Nordic Council of Ministers

# STATE OF THE NORDIC REGION 2018

## THEME 1: DEMOGRAPHY

State of the Nordic Region 2018
Theme 1: Demography
*Julien Grunfelder, Linus Rispling and Gustaf Norlén (eds.)*

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**Nordic Council of Ministers**
**Nordens Hus**
**Ved Stranden 18**
**DK-1061 Copenhagen K**
**www.norden.org**

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## THEME 1: DEMOGRAPHY

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**COUNTRY CODES FOR FIGURES**

| | |
|---|---|
| AX | Åland |
| DK | Denmark |
| FI | Finland |
| FO | Faroe Islands |
| GL | Greenland |
| IS | Iceland |
| NO | Norway |
| SE | Sweden |

| | |
|---|---|
| EU | The European Union |
| EU28 | The 28 European Union member states |

**OTHERS**

| | |
|---|---|
| b | billion |
| BSR | Baltic Sea Region |
| EFTA | European Free Trade Agreement |
| EII | Eco-Innovation Index |
| Eco-IS | Eco-Innovation Scoreboard |
| ESPON | European Observation Network for Territorial Development and Cohesion |
| FDI | Foreign Direct Investments |
| FTE | Full-time equivalent |
| GDHI | Gross disposable household income |
| GDP | Gross Domestic Product |
| GRP | Gross Regional Product |
| GWh | Gigawatt hour |
| ICT | Information and communication technology |
| ISCED | International Standard Classification of Education |
| ISO | International Organization for Standardization |
| ITQ | Individual Transferable Quotas |
| Ktoe | Kilotonnes of oil equivalent |
| LAU | Local Administrative Unit |
| LFS | Labour Force Survey |
| m | million |
| NACE | Statistical classification of economic activities in the European Community |
| NCD | Non-Communicable Diseases |
| NGA | Next Generation Access |
| NSI | National Statistical Insitute |
| NUTS | Nomenclature of Territorial Units for Statistic |
| OECD | Organisation for Economic Co-operation and Development |
| PPP | Purchasing Power Parity |
| R&D | Research & Development |
| RIS | Regional Innovation Scoreboard |
| SCB | Statistics Sweden |
| SDG | Sustainable Development Goals |
| SPI | Social Progress Index |
| TWh | Terawatt hour |
| UN | United Nations |
| USD | United States dollar |
| WWF | World Wildlife Fund |

# Contents


| | | |
|---|---|---|
| 09 | **Preface** | **A look behind the scenes of the Nordic model** |
| 11 | | **INTRODUCTION** |
| 12 | Chapter 1 | **Introduction** |
| 23 | **THEME 1** | **DEMOGRAPHY** |
| 24 | Chapter 2 | **Population growth and ageing: Past, present and future trends** |
| 36 | Chapter 3 | **Urbanisation: Nordic geographies of urbanisation** |
| 48 | Chapter 4 | **Migration: The wary welcome of newcomers to the Nordic Region** |
| 61 | **THEME 2** | **LABOUR FORCE** |
| 62 | Chapter 5 | **Employment: Labour force participation and productivity of Nordic labour markets** |
| 74 | Chapter 6 | **Towards inclusive Nordic labour markets** |
| 88 | Chapter 7 | **Education in an evolving economic landscape** |
| 101 | **THEME 3** | **ECONOMY** |
| 102 | Chapter 8 | **Economic development: The Nordic Region still performing well in relation to the EU** |
| 118 | Chapter 9 | **The Nordics: Europe's hotbed of innovation** |
| 132 | Chapter 10 | **Foreign direct investment: Trends and patterns of FDI inflows** |
| 145 | **THEME 4** | **FOCUS CHAPTERS** |
| 146 | Chapter 11 | **The rapidly developing Nordic bioeconomy** |
| 160 | Chapter 12 | **Digitalisation for a more inclusive Nordic Region** |
| 170 | Chapter 13 | **Health and welfare: We continue to live longer, but inequalities in health and wellbeing are increasing** |
| 184 | Chapter 14 | **Culture and arts: An essential area for Nordic co-operation** |
| 195 | **THEME 5** | **REGIONAL POTENTIAL INDEX** |
| 196 | Chapter 15 | **Nordregio Regional Potential index: Measuring regional potential** |

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Preface

# A LOOK BEHIND THE SCENES OF THE NORDIC MODEL

The Nordic Region as such comprises the 12th largest economy in the world, with a population that is growing faster than the EU average, a labour market that receives global praise and a welfare system that has proved resilient both in times of boom and bust.

But the countries of Denmark, Finland, Iceland, Norway and Sweden along with Greenland, the Faroe Islands and Åland also make out a macro-region of very different internal regions, both geographically and administratively.

It is an area spanning from the endless acres of farmland in Denmark and the vast forests in Sweden, over the thousand lakes of Finland and the mythical fjords of Norway to the Arctic splendour of Iceland and Greenland. Indeed, even the island communities of the Faroe Islands and Åland have their own characteristics, both when it comes to nature and culture, economy and population.

The Nordics often are at the top of the list when the UN or other international bodies rank nations on various parameters. And despite some bumps on the road, we are also rated as some of the most suited to fulfill the aim of the 2030 Agenda to reach the UN Sustainable Development Goals.

In fact, a recent publication from the Nordic Council of Ministers point to the almost unlikely success of the Nordic region in a global perspective. But what is the picture behind the national figures and how do the various regions within the Nordic countries interact, both internally and across borders?

That question is addressed by this publication, the State of the Nordic Region 2018 that gives a unique look behind the scenes of the world's most integrated region.

The Nordic Council of Ministers has contributed with Nordic statistics for more than 50 years through e.g. the Nordic Statistical Yearbook, and Nordregio – our research institution for regional development and planning – has published regional statistics since its establishment in 1997.

Now we are gearing up even more with a newly established Analytical and Statistical Unit at the Nordic Council of Ministers. In the same spirit, two other Nordic actors – the Nordic Welfare Centre and Nordic Agency for Cultural Policy Analysis – have contributed along with Nordregio to the current edition of the State of the Nordic Region, which is now published as a joint venture for the entire Nordic Council of Ministers' network.

By mapping and documenting information about the state of the Nordic region(s), Nordregio provides a very important knowledge base that empowers local, regional and national authorities in the Nordic countries to make informed decisions. Solid documentation of development trends is a necessary starting point for developing good policy.

At the same time, the State of the Nordic Region 2018 is also a treasure trove of information for the Nordic population at large, as well as a must read for international actors who want to learn about the Nordics and maybe even get inspired by the Nordic model, however differently it may be played out in the various regions and areas.

I hope the many interesting facts, figures and stories embodied in this impressive work will find a large audience and reach high and wide, just as the Nordic countries themselves seem to be doing.

**Dagfinn Høybråten**
*The Secretary General,*
Nordic Council of Ministers

# INTRODUCTION

# Chapter 1
# INTRODUCTION

**Author: Kjell Nilsson**
**Map and data: Julien Grunfelder**

## Background

Since 1981, Nordregio and its predecessor organisations have produced the report *State of the Nordic Region*. The report is published every two years, describing ongoing developments over time in the Nordic Region at the municipal and regional levels. This report is the 15th volume in the series "Regional Development in the Nordic countries", which has supplied policymakers and practitioners with comprehensive data and analyses on Nordic regional development for many years.

The report is based on the latest statistics on demographic change, labour markets, education, economic development, etc. The analyses are based on a broad range of indicators covering the above-mentioned areas. Since 2016, *State of the Nordic Region* has also included a Regional Development Potential Index which highlights the strengths and weaknesses of the 74 Nordic regions in relation to one another and identifies the regions with the strongest development potentials. The maps contained within the report can also be accessed through Nordregio's online map gallery, and NordMap, an interactive map tool dealing with demographic, labour market and accessibility issues in the Nordic countries.

From 2018, publication of *State of the Nordic Region* has been directly overseen by the Nordic Council of Ministers centrally. The ambition here is to make the report a flagship project for the Nordic Council of Ministers, enhancing its analytical capacity and its ability to collaborate across sectors and institutions. *State of the Nordic Region* strengthens Nordic identity and community. It is deeply illustrative thanks to its rich map material and is therefore suitable for the international marketing of the Nordic Region. Thanks to the Nordic Region's strong performance in international comparisons it can also contribute to the strengthening of Nordic influence and competitiveness within Europe as well as globally.

Given its focus on scale, *State of the Nordic Region* builds on the collection and use of Nordic statistics at the local and regional levels. The advantage of following an administrative division is that it coincides with political responsibilities and thus becomes more relevant to politicians and other decision-makers for whom access to comparable and reliable statistical information is vital. The report itself should not however be viewed as being politically guided or seen as containing political pointers or recommendations. Maintaining integrity and independence is important for the credibility and, ultimately, for how the *State of the Nordic Region* is received and used. When the inclusion of an international benchmarking approach makes sense, the Nordic-focused material is supplemented with statistics and maps addressing the pan-European level.

The concept of *State of the Nordic Region* can be both scaled up and down. An example of the former is the ESPON BSR-TeMo project (2014) and its follow-up TeMoRi (Rispling & Grunfelder, 2016), con-

**The Nordic Region consists of Denmark, Finland, Iceland, Norway and Sweden as well as Faroe Islands and Greenland (both part of the Kingdom of Denmark) and Åland (part of the Republic of Finland)**

ducted by Nordregio on behalf of the Swedish Agency for Economic and Regional Growth, with both projects focusing on the development of a territorial monitoring approach for the Baltic Sea Region (ESPON, 2014; Rispling & Grunfelder, 2016). Examples of scaling down include various assignments that Nordregio has implemented for individual regions such as Jämtland, Värmland, and Lappi. The potentials for extending the implementation of *State of the Nordic Region* are therefore immense if awareness increases due to its broader launch profile.

## The regional approach

**What is the Nordic Region?**

The Nordic Region consists of Denmark, Finland, Iceland, Norway and Sweden as well as Faroe Islands and Greenland (both part of the Kingdom of Denmark) and Åland (part of the Republic of Finland). *State of the Nordic Region* is based on a suite of statistics covering all Nordic municipalities and administrative regions. It is however worth noting here that several Nordic territories, e.g. Svalbard (Norway), Christiansø (Denmark) and Northeast Greenland National Park (*Avannaarsuani Tunumilu Nuna Allanngutsaaliugaq*), are not part of the national administrative systems. Nevertheless, though not strictly included in the administrative systems, these territories are included in the report where data is available.

*State of the Nordic Region* displays data using national, regional and municipal administrative divisions (this edition according to the 2017 boundaries). Large differences exist both in terms of the size and population of the various administrative units at the regional and municipal levels across the Nordic Region. The four largest municipalities are all Greenlandic, with Qaasuitsup being the world's largest municipality with its 660,000 km² (however, split into two municipalities in 2018). Even the smallest Greenlandic municipality, Kujalleq, at 32,000 km² significantly exceeds the largest Nordic municipalities outside Greenland, i.e. Kiruna and Jokkmokk in northern Sweden with approximately 20,000 km² each. Excluding Greenland and the Faroe Islands, the average size of a Nordic municipality is 1,065 km². The smallest are less than 10 km² and are either insular municipalities (e.g. Kvitsøy in Norway or Seltjarnarnes near Reykjavík) or within the greater capital areas (e.g. Sundbyberg near Stockholm, Frederiksberg surrounded by the municipality of Copenhagen, or Kauniainen surrounded by the municipality of Espoo near Helsinki).

The average area of a Nordic region is 17,548 km². The smallest is Oslo (455 km²), followed by two Icelandic regions, Suðurnes (884 km²) and Höfuðborgarsvæði (1,106 km²). The largest region is Norrbotten in Northern Sweden (106,211 km²), followed by Lappi in Northern Finland (just under 100,000 km²). The average population density of a Nordic region is 66 inhabitants per km² with densities ranging from 1 inhab./km² (Austurland, Vestfirðir, Norðurland vestra, and Norðurland eystra – all in Iceland) to 1,469 inhab./km² (Oslo region). Other high-density regions include the Capital region of Denmark Hovedstaden (706 inhab./km²) and Stockholm (335 inhab./km²).

Among the Nordic countries Denmark, Finland (including Åland) and Sweden, are Member States of the European Union (EU), although only Finland is part of the Eurozone. Iceland and Norway are members of EFTA (European Free Trade Association) consisting of four countries, which either through EFTA, or bilaterally, have agreements with the EU to participate in its Internal Market. The Faroe Islands and Greenland are not members of any of these economic cooperation organisations. These differences in supra-national affiliation have an impact on which data that is available for this report. For example, Eurostat, the statistical office of the EU, only provides data for EU, EFTA and EU candidate states, thus excluding the Faroe Islands and Greenland. Whenever possible, data for these regions has been supplemented from other sources.

In the regular register data of Eurostat and the National Statistics Institutes (NSIs), which are the two prime data sources for this report, commuters to neighbouring countries are not included in the Nordic countries. This results in incomplete information (i.e. underestimations) regarding employment, incomes and salaries for regions and municipalities located close to national borders, where a substantial share of the population commutes for work to the neighbouring country. Estimates have been produced in some cases and included in this report. In 2016, the Finnish presidency of the Nordic Council of Ministers launched a project to develop statistics on cross-border movement in the Nordic countries. There is however still no up-to-date and no harmonised Nordic cross-border statistical data available, other than that provided by some regional authorities.

**Regional and administrative reforms**

Administrative reforms provide a series of seemingly never-ending stories across the Nordic politi-

cal systems. Today, the need for reforms and for the reallocation of tasks between the national, regional and municipal levels can be derived from two major challenges facing the Nordic countries (Harbo, 2015). Firstly, increased pressure on the Nordic welfare system caused by an ageing population which increases demand for public services while simultaneously shrinking the tax base. Secondly, enlargement of the regions due to widening labour markets caused by changing mobility and commuting patterns moves the functional borders of regions beyond their traditional administrative limitations. Finally, there is a common belief among professionals and decision makers that fewer and larger units are more efficient when it comes to service provision and public administration. On the other hand, concerns remain over the merging of administrative units especially at the municipal level due to the increased distance this potentially creates between citizens and the local political authority.

Thus far, the Danish experience provides the best Nordic example of a completed reform process as it is now a decade since the process took place and where the number of municipalities was reduced from 270 to 98. The reform as such was decided by the government, but the practical implementation, i.e. which municipalities should merge, was delegated to the municipalities themselves. At the same time, 1 January 2007, the 13 counties (*amt*) were abolished and replaced by five regions. The reform increased the political weight of the municipalities in society while the importance of the regions decreased. The regions are led by elected politicians, which reinforces their legitimacy, but they lack the power to tax and the freedom to undertake tasks in addition to their statutory responsibilities. In addition to healthcare, which is the region's main area of work, they are participating in regional public transport companies and in the setting up of growth forums (which decide on the allocation of EU Structural Funds). Hence, there are no official regional development plans except for the capital region, the so-called Finger Plan, which is prepared by the state.

After having failed, for the second time since the turn of the millennium, to try to implement a major reform of the Finnish municipalities, the government decided on 19 August 2015 that the municipalities would no longer be required to investigate the possibility of amalgamation (Sandberg, 2015). The government still wants to encourage municipal mergers, but they should be done on an entirely voluntary basis. Since 2000, the number of municipalities has voluntarily decreased from 452 to 311, but the size of Finnish municipalities is still on average below 7,000 inhabitants. After failing with their municipal reform, the government decided instead to turn its attention to the regional level and to plan for a comprehensive expansion of the regions' responsibilities. The plan is for the 18 regions (*maakuntaliitto – landskapsförbund*) to take over the main health care system from the municipalities. They will also assume responsibility for regional development, e.g. business and transport policy. The regions will have a directly elected political leadership, but the right to tax will remain with the municipalities which will, however, lose more than half of their budget (Sandberg, 2017).

Åland is not included in the above-mentioned administrative reform of the Finnish regions. There, responsibility for health care is already centralised to the Government of Åland. Åland has 16 municipalities, some of them with less than 500 inhabitants and one, Sottunga municipality, with even less than 100. At the same time as several investigations into voluntary municipal mergers are in progress, the current government is also preparing a bill to be introduced to the Åland Parliament, the *Lagtinget*, on reducing the number of municipalities to four.

More than 50 years since the last municipal reform, on 8 June 2017, the Norwegian parliament (Stortinget) decided on an administrative reform that reduces the number of regions (*fylkeskommuner*) from 18 to 11 and the number of municipalities from 428 to 354. The basic goal of the reform, which should be fully implemented by 1 January 2020, is to transfer resources and responsibilities to local and regional authorities that are more robust than they are currently (Kaldager, 2015). In Norway, the health care system is organised by the state, while the regions are, among other things, responsi-

**Concerns remain over the merging of administrative units especially at the municipal level due to the increased distance this potentially creates between citizens and the local political authority**

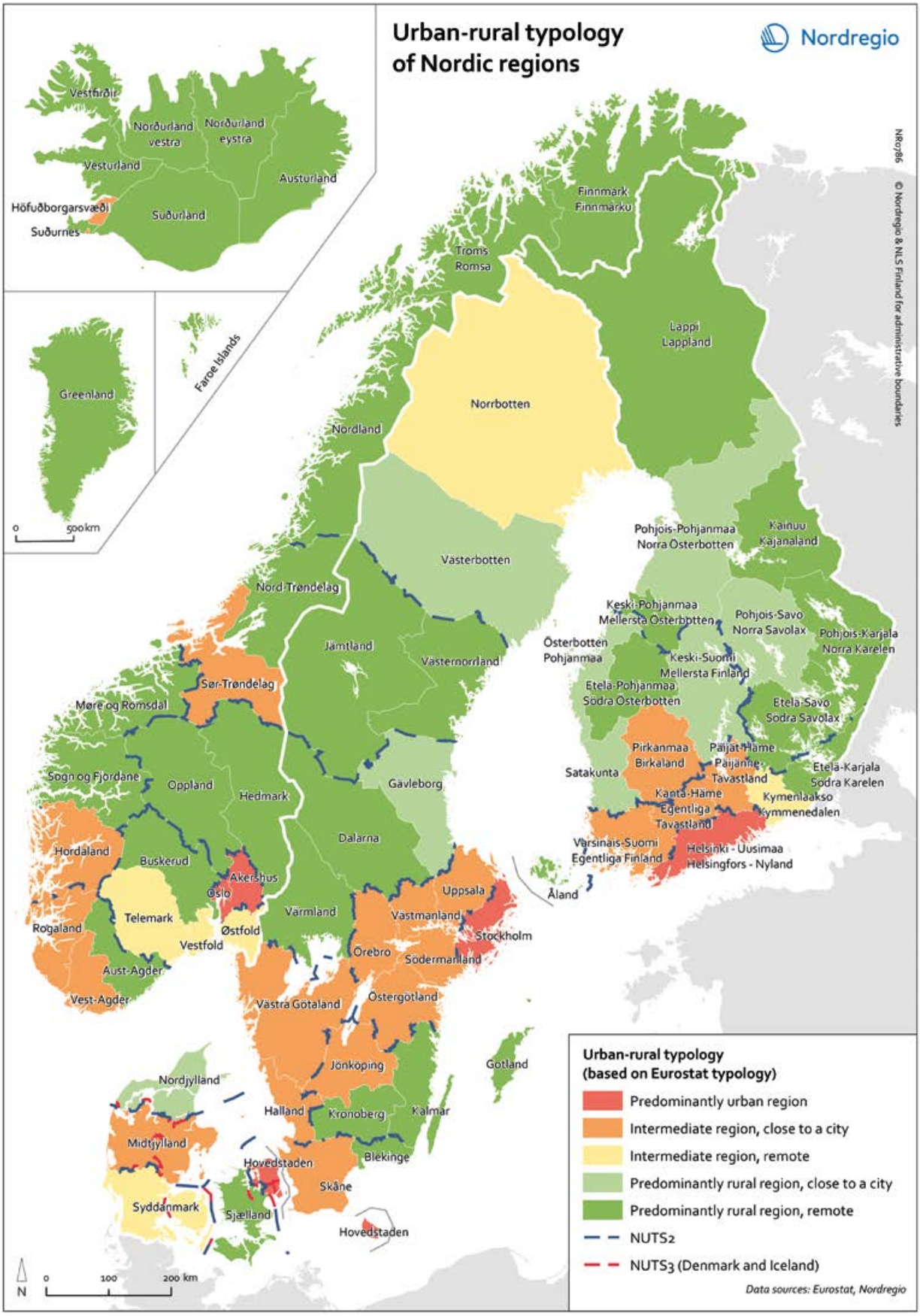


**Figure 1.1 Urban rural typology of the Nordic regions.**

## The combined economy of the Nordic countries is the 12th largest in the world

ble for planning, transportation and regional development. The reform is based on the tasks that the regions currently have, but the government has appointed an expert group to review opportunities to strengthen the regions' role as developer and their capacity to provide better service to the citizens. The regions are led by directly elected politicians, they have a formal – but in practice no – right to tax and they are free to undertake other than statutory tasks.

In Sweden, the last municipal reform took place in 1974 when the number was reduced from slightly more than 1,000 to 278. The latest merger of Swedish municipalities took place in 1977. In the period since, the number has slightly increased to 290 due to the dissipation of existing municipalities. Instead of pushing further municipal mergers, the Swedish government has instead focused on the regions in recent years. In March 2016, a committee presented a new map dividing Sweden into six new major regions. The map raised such strong opposition however that the government chose not to proceed with the proposal. When the map turned out to be a distortion of reality, instead of adjusting the map at regional level, the government decided to change the reality at local level. Thus, a new parliamentary committee was set up to develop a strategy for strengthening the municipalities' capacity, focusing more on cooperation and the allocation and execution of tasks than on administrative boundaries.

In common with the Faroe Islands and Greenland, Iceland has only two administrative levels: national and local. In recent times, Iceland has carried through two large reform processes – in 1993 and again in 2005. On both occasions, consultative referendums were held and on both occasions, a majority voted against the suggested mergers. Despite the outcomes of the referendums the reforms resulted in a reduction in the number of municipalities from 196 in 1993 to 89 in 2006. In recent years, the number of municipalities has been further reduced to 74 on a voluntary basis though the government has, for its part, decided not to push for further aggregations. Instead, the idea of interregional municipal cooperation has been put on the aganda (Traustadóttir, 2015). This idea is aimed at strengthening the local level through the decentralisation of tasks from the government, but without the merging of municipalities.

The Faroe Islands and Greenland both sought to reduce the number of municipalities through administrative reform processes. The Faroese reform process started in 2000 with a new piece of municipal legislation. The government wanted to encourage municipal mergers, but they should be done on an entirely voluntary basis. Since 2000, the number of municipalities has voluntarily decreased from 49 to 29. In a 2012 referendum on municipal mergers, the majority in almost every municipality said no to more mergers.

By far the most radical change took place in Greenland in 2009, where the administrative set up changed from 18 to four municipalities. The idea behind the change which was supported by most of the political parties, was to delegate political decisions and economic resources from the central administration to the municipalities (Hansen, 2015). In reality, only a few administrative areas have at least thus far been transferred, but major areas will be transferred to the municipalities in 2018 and 2019. Widespread dissatisfaction with the new municipal structure especially in Qaasuitsup Kommunia, the largest municipality in the world in terms of square kilometres, led to a political decision to divide Qaasuitsup Kommunia into two municipalities by 1 January 2018.

**NUTS classification**

Table 1.1 provides an overview of the administrative structure in each country in the Nordic Region. These administrative structures are the basis for the NUTS (Nomenclature of territorial units for statistics) classification, a hierarchical system dividing the states on the European continent into statistical units for research purposes. The NUTS and LAU (Local administrative units) classifications generally follow the existing division but this may differ from country to country. For example, municipalities are classified as LAU 1 in Denmark but as LAU 2 in the other Nordic countries, and regions of primary importance within the national context as NUTS 2 in Denmark but as NUTS 3 in Finland, Norway and Sweden (figure 1.1).

| Nomenclature level | | NUTS 0 | DK | FI | IS | NO | SE | SNUTS | FO | GL |
|---|---|---|---|---|---|---|---|---|---|---|
| | Regional | NUTS 1 | | Manner-Suomi/ Fasta Finland; Ahvenanmaa/ Åland 2 | | | Landsdel 3 | SNUTS 1 | | |
| | | NUTS 2 | Region 5 | Suuralue; Storområde 5 | | Landsdel 7 | Riksområde 8 | SNUTS 2 | | |
| | | NUTS 3 | Landsdel 11 | Maakunta; Landskap 19 | Hagskýrsluvæði 2 | Fylke 19 (18) | Län 21 | SNUTS 3 | | |
| | Local | LAU 1 | Kommune 98 | | Landsvædi 8 | Økonomisk region 89 | | SNUTS 4 | Sýsla 6 | |
| | | LAU 2 | Sogn 2165 | Kunta; Kommun 311 | Sveitarfélög 74 | Kommune 426 (422) | Kommune 290 | SNUTS 5 | Kommune 30 | Kommune 4 (5) |

**Table 1.1 Administrative structures in the Nordic Region on 1 January 2017 (diverging number on 1 January 2018 in brackets).**

[1] Grey frames represent the regional levels presented in most regional maps in this report, comparable from a Nordic perspective, while dark gray frames show the local units represented in the majority of our municipal level maps.

Data sources: NSIs, Eurostat, ESPON.

## The Nordics in the world

With its 3,425,804 km$^2$, the total area of the Nordic Region would form the 7th largest nation in the world. However, uninhabitable icecaps and glaciers comprise about half of this area, mostly in Greenland. In January 2017, the Region had a population of around 27 million people. More relevant is the fact that put together, the Nordic economy is the 12th largest economy in the world (Haagensen et al., 2017).

The power of the Nordic economy was acknowledged in the light of its general handling of the economic crisis of 2007–08 (Wooldridge, 2013). What particularly impressed e.g. the journalists at the magazine*The Economist*, that published a special editoin on the Nordics, was the the ability of the Nordic countries to combine a generous tax-funded welfare system with efficient public administration and a competitive business sector.

As such, the locational aspects of the Nordic Region are noted in this edition of the State of the Nordic Region, where relevant and when reliable data is available. In addition, European developments generally and specifically those pertaining to the EU level are also addressed.

**EU 2020 targets**

The Europe 2020 strategy was designed in 2010 with the aim of guiding the Member States through the global financial crisis towards recovery. Three drivers of economic growth were identified as crucial: (i) smart growth based on knowledge and innovation, (ii) sustainable growth for a more efficient, greener and competitive economy, and (iii) inclusive growth capable of delivering employment, social and territorial cohesion.

Targets to be achieved include increasing the employment rate of the population aged 20–64 from 69% to 75%, investing at least 3% of the EU's GDP on research and development, reducing greenhouse gas emissions by 20% compared to 1990, increasing the share of renewable energy sources in final energy consumption to 20%, reducing the proportion of early school leavers from 15% to below 10%, ensuring that at least 40% of 30–34 years old

**The total area of the Nordic Region would form the 7th largest nation the world**

**Figure 1.2 Sustainable Development Goals.**


should have completed tertiary or equivalent education and, finally, reducing poverty by lifting at least 20 million people out of the risk of poverty or social exclusion.

The European Commission expected that each Member State would translate these targets into national targets and trajectories. According to Eurostat's headline indicators scoreboard only one target, i.e. the reduction of greenhouse gas emissions, has thus far been reached. Two targets, those regarding early school leavers and tertiary educational attainment, are less than one percentage unit from fulfilment. The target on reduced poverty is also close to being attained, in 2015 18.5 million people have been lifted out of poverty since 2012. The employment rate had risen to 71% in 2016, but is still less than half way to the target while the R&D investments are even further away from their specified target.

**UN Sustainable Development Goals**

On 25 September 2015, the United Nations adopted Resolution A/RES/70/1 which contains 17 Sustainable Development Goals (SDGs) with 169 targets to be achieved over the next 15 years. The 17 goals (figure 1.2) are:

1. End poverty in all its forms everywhere;
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture;
3. Ensure healthy lives and promote well-being for all at all ages;
4. Ensure inclusive and quality education for all and promote lifelong learning;
5. Achieve gender equality and empower all women and girls;
6. Ensure access to water and sanitation for all;
7. Ensure access to affordable, reliable, sustainable and modern energy for all;
8. Promote inclusive and sustainable economic growth, employment and decent work for all;
9. Build resilient infrastructure, promote sustainable industrialization and foster innovation;
10. Reduce inequality within and among countries;
11. Make cities inclusive, safe, resilient and sustainable;
12. Ensure sustainable consumption and production patterns;
13. Take urgent action to combat climate change and its impacts;
14. Conserve and sustainably use the oceans, seas and marine resources;
15. Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss;
16. Promote just, peaceful and inclusive societies;
17. Revitalize the global partnership for a sustainable developmen.

The Nordic countries are performing well. In an overall assessment of OECD countries, Sweden is given the highest score followed by Denmark, Finland and Norway (Sachs et al., 2017). Nevertheless, the Nordic countries continue to face significant

challenges in terms of reaching all the identified targets by 2030. The Nordic Council of Ministers has chosen goal number 12, to "ensure sustainable consumption and production patterns", as its prioritised action field. But there are additional goals where a certain amount of effort is still required, such as the greening of the region's agricultural systems (SDG 2), reducing the high levels of CO2 emissions per capita (SDG 7 and 13, and improving ecosystem conservation (SDG 14 and 15) (Larsen & Alslund-Lanthén, 2017).

## Further reading

The report consists of two parts; the first, consisting of three thematic areas which have remained constant over the years of this publication (demography, labour market and economy) and are summarised in the *Regional Development Potential Index* (chapter 15).

**Demography** (chapters 2–4): Describes and analyses population development in terms of natural increase or decline, migration, urbanisation and age distribution.

**Labour market** (chapters 5–7). Describes and analyses employment, unemployment and economically-inactive groups, especially among young people and foreign born, as well as education.

**Economy** (chapters 8–10): Describes and analyses GDP, income levels, innovation capacity, research and development and foreign direct investment (FDI).

The second part consists of four thematic focus areas. The chosen areas for the 2018 edition are:

**Bioeconomy** (chapter 11): Focuses on land use and land ownership, forestry, biogas, fisheries and aquaculture.

**Digitalisation** (chapter 12): Focuses on the broadband coverage and use of Internet to interact with the public sector.

**Health and welfare** (chapter 13): Focuses on public health issues and the territorial dimensions of life expectancy and accessibility to healthcare.

**Culture** and arts (chapter 14): Focuses on newly-produced data at municipal and regional levels on cinemas, libraries and museums.

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THEME 1

# DEMOGRAPHY

## The Nordic population: Increasingly urban, diverse and older

The current demographic situation in the Nordic Region is characterised by four main trends: The Nordic population is growing, driven to a large extent by immigration, and is increasingly concentrated in urban settlements. The average age of the population is also increasing, while a growing share of people have a foreign background. All of these trends are expected to continue in the years to come.

By 2030, the Nordic Region is expected to have almost 30 million inhabitants, an increase of more than 10% from the current 26 million. In Sweden, almost 80% of the population increase is expected to occur in the densely populated urban areas in the south of the country. In the other Nordic countries, population growth remains more decentralised and in many cases medium-sized towns may grow faster than capital areas.

Over the past ten years, the population of the Nordic Region has grown quicker but also aged faster as a whole than in many other European regions. This process does not however affect all Nordic regions and municipalities in equal measure. As the following chapters show, Nordic municipalities and regions experience very different, often contrasting, demographic trends, presenting specific opportunities and challenges to each: Population growth is largely concentrated in the urban areas while many remote and sparsely populated areas face population decline and high rates of population ageing.

By 2030, large parts of northern and eastern Finland, for example, are expected to have populations where more than 50% of people over 15 are aged 65 or more.

Around one in five people in the Nordic Region live in the five largest urban areas. Between 2011 and 2016, growth in urban settlements has been around 9% in Norway and Sweden, while Denmark, Finland and Iceland register around half that rate. Immigration accounts for a large part of this increase. Indeed, roughly 26% of all Nordic municipalities increased their population between 2011 and 2016 only due to international migration.

As of 2017, one in eight Nordic residents were identified as having been born abroad, either in another Nordic country or outside the Nordic Region. Rural municipalities are increasingly recognising the important contribution that immigrants can make to their communities. Most migrants however still choose to live in the large urban settlements. As such, questions relating to how best the integration of refugees and other newcomers can be facilitated have gained increasing in relevance in the aftermath of the European 'refugee crisis' and will undoubtedly remain of central concern in the years to come.

Chapter 2

# POPULATION GROWTH AND AGEING

## Past, present and future trends

**Author: Nora Sánchez Gassen**
**Maps and data: Julien Grunfelder and Nora Sánchez Gassen**

The demographic situation in Europe is characterised by two main trends, population growth and ageing. Since 2007, the population of the European Union has increased slowly from 500 million to 512 million people (Eurostat, 2017a). The old-age dependency ratio, defined as the size of age groups 65 and older as a share of the working-age population between 15 and 64 years, increased from 25.2% to 29.3% (Eurostat, 2017b). Thus, there are now 3.4 persons of working age for every person aged 65 and older in the European Union. Both trends have been particularly pronounced in the Nordic Region. Here, the old-age dependency ratio has increased faster and population growth has been stronger than in many other European countries. Migration has been the major source of population increase. These general trends however mask considerable variation within and across the Nordic countries. Municipalities and regions face diverse demographic challenges with each, potentially, requiring tailor-made policy responses. In the following sections, the current and expected future trends in population growth or decline and population ageing will be described, from both a regional and a municipal perspective.

**Diverse levels of population growth**

In 2007, almost 25 million persons lived in the Nordic Region. The number of inhabitants ranged from 27,000 in Åland to 9.1 million in Sweden (table 2.1). Between 2007 and 2017, the population of the Nordic Region increased, but this growth was unevenly distributed: In Denmark, Finland, Sweden, Norway, Iceland and Åland, population increases have occurred, mainly driven by migration. Iceland is the exception here, as natural increase – a surplus of births over the number of deaths – was the major source of population growth. Population decline occurred only in Greenland. This decline was exclusively due to outmigration. Natural population growth in Greenland remained positive during the last decade, in other words, more people were born than died. Without migration, the population of Greenland would thus have increased as well. The Faroe Islands also lost population due to net outmigration, but high natural increase more than offset this loss.

While population increases have occurred in all Nordic regions except Greenland in recent years, growth rates varied strongly across municipalities. As shown in Chapter 3, most of the population growth in the Nordic Region has occurred in and around the largest cities such as Stockholm, Gothenburg, Copenhagen, Helsinki, Reykjavík and Oslo. Many inland municipalities with smaller populations have declined in size, particularly in Finland, Sweden and Norway. While the general trend in the Nordic countries thus seems to be one of urbanisation, interesting nuances can be seen when comparing urban settlements within municipalities: For instance, even in growing municipalities, e.g. in the Stockholm area, some urban settlements have declined in size over the past five years. Conversely, in some municipalities with declining populations, urban settlements may still have been growing. Visby in Gotland, and Skellefteå in Västerbotten in Sweden are cases in point here.

| | Total population size | | Population change, 2007-2017 (in percentage) | | |
|---|---|---|---|---|---|
| | 2007 | 2017 | Total | Natural increase | Net migration |
| Nordic Region | 24,931,018 | 26,949,609 | 8.1 | 2.3 | 5.8 |
| Denmark | 5,447,084 | 5,748,769 | 5.5 | 1.3 | 4.2 |
| Finland | 5,250,032 | 5,474,083 | 4.3 | 1.4 | 2.9 |
| Sweden | 9,113,257 | 9,995,153 | 9.7 | 2.4 | 7.2 |
| Iceland | 307,672 | 338,349 | 10.0 | 8.0 | 2.0 |
| Norway | 4,681,134 | 5,258,317 | 12.3 | 4.0 | 8.4 |
| Faroe Islands | 48,268 | 49,864 | 3.3 | 5.3 | -1.9 |
| Greenland | 56,648 | 55,860 | -1.4* | 6.6* | -7.5* |
| Åland | 26,923 | 29,214 | 8.5 | 0.6 | 7.8 |

**Table 2.1 Population change, 2007–2017.**

* Natural increase and net migration values do not add up to the total population change (in %) shown here. This is due to a correction term that Statistics Greenland uses in updating its statistics (not included in the table).

Data source: Eurostat and NSIs.

**Strong population growth predicted for urban centres until 2030**

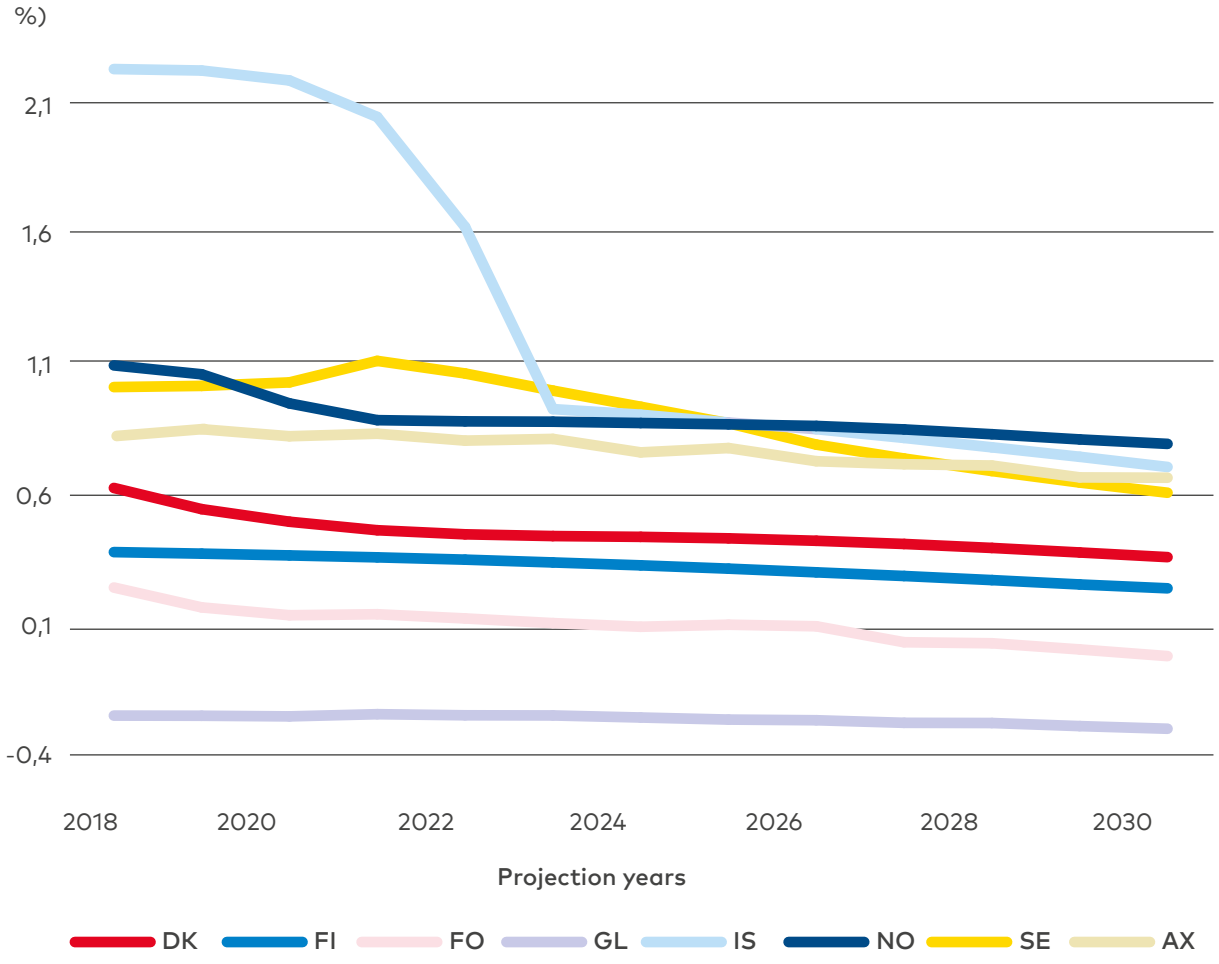
NSIs expect that the population of the Nordic Region will continue to grow up to 2030. Again, however, this regional trend hides interesting differences between countries and municipalities. NSIs in Denmark, Finland, Åland, Sweden, Iceland and Norway expect their populations to grow until 2030 (figure 2.1). In Iceland, the population is initially expected to increase more strongly than in any other part of the Nordic Region. In the 2020s, growth rates are expected to decline and approach those of Åland, Norway and Sweden. In the latter three, annual population growth rates are expected to range between 0.6% and 1.1% throughout the projection period. Given these growth rates, population sizes will increase from 338,300 (2017) to 400,000 (2030) in Iceland. The populations in Norway and Sweden will reach around 5.9 million persons and 11.3 million persons respectively, in 2030, while Åland will have around 32,700 inhabitants. The NSIs in Denmark and Finland also expect their populations to grow up to 2030, but annual growth rates are projected to remain between 0.2% and 0.6%. Finland will have 5.7 million inhabitants in 2030 (up from 5.5 million in 2017) while the Danish population will be 6.1 million persons.

Population dynamics in Greenland and the Faroe Islands are expected to follow a different pattern. The NSI of Greenland expects the population to shrink by 0.2% to 0.3% in each projection year. This would translate into a loss of more than 1,800 inhabitants and a decline in the total population from 55,900 (2017) to around 54,000 (2030). The Faroese population is projected to increase until 2029 when it will reach 50,900 inhabitants. By 2030, however, population decline is expected to set in.

It is important to note that the projections published by the NSIs differ in terms of the projection periods they cover and the number of scenarios they use. They also make different assumptions about how fertility rates, mortality rates and migration numbers will develop in the future. These differences must be kept in mind when comparing projection results across the Nordic Region. They influence the projection results that we present in figure 2.1 and in the other figures contained in this chapter. The online appendix for this chapter provides more detailed information on the projections for each Nordic region.

While all Nordic regions apart from Greenland are expected to have larger populations in 2030, figure 2.2 shows that this growth will continue to be skewed towards urban areas. This is particularly visible in Sweden, where population growth rates of 10% or more are expected for Stockholm and its surrounding municipalities, the area around Lund, Malmö and Helsingborg as well as Växjö and Gothenburg/Kungsbacka. 80% of the population increase

**Figure 2.1 Projected annual population growth in the Nordic Region, 2017–2030.**




Source: NSIs.

is expected to occur in the densely populated south of the country, with Umeå as the only exception in the North. The large majority of other municipalities in the northern part of the country will experience population decline. A similar pattern applies in Greenland, where moderate population gains are only expected in the municipality of Semersooq which hosts the city Nuuk. In Finland, Norway and Denmark, population growth is somewhat more dispersed. In Norway, for instance, high rates of growth are expected in Oslo and its surrounding municipalities, Bergen, Stavanger, Kristiansand and Trondheim, but also in some more remote municipalities such as Hammerfest and Bardu. The municipalities that together contribute 80% of Norway's total population increase are also somewhat more spread out than in Sweden. In Denmark, the strongest population growth is projected for Copenhagen, Aarhus and

**This is particularly visible in Sweden, where population growth rates of 10% or more are expected for Stockholm and its surrounding municipalities**

Horsens, though other areas of Sjaelland, Fyn and Jylland are also expected to see growing numbers of residents. Many rural and less populated areas in Denmark, Norway and Finland are expected to lose inhabitants up to 2030. Overall, the municipal population projections for the Nordic Region suggest that the ongoing process of urbanisation will continue apace.

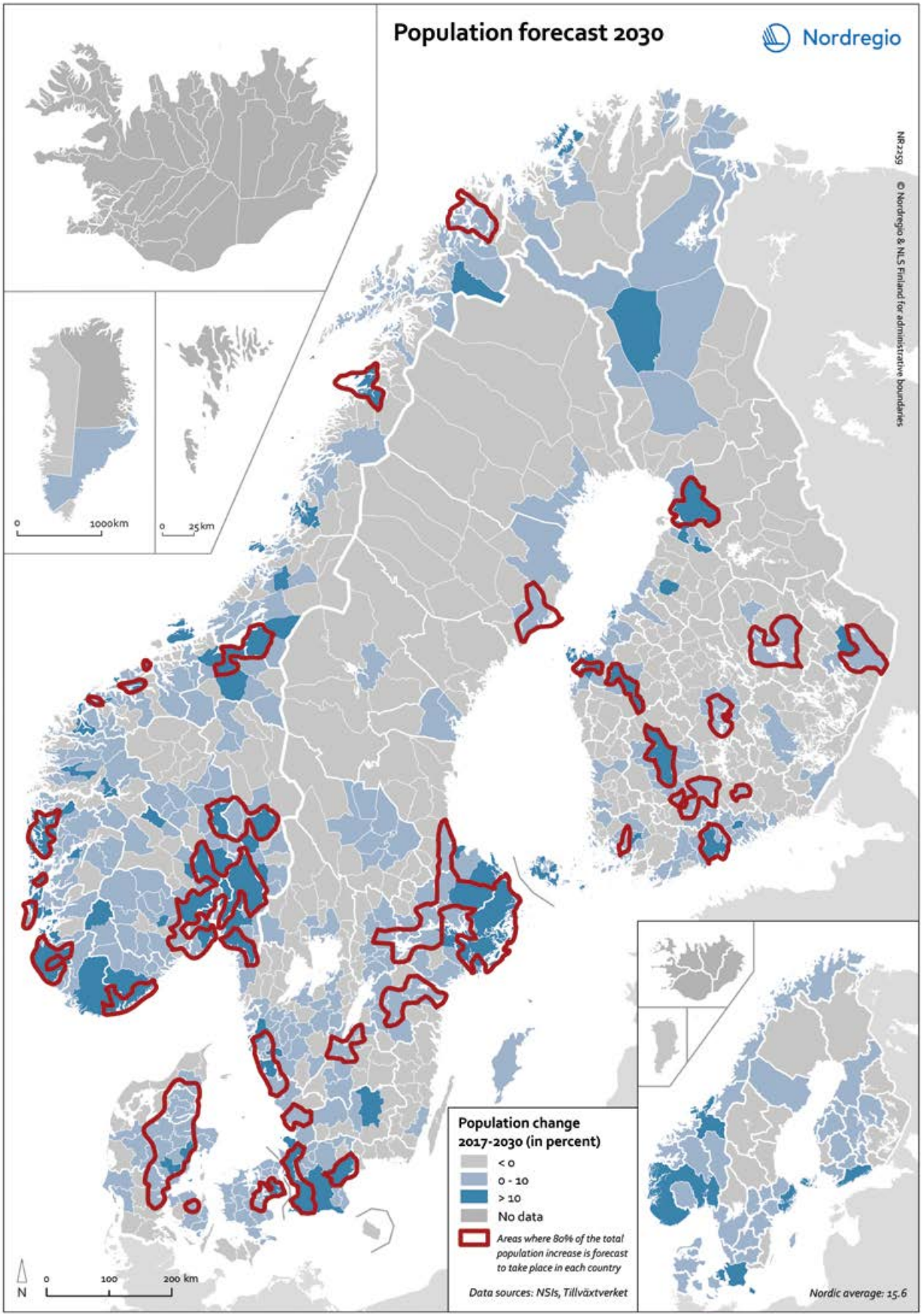
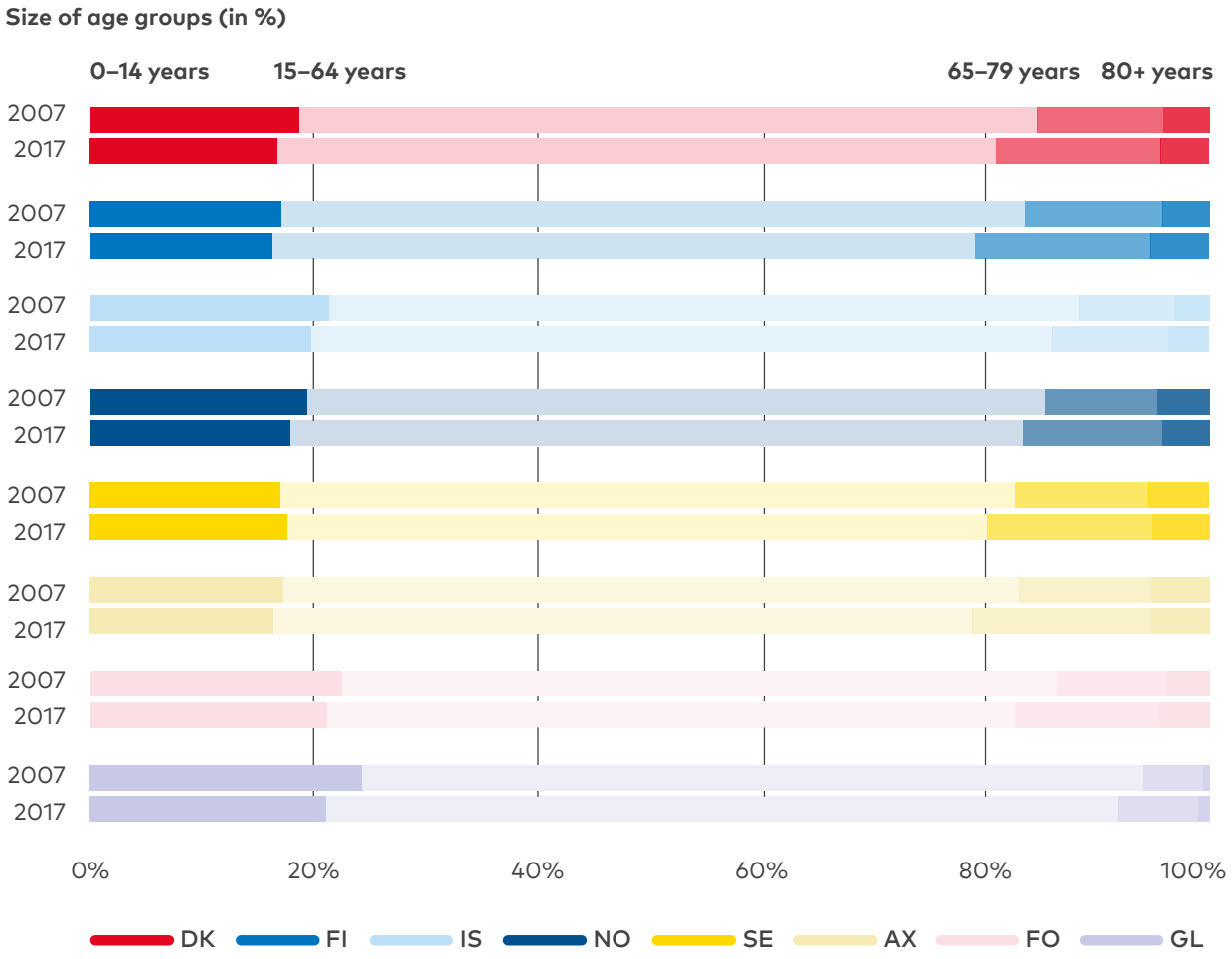



**Figure 2.2 Population change 2017–2030.**

Figure 2.3 Population structure by major age groups, 2007 and 2017.




Source: NSIs.

## Population structure shifts to higher ages in the Nordic Region

In addition to changes in their population size, populations in all Nordic regions have aged over the past decade: The proportion of elderly persons in the population has increased while the proportion of young people and those in the working-age population has either remained constant or declined.

Figure 2.3 shows the size of major age groups within each country or region, and how age distributions have changed between 2007 and 2017. The population in Åland has the oldest age structure in the Nordic Region, with persons in the two oldest age groups – 65 to 79 years and 80 years and older – together accounting for 16.9% (2007) and now 21.1% (2017) of the total population. In Greenland, these two age groups only make up 8.1% of the population, though this share is also higher than it was in 2007. The young population structure in Greenland is not only due to comparatively high fertility rates, but also to lower levels of life expectancy than in the other Nordic regions. The other countries or regions lie in the middle of the spectrum, with proportions of older people (combined age groups 65–79 years and 80+ years) ranging from 14.0% in Iceland to 20.9% in Finland in 2017. The increase in the proportion of older people is primarily driven by the population aged 65 to 79 years. The proportion of persons aged 80 years and older – often referred to as the oldest-old – increased only slowly or even declined in most Nordic regions between 2007 and 2017. This stands in contrast to other countries in Europe, where the oldest-old population generally increased more strongly. The increase in the proportion of

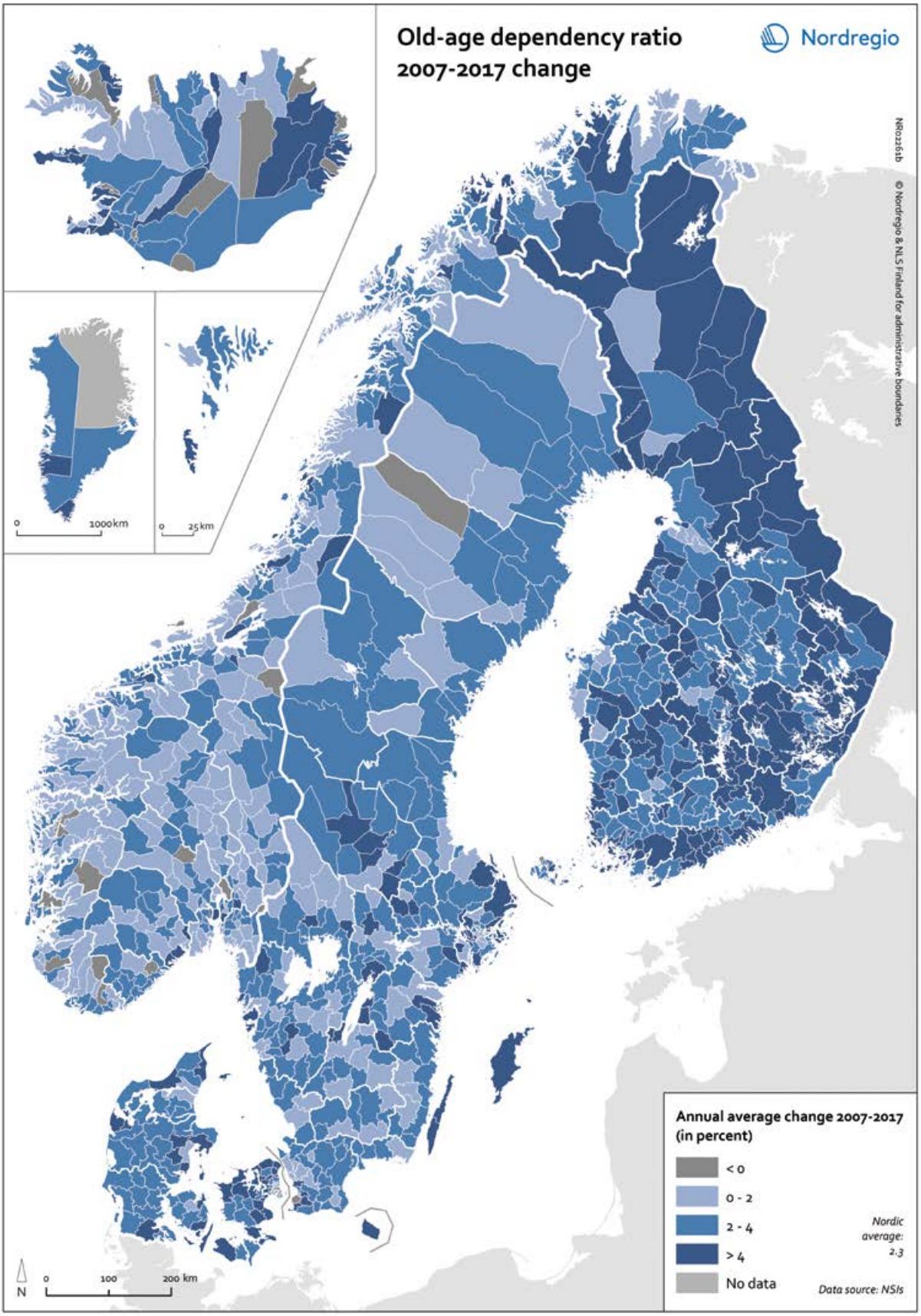
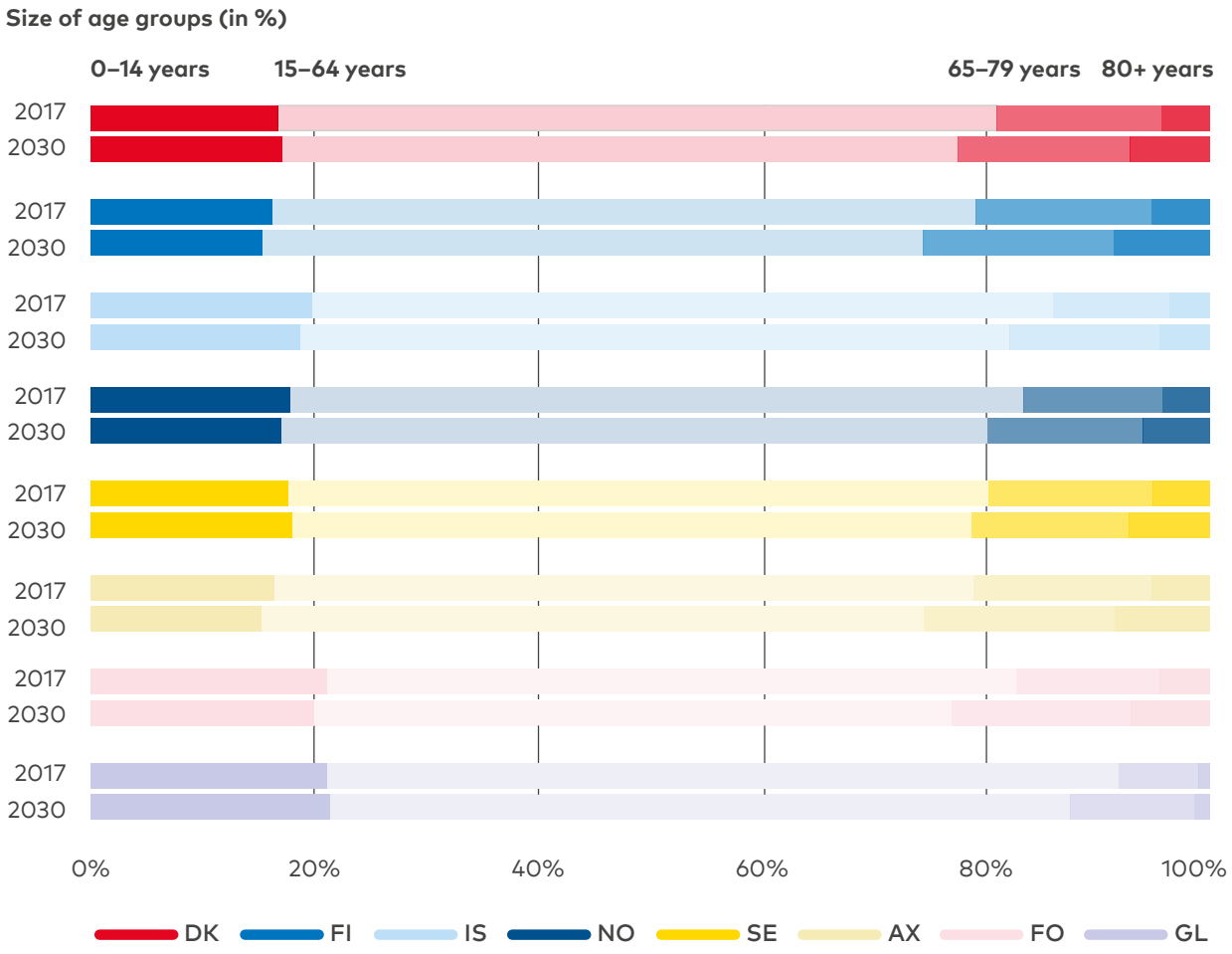



**Figure 2.4 Old-age dependency ratio change 2007–2017: The number of elderly people at an age when they are generally economically inactive (i.e. aged 65 and over), compared to the number of people of working age (i.e. 15–64 years old).**

Figure 2.5 Population structure by major age groups, 2017, and projection results for 2030.




Source: NSIs.

older people has come at the expense of the young (0–14 years) and working age populations (15–64 years). The proportional size of these two groups was smaller almost everywhere in the Nordic Region in 2017 than in 2007. The exceptions are Greenland, where the working-age population increased from 69.7% to 70.8% and Sweden, where the young population was almost of the same proportional size in 2017 as in 2007.

Within the Nordic Region, population ageing between 2007 and 2017 has been least pronounced in large urban areas. Cities such as Stockholm, Copenhagen, Oslo, Reykjavík and Malmö have either registered declines in their old-age dependency ratios or slower increases than elsewhere (figure 2.4). This has largely been a result of the influx of young people from rural areas and abroad who moved to these urban centres for education and work (Hansen & al., 2011). Smaller urban and rural municipalities in the Nordic regions have almost exclusively witnessed increases in old-age dependency ratios. Strong annual average increases of more than 4% occurred in rural areas of Finland, Iceland and urban-adjacent municipalities in Denmark, for instance in the surrounding areas of Aarhus and Copenhagen. In rural and remote areas in Sweden, Norway and Denmark, the average increase in old-age dependency ratios remained below 4 percent per year in the majority of municipalities. A few municipalities in Sweden, Norway and Iceland even experienced declines in their old-age dependency ratios between 2007 and 2017. Overall, however, such declines remain the exception in an otherwise ageing population in the Nordic Region.

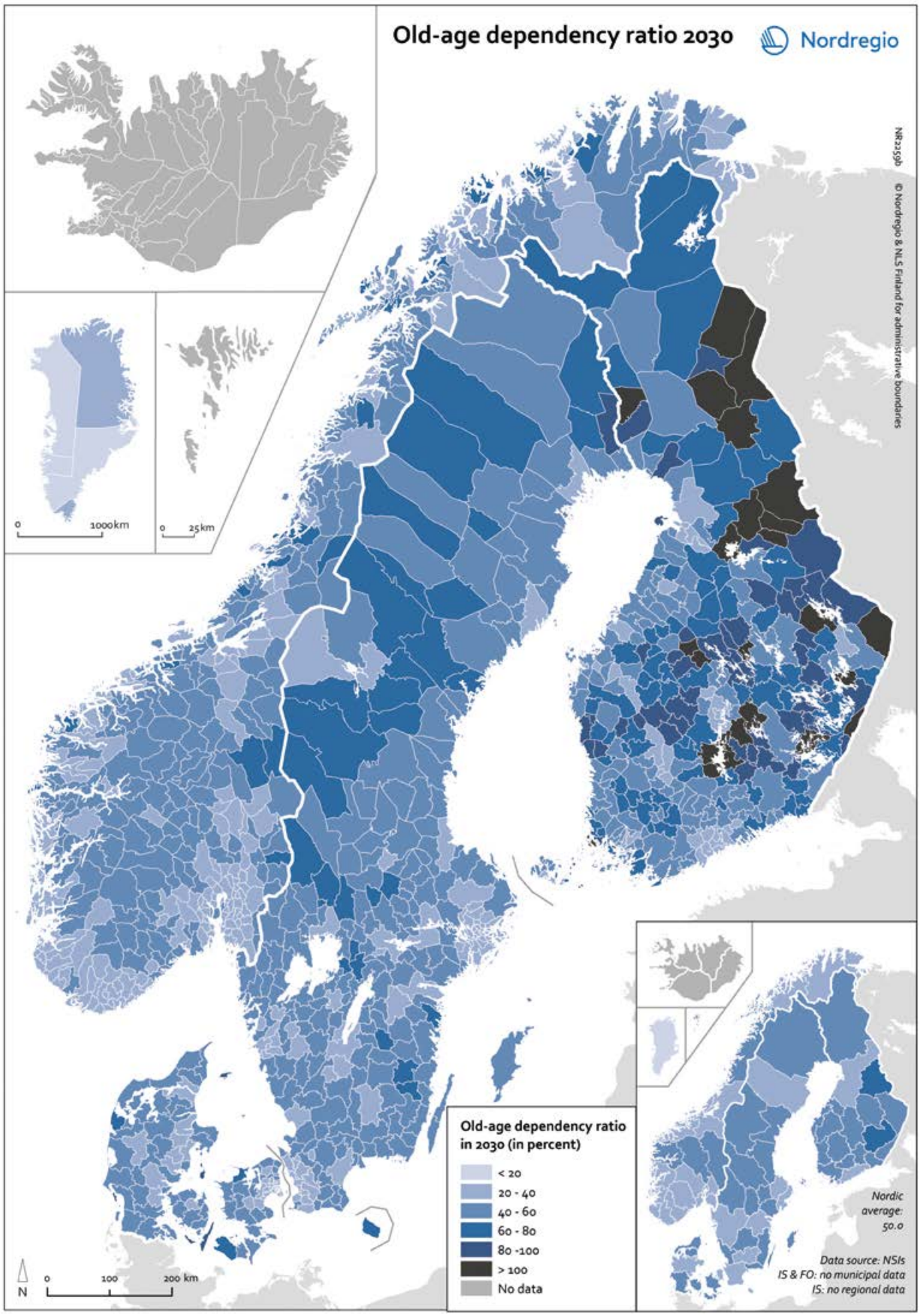



**Figure 2.6 Old-age dependency ratio 2030.**

## Population ageing expected to continue until 2030

All NSIs expect that the population ageing trend will continue in the coming years. Projections suggest that Finland and Åland will continue to have the oldest age structures among the Nordic regions (figure 2.5). 17.0% of the population in both regions will belong to age groups 65–79 years in 2030, and around 8.5% will be aged 80 years or older. At the other end of the spectrum, Greenland's population is projected to remain comparatively young. Statistics Greenland assumes that fertility will remain at a level of 2.1 children per woman in the future, and that life expectancy will rise, but remain lower than in the other Nordic countries. Both factors contribute to the comparatively young projected age structure in 2030. Only 12.5% of the population will be of retirement ages (combined age groups 65–79 years and 80+ years) in 2030, up from 8.1% in 2017. Greenland, together with Sweden and Denmark, is also expected to see a small increase in the proportion of younger people, thanks to high fertility rates: 21.4% of the population will be aged 14 or younger in 2030, up from 21.1% in 2017. Finally, the proportional size of the working-age population (15–64 years) is expected to decrease across the Nordic Region.

Figure 2.6 highlights differences in projected age structures within each region. In 2030, the largest cities such as Stockholm, Oslo, Helsinki, Copenhagen, Stavanger and Gothenburg will have old-age dependency ratios between 16% and 30%. The working age population (15 to 64 years) will be at least 3.3 times larger than the retirement age population in these areas. Much higher old-age dependency ratios are expected in many rural and sparsely populated areas. The highest levels are projected for many municipalities in northern and eastern Finland, which will have more than one person of pension age for every person of working age. Most other rural areas in Norway, Sweden, Denmark and Finland will have lower old-age dependency ratios, but levels vary widely between 20% and 100%. Figure 2.6 also shows that large parts of Greenland will retain comparatively young age structures in their population up to 2030. Kujalleq is the only municipality in Greenland expected to reach an old-age dependency ratio above 20%. In general, almost all municipalities in the Nordic Region are expected to have higher old-age dependency ratios in 2030 than today. These increases will however begin from various levels and progress at different speeds, reflecting differences in current age structures and expected demographic behaviour.

## Concluding remarks

If the projection results described here are correct, the Nordic Region will be older and more urban in 2030 than it is today. Cities will have to provide housing and infrastructure for more inhabitants, while many rural and remote municipalities will have to develop strategies to influence or adapt to population decline. To different degrees, all municipalities will have to accommodate the needs and demands of a growing number of older persons. As recent publications show, many villages, towns and cities are already implementing innovative strategies to address population changes and these may serve as examples for other Nordic municipalities in the coming years (Hörnström & al., 2015; Johnsen & Perjo, 2014).

While the demographic outlook suggests that Nordic municipalities face a variety of challenges to their traditional welfare state arrangements and other areas of public and private life, two points must be kept in mind:

First, population projections are inherently uncertain. If fertility, mortality or migration trends develop differently than currently projected by the NSIs, the size and age structure of populations may look somewhat different in 2030 than those shown here. Migration to and from municipalities may play a particularly important role: The closure of a company that provides for a large share of jobs, the opening of a new service provider or similar local events may prompt more people to leave or move to a municipality than we can anticipate today (Foss & Juvkam, 2005). Similarly, municipal attempts to counteract the outmigration of young people or to attract new residents with the help of rural development programmes may prove fruitful and change migration patterns. Hence, while the projection results in this chapter show likely population dynamics in the Nordic Region up to 2030, somewhat different outcomes are possible.

Second, while de facto population trends may deviate from the trends outlined here, it is clear that the proportion of people aged 65 years and older will increase in the years to come. Nonetheless, these changes do not necessarily imply that the number of patients dependent on health care and/

or welfare state benefits will increase in parallel. People in their 60s and 70s are often now more active and in better health than those of previous generations. Increasing numbers of men and women continue to be employed past traditional retirement ages, care for family members or engage in other paid or voluntary activities; ill health and dependency on care are often concentrated in the last years of life. Changes in age structure are therefore not the only factor to determine how productivity levels, care needs and welfare state costs will develop in the future (Sanderson & Scherbov, 2007). It is important then to bear in mind the potential for, and abilities of, older people to contribute to their neighbourhoods, villages and cities. Policy makers should encourage and tap into these potentials as one way of adapting to future population changes.

## Population projections: methods and interpretation

Population projections provide estimates of the number of persons who will, at a future date, live in a particular geographic area. They are usually calculated using the so-called 'cohort-component method'. This method allows for population projections by age groups and sex, and if desired, by other demographic attributes. Usually, the population is divided into single-year or five-year male and female age groups. Each of these age-sex-specific groups is separately projected into the future.

The results of population projections depend on assumptions about how future fertility and mortality levels will develop and how many people will move in and out of each area. These assumptions are made using a variety of tools and methods, but are often based on extrapolating demographic trends observed in the past. Each age-sex-specific population group is then projected into the future, one year or five years at a time, by adjusting for mortality during the time interval, as well as by deducting or adding migrants. The youngest age group is composed of infants born alive during the projection year and immigrants. Projections thereby provide information on the size of each age- and sex-specific population group in each future year. The projected groups can be aggregated to show changes in the total size of the population, but also in dependency ratios or other population indicators.

Assumptions about future fertility, mortality and migration trends must be well-justified, since they strongly influence projection outcomes. Only if the assumptions correctly predict future demographic trends will the projection results concur with de facto population developments. Predicting future trends in demographic behaviours is however inherently challenging. Economic boom and bust-periods, policy changes and other factors may influence mortality trends as well as people's decisions to move or have children. Nonetheless, they are often difficult to anticipate and incorporate into the projection assumptions. Future levels in international migration are arguably the most challenging to estimate, since they can fluctuate strongly from one year to the next. Due to these uncertainties, NSIs often publish not one, but several sets of assumptions about future fertility, mortality and migration trends. These are then combined to create different projection scenarios. Each scenario then shows how the population would develop, if the underlying assumptions are correct. In this chapter, we show the results of the most recent national and municipal population projections published by the NSIs. If more than one projection scenario is available, the figures and maps show the results of the 'main' or 'median' scenario. The online appendix for this chapter provides more detailed information on the projections for each part of the Nordic Region.

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# Chapter 3
# URBANISATION
# Nordic geographies of urbanisation

**Author: Lukas Smas**
**Maps and data: Julien Grunfelder and Oskar Penje**

From a European perspective, the Nordic Region is sparsely populated but also one where, in 2016, more than 75% of the population lived in urban settlements with more than 2,000 inhabitants. Moreover, population growth has been concentrated to the larger functional urban areas for decades, though, in 2016, around 45% of the Nordic population still lived outside these areas. In this chapter, an urban settlement population map covering the entire Nordic Region is for the first time presented which, in combination with other spatial data, provides new insights into the various ongoing urbanisation processes, urban-rural relations and small and medium-sized city developments in the Nordic Region.

## Sparsely populated and highly urbanised

North-eastern Europe is sparsely populated with people concentrated to large cities such as Moscow, St Petersburg, the Baltic capitals and around the coastal areas of the Nordic Region (figure 3.1). From Denmark, Poland and the Ukraine southwards, more populated areas can be found along with a dispersed settlement pattern. There is a major concentration of population in an urban network corridor running from Northern England across the Benelux-countries through Germany towards Northern Italy – the so called 'Blue Banana' (Faludi, 2015). Central Spain and Southern Portugal display a more sparsely populated settlement structure similar to that of the Northern parts of Europe. It is interesting to note here also

**The Nordic population is to a large degree concentrated towards the coastal areas**

that Europe's mountainous areas are clearly visible as sparsely populated areas on a population settlement map (figure 3.1) from the Scandinavian Mountain Range and the Scottish Highlands in the north, to the Alps and Dinaric Alps in the south and the Carpathians in the East.

The Nordic population is to a large degree concentrated towards the coastal areas (ibid.). It is a historical settlement pattern closely related to the availability of cultivated agricultural areas (Sporrong, 2008). There is a major settlement corridor from the area around the fjord of Oslo which continues into Sweden along the west coast towards the greater Copenhagen area. Another settlement corridor runs from the Greater Gothenburg region to the northeast, through Stockholm, to the Finnish triangle of Helsinki, Tampere and Turku. In Iceland, the population is to a large degree concentrated in the capital region of Reykjavík. There are also relatively significant settlements along Norway's southwest coast and in urban settlements scattered around the Baltic and Bothnian Seas. Denmark is different, with a more distributed spatial settlement pattern, rather like that of Germany and other parts of continental Europe (figure 3.1). The Faroe Islands have a rather evenly distributed spatial

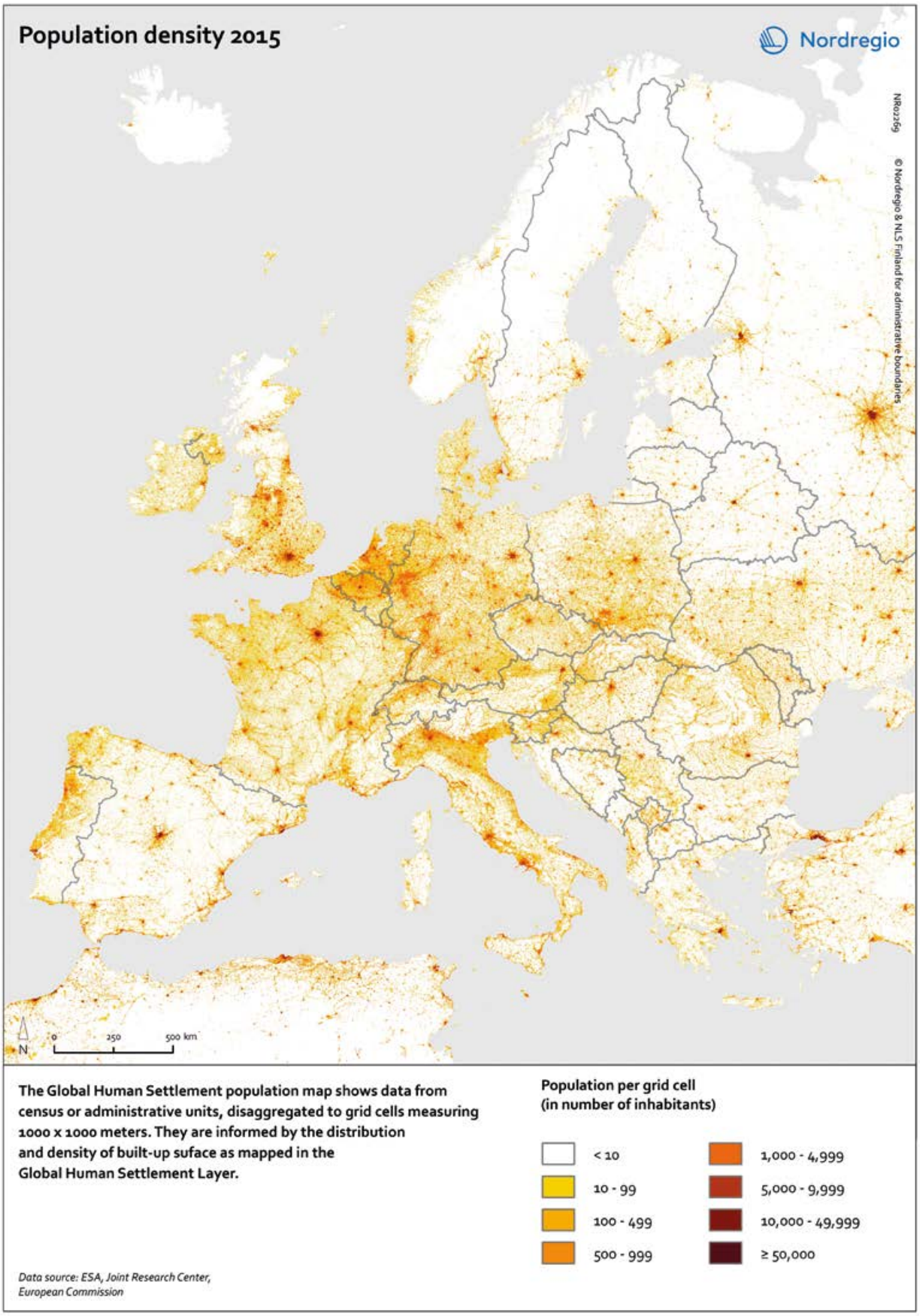


Figure 3.1 Population settlement structure in Europe.

| | Total population | | Change in % | Population in urban settlements > 2000 | | Change in % | Population in functional urban regions > 50,000 | | Change in % |
|---|---|---|---|---|---|---|---|---|---|
| | **2011** | **2016** | | **2011** | **2016** | | **2011** | **2016** | |
| Denmark | 5,560,628 | 5,707,251 | 2.6% | 3,986,777 | 4,160,264 | 4.3% | 3,140,375 | 3,283,465 | 4.6% |
| Finland | 5,375,276 | 5,487,308 | 2.1% | 4,308,677 | 4,497,378 | 4.4% | 2,895,081 | 3,048,845 | 5.3% |
| Iceland | 318,452 | 332,529 | 4.4% | 264,245 | 278,388 | 5.3% | 202,341 | 213,619 | 5.6% |
| Norway | 4,920,305 | 5,213,985 | 6.0% | 3,436,686 | 3,760,710 | 9.4% | 2,330,439 | 2,531,303 | 8.6% |
| Sweden | 9,415,570 | 9,851,017 | 4.6% | 6,876,785 | 7,599,236 | 10.5% | 5,197,468 | 5,541,582 | 6.6% |
| **Nordic Region** | **25,590,231** | **26,592,090** | **3.9%** | **18,873,170** | **20,295,976** | **7.5%** | **13,765,704** | **14,618,814** | **6.2%** |

**Table 3.1 Population in the Nordic Region.**

Data source: NSIs, Nordregio.

settlement pattern, while in Åland the population is more concentrated.

The population of the Nordic Region has grown by almost 4% during the period 2011–2016; more in Norway and less in Denmark and Finland. Populations in urban settlements with more than 2,000 inhabitants (see box) have however grown even more; by 7.5%, while that in the functional urban areas (see box) have grown by more than 6% (table 3.1 and figure 3.4). Population growth is unequally distributed within and between the various Nordic countries (table 3.1, figures 3.2 and 3.3). In Sweden and Norway, the population in urban settlements has grown by around 10% while the change in Denmark, Iceland and Finland has been between about 5% during the period in question. In Sweden, functional urban areas have, however, grown less in relation to the other countries and to urban settlements with 2,000 inhabitants. Norway has seen 9% population growth in both urban settlements and in the six largest functional areas.

Between 2011 and 2016, population growth at the Nordic municipal level has been most intense in and around the larger regions of Stockholm and Oslo and around the larger cities on Norway's western coastline (figure 3.2). The Greater Copenhagen, Gothenburg, Helsinki and Reykjavík areas have also grown in terms of population. There has also been significant population growth in most municipalities within the larger functional urban areas though some municipalities outside these areas have also grown significantly, including Bodø, Växjö, Jyväskylä and Horsens as well as in a few smaller municipalities. The general pattern however seems to be that small inland municipalities with already small populations have declined further, particularly in Finland, but also in Sweden and Norway. In Denmark, municipalities with shrinking populations are primarily found along the west coast of Jylland but also in Sjælland.

**In Sweden and Norway, the population in urban settlements has grown by around 10% while the change in Denmark, Iceland and Finland has been between about 5% during the period in question**

## Urbanisation also happens beyond municipal border

If, however, the population changes in urban settlements are taken into consideration, the general process of urbanisation becomes more nuanced (figure 3.3). In the capital regions, there are both urban settlements with a growing population and others with a shrinking population. Even if almost one fifth of the Nordic population is living in the five largest urban settlements, the population growth in these five built-up areas is rather low in relative terms compared to the average growth in

## Approaching urban areas

Urban areas can be defined in terms of form, size and function. A common approach is to focus on the number of people living together within a defined area considered to have urban physical characteristics. This is a morphological approach which defines an **urban settlement** based on its built environment and concentration of buildings and with a population size above a minimal threshold (Servillo et al., 2017). All Nordic countries have data on urban settlement which corresponds to tätort (SE), byområde (DK) taajama/tätort (FI), Þéttbýlisstaður (IS) and tettsted (NO). In the Nordic Region, the population threshold is 200 individuals living within 200 metres (in Norway 50 metres) of each other. The delimitation of the urban settlement is regularly updated to account for settlements growing together and/or growing apart.

Urban settlements seldom actually correspond to the administrative and territorial boundaries of **municipalities** (i.e. there is a discrepancy between the morphological and territorial approaches to the delimitation of urban areas). Municipal boundaries often have a different historical logic with an urban centre and rural hinterland. Population growth and the expansion of the built environment have, in functional urban areas, resulted in the core urban settlements being extended beyond the territorial boundaries of the municipalities (table 3.2). In areas with a more rural character and towns and suburbs, the urban settlement is often contained within the municipality. Municipalities can however contain multiple urban settlements in both more densely populated and in more sparsely populated regions.

Neither the morphological nor the territorial approach however effectively captures the dynamics of the current urban condition or the function of the urban settlement in a wider spatial context. **Functional urban area** is a term used to capture these dynamics which focuses on the functional relations and links between the urban centre (or centres) and the (regional or suburban) hinterland. The Organisation for Economic Cooperation and Development (OECD) and the European Commission (EC) have developed harmonised data for functional urban areas with a population size over 50,000 and at least 1,500 inhabitants/km$^2$ in the urban core based on grid data and commuting data to demarcate the hinterlands (15% commuting to the urban core; Dijkstra & Poelman, 2012; see also Grunfelder et al., 2016).

urban settlements more generally (table 3.2). On a general level, the population is growing in urban settlements across the Nordic countries although there are spatial differences as well as differences between population change in urban settlements compared with that witnessed in the municipalities. The spatial pattern is not as distinct when it comes to population change in urban settlements (compare figure 3.2 and 3.3). A more diversified pattern emerges with smaller urban settlements in Western and mid-Sweden increasing their populations. This diverse pattern continues in Denmark which sees population growth in several urban settlements across both Jylland and Sjælland.

Cases also exist where the population in an urban settlement is growing but the population size in the municipality is shrinking. For example, the populations in the urban settlements of Visby, Örnsköldsvik, and Skellefteå are growing while the municipalities themselves are shrinking. This indicates that population concentration is occurring in the urban settlements. In addition, there are also cases where the population of the municipality is growing but not in the larger urban settlement within the municipality,

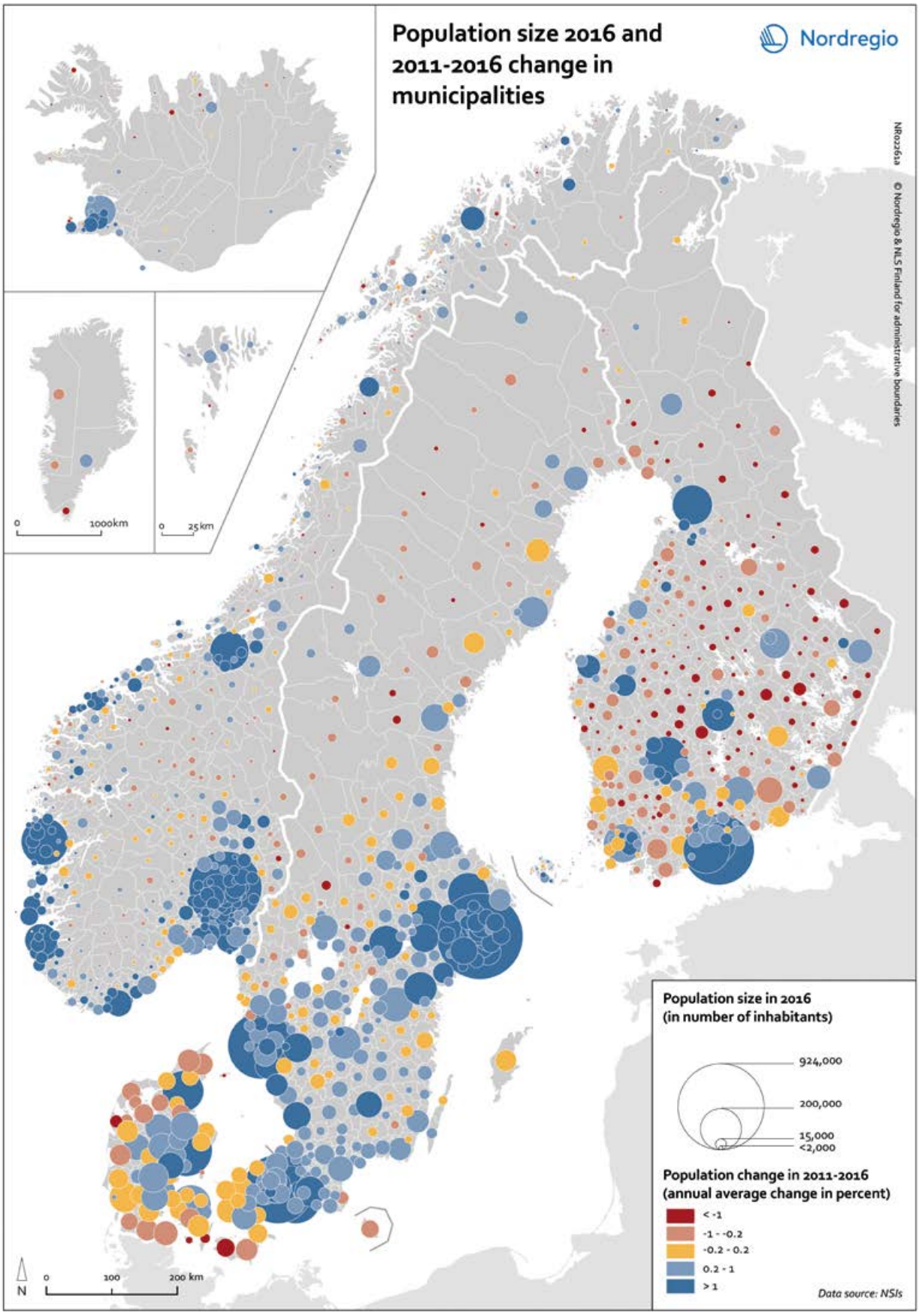


**Figure 3.2 Population size in 2016 and change 2011–2016 in municipalities.**

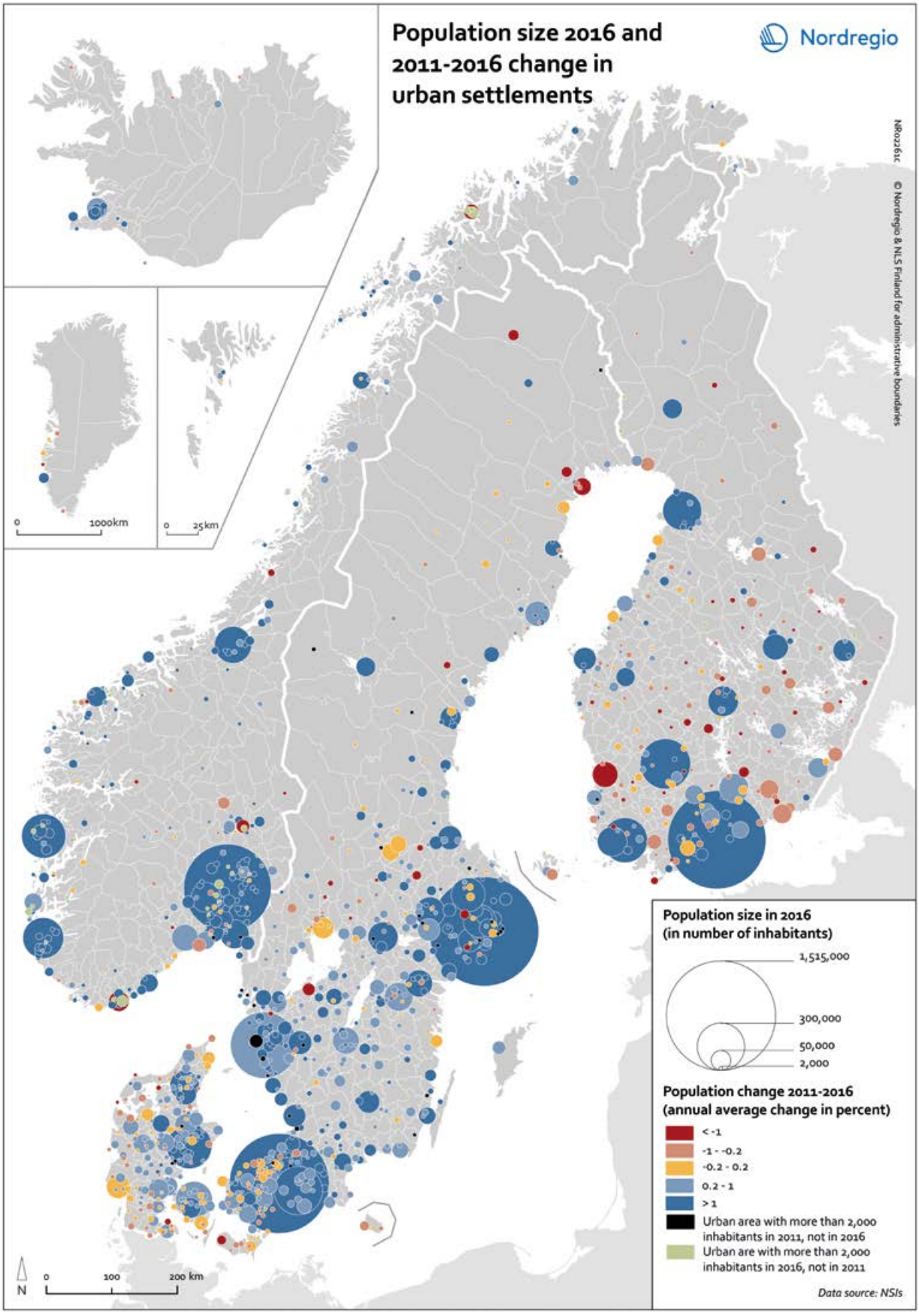


**Figure 3.3 Population size in 2016 and change 2011–2016 in urban settlements of at least 2,000 inhabitants in 2016.**

| | Urban settlement Annual average Change | | Annual average Change | Municipality | | Annual average Change |
|---|---|---|---|---|---|---|
| | 2011 | 2016 | | 2011 | 2016 | |
| Stockholm | 1,372,565 | 1,515,017 | + 2.1% | 847,073 | 923,516 | + 1.8% |
| Copenhagen | 1,199,224 | 1,280,371 | + 1.3% | 539,542 | 591,481 | + 1.9% |
| Helsinki | 1,145,755 | 1,231,595 | + 1.5% | 588,549 | 628,208 | + 1.3% |
| Oslo | 906,681 | 975,744 | + 1.5% | 599,230 | 658,390 | + 2.0% |
| Gothenburg | 549,839 | 572,799 | +0.8% | 513,751 | 548,190 | + 1.3% |

**Table 3.2 The most populated urban settlements and municipalities in the Nordic Region.**

for example Karlstad and Falun, Boden and Luleå in Sweden, Pori in Finland and Hamar in Norway.

Urban settlements, especially within the larger functional urban areas, grow together which can appear in statistical form as a significant increase in population. For example, the urban settlement of Torslanda in Gothenburg municipality has grown together with neighbouring areas which means the boundary for the area has been redrawn and the population of Torslanda has been amended upwards from around 6,000 in 2011 to more than 23,000 in 2016. In Tromsø the opposite process can be observed, i.e. the population in the main urban settlement decreased from 56,000 inhabitants in 2011 to about 34,000 in 2016, when Tromsdalen, Kvaløysletta and Hamna were redefined as independent urban settlements.

## The Nordic functional urban areas: A mixed picture

The degree of urbanisation is the relationship between the population living in urban (and rural) areas and the total population of the municipality (i.e. between a morphological and a territorial approach). It indicates the spatial settlement patterns within a municipality and it can be used to describe the character of an area (figure 3.4). The Organisation for Economic Cooperation and Development (OECD) and the European Commission (EC) distinguish between three types of areas: cities or urban areas that are densely populated and where at least 50% of the population lives in the urban centre; intermediate density areas including suburbs and towns where less than 50% of the population live in rural areas and less than 50% in urban areas; and rural areas which are thinly populated areas where more than 50% of the population live in rural areas. (For more detailed information on measuring the degree of urbanisation, see Dijkstra & Poelman, 2012).

The core cities of the 31 urban functional areas in the Nordic Region, correspond with the cities as defined by degree of urbanisation. In the functional urban areas of Esbjerg and Aalborg, for instance, there are however no densely populated urban centres. The hinterlands in most functional urban areas in the Nordic region do include towns and suburbs as well as rural areas (figure 3.4). The degree of urbanisation is a difficult concept to display but is useful as a way of adding nuance to the debate on urban-rural relations. Moreover, municipalities in sparsely populated areas can display a high degree of urbanisation, such as, for example, Kiruna and Gällivare in Sweden. It is also interesting that Boden and Luleå display an intermediate degree of urbanisation (figure 3.4) and growing population in the municipalities (figure 3.2) but shrinking population within the urban settlements (figure 3.3).

## Small and medium-sized cities: What are they?

In the *Nordic Cooperation Programme for Regional Development and Planning 2017–2020* (Nordiska Ministerrådet, 2017) urban qualities in small and medium-sized cities and urban-rural relationships are prioritised as important areas for regional development. How can urban and regional policy help to develop attractive and sustainable small

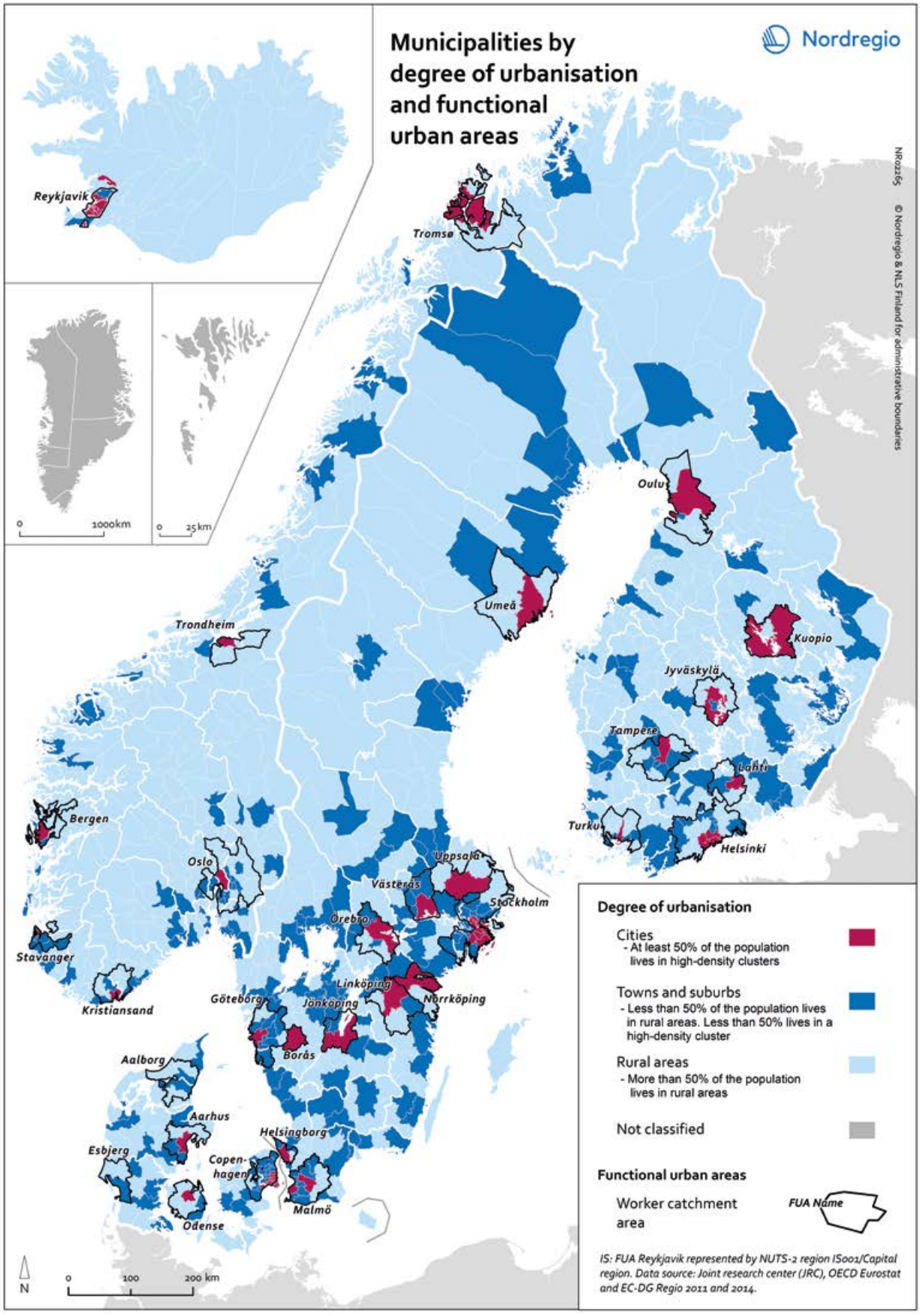


Figure 3.4 Degree of urbanisation and functional urban areas.

and medium-sized Nordic and Arctic cities? How are urban and rural environments related to each other, as discursive categories and through flows of people, goods and services in times of increased globalisation and technological change such as digitalisation? Small and medium-sized Nordic and Arctic cities face explicit and often rather different challenges in terms of social, economic and environmental sustainability compared to larger cities and central regions. But they have also been recognised as important nodes to "counteract the polarisation of urban growth and maintain the settlement pattern, especially in more sparsely populated areas. In these areas they can play a role in the attempt to diversify the economic base and ensure a minimum level of services" and at the local level they also "offer good possibilities in terms of living areas of high quality – counteracting social segregation" (Damsgaard, 2006, p. 4).

Small and medium-sized cities have often however been neglected in both research and policy terms. Even if they "*are typical in a quantitative sense, and theorists have been too dazzled by the spectacular urbanism of big cities to notice them. They are unique in that the way they 'do' 'cityness' is distinctive, while still recognizably urban*" (Bell & Jayne, 2009, p. 695). Small and medium-sized cities can be defined in many ways and there is no (and cannot be) one universal definition mainly because it is a relative concept with different meanings and implications in different contexts. There is no generally agreed upon European definition for small and medium-sized cities (or towns) and no harmonised data for smaller cities and towns across Europe, but small and medium-sized cities present "a 'real' object because of [their] specific (common-sense) shared cultural meaning that evokes certain common images and an, often implicit, understanding of what are [the] characteristic territorial features of such places" (Servillo et al., 2017, p. 2f.).

Here it is vital to recognise the importance of terminology and the confusing similarities and differences between the Scandinavian languages. In Danish and Norwegian the term "by" is used for all types of urban areas (although we may distinguish here between "*landsby* and '*storby*" etc.). In Swedish, the word "by" in contrast means village or settlement while an urban area or city is usually called "*stad*". In English, there is a third category, towns which may be considered as something "in between" a city and a village. There are various linguistic and cultural explanations for these differences and other additional denominations related to the historical functions of cities in each country. It is however also worth noting that the relationship between cities and urban (areas) has changed in meaning over time. The Latin word *urb* referred to the physical settlements of the Romans, while the Greek word for city is connected to civilisation and *civitias*, i.e. to a wider social meaning. Today the notion of 'urban' is associated more with the social sphere while cities are physically delimited, as such the urban often extends beyond the city walls as Lefebvre (2003) argued, which is certainly correct if we consider the larger urban settlements which clearly extend beyond both municipal boundaries and historical city borders.

The EU and the OECD define a city as a densely populated area with at least 50,000 inhabitants, which means that there are only 31 cities in the Nordic Region (Dijkstra & Poelman, 2012). Of these, 18 are classified as small cities while eight are medium-sized. Only the five most populated urban areas are considered larger cities. Even if almost all population growth in the Nordic Region over the last 20 years (1995–2015) has been in the largest functional urban areas, almost half of the Nordic population continue to live outside these areas in small and medium-sized cities (Grunfelder & al., 2016). The ESPON programme has also funded several projects on small and medium-sized towns and/or cities and in the process established various criteria and definitions. For example, a large "small and medium-sized" town might have a population between 5,000 and 50,000 which would include a city such as Bodø but not Norrköping which would then be considered a large city (Servillo et al., 2017).

Multiple definitions exist of what constitutes a "small and medium-sized city" within the Nordic countries. This is perhaps more understandable than it initially seems given that it often depends on the purpose of the definition used. Different national authorities have produced different city definitions and thus also defined small and medium-sized cities based on their own needs. New urban-rural typologies are continuously being developed using new technologies and data. The Finnish Environment Institute has developed a new ur-

ban-rural classification system based on 250 x 250 metre grids thus creating a more fine-grained urban-rural continuum.[1] Urban areas are in this case defined as settlements with more than 15,000 residents including both the inner and outer urban areas surrounded by a peri-urban area which is linked to the more distant rural areas. Beyond this, on the urban-rural continuum there are local centres located outside the urban areas, areas with a rural character closely connected to urban areas, so-called "rural heartlands" and finally, sparsely populated areas.

The Norwegian Institute for Urban and Regional Research has produced a classification of Norwegian municipalities by combining the morphological, territorial and functional approaches outlined above (i.e. Gundersen & Juvkam, 2013). Residential and labour market areas were classified into five distinct categories based on the centre structure (itself based on urban settlements and municipalities). Any breaking point between large, medium and small cities are arbitrary and dependent on what rationale is used and the defined purpose of the classification. It would however be interesting to further explore the small and medium-sized cities from a functional perspective and to focus for example on the function of small and medium-sized Nordic and Arctic cities within a region in an age of planetary globalisation: what is the role of small and medium-sized cities in urban-rural relations?

## Rethinking urban and rural relations

Thinking through the conceptualisation of small and medium-sized cities and using urban settlement data provides a new dimension to urban-rural relations while highlighting different urbanisation processes. The geographies of urbanisation in the Nordic Region are occurring on different scales and there are multiple dimensions to urban-rural relations at different scales from the local to the global. The larger urban functional areas are continuously and exponentially growing which is of significant concern both regionally and nationally, but there are also urban settlements within these areas that are declining. Within the larger urban regions in the Nordic countries there are also increasing tensions in terms of spatial and socio-economic segregation (Smas et al., 2016). Furthermore, the functional urban areas contain municipalities that are rural in character which means that interesting dynamics in respect of urban-rural relations emerge within these functional urban areas.

Urban-rural relations are also to a large extent intra-municipal issues, especially outside the larger functional urban areas. This becomes increasingly evident with a more detailed and nuanced analysis of the geographies of urbanisation patterns in the Nordic Region. Urban settlement and concepts such as the degree of urbanisation reveals this but it is important to investigate further the functional relations between urban and rural. Population change is also non-linear, with urban settlements potentially growing within municipalities which themselves have a shrinking population and *vice versa*.

[1] For more information visit http://www.ymparisto.fi/en-US/Living_environment_and_planning/Community_structure/Information_about_the_community_structure/Urbanrural_classification

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Chapter 4

# MIGRATION

# The wary welcome of newcomers to the Nordic Region

**Author: Timothy Heleniak**
**Maps and data: Julien Grunfelder, Gustaf Norlén and Timothy Heleniak**

After the exodus of large portions of their populations in the early twentieth century, in recent decades the Nordic countries have predominantly been countries of immigration. The migration policies of the Nordic countries have long been welcoming to work migrants and the region has become a prime destination for people from the new EU member states. These migrants have been important to the Nordic countries as population growth slows and the populations age. Without migration since 1970, population growth in Sweden would have ceased and the population size would be 8 million rather than the 10 million it is today (Lundkvist, 2016). Migrant workers are especially important to rural regions with declining populations as they alleviate population decreases and provide a work force.

The movement of large numbers of people seeking asylum in the Nordic countries and elsewhere in Europe since 2015 is often referred to in the media as a "refugee crisis" as it represents one of the largest influxes of displaced persons since the end of World War II. Over the course of 2015, an estimated 1.3 million people applied for asylum in the European Union. In that year, Sweden had among the largest per capita number of asylum seekers in Europe, with 16.7 asylum applications per thousand. Norway (6.0) and Finland (5.9) also received large relatively numbers of asylum applicants (Eurostat, 2017). While not all of these asylum seekers receive refugee status and permanent residence, a large and increasing share do, thus becoming potential workers.

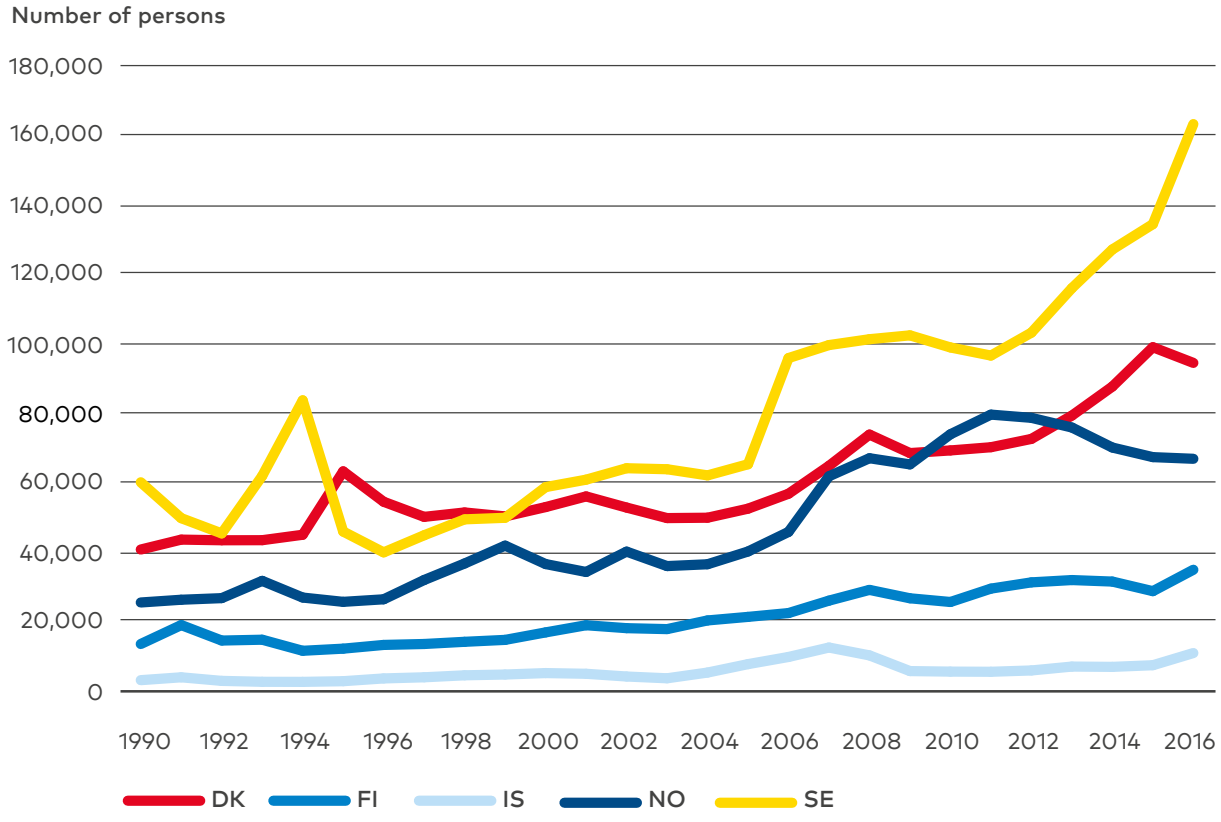
The issue of maintaining the proper balance between controlling the inflow of humanitarian migrants while remaining open to labour migrants is an issue that has risen towards the top of political and public policy agendas. The recent influx of asylum seekers caused the Nordic governments to put in place several restrictive measures. The Nordic countries have, working together, devoted considerable resources towards devising more effective policies for the integration of both labour migrants and refugees into Nordic society and into the labour market. This chapter analyses long-term international migration trends at both the national and regional levels in the Nordic Region.

**Migration has become the major source of population increase in the Nordic countries**

## Historically high levels of immigration in the Nordic countries

Migration has become the major source of population increase in the Nordic countries. Since 2000, the population of the Nordic countries increased by 2.7 million. Thirty percent of this increase was from natural increase (more births than deaths) and 70 percent was from net migration (more immigrants then emigrants). This means that most of the population growth is from the immigration of people from outside the Nordic countries.

**Figure 4.1 Immigration to the Nordic countries, 1990–2016.**



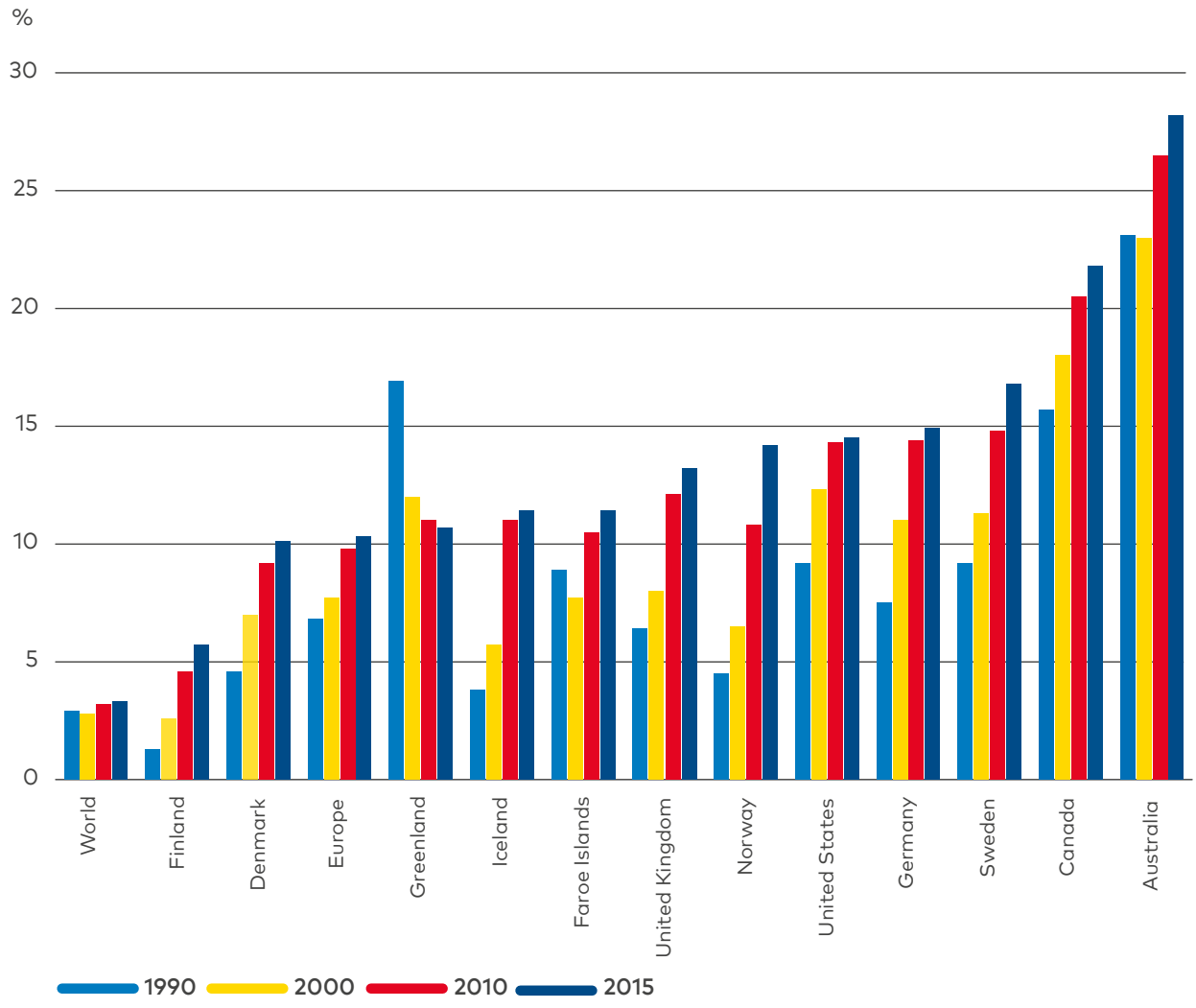

Source: NSIs.

With several EU expansions plus the recent flows of refugees, immigration to the Nordic countries has steadily increased, especially since the mid-2000s (figure 4.1). Since 2000, 4.3 million people have immigrated to the Nordic Region (while 2.5 million have emigrated). Of the immigrants, 1.6 million have arrived in the past five years. Immigration to Iceland has increased again after a decline following the 2008 banking crisis. Immigration to Norway peaked in 2011 and has declined since then. In Denmark, immigration declined slightly in 2016 after peaking in 2015. Immigration to Finland and Sweden continued to increase and reached historically high levels in 2016.

The Nordic countries define the immigrant or foreign populations differently, thus data from the United Nations were used to compare the numbers of migrants (Heleniak, 2017). This data set defines a migrant as a person who is residing outside their country of birth (figure 4.2). Globally, there were 244 million migrants in 2015 which amounted to 3.3 percent of the world's population. This is an increase from 1990 figures when there were 154 million migrants but only a slight increase in percentage terms as this 1990 figure represented 2.9 percent of the world's population. While the number of international migrants globally has increased by 60 percent since 1990, it has increased by 250 percent in the Nordic Region. Since 1990, the number of foreign-born persons in the Nordic Region has increased from 1.3 to 3.3 million. This number means that one-in-eight Nordic residents were born abroad (which includes those born in other Nordic countries).

Since 1990, international migrants as a share of the population increased significantly in all the Nordic countries. The percent figure for foreign-born in each exceeds the global average and in Iceland, Norway and Sweden exceeds the European average of 10.3 percent. The percent of foreign born people in Sweden now exceeds that of the United States, which has a much longer history as an immigration destination. Greenland is the only exception where

**Figure 4.2 Foreign-born as percent of total populationin in the Nordic and selected other countries, 1990 to 2015.**




Data source: United Nations Population Division, Trends in International Migrant Stock: The 2015 Revision.

the percentage of foreign born people has declined, going from 16.9 percent in 1990 to 10.7 percent in 2015. This figure was as high as 19 percent in 1975 before Greenland home rule was instituted and the flow of Danes to Greenland slowed.

The countries of origin of migrants to the Nordic countries have also become more diverse. Several decades ago, most migrants to the Nordic countries originated from other Nordic countries. With the EU enlargements in the 2000s, the new EU member states, particularly Poland, became major sending states. Given the large refugee flows in recent years, Syria, Eritrea, Iraq and Afghanistan have also now become major source countries (Heleniak, 2017).

## High levels of international migration in most Nordic regions

Between 2011 and 2016, the population of the Nordic Region grew by 3.5 percent from international migration (figure 4.3). In addition to the differences by country noted above, there were also significant differences at the regional and municipal levels within the Nordic Region. At the regional level, all regions in Norway, Sweden and Denmark saw increases from international migration of more than 2.5 percent. In Finland, only the capital region had such gains from international migration while all other regions had smaller but positive increases.

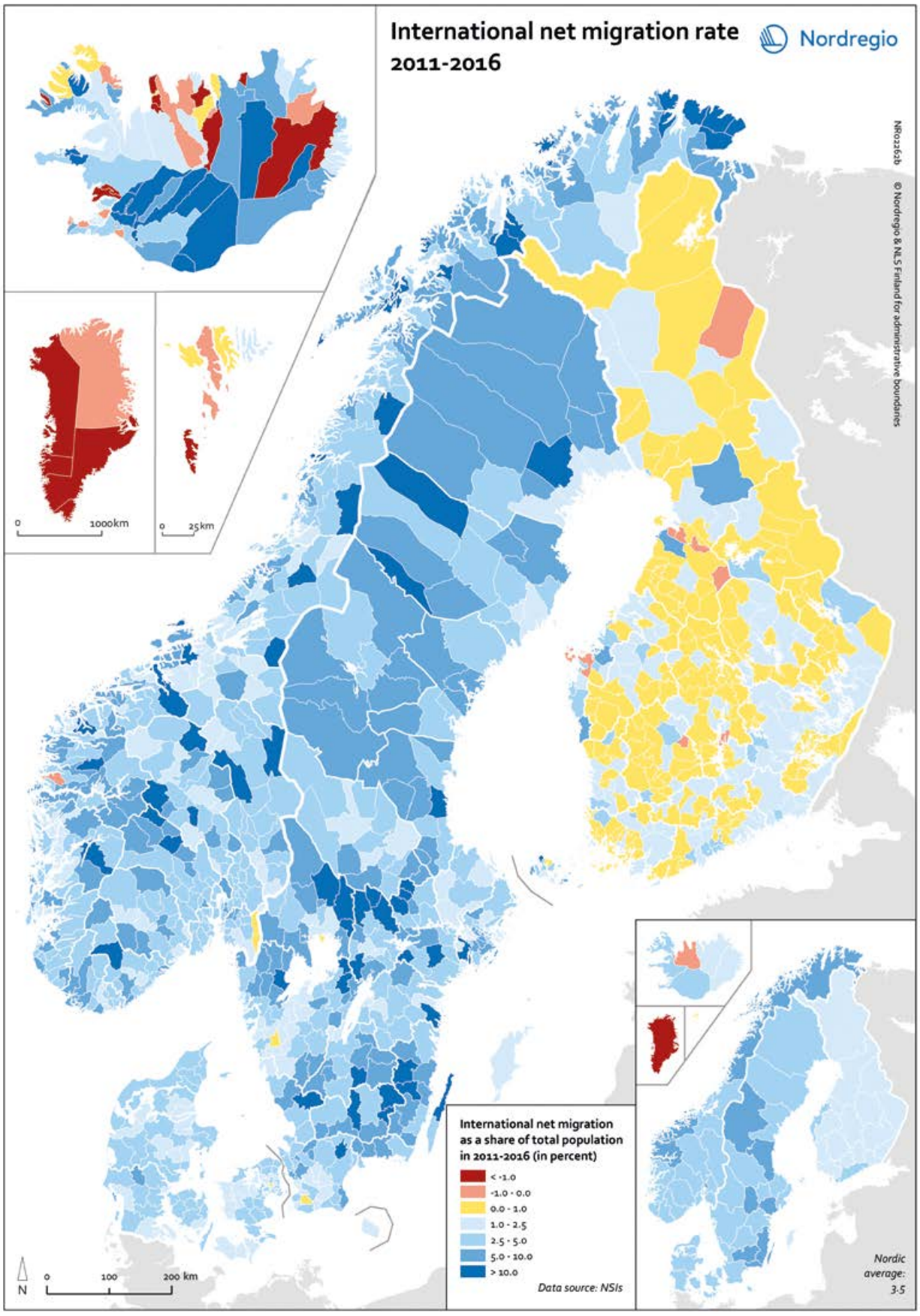



**Figure 4.3 International net-migration 2011–2016.**

In Iceland, there were a mix of regions seeing gains and declines from international migration. At the municipal level, in Norway and Sweden there were many regions throughout the two countries that saw gains from international migration of more than ten percent. Most of these were outside the capital regions and with smaller population bases. Overall, Finland had smaller gains from international migration and had no municipalities with gains of more than ten percent and a few with losses. Iceland sees a more varied pattern with a few municipalities with small populations having large increases from international migration and a few having net losses including some close to the capital.

Three different types of regions can be distinguished based on the impact of international migration on population change (figure 4.4). The first are those where international migration was not needed for the populations to grow (green areas on map). A second set of regions are those which only grew because of international migration (yellow areas on map). A third set of regions are those where even the impact of immigration was insufficient to counter declines from either having more deaths than birth or domestic outmigration, or both, or where net international migration was negative (red areas on map).

At the regional level (small map), many regions in southern Norway, Sweden, and Finland, the Copenhagen area, and southern Iceland would have grown even without international migration. Most of the northern two-thirds of Norway and Sweden and most areas in Denmark outside the capital region required international migration to have population growth. In Finland, there were a few regions in the southern part of the country where international migration contributed to a population increase but in many, international migration was insufficient to counter population declines from other sources.

**Many regions in southern Norway, Sweden, and Finland, the Copenhagen area, and southern Iceland would have grown even without international migration**

At the municipal level, the map shows that 416 municipalities would have experienced population growth even without immigration, most of these are in or near the capital regions and other large urban centres. A total of 310 municipalities experienced population growth only because of immigration and 485 municipalities experienced a population decrease during the period 2011–2016, even with international migration. The latter were in western Denmark, the more rural municipalities in northern Sweden, much of Finland, and northern Iceland.

## Largest number of asylum seekers into the Nordic countries since World War II

With ongoing civil wars or instability in Africa, the Middle East and South Asia, Europe received a record number of asylum applications in 2015. While

## Asylum seekers and refugees in immigration statistics

**The process of applying for asylum is similar throughout the Nordic countries and the EU. A person applies for asylum with the police or office of the relevant migration agency. Their application is either accepted and refugee or subsidiary protection status is granted or they are denied asylum. If they are denied, they must either leave the country or appeal the decision. If they are granted asylum they are given a resident permit and are counted as an immigrant in the migration statistics. In addition, there are quota refugees who have been selected by the UNHCR for resettlement and who enter the country with refugee status. In recent years, far more people have been granted protection status in the Nordic countries as asylum seekers than as quota refugees.**

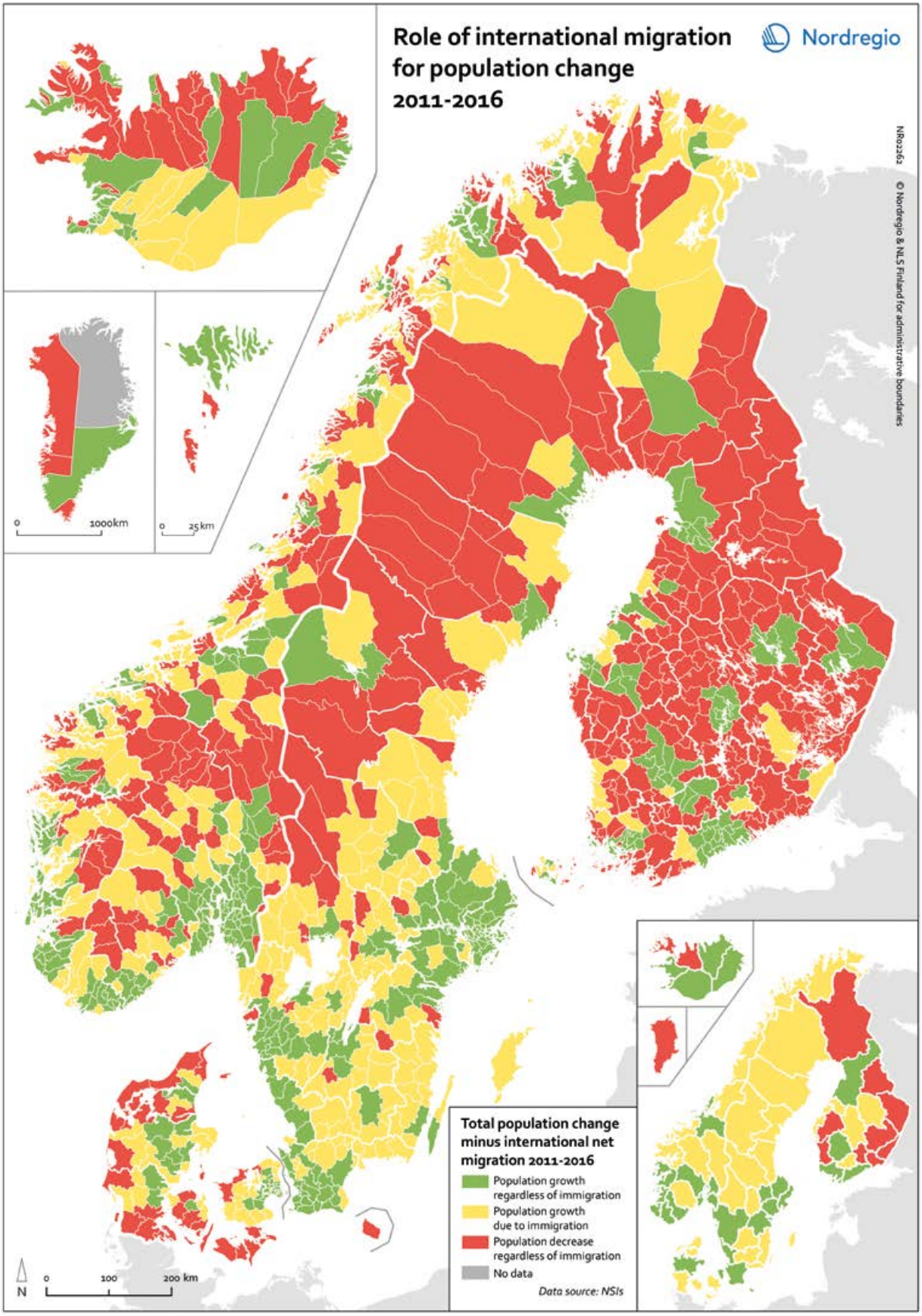
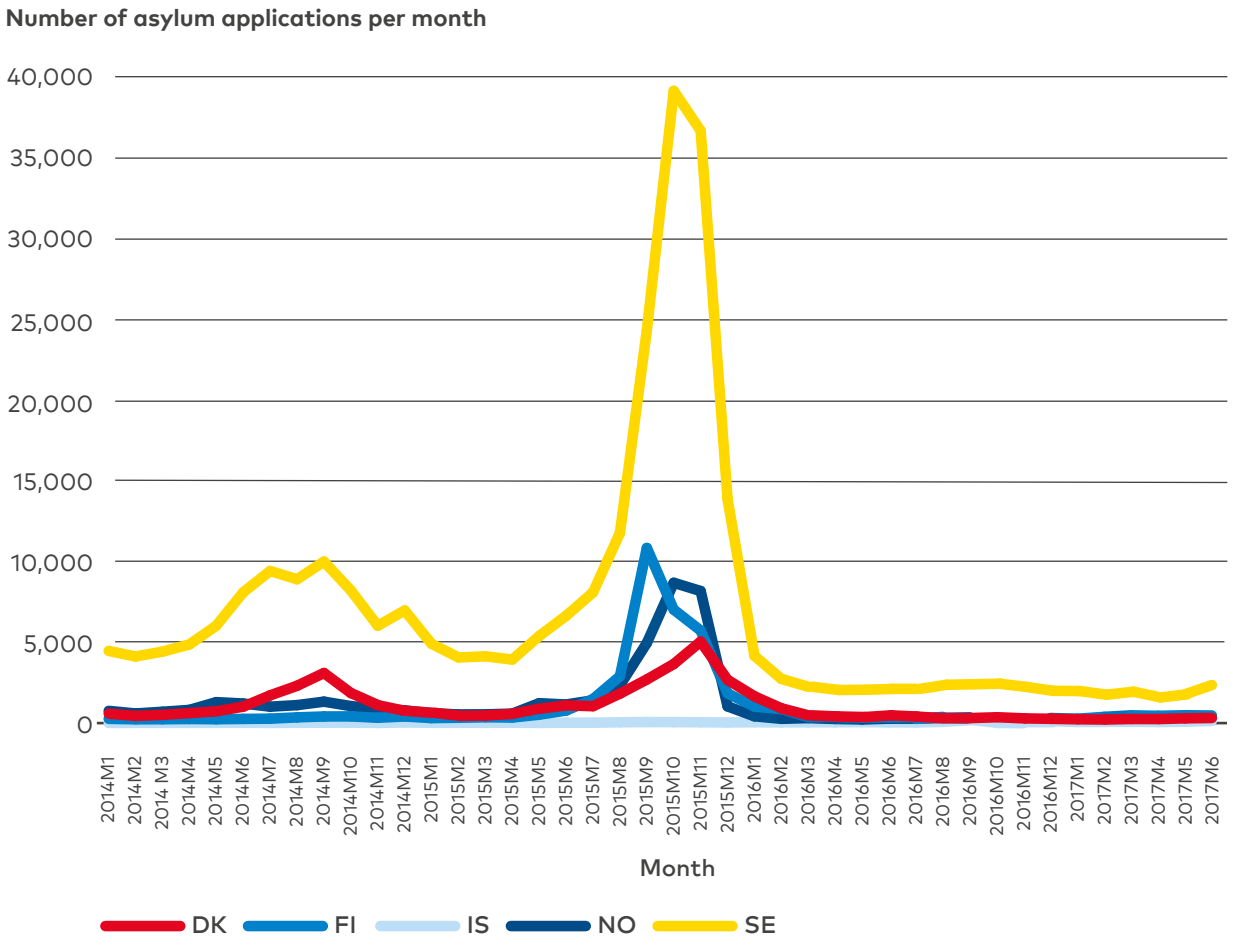



**Figure 4.4 Impact of international migration on population change.**

**Figure 4.5 Number of asylum applications per month, January 2014 to June 2017.**




Data source: Eurostat.

not all persons who apply for asylum are awarded refugee status and thus the right to permanently reside, many do and the share who receive a positive decision in the Nordic countries has increased in recent years. The share of positive decisions in Sweden increased from 33 percent in 2011 to 77 percent in 2014 before declining slightly to 70 percent in 2016. In Norway, the share of positive decisions increased from 34 percent in 2010 to 66 percent in 2016. The share of positive decisions in Denmark increased from 36 percent in 2012 to 81 percent in 2015 before declining to 68 percent in 2016. In Finland, between 2012 and 2015, more than half of first instance decisions were positive before declining to 34 percent in 2016. The increased shares of positive decisions combined with the increased numbers of asylum seekers means that there are many more persons who have received refugee status over the past few years (see box).

Increased control efforts at the borders of the Nordic countries in the autumn of 2015 and an agreement between the EU and Turkey to not allow asylum seekers to enter Europe in June 2016 contributed to stemming the flow of asylum seekers. Norway, Sweden, Finland, and Denmark all saw record numbers of asylum seekers in 2015. Iceland saw smaller numbers and a later peak in 2016. The number of asylum seekers was especially large in the autumn of 2015 (figure 4.5).

### Uneven regional distribution of asylum seekers and refugees

The distribution of refugees is of growing interest in the Nordic countries due both to the unprece-

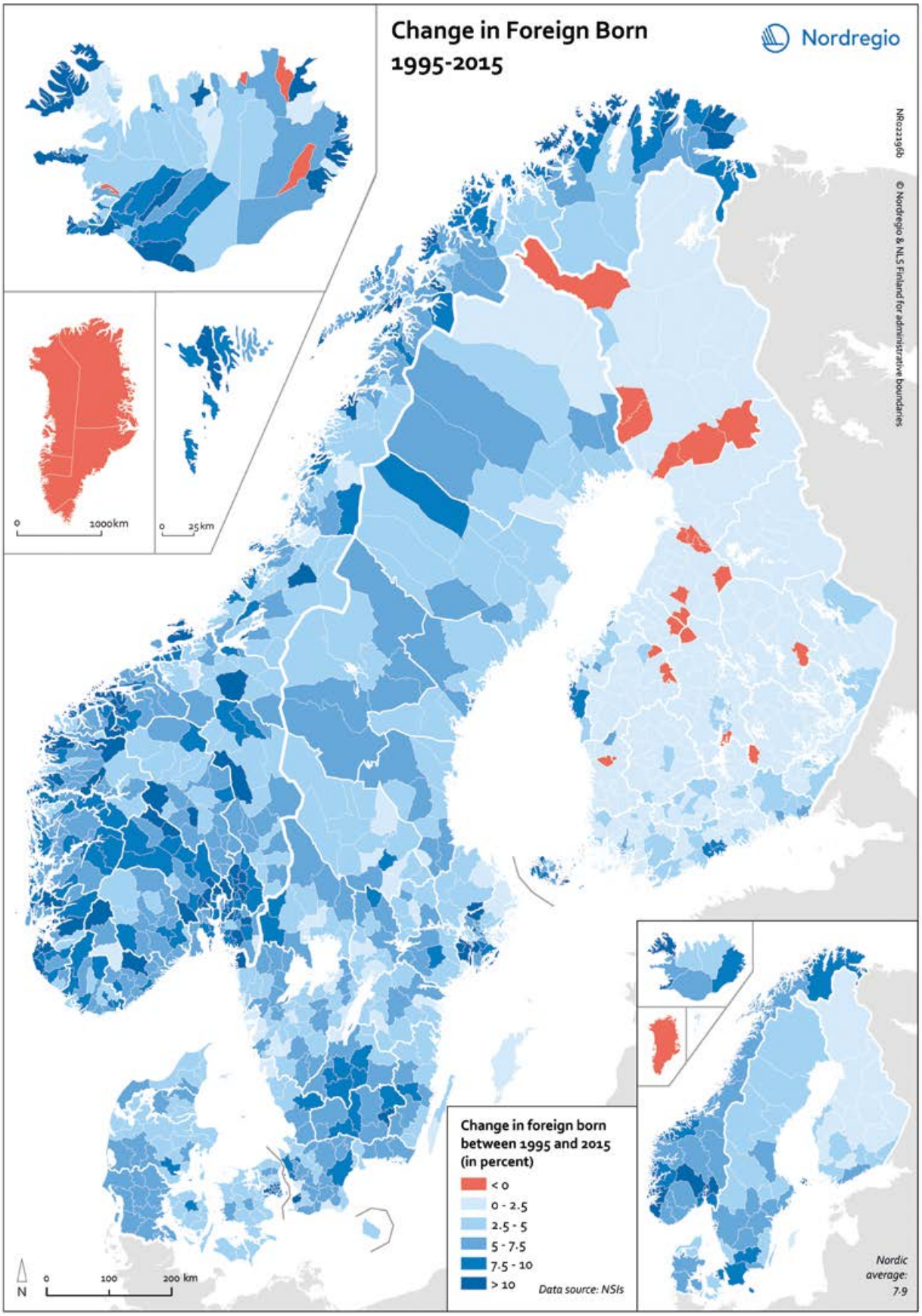



**Figure 4.6 Change of foreign-born population, 1995–2015.**

## By 2015, almost 15 percent of the Nordic population was born outside their country of residence

dented in-flows of migrants and in respect of the longer-term demographic challenges relating to depopulation in many rural areas. Rural municipalities are increasingly recognising the important contributions these immigrants can make to local communities and are pursuing policies that will encourage them to stay.

There are clear spatial consequences attached to the different national policies regarding the housing of asylum seekers and refugees, especially as the evaluation of the professional backgrounds is being done earlier, often prior to them receiving a decision on protection. The evaluation of competencies is often tied to their placement upon receiving permanent residence but there is a trade-off here between distributing refugees across the country and the availability of jobs (Karlsdóttir et al., 2017). When refugees are placed in regions where there are few jobs or few jobs for their skills, research has shown that their entry to the labour market is delayed.

A recent study by Statistics Sweden, showed a tendency for refugees to end up in the large urban centres regardless of where they were initially placed (SCB, 2016). For refugees who immigrated during 1990–1994, eight of ten were placed in a municipality outside of Stockholm, Göteborg, or Malmö and five years later, most had migrated to one of these larger urban centres. The same was true of refugees who had immigrated during 2006–2010. This cohort had more freedom to choose their initial place of residence and about half choose one of these large urban centres, while many others ended up there a few years later.

**Increased foreign-born population across almost all regions**

With the increase in the total foreign-born population, there has been an increase in the percent of foreign born in almost every region of the Nordic countries as can be seen in figure 4.6 which shows the change in the percent of foreign born between 1995 and 2015. Over the last 20 years, the share of the foreign-born population in the Nordic Region has increased from 6.5 percent to 14.3 percent. On the national level, the increase has been fastest in Norway followed by Sweden. At the regional level, the increase has been fastest in Rogaland, Oslo and Akershus in Norway and in Reykjanes in Iceland. The only municipalities that have seen declines in the percent of foreign born are municipalities in Iceland and central and northern Finland outside the larger urban areas and across Greenland.

By 2015, almost 15 percent of the Nordic population was born outside their country of residence. The highest share of foreign-born population can be found in southern and mid-Sweden in larger city regions of Stockholm, Gothenburg and Malmö, and in larger city regions of Oslo and Bergen in Norway. On the national level, Sweden and Norway have a larger share of foreign-born population than the other Nordic countries. In Finland, the share of this group is very low in some regions. In the Faroe Islands and Greenland, the share is relatively high, but dominated by those born in Denmark.

**Nordic countries adjust migration policies**

The Nordic welfare model rests, in part, on high levels of employment for both men and women. With declining population growth and ageing populations, the immigration of newcomers plays a crucial role in sustaining the model, provided newcomers can be integrated into the labour market quickly. This is easier for labour migrants who come with a job or find one soon after arriving, than for refugees who must learn the local language, have their skills, experiences and education validated all while seeking to develop social and professional networks (Damm & Åslund, 2017). The policy responses of the Nordic countries to the refugee influx amounted to a mix of stricter controls over the flow of asylum seekers, speeding up the integration of those who

## Integrating immigrants into the Nordic countries becomes a challenge given the characteristics of the composition of the flows

had been granted protection status and remaining open to labour migrants.

Integrating immigrants into the Nordic countries becomes a challenge given the characteristics of the composition of the flows noted above (OECD, 2016). With the recent large increase in immigration flows to the Nordic countries, many recent migrants have not had sufficient time to fully integrate. Unlike those of some of the other OECD countries, the Nordic languages are not widely spoken outside the region. Few newcomers arrive with proficiency in a Nordic language and thus they generally need time to learn them. Increasing shares of recent arrivals have come from outside the EU as refugees (OECD/EU, 2015). This makes the recognition of formal qualifications and the applicability of skills acquired abroad rather difficult. Efforts aimed at the early mapping of competencies, the validation of skills and qualifications, more focused language learning and the better matching of regional labour demand with the skills of new immigrants are now, however, underway.

According to population projections produced by the national statistical offices of the Nordic countries, there will be net immigration for the foreseeable future (see chapter 2). This is because the Nordic countries will likely remain highly-desired destinations for all types of migrants given their strong economies. While the chaotic refugee situation of 2015 and 2016 has subsided, some of the underlying factors which caused it have not. The "refugee crisis" caused a re-evaluation of asylum and migration policies in all the Nordic countries. While the borders remain open to both labour migrants and those seeking humanitarian protection, the focus has shifted to more orderly flows and increased efforts to successfully integrate those already resident in the Nordic countries.

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Nordic Council of Ministers
Nordens Hus
Ved Stranden 18
DK-1061 Copenhagen K
www.norden.org

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