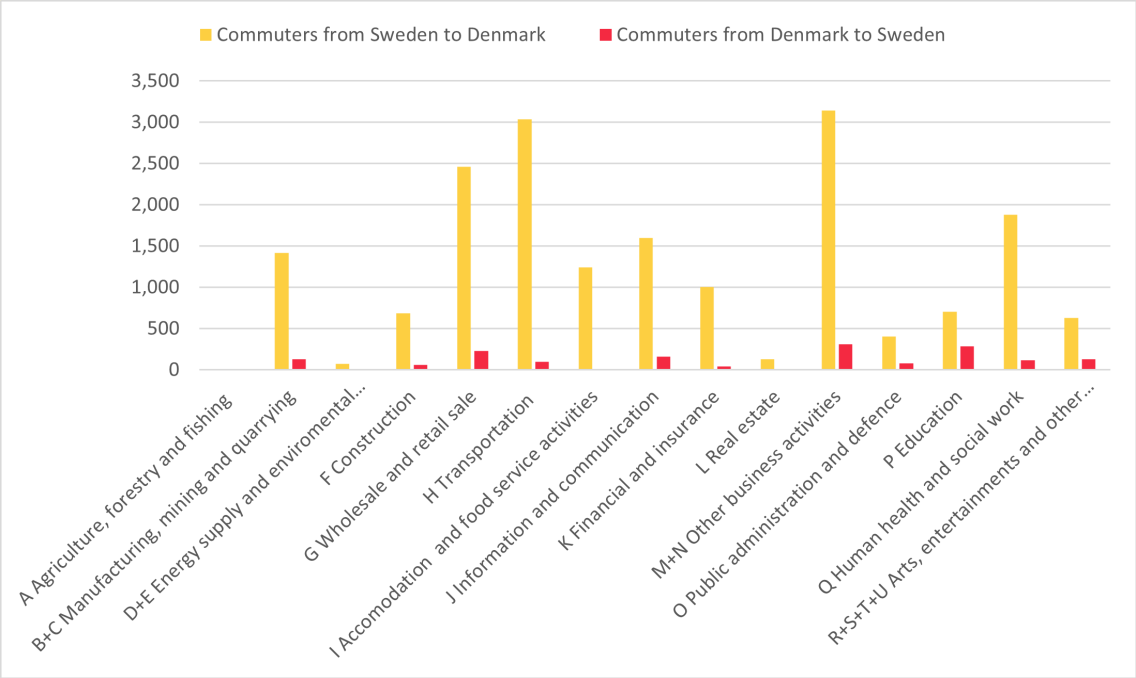
Figure 29: Commuting between Denmark and Sweden across the Öresund (2015-2022)
Source: Ørestat, 2024.



Statistics from Ørestat also show that around 63% of commuters between Denmark and Sweden are men, considering flows in both directions (Ørestat, 2024; Region Skåne, 2022). Men are also the dominant group in other cross-border areas with higher levels of commuting, such as Värmland (Region Värmland, 2023).

Among Swedish commuters to Denmark, many worked in various business activities, transportation as well as wholesale and retail sales during 2022 (Figure 30). Wholesale and retail sales, as well as other business activities, were also popular sectors for Danish commuters in Sweden. In addition, a relatively large group among the commuters from Denmark in Sweden worked in education in 2022.

Figure 30: Commuters between Sweden and Denmark by sector (NACE 2.0), 2022
Source: Ørestat (2024)



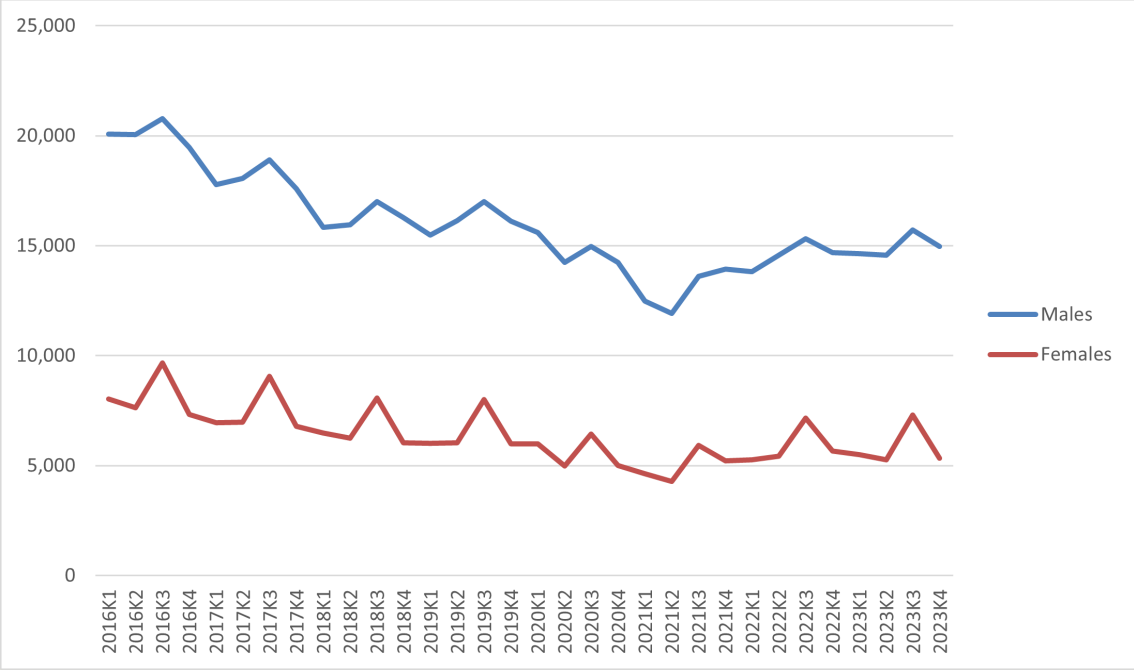
Despite the post-pandemic increase in commuting numbers, it seems only a minority of residents in the Öresund region consider commuting an attractive option. In a survey on attitudes towards cross-border commuting in the Öresund region, only 17% of the respondents from the Swedish side said that they were likely to look for a job in Denmark and even fewer respondents in Denmark – just 10% – were likely to look for a job in Sweden. The main reason mentioned for taking up a job in Denmark was higher pay, while issues relating to the commute (distance, time, cost and frequency of transport) as well as respondents' happiness with their current job were main reasons for not taking up a job in Denmark. Commuting distance and happiness with their current job were also mentioned by Danes as reasons for not taking up a job in Sweden. In addition, around 40% of respondents answered that they had simply "never thought about it". For those considering taking up a job on the Swedish side, the main motivating factors were higher pay, a larger number of exciting job options and an international environment (Greater Copenhagen, 2023).

Commuting in Norway

Statistics Norway also offers some datasets on non-resident employees from the other Nordic countries on the Norwegian labour market. Figure 31 shows that the number of men surpassed the number of female commuters to Norway throughout the time period shown. According to Statistics Norway (2024), several sectors which employed larger numbers of commuters in 2023 are male-dominated, such as construction, manufacturing and transportation.

Figure 31 also suggests that commuting to Norway is subject to seasonal fluctuations, with peaks in employment during the third quarter (July-September) of each year. Over time, the number of Nordic commuters in Norway has gradually declined, with an additional dip during the Covid-19 pandemic. Since then, the number of male commuters has picked up again, although it remains at a level well below that of 2016. Among women, the number of commuters has stagnated at around 6,000 people.

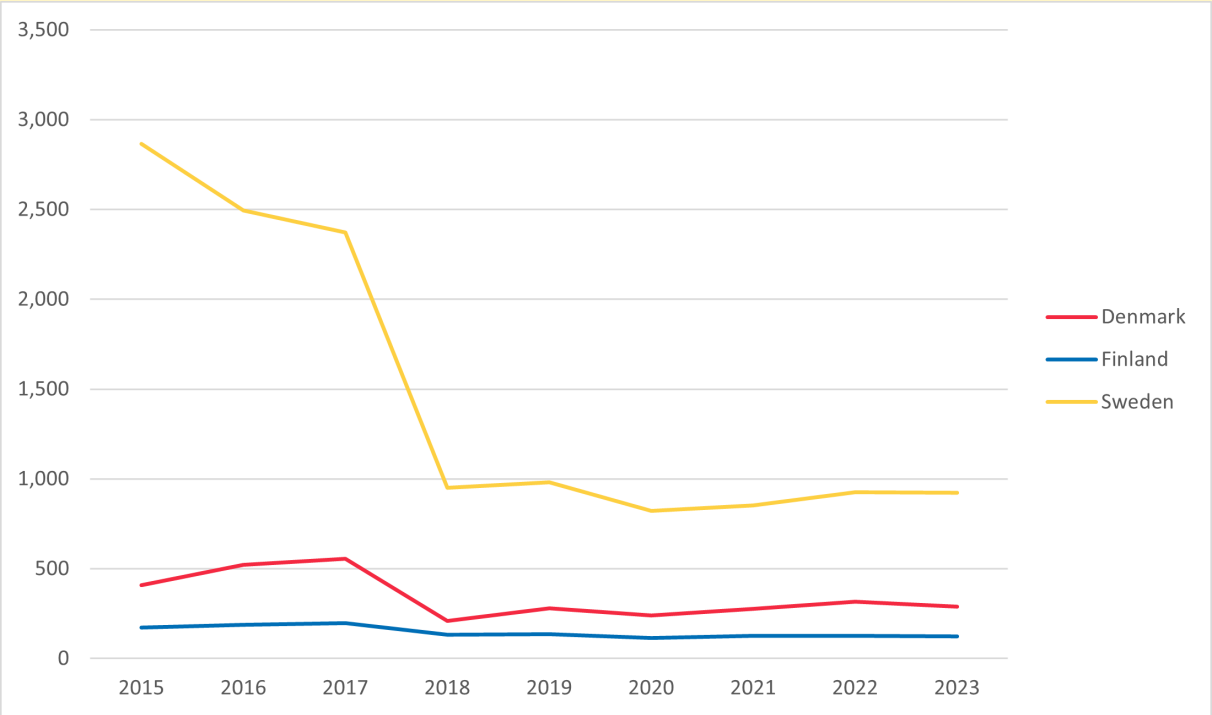
Figure 31: Employees in Norway who live in the other Nordic countries by quarter of the year (2016-2023)
Source: Statistics Norway



One sector in Norway that has traditionally attracted many commuters, particularly from Sweden, is the healthcare sector (see also Pedersen et al., 2008). [12] Nonetheless, between 2015 and 2018, the number of commuters trained in healthcare declined (Figure 32). That has been attributed to currency fluctuations and the increasingly weak Norwegian currency during this period, meaning that salary differences between Norway and Sweden were not as pronounced as before. As in the case of commuting across the Öresund, that points to the importance of differences in salary levels and job opportunities as factors that explain commuting decisions.

12. Commuting also seems to be popular among Icelandic healthcare professionals. It often takes the form of temporary stays abroad, after which the commuters return to their workplaces in Iceland. Others hold parallel part-time positions in Iceland and one of the other Nordic countries (Sigurðardóttir, 2012).

Figure 32: Commuters from Denmark, Finland and Sweden to Norway trained in health care (2015-2023)
Source: Statistics Norway



One area with high levels of commuting is the Värmland region in Sweden. In 2020, 4,600 residents in Värmland received a salary from a neighbouring country.[13] Previous studies indicate that the vast majority work in Norway, with most of them being men (73% in 2020). Employment across the border plays a particularly important role in the border municipalities of Årjäng and Eda, where 8% and 7% of all registered residents received a salary from another country.

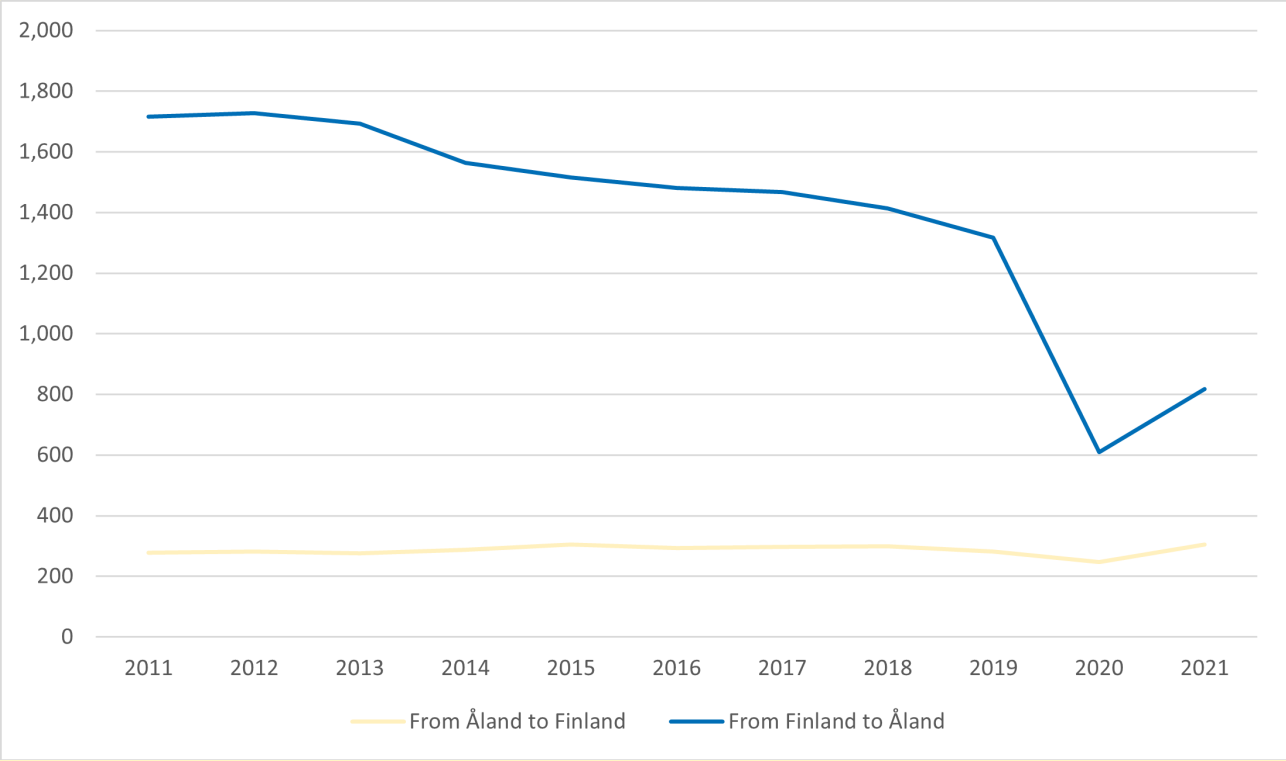
In 2021, the number of Värmland residents who received a salary from abroad decreased to around 3,800, likely reflecting the difficulties of commuting across the border during the pandemic (Region Värmland, 2023). Looking ahead, an improved railway connection between Stockholm and Oslo is expected to reduce the commuting time – for example, between the municipality of Arvika and Oslo – by more than half, which may make commuting to Norway more attractive for a larger number of residents in Värmland (Region Värmland, 2023).

13. It is important to note that the available statistics do not cover all residents of Värmland who receive a salary from a neighbouring country. The de facto number of cross-border commuters is therefore likely to be even higher than the available data suggest. For a discussion of such limitations, see Region Värmland (2023).

Commuting in Åland

Finally, Statistics Åland shows that the number of commuters who live in mainland Finland and work in Åland is much higher than the number of Åland residents who work in Finland (Figure 33). Over time, the number of commuters from mainland Finland to Åland has, however, declined from around 1,700 in 2011 to around 1,300 people in 2019. With the onset of the pandemic, the number of commuters dropped further to around 600 people. In 2021, the number of commuters somewhat recovered, but remained well below pre-pandemic levels. Among commuters from Finland to Åland, the majority (73%) worked in the transportation and storage sector in 2021, with human health and social work (6%) and public administration and defence (5%) coming in second and third place (Statistics Åland, 2024a). In contrast to commuting trends from Finland to Åland, the number of commuters who live in Åland and work in mainland Finland has remained comparatively stable during the time period considered in Figure 33, fluctuating between 250 and 300 persons. Among those commuters, transportation and storage were popular sectors (24%), as well as professional, scientific and technical activities (11%) and education (11%).

Figure 33: Commuting between mainland Finland and Åland (2011-2021)



In addition to Finland, Åland also has strong links to Sweden (ÅSUB, 2024). A recent analysis shows that 810 young people from Åland were studying in Sweden in 2022 (Statistics Åland, 2024b). That makes Sweden the most popular destination to move to for studies, ahead of Finland, where 559 were studying in the same year.

Overall, the statistics on commuting in selected cross-border regions presented in this section paint a mixed picture. It appears that the number of commuters was on the decline during the 2010s, a trend which accelerated during the pandemic. Since the end of the pandemic, the number of commuters has increased again, with a particularly rapid rise in the Öresund region.

2.4. Discussion: Looking back at 70 years of cross-border Nordic labour market mobility

The common Nordic labour market has enabled Nordic citizens to move freely and take up a job in another Nordic country for 70 years and even longer. Looking back, we find that during certain periods of time, when unemployment was high in some parts of the Nordic Region and vacancies existed in others, people moved to another Nordic country to obtain a job and potentially have better living conditions. A large part of that migration was of a temporary nature, since the Nordic migration data suggest that re-migration was also common.

Migration from Finland to Sweden, numbering close to 500,000 migrants in the 1960s and 1970s, stands out as unique in intra-Nordic migration history. The main push factors for the outmigration from Finland were high unemployment, strikes and unrest on the Finnish labour market. Seasonal working in Sweden and having education in Sweden was common, which facilitated the decision to move. Other examples of high migration between Nordic countries include high numbers of people moving from Denmark to Sweden in 1975, as well as high levels of migration from Iceland in the 1980s and also later, mainly related to developments in the fishing industry and economic downturns. Pull factors also played a role, attracting people from one Nordic country to another, such as a booming industry with many available jobs, higher salaries, better working conditions, lower costs of living and higher quality of life. The migration from Finland to Sweden was further supported by the fact that studying and seasonal working in Sweden had previously been common, and increased accessibility with new and improved ferry connections between Finland and Sweden.

However, the 1990s marked a shift in Nordic migration patterns. One of the reasons for that shift may have been the convergence in GDP per capita across the four large Nordic countries during the 1990s, which may have reduced incentives to move within the Nordic Region (Pedersen & Røed, 2008). Since the 2000s, migration between the Nordic countries has declined. In comparison to total emigration, as many as 20% of Nordic migrants still choose to move to another Nordic country (2022), although that figure has also been decreasing. That indicates that over time the Nordic countries have become less popular destinations to move to compared to other countries.

In 2023, some 450,000 Nordic people, or 1.6% of the Nordic population, lived in a Nordic country other than the country where they were born. While relatively more people choose to migrate to another Nordic country in the self-governing territories of the Faroe Islands, Greenland, Åland and Iceland, the largest flows of intra-Nordic migration are found between Finland and Sweden and Norway and Sweden.

The downward trend in migration between the Nordic countries may be explained

by several factors.[14] One is the convergence of GDP per capita and that the Nordic countries have been impacted by the same macroeconomic crises during the last decades and have largely followed the same economic cycles, meaning that there have been fewer economic incentives to move to another Nordic country. Another possible explanation is that people may move abroad to gain new experiences and explore different cultures. Increased globalisation, along with European freedom of movement and many similarities between the Nordic countries, may simply have made it less appealing to move within the Nordic Region.

The literature on migration speaks about a combination of push and pull factors. The prospects of a better life involves a combination of material and socioeconomic factors, as well as subjective experiences of health, wellbeing and satisfaction in life.[15] Previous studies based on interviews confirm that it is a combination of economic, social and cultural factors that work as pull and push factors for moving to a job in another Nordic country (Lundgren & Bogason, 2022). Given the overall high standards of living in all the Nordic welfare states, it may be questioned whether the pull and push factors are sufficiently strong to actually prompt more people to move?

However, when moving to another Nordic country, some countries and regions are more popular among Nordic migrants than others. Proximity seems to play a crucial role (spatial, linguistic and cultural proximity), with higher levels of migration and commuting in border regions. The migration data suggests that while Icelanders seems to be the most spread out over the Nordic territory, Finns represent the largest working age population living in another country. Sweden and Åland has the largest old-age population from another Nordic country.

Taking up a job in another Nordic country does not necessarily necessitate moving country since commuting is also a possibility. For evident reasons, that is mainly a possibility in cross-border areas such as the Öresund region, Innlandet-Värmland and Torneå-Haparanda, although commuting may also mean long-distance commuting. Throughout history, close relationships have developed in the cross-border areas. The possibility of commuting means extended labour markets. That may have important implications both for employment and the regional economy. Like with migration patterns, patterns of commuting, such as in the Öresund area, indicate that higher wages and better career and life opportunities play a role.

However, while data on migration can easily be accessed, data on commuting are not collected to the same extent and do not tend to be shared between the Nordic countries, making it difficult to assess the magnitude and the impact of commuting. Cross-border organisations such as Ørestat and regional authorities in

14. Interestingly, migration within each Nordic country remains substantially higher, with as much as 13-16% of the total population changing residence in any given year (Heleniak, 2020).
15. For example, the OECD Better Life Index includes eleven dimensions – income, housing, jobs, community, education, environment, civic engagement, health, life satisfaction, safety and work-life balance (OECD, n.d.).

the cross-border areas, in collaboration with the national statistical offices, have endeavoured to compensate for the lack of comparable national statistical data. While the Covid-19 pandemic meant a downturn in commuting, figures have since been on the rise.

However, for both Nordic migration and cross-border commuting, many studies point to administrative barriers hampering further mobility. Legislation regarding taxation, social security, access to an electronic ID, citizenship of a third country or validation of education complicate working and may prevent or deter people from taking up a job in another Nordic country (Giacometti & Wøien Meijer, 2021; Lundgren & Wøien Meijer, 2022; Lundgren & Bogason, 2022). That has been articulated in times of crises in particular, such as the refugee crisis of 2015-16 and the Covid-19 pandemic of 2020-21, when cross-border commuters and workers had to contend with increased travel times due to cross-border restrictions, insecurity about rules and regulations in relation to working from home and also a lack of trust among fellow colleagues and citizens. That came as a shock to many, especially in those cross-border areas with a high degree of interaction (Giacometti & Wøien Meijer, 2021; Svinesundskommittén, 2024).

In the past decades and especially during and after the pandemic, remote working (also referred to as distance working, working from home, flexible working or multilocality) and hybrid working which means working part-time at a permanent workplace and part-time remotely has come to play a more important role in the Nordic Region. In 2022, it was estimated that approximately 40% of all jobs in the Nordic Region could be performed remotely (Randall et al., 2022). More recent figures show even higher levels than 40% working remotely in most countries (Granath Hansson & Gudmundsdottir, 2024). However, the possibility of working remotely is dependent on access to fast broadband, a type of job that can actually be performed remotely, employers amenable to remote working, as well as access to commuting opportunities. This means that issues of connectivity and accessibility play a key role, not only for migration and commuting on the common Nordic labour market, but also with respect to working remotely. However, the option to work remotely means that work can be performed anywhere, suggesting that the Nordic Region is competing with other attractive places around the world.

The common Nordic labour market serves two main objectives: enabling individuals to search for a job in a wider labour market area – which may both increase earnings and reduce the risk of unemployment – and dampening economic cycles by attracting labour during economic upswings and reducing unemployment though emigration during downswings (Pedersen and Wadensjö, 2008). The data presented in this report show that, to some extent, that has been the case during the 70 years of the common Nordic labour market. In the final chapter of this report, we will discuss further the role of Nordic institutions and organisations in fostering development of the common Nordic labour market.



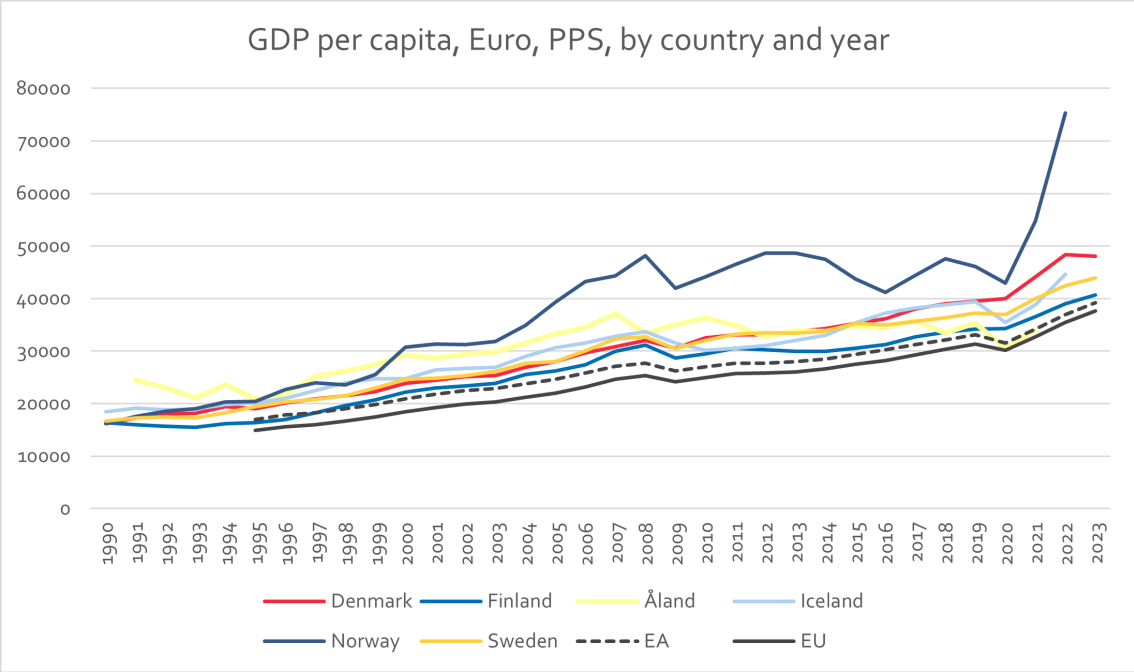
Photo: Lukasz Maznica, Unsplash.com

3. Looking forward: The Nordic common labour market the next 70 years

The Nordic labour market migration has historically developed in interplay with economic development in the Nordic countries. The most evident example is the migration of nearly half a million people to Sweden from Finland in the 1960s and 1970s. However, data about the relationship between unemployment and labour market mobility paint a complex picture and indicate that labour market migration also seems to be related to "moving towards something" rather than "moving away from something", indicating that pull factors may exceed the importance of push factors. In the following section, we will point to some key characteristics of the Nordic labour market today, as a stepping stone for looking into the future of the common Nordic labour market.

In international comparison, the Nordic Region performs well economically, with all Nordic countries performing better in terms of GDP per capita than the EU average. Economic growth in the Nordic Region has been stable over time following the economic crisis in 2008-2009 with a few exceptions, in particular the Covid 19 pandemic. However, it should be noted that the Nordic Region recovered more rapidly than the EU after the pandemic (Calmfors & Sánshez Gassen, 2024).

Figure 34: GDP per capita In Euro, PPS, by country and year.
Source: Nordics statistics, Economic key figures, KEY01



The Nordic countries are closely tied to the global economy, with exports making a crucial contribution to the economy in each of the Nordic countries. In Denmark, exports account for as much as 70% of GDP and in the other countries exports account for around half of GDP (Nordic Statistics database). However, the Nordic countries are also very strong trading partners. In fact, all the Nordic countries have another Nordic country and Germany among their top three countries for exports or imports, and in most cases for both exports and imports.

Access to various natural resources in the individual Nordic countries is reflected in the industry profiles of the individual countries and their exports. While some of the Nordic countries share the same profiles and export sectors, others are country-specific. For example, Denmark, Finland and Sweden have strong export in the chemistry sector, while Norway and Iceland are strong in the fishery sector. That means that when acting on the global market the Nordic countries are competing for economic market shares in some areas, while also being strong trading partners in other areas or even in segments of the same areas.

The industrial profiles of the Nordic countries are also reflected in the labour market sectors with the highest employment figures. All Nordic countries are strong welfare states and approximately 30% of the labour force works in the public sector. The second largest employment sector in all Nordic countries is a broad sector labelled in the Nordic statistics as "Wholesale, retail trade, transportation and storage, accommodation and food service activities'"(25.7% in

Denmark, 25.2% in Iceland, 21.3% in Norway and 19.3% in both Finland and Sweden). The third and fourth largest employment sectors in Denmark, Sweden, Finland and Norway are the sectors called "Professional, scientific and technical activities, administrative and support service activities" and "Industry except construction" with figures ranging from 10.2% to 13.9%. In Iceland, the third and fourth biggest employment sectors are "Industry except construction" and "Industry, of which manufacturing" (Nordic Statistics database). Several of those sectors are currently suffering from a lack of labour and, as we will see below, several of those sectors also forecast to face challenges in filling vacant positions in the future.

However, development of the local and regional Nordic labour markets are also dependent on accessibility and transport infrastructure to support the flows of goods and people commuting both within and to and from the labour market area. Past studies show that access to cross-border infrastructure and reliable public transport are essential to enhancing not only international trade but also cross-border mobility. A key example for improving cross-border transport infrastructure is the Trans European Network Corridors (TEN-T) which include major links across Europe and also in the Nordic territory. In 2023 it was agreed to extend the TEN-T core network with the link between Stockholm and Oslo. In a longer run, accessibility is important for economic growth and welfare in cross-border areas, as well as for increased civil security (Pedersen, Røed & Wadensjö, 2008; Greater Copenhagen Committee, 2016; Grundfelder et al. 2020; Region Värmland 2022; Sweco, 2023).

After that description of some key features of the current situation, we will now delve into expectations about labour market demand and supply in in the future in the Nordic Region.

3.1. Supply and demand on the future Nordic labour market

This chapter aims to present the labour market forecast for the Nordic countries and their autonomous regions, mainly using official harmonised data sourced from the CEDEFOP website, administered by CEDEFOP European Centre for the Development of Vocational

Training.[16]

The overarching theme, which will be presented based on the comprehensive forecast from CEDFOP, is a pronounced scarcity of labour throughout the Nordic Region. That scarcity aligns with factors such as an ageing population, low fertility rates and a technologically dependent industrial society. The Nordic countries are facing a pronounced scarcity of skilled labour, evidenced by the present-day challenges encountered by numerous enterprises in recruitment across various specialised fields. That issue is expected to become exacerbated, with analyses indicating a potential deficit of skilled workers numbering in the hundreds of thousands across the Nordic Region within a decade to fifteen years. This might risk to have substantial ramifications for Nordic societies, impeding endeavours such as facilitating the green transition, fortifying healthcare systems and fostering the efficient development of emerging technologies. A contributing factor to that predicament lies in the insufficient enrolment of young individuals in vocational education and training programmes throughout the region (Nordisk Råd, Attraktive erhvervsuddannelser 2022).

The CEDEFOP predictions of labour market trends presented here, such as labour force participation, labour demand and supply, as well as skill levels, are based on econometric models through to the year 2035. Although CEDEFOP offers thorough cross-national forecasts of skill and labour demand, it relies on assumptions regarding factors such as changes in population size, expansion of sectors and industries and educational enrolment, i.e. projections about the future that are based on estimates. Readers should therefore focus on overall trends and not place too much emphasis on specific numbers.[17]

The chapter is structured as follows: initially, we provide an overview of the forecast size and composition of the labour force across the five Nordic countries. Subsequently, data pertaining to forecast employment levels and sectoral growth rates are presented. That is followed by an analysis of estimated replacement demands, along with an elucidation of their implications. Finally, projections of job openings spanning the years 2025 to 2035 are delineated according to varying levels of qualification and occupation.

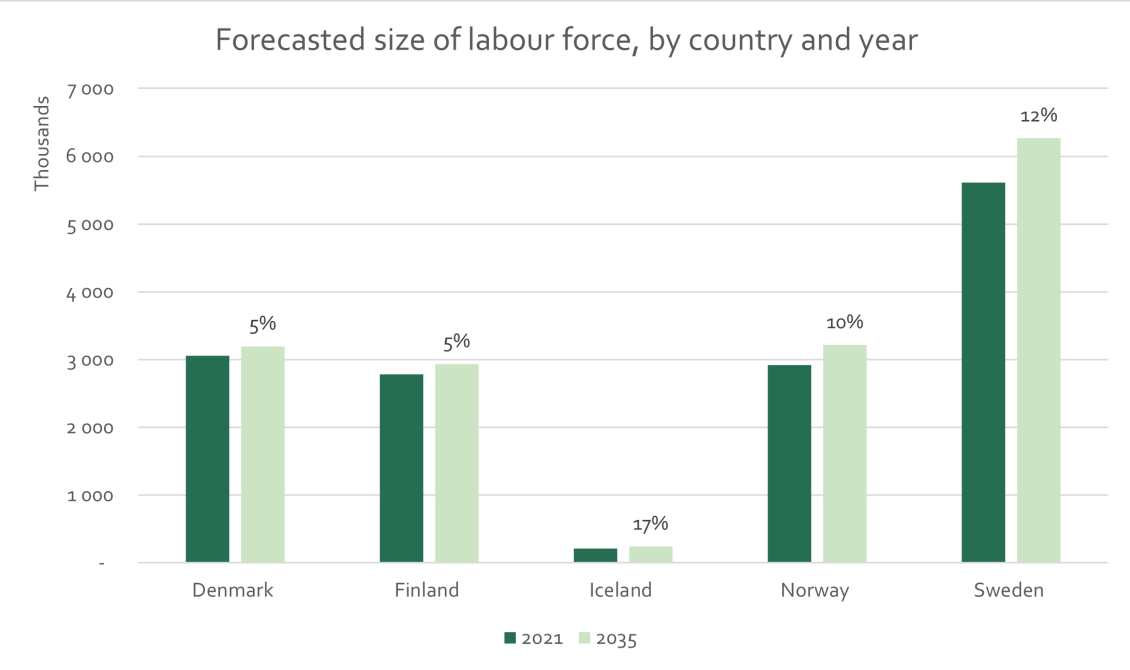
---

16. The conceptual framework of CEDEFOP revolves around three key components: (a) analysing skill demands arising from employment opportunities, (b) assessing skill supplies within the labour market, including metrics such as workforce participation rates and educational qualifications and (c) identifying disparities between demand and supply through a comparative examination of data from both sides. CEDEFOP's forecast is based on standardised data, methodologies and models employed across all participating countries, which encompass the EU alongside the Republic of North Macedonia, Iceland, Norway, Switzerland and Turkey, to generate a comprehensive and harmonised set of skill projections. The data primarily originate from Eurostat, covering demographic trends, historical and projected figures, national accounts and labour force surveys. Full information on the methodology can be found here: https://www.cedefop.europa.eu/files/skills_forecast_methodological_framework.pdf. CEDEFOP does not include information about the self-governing territories.
17. Note that while subject matter specialists from individual countries engage in peer review and validation processes, the use of standardised models and assumptions may limit the integration of localised data and contextual factors.

A growing but ageing labour force in the Nordic Region

Labour force forecasts are constructed based on estimates provided by CEDFOP, drawing on data primarily sourced from Eurostat. The labour force is defined as individuals aged 16 and above who are either employed or unemployed. Figure 35 illustrates the total number of individuals in the labour force for the year 2021 alongside the projected values for 2035, with the percentage change between the two years.

Figure 35: Forecasted size labour force, absolute numbers, and precent change 2021 to 2035, by country.
Source: Own calculation based on CEDEFOP data



It is evident that all countries are anticipated to experience an expansion of their labour force in the forthcoming years. However, the magnitude of that growth is particularly noteworthy in Iceland, Sweden and Norway. Notably, the labour forces of Sweden and Norway are expected to increase by more than 650,000 and 300,000 individuals respectively. Growth in Iceland as a percentage is large mainly due to its comparatively small labour force in 2021.[18]

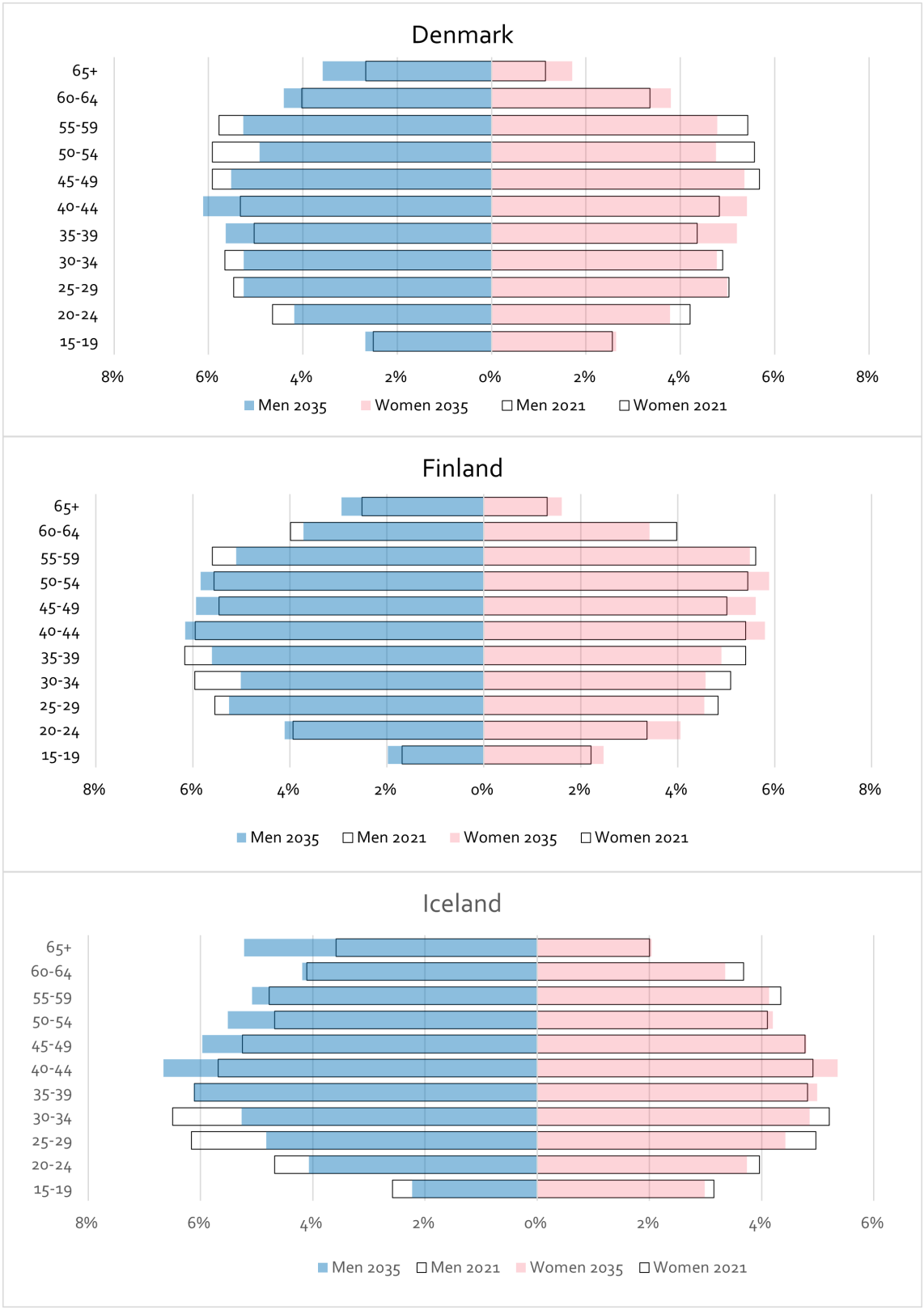
For example, in Sweden, the SCB forecast for 2040 (Sysselsättningsprognos, 2018) anticipates a 15% rise in employment from 2016, totalling approximately 691,000 individuals aged 16-74 years, reaching a total of 5.5 million. That projection is further underpinned by expectations of heightened employment levels among individuals aged 74 and above, as well as increased employment rates among immigrants.

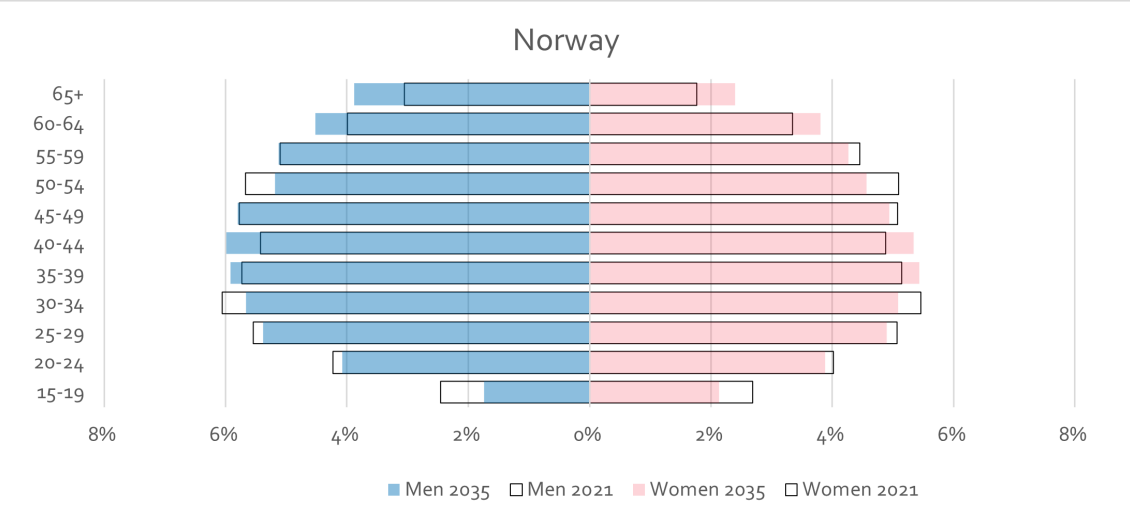
18. Note that all figures in this section refer to the year 2021. That choice was made because the data for 2021 are the most recent data available that have been sourced from the Labour Force Survey (LFS) and other official sources rather than extrapolated.

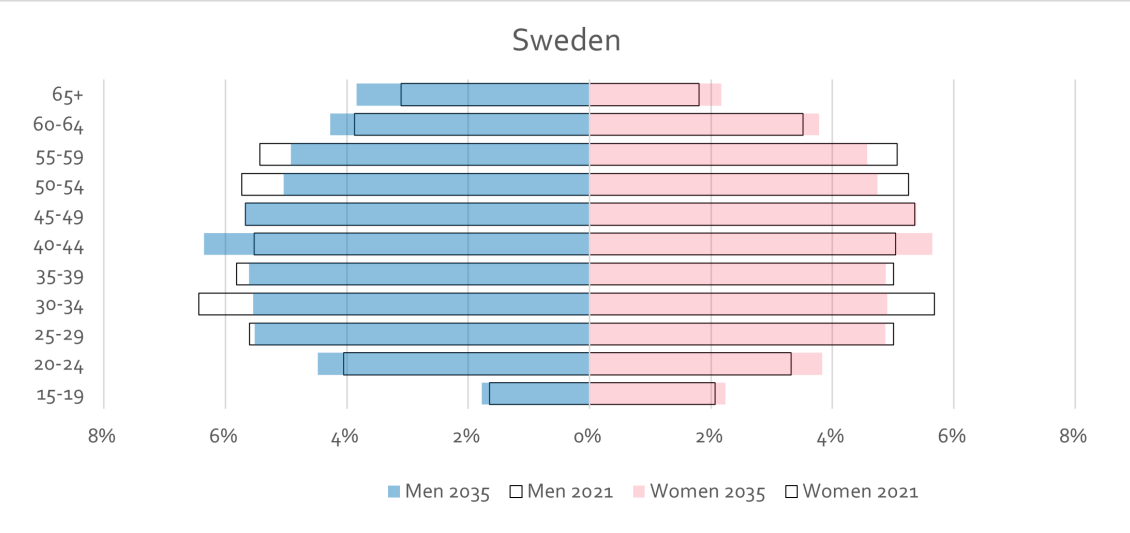
In the case of Finland, while CEDEFOP's estimate of the labour force suggests a slight increase, national statistics from Finland (Finnish National Agency for Education, 2020; Finnish Government, 2021) indicate a projected decrease in the working age population of Finland in the near future (by 2030 and 2035, depending on the forecasts). Those disparities likely stem from larger labour force participation predictions for older cohorts in the case of CEDFOP and focus on the size of the workforce by the national statistics. Finland has experienced lower levels of immigration compared to other Nordic countries. To increase the labour force, the Finnish government has outlined a roadmap to augment education-based and work-based immigration and increase the employment rate (Finnish government, 2023).

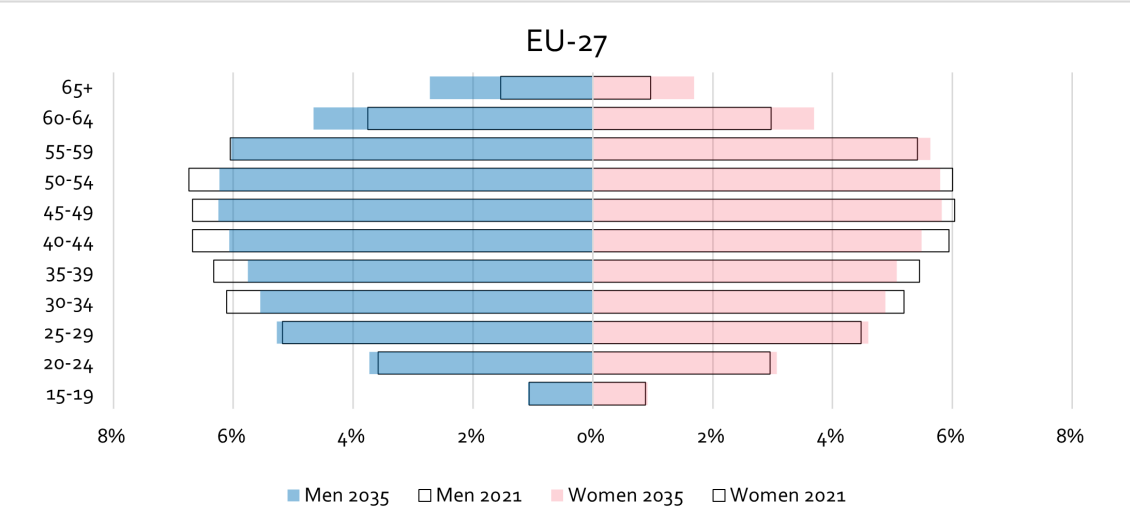
Figure 36 presents population pyramids illustrating the labour force as a percentage of the total workforce for each country. The evident trend depicted in this figure is again the ageing population of the labour force in Nordic countries, manifested in two key aspects. First, the proportion of individuals aged 60 and above within the total labour force is projected to increase in Denmark, Iceland, Norway, Sweden and the EU-27. That surge in labour force participation among individuals aged 60 and above reflects the ageing population across all countries, as well as the predicted increase in the labour force participation of that age group. Second, the percentage of individuals entering the labour market (ages 25-29) or at the outset of their careers (30-34) is anticipated to decline across most Nordic countries. That effect is particularly pronounced in Iceland and Finland. Similarly, the Finnish National Agency for Education also emphasises the smaller younger cohorts, predicting that only 80-85% of the job openings are expected to be covered by young people, while 15-20% will have to come from other sources (Finnish National Agency for Education, 2020). Note that the predicted increases in the labour force are largely dependent on assumptions regarding an increase in the labour force participation of older cohorts, implying that while the working age population might be decreasing, the labour force might still be predicted to grow.

Figure 36: Population pyramids of the labor force as a percentage of the total workforce, 2021 and 2035 by country.
Source: Own calculation based on CEDEFOP data



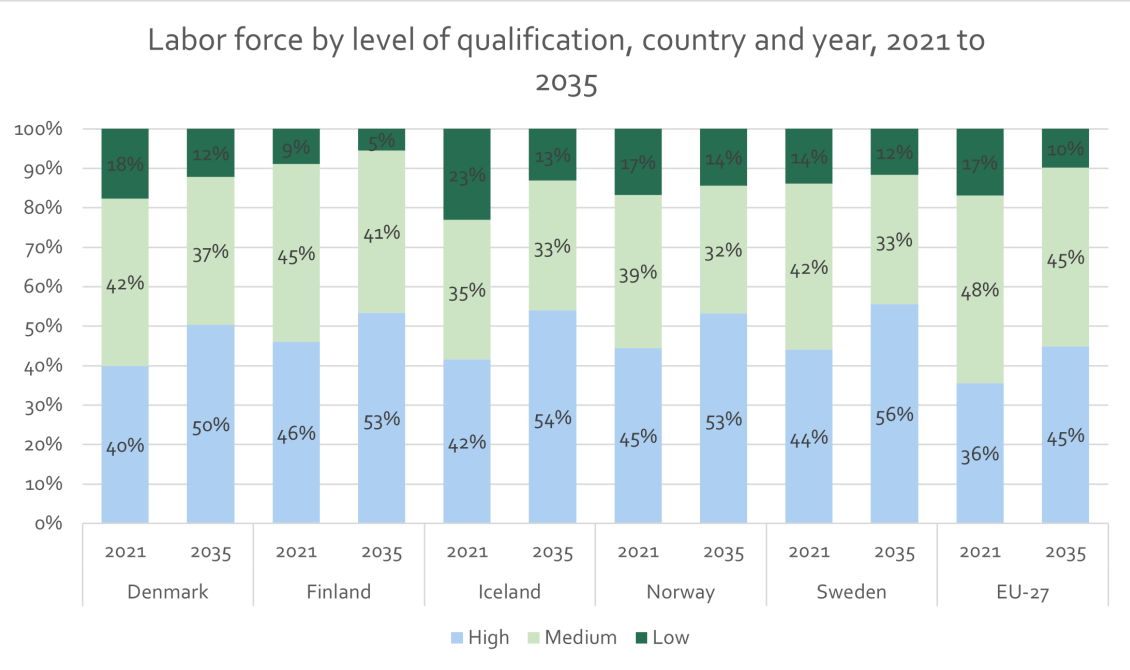

Norway
65+
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
8%
6%
4%
2%
0%
2%
4%
6%
8%
Men 2035
Men 2021
Women 2035
Women 2021


Sweden
65+
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
8%
6%
4%
2%
0%
2%
4%
6%
8%
Men 2035
Men 2021
Women 2035
Women 2021


EU-27
65+
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
8%
6%
4%
2%
0%
2%
4%
6%
8%
Men 2035
Men 2021
Women 2035
Women 2021

In line with the trend observed in education across most developed countries, including the Nordic Region, the prognosis for the next decade suggests that the labour force will see a larger proportion of individuals with high qualifications (corresponding to ISCED11 levels 5-8).[19] It is anticipated that over 50% of the labour force in the Nordic countries will fall into this category, compared to the average of 45% for the EU-27 (see Figure 37). That increase in the share of higher qualifications is expected to coincide with a decline in the proportion of individuals with low or medium qualifications across the various countries. For instance, the increase in high qualifications is predicted to be driven by a decrease in low education levels in Iceland, while in Sweden it is expected to be due to a decrease in the proportion of medium education levels.

Figure 37: Labor force by level of qualification, country and year, 2021 to 2035.
Source: Own calculation based on CEDEFOP data



Employment forecasts in various labour market sectors

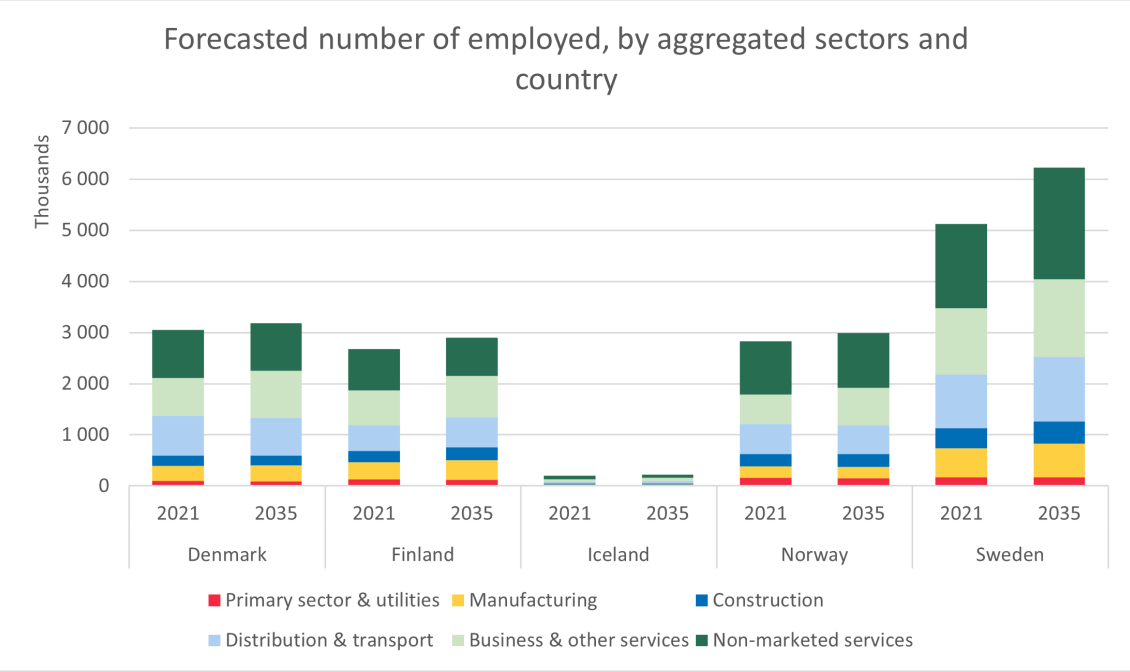
Overall, the labour market in the Nordic countries has many similarities with historically strong primary sectors, knowledge intensive manufacturing industries and businesses and a large public sector in line with the Nordic welfare model. As we will see, this is also reflected in the employment forecasts below.

Figure 38 depicts the employment forecast by country in absolute numbers for the years 2021 and 2035 across six aggregated industries and sectors. Figure 39 presents the same numbers as a share of total employment to facilitate the

19. Categories are low (ISCED1-2), medium (ISCED3-4) and high (ISCED5-8); see Appendix 4.1 for a detailed explanation of the classification used for education.

comparison across countries due to the differences in the size of the economies.[20] It is evident that three aggregated sectors comprise the predominant portion of employment in the Nordic countries. Those sectors encompass non-market services (a consolidation of Public Administration & Defence, Education and Health), Business and Other Services and Distribution and Transport.

Figure 38: Forecasted employment in absolute numbers, by aggregated sectors and country, 2021 and 2035.
Source: Own calculation based on CEDEFOP data



A prominent observation is that, in line with the Nordic welfare state model, in all Nordic countries a considerable proportion of individuals work in the non-market services sector compared to the rest of the EU-27, constituting between 30 to 37% of all employees, in contrast to 24% in the EU-27 in 2021. However, it is anticipated that, aside from Sweden, all Nordic countries will experience a decline in the share of employment within this sector relative to other sectors (as a percentage of all employment, see Figure 39). That decline does not imply a reduction in the absolute number of employees engaged in the non-market sector, but rather suggests that a greater proportion of labour growth will be in other sectors, primarily Business and Other Services (see Figure 39).

When looking at forecast changes until 2035, all Nordic countries are expected to experience substantial growth in the Business and Other Services sector. For

20. Appendix 4.3 presents the categorisation of industries and sectors based on NACE 2-digit numerical codes into the six aggregated categories, as well as a detailed breakdown of the classification. For more information on the classification used by CEDEFOP which is based on the EUROSTAT, see the methodological report

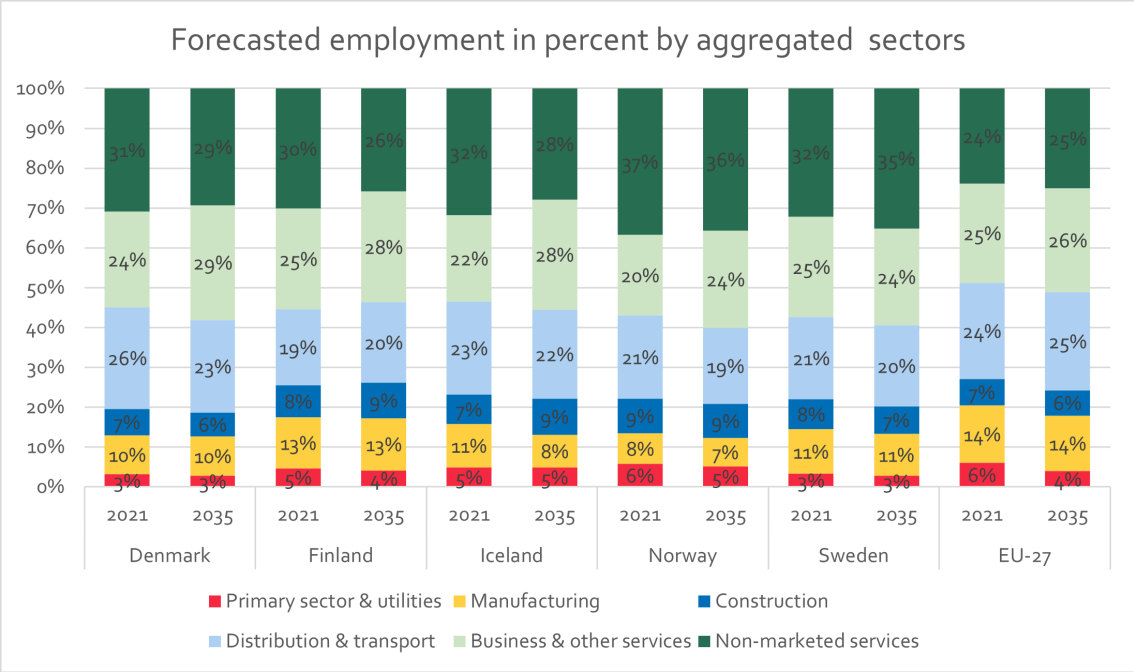
example, in Norway the projections for employment in various sectors by 2040 suggest an increase in the number of individuals employed in private services and public services except armed forces, alongside a decline in those employed in industry, retail and oil and gas production (NAV's Horizon Scan 2023-2035, 2023).

While a small number of individuals were employed in the primary sectors and utilities in 2021, that sector is predicted to shrink still further in the coming years. Most Nordic countries are expected to experience a decrease in employment within the primary sectors and utilities, except Sweden and Iceland. For example, Norway is forecast to see a significant decline in employment in the oil and gas production sector, with a decrease of over 25% compared to 2017 levels (NAV's Horizon Scan 2023-2035, 2023). At the same time, Sweden's increase in employment is linked to a rise related to the green transition, while Iceland's growth is driven by a combination of factors within utilities.

Sweden represents an exception, as it is projected to witness a simultaneous increase in the non-market services sector and a modest decline in the share of employees engaged in Business and Other Services, as well as Distribution and Transport, as a share of total employment (see Figure 39). That forecast is primarily attributed to the substantial expansion of non-market services in absolute numbers. Statistics Sweden (SCB) also forecasts robust labour demand, particularly in fields related to the welfare society such as social care, healthcare and teaching, as well as fields linked to technological advancements like digitalisation, automation, AI and the green transition (Statistics Sweden, Trends and Forecasts 2020; Statistics Sweden, 2022; Larsson, 2023).

While those findings provide an overview of forecast employment growth across sectors and countries, they mask significant features within sectors. That is particularly notable within the non-market sectors, which are crucial components of the welfare state. That aligns closely with the growing demand for healthcare services driven by population ageing. Additionally, a projected growth in care services is expected across all countries except Iceland. That trend of high demand in relation to the ageing population was emphasised in most countries' national statistics forecasts. For example, according to Statistics Finland's population projection, the number of persons aged 85 or over will nearly double by 2035, which will increase the need for healthcare and social services. Accordingly, more people will work in the sector and an estimated 30,000-70,000 additional workers will be needed in that sector (Finnish Government, 2023).

Figure 39: Forecasted employment shares in each aggregated sectors by country, 2021 and 2035.
Source: Own calculation based on CEDEFOP data



Within non-market services, it should be noted that Finland, Iceland and Denmark are forecast to experience a decline in the number of individuals employed in the education sector. That unexpected trend could be linked to a reduction in the number of children due to declining fertility rates in those countries, particularly in Finland (the lowest rate in all the Nordic countries) and Iceland (which has been experiencing a steep decline since 2009) (Norlén et al., 2024, forthcoming).

Job openings

While the preceding section primarily focuses on the supply side of the labour market, encompassing the labour force and employment across various sectors, we will now look into forecasts regarding the demand side of the labour market, i.e. future job opportunities (e.g. job openings) across the various Nordic countries by occupations. Estimates of job openings encompass both anticipated job openings stemming from growth in employment (e.g. expansion of demand) and the need to replace individuals leaving their current occupations for various reasons (e.g. replacement demand). Replacement demand primarily concerns what could be termed "permanent or semi-permanent" departures from the employed workforce and includes retirement, family formation or emigration.[21]

Figure 40 illustrates the absolute number of forecast job openings spanning the period from 2025 to 2035, categorised by country and aggregated

21. Alongside exits from the labour force, inter-occupational mobility – workers transitioning from one occupation to another – is also considered. Nonetheless, it should be noted that retirement is the predominant factor for replacement demand.

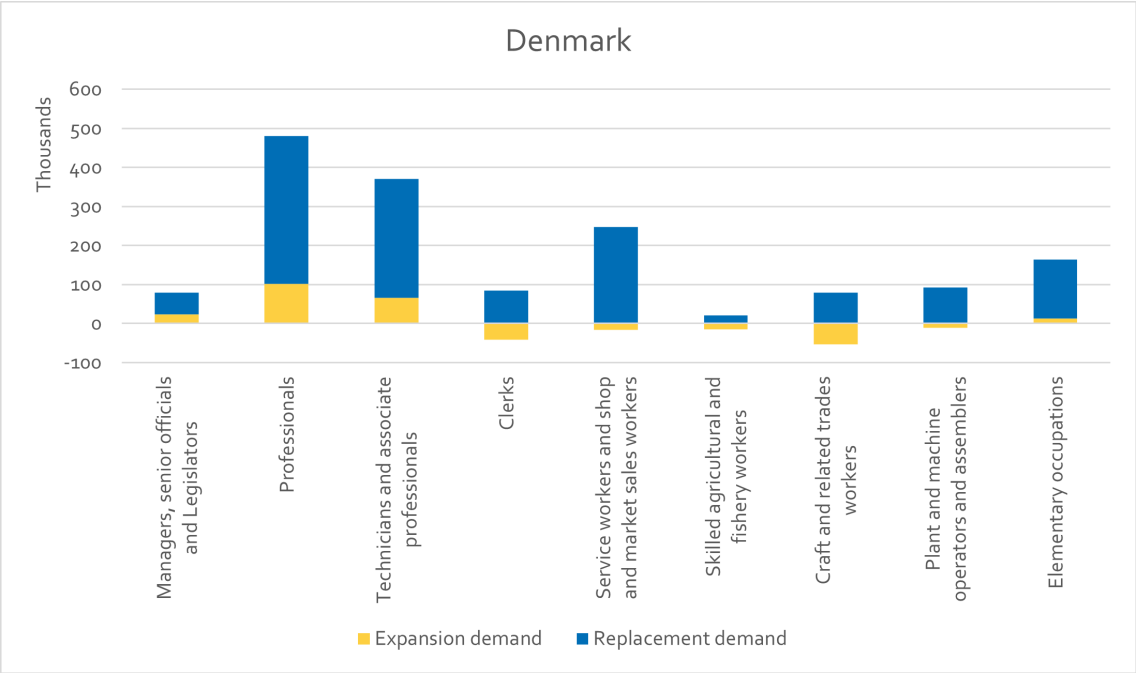
occupation.[22] Across all Nordic countries, the majority of job openings are attributed to the need for replacement on the labour market. Additionally, in certain occupations, expansion demand constitutes a considerable proportion of job openings, particularly in professional occupations.

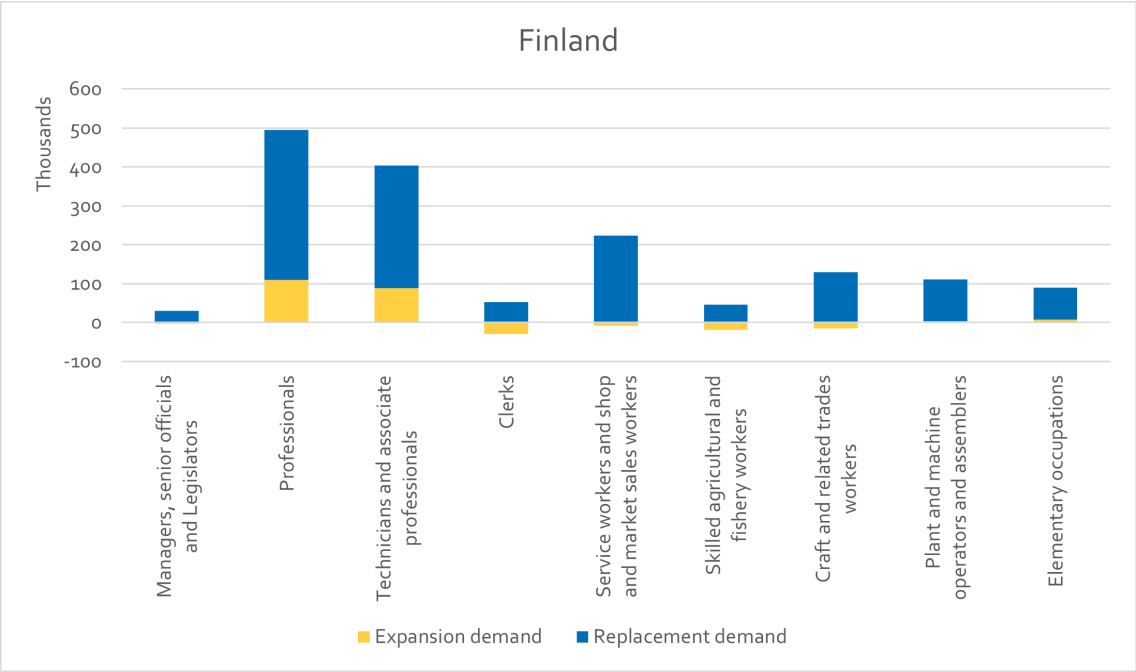
Another noteworthy similarity among the Nordic countries is the prominence of job openings within the professional occupation category, followed by technicians and associate professionals in most countries. However, Iceland and Norway deviate from this pattern, with the field with the second highest demand being legislators, senior officials and managers in Iceland and service workers and shop and market sales workers in Norway. Furthermore, service workers and shop and market sales workers constitute a substantial share of forecast job openings in all Nordic countries.

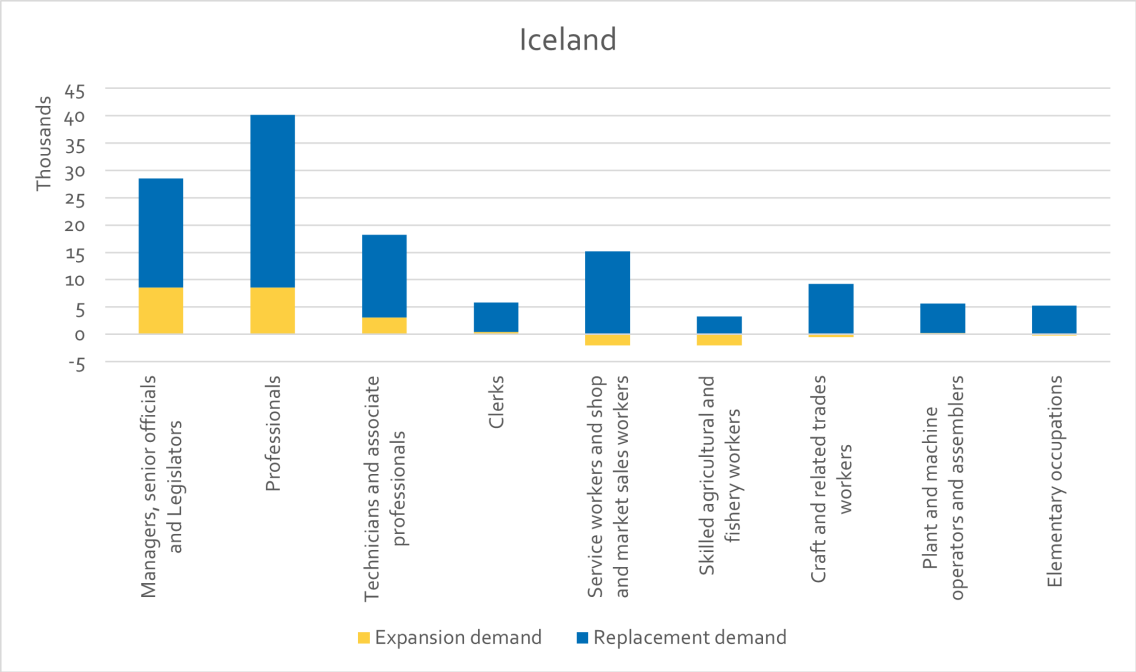
Another significant insight apparent from Figure 40 is that in most Nordic countries, the projected share of job openings within the elementary occupation category is remarkably small compared to other occupations (with the exception of Denmark). That limited demand for low-skill occupations has clear implications for individuals with lower levels of education in terms of employment opportunities. For example, several studies point to the need for highly skilled workers and the risk of unemployment for low-skilled workers (Walbækken, et. al., 2019; Cappelen, 2020).

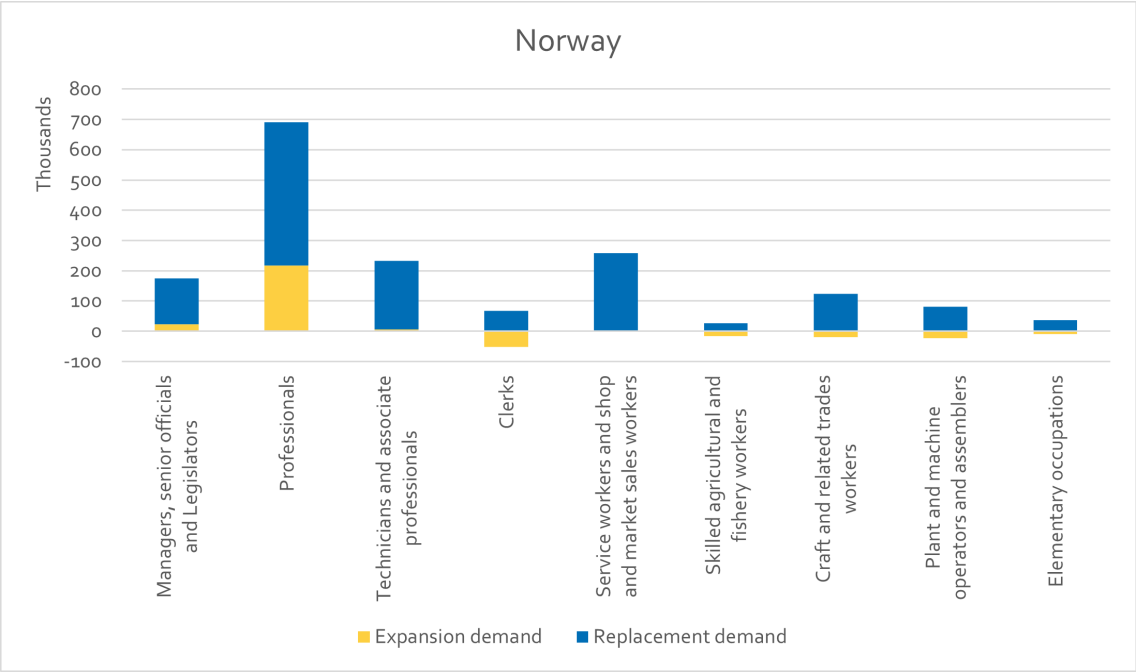
22. Appendix 4.4 provides the categorisation of occupations based on the ISCO-08 2-digit occupational classification into the 1-digit classification, along with a detailed crosswalk of the classification and specific examples of occupations for clarification purposes. For further details on the classification utilised by CEDFOP, which is based on EUROSTAT methodology, please refer to the methodological report: https://www.cedefop.europa.eu/files/skills_forecast_methodological_framework.pdf and ILO definition in: https://isco-ilo.netlify.app/en/isco-08/.

Figure 40: Forecast number of job openings, by aggregated occupation and country, 2025 to 2035.
Source: Own calculation based on CEDEFOP data






Iceland
Thousands
45
40
35
30
25
20
15
10
5
0
-5
Managers, senior officials and Legislators
Professionals
Technicians and associate professionals
Clerks
Service workers and shop and market sales workers
Skilled agricultural and fishery workers
Craft and related trades workers
Plant and machine operators and assemblers
Elementary occupations
Expansion demand
Replacement demand


Norway
Thousands
800
700
600
500
400
300
200
100
0
-100
Managers, senior officials and Legislators
Professionals
Technicians and associate professionals
Clerks
Service workers and shop and market sales workers
Skilled agricultural and fishery workers
Craft and related trades workers
Plant and machine operators and assemblers
Elementary occupations
Expansion demand
Replacement demand

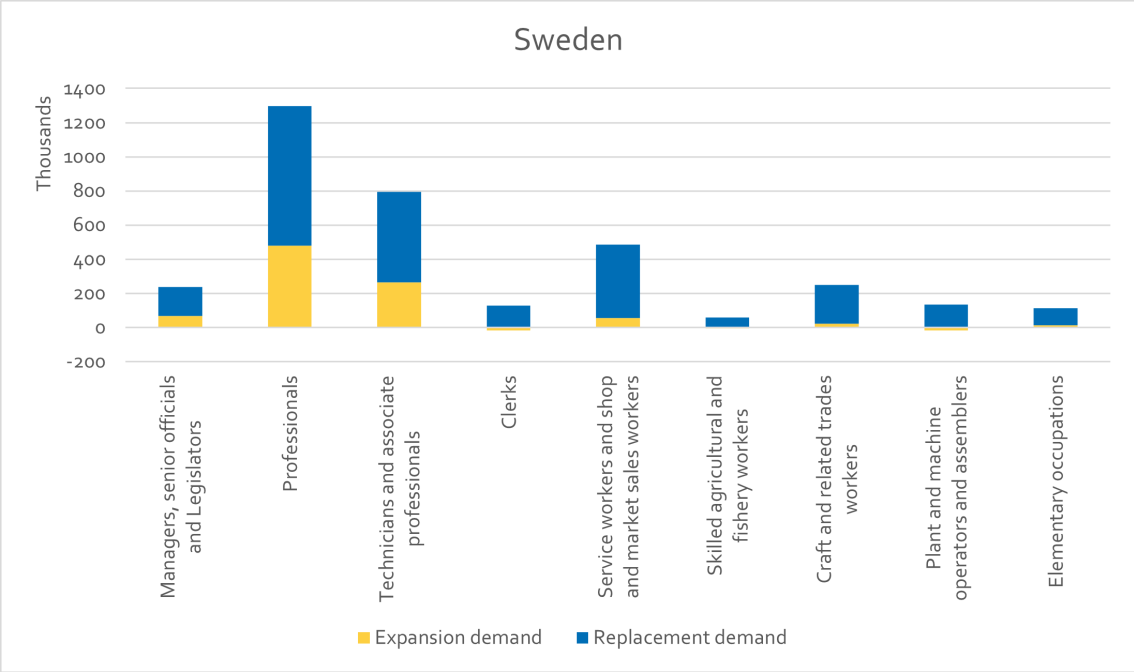
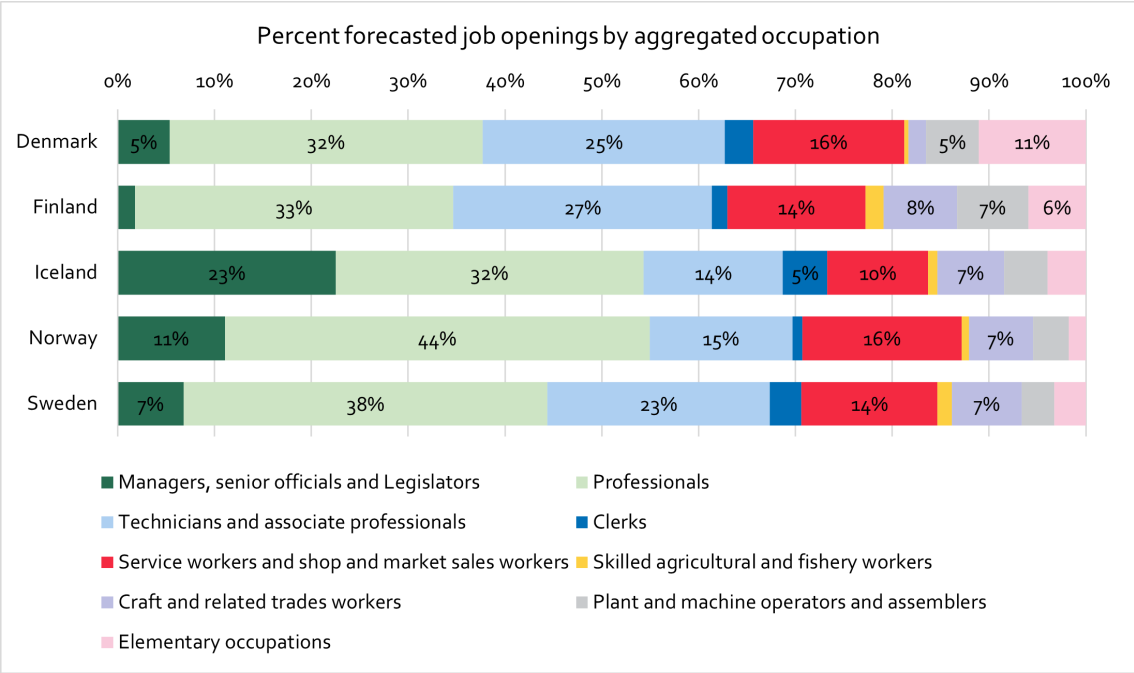


Figure 41 shows the distribution of forecast job openings across broad occupational groups and countries as a share of all forecast job openings between 2025 and 2035. As stated, across all five Nordic countries professional occupations emerge as the most in-demand category, constituting between 31 and 42% of all predicted job openings. Following closely, technicians and associate professionals represent the occupational group for which demand is second highest in most Nordic countries (except for Iceland). Service workers, shop and market sales workers are projected to account for between 11 and 17% of job openings in the Nordic Region. Other occupational groups collectively represent less than 10% of all job openings, with exceptions such as managers, senior officials and legislators in Iceland and Norway.[23]

For example, in Finland the share of expert and management positions in the workforce is set to increase by 5 percentage points (171,000) by 2035 (Education and Labour Demand 2023, 2020). Demand is especially high in high-skilled, non-manual occupations in many different fields, such as business & administration, science & engineering legal, social sciences and teaching (Finnish National Agency for Education, 2020).

23. This category includes, for example, the following occupations: Senior Government Officials, Traditional Chiefs and Heads of Villages, Senior Officials of Employers', Workers' and Other Economic-interest Organisations, General Managers of Business Services. See more details on the classification in Appendix 4.4.

Figure 41: Forecast job openings by aggregated occupation as a percentage of total job openings, by country, 2025-2035.
Source: Own calculation based on CEDEFOP data



Figures 42-44 depict the forecast job openings within three aggregated occupational groups: professional (Figure 42), technicians and associate professionals (Figure 43) and service workers, shop and market sales workers (Figure 44).

Looking first at Figure 42, we observe both similarities and variations across countries. The ILO definition of "Professionals" describes these occupations as follows: "Professionals increase the existing stock of knowledge; apply scientific or artistic concepts and theories; teach about the foregoing in a systematic manner; or engage in any combination of these activities. Competent performance in most occupations in this major group requires skills at the fourth ISCO skill level".[24] Since all occupations within the professional group require higher levels of education, it is vital to analyse which specific roles are anticipated to be in high demand. As stated before, a sizeable proportion of job openings in most Nordic countries is related to the demand for healthcare professionals, with the exception of Finland, where they represent less than 8%.[25] In other countries that figure exceeds 19%, reaching as high as 27% in Iceland and Norway. That trend is primarily attributed to the ageing population in those countries. Unfortunately, CEDEFOP does not provide a specific forecast as to which occupations within the health

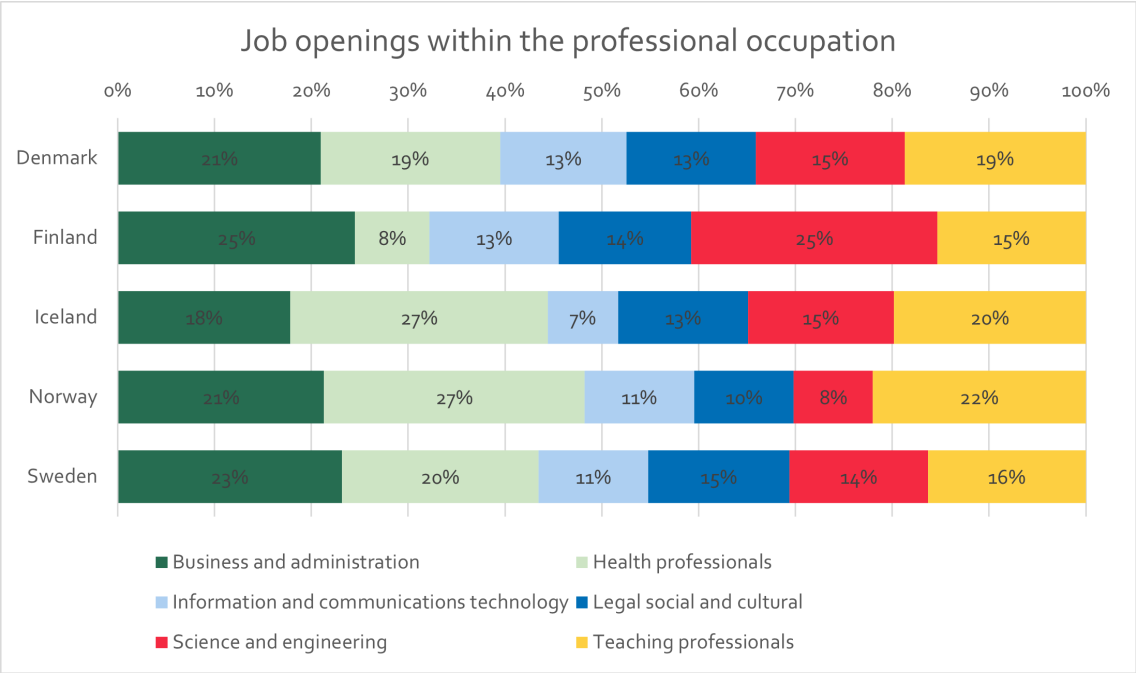
24. See Appendix 4.1 for ILO classification of skill level compared to ISCED-97 classification of education.
25. Note that while the CEDEFOP forecast indicates that demand in the healthcare profession will constitute a relatively small proportion of all demand by 2035, other statistical indicators suggest otherwise.

profession will have the highest demand. However, health professionals encompass various roles such as Generalist Medical Practitioners, Nursing Professionals, Midwifery Professionals, Veterinarians, Dentists and Pharmacists. That clear high demand for health professionals is also repeatedly stated in most Nordic countries' official statistics. For example, in Denmark, sector-specific prognoses point to a lack of labour in the healthcare and social care sector of up to 40,000 workers in 2030 (SAMAK, 2022), while in Finland some 30,000-70,000 additional workers are expected to be needed in the healthcare and social services sector (Finnish Government, 2023). The Norwegian Labour and Welfare Administration (NAV) estimates an increase in employment of 10% until 2040 in the services sector, especially in the service industry, including healthcare and social care services (Samfunnsøkonomisk analyse AS, 2019; NAV 2023). In the small nation of Iceland, estimates of the increase in demand range from 30 to 49%, depending on the year to which the forecast applies (2030 or 2040) (SAMAK, 2022).

Business and Administration Professionals are consistently projected to account for between 18 to 25% of job openings over the next ten years in all countries. That category includes roles such as Finance Professionals, Administration Professionals, Sales, Marketing and Public Relations Professionals. Teaching is another significant occupation in demand, encompassing all types of teaching at various levels and representing between 15 to 22% of all job openings within professional job openings. The remaining three occupational groups within the professional sector – information and communication technology, science and engineering and legal, social and cultural professions – each represent between 10 to 15% of all job openings in most countries, with Finland being an exception.

Finland differs somewhat from other countries in terms of the distribution of forecast job openings within the professional sector. The two largest occupations in high demand are Business and Administration Professionals and Science and Engineering Professionals, which collectively account for 50% of all forecast job openings within the professional sector in Finland.

Figure 42: Job openings within the professional occupation group, by detailed occupation and country, 2021-2035.
Source: Own calculation based on CEDEFOP data



The same line of argument regarding the high forecast demand for professionals in Sweden was emphasised in the last Statistics Sweden (SCB) prognosis for labour market demand in 2040 by education, suggesting that the demand for individuals with post-secondary degrees will rise significantly in the coming years due to various factors. Those factors include the growing and ageing population, leading to greater demand for workers in the healthcare, social care and private services sectors, as well as academic inflation, where higher education is increasingly required in occupations in which lower levels of education sufficed previously. That will result in continued shortages in various fields such as nursing, midwifery, biomedical science, occupational therapy, physiotherapy, engineering physics, electrical engineering, data science and teaching. It should be noted that the SCB prognosis suggests that there may be a slight increase in the supply of qualified teachers. Nonetheless, demand is expected to outpace that increase until at least 2040 (Statistics Sweden, Trends and Forecasts, 2020).

Figure 43: Job openings within the occupational group of technicians and associate professionals, broken down by occupation and country, 2021-2035.
Source: Own calculation based on CEDEFOP data

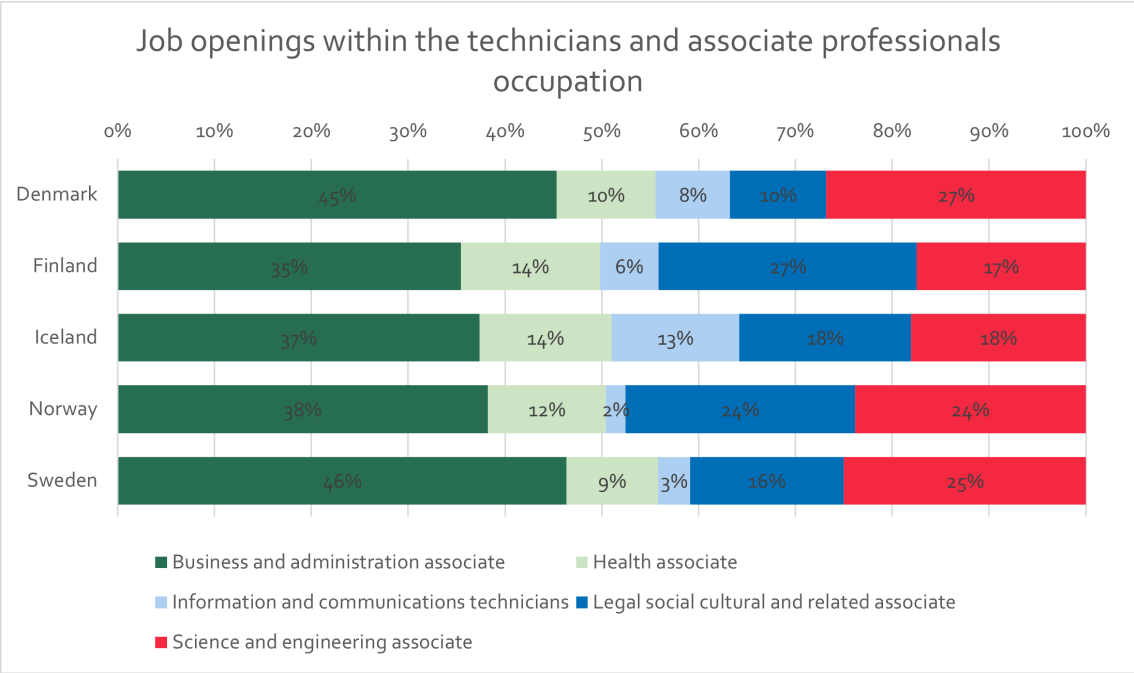
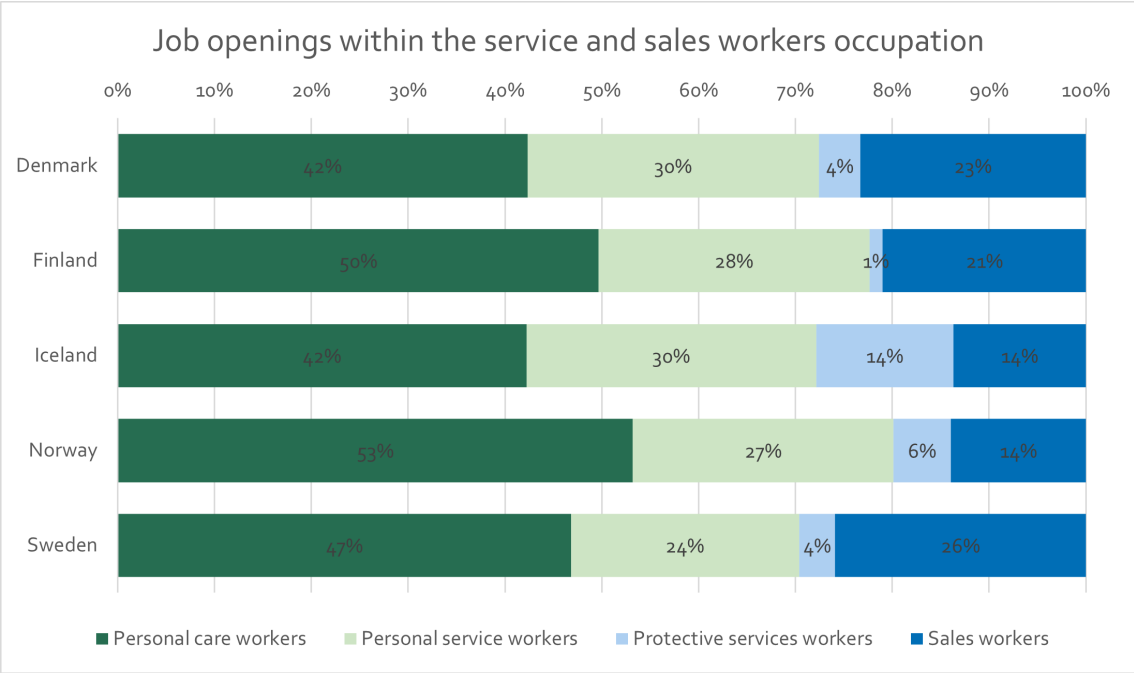


Figure 43 focuses on technicians and associate professionals. This category shares some similarities with the professional occupation outlined in Figure 42, albeit requiring a lower level of education. The International Labour Organization (ILO) describes this occupation as follows: "Technicians and associate professionals perform technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods and government or business regulations. Competent performance in most occupations in this major group requires skills at the third ISCO skill level." In practical terms, this occupation typically requires the completion of the first stage of tertiary education, often in the form of a bachelor's degree. Within this broad occupational category, which constitutes the second largest group of job openings in most countries, the largest subgroup consists of business and administration associates. Specific occupations within this group include Financial and Mathematical Associate Professionals, Sales and Purchasing Agents and Brokers, Business Services Agents, Administrative and Specialised Secretaries and Government Regulatory Associate Professionals. Those occupations collectively represent between 35 to 46% of all forecast job openings at the associate level. The second and third largest occupational categories are those of science and engineering associates and legal, social and cultural associates. Health-related occupations represent a relatively smaller share of job openings, possibly due to increasing demand for higher levels of education in the healthcare sector.

Figure 44: Job openings within the occupational group of service and sales workers, broken down by occupation and country, 2021-2035.
Source: Own calculation based on CEDEFOP data



Finally, the third largest aggregated occupational group with respect to forecast job openings is that of services and sales workers, comprising approximately 10-16% of all job openings in the Nordic countries over the next 10 years. Occupations within this subgroup are presented in Figure 44. This occupational group generally requires skills at the second ISCO skill level, ranging from lower secondary education to post-secondary, non-tertiary education.

Within this category, the largest subgroup is that of Personal Care Workers, accounting for almost half of all job openings (42-53%). The International Labour Organization (ILO) describes tasks performed by workers in this subgroup as assisting with mobility, washing and other personal needs; assisting children individually to learn social skills; supervising and participating in activities that enhance children's physical, social, emotional and intellectual development; and observing and reporting concerns to appropriate health or social service workers. Examples include Childcare Workers, Teachers' Aides and Personal Care Workers in Health Services. That trend is likely associated with the ageing population, which will require more care for the elderly, both at home and in elderly care facilities. Unfortunately, we cannot break down the CEDEFP forecast to distinguish between the two occupations of Childcare and Personal Care Workers in Health Services to determine the proportion associated with the ageing population.

The second subgroup, comprising Personal Services Workers, accounts for approximately 24 to 30% of job openings within the services and sales workers category. As described by the International Labour Organization (ILO), workers in

this subgroup are involved in organising and delivering services across various domains, such as travel and sightseeing, housekeeping, food and beverage preparation and service, hairdressing and beauty treatment, funeral arrangements, animal grooming and care, training, teaching, motor vehicle driving, providing companionship and offering other personal services. Occupations in this subgroup include for example Travel Attendants, Conductors and Guides, Cooks, Waiters and Bartenders, Hairdressers, Beauticians and Related Workers and Building and Housekeeping.

Forecasts for the autonomous regions

Generally, the three autonomous regions – Greenland, the Faroe Islands and Åland – are undergoing demographic transitions similar to those of the Nordic countries, marked by an ageing population and labour shortages in certain sectors. However, due to their small populations and remote locations, there are unique considerations regarding those labour shortages. The next section is devoted to each of those regions.

Greenland

Statistical projections from Statistics Greenland indicate a trend towards an ageing population in Greenland, forecasting a decline from over 56,000 individuals in 2022 to below 50,000 individuals in 2050, based on current fertility, mortality and migration patterns (Statistics Greenland, 2023). That demographic shift is anticipated to have significant implications for the labour market, characterised by a higher proportion of older adults and a diminished working age population. Without the implementation of reforms and initiatives, the number of old-age pensioners is projected to surge by 70% by 2035, while the working age cohort is expected to decline by 12% during the same period (Department of Social Affairs, Labour and Home Affairs, 2022).

Projections extending to 2050 call for strategies to bolster the labour force. Given the paramount importance of the fishing industry as Greenland's primary export sector and a cornerstone of its economy and society, the trajectory of this industry will significantly influence the future labour market landscape in Greenland (Department of Business and Labour Market, 2020).

In terms of sector-specific demand, the scarcity of qualified labour is a critical impediment to the continued economic advancement of Greenland (Department of Finance and Equality, 2023). Ongoing demographic shifts are expected to exacerbate that challenge in the years ahead, particularly within the healthcare and social sectors, where a substantial portion of the workforce is aged 55 and above, resulting in an unprecedented shortage of labour. Exploring options such as recruiting manpower from international sources is posited as a potential strategy to address that issue (Department of Finance and Equality, 2023).

Faroe Islands

The demographic shift towards an ageing population is significantly impacting the economy and labour market dynamics in the Faroe Islands. In 2022, 61% of the Faroese population fell within the working age range of 15-64 years. However, that proportion is expected to decline to 54% by 2060, according to data from Danmarks Nationalbank (2023). With already low unemployment rates and a high labour market participation rate, virtually all industries in the Faroe Islands are grappling with labour shortages (Danmarks Nationalbank, 2023).

The labour force in the Faroe Islands is growing by approximately 150 individuals annually, with 750 people entering the labour market, while 600 retire and exit the labour market each year. Forecasts from the public sector suggest demand for 1,500 new employees during the period 2021-2030, while estimates from Denmark indicate that private sector demand could be twice as high, requiring around 3,000 employees by 2030 (Faroe Islands Governmental Bank, 2023).

In terms of sector-specific demand, overall demand is further underscored by a report from the Ministry of Social Affairs and the Ministry of Health (2022), which highlights the need for approximately 2,500 additional workers in welfare services over the next eight years. That demand arises from the expected increase of 1,200 individuals aged 80 and above, representing a 52% rise over the next decade.

Åland

Over the decade 2010-2020, Åland's population experienced steady growth, largely attributed to favourable net immigration patterns. A notable portion of that immigration stems from new EU countries, resulting in an internationalisation of Åland's population and bolstering its labour force. However, it is important to note that while immigration has contributed to labour availability, it has not necessarily correlated with an overall increase in educational attainment levels. Nevertheless, maintaining a positive net migration balance is imperative for sustaining Åland's population growth trajectory in the future (ÅSUB 2019). Similarly, during the 2010s, employment in Åland rose steadily, reaching 14,873 by the end of 2018, representing growth of around 8.7% since 2010. However, due to Åland's predominantly service-oriented business landscape, which is heavily reliant on tourism, the pandemic restrictions disproportionately impacted the region compared to other areas of Finland. In 2020, Åland experienced an average relative unemployment rate of 9.5%, reflecting the severity of the situation.

The ÅSUB report (2021) evaluates three different scenarios and their potential impact on Åland's labour market by 2035. Those scenarios are: (1) a base scenario, (2) a scenario for faster modernisation and (3) a scenario characterised by stagnation. Regardless of which scenario is deemed most realistic, under all three of them there are two industries which stand out in terms of increased employment, namely business services and healthcare. That implies that in terms of education the demand for personnel with general education is decreasing. At the

same time, general education is often just a stepping stone in an individual's academic career. In any case, the supply of Ålanders with general education is greater than the demand in all scenarios from 2026 onwards.

The report also concludes that the external demand for skills, i.e. the need for skills that must be filled by migration, is consistently higher for positions currently held by women. That need often pertains to positions requiring higher education. Even today, Åland faces a shortage of women of childbearing age (15-49), affecting the region's future birth rate, which has shown a negative trend. An uneven gender distribution in migration patterns between urban and rural areas is a common phenomenon – women tend to move to cities while men remain in rural areas. It would therefore be extremely important for overall societal development to have more younger women choose to settle in Åland. Without deliberate measures, influencing those trends will be challenging (ÅSUB 2021).

While the shortage of labour appears to be a shared concern among all Nordic countries and autonomous territories, discrepancies emerge both in the predominant occupational sectors experiencing demand and in geographical distributions within individual nations. The subsequent section will delve into the nuanced regional variations pertaining to the forecast dynamics of labour demand and supply.

3.2. Future supply and demand from a regional perspective

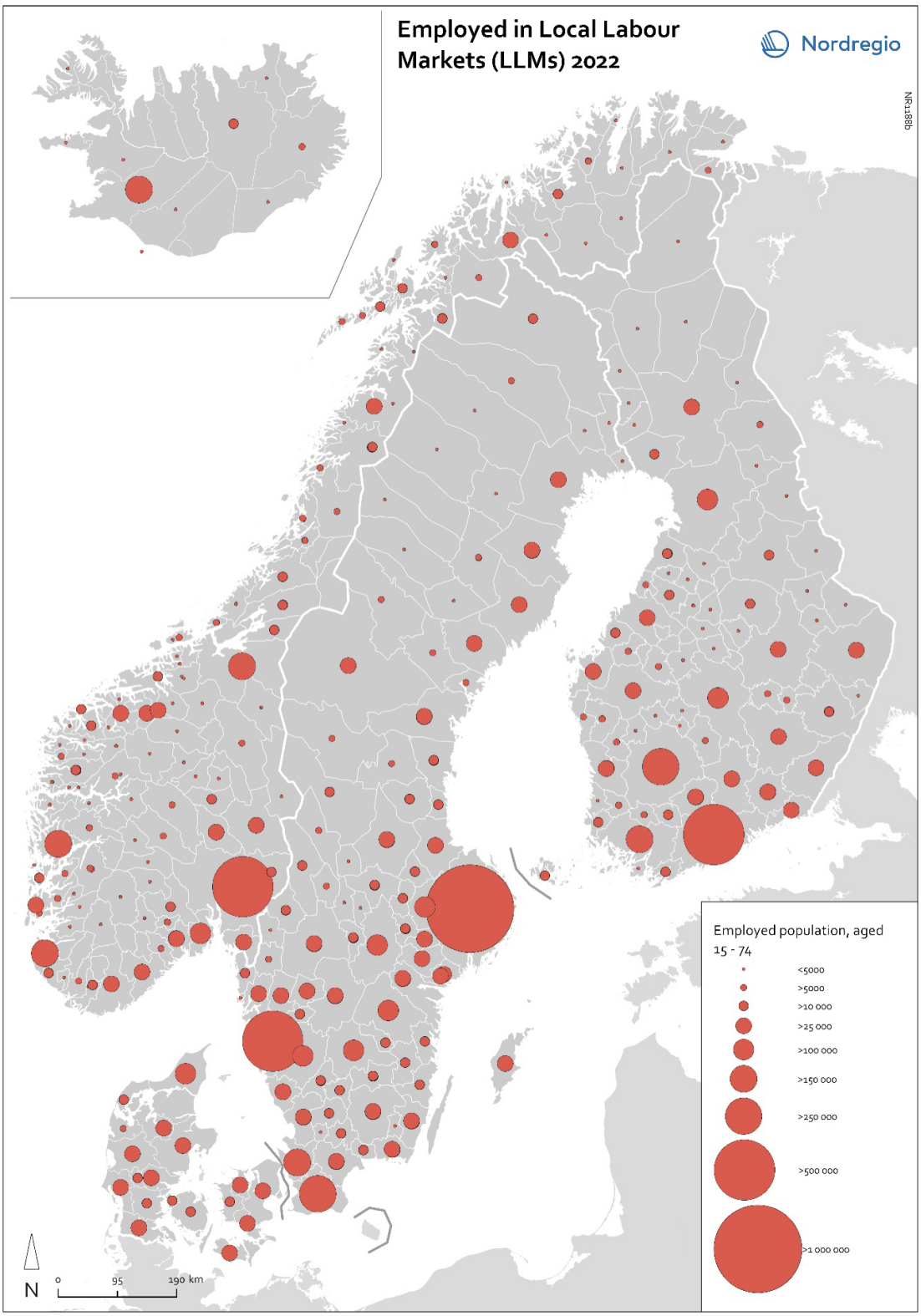
In order to understand the dynamics of the labour market, it is important to note that most labour markets are local and regional rather than national. That means that, for example, an industrial rise or decline may have large implications for the local labour market and the regional economy, while it plays a more limited role in national statistics.

A local labour market is the functional area where demand and supply for labour meets and is defined by the core and its commuting zone (Borges, 2020). Map 4 shows the local labour markets in the Nordic Region with the circles representing the number of employed.[26] According to this Nordic definition there are 365 local labour markets in the Nordic Region varying in size from around just 100 persons to around 1.5 million workers in Stockholm. There are no cross-border labour markets according to this definition.[27] However, as illustrated previously, many people commute between the Nordic countries, mainly from Sweden to Denmark and Norway. Commuting is frequent in Skåne to the Copenhagen area and from

26. More information about the definition can be found here: https://nordregio.org/maps/nordic-local-labour-market-areas-2018/.
27. Most probably Haparanda-Torneå would constitute a joint local labour market but data on commuting between Sweden and Finland are lacking.

western Sweden to the Oslo area and Norway. There were more than 18,000 commuters from Sweden to Denmark in 2022 and over 4,500 people in Värmland had a salary from Norway in 2020 (Norlén et al., 2022; Region Värmland, 2023).

Map 4: Local Labour Markets in the Nordic Region 2022 by number of employees.



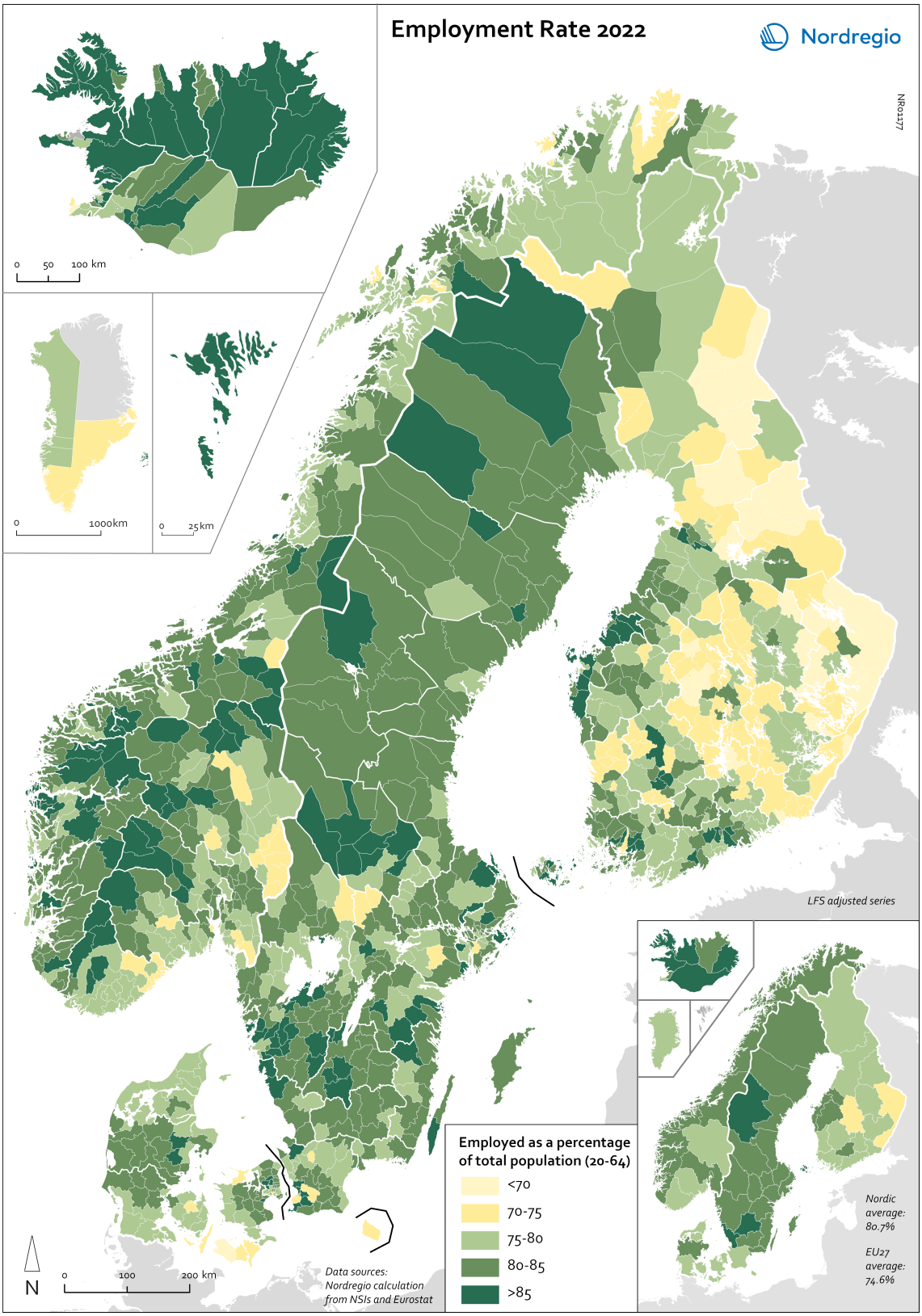
This chapter explores regional variations in labour demand and supply within the Nordic Region, primarily relying on official statistics from Nordic sources. Its primary goal is to illuminate cross-regional disparities and identify areas where increased mobility could yield benefits. While the overall forecast for the Nordic Region suggests high labour scarcity, an ageing population and demand for highly skilled workers, significant variations emerge at the regional level.

Beginning with the current employment levels in the Nordic Region, there are notable discrepancies across regions. In 2022, on average, over 80% of the population aged 20-64 were employed, exceeding the EU-27 average of 75% (see Map 5). However, regional disparities are evident. Notably, in Finland and Greenland, certain regions exhibit employment rates below 70% among the main working age population (20-64). Nevertheless, these regional figures obscure significant variation at the municipality level. For instance, in eastern Finland, employment rates were notably lower, often falling below 70%, while some areas exceeded 80%. Similarly, within the Skåne region in Sweden, employment rates range from over 85% in some municipalities to just under 75% in others. The lowest employment rate can be found in Lund, which is a university city where a substantial share of the population are studying. That also shows the limits of employment rate as an indicator of labour market performance.

Moreover, the map highlights disparities in employment between countries in cross-border regions. A prominent example is the Tornedalen cross-border region, where employment on the Swedish side exceeds 85%, while on the Finnish side it falls below 75%. Another instance is the Värmland – Østfold cross-border region, where employment levels are high in Värmland, Sweden, but are not at the same level on the Norwegian side.

When discussing employment, it is crucial to note that it is calculated as a share of the working age population. Consequently, the employment rate reflects individuals employed relative to the working age population, but does not provide insight into those not employed. Unemployment levels are therefore also presented in Map 6 to offer a more comprehensive understanding of labour market dynamics.

Map 5: Employment rate in the Nordic Region 2022.



As mentioned, while employment provides insight into the current alignment between supply and demand, unemployment levels offer a more nuanced understanding of the extent to which individuals are actively seeking work and are currently at the disposal of the labour market. The International Labour Organization (ILO) defines unemployment as individuals actively searching for employment at a specific point in time. Map 6 shows the unemployment rate on a municipal level using data that have been harmonised with the Labour Force survey (which is the official source for labour market statistics). The unemployment rate is measured as unemployed persons as a share of the total workforce. The workforce consists of those who are in employment and those who are unemployed. Those who are outside the labour market are therefore not included here.

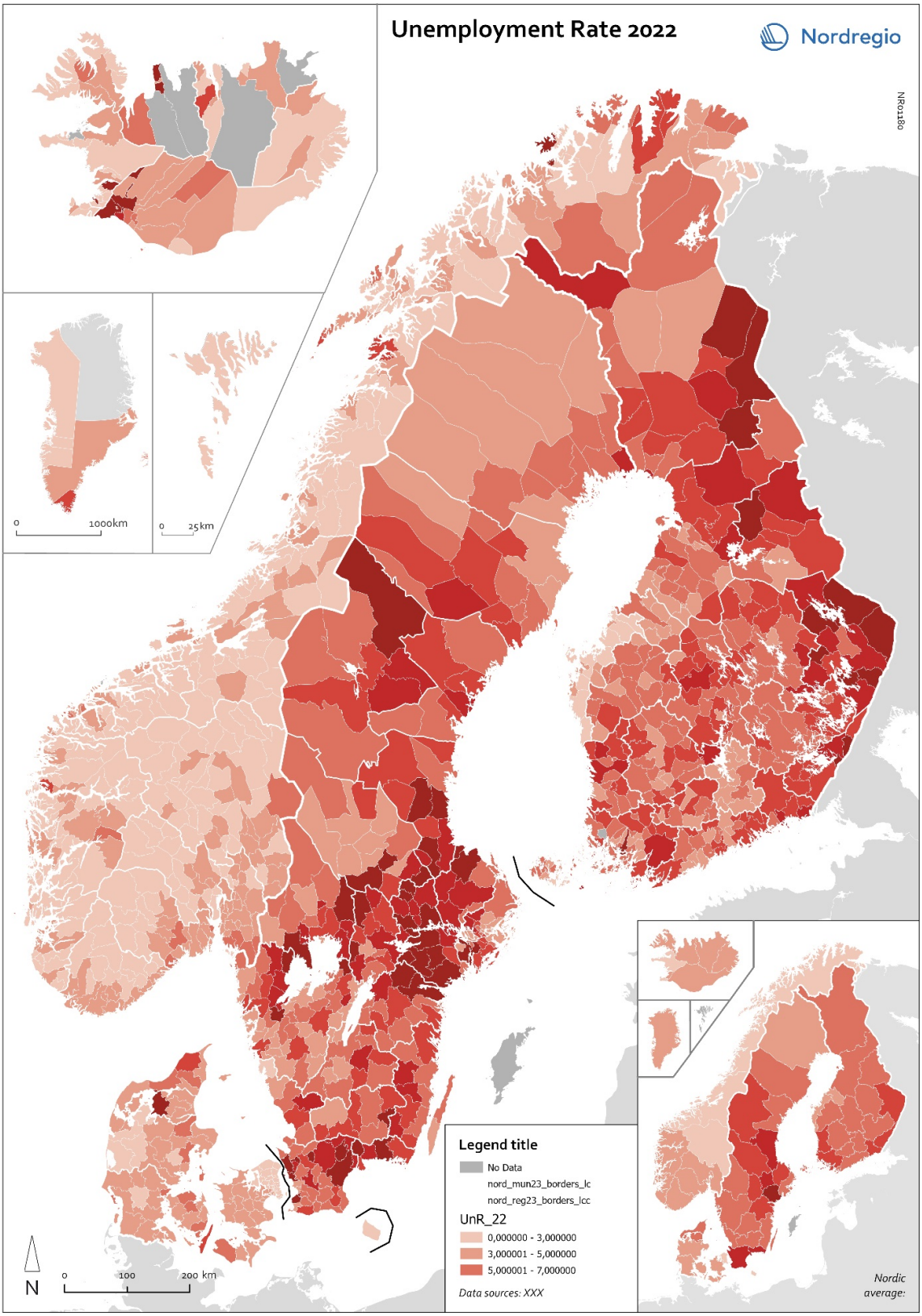
When analysing unemployment rates at the national level, discrepancies arise among the Nordic countries, notably with higher rates observed in Sweden and Finland. Those variations in unemployment rates can partly be attributed to structural unemployment in those countries, meaning that certain demographic groups encounter difficulties in securing suitable employment opportunities. Additionally, differences in systems related to unemployment benefits, sick leave policies and other factors contribute to those variations.

Specifically, since unemployment is calculated as a share of the workforce (i.e. the sum of individuals of working age who are either employed or actively seeking employment), lower levels of unemployment might also result from individuals exiting the workforce entirely. That raises a key point for comparison across countries: higher unemployment levels might be indicative of larger labour force participation, meaning fewer individuals are dropping out of the labour force due to low alternative benefits. For example, in 2022, both the employment rate and the unemployment rate were higher in Sweden compared to Norway. That suggests that a higher proportion of individuals are employed in Sweden, but concurrently a significant share of individuals are actively seeking employment. By contrast, in Norway those individuals were likely outside the labour market, likely receiving social assistance such as unemployment benefits or sick leave payments.

That highlights the fact that while unemployment serves as an indicator – of those immediately available to work – it also conceals those who are entirely outside the labour market and not actively seeking employment. In the Nordic Region around 15% of the age group 20-64 are outside the labour force, with that group also consisting of students and those who are sick etc.

Considering the intricacies involved in comparisons between countries and the diverse policy implications, it remains worthwhile to examine regional and municipal levels. In some cross-border regions, distinct differences in unemployment levels between countries suggest that labour mobility or commuting could help to mitigate unemployment. Notably, regions that stand out in terms of employment are also relevant with respect to unemployment. Those include the Swedish-Finnish border in the north and the Copenhagen-Malmö area.

Map 6: Unemployment rate in the Nordic Region 2022.



Forecast of regional working age population

As mentioned, all Nordic regions face the challenge of an ageing population, but there are significant regional variations. Map 7 illustrates the percentage changes in the working age population between 2023 and 2040, with red indicating declining populations and blue showing the opposite trend. A decreasing working age population (measured here for the age group 20-64 years) is a prevailing trend across much of the Western world. For the EU as a whole, that age group is anticipated to decrease by 6.5% between 2023 and 2040. Only five EU countries are projected to experience growth in their working age populations during this period: Malta, Luxembourg, Ireland, Sweden and Belgium.

In the Nordic Region overall, however, a slight increase in the working age population is expected, averaging 1.9% growth. As depicted on the map, the distribution varies significantly, with substantial differences both between and within countries. The largest increase is anticipated in Iceland (28%), followed by Sweden (5.8%), Åland (3.9%) and Norway (0.6%). Conversely, decreases are forecast in Finland (-0.5%), the Faroe Islands (-2.6%), Denmark (-3.2%) and Greenland (-11.4%).

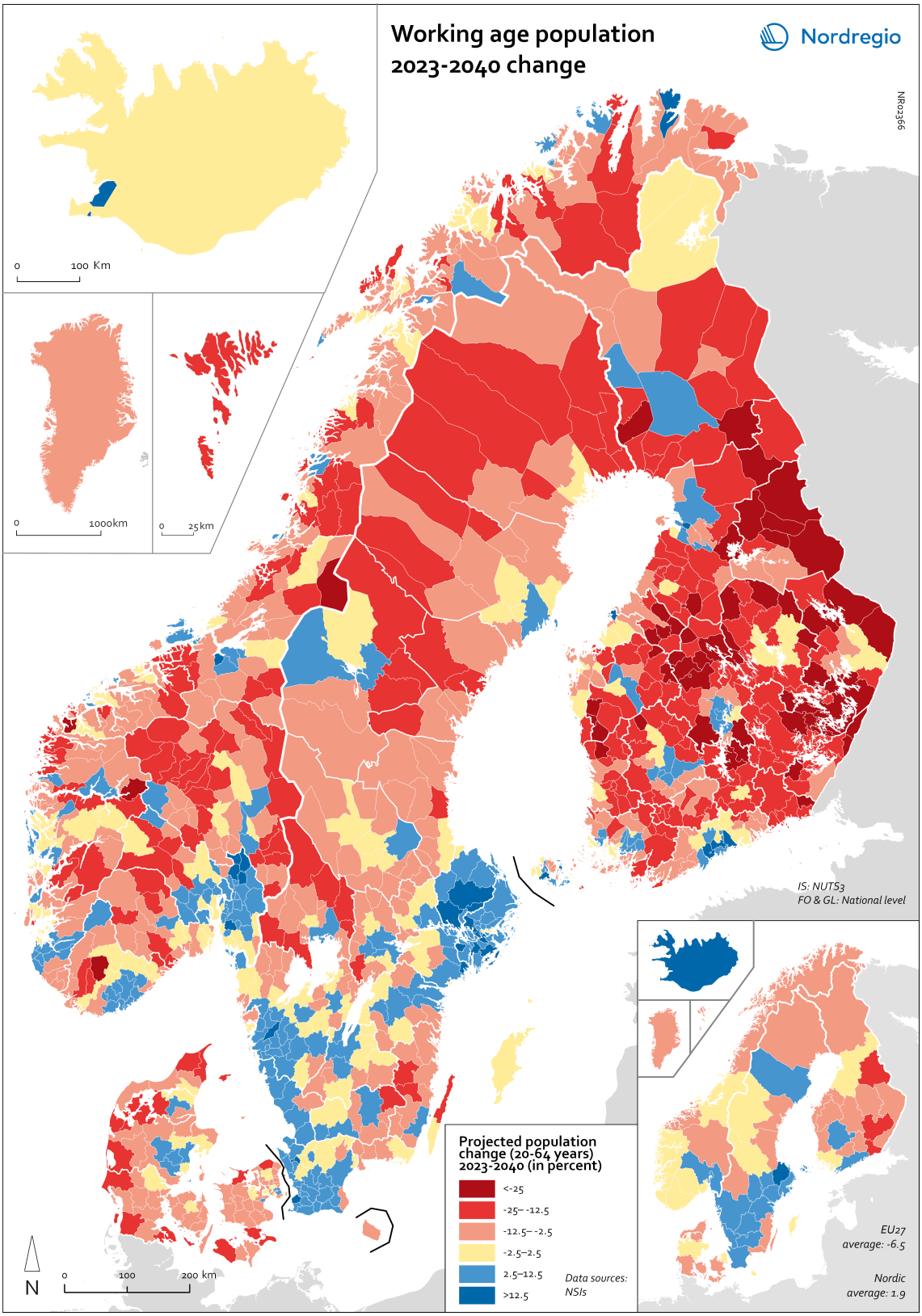
Generally, the trend of urban population growth and rural population decline is expected to persist. Regions with the highest projected population growth include Höfuðborgarsvæðið in Iceland, Uppsala (+13%), Stockholm (+12%), Skåne (+9%), Halland (+7%) and Västra Götaland (+6%) in Sweden, Uusimaa (+8%) and Pirkanmaa (+5%) in Finland and Oslo and Viken in Norway (+5%). Notably, Copenhagen municipality (+5%) and Rødovre (+9%) and Vallensbæk (+6%) in the capital region (Hovedstaden region) in Denmark are also expected to experience significant increases. However, the majority of municipalities in the Hovedstaden region are anticipated to see a decline in their working age populations.

Several Finnish regions including Satakunta, Etelä-Karjala, Kainuu, Kymenlaakso and Etelä-Savo, along with Greenland, are projected to experience a decrease in their working age population of more than 10%.

Across the entire Nordic Region, rural municipalities are expected to witness a 5.8% decline, while urban municipalities are projected to grow by 7.3% and interim municipalities are anticipated to maintain a stable labour supply.

That regional variation in the size of the working population has implications for the importance of mobility and commuting in terms of maintaining the population in some regions. In addition, considering trends in urbanisation, some rural areas are expected to experience very high levels of labour shortages.

Map 7: Forecast change in working age population 2023-2040.



3.3. Discussion on the future of supply and demand in the Nordic Labour Market

Looking into future developments on the Nordic labour market, we started out this chapter by sketching some basic facts about the Nordic economy, industry sectors, its location and the labour market. Research on economic geography often tells a story of path dependence which means that when new economic sectors are developed they are frequently built upon previous assets, knowledge, skills and networks.

Furthermore, being part of the global economy, the Nordic Region is also impacted by megatrends. The ILO (2017) points to four main megatrends impacting labour markets, namely demographic change, technological change, globalisation and climate change and the green transition, that are also influencing the Nordic Region. For example, two of the key features in the Nordic Region relating to demographic change are urbanisation and the ageing population, with particular strain on those rural areas that face both an increasingly elderly population and lack of labour. Another example is the reduction of CO2 emissions and the green transition, which is a strong driving force for labour market demand and structural change in the industry sector with a strong need for re-skilling, up-skilling and new skills (e.g. Endresen Norrman et al. 2023; Kompetansebehovsutvalget, 2023; Fabricius et al. 2024).

When looking into the future of supply and demand on the Nordic labour market, we have to rely on forecasts based on assumptions developed by experts in a range of fields. In this chapter we have focused on the forecasts developed by CEDEFOP, a European institution for skills development, with the aim of accessing comparable data for the Nordic countries. We have complemented that by looking into national forecasts and forecasts developed by the self-governing territories. In addition, we conducted a survey where stakeholders involved in labour market development and cross-border cooperation shared their views on the future of the Nordic labour market.

The survey, conducted in April, targeted individuals employed in sectors related to the labour market. Individuals were contacted via email based on their organisational affiliations, with the survey distributed through the organisation's info email. Respondents came from all Nordic countries and territories, with the largest number being from Sweden and Norway. The survey results can be found in the appendix, but some intriguing findings merit discussion.

First, despite all respondents being employed in labour market sectors, over 40% were unaware of the vision of the Nordic Council of Ministers and nearly 40% believed the Nordic Region lacked integration. Second, four aspects of the labour market were highlighted as potential benefits of a common labour market:

increased job opportunities, reduced unemployment, a higher supply of potential employees and improved skills matching. Notable obstacles included bureaucratic and administrative hurdles (such as tax and social security procedures), language barriers, challenges in coordinating with family commitments and difficulties in finding suitable housing.

When respondents were asked an open question, they echoed similar challenges. While the survey's sample size was limited, it is worth noting that respondents from Finland and Iceland mentioned language barriers more frequently than those from other Nordic countries.

To a large extent, we find that the Nordic countries are facing similar future labour market challenges. The ageing of the population and the ageing of the labour force present a challenge on labour markets across the Nordic Region. It means that fewer people will be entering the workforce and that governments will need to devise other solutions to manage the lack of labour. In Finland, three main avenues present themselves: increase employment levels to +80%, increase immigration of educated labour and decrease demand for workers in the welfare sector (Finnish government, 2023). Similar discussions are taking place in the other Nordic countries. While public discussion around increasing employment focuses on working at older ages, it also addresses the issue of bringing NEETs (individuals Not in Employment, Education or Training) onto the labour market and the potentials of using new technology.

When we look into employment rates across the Nordic Region, we find very high employment rates overall, in line with the Nordic model of high labour market participation, but we also find large local and regional differences. For example, it is in rural areas that we find both the highest and lowest employment rates. To increase employment in various groups (e.g.young, old, native, immigrant) and in a range of territories (urban, rural etc.), it will be important to address those different groups and territories in an appropriate way and by using place-based analyses and solutions to complement universal policies.

Another similar development in the Nordic Region and across the EU is the increasing demand for highly skilled labour. The increase in demand for labour is mainly for those with higher education or medium level education, with the exception of Denmark, where demand for labour with low education is also set to increase. The analysis of future job openings (including both replacements – of which the majority are retirements – and new jobs) indicates that it is highly skilled jobs that will be offered in the future, with the main groups being professionals, technicians and associate professionals. To address those challenges, the education system and measures for re-skilling and up-skilling on the labour market can be expected to play a key role.

When we look into the labour market sectors where demand is expected to increase, we find a similar pattern across the Nordic Region, with growing demand

in the businesses and services and non-market sector, where the welfare sector plays a crucial role. For the common Nordic labour market, the conclusions from those findings may point in different directions. On the one hand, it might be argued that the similarities between the Nordic countries could make it easier to get a job in another Nordic country, while on the other hand the Nordic countries could also be competing for the same labour force. Previous research has shown that those with a higher education have a greater propensity for international migration and that it is more common to migrate in earlier ages. However, it also seems that they have a preference for moving out of the Nordic Region (Pedersen, Røed & Wadensjö, 2008).

Two important messages can be drawn from the results of the survey of stakeholders engaged in the common Nordic labour market and regional development. The first is that the respondents take a positive view of the common Nordic labour market and highlight potential benefits such as increased job opportunities, reduced unemployment, better supply of potential employees and improved skills matching. The second message is that they also think that the common labour market faces many hurdles, with the most frequently noted obstacles including bureaucratic and administrative barriers, mainly relating to tax and social security, language barriers, challenges in coordinating with family commitments and difficulties in finding suitable housing. Those results are in line with several previous studies. To enhance labour market mobility across the Nordic borders, those considerations need to be taken into account.



Photo: Jon Flobrant, Unsplash.com

4. Concluding remarks and looking towards the future

In this chapter we will summarise the conclusions of the two previous chapters, looking back at the common Nordic labour market since 1954, present some concluding remarks and look ahead to the future of the Nordic labour market. In the final section, we will also spark discussion about future perspectives on the common Nordic labour market.

While the first two parts of the report are mainly based on descriptive statistics and document studies, this chapter is also based on the results of the survey and interviews conducted with stakeholders involved in the common Nordic labour market.

Three main trends when looking back at 70 years of the common Nordic labour market

To summarise, the 70 years of the common Nordic labour market have indeed played a role in the possibility to migrate or commute to work in another Nordic country. Overall the Nordic experience suggests that a large majority of people prefer to live and work in the country or region where they have their roots. Moreover, the comparatively high standards of living and generous welfare states in the Nordic countries suggest that the need to migrate for economic reasons, which is prevalent in many other regions of the world, such as to escape unemployment and poverty, is weak.

While the extent and the direction of migration flows have changed over time, we would like to point to three trends that have been more persistent over time. The first trend is that residents from islands and self-governing territories are more prone to migrate to another Nordic country. Greenland, Åland and the Faroe Islands in particular have a large share of Nordic migrants, while Iceland stands out as being perhaps the most "Nordic" since the population of Iceland has changed its preferred destinations during different periods of time.

A second key feature is that proximity matters. That applies both to geographical proximity and to linguistic and cultural proximity. That is relevant both to migration and commuting patterns – taking up a job in another Nordic country is simply more common if the distances are not too great.

Finally, a third key feature of the Nordic migration pattern is re-migration, which means that many Nordic migrants spend some time in another Nordic country, for example to escape unemployment, gain new professional experiences, for family reasons, to study etc. and move back after a couple of years (Jensen & Pedersen, 2007; Monti, 2020; Weber & Saarela, 2019; Fischer and Straubhaar, 1996).

However, it is not necessary to migrate to take up a job in another Nordic country. Commuting to the workplace or working remotely are also possibilities. From a research point of view, we know less about commuters and remote workers than about migrants since migrants' change of residence is also recorded in the statistics. However, in certain cross-border areas and sectors, cross-border mobility is of pivotal importance to the local and regional economy and the labour market and in some municipalities as much as over 10% of the working force are commuting from a nearby country. While commuting currently seems to be on the rise in some areas, it is a phenomenon that is highly sensitive to disruptions. Previous experiences have shown that cross-border restrictions can make commuting patterns drop quite drastically, such as during the pandemic, and it also seems that the transport and commuting experience itself plays a role that should not be underestimated.

What can we know about the future?

From a research point of view, the academic literature on why people migrate between affluent countries is limited. Employment, higher wages and the possibility of a better life have been assumed to operate as drivers, although these benefits also need to be weighed against the economic costs and other social transaction costs of migrating or commuting. Multiple factors are at play, which are often described in a simplified way as push and pull factors, or as attraction forces, driving forces or intervening obstacles (Lundgren and Bogason, 2020).

Even if we do not know exactly when and why people choose to migrate or commute to another Nordic country, previous studies on migration flows within the Nordic Region indicate that unemployment and structural change at specific times could act as a financial incentive for migration (Fischer and Straubhaar 1996,

Pedersen, Røed and Wadensjö 2008), although the robust social security systems allowed many to stay put (Fischer and Straubhaar 1996). The findings outlined in this report for the years spanning from 1990 to 2022 corroborate those arguments.

From previous studies we know that commuting has dropped dramatically when cross-border restrictions have been introduced, such as during the pandemic (see e.g. Lundgren &Wøien Meijer, 2022). In economic literature that phenomenon of decreased interaction when hurdles arise is often described as transaction costs. These can be related to types of costs other than economic costs, such as the cost of gaining access to information, the time allocated for commuting, the social costs involved with larger distances, language problems and perceived insecurity about the potential benefits of working in another Nordic country. Learning more about those barriers is hence of importance (e.g. Pedersen, Røed & Wadensjö, 2008).

To learn more about what the labour market will look like in the Nordic countries in the future and in order to be able to compare forecasts between the countries, we have chiefly used data from CEDEFOP in this study. In all Nordic countries we find that demography is a strong driving force for developments on the labour market. All the Nordic countries and regions are challenged by the global trends of ageing population and urbanisation. Digitalisation and the green transition are two megatrends currently impacting the labour market in the Nordic countries which will require re-skilling and up-skilling, but also increased adaptation and flexibility, systems for lifelong learning and involvement of the social partners (e.g. Fabricius et al. 2024).

We also find that demand for labour looks very similar in the Nordic countries, with a focus on the business sector and the public services sector. Based on the same data, we also find that demand for a more highly educated and skilled labour force is yet another common Nordic trend. The challenges of filling job openings with the right skills and providing welfare services can be expected to be given higher prominence across the Nordic Region and especially in rural and remote areas. With regard to the common Nordic labour market this could potentially mean increased competition for labour between the Nordic countries. However, previous studies and our data indicates that when accessibility is good and cross-border barriers are kept at a low level, the labour markets can complement each other, at least in specific niches (e.g. Fabricius et al, 2024).

What has been the role of the agreement on the common Nordic labour market?

One of the research questions set out in this study relates to the agreement on the common Nordic labour market: what has been the role of this agreement in terms of the common Nordic labour market?

To address that question, we need to step back to the Nordic cooperation in the legal field which according to research has resulted in a joint Nordic legal mind or legal family, starting as far back as the Nordic lawyers' meeting in 1872 and

containing elements such as pragmatism, realism, absence of formality, equality and transparency. Since then, the Nordic countries have developed similar legislation in many fields with discrete acts instead of civil code and with Denmark, Norway and Iceland showing more similarities to one another and likewise Sweden and Finland. Despite the cooperation and the similarities, however, there is no such a thing as Nordic law or judiciary and the individual countries are responsible for deciding upon drafting and adopting new legislation. Although some claim that the legal cooperation has lost some of its dynamism and spirit with the increased focus on the European Union and harmonisation with European law (Letto-Vanamo & Tamm, 2019), the informal nature of Nordic cooperation also has benefits if it is prioritised and allocated financial resources (Lorange Backer, 2018).

The Nordic cooperation has developed successively through the codification of agreements and setting up institutions and initiatives for the cooperation. While the Nordic Council started up back in 1952, the Helsinki Agreement from 1962 can be seen as a codification of the former Nordic cooperation, stating ambitions for unified regulations. With the foundation of the Nordic Council of Ministers in the 1970s, Nordic cooperation was further formalised as intergovernmental cooperation based on conventions and agreements.

The agreement on the common Nordic labour market in 1954 was a codification of free movement of the Nordic labour force. Hand in hand with that, and further supporting free movement, came the Nordic convention on social security in 1955 and the Passport Union in 1958. While it is hard to judge the exact role the agreement on the common Nordic labour market has had on Nordic labour market mobility, it can be assumed that cross-border labour force migration and commuting would have been lower without the agreements facilitating cross-border mobility. Furthermore, the agreements have been important for the set-up of different Nordic institutions aiming at facilitating cross-border mobility, such as Info Norden, cross-border services and the Freedom of Movement Council.

However, cross-border cooperation is also fostered in the European context, promoting free movement of goods, services, capital and persons and supporting cross-border collaboration through EU support schemes such as the Interreg and Trans-European Transport Networks (TEN-T). Regions across the Nordics and the European territory are involved in cross-border and interregional cooperation (Association of European Border Regions, n.d.; European Commission, n.d.; Interreg, n.d.). Nordic cross-border regional organisations involve multiple organisations from across national borders, such as regional and local authorities, local employment services, business organisations and chambers of commerce. By supporting cross-border integration, the cross-border organisations and their partners also have first-hand information on when barriers and challenges to cross-border mobility arise, such as temporary ID checks, issues related to social security, taxation, banking or validation of qualifications, and transport disruptions.

It should, however, be noted that Nordic cooperation is not limited to what is taking

place at the immediate borders. The Nordic web of relationships is complex and vast, covering the economic area, including close industry and business relations, tourism and intensive trade, mergers between companies (such as Nordea, Stora Enso, TeliaSonera, Sampo and Arla to mention just a few) and co-ownership of infrastructural assets (e.g. Öresund Bridge, Kvarken ports, Malmö Copenhagen port). Furthermore, social and cultural cooperation is extensive, including joint Nordic literature, film and music prizes and the Föreningen Norden with over 90 local associations and 6,600 members across the Nordic Region. The agreement on the common Nordic labour market therefore needs to be understood within that complex web of interrelations and supporting Nordic institutions.

The role of cross-border barriers

Despite the Nordic free movement of people and the common Nordic labour market usually being lauded, freedom of movement has not been without challenges and in some cases has caused tensions and even conflicts. In the 1950s, a conflict arose between Finland and Sweden concerning the right of the Roma population from Finland to settle in Swedish municipalities. Another example is Swedish employers' headhunting of labour in Finland; in the 1970s that resulted in agreement that recruitment should go through the public employment services (Pedersen, Røed & Wadensjö, 2008). More recent examples are the establishment of border controls in the Danish passport affair in 2011, prompting the European Commission to step in to safeguard the Schengen Agreement (Tervonen, 2017), not to mention the migration crisis in 2016/2017 and the Covid-19 pandemic, which had serious implications for cross-border mobility (Giacometti & Wöien Meijer, 2022; Svinesundskommittén, 2024). Tervonen (2017) refers to this as the "unintended consequences of the free movement", i.e. when free movement comes into conflict with maintaining control over national borders, impacting actors at various levels of government and across the countries.

Cross-border barriers relating to various rules and regulations are still reported as important obstacles to day-to-day work by both employers and individuals, particularly obstacles relating to taxation, social security and eID (e.g. Lundgren & Rasborg, 2023). Only 69.4% of the respondents in our survey say that the Nordic labour market is integrated. However, 73.8% say that the Nordic labour market is more integrated than the EU labour market. Over the years, many initiatives have been launched to support cross-border mobility and the free movement of people, e.g. the Freedom of Movement Council, the cross-border statistics project 2016-2020 and the Nordic Mobility Action Programme 2019-2021. Although Nordic cooperation plays a central role, it should also be noted that many of the Nordic cross-border obstacles need to be addressed in a bi-national context. One example is the re-negotiation of Öresund agreement, which regulates taxation issues between Denmark and Sweden. It is expected to come into force in 2025 and will facilitate working across the Swedish-Danish border for commuters and remote workers (Regeringen, 2024).

Although distance working or working from home was not unheard of earlier, it was during the pandemic that working remotely became more frequent, including for cross-border workers who had difficulty getting to their workplace due to the border restrictions (Randall et al. 2022). In 2022-2023, 35-47% of the workforce in the Nordic countries worked remotely and hybrid working, i.e. working partially at the permanent workplace and partially remotely, has since become "the new normal" (Granath Hansson & Guðmundsdóttir, 2024). Studies show that working remotely may have positive effects not only for individuals, who do not have to commute every day, but also in terms of retaining and recruiting workers in urban and rural areas (Granath Hansson & Gudmundsdottir, 2024; Bogason, Brynteson & Salonen, 2024). To attract hybrid workers, physical and digital infrastructure, good commuting opportunities and access to attractive and affordable housing are important. It has been estimated that small towns and rural areas at a distance of no more than 1.5 hours from a larger urban centre, could benefit most from that development (Granath Hansson & Guðmundsdóttir, 2024).

A recent study finds that many employees now seek out employers who allow remote working at least during part of the working week (Gill and Nordström Skans, 2024). Nordic employers could build on those changed preferences and, where the type of work permits, allow commuters to work remotely. That could free up time that commuters would otherwise spend travelling between work and home and may potentially make commuting more attractive to larger groups.

However, the possibility to working remotely is hampered by the differing tax policies and social security policies in the various countries, which hinders both employers from recruiting and workers from taking up a job in another Nordic country. Tax policy and social security are two policy areas are also closely interrelated, which further complicates the matter. The Freedom of Movement Council and the Nordic Council of Ministers have engaged to look into this in more depth. Identifying one main workplace seems to be one solution to this problem, at least partially (Lundgren & Rasborg, 2023).

This resonates with the results from our survey where bureaucratic and administrative barriers are raised as the major obstacle to a more integrated Nordic labour market (55.7%). Within that group, taxation, problems with electronic identification and differing regulations regarding social security are highlighted.

In second place, after bureaucracy and administrative obstacles, linguistic obstacles (54.1%) are mentioned, which was somewhat unexpected considering the common linguistic background in Scandinavia. Furthermore, these figures remained high (50%) even when respondents from Finland and Iceland where removed. Among the solutions highlighted by the respondents in the free text answers were language teaching of Nordic languages at an early age. In third place came difficulties in coordinating with family (50.8%), while difficulties in finding housing came in fourth place (42.6%) and was also mentioned several times in the free text

answers. Interestingly, those figures indicate that the obstacles are not related to the labour market primarily, but to the overall circumstances of taking up a job in another country.

To further enable increased cross-border mobility in the labour market, more knowledge is needed. Collecting and sharing statistics across the borders is more difficult than it may sound, partly due to legal obstacles imposed by data protection legislation and rules governing the exchange of personal information (micro-data) across national borders and partly due to different methods of collecting data and interoperability of systems. However, the need for reliable cross-border statistics on mobility remains undisputed and the Nordic Council of Ministers has called for the collection of these statistics to be made permanent. Stepping up work on cross-border statistics will require both financial resources and clear political will, increased financial resources and motivation to weigh up the benefits of shared statistics in various areas against the costs (Dahl et al., 2022).

While these issues have long been identified by the Freedom of Movement Council and are well known by relevant authorities and ministries; the removal of obstacles seems to be lacking top-priority in the political administrations and hence proceeds at a slow pace.

Looking towards the future

Nordic cooperation is both a success story for regional cooperation and a story of challenges and failures. High ambitions for Nordic integration with plans for a Nordic defence union in the 1930-1940s and a Nordic economic community in the 1960s failed, and instead resulted in the emergence of new Nordic institutions for collaboration, the Nordic Council in 1951 and the Nordic Council of Ministers in 1971 (Strang, 2016). Interestingly the two different narratives about Nordic cooperation seem to continue to co-exist; on the one hand Nordic cooperation is described as a success story often branded as the Nordic Model, while on the other hand it is a narrative focusing more on missed opportunities such as cross-border obstacles hampering mobility as discussed in this report.

It is important to remember that in the time period examined here, from 1954 until today, the geopolitical landscape has changed quite dramatically. We have witnessed the fall of the Berlin Wall, the collapse of the Soviet Union, accession of the Nordic countries to the European Union and the European Economic Area (EEA), expansion of the European Union to 27 countries, globalisation with increased international migration and global value chains, and digitalisation which has reduced the notion of distance and, more recently, challenging of the world security order which is contributing to reshaping our relationships with our neighbouring countries. As a result from these developments and the experiences from the pandemic, several reports point to the need for increased Nordic cooperation and dialogue in the field of civil security (Enestam, 2021; Sweco, 2023; Svinesundskommittén, 2024) which also seems to be supported by a public opinion

(Hanaholmen, 2023. In that context, it may be asked what that means for the development of the common Nordic labour market?

Nordic cooperation has indeed high political ambitions as to freedom of movement, which is also part of the Nordic vision of becoming the most integrated and sustainable region in the world by 2030. The latest status report shows mixed results on indicators related to freedom of movement with Nordic migration decreasing, Nordic trade remaining at a stable level and commuting across the Öresund showing a slight increase with expectations to further grow (Nordic Council of Ministers, 2023). Our survey of stakeholders engaged in the common Nordic labour market show that just 61% are familiar with the Nordic vision. In a joint declaration of 2022, following the Covid-19 pandemic and its effects on cross-border mobility, the Ministers for Nordic Cooperation (MR-SAM) admitted the serious impact on relations between the Nordic countries and freedom of movement, stating that living, working, studying and running businesses across Nordic borders should be easy and renewed and strengthened the mandate of the Freedom of Movement Council.

The relevance of a common Nordic labour market is further acknowledged in the survey, with the main benefits mentioned being more job opportunities (82.3% of the respondents), lower unemployment (74.2%), a higher supply of potential jobs (62.9%) and better skills matching (59.7%). According to the respondents, many sectors could benefit from a more integrated Nordic labour market, in particular the healthcare and social care sector (44.3%) the services and tourism sector (39.3%) and the industry and engineering sector (31.1%).

As we have seen, the Nordic countries are facing very similar challenges in relation to the labour market, many of which are related to the ageing population and decreasing workforce. In parallel, we find increasing demand for educated and skilled labour in many sectors, in particular the business sector and the welfare sectors. Based on "Nordic thinking", which encompasses a belief in a "virtuous circle between equality, efficiency and social solidarity as important values" (Petersen, 2019, p. 31), it might be assumed that increased cooperation and sharing of best practices could play a greater role. This is also reflected in a Nordic white paper on attractive vocational education and training in the Nordic Region (Nordic Council of Ministers, 2022).

Based on the previous data, we have seen that re-migration and proximity matter, which leads to the assumption that it is in cross-border regions and in regions with cultural, social and economic proximity that the greatest potential for labour market mobility lies. While the role of economic cycles seems to have diminished since all the Nordic countries are subject to the same macro-economic trends, if the timing and the sectoral effects differ between the countries, migration may still be prompted (Pedersen, Røed & Wadensjö, 2008). Since the Nordic countries largely face similar challenges, it may also be asked whether it might be worthwhile to seek joint solutions for the future, such as joint schemes for skills in demand across

the Nordic Region. At various points in time, joint conventions, such as on social security, the use of Nordic languages or credentials for healthcare staff, have been agreed upon to advance the common labour market. And, just as many of the top universities have set up European programmes that include studying in multiple locations across Europe, why not having Nordic programmes for fields such as energy engineering, nursing, business administration or innovation? For Nordic vocational training, institutions such as Utbildning Nord in Övertorneå could perhaps serve as inspiration (Utbildning Nord, n.d.).

The ageing population and declining workforce outside the large urban areas, are indeed major challenges across the Nordic Region, and it might be thought that the increasing immigration to the Nordic countries the last decades could be a solution to the situation of labour shortage. However, on a Nordic scale, the current figures of inflow of immigrants are still too small to replace those retiring. There are also many hurdles to integration of immigrants into the labour market such as language barriers and lack of skills (Berlina and Cavicchia, 2023). However, immigration is considered as part of the solution to the labour shortages, such as in the Finnish roadmap for education-based and work-based immigration, where the government is seeking to at least double the current volume of work-based immigration by 2030 and increase the numbers of foreign students threefold (Finnish Government, 2021), along with the aim of raising the employment rate in Finland (Finnish Government, 2023).

The Nordic institutions aimed at reducing cross-border obstacles and the multiple actors involved in supporting cross-border cooperation are likely to play an important role in sharing information about the possibilities and helping people to take the step of working across the border. However, despite the aspirations, we have little evidence that mobility on the common Nordic labour market will increase in the future. On the contrary, with the strong future demand for labour within the Nordic countries, the motivation to seek a job in another Nordic country will remain low and we may expect the stable to downward trend of migration to persist. In certain cross-border regions, such as the Öresund region, reports indicate that the potential for increased migration and commuting lies primarily in the possibility for third-country nationals from Sweden to take up a job across the border and in improving the commuting experience (e.g. Øresund Direkt).

Based on research, we know that larger labour markets have positive impacts for both individuals and the economy, being able to increase both competitiveness and attractiveness, yet the potential of integrated cross-border labour markets is still to a large extent unexplored. However, mergers and close cooperation across the borders continue, with the Öresundståg and the newly established Swedish-Danish Chamber of Commerce being two examples.

The majority of the Nordic efforts to sustain the common Nordic labour market and support cross-border mobility are fairly small in scale and many of them are also downstream, e.g. focusing on obstacles. Perhaps it is time therefore for attempts that are bigger in scale and target current joint challenges, as well as upstream

efforts, in order to see major achievements on the common Nordic labour market.

4.1. Future perspectives on the common Nordic labour market

In this section we will look into future perspectives by asking four daring and forward-looking questions, with the aim of starting a discussion about how the common Nordic labour market can be developed further. The questions have emerged from the document studies, the survey conducted and in discussion with stakeholders.

It should be noted that this is only a selection of four questions. Many more questions could and should be raised in the discussions on the future of the common Nordic labour market, but we hope that these can serve as a starting point. The questions are phrased as "what if" or "what would" with the intention of encouraging readers to think more broadly and look ahead to the future.



1. What if the Nordic Region was without internal borders?

Why? Cross-border obstacles are widely referred to as hampering mobility.

What would it mean for the common Nordic labour market? A Nordic Region without internal borders would mean no border controls at any point, neither for Nordic citizens nor for third country nationals. It would ease all mobility.

How? Remove the border controls.

Pros: The pull factors, i.e. the ease of moving or commuting to another Nordic country, would increase. It would enable third-country nationals to access to the Nordic labour market. It could increase temporary migration, reduce unemployment and help solve a lack of labour in some areas. However, according to what we know of migration between rich countries, it is unclear if this would have a major or only limited impact on migration and commuting patterns.

Cons: Controlling the border is a key competence of the national state. It could mean increased labour market mobility, but also increased mobility of criminals, for example.



2. What would a fully integrated Nordic Region look like?

Why? To dampen economic cycles, reduce unemployment and increase the skills match on the labour market. Could it also solve a lack of labour?

What would it mean for the common Nordic labour market? It would make it easy to take up a job in another Nordic country, with no need to contend with administrative hurdles regarding taxation, social security, eID, validation of education or work experience etc. Better knowledge about the Nordic countries, cultures and languages would facilitate integration on the common Nordic labour market.

How? Remove cross-border obstacles related to the common labour market. Invest in exchange in all areas and at all levels (labour market, business, education, culture, youth etc.) to promote an integrated Nordic Region.

Pros: A fully integrated labour market would mean that the costs of taking up a job in another Nordic country would be low. The skills match would benefit both the individual and national economy. Quality of jobs could be increased. Old-age dependency could potentially be solved through a better integrated Nordic labour market and by involving the entire workforce. It could mean increased flexibility and resilience in times of economic crisis.

Cons: The Nordic countries are in need of much of the same labour: mainly highly skilled people in the business sector and in the public service sector, in particular healthcare and social care. That implies competition for labour.



3. What strategic Nordic infrastructure would the common Nordic labour market need?

Why? Nordic residents do not seem too attracted to moving to another Nordic country. Proximity matters for migration and commuting, but also the prospect of better life circumstances.

What would it mean for the common Nordic labour market? Access to affordable, reliable and sustainable transports for commuting, attractive and affordable infrastructure, housing and broadband, easy access to interesting jobs and exciting educational opportunities, and the feeling that working in another Nordic country represents an improvement of some kind.

How? Invest in strategic Nordic infrastructure that can boost the common Nordic labour market.

Pros: The prospect of a higher quality of life can be assumed to add to the pull factors for taking up a job in another Nordic country or for working remotely in another Nordic country.

Cons: Big and broad investments. Who is responsible for prioritisation and realisation? Who should be financing?



4. What would Nordic cohesion for the next generation look like?

Why? Linguistic and cultural barriers are increasingly reported. Knowledge of the Nordic languages has been on the decrease. The Nordic value of trust across borders is being challenged and belief in the Nordic welfare societies is being debated.

What would it mean for the common Nordic labour market? Nordic cohesion for the next generation would mean that it is easy to speak, live and work across the Nordic countries. Nordic networking is frequent and values pertaining to the Nordic welfare societies are sustained (such as equality, universality and trust).

How? Invest more in Nordic linguistic and cultural cooperation.

Pros: Strong social and cultural relationships could increase access to and interest in the labour markets in the other Nordic countries.

Cons: The Nordic Region is competing for interest with the other EU countries and the world, where many destinations could seem more attractive. To have an effect on the common Nordic labour market, the removal of cross-border barriers, such as eID and transport, would also be required.

References

Alsos, K. & Dølvik, J. E. (2021). The future of work in the Nordic countries: Opportunities and challenges for the Nordic working life models. TemaNord 2021:520. Copenhagen: Nordic Council of Ministers.

Andréasson, U., Randall, L. & Norlén, G. (2020). Socioeconomic factors. In Lundgren, A., Randall, L.& Norlén, G. (eds.), State of the Nordic Region 2020. Wellbeing, health and digitalisation edition. Copenhagen: Nordic Council of Ministers.

Andresen, B., Palmehag, A. & Wiborg, T. (2016). ID- og grænsekontroller i Norden Effekter af ID- og grænsekontroller i et nordisk perspektiv. TemaNord 2016:531. Copenhagen: Nordic Council of Ministers.

Association of European Border Regions (n.d.). b-solutions. https://www.b-solutionsproject.com/.

Association of European Border Regions (n.d.). Cross-border cooperation in Europe. https://www.aebr.eu/.

Barcus, H. R. & Halfacree, K. (2018). An introduction to population geographies*:* Lives across space. London: Routledge.

Berlina, A. & Cavicchia, R. (2023). Employers' perspectives on hiring immigrants. Nord 2023:043. Copenhagen: Nordic Council of Ministers.

Birgier, D. P., Lundh, C., Haberfeld, Y. & Elldér, E. (2022). Movers and stayers: A study of emigration from Sweden 1993–2014. European Journal of Population, 38(5), 1033-1064.

Bogason, A. & Norlén, G. (forthcoming). Cross-border regional labor market analysis. Case study: Region Öresund/ Øresund/Greater Copenhagen (Sweden & Denmark). Brussels: European Commission.

Bogason, A., Brynteson, M. & Salonen, H. (2024). Remote work in rural areas: Possibilities and uncertainties. Nordregio report 2024:7. Stockholm: Nordregio.

Borjas, G. J. & Chiswick, B. R. (2019). Foundations of migration economics. Oxford: Oxford University Press.

Borjas, G. J. (2014). Immigration economics. Cambridge, MA: Harvard University Press.

Borjas, G. J., Kauppinen, I. & Poutvaara, P. (2019). Self-selection of emigrants: Theory and evidence on stochastic dominance in observable and unobservable characteristics. The Economic Journal, 129(617), 143–171.

Bratu, C., Dahlberg, M., Engdahl, M. & Nikolka, T. (2020). Spillover effects of stricter

immigration policies. Journal of Public Economics, 190, 104-239.

Brun, N., Ekmark, S., Munch Haagensen, K., Harðarson, Ó., Rustad Holseter, A. M., Nome Næsheim, H. & Ruotsalainen, K. (2021). Nordic cross-border statistics: The results of the Nordic mobility project 2016-2020. Copenhagen: Nordic Council of Ministers.

Calmfors, L. & Sánchez Gassen, N. (2024). Economic policy beyond the pandemic in the Nordic countries. Nordregio report 2024:12. Stockholm: Nordregio.

Capplenen, Å., Dapi, B., Gjefsen, H. M. & Stølen, N. M. (2020). Framskrivninger av arbeidsstyreken og sysselsettningen etter utdanning mot 2040. Rapporter 2020/41. Oslo/Kongsvinger: Statistics Norway.

Creutz, K., Berglund, S., Betül Karacan, T., Giacometti, A., Haugevik, K., Nyberg Sørensen, N., Wøien Meijer, M. & Lares, A. (2021). Nordic cooperation amid pandemic travel restrictions. Fiia Report November 2021/68. Helsinki: Finnish Institute of International Affairs.

Dahl, A., Mattila, R., Olkkonen, L. & Saarinen, H. (2022). Baseline study of cross-border data exchange in the Nordic and Baltic countries. TemaNord 2021:547. Copenhagen: Nordic Council of Ministers.

Danmarks Nationalbank (2023). Economic upturn and growing reform needs. Copenhagen: Danmarks Nationalbank.

de Haas, H., Castles, S. & Miller, M. J. (2019). The age of migration: International population movements in the modern world. 6th ed. London: Macmillan.

Department of Finance and Equality (2023). Politisk-Økonomisk Beretning 2023. Government of Greenland.

Department of Social Affairs (2022). Naalakkersuisuts Arbejdsmarkedsredegørelse 2021. Labour and Home Affairs.

Dølvik, J. E. & Steen, J. R. (2018). The Nordic future of work. Drivers, institutions and politics. TemaNord 2018:555. Copenhagen: Nordic Council of Ministers.

Enestam, J-E. (2021). Strategisk genomlysning: Nordisk civil beredskap. Nord 2021:062. Copenhagen: Nordic Council of Ministers.

Engström, M-G., Eriksson, G. & Johanson, R. (1990). Att flexa i tid och rum. Distansarbetets struktur och tendenser. BFR-report T:8. Byggforskningsrådet.

Erlinghagen, M., Ette, A., Schneider, N. F. & Witte, N. (2021). The global lives of German migrants: Consequences of international migration across the life course. Cham: Springer Nature.

European Commission (2023). Annual report on intra-EU mobility 2022. Luxembourg: Publications Office of the European Union.

European Commission (n.d.). Solvit. Vi löser problem med dina EU-rättigheter. https://ec.europa.eu/solvit/index_sv.htm.

European Commission (n.d.). Trans-European Transport Network (TEN-T). https://transport.ec.europa.eu/transport-themes/infrastructure-and-investment/trans-european-transport-network-ten-t_en.

European Labour Authority (n.d.) European Labour Authority. https://www.ela.europa.eu/en.

Fabricius, L., von Beckerath, M., Härmä, E., Eriksson, M. & Grauers Berggren, Y. (2014). Livslångt lärande för framtidens arbetsmarknad. TemaNord 2024:520. Copenhagen: Nordic Council of Ministers.

Faroe Islands Governmental Bank (2023). Styttri arbeisðvika gevur tvær avbjóðingar. https://www.landsbankin.fo/fo-fo/styttri-arbei%c3%b0svika-gevur-tvaer-avbjo%c3%b0ingar.

Finnish Government (2021). Roadmap for education-based and work-based immigration 2035. Publication of the Finnish Government 2021:86. Helsinki: Finnish Government, Ministry of Education and Culture.

Finnish Government (2023). Opportunities for Finland. Publications of the Finnish Government 2023:12. Helsinki: Finnish Government.

Finnish Government (2024). Nordic Prime Ministers promote competitiveness and support for Ukraine. https://valtioneuvosto.fi/en/frontpage.

Fischer, P. & Straubhaar, T. (1996). Migration and economic integration in the Nordic Common Labour Market. Anniversary Issue: 40 years of the Nordic Common Labour Market. Nord 1996:2, Copenhagen: Nordic Council of Ministers.

Flora, J. (2017). Different from all the "others": Mobility and independence among Greenlandic students in Denmark. Arctic Anthropology, 54(2), 71-82.

Fuentes Monti, A. & Tønnessen, M. (2023). Party penalty or party premium? ´Party-Swedes´ in Norway and their income before, during, and after migration. Stockholm Research Reports in Demography 2023:10. Stockholm: Stockholm University, Demography Unit.

Giacometti, A. & Wøien Meijer, M. (2021). Closed borders and divided communities: status report and lessons from Covid-19 in cross-border area. Nordregio report 2021:6. Stockholm: Nordregio.

Gill, A. & Nordström Skans, O. (2024). Working from home in the Nordic Region? More than a remote possibility. In Calmfors, L. & Sánchez Gassen, N. (eds.), Economic policy beyond the pandemic in the Nordic countries. Nordregio report 2024:12. Stockholm: Nordregio.

Granath Hansson, A. & Guðmundsdóttir, H. (2024). Remote work in smaller towns:

Possibilities and uncertainties. Nordregio report 2024:5. Stockholm: Nordregio.

Gravesen, E., Lemming, M., Ekeland, A., Finne, H., Åkerblom, M., Virtaharju, M. & Ullström, J. (2003). Migration between the Nordic countries: What do register data tell us about the knowledge flows? STEP Report series 200310. Oslo: Step Group.

Greater Copenhagen (2023). Varför pendlar inte fler över Öresund? https://www.greatercph.com/sites/default/files/Rapport%20pendlingsenk%C3%A4t%20SE.pdf.

Greater Copenhagen Committee (2016). Handlingsplan 2016. Greater Copenhagen. https://www.greatercph.se/om-dokument.

Grunfelder, J. (2020). Mobility changes due to COVID-19. Stockholm: Nordregio. https://nordregio.org/maps/mobility-changes-due-to-covid-19/.

Grunfelder, J., Lidmo, J. & Huynh, D. (2020). Transit-oriented development in the Greater Copenhagen Region: Insights from small- and medium-sized cities. Nordregio report 2020:15. Stockholm: Nordregio.

Gyene, M., Røtnes, R., and Steen, J. I. (2019). Endringer i kompetansesammensetningen i arbeidslivet mot 2040. Rapport 31-2019. Oslo: Samfunnsøkonomisk analyse AS.

Haberfeld, Y., Birgier, D. P., Lundh, C. & Elldér, E. (2020). Migration across developed countries: German immigrants in Sweden and the US. International Migration, 58(6), 171-194.

Hanaeus, C.-G. (2013). Gränspendlingen från Sverige till Danmark och Norge åren 2001–2008. TemaNord 2013:551. Copenhagen: Nordic Council of Ministers.

Hanaholmen (2023). Den bilaterala barometern. https://www.hanaholmen.fi/sv/barometern/.

Handelskammaren (n.d.). Ny dansk-svensk handelskammare vill se bättre samarbete. https://handelskammaren.com/2024/02/29/ny-dansk-svensk-handelskammare-vill-se-battre-samarbete/.

Hayfield, E. A. (2017). Exploring transnational realities in the lives of Faroese youngsters. Nordic Journal of Migration Research, 7(1), 3-11.

Hedberg, C. & Kepsu, K. (2003). Migration as a mode of cultural expression? The case of the Finland-Swedish minority's migration to Sweden. Geografiska Annaler: Series B, Human Geography, 85(2), 67–84.

Hilson, M. (2008). The Nordic Model: Scandinavia since 1945. London: Reaktion Books.

Ho, G. & Shirono, K. (2015). The Nordic labor market and migration. IMF Working paper 15/254. International Monetary Fund.

Høgedahl, L., Nergaard, K. & Alsos, K. (2022). Trade unions in the Nordic labor

market models Signs of erosion? Nordic Journal of Working Life Studies, 12(S8).

ILO (2017). Inception report for the Global Commission on the Future of Work. Geneva: International Labour Office.

ILO (2022). World employment and social outlook. Trends 2022. Geneva: International Labour Office.

Interreg (n.d.). What is Interreg. https://interreg.eu/.

Jensen, P. & Pedersen, P. J. (2007). To stay or not to stay? Out-migration of immigrants from Denmark. International Migration, 45(5), 87–113.

Jesnes, K. & Nordli Oppegaard, S. M. (2020). Platformwork in the Nordic models: issues, cases and responses. TemaNord 2020:513. Copenhagen: Nordic Council of Ministers.

Kompetansebehovsutvalget (2023). Utfordringer for grönn omstilling i arbeidslivet. Temarapport 1/2023. Oslo: Kompetansebehovsutvalget.

Larsson, F., Björk, H., Svedmark, L. & Löwing, M. (2023). Omvärldsrapport 2023. Demografi, teknikutveckling och arbetsmarknadspolitik. Arbetsförmedlingen Analys 2023:5. Arbetsförmedlingen.

Leino-Sandberg, P., Leppävirta, L. & Mitettinen, S. (2016). Rapport över ändringar i de nordiska avtalen efter 1 januari 1005, i synnerhet ur ett EU-rättsligt perspektiv. TemaNord 1016:520. Copenhagen: Nordic Council of Ministers.

Letto-Vanamo, P. & Tamm, D. (2015). Cooperation in the field of law. In Strang, J. (ed.), Nordic cooperation - a European region in transition. Abingdon: Routledge.

Letto-Vanamo, P. & Tamm, D. (2019). Nordic legal mind. In Letto-Vanamo, P., Tamm, D. and Gram Mortensen, B.O. (eds.), Nordic law in European context (pp. 1-19). Cham: Springer Nature.

Lindroth, B. (2021). Vi som inte var med i kriget. Om Sverige, Norden, Europa och Coronan. Falun: Carlssons.

Logue, J. (2019). Trade unions in the Nordic Countries. Info Nordics. https://nordics.info/show/artikel/trade-unions-in-the-nordic-region.

Lorange Backer, I. (2018). Styrket nordisk lovsamarbeid. Muligheter og utfordringer. ANP 2018:727. Copenhagen: Nordic Council of Ministers.

Lundgren, A. & Bogason, A. (2022). Re-start competence mobility. Nordregio report 2022:4. Stockholm: Nordregio.

Lundgren, A. & Wøien Meijer, M. (2022). Labour market mobility between the Nordic countries. In Norlén, G., Randall, L., Sánchez Gassen, N. & Tapia, C. (eds.), State of the Nordic Region 2022. Nordregio report 2022:2. Stockholm: Nordregio.

Lundgren, A., Gudmundsdottir, H., Norlén, G. & Berlina, A. (2023). Embracing the

just green transition on the Nordic labour market. Nordregio Report 2023:11. Stockholm: Nordregio.

Lundgren, F. & Rasborg, T. J. (2023). Arbete över gränserna i Norden. Nord 2023:025. Copenhagen: Nordic Council of Ministers.

Lundholm, E. (2007). New motives for migration? Interregional mobility in the Nordic context. Unpublished doctoral dissertation. Umeå: Umeå University.

Lundholm, E., Garvill, J., Malmberg, G. & Westin, K. (2004). Forced or free movers? The motives, voluntariness and selectivity of interregional migration in the Nordic countries. Population Space and Place, 10(1), 59-72.

McCann, P., Poot, J. & Sanderson, L. (2010). Migration, relationship capital and international travel: Theory and evidence. Journal of Economic Geography, 10(3), 361–387.

Medeiros, E., Ramírez, M. G., Ocskay, G. & Peyrony, J. (2021). Covidfencing effects on cross-border deterritorialism: the case of Europe. European Planning Studies, 29(5), 962-982.

Minority Rights Group (n.d.). Faroese in Denmark. https://minorityrights.org/communities/faroese/.

Monti, A. (2020). Re-emigration of foreign-born residents from Sweden: 1990–2015. Population, Space and Place, 26(2), 1-15.

Mortensen Nolsøe, B. (2017). Inconspicuously foreign. Everyday identity work within the Faroese diaspora in Copenhagen. Unpublished master thesis. Lund: Lund University.

Möller, C., Alfredsson- Olsson, E., Ericsson, B. & Overvåg, K. (2018). The border as an engine for mobility and spatial integration: A study of commuting in a Swedish-Norwegian context. Norsk geografisk tidsskrift – Norwegian Journal of Geography, 72(4), 217-233.

National Board of Trade Sweden (2022). Stronger integration and enhanced free movement in the Nordic Region. https://www.kommerskollegium.se/globalassets/publikationer/rapporter/2022/stronger-integration-and-enhanced-free-movement-in-the-nordic-region.pdf.

NAV (2023). NAV's Horizon Scan 2023-2035. Societal trends and consequences for NAV. https://www.nav.no/_/attachment/inline/3aa2dd72-b4af-440d-9f62-fb930a8e5cbf:41b1b6d602e1ada621ad4dabefb7c7a0d73b620b/NAV's%20Horizon%20Scan%202023-2035.pdf.

NAV (2023). NAVs omverdensanalyse 2023–2035. Samfunnstrender og konsekvenser for NAV. Rapport 2023:4. Mo i Rana: Directorate of Labor and Welfare.

Nekby, L. (2006). The emigration of immigrants, return vs onward migration: Evidence from Sweden. Journal of Population Economics, 19(2), 197–226.

News Öresund (2023). Nya nordenministrar efter möte med Greater Copenhagen: "Öresundsregionen är ett test på hur duktiga vi kan vara på att integrera oss". Published 1 February 2023. https://www.newsoresund.se/nya-nordenministrar-efter-mote-med-greater-copenhagen-oresundsregionen-ar-ett-test-pa-hur-duktiga-vi-kan-vara-pa-att-integrera-oss/.

Nordic Council of Ministers (2005). Nordisk Pendlingskarta – Huvudrapport. TemaNord 2005:518. Copenhagen: Nordic Council of Ministers.

Nordic Council of Ministers (2013). Nordisk Pendlingskarta 2012. Baserat på statistik från 2009. Copenhagen: Nordic Council of Ministers.

Nordic Council of Ministers (2019). Nordisk ministerråds handlingsplan for mobilitet 2019-21. Copenhagen: Nordic Council of Ministers.

Nordic Council of Ministers (2020). The Nordic Region – towards being the most sustainable and integrated region in the world: Action Plan for 2021 to 2024. PolitikNord 2020:728. Copenhagen: Nordic Council of Ministers.

Nordic Council of Ministers (2021). New data on cross-border commuting. https://www.norden.org/en/news/new-data-cross-border-commuting.

Nordic Council of Ministers (2022). Attraktive erhversuddannelser I Norden. Nord 2022:028. Copenhagen: Nordic Council.

Nordic Council of Ministers (2022). Declaration by the Ministers for Nordic Co-Operation, 27 June 2022. https://www.norden.org/en/declaration/declaration-ministers-nordic-co-operation.

Nordic Council of Ministers (2023) A Memorandum of Understanding from The Nordic Tripartite Dialogue on the Green Transition on the Nordic Labour Market. Copenhagen: Nordic Council of Ministers.

Nordic Council of Ministers (2023). Ett säkrare, grönare och friare Norden. Program för Sveriges ordförandeskap i Nordiska ministerrådet 2024. PolitikNord 2023:730. Copenhagen: Nordic Council of Ministers.

Nordic Council of Ministers (2023). The Nordic Region – a sustainable and integrated region? Our Vision 2030 - Status Report 2023. Copenhagen: Nordic Council of Ministers.

Nordic Council of Ministers (n.d.). A memorandum of understanding from the Nordic Tripartite Dialogue on the green transition on the Nordic labour market. https://www.norden.org/da/declaration/memorandum-understanding-nordic-tripartite-dialogue-green-transition-nordic-labour.

Nordic Council of Ministers (n.d.). Agreement concerning common Nordic labour

market. https://www.norden.org/en/treaties-and-agreements/agreement-concerning-common-nordic-labour-market.

Nordic Council of Ministers (n.d.). Even greater mobility in the Nordic Region. https://www.norden.org/en/news/even-greater-mobility-nordic-region.

Nordic Council of Ministers (n.d.). Increasingly mobile labour market brings hope to shrinking regions. https://www.norden.org/en/news/increasingly-mobile-labour-market-brings-hopeshrinking-regions.

Nordic Council of Ministers (n.d.). Joint Nordic Declaration from the Nordic Council of Ministers for Labour (MR-A) - A policy response to changing labour relations. https://www.norden.org/en/declaration/joint-nordic-declaration-nordic-council-ministers-labour-mr-policy-response-changing.

Nordic Council of Ministers (n.d.). Livslångt lärande nyckeln till framtidens arbetsmarknad. https://www.norden.org/sv/news/livslangt-larande-nyckeln-till-framtidens-arbetsmarknad.

Nordic Council of Ministers (n.d.). Mörkertalen minskar – nya siffror kastar ljus över gränspendlingen i Norden. https://www.norden.org/sv/nyhet/morkertalen-minskar-nya-siffror-kastar-ljus-over-granspendlingen-i-norden.

Nordic Council of Ministers (n.d.). Nordic agreements and legislation. https://www.norden.org/en/information/nordic-agreements-and-legislation.

Nordic Council of Ministers (n.d.). Nordic Council - The history of the Nordic Council. https://www.norden.org/en/information/history-nordic-council.

Nordic Council of Ministers (n.d.). Ny analys ska göra arbetet med fri rörlighet mer effektivt. https://www.norden.org/sv/news/ny-analys-ska-gora-arbetet-fri-rorlighet-mer-effektivt.

Nordic Council of Ministers (n.d.). Promoting cross-border data exchange between authorities. https://www.norden.org/en/project/promoting-cross-border-data-exchange-between-authorities.

Nordic Council of Ministers (n.d.). Promoting cross-border data-exchange between authorities. https://www.norden.org/en/project/promoting-cross-border-data-exchange-between-authorities.

Nordic Council of Ministers (n.d.). The Freedom of Movement Council. https://www.norden.org/en/organisation/freedom-movement-council.

Nordic Council of Ministers. (n.d.). Our Vision 2030. https://www.norden.org/sv/declaration/var-vision-2030.

Nordic Health and Welfare Statistics (n.d.). Unemployment. https://nhwstat.org/welfare/unemployment.

Nordic Statistics Database (2020). Who goes where in the Nordic Region.

https://www.nordicstatistics.org/news/who-goes-where-in-the-nordic-region/.

Nordiska Council of Ministers (2024). Gränshinderrådets årsrapport 2023. PolitikNord: 2024:071. Copenhagen: Nordic Council of Ministers.

Norlén, G., Heleniak, T., Refsgaard, K. & Tapia, C. (2024). State of the Nordic Region, Nordregio Report 2024. Stockholm: Nordregio.

Norlén, G., Randall, L., Sánchez Gassen, N. & Tapia, C. (2022). State of the Nordic Region. Stockholm: Nordregio.

Normann E. H., Steen, M., Mäkitie, T., Klitkou, A., Børing, P., Solberg, E., Lund, H. B., Wardeberg, M. & Wanderås Fossum, L. (2023). Kompetanse for grønn omstilling. En gjennomgang av forskningslitteratur og arbeidslivets kompetansebehovknyttet til miljø- og klimautfordringer. Rapport 2023:5. Oslo: NIFU.

NOU (2020). Fremtidige kompetansebehov III. Laering och kompetanse i alle ledd. Norges offentlige utredninger 2020:2. Oslo: Departementenes sikkerhets- og serviceorganisasjon/Teknisk redaksjon.

OECD (2018). Is the last mile the longest? Economic gains from gender equality in the Nordic countries. Paris: OECD Publishing.

OECD (2023). Assessing and anticipating skills for the green transition: Unlocking talent for a sustainable future, getting skills right. Paris: OECD Publishing.

OECD (n.d.). OECD Better Life Index. https://www.oecdbetterlifeindex.org/#/11111111111.

Olesen, T., & Strang, J. (2016). European challenge to Nordic institutional cooperation: Past, present, future. In Strang, J. (ed.), Nordic cooperation: A European region in transition (pp. 27–47). Abingdon: Routledge.

Pedersen, P. J. & Roed, M. (2008). A survey of earlier studies of intra Nordic migration flows. In Pedersen, P. J., Roed, M. & Wadensjö, E. (2008). The Common Nordic Labour Market at 50. TemaNord 2008:506. Copenhagen: Nordic Council of Ministers.

Pedersen, P. J. & Wadensjö, E. (2008). Introduction. In Pedersen, P. J., Roed, M. & Wadensjö, E. (2008). The Common Nordic Labour Market at 50. TemaNord 2008:506. Copenhagen: Nordic Council of Ministers.

Pedersen, P. J., Røed, M. & Wadensjö, E. (2008). The Common Nordic Labour Market at 50. TemaNord 2008:506. Copenhagen: Nordic Council of Ministers.

Petersen, J. H. (2019). Nordic model of welfare states. In Letto-Vanamo, P., Tamm, D. & Gram Mortensen, B. O. (eds.), Nordic law in European context. Cham: Springer.

Randall, L. & Norlén, G. (2022). Working from home. In Norlén, G., Randall, L., Sánchez Gassen, N. & Tapia, C. (eds.), State of the Nordic Region. Copenhagen: Nordic Council of Ministers.

Randall, L., Jensen, T. & Vasilevskaya, A. (2022). Local and regional experiences from remote work and multilocality. Nordregio report 2022:4. Stockholm: Nordregio.

Randall, L., Ormstrup Vestergård, L., Rohrer, L. Huynh, D., Lidmo, J., Stjernberg, M., Weber, R., Sigurjonsdottir, H. R., Gudmundsdottir, H. & Kivi, L. (2022). Remote work: Effects on Nordic people, places and planning 2021-2024. Nordregio report 2022:3. Stockholm: Nordregio.

Regeringen (2021). Danmark, Norge og Sverige laver aftale om forstærket samarbejde på forsvarsområdet. https://www.regeringen.dk/nyheder/2021/danmark-norge-og-sverige-laver-aftale-om-forstaerket-samarbejde-paa-forsvarsomraadet/.

Regeringen (2023). Utrikesdeklarationen 2023. https://www.regeringen.se/tal/2023/022/utrikesdeklarationen-2023/.

Regeringen (n.d.). Överenskommelse om nytt Öresundsavtal. https://www.regeringen.se/pressmeddelanden/2024/05/overenskommelse-om-nytt-oresundsavtal/.

Regeringskansliet Arbetsmarknadsdepartementet (2024). Program för arbetsliv, jämställdhet och integration. https://www.regeringen.se/contentassets/4def77cc69a240d88b71e2b6670c7b3b/program-for-arbetsliv-jamstalldhet-och-integration-240229.pdf.

Region Skåne (2022). Pendling över Öresund 1997-2020. Region Skåne, Enheten för samhällsanalys. https://utveckling.skane.se/siteassets/kampanjsidor/pendling-oresund/pendling_over_oresund-v9.pdf.

Region Värmland (2022). Sverige Norge – Gränslösa möjligheter: Statistik och röster om hur mycket Sverige och Norge betyder för varandra. Karlstad: Region Värmland.

Region Värmland (2023). Sverige Norge – Gränslösa visioner, Region Värmland: Statistik och röster om hur mycket Sverige och Norge betyder för varandra. Karlstad: Region Värmland.

Riisanen, R., Pulli, P., Sinkkonen, M., Vaittinen, S., Kaartinen, O., Hietaenen, A., Husso, T., Nykopp, O., Kari, A., Anttila, E. & Rajala, H. (2023). Handbook of cross-border data exchange within the Nordic and Baltic countries. TemaNord 2023: 542. Copenhagen: Nordic Council of Ministers.

Rogers, A. & Castro, L. J. (1981). Model migration schedules. International Institute for Applied System Analysis Research Reports, 4(2), 239-289.

Rolandsson, B. & Ilsøe, A. (2023). Nordic working life and social dialogue in times of crises. Introduction to the Special Issue. Nordic Journal of Working Life Studies, 13(S10), 1-5.

Rosso, A. (2019). Emigrant selection and wages: The case of Poland. Labour

Economics, 60, 148–175.

Samfunnsekonomisk Analyse (2019). Endringer i kompetansesammensettningen i arbeidslivet mot 2040. Rapport 31-2019. Oslo: Sammfundsøkonomisk analyse AS.

Shuttleworth, I., Östh, J. & Niedomysl, T. (2018). Sweden: internal migration in a high-migration Nordic country. In Champion, T., Cooke, T. & Shuttleworth, I. (eds.), Internal migration in the developed world. Are we becoming less mobile? Abingdon: Routledge.

Sigurðardóttir, G. H. (2012). Commuting: Iceland's challenge and opportunity. Nordic Labour Journal, 15 April 2012. http://www.nordiclabourjournal.org/i-fokus/in-focus-2012/when-commuting-becomes-an-obstacle-race/article.2012-04-13.6268727380.

Stambøl, S. L., Heikikilä, E., Johansson, M., Persson, L-O. & Rissanen, E. (1999). Regional arbeidsmarkedsmobilitet i nordiske land. TemaNord 1999:551. Nordic Council of Ministers.

Statistics Greenland (2023). Greenland in Figures 2023, 20th edition. Nuuk: Statistics Greenland.

Statistics Norway (2024). 13631: Employees and jobs, by industry division (17 groups, SIC2007) for wage earners not registered as resident, by industry (SIC2007), contents, month and preliminary and final figures. https://www.ssb.no/en/statbank/table/13631/.

Statistics Sweden (2018). Sysselsättningsprognos 2018. Örebro: Statistics Sweden, Population and Welfare Department.

Statistics Sweden (2021). Trender och prognoser - befolkning, utbildning, arbetsmarknad. Med sikte på år 2035. Solna: Statistics Sweden, Population and Welfare Department.

Statistics Sweden (2022). Sammanfattning av regionala utbildnings- och arbetsmarknadsprognoser Med sikte på år 2035. Solna: Statistics Sweden, Population and Welfare Department.

Statistics Åland (2024a). Commuting within Finland 2011-2021 by municipality of residence, municipality of the workplace and industry. https://pxweb.asub.ax/PXWeb/pxweb/en/Statistik/Statistik__AR__Syssels%C3%A4ttning/AR020.px
rxid=39c3f053-b021-4eaa-b063-7945f30926f5.

Statistics Åland (2024b). Utbyte mellan Sverige och Åland. En statistisk översikt av relationerna mellan Sverige och Åland. Mariehamn: Statistics Åland.

Strang, J. (2016). Nordic cooperation. A European region in transition. Abingdon: Routledge.

Strang, J. (2024). The world's most integrated region 60 years ago. Nordforsk

News. 23. February 2024. https://www.nordforsk.org/news/worlds-most-integrated-region-60-years-ago.

Svinesundskommittén (2024). Pandemin stängde gränsen. Stockholm: Storia Förlag.

Sweco (2023). Totalförsvaret, försvarsindustrin och järnvägen. Oslo-Stockholm. Stockholm: Sweco.

Sydsvenskan (2020). Svenska sjuksköterskor vänder åter till Norge. 13. Juni 2020. https://www.sydsvenskan.se/artikel/svenska-sjukskoterskor-vander-ater-till-norge/.

Tervonen, M. (2016). The Nordic passport union and its discontents. Unintended consequences of free movement. In Strang, J. (ed.), Nordic cooperation: A European region in transition. London: Routledge.

Utbildning Nord (n.d.). Utbildning Nord. Nyckeln till den nordiska arbetsmarknaden. https://utbnord.se/.

Vadean, F. & Piracha, M. (2010). Circular migration or permanent return: What determines different forms of migration? In Epstein, G. S. & Gang, I. N. (eds.), Migration and culture, frontiers of economics and globalization (pp. 467–495). Bingley: Emerald Publishing.

Walbækken, M., Kostøl, F., Røtnes, R., Eggen, F., & Kordt, A. H. (2019). Automation/Robotisation – Demography – Immigration possibilities for low-skilled immigrants in the Norwegian labour market of tomorrow. Report 7-2019. Oslo: Economics Norway.

Weber, R. & Saarela, J. (2019). Circular migration in a context of free mobility: Evidence from linked population register data from Finland and Sweden. Population, Space and Place, 25(4), 1-12.

Weber, R. & Saarela, J. (2023). Who migrates and who returns in a context of free mobility? An analysis of the reason for migration, income and family trajectories. European Journal of Population, 39(1), 17.

Wenander, H. (2016). Nordiska gänsregioner som rättsvetenskapligt forskningsfält. Nordisk administrativt tidsskrift, 93(3), 33-43.

Yeung, J., Alexander, M. & Riffe, T. (2023). Bayesian implementation of Rogers-Castro model migration schedules: An alternative technique for parameter estimation. Demographic Research, 72(4), 1201-1228.

ÅSUB (2019). Tillväxtstudie 2019. Ålands framtida möjligheter och utmaningar i ljuset av megatrender. Rapport 2019:10. Mariehamn: Ålands statistik- och utredningsbyrå.

ÅSUB (2021). Utbildning och arbetsmarknad 2035. Vägarna till välstånd efter pandemin. Rapport 2021:3. Mariehamn: Ålands statistik- och utredningsbyrå.

Ørestat (2024). Pendlare mellan Danmark och Sverige efter arbetsställets kommun och tid. Dataset.
https://oresundse.statistikbank.dk/statbank5a/SelectTable/Omrade0.asp?SubjectCode=241&ShowNews=OFF&PLanguage=0.

Øresundsinstitutet (2023). State of the Region. Analys av samarbetet över Öresund 2023. Malmö: Øresundsinstitutet.

Øresundsinstitutet (2023). Øresunds Index. Trafikstatistik Q1 2024: Trafiken över Öresund. Resor över bron och med färja. Malmö: Øresundsinstitutet.

Öresundståg (n.d.). Vilka är vi?. https://www.oresundstag.se/om-oresundstag/vilka-ar-vi/.

Appendix

Appendix 1: Stakeholder Groups

Stakeholder groups according to project plan:

- EK-A
- Employers' organisations
- Trade unions
- Local and regional authorities
- Labour market organisations
- CBC services
- Eures network
- European Labour Authority (ELA)

Appendix 2: Survey questionnaire

The common Nordic labour market

The common Nordic labour market is celebrating 70 years in 2024. This means that for more than 70 years Nordic citizens have been able to take a job in another Nordic country.

In this survey, we are interested in learning more about what you think of the common Nordic labour market and its potential. The survey is conducted by Nordregio and is part of a research project funded by the Nordic Council of Ministers. We reached out to you because you are associated with an organization involved in Nordic working life, and your insights could be essential for this study.

The survey contains 12 questions and will take approx. 10 min to respond to. The answers will be anonymous.

We would appreciate it if you could complete the survey by April 3rd.

1. Which country or self-governing territory do you live in?

- ◯ Denmark
- ◯ Sweden
- ◯ Finland
- ◯ Faroe Islands
- ◯ Iceland
- ◯ Greenland
- ◯ Norway
- ◯ Åland
- ◯ Other (please specify)

2. Which type of organisation do you work in?

- ◯ Public sector organisation at national level
- ◯ Employment service organisation
- ◯ Public sector organization at regional or municipal level
- ◯ Public sector organization in cross-border region
- ◯ Business and industry organisation
- ◯ Trade union organisation
- ◯ Other (please specify)

3. Are you familiar with the Nordic Council of Ministers Vision that the Nordic Region will be the most integrated and sustainable region in the world in 2030?

◯ Yes

◯ No

4. The common Nordic labour market agreement celebrates 70 years in 2024. This means that for more than 70 years Nordic citizens have been able to take a job in another Nordic country. Would you say that the Nordic labour market is integrated?

◯ Yes

◯ No, if no please explain

5. To your knowledge, is the Nordic labour market more integrated than the EU labour market?

◯ Yes

◯ No

6. What do you think are the **potential benefit(s)** of an integrated Nordic labour market?

Multiple answers possible:

☐ Higher personal income

☐ Higher GDP

☐ Less unemployment

☐ Reduced number of vacant jobs

☐ More job opportunities

☐ Other (please specify)

☐ Better skills match

☐ Higher supply of potential employees

☐ Better opportunities to integrate immigrants into the labour market

☐ I don't see potential benefits in an integrated Nordic labour market

7. Which **business and industry sectors** do you think could benefit from a more integrated Nordic labour market?

Multiple answers possible:

- ☐ Industry, engineering and manufacturing
- ☐ Service and tourism sector
- ☐ Health and social care sector
- ☐ Education sector
- ☐ Agriculture, fishery, and forestry
- ☐ I think all sectors could benefit from a more integrated Nordic labour market
- ☐ I don't think any business sector could benefit from a more integrated Nordic labour market
- ☐ Other (please specify)

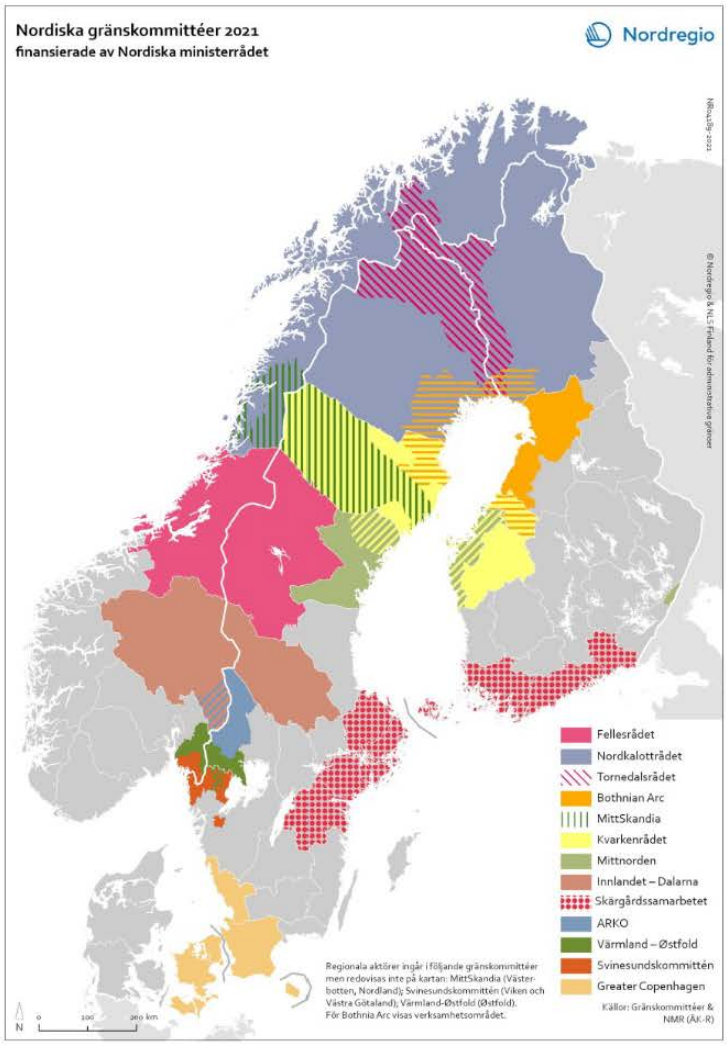
8. Which **regions** do you think could benefit from a more integrated Nordic labour market?
Multiple answers possible:

- ☐ **Denmark**
- ☐ Hovedstaden
- ☐ Sjælland
- ☐ Syddanmark
- ☐ Midtjylland
- ☐ Nordjylland
- ☐ **Finland**
- ☐ Uusimaa - Nyland
- ☐ Varsinais-Suomi - Egentliga Finland
- ☐ Satakunta
- ☐ Kanta-Häme - Egentliga Tavastland
- ☐ Pirkanmaa - Birkaland
- ☐ Päijät-Häme - Päijänne-Tavastland
- ☐ Kymenlaakso - Kymmenedalen
- ☐ Etelä-Karjala - Södra Karelen
- ☐ Nordland
- ☐ Akershus
- ☐ Buskerud
- ☐ Innlandet
- ☐ Vestfold
- ☐ Telemark
- ☐ Agder
- ☐ Vestland
- ☐ Trøndelag
- ☐ Troms
- ☐ Finnmark
- ☐ **Sweden**
- ☐ Stockholm
- ☐ Uppsala
- ☐ Södermanland

- [ ] Etelä-Savo - Södra Savolax
- [ ] Pohjois-Savo - Norra Savolax
- [ ] Pohjois-Karjala - Norra Karelen
- [ ] Keski-Suomi - Mellersta Finland
- [ ] Etelä-Pohjanmaa - Södra Österbotten
- [ ] Österbotten - Pohjanmaa
- [ ] Keski-Pohjanmaa - Mellersta Österbotten
- [ ] Pohjois-Pohjanmaa - Norra Österbotten
- [ ] Kainuu - Kajanaland
- [ ] Lappi - Lappland
- [ ] **Iceland**
- [ ] Höfuðborgarsvæðið
- [ ] Suðurnes
- [ ] Vesturland
- [ ] Vestfirðir
- [ ] Norðurland vestra
- [ ] Norðurland eystra
- [ ] Austurland
- [ ] Suðurland
- [ ] **Norway**
- [ ] Oslo
- [ ] Rogaland
- [ ] Møre og Romsdal
- [ ] Östergötland
- [ ] Örebro
- [ ] Västmanland
- [ ] Jönköping
- [ ] Kronoberg
- [ ] Kalmar
- [ ] Gotland
- [ ] Blekinge
- [ ] Skåne
- [ ] Halland
- [ ] Västra Götaland
- [ ] Värmland
- [ ] Dalarna
- [ ] Gävleborg
- [ ] Västernorrland
- [ ] Jämtland
- [ ] Västerbotten
- [ ] Norrbotten
- [ ] **Åland**
- [ ] **Faroe Islands**
- [ ] **Greenland**
- [ ] I think all regions could benefit from a more integrated Nordic labour market
- [ ] I don't think regions could benefit from a more integrated Nordic labour market
- [ ] Other (please specify)

9. Which **cross-border regions** do you think could benefit from a more integrated

Nordic labour market?
Multiple answers possible:



- [ ] ARKO
- [ ] Bottenviksbågen Bothnian Arc
- [ ] Fellesrådet for Trøndelag og Jämtland Härjedalen
- [ ] Nordkalottrådet
- [ ] Skärgårdssamarbetet
- [ ] Svinesundskommittéen
- [ ] Tornedalsrådet
- [ ] Värmland-Østfold

- [ ] Greater Copenhagen and Skåne Committee
- [ ] Innlandet-Dalarna
- [ ] Kvarkenrådet
- [ ] MidtSkandia
- [ ] Other (please specify)

- [ ] I think all cross-border regions could benefit from a more integrated Nordic labour market
- [ ] I don't think any cross-border regions could benefit from a more integrated Nordic labour market

10. What do you think are the major **obstacles** to an more integrated Nordic labour market?
Multiple answers possible:

- [ ] language obstacles
- [ ] cultural obstacles
- [ ] difficulties in finding a job
- [ ] difficulties in finding housing
- [ ] difficulties in coordinating with family
- [ ] long distances and limited accessibility (e.g. transport)
- [ ] limited mobile and broadband connections
- [ ] bureaucracy and administrative obstacles (e.g. tax and social security)
- [ ] limitations for non-Nordic citizens to migrate in the common Nordic labour market
- [ ] Other (please specify)

11. Different challenges require different solutions. Please state the two most important challenges for a more integrated Nordic labour market, how this challenge can be solved, who is responsible and what the estimated impact would be.

Challenge 1:	
What is the solution to the challenge?	
Who is responsible for solving the challenge?	
What is the estimated impact (what difference would it make)?	

12. Challenge 2:

Challenge 2:	
What is the solution to the challenge?	
Who is responsible for solving the challenge?	
What is the estimated impact (what difference would it make)?	

Thank you very much for your participation

For any questions related to the survey please constant us: debora.birgier@nordregio.org

Appendix 3: Interview questionnaire

Interviews – approx. 1 hour

The last 70 ys

1. The common Nordic labour market celebrates 70 ys in 2024, what has been the greatest achievements?

2. In what way have your country/territory benefited the most from the common labour market during the last 70 ys?

3. What has been the greatest challenges to the common Nordic labour market?

4. What has been the role of the agreements of Nordic cooperation and a common Nordic labour market …
a) for Nordic labour market mobility? (High importance, medium, low) How, give examples.
b) for international competitiveness? (High importance, medium, low) How, give examples.

5. What has been the role of different institutions….
a) Nordic labour market committee who is responsible for implementing the agreement on the common Nordic labour market? (High importance, medium, low)
b) Info Norden and cross-border services? (High importance, medium, low)
c) Freedom of movement council? (High importance, medium, low)
d) Other institutions you want to highlight?

Today and in the future

6. Flow: The share of Nordic immigration has been decreasing. Immigration (of total immigration) 2021: SE: 9 %, DK: 15%; FI: 10%; NO: 8%; Iceland 10%; FO: 67%; GL: 90%; AX: 81%

Stock: Around 449.300 Nordic people were living in another Nordic country, corresponding to 1.6% of the total Nordic population (2022). At EU level, 3.9% of European citizens lived in an EU member state other than their country of birth in 2023.

Please comment.

7. What were the effects of the pandemic on the common Nordic labour market? Are these effects still relevant?

8. How do new technologies (e.g. automation and digitalisation) impact on the common Nordic labour market today and in the future?

9. How does the green transition impact the common Nordic labour market today and in the future?

10. How does working remotely impact the common Nordic labour market today and in the future?

11. Can cornerstones of the common Nordic labour market contribute to the Nordic vision of being the most integrated and sustainable region in 2030? How?

12. Lack of labour and skills mismatch is a challenge in all Nordic countries, could a common Nordic labour market contribute to solve those challenges? How?

Appendix 4: Classification of levels of education, skills levels, labour markets sectors, occupations

Appendix 4.1: Classification of levels of education

ISCED 2011 (levels of education) classification - Level of qualification

Low	(Pre)primary and lower secondary (ISCED 0-2)	ISCED 0: Early childhood education
		ISCED 1: Primary education
		ISCED 2: Lower secondary education
Medium	Upper and post-secondary (ISCED 3-4)	ISCED 3: Upper secondary education
		ISCED 4: Post-secondary non-tertiary education
High	Tertiary (ISCED 5-8)	ISCED 5: Short-cycle tertiary education
		ISCED 6: Bachelor's or equivalent level
		ISCED 7: Master's or equivalent level
		ISCED 8: Doctoral or equivalent level

Appendix 4.2: Classification of levels of skill levels

ISCO-08 skill level	ISCED-97 groups
4	6 Second stage of tertiary education (leading to an advanced research qualification)
4	5a First stage of tertiary education, 1st degree (medium duration)
3	5b First stage of tertiary education (short or medium duration)
2	4 Post-secondary, non-tertiary education
2	3 Upper secondary level of education
2	2 Lower secondary level of education
1	1 Primary level of education

Appendix 4.3: Classification of levels of skill levels

Industries categories based on NACE, categorization from 2 digits

6 industry [NACE]	41-industry [NACE]		NACE rev. 2 [NACE]
Primary sector & utilities	1	Agriculture etc [01-03]	Agriculture [01]
			Forestry [02]
			Fishing [03]
	2	Mining and quarrying [05-09]	Coal [05]
			Oil and Gas [06]
			Other mining [07-09]
Manufacturing	3	Food, Drink & Tobacco [10-12]	Food, Drink & Tobacco [10-12]
	4	Textiles, Clothing & Leather [13-15]	Textiles, Clothing & Leather [13-15]
	5	Wood, paper, print, publishing [16-18]	Wood and wood products [16]
			Paper and paper products [17]
			Printing [18]
	6	Coke & ref petroleum [19]	Manufactured fuels [19]
	7	Other chemicals [20]	Other chemicals [20]
	8	Pharmaceuticals [21]	Pharmaceuticals [21]
	9	Rubber/non-metal min. products [22,23]	Rubber and plastic products [22]
			Non-metallic mineral products [23]
	10	Basic metals & metal products [24,25]	Basic metals [24]
			Metal products [25]
	11	Optical & electronic equip [26]	Optical & electronic equip [26]
	12	Electrical equipment [27]	Electrical equipment [27]
	13	Other machinery & equipment [28]	Other machinery & equipment [28]
	14	Motor Vehicles [29]	Motor Vehicles [29]
	15	Other Transport Equipment [30]	Other Transport Equipment [30]
	16	Manufacturing nes [31-33]	Manufacturing nes [31-32]
			Repair & installation of machinery [33]
Primary sector & utilities	17	Electricity [35.1]	Electricity [35.1]
	18	Gas, steam & air conditioning [35.2,35.3]	Gas, steam & air conditioning [35.2,35.3]
	19	Water supply [36-39]	Water supply [36]
			Sewerage and waste [37-39]
Construction	20	Construction [41-43]	Construction [41-43]
Distribution & transport	21	Wholesale and retail trade [45-47]	Trade and repair of motor vehicles [45]
			Other wholesale trade [46]
			Other retail trade [47]
	22	Land transport [49]	Land transport [49]
	23	Water Transport [50]	Water Transport [50]
	24	Air Transport [51]	Air Transport [51]
	25	Warehousing and postal services [52,53]	Warehousing [52]
			Postal and courier activities [53]
	26	Accommodation & Catering [55,56]	Accommodation & Catering [55,56]
Business & other services	27	Media [58-60]	Publishing activities [58]
			Motion picture and broadcasting activities [59-60]

	28	Telecommunications [61]	Telecommunications [61]
	29	Computer programming, info serv [62,63]	Computer programming, info serv [62,63]
	30	Financial & insurance activ [64-66]	Financial services [64]
			Insurance [65]
			Auxiliary to financial & insurance activities [66]
	31	Real estate activities [68]	Real estate activities [68]
	32	Legal, account & consulting [69,70]	Legal and accounting [69-70]
	33	Architectural & engineering [71]	Architectural & engineering [71]
	34	Research & Development [72]	Research & Development [72]
	35	Market research & other prof [73-75]	Advertising [73]
			Other professional activities [74-75]
	36	Admin. and support services [77-82]	Rental and leasing activities [77]
			Employment activities [78]
			Travel agency, tour operators [79]
			Security and office administrative [80-82]
Non-marketed services	37	Public administration & defence [84]	Public administration and defence [84]
	38	Education [85]	Education [85]
	39	Health [86-88]	Human health activities [86]
			Residential care and social work [87-88]
Business & other services	40	Arts and entertainment [90-93]	Arts and entertainment activities [90-92]
			Sports activities [93]
	41	Other service activities [94-99]	Membership organisations [94]
			Repair of household goods [95]
			Other personal service activities [96]
			Households as employers of domestic personnel [97]

Appendix 4.4: Classification of occupation

ISCO-08	Major group name and number	Examples
Major group 1: Managers		
11	Chief Executives, Senior Officials and Legislators	Senior Government Officials, Traditional Chiefs and Heads of Villages, Senior Officials of Employers', Workers' and Other Economic-interest Organizations, General Managers of Business Services
12	Administrative and Commercial Managers	Directors and Chief Executives, Finance and Administration Department Managers, Sales and Marketing Department Managers
13	Production and Specialized Services Managers	General Managers in Manufacturing, Production and Operations Department Managers in Manufacturing
14	Hospitality, Retail and Other Services Managers	Hotel Managers, Restaurant Managers
Major group 2: Professionals		
21	Science and Engineering Professionals	Physicists and Astronomers, Meteorologists, Chemists, Mathematicians, Actuaries and Statisticians, Biologists, Botanists, Zoologists and Related Professionals
22	Health Professionals	Generalist Medical Practitioners, Nursing Professionals, Midwifery Professionals, Veterinarians, Dentists, Pharmacists
23	Teaching Professionals	University and Higher Education Teachers, Vocational Education Teachers, Secondary Education Teachers, Primary School Teachers, Early Childhood Educators,
24	Business and Administration Professionals	Accountants, Financial and Investment Advisers, Financial Analysts, Management and Organization Analysts, Policy Administration Professionals, Public Relations Professionals
25	Information and Communications Technology Professionals	Systems Analysts, Software Developers, Web and Multimedia Developers, Applications Programmers, Database and Network Professionals,Database Designers and Administrators
26	Legal, Social and Cultural Professionals	Lawyers, Judges, Legal Professionals,Archivists and Curators, Librarians and Related Information Professionals, Sociologists, Anthropologists and Related Professionals, Philosophers, Historians and Political Scientists, Psychologists, Social Work and Counselling Professionals, Religious Professionals, Authors, Journalists and Linguists, Creative and Performing Artists
Major group 3: Technicians and associate professionals		
31	Science and Engineering Associate Professionals	Chemical and Physical Science Technicians, Civil Engineering Technicians, Mechanical Engineering Technicians, Manufacturing Supervisors, Construction Supervisors
32	Health Associate Professionals	Medical Imaging and Therapeutic Equipment Technicians, Pharmaceutical Technicians and Assistants, Nursing Associate Professionals, Midwifery Associate Professionals, Traditional and Complementary Medicine Associate Professionals, Ambulance Workers
33	Business and Administration Associate Professionals	Securities and Finance Dealers and Brokers, Credit and Loans Officers, Statistical, Mathematical and Related Associate, Sales and Purchasing Agents and Brokers, Insurance Representatives, Buyers, Trade Brokers, Conference and Event Planners, Administrative and Specialized Secretaries, Government Tax and Excise Officials
34	Legal, Social, Cultural and	Legal and Related Associate Professionals, Legal and Related Associate Professionals, Sports and Fitness Workers, Athletes and Sports Players, Sports Coaches, Instructors and Officials, Interior Designers and Decorators, Chefs

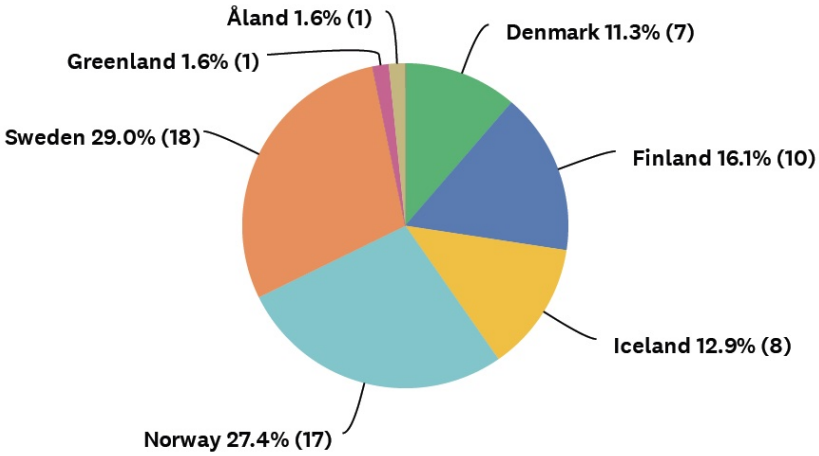
	Related Associate Professionals	
35	Information and Communications Technicians	Information and Communications Technology Operations Technicians, Web Technicians, Broadcasting and Audio-visual Technicians, Telecommunications Engineering Technicians
Major group 4: Clerical support workers		
41	General and Keyboard Clerks	General Office Clerks, Secretaries (general), Keyboard Operators, Typists and Word Processing Operators, Data Entry Clerks
42	Customer Services Clerks	Tellers, Money Collectors and Related Clerks, Bank Tellers and Related Clerks, Bookmakers, Croupiers and Related Gaming Workers, Pawnbrokers and Money-lenders, Debt Collectors and Related Workers, Client Information Workers, Travel Consultants and Clerks, Hotel Receptionists, Inquiry Clerks, Receptionists, Survey and Market Research Interviewers
43	Numerical and Material Recording Clerks	Accounting and Bookkeeping Clerks, Statistical, Finance and Insurance Clerks,Payroll Clerks, Stock Clerks, Production Clerks, Transport Clerks
44	Other Clerical Support Workers	Library Clerks, Mail Carriers and Sorting Clerks, Coding, Proofreading and Related Clerks, Scribes and Related Workers, Filing and Copying Clerks, Personnel Clerks, Clerical Support Workers Not Elsewhere Classified
Major group 5: Services and sales workers		
51	Personal Services Workers	Travel Attendants and Travel Stewards, Transport Conductors, Travel Guides, Cooks, Waiters and Bartenders, Waiters, Bartenders, Hairdressers, Beauticians and Related Workers, Pet Groomers and Animal Care Workers, Driving Instructors
52	Sales Workers	Shop Aalespersons, Shopkeepers, Shop Supervisors, Shop Sales Assistants, Cashiers and Ticket Clerks, Sales Demonstrators, Door-to-door Salespersons, Contact Centre Salespersons
53	Personal Care Workers	Child Care Workers and Teachers' Aides, Personal Care Workers in Health Services, Home-based Personal Care Workers
54	Protective Services Workers	Fire Fighters, Police Officers, Prison Guards, Security Guards
Major group 6: Skilled Agricultural, Forestry and Fishery Workers		
61	Market-oriented Skilled Agricultural Workers	Market Gardeners and Crop Growers Animal Producers
62	Market-oriented Skilled Forestry, Fishery and Hunting Workers	Forestry and Related Workers, Fishery Workers, Hunters and Trappers, Aquaculture Workers, Inland and Coastal Waters Fishery Workers,Deep-sea Fishery Workers, Hunters and Trappers
63	Subsistence Farmers, Fishers, Hunters and Gatherers	Subsistence Crop Farmers, Subsistence Mixed Crop and Livestock Farmers, Subsistence Fishers, Hunters, Trappers and Gatherers
Major group 7: Craft and Related Trades Workers		
71	Building and Related Trades Workers (excluding Electricians)	House Builders, Bricklayers and Related Workers, Stonemasons, Stone Cutters, Splitters and Carvers, Concrete Placers, Concrete Finishers and Related Workers, Carpenters and Joiners, Roofers, Floor Layers and Tile Setters, Plasterers, Insulation Workers, Glaziers, Plumbers and Pipe Fitters
72	Metal, Machinery and Related Trades Workers	Metal Moulders and Coremakers, Welders and Flame Cutters, Sheet Metal Workers, Structural Metal Preparers and Erectors, Riggers and Cable Splicers, Blacksmiths, Hammersmiths and Forging Press Workers, Metal Working Machine Tool Setters and Operators, Motor Vehicle Mechanics and Repairers
73	Handicraft and Printing Workers	Precision-instrument Makers and Repairers, Musical Instrument Makers and Tuners, Jewellery and Precious Metal Workers, Potters and Related Workers, Glass Makers,

		Cutters, Grinders and Finishers, Handicraft Workers Not Elsewhere Classified, Printing Trades Workers, Pre-press Technicians
74	Electrical and Electronic Trades Workers	Building and Related Electricians, Electrical Mechanics and Fitters, Electrical Line Installers and Repairers, Electronics Mechanics and Servicers, Information and Communications Technology Installers and Servicers
75	Food Processing, Woodworking, Garment and Other Craft and Related Trades Workers	Butchers, Fishmongers and Related Food Preparers, Bakers, Pastry-cooks and Confectionery Makers, Dairy Products Makers, Fruit, Vegetable and Related Preservers, Cabinet-makers and Related Workers, Woodworking Machine Tool Setters and Operators, Garment and Related Trades Workers, Tailors, Dressmakers, Furriers and Hatters
Major group 8: Plant and Machine Operators and Assemblers		
81	Stationary Plant and Machine Operators	Miners and Quarriers, Mineral and Stone Processing Plant Operators, Well Drillers and Borers and Related Workers, Cement, Stone and Other Mineral Products Machine Operators, Metal Processing Plant Operators, Metal Finishing, Plating and Coating Machine Operators, Fibre Preparing, Spinning and Winding Machine Operators, Weaving and Knitting Machine Operators, Shoemaking and Related Machine Operators, Laundry Machine Operators
82	Assemblers	Mechanical Machinery Assemblers, Electrical and Electronic Equipment Assemblers, Assemblers Not Elsewhere Classified
83	Drivers and Mobile Plant Operators	Locomotive Engine Drivers, Railway Brake, Signal and Switch Operators, Motorcycle Drivers, Car, Taxi and Van Drivers, Heavy Truck and Bus Drivers, Crane, hoist and related plant operators, Lifting Truck Operators
Major group 9: Elementary Occupations		
91	Cleaners and Helpers	Domestic, Hotel and Office Cleaners and Helpers Vehicle, Window, Laundry and Other Hand Cleaning Workers
92	Agricultural, Forestry and Fishery Labourers	Crop Farm Labourers, Livestock Farm Labourers, Mixed Crop and Livestock Farm Labourers, Garden and Horticultural Labourers, Forestry Labourers, Fishery and Aquaculture Labourers
93	Labourers in Mining, Construction, Manufacturing and Transport	Mining and Quarrying Labourers, Civil Engineering Labourers, Building Construction Labourers, Manufacturing Labourers, Hand Packers, Manufacturing Labourers Not Elsewhere Classified, Transport and Storage Labourers, Hand and Pedal Vehicle Drivers
94	Food Preparation Assistants	Fast Food Preparers, Kitchen Helpers
95	Street and Related Sales and Services Workers	Street and Related Service Workers, Street Vendors (excluding Food)
96	Refuse Workers and Other Elementary Workers	Garbage and Recycling Collectors, Refuse Sorters, Sweepers and Related Labourers, Messengers, Package Deliverers and Luggage Porters, Meter Readers and Vending-machine Collectors

Appendix 5: Survey results

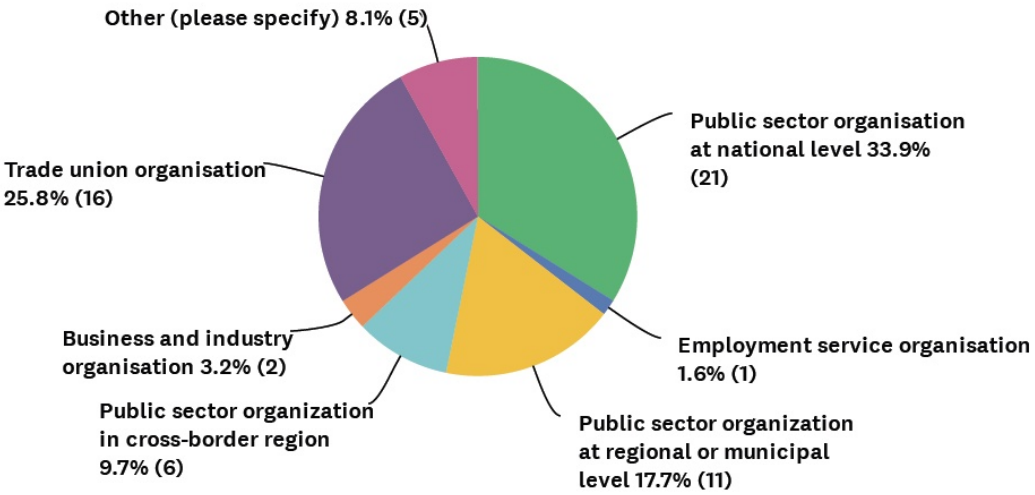
Q1 Which country or self-governing territory do you live in?

Answered: 62 Skipped: 0



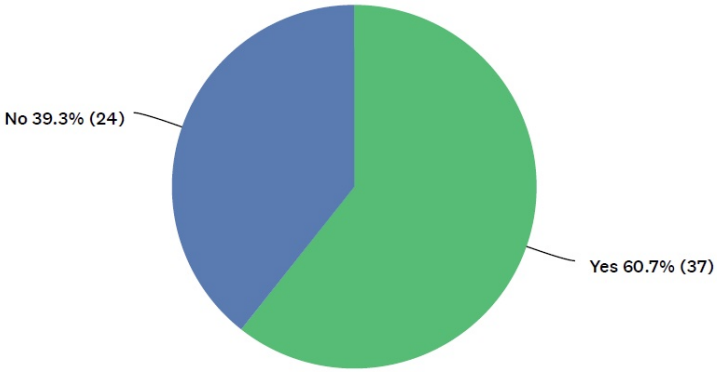
Q2 Which type of organisation do you work in?

Answered: 62 Skipped: 0



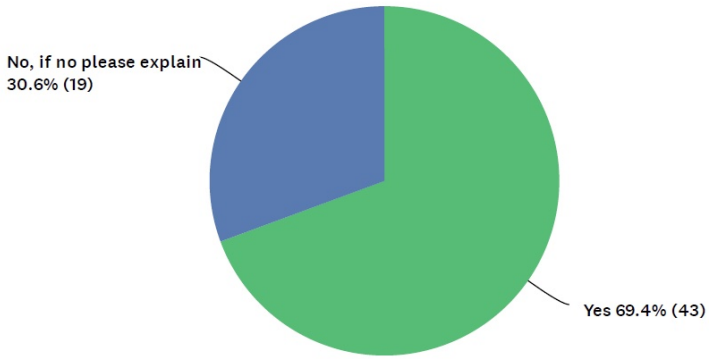
Q3 Are you familiar with the Nordic Council of Ministers Vision that the Nordic Region will be the most integrated and sustainable region in the world in 2030?

Answered: 61 Skipped: 1



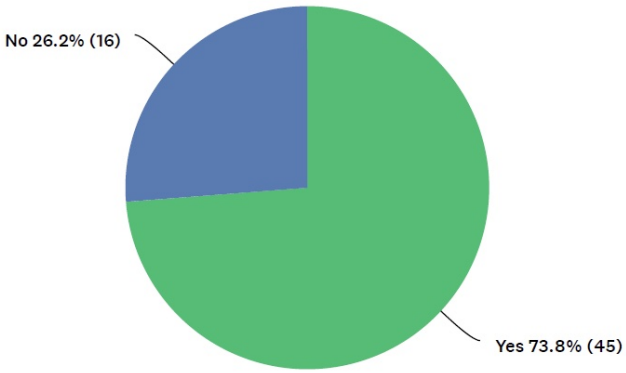
Q4 The common Nordic labour market agreement celebrates 70 years in 2024. This means that for more than 70 years Nordic citizens have been able to take a job in another Nordic country. Would you say that the Nordic labour market is integrated?

Answered: 62 Skipped: 0



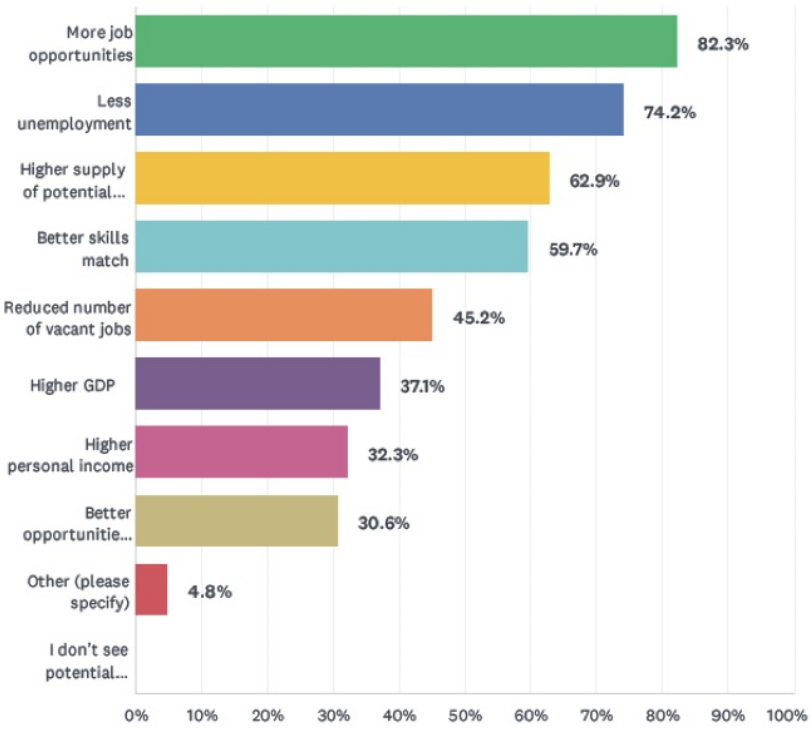
Q5 To your knowledge, is the Nordic labour market more integrated than the EU labour market?

Answered: 61 Skipped: 1



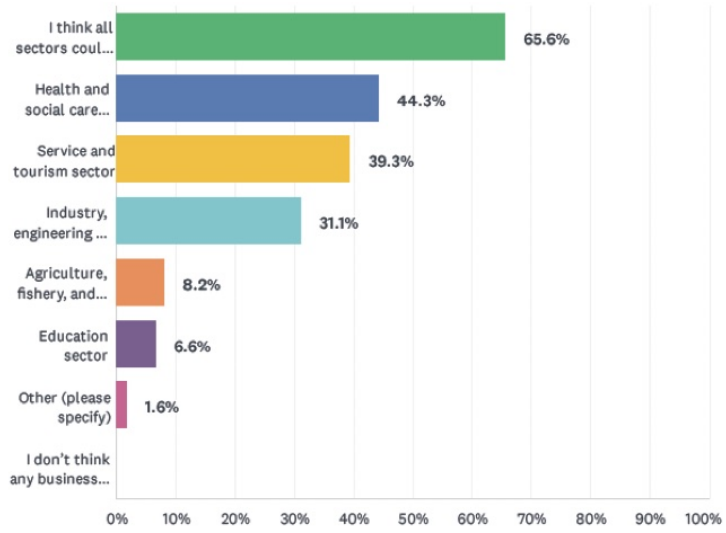
Q6 What do you think are the potential benefit(s) of an integrated Nordic labour market?Multiple answers possible:

Answered: 62 Skipped: 0



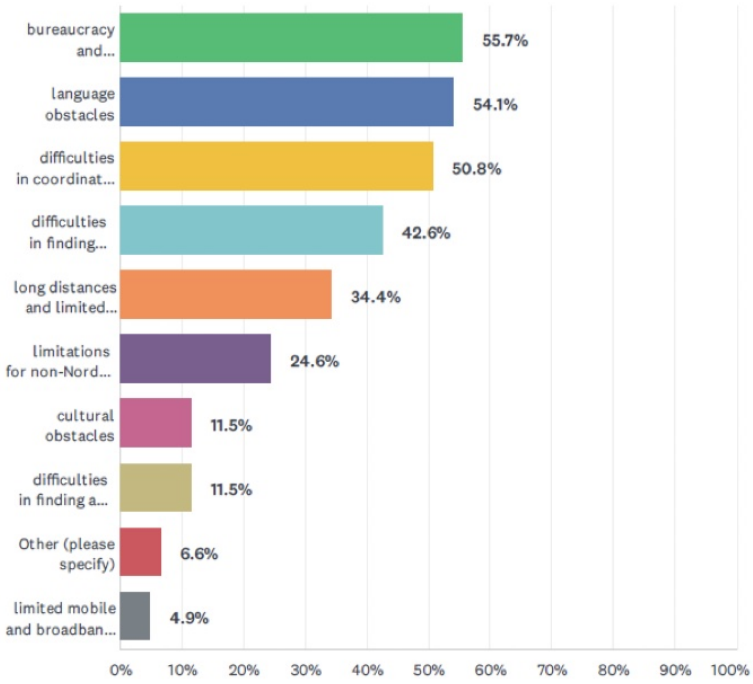
Q7 Which business and industry sectors do you think could benefit from a more integrated Nordic labour market?Multiple answers possible:

Answered: 61 Skipped: 1



Q10 What do you think are the major obstacles to an more integrated Nordic labour market?Multiple answers possible:

Answered: 61 Skipped: 1



About this publication

The Common Nordic Labour Market – 70 Years and Beyond

Anna Lundgren, Debora Pricila Birgier, Nora Sánchez Gassen and Gustaf Norlén

Nordregio report 2024:14
ISBN 978-91-8001-105-1 (online)
ISBN 978-91-8001-106-8 (PDF)
ISBN 978-91-8001-111-2 (print)
ISSN: 1403-2503
http://doi.org/10.6027/R2024:14.1403-2503

© Nordregio 2024

Layout: Kotryna Juskaite
Cover Photo: Tapio Haaja / Unsplash.com

Nordregio

Nordregio is a leading Nordic and European research centre for regional development and planning, established by the Nordic Council of Ministers in 1997. We conduct solution-oriented and applied research, addressing current issues from both a research perspective and the viewpoint of policymakers and practitioners. Operating at the international, national, regional and local levels, Nordregio's research covers a wide geographic scope, emphasising the Nordic and Baltic Sea Regions, Europe and the Arctic.

Nordregio
Holmamiralens Väg 10
Skeppsholmen
Stockholm, Sweden
www.nordregio.org