The population in the Nordic Region is growing from a combination of both natural increase (more births than deaths) and positive net immigration (more immigrants than emigrants). From 1990 to 2015, the population has grown by 14% and now stands at 26.5 million. Over this period, net immigration has accounted for about two-thirds of total population increase with natural increase accounting for the other one-third.\(^1\)

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### Chapter 3

**MIGRATION: An important source of population increase**

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Maps and data: Julien Grunfelder, Timothy Heleniak

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Immigration numbers show a positive increase in population

The Nordic countries and regions can be placed into four groups based on their recent patterns of natural increase and net migration. The first group includes Norway, Sweden, Denmark and Åland, where net immigration has increased considerably and has become the major source of population increase, far exceeding that

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**Table 3.1: Population change in the Nordic Region, 1990-2015**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td></td>
<td>1990</td>
<td>2015</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23 226 651</td>
<td>26 478 698</td>
</tr>
<tr>
<td><strong>Iceland</strong></td>
<td>253 785</td>
<td>329 100</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td>4 233 116</td>
<td>5 165 802</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td>8 527 036</td>
<td>9 747 355</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td>4 974 383</td>
<td>5 471 753</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
<td>5 135 000</td>
<td>5 660 000</td>
</tr>
<tr>
<td><strong>Greenland</strong></td>
<td>55 558</td>
<td>55 984</td>
</tr>
<tr>
<td><strong>Faroe Islands</strong></td>
<td>47 773</td>
<td>48 704</td>
</tr>
<tr>
<td><strong>Åland</strong></td>
<td>24 231</td>
<td>28 916</td>
</tr>
</tbody>
</table>

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\(^1\) The migration crisis was unfolding during the period in which the report was written: very little can be said definitively at this stage, particularly as the statistics have not yet been released.
of natural increase (Table 3.1). Here migration has accounted for the majority of population growth over the past twenty-five years. Indeed, all together net immigration makes up to three-quarters of the total population increase in Sweden, Denmark and Åland. Greenland and the Faroe Islands form a second group, where the populations have remained relatively constant over the past twenty-five years as natural population increase is levelled out by net emigration. Iceland is in a category by itself where unlike the other Nordic countries it has, since 1960, vacillated between being a country of net emigration and net immigration but has had its own unique pattern of net migration over the past decade (see box). Finland is also in a category by itself where

**From 1990 to 2015, the population has grown by 14% and now stands at 26.5 million.**

**Population change in Iceland**

In Iceland, during the boom years of 1997-2008 when the economy was expanding rapidly, there was a huge net inflow of 20 266 people. The increase was followed by a net outflow of 5 981 people during the period 2009-2014 due to the banking crisis (figure 3.1). In the 1990s, the volume of both immigration and emigration increased to nearly 4 000 a year and after 2000 increased even more, to over 6 000 a year. With these fluctuations in net migration, natural increase remains the primary component of population increase in Iceland.

**Figure 3.1: Natural increase and net migration in Iceland, 1990 to 2015.**

- Natural increase
- Net migration

Data source: Statistics Iceland
natural increase and net migration contributed to population change to a similar extent for the period 1990-2015.

Migration flows can be broken down into shares of national and foreign citizens. In 2014, the majority of immigrants in the Nordic countries were foreign citizens, averaging 81% of the total. The value varies from 62% in Iceland to 88% in Norway. However, among people migrating away from the Nordic Region, the percent of national citizens is smaller: the share of national citizens comprises the majority in Finland (65%) and Iceland (58%), whereas national citizens comprise a minority of total emigration in 2014 from Denmark (41%), Norway (27%) and Sweden (49%).

Intra-Nordic migration: People flow within the Nordic Region

Migration from one Nordic country or autonomous territory to another is termed ‘intra-Nordic migration’. This phenomenon plays an important role in maintaining the coherence of the Nordic Region, and despite increased migration from and to countries beyond the Nordic Region, intra-Nordic migration remains a significant part overall migration flows.

The diagram below shows intra-Nordic immigration and emigration for the period 2005-2014. In absolute

In 2014, the majority of immigrants in the Nordic countries were foreign citizens, averaging 81% of the total.

Figure 3.2: Intra-Nordic migration 2005-2014

Data source: NSI’s

Total number of Intra-Nordic migration

Intra-Nordic migration as a share of the total number of migration (%)
Note: each country has an assigned colour, for instance yellow for Sweden, and the colours used for the migration flows correspond to the country of origin of the flow. In other words, all the yellow lines correspond to migration from Sweden to another Nordic country. The length of the arc of the circle is relative to the total population of the country and the number in brackets indicates the net migration value for intra-Nordic migration in 2014.

Intra-Nordic migration peaked in 2011 at 107,000 migration flows between the Nordic countries, or ca 56,000 immigration flows as shown on the diagram (considering that the total flow includes persons that are emigrants from one Nordic country and immigrants into another, the actual number of people moving between the Nordic countries can be approximated by analysing the immigrant group only). From 2012 and onwards, the number of intra-Nordic migrants has been steadily declining to pre-crisis levels (see blue line in the diagram), especially between Norway and Sweden.

In relative terms, the curves highlight the fact that intra-Nordic emigration constitutes a larger share of the total emigration than immigration during this period, reflecting the overall immigration surplus to the Nordic Region. The shares of intra-Nordic immigration and emigration were stable between 2006 and 2011. Again, a change occurred in 2012 when the share of intra-Nordic migration relative to total migration in the Nordic Region started to decline due to the increase in migrations flows from outside the Nordic Region, such as from USA, Syria and Poland, among others. In 2014, figures indicate that intra-Nordic migration had declined to 14% of total immigration and 26% of total emigration.

Denmark and Norway have net Nordic immigration, whereas Finland, Iceland and Sweden have net emigration.

Looking in detail at intra-Nordic migration in 2014 for the five Nordic countries, figures show that Denmark and Norway have net Nordic immigration, whereas Finland, Iceland and Sweden have net emigration. The figure below (figure 3.3) aims to illustrate the migration flows between the five Nordic countries. The largest flows are between Norway and Sweden (about 7.5% of total intra-Nordic migration, in each direction). Norway is the only country with net immigration from all four other Nordic countries. On the other hand, Fin-
Figure 3.4: Net migration 2008-2014
There are four Nordic countries that have net emigration. Furthermore, the figure highlights that the intensity and direction of intra-Nordic migration flows vary from one Nordic country to another. For instance, all Nordic countries have relatively significant migration flows to and from Sweden. On the other hand, migration from and to Finland (including Åland) is relatively low from and to Denmark, Iceland and Norway, but high to and from Sweden. The latter can be explained by a long history of migration between the two countries, mostly linked to integration of Finnish nationals into the Swedish labour market. A very significant share of migration flows can be found between Sweden and Finland: 72% of the emigration from Finland to the Nordic countries ends in Sweden. A similar proportion can be found between Sweden and Norway, where 72% of Nordic immigrants in Norway originate in Sweden.

As already noted, the data on immigration and emigration can be broken into the percentage of national and foreign citizens, although there is a clear majority of foreign citizens in the intra-Nordic migration data, averaging 58%. The individual situations pertaining in each country are however rather different. For instance, figures on intra-Nordic immigration indicates that Denmark, Norway and Sweden have higher shares of foreign-born in-migration flows than the Nordic average (respectively 62%, 73% and 58%), whereas both Iceland with 14% and Finland with 25% are significantly below the Nordic average. These figures may reflect the changing attractiveness of the different labour markets but also the education possibilities in other parts of the Nordic Region thus resulting in the increased migration of nationals from Iceland and Finland.

The Faroe Islands and Greenland are not included in the illustration above due to their very small absolute figures of intra-Nordic migration. It is however worth mentioning that the share of intra-Nordic migration is significantly higher in these two territories than in the five Nordic countries at around 90%. This is primarily explained by their strong linkages to Denmark, representing more than 80% of the intra-Nordic flows and by the phenomena of re-migration. To a much lesser extent there was also a rather stable migration pattern between the Faroe Islands and Greenland during the period 2005-2014.

Migration at the regional and municipal levels

The map on net-migration (figure 3.4) illustrates the annual average changes from 2008, when the financial crisis started, to 2014. The Nordic Region had an annual average net migration rate of 0.7% during the period 2008-2014, but there is significant geographic variation between regions and between municipalities.
but also in the majority of its rural municipalities. In the Faroe Islands and Greenland, where there is overall (national/regional) net out-migration, the municipal scale showcases their internal differences. For instance, the municipality containing Greenland’s largest settlement (Nuuk) shows a net in-migration flow.

The map below (figure 3.5) highlights a clear divide between large urban areas and the rest of the Nordic Region for figures on domestic net migration in 2014. The majority of the municipalities (61%) are located primarily in rural or remote parts of the Nordic Region and suffer from net out-migration in terms of their domestic flows. The remaining municipalities experience net in-migration for domestic flows and are mostly located in the capital and metropolitan areas of Denmark, Finland, Norway and Sweden.

The map also highlights that a vast majority of municipalities (93%) have net in-migration for international migration flows. Only 86 out of 1,219 municipalities, mostly located in Greenland, Iceland, Finland and Norway have net out-migration.

Domestic net migration is the result of the difference between the in-migration and out-migration that takes place from one administrative unit to another (municipality or region) within the same country. International net migration is the result of the difference between the immigration and emigration that takes place from one administrative unit to another (municipality or region) between two countries. The map below indicates domestic (left half of the circle) and international net migration (right half of the circle) in 2014 for municipalities of the Nordic Region (figure 3.5). The size of the circle indicates the absolute value of migration turnover (the sum of in-migration and out-migration) while the colour indicates the trend (blue for net in-migration and red for net out-migration).

The consequences of both net in-migration and net out-migration can pose significant challenges at the municipal level. In the case of significant net in-migration, municipalities often have to deal with issues relating to housing shortages and the inadequate provision of public services as well as the specific challenges that come with social integration. In the case of net out-migration, municipalities often need to find solutions to the rapidly changing nature of their demographic structure, i.e. reductions in their tax base as well as potential reductions in the active labour workforce and/or increases in the share of the ‘dependent’ elderly population requiring a significant level of public service support, including extensive health care.

The strategies developed to address both these types of challenges are diverse across the Nordic Regions and municipalities, ranging from strategies and actions to attract new inhabitants to those designed to help the municipality to adapt its local structures to the new situation. A number of remote municipalities have developed policies aimed at attracting and integrating migrants into their labour markets, thus providing a counterweight to the out-migration flows particularly of young people. One example of the level of awareness on this issue is a policy developed in Åland where policy makers have calculated the required volume of in-migration necessary to maintain an acceptable dependency ratio and thus have actively promoted immigration and integration (Hörnström et al 2015).

National policies have also been developed with the aim of maintaining populations in areas with high out-migration rates. The Faroe Islands have launched an ambitious national strategy to reverse their emigration rates and hopefully increase the re-immigration rates in the hope of attracting returnees who have completed their tertiary education and training programmes. At the regional level, there is also the recent Danish plan to relocate government jobs from the capital to other regions. A further example is the investment and development support for small grocery stores in rural areas in Norway (Hörnström et al 2015). The merging of small municipalities is also sometimes seen as a response to net out-migration trends with the expectation that larger municipalities may be better able to provide the necessary level of services to their inhabitants more efficiently. A number of recommendations designed to deal with net out-migration can be found in a working paper on local and regional approaches to demographic change (Johnsen et al 2014). Among the recommendations here are the better utilisation of private actors, coordination and cooperation between administrative levels and citizen engagement.
Domestic and international net migration in 2014

Figure 3.5: Domestic and international net migration in 2014

Data source: NSIs

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