

SCANDINAVIAN INTEGRATION POLICIES FOR REFUGEES

An updated comparative analysis of qualification
and labour-market integration outcomes



Nordic Council
of Ministers



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This publication is also available online in a web-accessible version at <https://pub.norden.org/temanord2022-534>.

Summary

Main highlights

- This comparative study analyse labour market integration of adult refugees settled in Denmark, Norway, and Sweden between 2008 and 2019.
- Altogether 280 000 adult refugees are included in the study and the analysis follow their integration into the labour market over time after granted residence permit.
- How labour-market integration is measured affects the results substantially: when a low threshold is used for measuring employment among refugees, approximately 60 per cent of the men and 40–50 per cent of the women is found to be employed after several years in their new country. However, only about 35–40 per cent of the men and 15–20 per cent of the women reach earning levels just below the median income (among the general work force) after over 10 years in their new country.
- The comparative analysis shows that Sweden and Norway have rather similar labour-market integration outcomes for refugees, whereas Denmark has substantially lower employment and earning levels – both in the shorter and the longer term.
- All three Scandinavian countries have substantial earnings and employment gaps between men and women, but these gaps narrow somewhat after a refugee has several years of residence.
- The three countries differ as to the integration measures offered to newly arriving refugees: Denmark has had a greater focus on employment measures, and particularly unpaid job training; Norway has increased the focus on ordinary education in recent years, mainly at lower levels; Sweden has a substantially greater share enrolled in education at minimum high school levels and a higher share receiving subsidized employment, compared to Denmark and Norway.
- The analysis indicates that Sweden may have better practices for validating and supplementing prior education early in the integration process.
- Subsidized employment as an integration measure shows a strong positive correlation with being employed in the shorter run, but this correlation decreases somewhat with time. Getting ordinary education during the initial years – particularly at secondary levels or higher – may have an initial lock-in effect but correlates with higher employment and earning levels in the longer run.

Overall, the study indicates that investment in the initial years in upskilling and (supplementary) education may ensure a more stable labour-market establishment for refugees in the longer run.

Aim of the study

In 2020, the UN recorded a record-high number of refugees in the world, and the recent Russian invasion of Ukraine has triggered the fastest growing refugee crisis in Europe since the Second World War. Once again, refugee settlement and integration policies are at the top of the political agenda in Europe. Norway, Denmark, and Sweden have experienced considerable refugee immigration over the past ten years, particularly during the refugee crisis in 2015. These Scandinavian countries have relatively comprehensive integration programmes compared to many other countries and employ a range of integration measures with the same overall goal – to help refugees get established on the labour market and achieve economic self-sufficiency. However, they differ as to certain goals, measures, and policies, making it relevant to compare the labour-market integration outcomes in these three countries, to gain knowledge about 'what works'.

This report, commissioned by the Nordic Council of Ministers, is a follow-up study of the report 'Nordic integration and settlement policies for refugees – A comparative analysis of labour market integration outcomes' (hereafter referred to as the NORDIC INTRO-report). This new study aims to provide policy-relevant knowledge by comparing refugee integration policies and labour-market integration outcomes in these three Scandinavian countries, by asking:

- Which country has the best labour-market integration outcomes for refugees – both in the shorter and the longer run, and for various subgroups?
- Do the countries differ in their use of integration measures aimed at promoting labour-market integration, and with what effect?
- Do differences in integration policies shed light on cross-country differences as regards outcomes?

The population in this study is adult refugees and family members reunited with refugees (family reunification), who have participated in the Scandinavian integration programmes. We study refugees in the age of 20–55 on the year of arrival, and who started their introduction programme between 2008 and 2019. We compare and discuss various measurements to assess 'labour-market integration': a standardized employment measure using the ILO-definition – categorizing a person as employed if he or she has earnings corresponding to at least one hour of work in a given reference week in November–, and three different earning levels, based on a calculated 'Nordic base amount'. The 'Nordic base amount' is a year- and country-specific measure which makes it possible to compare earning levels across the three countries, and we use it to measure different levels of earnings and economic independence. We also analyse enrolment in ordinary education in order to study different pathways to labour-market integration over time.

Why a follow-up study?

The previous NORDIC-INTRO report included data only up until 2016. In this updated study, we present new analyses of integration measures and results for refugees who arrived between 2008 and 2019, including those who came during the 2015 refugee crisis. As more time has passed, we are also able to analyse labour-market integration outcomes in the longer run – up to 11 years after settlement in the new country, for older cohorts.

The aim of this new report is to explore and test findings from the first NORDIC

INTRO-report through updated and extended analyses, including

1. analyses of long-term labour-market integration outcomes
2. comparing and testing of various measurements for labour-market integration outcomes, including earning levels,
3. analyses of changes in the usage of programme measures across countries and for refugees arriving before and after 2015, and
4. assessment of the long-term outcomes of selected integration measures: ordinary education, subsidized employment, and unpaid job-training.

What are the differences and similarities between the refugee populations in the Scandinavian countries?

Do the refugee populations in the Scandinavian countries differ, and has this changed after the 2015 refugee crisis? All three countries have received relatively large numbers of refugees historically, but also particularly in recent years with the 2015 refugee crisis. Still, Sweden stands out as the major receiver, in absolute numbers and relative to its own population.

The *composition* of the refugee population matters. Research has shown consistently that individual background factors affect integration outcomes. Our comparative analysis of participants in the Scandinavian integration programmes shows a rather similar composition on several relevant background variables. In all three countries there is a slight overrepresentation of male participants. Over half of the participants are married, and between 30 and 40 per cent had small children at the time of settlement. However, there are some differences concerning the distribution among age-groups, country of origin, education levels on arrival, and the grounds for being granted a residence permit.

First, Sweden has a larger share among the older age groups at settlement compared to Norway and Denmark. Second, as to country of origin, Syrians constitute a relatively larger group in Denmark than in Sweden and Norway. Third, Denmark has the greatest share of persons who have low level of education (only completed primary education), and Sweden has significantly higher share with secondary or higher level of education on arrival. Finally, Norway has fewer family reunifications than Sweden and Denmark, but a higher share of participants with UN Quota status. Thus, there are some cross-country differences in age-groups, country of origin, education level and grounds for residence permit, making important to control for these differences in subsequent analyses.

Which country has the best results for various labour-market integration outcomes?

How do participants in the Scandinavian integration programmes fare in the education and labour market? Do their paths differ as regards short- and long-term outcomes?

To get a better picture of the various paths towards labour-market integration over time, we study both employment (as defined by the ILO-measure, which imply minimum one hour of work in a reference week) and enrolment in education to gain insight on how these two may interact and explain short-term as well as long-term outcomes. Norway generally has higher employment rates after the initial years for

both men and women, but, after several years in the country, refugees in Sweden catch up with Norway on this indicator. Except for the first initial years for men, Denmark generally has lower employment levels for both men and women throughout the period analysed here. We also see clear differences for education enrolment (at minimum secondary level): Sweden and Norway have relatively high education enrolment for both men and women during the first five years (around 25 per cent). Denmark, by contrast, has very few refugees enrolled in education during the initial years (around 5 per cent), but more attend education after several years in the country, especially women.

Comparison of outcomes using higher earnings levels with the broader ILO-employment measure reveals the following. First, and logically, the proportion who achieve the various earning thresholds decreases, the higher the threshold is set. Regarding the different thresholds for male participants, the patterns between countries are rather similar, but with different absolute levels depending on the threshold. For women, however, the different thresholds for labour-market integration modify this comparative pattern. When the ILO definition is applied, Norway emerges as having higher employment rates for women than Denmark or Sweden. However, in the trajectories for the three different earning levels, the gap between Norway and Sweden almost disappears, and the patterns are very similar. This nuance implies that, when a higher threshold for defining labour market integration is applied, Norway does not outperform Sweden. Thus, including various measures to describe labour-market integration may yield a more nuanced picture. Irrespective of the definition of labour-market integration, however, both employment and earning levels are consistently lower in Denmark.

Are there cross-national differences in outcomes for different subgroups?

Are there cross-national differences in employment and earning outcomes for different subgroups in the Scandinavian countries, such as men and women, age groups and with different levels of attained education at settlement? Earlier research has found that integration policies may affect subgroups differently. Thus, examining differences between subgroups may yield important insights into the dynamics of national integration policies. Controlling for relevant background variables, we prepare estimated employment trajectories that explore whether there are cross-national differences in employment and earning outcomes for various subgroups as to gender, age and education level on arrival.

Today's Scandinavian welfare states depend on high employment levels among both men and women. One main conclusion from the previous NORDIC-INTRO report was that Norway had substantially higher employment rates for women compared to Denmark or Sweden. The report also found that although all three countries had a substantial male/female employment gap, this was substantially less pronounced in Norway than in Sweden and, particularly, in Denmark. Our updated analysis still shows sizable employment and earning gaps between men and women in all three countries. However, when we measure outcomes over a longer period (up to eleven year), the gender gaps increase in the first years after settlement but narrow somewhat after several years in the country. We also find that that the relative gender gaps increase when the threshold for labour market integration rises (higher earnings levels compared to merely being registered as employed). Comparison of the gender gaps for employment and earning between countries shows a difference

between the absolute (percentage points male levels minus female levels) and relative (male levels divided by female levels) gaps, which alters the conclusion in the previous NORDIC INTRO-report. We find that Norway and Sweden have rather similar gender gaps for employment and earnings. Because Denmark generally has lower employment levels than these two countries, its gender gap is either similar to these, or lower, when we analyse the *absolute* difference (percentage-point difference in employment rate) for Denmark compared to the other two countries. However, if we calculate the relative difference, Denmark's relative gender gap for both employment and earnings is higher during the first years after settlement, but after several years' residence, these large gaps decrease and come to a level similar to those of Norway or Sweden.

We do not find any substantial cross-national differences between age-groups. For both men and women, the two youngest groups – those aged 20 to 35 – have higher employment levels than the two older age-groups, and particularly as regards those who were over 45 years on arrival.

We do find cross-national differences when we compare refugees who have primary, secondary and tertiary education levels on arrival. Sweden and Norway show rather similar results for those with primary education on arrival. Sweden, however, outperform Norwegian employment levels for those with secondary and particularly tertiary education levels after several years in the country (this difference is greater for men than for women). Denmark has lower estimated employment levels for all groups, but the difference is less pronounced for those with secondary education levels, especially several years after settlement and when we compare higher levels of earnings.

What integration measures do refugees in Scandinavia receive during the initial years after arrival?

What types of integration measures do refugees in Scandinavia attend during their initial years after arrival? Does the Scandinavian countries differ in the types of integration measures they use? How has this developed in recent years? To answer these questions, we compare the use of three different integration measures in Scandinavian integration programmes: *ordinary education*, *unpaid job-training* and *subsidized employment*. These measures have consistently been shown to have a positive correlation with labour market outcomes. If countries differ in their use of these measures in their integration programme for refugees, that may be one plausible explanation for differing outcomes as to labour-market integration.

When we compare the use of programme measures during the first three years of the integration period, several patterns stand out. In Denmark, a very high proportion of refugees participate in job-specific measures (especially unpaid job training), but very few in education above lower secondary level. Sweden, on the other hand, stands out as having a high share of refugees who attend ordinary education – especially education at upper secondary levels or higher. Sweden also has a greater share of refugees who obtain subsidized employment in the initial years, compared to Denmark and Norway. Norway is somewhat in-between Denmark and Sweden in usage of the three above-mentioned measures but has the highest share of participants in education at the elementary levels.

Comparison of the use of measures before and after 2015 shows that the percentage of refugees participating in ordinary education during their integration

period increases in all three countries. However, in Denmark, the increase is seen only in the use of primary education. On the other hand, for Denmark we find a large increase in the use of subsidized employment and particularly unpaid job-training, whereas Norway has an increase only in the use of unpaid job-training and Sweden in the use of subsidized employment.

In brief: Denmark has had a greater focus on employment measures, and particularly unpaid job training. Norway has increased the focus on ordinary education in recent years, but the majority of refugees still attend education at lower levels. And finally, Sweden has a higher share of refugees who are enrolled in education at high school levels or higher and who get subsidized employment.

Does the use of different integration measures relate to improved outcomes?

How does the use of integration measures relate to improved labour-market integration outcomes for participants? Are there differences when we study outcomes in both the shorter and the longer run? Here, we identify participants who have received ordinary education, subsidized employment, and unpaid job training during the initial three years of the integration process and examine whether they have higher employment and earnings in the fourth and the sixth years after settlement.

For all three countries, we find the same tendency: educational measures show weak or even negative associations with employment in the short run. However, the correlation becomes stronger or significant when long-term outcomes are measured. Thus, getting ordinary education during the initial years – particularly at high school levels or higher – may have a lock-in effect in those initial years, but correlates with higher employment and earning levels in the longer run. We also find positive correlations between job-specific measures during the integration period and employment – particularly for subsidized employment. However, although subsidized employment has a substantial positive correlation with being employed in the shorter run, this correlation decreases somewhat with time.

Validation and investment in (supplementary) education in the host country

One consistent finding across all analyses in our study is the Swedish focus on higher education, from start to outcomes. Already in the descriptive statistics, we see that Sweden has extensive register information on highest attained level of education during a refugee's first year since being granted a residence permit (meaning few 'missing values'), and a higher share of participants with secondary and tertiary education levels on arrival. Although this difference in registered data may simply reflect the fact that Sweden has a higher proportion of participants who arrive with higher education levels, it could also be that Sweden has better systems for assessing and validating those 'foreign' education levels at an early stage in the integration process.

We also find that in Sweden, some 55 to 61 per cent of those with tertiary education on arrival get further education during the first three years after settlement, as against 20–30 percent in Norway and Denmark. For secondary education the differences are smaller, but Sweden still provides education measures to 15 percent-

points more participants than do Norway and Denmark. Lastly, when we combine these insights with the estimated employment trajectories for different education levels, Sweden displays better long-term employment outcomes for those with secondary and tertiary education on arrival. Overall, our analyses indicate that Sweden has developed useful practices for validating and supplementing prior education for these two groups, with a potential for cross-national learning.

Rapid versus long-term employment – an outdated contradiction?

In all three countries, goals of employment and self-sufficiency permeate the *raison d'être* of the national integration acts. However, there is a notable difference concerning their balance between getting participants into employment (of any kind) as fast as possible versus investing in qualifications during the initial years, to ensure more stable and long-term labour market integration.

We find that Denmark – concerning explicit goals for and concerning the content of its integration programme – has a strong focus on rapid employment. Norway and Sweden, however, focus more on upskilling and usage of education measures to ensure a more robust and long-term integration into the labour market

The difference in focus on rapid versus long-term employment is particularly relevant when we compare the results in this report with one of the main findings in the previous NORDIC-INTRO report. A main conclusion there, was that Denmark was better at getting male integration program participants rapidly employed in the initial years, but that Sweden and particularly Norway were better at ensuring a higher share of participant employment in the longer run. However, our updated analysis, which includes newer cohorts, does not show that Denmark has higher employment rates in the initial years; Denmark also has lower employment rates in the longer run.

The overall picture for the situations as regards Denmark, Norway, and Sweden, with only 35–40 percent of male and 15–20 percent of female refugees reaching median-level income after more than 10 years' residence, indicates that these countries have not found a golden way to solve the problem of labour market integration. However, our comparative analyses have indicated several important suggestions for policy recommendations. We find that the focus on rapid employment neither serves short- nor long-term goals of labour-market integration. Further, investing in validation of previous education and work experience, upskilling and (supplementary) education is both time- and resource-consuming, and may have short-term lock-in effects which may delay labour-market integration and self-sufficiency. On the other hand, our overall findings indicate that such investments may prove advantageous in the longer run, ensuring that a larger share of newcomers manage to establish themselves in the Scandinavian labour markets.

1. Introduction

In 2020, the UN recorded a record-high number of 26 million refugees¹ in the world (not including internally displaced persons) (World Data Bank, 2021). In 2015–2016, 6.8 million people fled the war in Syria. In 2022, the Russian invasion of Ukraine triggered the fastest-growing refugee crisis in Europe since the Second World War (UNHCR, 2022). Once again, refugee settlement and integration policies are at the top of the political agenda. However, how refugees and family members reunited with refugees are accommodated and welcomed in their new host countries varies greatly, with differing national and/or local policies and organizational solutions (Goodman, 2014; Hernes, 2020; Joppke, 2017).

All the Scandinavian countries are comprehensive welfare states which depend on high employment levels among both men and women. Successful integration of newcomers has been seen as a precondition for the survival of today's welfare states in Western Europe, making the design and implementation of appropriate policies for promoting integration of crucial importance (Andersson Joona, Lanninger, & Sundström, 2016; Djuve, 2016; NOU 2017: 2, 2017). As refugees are forced migrants, they generally do not speak the language of their new host country, and often lack relevant work experience on arrival, which may hamper their employment chances (Bevelander & Pendakur, 2014). Additionally, the Scandinavian countries have relatively few low-skilled jobs to offer (Calmfors & Gassen, 2019), resulting in a severe *qualification* gap between refugees and labour-market needs.

Pyrhönen et al. (2017) emphasize that comparative analyses (as opposed to single-country studies) may help to reveal what actually works when it comes to migrant integration. The present report is a follow-up study of 'Nordic integration and settlement policies for refugees – A comparative analysis of labour market integration outcomes' (Hernes et al., 2019) (hereafter referred to as the NORDIC-INTRO report, as 'NORDIC-INTRO' was the name of the project financed by the Nordic Council of Ministers). As in the previous report, we aim at providing policy-relevant knowledge through comparative analyses of refugee labour-market integration policies and outcomes in Scandinavia, asking:

- Which Scandinavian country has the best labour-market integration outcomes for refugees – in the shorter and the longer term?
- Do the Scandinavian countries apply different integration measures to promote labour-market integration, and with what effects?
- Can differences in integration policies shed light on cross-country differences as regards outcomes?

Through longitudinal comparative analyses, this study examines the labour-market integration of refugees in Denmark, Norway, and Sweden, searching for explanations of cross-national differences by combining statistical analyses with in-depth analyses of national policies. As the previous NORDIC-INTRO report included data only until 2016, in this updated study we include new analyses of integration measures and results for refugees who arrived during the 2015 refugee crisis. As more time has passed, we are also able to analyse labour-market integration

1. Refugees are people who have fled war, violence, conflict or persecution and have crossed an international border to find safety in another country.

outcomes in the longer run – up to 11 years after settlement in the new country (for older cohorts).

With their comprehensive integration programmes for refugees (Karlsdóttir et al., 2017), the Scandinavian countries stand as suitable cases for learning, from both their successes and their failures. A comparative Scandinavian analysis also has unique methodological advantages. First, Denmark, Norway and Sweden have strong political, social, cultural, and economic similarities, making it possible to hold many potentially confounding factors relatively stable. Second, the unique Scandinavian data registers make it possible to control statistically for important intervening factors that may affect policy outcomes. All three countries produce official statistics of high quality, linking population and administrative registers (Røed & Raaum, 2003). These data make it possible to conduct comparative analyses with harmonize populations, data, and operationalization of variables, using longitudinal individual-level data that enable fine-grained analyses over time (Hernes, Arendt, Andersson Joona & Tronstad, 2020).

The Scandinavian countries have differed greatly in their immigration policies and as regards how many refugees they have received, particularly in recent years (Calmfors & Gassen, 2019; Hernes, 2018; Joyce, 2019). On the other hand, viewed in a European comparative perspective, Denmark, Norway, and Sweden have all developed rather similar, comprehensive, integration programmes for refugees. These programmes are aimed at helping newly arrived refugees to get relevant qualifications and find employment, and, it is hoped, achieve economic independence. The programmes, which are meant to be full-time in the initial year(s), consist of three main components: language training, civic studies, and educational and/or labour-market measures. Entitlement to financial assistance and social benefits is linked to programme participation (Hernes & Tronstad, 2014). Although the Scandinavian integration programmes share many similarities, they also differ in certain areas, such as the types of measures participants get in the initial years, and efforts directed towards various subgroups. In addition, policy implementation may differ, with countries emphasizing different goals and measures – which makes them relevant cases for investigating the outcomes of specific policies and programme measures (Hernes, Arendt, Andersson Joona & Tronstad, 2019).

1.1 Research gaps: exploring a broader definition of labour-market integration, recent developments, and long-term outcomes

Comparative studies connecting integration policies with integration outcomes are relatively rare (although with a few good exceptions, see Brell, Dustmann, & Preston, 2020; Ersanilli & Koopmans, 2011; Fasani, Frattini, & Minale, 2018; Goodman & Wright, 2015; Jakobsen, Korpi, & Lorentzen, 2019). One notable similarity among these comparative studies is that they do not find that different integration policies have a substantial effect on integration outcomes. However, these studies try to connect changes based on major reforms that encompass myriad policy changes simultaneously, or they classify civic integration regimes more generally as either 'restrictive' or 'permissive'. De-composing comparative analyses to examine how

specific integration measures may affect integration with residence time, as well as differences between various subgroups, may reveal important insights into the dynamics of national integration policies (Hernes et al., 2020).

The first NORDIC-INTRO report took an important first step by conducting harmonized longitudinal analyses of the Scandinavian countries' educational and employment results for participants in the integration programs, as most previous studies had involved non-comparable national analyses, or comparative analyses based on cross-sectional data. With this new report we aim to explore further some pertinent findings and conclusions from the first report, and find whether these conclusions hold in updated analyses that include 1) a more comprehensive measure of labour market integration by also testing different levels of earnings from work, 2) a longer timeframe for measuring outcomes of both employment and earnings, and 3) an analysis of changes in the usage of programme measures for cohorts after 2015, and long-term outcomes of selected measures (regular education, subsidized employment and unpaid job-training).

Analyses of various earning levels as supplementary outcomes

The first NORDIC-INTRO report measured the dependent variable 'labour market integration' by using the well-established ILO definition for measuring employment, which is operationalized as having minimum of one hour of registered paid work in a reference week in November. As discussed in the first report, this definition can be criticized for being both a generous and a restrictive definition of connection to the labour market. Still, as Ruist (2017) argues, the long-term goal of the Scandinavian integration programmes is self-sufficiency, so policy evaluations should operate with a higher assessment criterion than the ILO standard. The previous report found sizable differences among countries regarding when and what proportion of refugees were in work x number of years after settlement – but do these cross-national differences hold when a higher threshold is used for measuring labour market integration? This is an important supplementary analysis that may serve as a robust test for previous conclusions or offer a more nuanced picture of refugees' work participation across countries. In this report, we conduct analysis using the ILO definition, but we also test different earning levels as a dependent variable, to see whether these analyses alter, nuance, or support earlier conclusions.

Analyses of long-term outcomes for employment, education, and earnings

The previous report analysed outcomes up to eight years after the refugee had started the integration programme. Other national (but not directly comparable) analyses with a longer time perspective have shown that refugees' labour market participation in the longer term differs greatly in the three Scandinavian countries. For example, Bratsberg, Raam, and Røed (2017) find that the labour market participation in Sweden increases steadily, whereas it actually decreases in Norway after seven to ten years. In this report, we test and compare various outcomes up to eleven years after settlement (using data from 2008 to 2019). We present descriptive statistics of different outcomes over time and conduct analyses of estimated trajectories for outcomes for different subgroups of the population, separated by gender, education level on arrival and different age groups.

Comparing changes in usage of programme measures for newer cohorts, and testing long-term effects of selected programme measures

Earlier research has shown that persons who get certain employment and/or education measures as part of the integration programme have a higher probability of transition to employment (Andersson Joona, 2019; Arendt Jacob, 2018; Arendt, Bolvig, Kolodziejczyk, & Petersen, 2016; Arendt & Pozzoli, 2013; Bratsberg et al., 2017; Clausen, Heinesen, Hummelgaard, Husted, & Rosholm, 2009). In this report, we conduct two updated and expanded analyses of programme measures. First, the previous report, with data until 2016, included the first direct comparison of usage of different programme measures and how this differed among various subgroups (gender, age, and education level) in Denmark, Norway, and Sweden. After the refugee crisis in 2015/2016, all three countries experienced a large increase in the number of refugees, and thereby participants in the integration programmes. In this report, we compare what type of programme measures were offered to those who arrived before and after 2015 during their first three years after settlement, to see whether the Scandinavian countries have made changes in the content of their integration programmes since 2015. Second, in the previous report we analysed the correlation between programme measure usage and employment outcomes by the fourth year after settlement. In this report we expand the analysis to test outcomes of programme measures by the sixth year, so as to compare both short- and long-term effects for selected programme measures. Additionally, we include analyses of whether the usage of these measures correlates with higher levels of earnings over time.

1.2 Structure of the report

In *chapter 2*, we describe the policy development and status quo of the integration programmes in each country.

In *chapter 3*, we present the research design and methods of this report.

In *chapter 4*, we describe the background characteristics of the refugee populations in each of the three Scandinavian countries. We compare changes in the composition of the population before and after the 2015 refugee crisis and analyse cross-national differences.

In *chapter 5*, we present a descriptive analysis on how refugees have fared in the education and labour markets.

In *chapter 6*, we give an overview of the usage of the various programme measures in each country before and after 2015 and discusses cross-national differences. Further, we present regression analyses of how the programme measures affect employment and earning outcomes in each country in the fourth and sixth years after settlement and compare them cross-nationally.

In *chapter 7*, we compare estimated employment and earning trajectories in the three countries. We explore if there are cross-national differences between various subgroups of the population, regarding gender, age, and education levels on arrival.

In *chapter 8*, we synthesize the findings from the analyses across chapters. We

discuss whether the updated and supplementary analyses in this report support, modify, or alter findings from the previous NORIDIC-INTRO report and other relevant research. Further, we consider how differences in Scandinavian integration policies may shed light on cross-country differences concerning usage of programme measures and labour-market integration outcomes.

2. Scandinavian integration programmes

What are the goals and policies of the Scandinavian integration programmes, and (how) have these changed in recent years? The integration programmes of all three countries are comprehensive and share many similarities when compared to other countries, but what relevant differences are there?

The Scandinavian integration programmes differ in certain areas; moreover, national policies may be implemented differently across countries, with differing emphasis on certain goals and measures. Differences in the application and implementation of programme measures and in policies that target (directly or indirectly) specific subgroups may lead to different labour-market outcomes (Hernes et al., 2019).

We begin with a short introduction to some characteristics of Scandinavian labour-markets more generally, to contextualize the settings in which the integration policies are intended to operate. Next, we describe the development of integration programmes in each country separately. Here we build on the policy analysis from Hernes et al. (2019), updated to include policy changes made after 2016. Lastly, we summarize some of the main similarities and differences as regards integration programmes in Denmark, Norway, and Sweden.

2.1 Scandinavian labour markets

The extensive welfare states in Scandinavia, with access to free education and a broad array of public services together with public transfers, depend on high labour participation (Pareliussen et al., 2018). Compared to other OECD countries, the Scandinavian countries have very similar labour markets, with high employment rates for both men and women. Numbers from Nordic Statistics show that employment rates for males in the three countries are around 78 per cent, varying between 72 and 75 percent for females. These levels are higher than the overall EU average of 72 per cent employment among men and 62 per cent among females (Nordic Statistics, 2022).

The relatively high participation rate of females in the Scandinavian countries (and the Nordic countries more generally) also result in relatively low gender employment gaps, compared to the EU average: indeed, the Scandinavian labour markets are the most gender-equal in the OECD (OECD 2018). Whereas the employment gender gap is between 4 and 5 per cent in Sweden and Norway, and just below 8 per cent in Denmark, the EU average is 14 per cent (Nordic Statistics, 2022).

There are, of course, also cross labour-market differences among the three countries as well. For example, Denmark lags behind Norway and Sweden in employment gaps for the low-educated; Norway lags behind as regards average weekly working hours, whereas Sweden lags behind as regards median earnings for full-time employees (OECD 2018). However, none of the levels reported from the three Scandinavian

countries exceed average OECD levels. Thus, comparatively speaking, Scandinavian labour markets are rather similar, characterized by high labour-market participation among both men and women.

2.2 Denmark

In the 1970s and 1980s, when refugees first started coming to Denmark, an NGO, the Danish Refugee Council (DRC), was given responsibility for integrative measures and contact for the first 24 months after arrival (18 months, from 1980), for which the DRC was funded and reimbursed by the government. This programme included language training and civic orientation, but no labour-market activities to speak of. In the 1990s, the slogan 'rights and obligations' guided new reforms in general welfare policies, reforms that sharpened the obligations for the unemployed, introducing individual activation plans and restrictions on the entitlement to social benefits. These principles also characterized the process that led up to the new national integration policy, the 1999 Integration Act, and the idea of 'integration through employment' steered the legislative process (Petersen & Jønsson, 2010).

With the 1999 Integration Act, responsibility for activities aimed at the integration of refugees were transferred from the DRC to local municipalities. The integration programme for refugees has involved language courses, a civic course and employment measures. Financial sanctions could be imposed on participants receiving social assistance if they or their spouses did not participate in the programme or declined offers of employment. All immigrants are required to participate in the measures that are offered in order to acquire a permanent residence permit. Although the Act required 30 weekly hours of participation (increased to 37 from 2004; later replaced by a requirement of 15 hours of participation in job training from 2016), the municipalities retain considerable autonomy with respect to the actual content of the programme. Various details have been changed since 1999, but mainly of an administrative / financial character regulating municipal implementation and obligations² or changes for immigrant groups other than refugees.

In response to the refugee crisis, the government revised the scope, length, and content of the existing integration programme in July 2016. The new Integration Act included easing administrative obstacles for municipalities and strengthening the central subsidies to the municipalities, but the main change was an intensified focus on rapid employment and self-sufficiency. The initial programme period was reduced from three years to one year, with the possibility of extension up to five years if the participant had not yet obtained employment. In response to findings that most refugees were undertaking language training prior to any employment measures – and that the lengthy language courses were delaying entry to the labour market – the new legislation explicitly prioritized job training. Through work practice or subsidized employment, the aim was to get participants employed within the one-year programme period (Rambøll Management Consulting, 2017).

Under the new law, all participants in the target group were to be evaluated as 'job-ready' (*jobparat*) by default, as opposed to 'activity ready' (*aktivitetsparat*). A person is 'job-ready' if he/she is considered to be able to take on ordinary work which will enable that person to support her/himself within three months. Conversely, a

2. For example, the new integration plans in 2013 and obligatory health checks in 2015.

person is 'activity-ready' if that person is not considered to be able to undertake ordinary work that would make themselves-supporting within three months. It was emphasized that lack of language skills or educational qualifications that could make it difficult to find a job – and could imply that the person might be offered only certain unskilled jobs – was not sufficient for being classified as an 'activity-ready' person. Persons classified as 'job-ready' should get work-practice or subsidized employment within one month after settlement in a municipality. Employment measures were to constitute minimum 15 hours a week, and there should be maximum six weeks between each employment measure. The law still opens for qualification and educational measures as part of the programme if such measures would increase the participant's chances for labour-market integration (particularly for persons classified as 'activity-ready'). However, the law explicitly states that a condition for providing long-term upskilling is that there should be no reasonable prospect for the participant to obtain ordinary employment during the regular programme period. Consequently, measures other than job-related activities should be considered only if it is deemed that the participant could not get (any kind of) job within one year. An exception is for participants between the age of 18 and 25 who lack higher education (*erhvervskompetancegivende uddannelse*). They are required to take education, but only if it is considered likely that they will be able to complete such an education on normal terms (Danish Integration Act).

The Danish government also introduced a new integration measure in 2016, the 'integration basic education' (*integrationsgrunduddannelsen, IGU*). This combines employment and qualification in a two-year 'programme', where the participant may work for an employer at a reduced salary. The employment relationship is arranged directly between employer and participant, with minimum involvement from local public agencies; however, the participant receives an education benefit during the weeks of qualification measures (Skjelbostad & Hernes, 2021).

In 2019, the Danish government changed the name of the integration programme for refugees. It became the 'self-sufficiency and repatriation program', and the social benefit received for participation was re-named the 'self-sufficiency and repatriation benefit'. For persons who were family reunified with Danish citizens, the programme is still called the integration programme. The government explained:

*(...) there must be a clear framework and a reconciliation of expectations from day one that the [refugees'] stay is temporary, and that the efforts aimed at jobs and self-sufficiency do not change the fact that one must return to his home country when the need for protection ceases.*³

2.3 Norway

Integration of immigrants has always been a local responsibility in Norway. Until the implementation of the 2004 Introduction Act, integration measures for refugees were mainly a local concern, and integration measures, organization and financial benefits to refugees varied widely. Generally, a few hours a week of Norwegian courses were provided. Some municipalities offered employment training, but the quality was questionable, and such measures were the exception rather than the rule (Brochmann & Hagelund, 2010a). In this initial phase when refugees first started arriving to Norway, offering integration measures was voluntary for municipalities, and participation was voluntary for the target group.

3. <https://uim.dk/filer/integration/orienteringsskrivelse-l140.pdf>, p. 3

In 2003, the Introduction Act was passed with support from all political parties⁴. The new Act changed the voluntary principle in two ways: it now became obligatory for refugees to participate in integration programmes, and obligatory for municipalities to provide such programmes (Djuve, 2011). Although the Introduction Act was a step towards greater central regulation of refugee integration, the new regulations were fairly general in character. The municipalities were obliged to provide such programmes, but they retained considerable autonomy regarding programme implementation and content (Tronstad & Hernes, 2017). According to the Introduction Act, such programmes should include Norwegian language and civics training, and measures to enable further education or attachment to the labour market – but the timing or duration of such is not specified. Each participant receives a set introduction benefit regardless of the household's financial situation: this was a deliberate political choice aimed at including women in the programme (Hernes & Tronstad, 2014). The Norwegian integration programme has not undergone any major legislative changes relevant for our analysis since it was introduced in 2004.

During the refugee crisis, Norway introduced a fast track (*hurtigsporet*), intended as brief work-oriented programme that integrate Norwegian language training with other qualifying measures. The target group is refugees who can manage without long, prior training courses, but mainly need to learn the language in order to get employed. In 2018, the Norwegian government launched a new integration strategy, where one key message was that the integration programme must result in formal education and qualifications, to ensure a long-term labour-market establishment. Based on this strategy, in 2021, Norway implemented a new Integration Act, which replaced the previous Introduction Act. The new Integration Act introduced differentiated programme time for participants of differing ages and educational backgrounds – the latter ranging from 3 months up to 4 years. The Act intensified the focus on formal qualification and education, and delegated explicit responsibilities to the regional level, made responsible for providing upper secondary education. However, these recent changes from 2021 are beyond the scope of the data analysis in this report, where we analyse outcomes until 2019.

2.4 Sweden

Initially, the idea that immigrants should be included in the general national welfare system and employment policies, in contrast to creating special policies for them as a specific group, prevailed in Sweden. The first steps towards specific policies came in 1985, when the municipalities were given greater responsibility for refugees, especially with regard to language and civic training (Borevi, 2010).

In the early 1990s, the financial crisis and the Balkan crisis brought a new focus on getting refugees into the workforce. The 1994 Act came as a response to all these challenges, and the first national steps were taken towards an integration programme. The municipalities were given a fixed grant for each participating refugee; the only requirement was that the municipality – in cooperation with the participant – would prepare an individual introduction plan. The municipalities could

4. The Introduction Act consists of two parts: the integration programme, exclusively for refugees and reunited refugee families; and an amendment that (added in 2005) that gave employment and family reunited with Nordic citizens the right and duty to attend 300 hours of language and civics training (Tronstad & Hernes, 2017, p. 125). In this analysis, we focus solely on the former, the integration programme for refugees.

also choose to pay an introduction benefit instead of social benefits, in order to link participation more clearly with financial support, including the possibility of financial sanctions in case of non-participation (Borevi, 2010). Nevertheless, the voluntary aspect characterized national policies: it was not only voluntary for refugees to participate, but also voluntary for municipalities to offer such programmes and to pay participants either an introduction benefit or social assistance (based on household income) (Andersson Joona et al., 2016). National guidelines were few and vague, providing the municipalities with considerable autonomy and resulting in wide variation. Moreover, studies revealed that few municipalities actually implemented these voluntary measures (Borevi, 2010).

The voluntary provision of municipal integration programmes continued until the Establishment Act was introduced in December 2010. The aim of the reform was to facilitate and speed up integration into the labour market and society, and to reduce the local variation in integration measures available (Andersson Joona et al., 2016, p. 5). The reform transferred responsibility for the integration of refugees from the municipalities to a central agency, the Public Employment Service (Arbetsförmedlingen). All refugees were to register with Arbetsförmedlingen for establishment talks, plans, coaching and introduction benefits (etableringsersättning). The establishment plan was to cover maximum 24 months; it included language and civic training (still provided by the municipalities) as well as measures to prepare for workforce participation (performed by Arbetsförmedlingen or other agents). In particular, the reform aimed at promoting the integration of women, as refugee women had been found to participate less in labour-market programmes and to have lower employment rates than male refugees (Andersson Joona & Nekby, 2012). The Establishment Act made financial sanctions against non-participation centrally regulated rather than a municipal option. Additionally, the introduction benefit was design as an individual benefit – similar to the Norwegian model – independent of the household's overall economy, in order to incentivize both men and women to participate in the programme (Borevi, 2010). Programme participation is a legal right for the target group, but not an obligation (as in Norway and Denmark). However, financial sanctions may be imposed on the target group in case of non-participation – weakening the voluntary aspect, as most persons in the target group are dependent on financial assistance (Hernes & Trondstad, 2014).

In 2015, through a tripartite agreement, the Swedish Government introduced a new fast track (snabbspåret), which aimed to build on the refugees' prior qualifications. The target group was newly arrived refugees who already had an education or experience from specific industries in demand in the Swedish labour market. By building on the refugees' previous qualifications, the aim was that participants would not only get a job, but a relevant job. Today, the fast-track involves some 40 professions within 14 industries (Arbetsförmedlingen, 2022).

In 2018, the Establishment Act was revised. Based on experiences from initial implementation, the 2010 act was criticized for being rigid, too detailed, and inefficient, particularly as regards Arbetsförmedlingen, which had been tasked with implementing the programme. Legal changes were made to make the legislation more flexible and similar to how Arbetsförmedlingen's responsibilities towards other unemployed target groups were regulated. For example, these regulatory adjustments gave Arbetsförmedlingen the possibility to impose sanctions on refugees for non-participation in the integration program, similarly to how other unemployed persons may be financially sanctioned for non-participation in other

employment programmes. Another important adjustment was that Arbetsförmedlingen could expand the length of the individual plans beyond the 24 months of the establishment programme and residence permit, based on the individual immigrant's needs.

The changes in 2018 also strengthened the focus on education and qualification. Compulsory education was introduced as a new measure in the integration programme for participants who had lower education levels on arrival. Such persons – if they were considered unable to get employed after a two-year programme – could be required to take further education, in order to receive financial assistance. The aim here was to strengthen and improve immigrants' chances of obtaining the high qualifications demanded on the Swedish labour market.

2.5 Summarizing comparison

As noted, compared to other EU and OECD countries, the Scandinavian countries have very similar labour markets, with high employment rates for both men and women. The relatively high employment levels for women also result in relatively low gender employment gaps, making the Nordic labour markets the most gender-equal in the EU and OECD. Thus, comparatively speaking, the overall picture is that Scandinavian labour markets are rather similar, characterized by high labour-market participation among both men and women.

The policies regulating Scandinavian integration programmes include many of the same main goals and measures, but some relevant developments in recent years are worth noting.

First, goals of employment and self-sufficiency permeates the Scandinavian integration acts. However, there is a notable difference concerning their balance between getting participants (any kind of) employment as fast as possible versus investing in qualifications the initial years to ensure a more stable and long-term labour market integration. In Denmark, it is explicitly highlighted in the preamble to the Integration Act that newly arrived immigrants are to become self-sufficient through employment 'as soon as possible'. Furthermore, qualification and different education measures should be used only if (rapid) employment is not deemed plausible for the participant in question. The law also emphasizes that lack of language skills or educational qualifications – or that the person may only uphold unskilled jobs – are inadequate grounds for not prioritizing employment measures aimed at rapid employment. In Norway, the 2018 integration strategy – resulting in the new Integration Act implemented in January 2021 – emphasizes that that the integration programme should ensure 'formal qualifications and a stable labour-market attachment', and introduces completed or partially completed education at primary, secondary, and tertiary levels as possible programme objectives. Sweden has introduced some new initiatives focus on rapid employment (such as the fast track and intensive year-program). However, all share the focus on getting participants into relevant jobs, particularly if they have prior qualifications that could be of use in the Swedish labour market. In addition, Sweden's compulsory education initiative aimed at strengthening and improving the immigrant's chances of meeting labour-market demands, as most jobs in Sweden require education/

experience. Thus, there are differences in the three countries' focus on rapid and long-term employment (Hernes et al. 2020).

Second, and as mentioned in the first NORDIC-INTRO report, the Scandinavian countries differ as to whether the financial benefit received for programme participation is an individual benefit or is conditional on the household's total income. Danish participants receive means-tested social assistance if their families are unable to support themselves. This mean-tested integration benefit (or self-sufficiency and repatriation benefit, as it is now called) is also lower than the social benefits available to the majority population. In contrast, Norway and Sweden provide a special integration benefit for each participant, regardless of the financial situation of the family as a whole. This individual benefit has been explicitly justified and promoted as a measure aimed at increasing the participation of women in the programme (Hernes & Tronstad, 2014, p. 85).

Third, the three countries differ concerning the programme period. Before 2016, the main policy was a two-year programme in Norway and Sweden, and up to three years in Denmark. With the 2016 revision of Denmark's integration act, the new standard would be a one-year programme, aimed at getting the participant employed within one year. However, the law allows expanding the programme up to five years if the participant has not obtained a job or become economically self-sufficient. Norway has taken a different approach. The Norwegian Integration Act, implemented in 2021, regulates differentiated programme periods based on the age, prior education levels and end objectives for each individual. For example, persons who arrive with education at upper secondary level or higher are to be offered programmes of between three months and maximum one year. Persons aged 18–25 years, with an end objective of completing upper secondary education, could have programmes lasting up to four years. For participants other than the two above-mentioned groups, the end objective of the programme determines the length of the programme. Normally, if the goal is employment, the programme should last between three months and two years, but with the possibility of extending it up to three years. Generally, participants who aim to complete their upper secondary education may have programmes lasting up to four years. In Sweden, earlier regulations concerning the programme period were rigid, and it was difficult for case workers at Arbetsförmedlingen to plan for a longer perspective than two years. The 2018 revision still states that the programme should correspond to a two-year (24 months) full-time programme; however, it also opens up for individual action plans with a longer timeframe than the specified 24 months.

3. Research design: data and methods

Scandinavia has many advantages that enable comparative statistical analyses. The national population registers linked with various administrative registers allow for detailed longitudinal analysis, and the concepts, definitions and classifications used in the three countries are relatively similar (Bevelander et al., 2013). This report builds on the same research design and methods as its predecessor, 'Nordic integration policies for refugees – a comparative analysis of qualification and labour market integration outcomes' (Hernes et al., 2019).

3.1 Target population for integration programmes

The target group of the Scandinavian integration programmes are adult refugees and family members reunited with refugees: they constitute the population of our study. We restrict the population to persons who have actually participated in an integration programme and start our analysis from the year in which the individual was settled in a municipality (as the local integration programme should start shortly after this). We analyse cohorts who settled in a municipality and started their integration programme between 2008 and 2019.

Although the various Scandinavian integration acts are aimed at basically the same population, there are some differences (see Hernes and Trondstad, 2014). First, the Norwegian and Swedish integration programmes target only refugees and family members reunited with other refugees. The Danish integration programme target not only the groups mentioned above, but also persons reunited with Danish citizens and other immigrants. To ensure comparable populations, we exclude these latter groups.

Second, in Norway, only persons who are reunited with refugees who have lived in Norway for less than five years are entitled to participate in an integration programme. In Sweden, the same cut-off point had been two years; this was extended to six years in 2013 (Arbetsförmedlingen, 2017). In Denmark, because the legislation does not distinguish between family members reunited with refugees and other citizens, there is no limit as to when members of the former category have the right and obligation to participate in integration programmes. Given these differences, the study population in each country will differ as regards family reunifications that are included, however, we do not believe that these differences will have a significant impact on the results. As the purpose of this analysis is to study the consequences of participating in an integration programme and the associated measures, it is relevant to include only those persons who are part of the target group in each country.

Third, the three countries differ as to which age-groups the integration programme is meant to cover. The Danish programme includes persons from the age of 18, with no specified upper limit. The Norwegian programme includes persons aged 18–55; and the Swedish programme, persons aged 20 (18)–65. To make the analyses and

target groups comparable, we include only participants aged 20–55 at the time of settlement in a municipality.

3.2 Data sources

Data on Danish participants

We have obtained data on participants in the integration programme in Denmark from several sources. Administrative registry data on employment, earnings, education, and socio-demographic characteristics from Statistics Denmark have been merged with data on residence permits from the Danish Immigration Services and on activity in the integration programme from the Danish Agency for Labour Market and Recruitment. We include only immigrants who have been granted a residence permit as a refugee, or who are family members reunited with a refugee. The 'year of settlement' is defined as the year the person was granted his/her first residence permit as a refugee, or the year he/she was first settled in the host municipality. If these two dates are not in the same year, the latest year of the two is applied. A 'participant' in the integration programme is defined as a refugee who receives welfare assistance within the first three years after settlement.⁵

Data on Norwegian participants

Data on participants in the integration programme in Norway are provided by Statistics Norway. Statistics Norway has a data register with statistics on integration programme participants, which is used to identify the entire population. Until 2016, statistics were based on local authorities' annual submissions of electronic forms and file extractions in relation to participants registered on KOSTRA form 11B. From 2017, statistics on participants in the integration programme have been based on data from the National Introduction Register (NIR) of the Directorate of Integration and Diversity (IMDi)⁶. The register includes information about gender, age, marital status,⁷ and programme measures they have participated in during the reference year. Participants who have been employed in private or public companies as part of the integration programme are categorized as being in 'subsidized employment'. The register also includes a start date for the integration programme, which is used to identify the year of settlement in a municipality for each participant. The data are then synthesized with the population statistics as of 31 December in the reporting year. We include statistics from population, earning, employment and education registers from Statistics Norway.

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5. This differs from the definition applied by Statistics Denmark, which has been adopted by the Ministry for Immigrants and Integration. Statistics Denmark defines a 'participant' solely on the basis of the type of residence permit. The Danish Act on Integration distinguishes between immigrants receiving welfare benefits and those who do not, and we focus on the former, who are eligible for employment support. Welfare assistance is *kontanthjælp* and includes *uddannelseshjælp* (since 2014) and *integrationsydelse* since 2015.
 6. <https://www.ssb.no/en/utdanning/voksenopplaering/statistikk/introduksjonsordningen-for-nyankomne-innvandrer>
 7. Marital status is only included in the introduction data until 2016. From 2017, we get marital status from the population statistics.

Data on Swedish participants

For the Swedish sample we use data from the database STATIV, which is administered by Statistics Sweden. Our sample includes all refugees and family migrants who settled in a municipality in the period 2008–2019. The population included in our analysis consists of those who have participated in integration programmes at some point during their first three years in Sweden. Due to changes following the December 2010 reform, the definition of 'participants' differs slightly between the period 2008–2010 and 2011–2019. Prior to December 2010, local governments were responsible for the integration programmes, but there was no central system for registering who participated in the programmes or in which type of activities. For this period, we rely on information on the type of benefits received. Those who received either an integration benefit (*introduktionsersättning*) or social assistance and integration benefit (*ekonomiskt bistånd och introduktionsersättning*) are defined as having participated in an integration programme. From 2011, the integration programme arranged by the municipalities was replaced by the 'establishment programme', responsibility for which was transferred to PES – the Swedish Public Employment Service (Arbetsförmedlingen). STATIV includes detailed register information from the PES about participation in the programme – for example, which activities refugees have participated in, and during which period. The data also include information on age, gender, marital status, number of children, place of residence and country of birth, as well as employment and educational background.

3.3 Integration outcomes of interest: employment, education enrolment and earnings

A chief aim of Scandinavian integration programmes is to help participants to get employment and become self-sufficient. However, both employment and enrolment in upper secondary and tertiary education have been considered criteria for (at least short-term) success. In this report, we test and compare various outcome measures for employment, earnings, and enrolment in higher education. In the previous report we studied only employment and enrolment in education; in this report, we include various levels of earning as well.

ILO employment is defined as having had labour earnings corresponding to one hour of work in a given week in November. This definition follows the guidelines of the International Labour Organization (ILO) and is a well-established measure of employment. The ILO employment measure is a *broad employment definition*.

Enrolled in education is defined as being enrolled in education in October at the level of ISCED 3 or higher – levels similar to high school/upper secondary and tertiary education in most OECD countries.

ILO employment and/or education are defined as referring to a person who is either employed and/or enrolled in education according to the definitions above. Some individuals are both employed and enrolled in education at the same time. For example, those enrolled in vocational education programmes will often be registered as both 'being employed' and 'in education'. In analyses where employment and

education are presented separately, these persons could be represented in both categories. This means that we cannot summarize outcomes for 'employed' and 'enrolled in education' to get the total number of those who are 'employed and/or enrolled in education', as the same individual might be represented in both categories.

To compare *earning levels* across countries with differing salary levels and living costs, we calculate the *Nordic base amount (NBA)* for each year in each country (see Jakobsen et al., 2019). The NBA is set to 25 per cent of median gross annual earnings in each country and year. We test different limits of the earning threshold at 1.5-, 2.5- and 3.5-times NBA, and measure the share of participants who have annual earnings from work or self-employment above the various earning thresholds. To exemplify, in 2019, the different thresholds would equal to:

Denmark:

- NBA 1,5 = 127 000 DKK
- NBA 2,5 = 211 000 DKK
- NBA 3,5 = 296 000 DKK

Norway:

- NBA 1,5 = 174 000 NOK
- NBA 2,5 = 290 000 NOK
- NBA 3,5 = 406 000 NOK

Sweden

- NBA 1,5 = 128 000 SEK
- NBA 2,5 = 212 000 SEK
- NBA 3,5 = 298 000 SEK

In earlier studies, a 3.5 NBA has been defined as a being 'equal to the annual labour earnings obtained from full-time continuous employment at the minimum wages established in collective bargaining agreements in, for instance, the hotel and restaurant sector' (Jakobsen et al. 2019). However, lower levels of earnings may be enough for self-sufficiency, and it is relevant to see whether the three countries have different outcomes over time when a different threshold is applied.

The maximum length of Scandinavian integration programmes varies – and has changed during the period under analysis here. Thus, measuring outcomes after programme end is not suitable for a cross-country comparison, as that could entail different lengths of time since settlement. Although the maximum length of the programmes varies, all three countries have the same goal of a transition to employment or education enrolment, making it more relevant to examine outcomes *x* years after settlement, to study both short- and long-term outcomes. In all three countries we have data from 2008 until 2019 on employment, earnings, and education enrolment, so we can document the trajectories up to 11 years after settlement in a municipality.

3.4 Factors affecting integration

Individual characteristics

Our study both analyses and controls for individual characteristics. These variables are operationalized accordingly:

- Cohort: Individual classified into the cohort based on the year the individual is settled in a municipality, or the year of the start date of the integration programme.
- Gender
- Age-groups: 20–25 years, 26–35 years, 36–45 years and 46–55 years at the time of settlement.
- Married: Individuals who were married at the time of settlement (Yes/No).
- Children <=6 years old: Persons with children under the age of six at the time of settlement (Yes/No).
- Country of birth: The variable distinguishes among the six countries that have supplied the majority of the participants in this three-country study: Afghanistan, Eritrea, Iran, Iraq, Somalia, and Syria. Individuals from other countries are included under 'Other countries'.
- Education level on arrival: Primary education (ISCED 0–2): no formal schooling, or primary or lower secondary school as highest completed level of education. Secondary education (ISCED 3–4): level equal to upper secondary school and post-secondary non-tertiary education, such as vocational education. Tertiary education (ISCED 5–8): university/college degrees at bachelor, masters, or doctoral level.
- Reason for being granted a residence permit: convention, subsidiary protection, UN quota refugee, family reunification, other.

Structural variables for the settlement municipality

The three Scandinavian countries define 'centrality' and 'rurality' in slightly different ways and operate with different numbers of categories. Population density and distance or accessibility to urban centres are the two most common criteria, often supplemented with various socio-economic criteria. For comparative analysis, we distinguish two categories regarding 'centrality': metropolitan area, and non-metropolitan area.

Earlier studies also show that local unemployment rate significantly affect how quickly refugees find jobs (Bevelander and Lundh 2007; Damm and Rosholm 2010). As a measure of local demand for labour as well as a way to account for the business cycle during the period analysed, we use the unemployment rate in the municipality where the refugee resides in the given year as the local unemployment rate.

Programme measures

In their data registers, the three countries use different categories to classify programme measures, making it difficult to create comparable categories across countries. However, there are three categories which are similar in all countries: *ordinary education* (education provided within the regular education sector), *unpaid*

job-training and *subsidized employment*. These three categories will be compared cross-nationally. Language training is also comparable across countries, but as more than 95% of the refugee population in all three countries participate in language training, it is not an interesting measure to compare. For regular education measures, our data allows us to distinguish between 'lower education', which is equivalent to enrolment in primary or lower secondary school (ISCED 0–2), and 'upper secondary education or higher' (ISCED >2), equivalent to education at high school levels or higher.

3.5 Empirical methods

Privacy and confidentiality restrictions do not allow the three datasets to be merged into one, so analyses are conducted separately for each country. We analyse outcomes for men and women separately, recognizing that gender can affect a person's integration experience and trajectories. We apply a panel data model that includes all observed years after settlement:

$$y_{ist} = c + YSS_s\beta_s + X_{ikt}\pi + u_t + e_{kt}$$

where y_{ist} is the outcome (employment, enrolment in education and earning levels) of individual i who is observed at s 'th years after settlement in year t . The estimates describes how the outcome develops *on average* with time since settlement in the country, when controlling for population characteristics, β_s , and local unemployment levels, π . The models have been estimated using the OLS estimator with standard errors that are clustered at the individual level and which are robust to heteroskedasticity.⁸ The estimated coefficients can be interpreted as differences in mean values of the outcomes at different categories of the independent variables, when having fixed the other independent variables. We stress that such associations are adjusted correlations which are not subject to causal interpretation.

Based on the regressions, we predict how the different outcomes evolve with time since settlement – by gender, age, and education, thereby providing information on cross-country differences in how well subgroups with the same background fare in the labour market.

3.6 Methodological limitations

Analysis of *observable* characteristics

Although we strive to analyse and control for the individual characteristics of the participant groups, there could be relevant characteristics that are not documented in the data but that could affect the outcomes – for example, health problems, motivation, or skills.

8. This estimator has the same mean asymptotic properties as the random effects estimator. Both estimators allow the error term to be correlated over time for the same individual, but the random effects estimator is more efficient (has less asymptotic variance) if this correlation is fixed across time. If this is not the case, the random effects estimator provides biased standard error estimates, but the clustered estimator allows a fully flexible within-individual correlation structure. Note also that we cannot perform a fixed-effects estimation, as most of the covariates are fixed over time.

Limitations of the comparative scope

The comparative aim and the wish to harmonize data across countries impose some limitations on the data: First, as discussed under each variable above, some countries have more fine-grained categories than others for the same variables. To ensure harmonized data, we must follow a categorization whereby more fine-grained data would have to be merged into larger categories (e.g., centrality of domicile, residence permit, education, and country of origin). The potentials of these fine-grained categories have already been exploited in earlier country analyses; we have therefore given priority to the comparative perspective.

Second, due to national differences in privacy policies, some independent variables shown to be relevant in earlier studies are not obtainable for all three countries – like information on health. Whereas data on participants' health (operationalized, for instance, as number of visits to the doctor) have been used in several Danish studies, this variable is not included in our analyses, as access to individual health data is restricted in both Norway and Sweden.

Third, our analysis is based solely on quantitative data, which enables objective comparison of the three countries. However, by basing the comparative scope exclusively on quantitative measures of employment, education, and wages, we neglect the part of integration which describes more social integration in society. To what extent do refugees in each country feel at home in their host country? Do they feel welcome at the workplace? How do members of the second generation fare? Despite the obvious relevance of these questions even in a comparative study, they fall outside the scope of this analysis.

4. Participants in Scandinavian integration programmes

Do the refugee populations in the Scandinavian countries differ? Has this changed after the refugee crisis in 2015? For example, does one country have a higher share of women, certain age groups, or persons with higher previous education? The composition of the refugee population matters because previous studies have consistently shown that integration outcomes are, to a substantial degree, the product of individual-level factors related to demographics (age, gender, family status, etc.) as well as 'human capital'-related determinants (such as education) (Arendt, Pohl Nielsen, & Jakobsen, 2016; Bevelander & Lundh, 2007; Goodman & Wright, 2015). Therefore, it is relevant to compare the refugee population in the three countries and to investigate whether the new cohorts arriving after 2015 differ on relevant background indicators such as proportion of men/ women, age, marital status, children, and education levels.

After the 2015 refugee crisis, all three Scandinavian countries experienced a large increase in the number of refugees compared to earlier years. The vast majority of these participate in integration programmes the initial years after settlement (Gustafsson, Fabricius, & Avdeitchikova, 2021). In this chapter, we describe and compare the background characteristic of the refugees that participate in integration programmes in each country. We investigate whether the composition of the refugee population in each country changed before and after the 2015 refugee crisis, and whether there are relevant cross-national differences in the composition of the target groups of integration programmes.

4.1 New participants in the integration programme before and after 2015

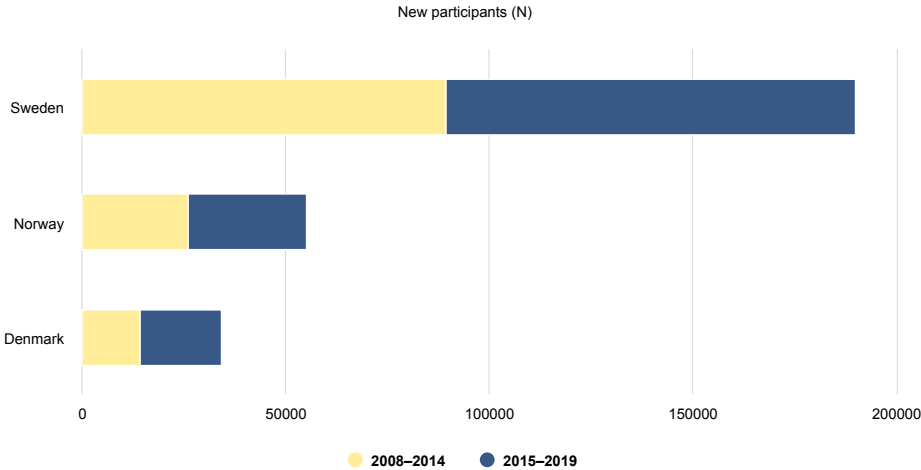


Figure 1: Comparison of number of new participants in the integration programme before and after 2015, cohorts 2008–2019

Figure 1 shows that there has been an increase of participants in integration programmes in all three countries, when cohort groups before and after 2015 are compared. Generally, the absolute number of participants has been much higher in Sweden. In total, Sweden has had some 190 000 new participants in its integration programmes 2008–2019, compared to 55 000 in Norway and 34 000 in Denmark. As Sweden has a larger population than Denmark and Norway, it is also relevant to examine these figures relative to the size of the population in each of the three countries (see below)

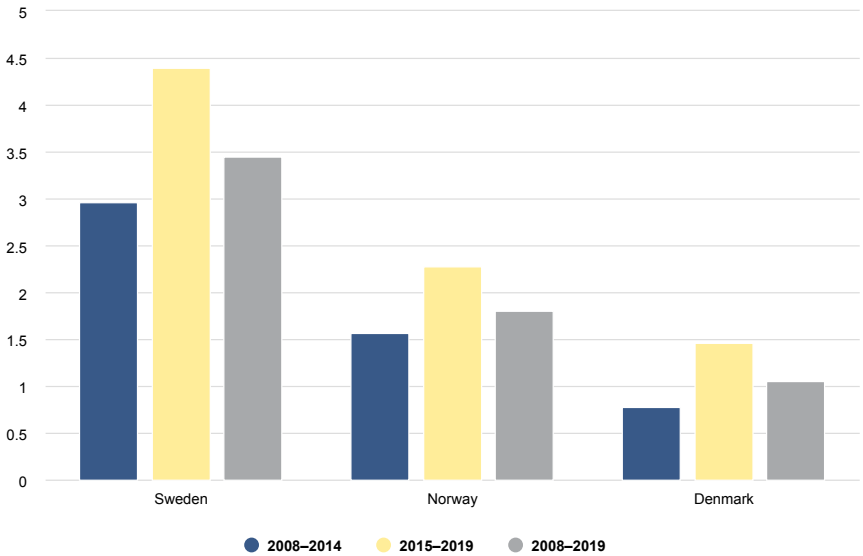


Figure 2: Comparison of new participants in the integration programme relative the population (aged 20–55) before and after 2015, cohorts 2008–2019

Figure 2 shows the average number of participants per year relative the population aged 20–55 for each period. Note that the Figure compares *participants* as a share of the population in each country – not the share of immigrants per capita. Still, this confirms the picture of Sweden as being a major receiver of refugees during the period, with almost 4.5 refugees arriving per citizen each year from 2015 to 2019, compared to 2.3 in Norway and 1.5 in Denmark.

4.2 Denmark

Table 1: Individual characteristics of refugees and family migrants to refugees in Denmark, before and after 2015

	2008–2014	2015–2019	TOTAL
Men	62 %	54 %	57 %
Women	38 %	46 %	43 %
Age mean (years)	31,7	31,2	31,4
Age-group (on arrival)			
20–25	24 %	27 %	26 %
26–35	47 %	47 %	47 %
36–45	21 %	19 %	20 %
46–55	7 %	7 %	7 %
Married	61 %	54 %	57 %
Has children <=6 years (old when settled)	36 %	42 %	39 %
Country of birth			
Afghanistan	10 %	4 %	6 %
Eritrea	2 %	18 %	11 %
Iraq	4 %	2 %	3 %
Iran	11 %	7 %	9 %
Somalia	7 %	2 %	4 %
Syria	43 %	61 %	53 %
Other	23 %	6 %	14 %
Education			
Primary education	62 %	64 %	63 %
Secondary education	8 %	13 %	11 %
Tertiary education	7 %	5 %	6 %
Missing values	23 %	19 %	21 %
Centrality			
Metropolitan area	25 %	34 %	30 %
Non-metropolitan area	75 %	66 %	70 %
Reason for being granted a residence permit			
Family reunification	18 %	28 %	24 %

Convention refugee	45 %	52 %	49 %
Subsidiary protection	22 %	15 %	18 %
UN Quota status	9 %	1 %	4 %
Other	6 %	4 %	5 %
Number of refugees (N)	14389	19724	34113

Table 1 shows that Denmark has more men than women among those participating in integration programmes, but that the share of women has increased after 2015, as well as the share of participants with children under the age of 6 on arrival. One plausible explanation is that there has been an increase in the share of family reunification refugees – from 18 to 28 per cent over the period. Denmark has no substantial changes in the distribution between different age groups when we compare cohorts before and after 2015, and most participants belong to the age range 20 to 35 (73 per cent). There is some spread in origin, but refugees from Syria (61 per cent) and Eritrea (18 per cent) make up almost 80 per cent of the refugees arriving in Denmark during the period 2015–2019. About two-thirds had no previous formal education, or only primary level, on arrival. The proportion of those with upper secondary education on arrival has increased from 8 to 13 per cent, but few have tertiary education above high school levels. Convention refugees, subsidiary protection and family reunification are the most common grounds for being granted a residence permit in Denmark.

4.3 Norway

Table 2: Individual characteristics of refugees and family migrants to refugees in Norway, before and after 2015.

	2008–2014	2015–2019	TOTAL
Men	52 %	61 %	57 %
Women	48 %	39 %	43 %
Age mean (years)			
Age-group (on arrival)			
20–25	24 %	27 %	25 %
26–35	49 %	45 %	46 %
36–45	21 %	21 %	21 %
46–55	7 %	8 %	7 %
Married	55 %	56 %	55 %
Has children <=6 years (old when settled)	35 %	36 %	35 %

Country of birth			
Afghanistan	7 %	3 %	5 %
Eritrea	24 %	23 %	24 %
Iraq	7 %	3 %	5 %
Iran	5 %	3 %	4 %
Somalia	23 %	5 %	13 %
Syria	5 %	47 %	27 %
Other	30 %	17 %	23 %
Education on arrival			
Primary education	53 %	37 %	44 %
Secondary education	10 %	5 %	8 %
Tertiary education	18 %	16 %	17 %
Missing values	19 %	42 %	31 %
Centrality			
Metropolitan area	35 %	34 %	34 %
Non-metropolitan area	65 %	66 %	66 %
Reason for being granted a residence permit			
Family reunification	14 %	14 %	14 %
Convention refugee	71 %	70 %	70 %
Subsidiary protection	0 %	0 %	0 %
UN Quota status	13 %	14 %	14 %
Other	2 %	2 %	2 %
Number of refugees (N)	25950	29133	55083

Table 2 shows that there are few substantial differences in the composition of the target group in Norway, with some exceptions. When comparing groups before and after 2015, we find no differences, or only minor ones, when it comes to the composition of age groups, marital status, children, and grounds for being granted a residence permit. There is, however, a change in the composition between gender and country of origin. Unlike the case in Denmark, the share of male refugees increased after 2015 in Norway. Additionally, the distribution of country of birth is the only individual characteristic that has changed significantly over time in Norway, where refugees from Syria constituted only 5 per cent of the total number of participants during the period 2008–2014, but as much as 47 per cent during the period 2015–2019. Consequently, the large increase in Syrian refugees has lowered the share of refugees from other countries (except for Eritrea, where Norway

received a similar share both before and after 2015). A majority (70 per cent) of those arriving were granted residence permits as convention refugees, as Norway very rarely applies the category 'subsidiary protection' for immigrants seeking asylum.

Most refugees are in the age groups between 20-35 years (71 per cent). Refugees participating in integration programmes in Norway generally have relatively low levels of formal education. About 40 per cent have compulsory (primary/elementary) school as the highest level of schooling, whereas 16 per cent had a completed tertiary-level education at the year of settlement. Information on level of education is missing in many cases, and the missing values are larger for cohorts arriving after 2015.

4.4 Sweden

Table 3: Individual characteristics of refugees and family migrants to refugees in Sweden, before and after 2015

	2008–2014	2015–2029	TOTAL
Men	53 %	54 %	54 %
Women	47 %	46 %	46 %
Age mean (years)	33,2	32,6	32,9
Age-group (on arrival)			
20–25	23 %	27 %	25 %
26–35	40 %	38 %	39 %
36–45	25 %	23 %	24 %
46–55	12 %	12 %	12 %
Married	65 %	57 %	61 %
Has children <=6 years (old when settled)	30 %	30 %	30 %
Country of birth			
Afghanistan	6 %	8 %	7 %
Eritrea	8 %	12 %	10 %
Iraq	22 %	5 %	13 %
Iran	4 %	3 %	4 %
Somalia	18 %	4 %	11 %
Syria	24 %	52 %	39 %
Other	17 %	15 %	16 %

Education on arrival

Primary education	37 %	41 %	40 %
Secondary education	22 %	26 %	24 %
Tertiary education	24 %	24 %	24 %
Missing values	16 %	9 %	12 %
Centrality			
Metropolitan area	27 %	26 %	27 %
Non-metropolitan area	73 %	74 %	73 %
Reason for being granted a residence permit			
Family reunification	19 %	23 %	21 %
Convention refugee	19 %	29 %	24 %
Subsidiary protection	46 %	36 %	41 %
UN Quota status	8 %	7 %	7 %
Other	9 %	5 %	7 %
Number of refugees (N)	89331	100663	189994

Table 3 show that Sweden has a similar composition on many background variables when we compare refugee arriving before and after 2015. The gender distribution is relatively even and stable. Approximately two-thirds were between 20 to 35 years of age in the year of settlement, and there are no major differences in the composition between age groups. There is also a similar proportion who have children, and the composition of education levels is rather similar, although there are fewer missing values for the most recent cohorts.

The changes before and after 2015 mainly concern country of origin and residence permits. Syria has been the most-represented country of origin among participants in Swedish integration programmes; its share increased drastically after 2015. The share of refugees from Eritrea is not quite as large as in the other countries, but this is still an important group. Other major sending countries has been Iraq and Somalia in the first period studied (2008–2014) and Afghanistan during the second period (2015–2019). We note a slight increase in arrivals from Afghanistan and Eritrea, but a decrease in the share from Iraq and Somalia.

Education levels on arrival have remained rather stable before and after 2015. Refugees in Sweden often have low levels of formal schooling. However, about half have secondary or tertiary education. For Sweden, there are very few missing values for education levels on arrival. We can note a small decrease in persons who obtained subsidiary protection, and a similar increase in persons who obtained convention status; otherwise, the other residence statuses are stable when we compare cohorts.

4.5 Discussion and comparative analysis of the cross-national composition of refugee cohorts 2008–2019

In this subchapter, we compare the participants in Scandinavian integration programme on the basis of their observable characteristics. The descriptive characteristics are presented and compared jointly for all cohorts 2008–2019.

Table 4: Individual characteristics of refugees and family migrants to refugees in Denmark, Norway and Sweden, cohorts 2008–2019.

	Denmark	Norway	Sweden
Men	57 %	57 %	54 %
Women	43 %	43 %	46 %
Age mean (years)	31,40		32,90
Age-group (on arrival)			
20–25	26 %	25 %	25 %
26–35	47 %	46 %	39 %
36–45	20 %	21 %	24 %
46–55	7 %	7 %	12 %
Married	57 %	55 %	61 %
Has children <=6 years (old when settled)	39 %	35 %	30 %
Country of birth			
Afghanistan	6 %	5 %	7 %
Eritrea	11 %	24 %	10 %
Iraq	3 %	5 %	13 %
Iran	9 %	4 %	4 %
Somalia	4 %	13 %	11 %
Syria	53 %	27 %	39 %
Other	14 %	23 %	16 %
Education on arrival			
Primary education	63 %	42 %	40 %
Secondary education	11 %	8 %	24 %
Tertiary education	6 %	17 %	24 %
Missing values	21 %	34 %	12 %
Centrality			
Metropolitan area	30 %	34 %	27 %
Non-metropolitan area	70 %	66 %	73 %

Grounds for being granted a residence permit			
Family reunification	24 %	14 %	21 %
Convention refugee	49 %	70 %	24 %
Subsidiary protection	18 %	0 %	41 %
UN Quota status	4 %	14 %	7 %
Other	5 %	2 %	7 %
Number of refugees (N)	34113	55083	189994

Table 4 compares the individual characteristics of refugees arriving in 2008–2019 in each of the three countries. We find rather similar compositions on several relevant background variables. All three countries have a slight over-representation of males; over half of them are married, and between 30 to 40 per cent have small children at the time of settlement. Also, age distribution is quite similar in all three countries. About one out of four is 20–24 years old. However, Sweden has a larger share of older age groups compared to Norway and Denmark. The share of refugees in the age group 46–55 is greater in Sweden (12 per cent compared to 7 per cent in Norway and Denmark), but slightly less for the age group 26–35 years.

We can also note several differences concerning country of origin, education level, and grounds for being granted a residence permit. First, concerning country of origin, due to the 2015 refugee crisis and the civil war in Syria, Syria has been the most common refugee-sending country during the second period (2015–2019) to all the Nordic countries. Syrians are the main refugee group, but they constitute a bigger group in Denmark (53 per cent) than in Sweden (39 per cent), and in Norway, only 27 per cent. Apart from Syria, Eritrea is a significant country of origin, – especially in Norway where about one out of four of programme participants had their origins in Eritrea. Denmark has a lower share from Somalia, but more from Iran. Sweden has received a higher share of migrants from Iraq compared to Norway and Denmark.

Second, although the majority of arrivals had at most a primary level of schooling upon arrival in all three countries, we also note considerable country differences regarding the level of education on arrival. Denmark has the largest share of persons with registered primary education levels – almost two out of three – about 20 percentage points higher than Norway and Sweden. Significantly more refugees had a higher level of education on arrival in Sweden: ca. 25 per cent reported having tertiary education. The corresponding figure for Denmark is 6 per cent and 17 per cent in Norway. Moreover, there are sizable differences in missing values for education levels. The high share of higher educated refugees in Sweden might be explained by Sweden having systematic procedures for evaluating schooling from refugee homelands – the ‘fast track’.

Third, the Scandinavian countries differ as to the distribution of grounds for being granted a residence permit, but here it should also be noted that they operate with different immigration rules for those who are granted status as convention refugees

and those who are granted subsidiary protection. The latter category was rarely used in Norway in this period. In all three countries, between 65 and 70 per cent of the refugees were granted residence permits either as convention refugees or with subsidiary protection. Norway has fewer persons who have been reunited with refugees than Sweden and Denmark, but a higher share of participants with UN Quota status.

Even though the overall picture shows similar patterns as to refugee composition across the three countries, differences in country of origin, education level and grounds for granting a residence permit might affect the success of the integration programme. Therefore, we take these differences into account when we compare the estimated employment and education trajectories in chapter 7.

5. Descriptive analysis of different outcomes: employment, enrolment in education and earnings

How do participants in Scandinavia's integration programmes fare in the education and labour market? Which country has the best overall results, and does this differ depending on whether we focus on short- and long-term outcomes, or define labour-market integration in different ways?

In this chapter, we present descriptive statistics of the share of participants who are employment, enrolled in education, and who achieve various earning levels (the dependent variables in this study). By including and comparing different outcomes to measure 'labour-market integration' more broadly, we gain important insights into different pathways through which refugees may be integrated into Scandinavian labour markets. Such an approach also enables us to discuss how certain pathways (e.g., through education) may affect both short- and long-term outcomes. We analyse results from the start year of the integration programme and up to eleven years after settlement in a municipality.

5.1 Employment and education enrolment

The Scandinavian integration programmes aim at employment and self-sufficiency. Still, in Sweden and Norway, both employment and enrolment in higher secondary/tertiary education have been used as criteria for (at least short-term) success. An important strategy in the integration programmes in these two countries is formal upskilling, to ensure stable labour market integration over time (Hernes et al., 2019). Education enrolment may have short-term lock-in effects, in that fewer participants may transition to employment the initial years. Thus, to get a better picture of the various paths towards labour-market integration over time, we analyse employment and education enrolment both separately and combined, to gain insights into how the two may interact and explain both short-term and long-term outcomes.

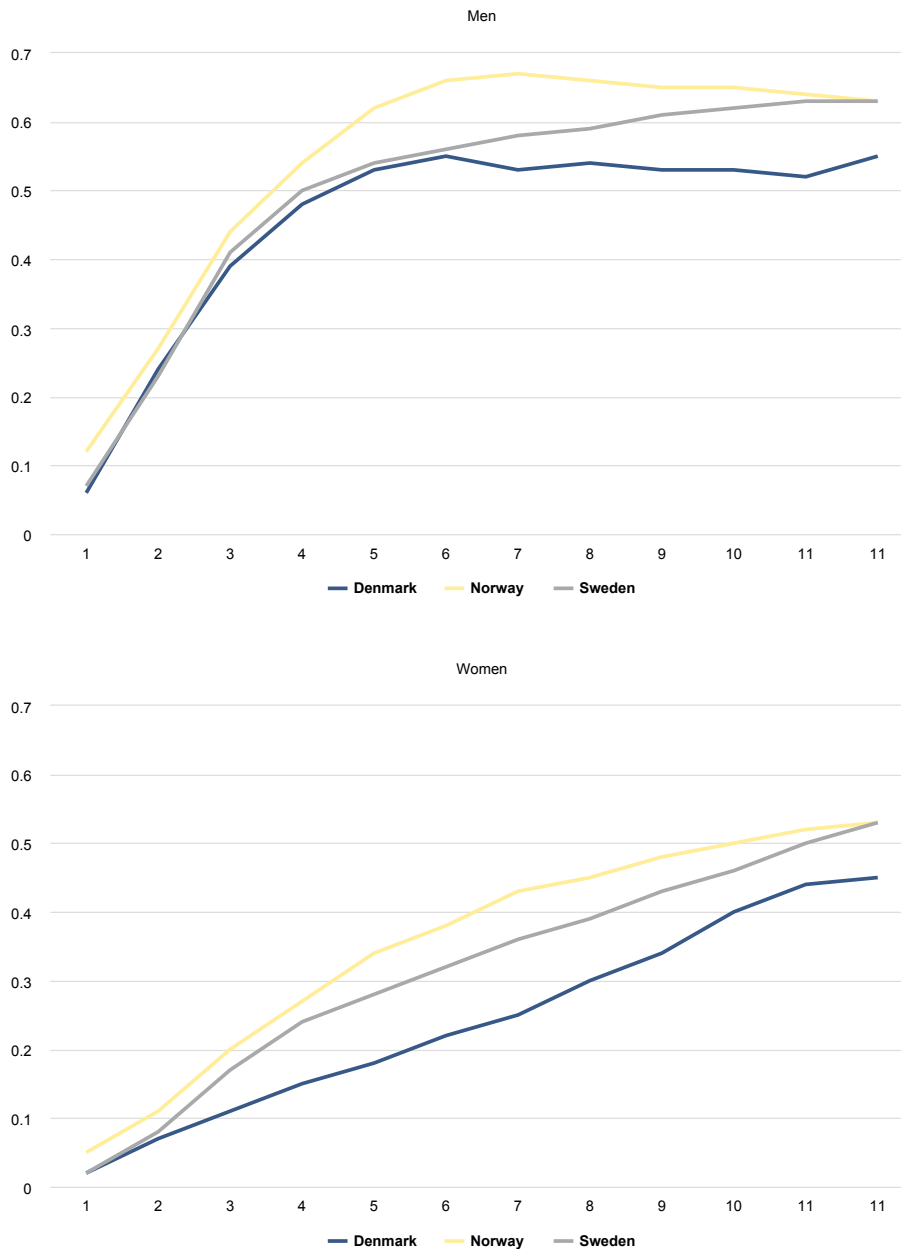


Figure 3: Descriptive statistics of share of employed (ILO) men and women with years since settlement, cohorts 2008–2019.

Figure 3 shows that for men, the three countries have rather similar employment patterns for the first two years. Then, after the third year, there is a steeper increase in Norway; and between years 4 and 6, Norway has employment levels approx. 10 percentage points higher than Sweden and Denmark. However, after year 6 since settlement, Norway's curve flattens, and declines slightly in the following years. Denmark has steadily lower employment levels than Norway from the fourth year after settlement, about 10 percentage points, although the gap narrows in the 12th year. Sweden follows the Danish patterns for the first five years, but from the sixth year after settlement, refugee employment levels increase steadily, reaching the Norwegian level the last years analysed here.

Descriptive analysis of employment levels for female participants shows lower employment levels than male participants in all three countries. In Norway, employment levels for women are slightly higher than in Sweden all years (on average for the whole period, the gap is about 4 percentage points between Norway and Sweden). Denmark generally has lower employment levels for women than the two other countries for the entire period of analysis. After year 2 since settlement, the gap between Norwegian and Denmark employment levels varies between 9 and 18 percentage points, and the difference between Sweden and Denmark is about 10 percentage points throughout the period of analysis.

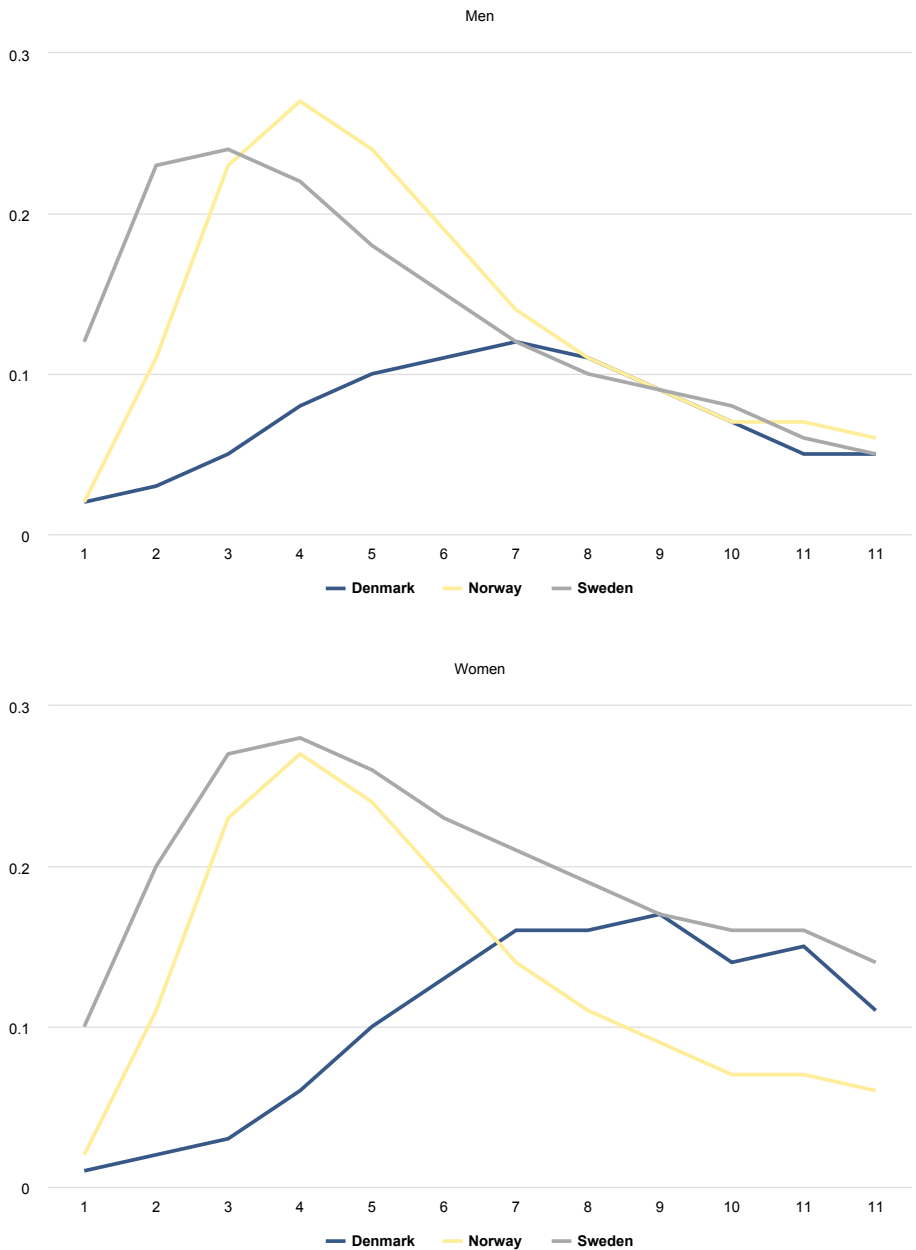


Figure 4: Descriptive statistics of share of men and women enrolled in education with years since settlement, cohorts 2008-2019.

Figure 4 shows that in both Sweden and Norway, the rate of participants enrolled in education increases steeply through the first 3–4 years after settlement, to a level where approximately 25 per cent of the refugees are enrolled, and then decreases again during the next 3–4 years. Among male refugees, the level is higher in Sweden than in Norway for the first two years after settlement, but this changes during years 3 to 5 after settlement. Denmark follows a different pattern: very few participants are enrolled in education during the first three years, but then the enrolment rate rises to ca. 10 per cent for male refugees and 15 per cent for female refugees after 5–6 years in the country.

Sweden generally has a higher share of female participants enrolled in education than Norway (on average 7 percentage points) and Denmark (up till 20 percentage points). The difference with respect to Norway grows greater after five years, whereas it diminishes in Denmark. After 7 years, female refugees in Denmark have the same education enrolment rates as Sweden.

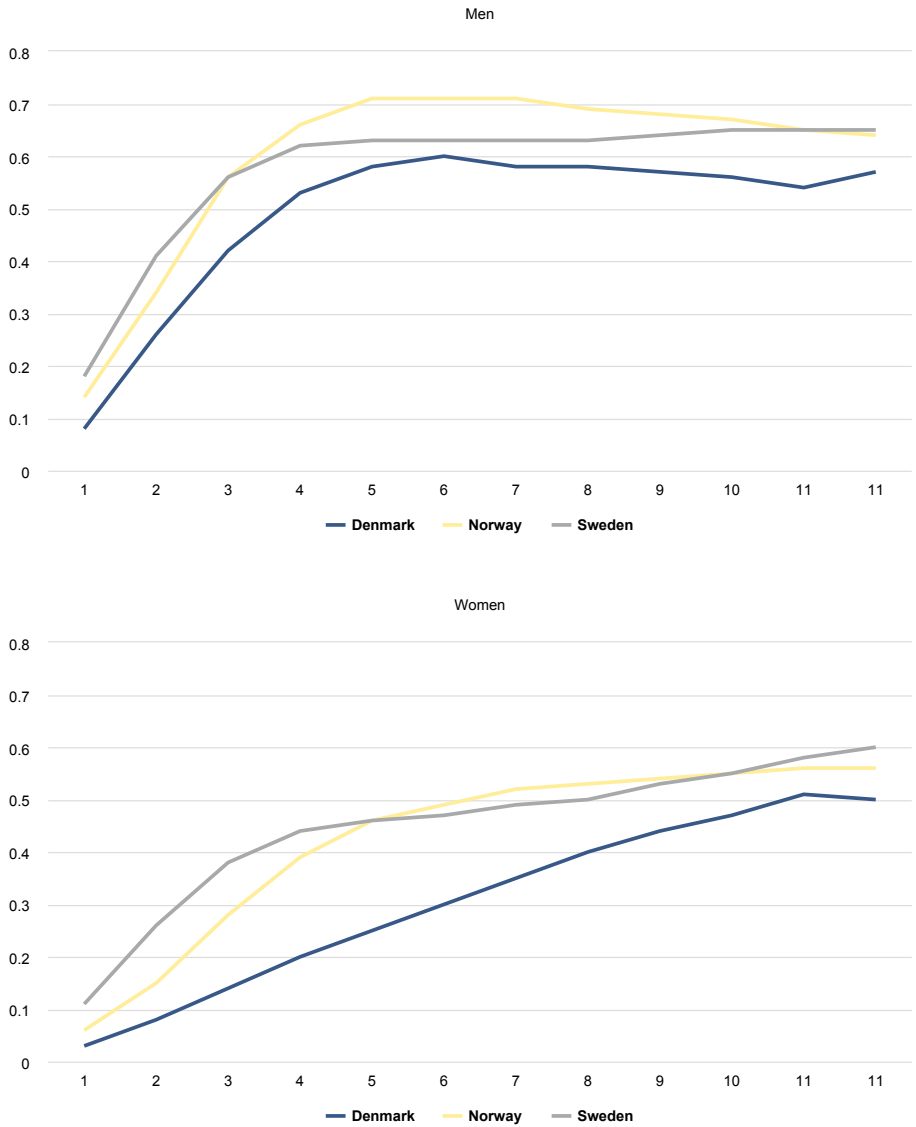


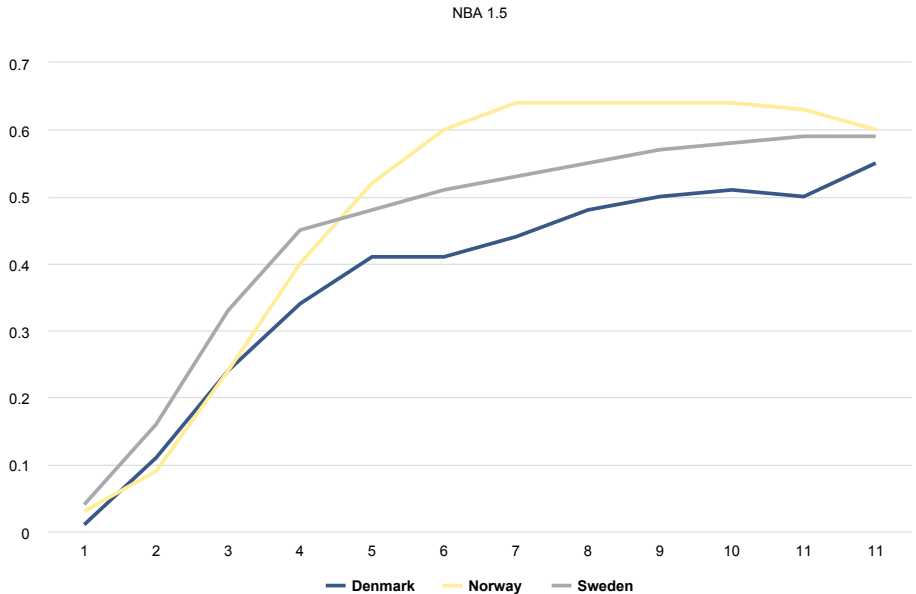
Figure 5: Descriptive statistics of share of men and women employed (ILO) and/or enrolled in education, with years since settlement, cohorts 2008–2019.

Figure 5 shows the share of the refugees who are either employed, enrolled in education, or both (e.g., have a part-time job in addition to studies or have education that includes paid internships). For male refugees, we see that both Sweden and Norway have rather similar trajectories in the first years. From years 3 to 8, Norway has about a level ca. 5 percentage points higher than Sweden, but the two countries converge towards the end of the period studied here. For men, Denmark has levels that are on average 7–10 percentage points lower than those in Sweden and Norway during the period analysed here.

For women, Sweden has the highest share of persons who are employed and/or enrolled in education – up to 10 percentage points higher than Norwegian levels in the initial years. After that, Norway and Sweden display very similar trajectories. Denmark generally has substantially lower levels than Sweden and Norway for women: up to 24 percentage points at the highest (difference between Sweden and Denmark in year 2 and 3 after settlement). In the final years since settlement, the gap between Denmark and the two other countries narrows, which aligns with the finding in Figure 4 showing that education enrolment among refugees in Denmark does not increase until several years after settlement.

5.2 Earning levels

In the previous NORDIC INTRO-report, we tested only the ILO definition for employment (used in Figure 3 and Figure 5), which measures if the person is employed in a given week in November. In this report, we also study whether there are cross-national differences or similarities at different levels of earnings. We test three levels based on a calculation of the Nordic base amount (NBA), which is 25 per cent of the annual median earning level in the population in the given year (we use the NBA measures to ensure comparability across countries that have different earning levels and costs of living: see description in the methods section, chapter 3.3).



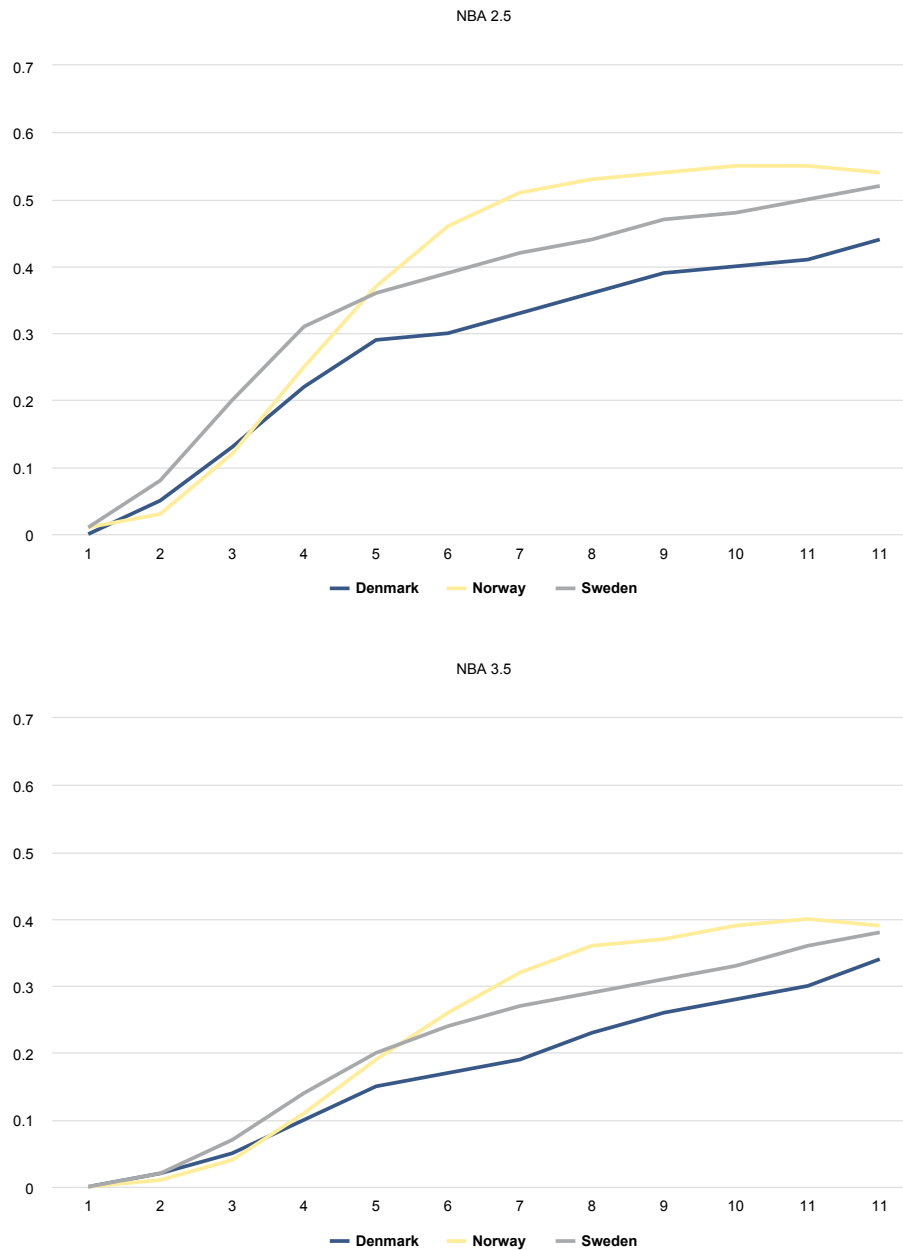
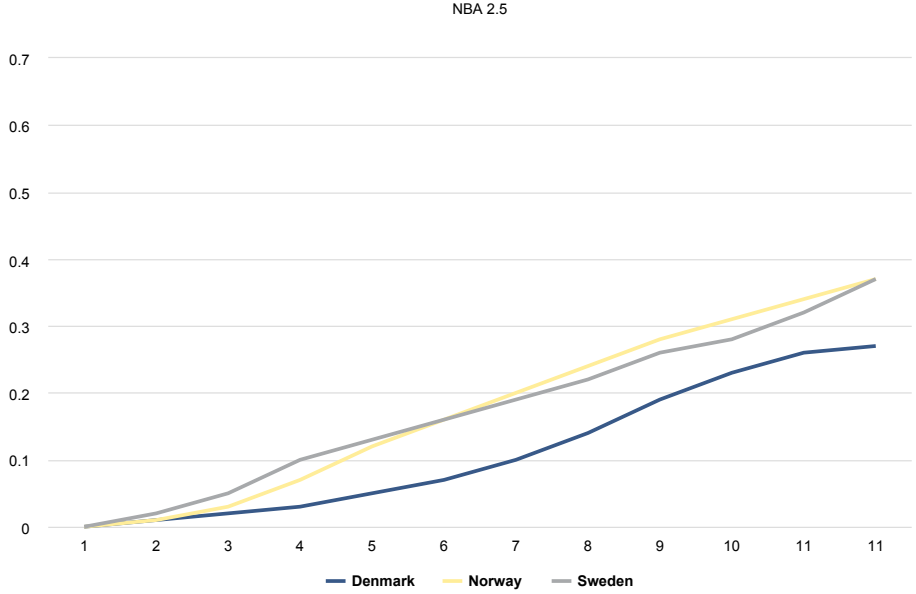
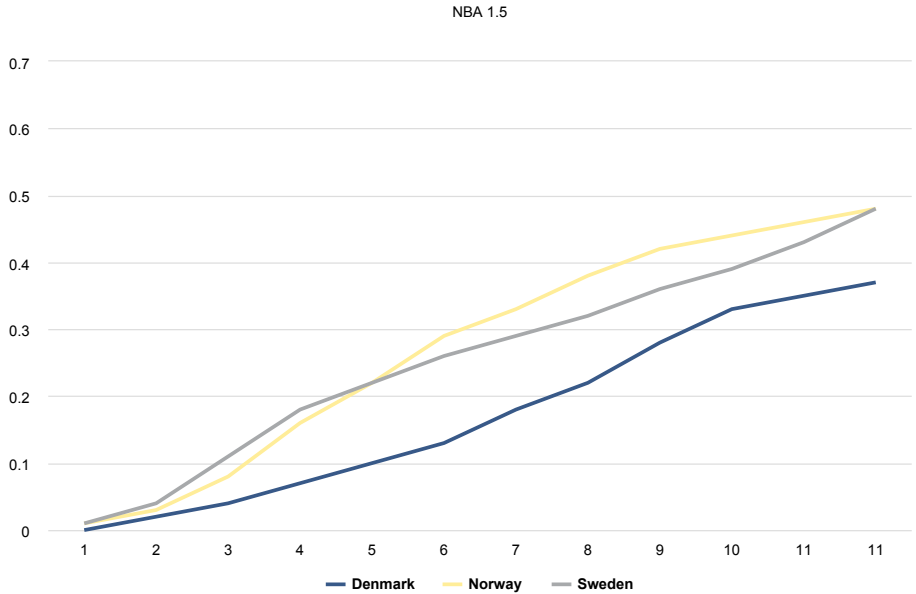


Figure 6: Descriptive statistics of share of MEN who have annual earnings of at least 1.5 NBA, 2.5 NBA and 3.5 NBA, by years since settlement, cohorts 2008–2019.

Figure 6 shows the share of male refugees who meet the different earning thresholds in the three countries (see footnote for example of what the different threshold in the different countries would be in 2019).⁹ The share of persons who meet the specified threshold decreases in all three countries as the threshold gets higher. In none of the three countries does the share of male refugees with earnings higher than NBA 3.5 exceed 40 per cent. However, the gaps and patterns as regards years since settlement are rather similar across countries for the various earning

9. NBA levels: Norway in 2019: NBA 1,5 = 174 000 NOK; NBA 2,5 = 290 000 NOK; and NBA 3,5 = 406 000 NOK. Sweden in 2019: NBA 1,5 = 128 000 SEK; NBA 2,5 = 212 000 SEK; and NBA 3,5 = 298 000 SEK. Denmark in 2019: NBA 1,5 = 127 000 DKK; NBA 2,5 = 211 000 DKK; and NBA 3,5 = 296 000 DKK.

thresholds. Although the absolute levels vary, Sweden scores slightly better than Denmark or Norway in the initial three years. After that, Norway surpasses Swedish levels, and maintains higher levels than Sweden for the next six years. Then Norwegian levels stagnate and/or decline slightly over the years, while Sweden climbs steadily. By year 11 after settlement, Norwegian and Swedish levels align for all three earning thresholds. Denmark generally has a lower share of male refugees who meet the various earning thresholds. The difference between Denmark and the other two countries is especially pronounced from around the fourth year after settlement.



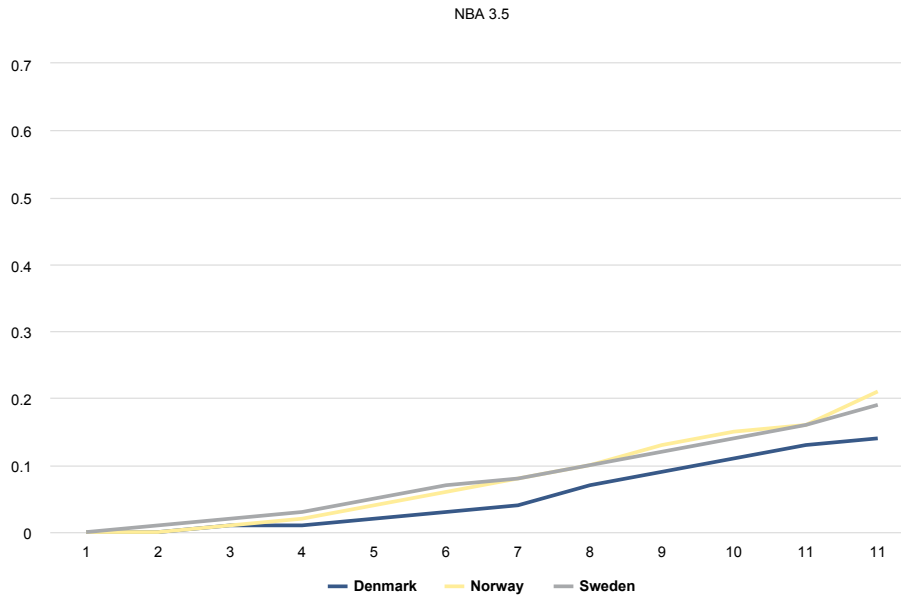


Figure 7: Descriptive statistics of share of WOMEN who have annual earnings of at least 1.5 NBA, 2.5 NBA and 3.5 NBA, by years since settlement, cohorts 2008–2019.

Figure 7 shows the share of female refugees who meet the various earning thresholds in the three countries. Although all countries generally have lower earning levels for female refugees than male refugees (see Figure 6), the trajectories follow a rather similar pattern, with some minor differences. The pattern for female refugees meeting the NBA 1.5 threshold is rather similar to that for men, but for the thresholds NBA 2.5 and 3.5, Norway and Sweden have very similar trajectories. Also, proportion of female refugees who meet the various earning thresholds is generally lower in Denmark than in Norway and Sweden

5.3 Summarizing discussion

In this chapter, we asked how participants in the Scandinavian refugee integration programmes fare in the education and labour markets. Are there any cross-national differences? We have presented the descriptive trajectories in terms of years since settlement for our dependent variables: employment, enrolment in education and earnings above various set levels. Here we summarize main findings from these descriptive statistics across analyses.

To get a better picture of the different paths towards labour-market integration over time, we study both employment (as defined by the ILO) and enrolment in education to gain insights into how the two may interact and explain short-term as well as long-term outcomes. We see that Norway generally have higher employment rates after the initial years for both men and women, but that after several years in the country, refugees settled in Sweden achieve Norwegian levels. Except for the first initial years for men, Denmark generally has lower employment levels for both men and women throughout the period analysed here. We also note clear

differences as regards enrolment in education (at upper secondary levels corresponding to high school) across the countries. Sweden and Norway have relatively high education enrolment for both men and women in the first five years. Denmark, however, has very few refugees enrolled in education in the initial years, but more refugees take education after several years in the country, especially women. Although the Danish integration programme does not focus on ordinary education as such, education is the main goal in the general unemployment system for young (under age 30) welfare recipients without formal education. Hence, education will become the focus for young refugees who are still unemployed after the integration period. This might explain the later enrolment among refugees in Denmark.

Comparing the trajectories for different earning levels with the trajectories for employment using the ILO definition, we find the following. First, and not surprising, the share of refugees who achieve various earning thresholds decreases, the higher the threshold is set. Comparison of the different outcomes variables for male participants shows rather similar patterns in all three countries, albeit with different absolute levels, depending on the threshold. However, for women, the different thresholds for labour-market integration modify the comparative pattern. For women, Norway has higher employment rates than the two other countries, when the ILO definition is used. In the descriptive trajectories for the three different earning levels, however, the gap between Sweden and Norway has almost disappeared; the two countries show very similar patterns. This implies that when a higher threshold is used for defining labour market integration, Norway does not outperform Sweden. Hence, including different measures to describe labour-market integration can yield a more nuanced picture of the comparison of the three countries. On the other hand, irrespective of how employment is defined, the level of refugee employment is consistently lower in Denmark. These differences might be explained by differences in the structure and components of the integration programmes, to which we turn in the next chapter.

6. Measures in the integration programmes

What kinds of integration measures do refugees in Scandinavia experience during their initial years after arrival? Do the Scandinavian countries differ in what type of integration measures they use, and how has this developed in recent years? And lastly, how do the measures used correlate with labour-market integration of participants, in the shorter and longer terms?

To answer these questions, we need to compare the different measures used in the three Scandinavian integration programmes and how they are associated with different outcomes. However, as noted in Chapter 3, Denmark, Norway, and Sweden operate with different categories in classifying traditional course-based programme measures, which complicates cross-national comparison. However, there are three categories that can be compared across countries: *ordinary education*, *unpaid job-training* and *subsidized employment*.¹⁰

Although integration participants may experience a wide range of programme measures (Hernes et al., 2019), two of the three above-mentioned integration measures have consistently been shown to have a positive correlation with employment: regular education acquired in the host country (Arendt Jacob, 2018; Bratsberg et al., 2017) and subsidised employment (Andersson Joona, 2019; Arendt & Pozzoli, 2013; Card, Kluve, & Weber, 2017; Clausen et al., 2009). If the three countries can be shown to differ in how they use these measures in the integration programme for refugees, it may be one plausible explanation for the differences in labour-market integration outcomes.

In this chapter, we first present an overview of the use of programme measures in each country, before and after 2015. We also assess whether there have been changes as regards subgroups concerning gender, age, and education level on arrival. Further, we discuss various differences between the countries. We then present regression analyses of how the programme measures correlate with employment and earning outcomes in each country, in the shorter and longer term, before comparing them cross-nationally.

10. Language training is also broadly applied in all three countries. However, those who do not attend language training is a marginal, selected group, making it hard to conclude anything from analyzing differences in outcomes between those who do or do not participate in language training. Consequently, we exclude this measure from the analyses.

6.1 Descriptive analyses of programme measures

Programme measures in Denmark

Table 5: Participation in different types of programme measures within the first three years after settlement, cohorts 2011–2014 and 2015–2017, DENMARK

	2011–2014	2015–2017	Total
Primary education (ISCED <=2)	20 %	23 %	21 %
Upper secondary education and above (ISCED >2)	2 %	2 %	2 %
Education total	21 %	23 %	22 %
Subsidized employment	12 %	22 %	18 %
Unpaid job-training	58 %	75 %	68 %

Note: The programme measures indicate if an individual has participated in an activity at any time during the first three years after settlement.

Table 5 shows that in Denmark, the use of job-specific training among refugees during their integration period is quite widespread and has increased significantly during the period under study. Among the refugees who arrived in Denmark in 2011–2014, 58 per cent participated in unpaid job-training and 12 per cent in subsidized employment. Then, for the cohorts 2015–2017 these figures had risen to 75 per cent and 23 per cent. The use of 'ordinary education' is concentrated within the primary and lower secondary school levels. Around 20 per cent of the refugees in both cohorts received education at lower levels – whereas only 2 per cent received education at upper secondary level or higher.

Table 6: Participation in different types of programme measures for different subgroups, cohorts 2011–2014 and 2015–2017, DENMARK

	Education total		Subsidized employment		Unpaid job-training	
	2011–2014	2015–2017	2011–2014	2015–2017	2011–2014	2015–2017
Total	21 %	23 %	12 %	22 %	58 %	75 %
Gender						
Women	17 %	23 %	3 %	7 %	41 %	64 %
Men	23 %	24 %	18 %	34 %	68 %	84 %
Age at settlement						
20–25	29 %	31 %	12 %	21 %	54 %	73 %
26–35	21 %	23 %	13 %	23 %	59 %	76 %
36–45	16 %	18 %	12 %	23 %	62 %	76 %
46–55	11 %	16 %	9 %	14 %	53 %	67 %
Education on arrival						
Primary	16 %	18 %	12 %	23 %	59 %	77 %
Secondary	32 %	31 %	13 %	21 %	62 %	75 %
Tertiary	36 %	39 %	11 %	18 %	55 %	71 %
Unknow	26 %	22 %	29 %	40 %	55 %	71 %

Note: The programme measures indicate if an individual has participated in an activity at any time during the first three years after settlement.

Table 6 shows the participation in various types of programme measures for different subgroups in Denmark. Male refugees have generally participated more in both educational and employment-specific labour-market measures. However, the gender difference as regards the use of educational measures disappears in the most recent cohorts who arrived between 2015 and 2017, whereas the difference in the use of employment-specific measures remains sizable throughout the period. For the use of subsidized employment, the absolute difference increases from 15 to 27 percentage points between the 2011–2014 and the 2015–2017 cohorts. Unpaid job-training increases for all subgroups, but relatively more for female refugees and for younger refugees. However, we find the highest rate of participation in unpaid job-training among male refugees arriving in Denmark 2015–2017, with 84 per cent participation rate during the integration period. The initial level of education from one's home country does not seem to influence the use of employment-specific measures, but we can note a pattern indicating that refugees with higher initial education participate in education during the integration period to a greater degree.

Programme measures in Norway

Table 7: Participation in different types of programme measures within the first three years after settlement, divided into cohorts 2011–2014 and 2015–2017, NORWAY

	2011–2014	2015–2017	Total
Primary education (ISCED <=2)	22 %	29 %	25 %
Upper secondary education and above (ISCED >2)	5 %	12 %	8 %
Education total	26 %	37 %	31 %
Subsidized employment	14 %	12 %	13 %
Unpaid job-training	28 %	36 %	32 %

Note: The programme measures indicate if an individual has participated in an activity at any time during the first three years after settlement.

Table 7 shows that in Norway, the use of ordinary education among refugees during their integration period is widespread, especially at the lower educational level. For the cohorts 2011–2014, 22 per cent have participated in lower-level ordinary education during their integration period and 5 per cent at a higher level. These figures increased to 29 per cent and 12 per cent for the cohorts arriving in Norway during 2015–2017. Thus, during the period observed, the share of refugees who have participated in higher education during their first three years in Norway has more than doubled. The use of unpaid job-training becomes more widespread during this period, involving 28 per cent of the early cohorts and 36 per cent of the latter cohorts. The rate of refugees participating in subsidized employment remains stable, at levels around 13 per cent.

Table 8: Participation in different types of programme measures for various groups, cohorts 2011–2014 and 2015–2017, NORWAY

	Education total		Subsidized employment		Unpaid job-training	
	2011–2014	2015–2017	2011–2014	2015–2017	2011–2014	2015–2017
Total	26 %	37 %	14 %	12 %	28 %	36 %
Gender						
Women	24 %	35 %	10 %	7 %	24 %	30 %
Men	28 %	38 %	18 %	15 %	32 %	39 %
Age at settlement						
20–25	43 %	57 %	12 %	12 %	21 %	30 %
26–35	25 %	35 %	15 %	13 %	30 %	37 %
36–45	14 %	22 %	14 %	12 %	32 %	39 %
46–55	8 %	11 %	11 %	8 %	29 %	36 %
Education at settlement						
Primary	28 %	38 %	14 %	12 %	28 %	35 %
Secondary	25 %	32 %	15 %	13 %	31 %	40 %
Tertiary	18 %	29 %	19 %	16 %	34 %	46 %
Missing edu.	29 %	40 %	11 %	10 %	22 %	31 %

Note: The programme measures indicate if an individual has participated in an activity at any time during the first three years after settlement.

Table 8 shows the use of various integration measures for different subgroups in Norway. Unlike the case in Denmark, here we note only minor gender differences in the use of job-specific labour-market measures. The main difference concerns unpaid job-training, in which 39 per cent of male refugees in cohorts 2015–2017 have participated, compared to 30 per cent of the female refugees. The greatest subgroup differences are found in the use of ordinary education. Here we note a tendency to higher educational engagement among younger refugees. The differences here have even increased during the period under study: in the 2015–2017 cohorts, 57 per cent of refugees aged 20–25 have participated in ordinary education during the integration period. For comparison, only 22 per cent and 11 per cent in the age group 36–45 years and 46–55 years have attended ordinary education during their first three years in Norway.

The initial level of education from the home country is correlated with the use of both ordinary education and unpaid job-training. For highly educated refugees, we find relatively higher participation rates in subsidized employment and unpaid job-training, compared to those with primary education levels, while the converse is

apparent for educational measures: 38 per cent of the lowest educated in the 2015–2017 cohorts have attended some form of schooling during their first three years in Norway, as against 28 per cent among those with tertiary education.

Programme measures in Sweden

Table 9: Participation in different types of programme measures within the first three years after settlement, divided into cohorts 2011–2014 and 2015–2017, SWEDEN

	2011–2014	2015–2017	Total
Primary education (ISCED <=2)	3 %	9 %	7 %
Upper secondary education and above (ISCED >2)	29 %	35 %	32 %
Education total	31 %	42 %	38 %
Subsidized employment	28 %	35 %	32 %
Unpaid job-training	5 %	4 %	4 %

Note: The programme measures indicate if an individual has participated in an activity at any time during the first three years after settlement.

Table 9 shows that in Sweden, the use of programme measures differs somewhat from the other two countries. The most frequently used measures during the integration period are higher education and subsidized employment: 35 per cent of the 2015–2017 cohorts have participated in each of the two measures – an increase from 29 per cent of the 2011–2014 cohorts participating in higher education and 28 per cent participating in subsidized employment. However, less than 10 percent have participated in education at lower secondary level or below. Nonetheless, during the period of observation, the proportion of refugees participating in lower-level education has increased from 3 per cent to 9 per cent. Unpaid job-training is seldom used – throughout the period, it has not been applied to less than 5 per cent of the refugees. However, the registered measures for unpaid job-training should be interpreted with some caution. There are some limitations in the register data from the Swedish public unemployment service included in STATIV (see chapter 4.1). We do not have complete information on labour market programme participation (such as unpaid job training) in Sweden in our database: that might result in underestimating the actual number of individuals who have participated in precisely this measure.

Table 10: Participation in different types of programme measures for different groups, cohorts 2011–2014 and 2015–2017, SWEDEN

	Education total		Subsidized employment		Unpaid job-training	
	2011–2014	2015–2017	2011–2014	2015–2017	2011–2014	2015–2017
Total	31 %	42 %	28 %	35 %	5 %	4 %
Gender						
Women	32 %	44 %	15 %	21 %	5 %	3 %
Men	31 %	40 %	38 %	45 %	6 %	5 %
Age at settlement						
20–25						
26–35	41 %	50 %	33 %	39 %	5 %	4 %
36–45	34 %	43 %	32 %	38 %	6 %	4 %
46–55	26 %	38 %	25 %	31 %	6 %	4 %
Education at settlement						
Primary						
Secondary	18 %	28 %	26 %	34 %	5 %	3 %
Tertiary	35 %	46 %	31 %	36 %	5 %	3 %
Missing	54 %	61 %	32 %	36 %	7 %	5 %

Note: The programme measures indicate if an individual has participated in an activity at any time during the first three years after settlement.

Table 10 shows the use of various integration measures for different subgroups in Sweden. We note only minor gender differences in the use of education as programme measure during the integration programme. However, also twice as many male refugees have been involved in subsidized employment than have female refugees: 45 per cent compared to 21 per cent, for the 2015–2017 cohorts. As regards both education and subsidized employment, younger refugees are more likely to attend these measures. Moreover, the level of education on arrival appears to be correlated with the probability to receive further education: only 18 per cent of those with primary education get involved in schooling during their integration period, as contrasted with 54 per cent of those with tertiary education. As regards the high participation rate among refugees with tertiary education from their homeland, we should note that Sweden has systematic procedures for evaluating education from refugee homelands (the 'fast track' – *snabbspår för nyanlända*) and then upgrading these exams to the level of corresponding Swedish exams. This 'fast track' procedure is intended to assist in validation of the individual's education from the home country, with complementary training and education to meet the requirements of a corresponding Swedish exam. This upgrading can be done partly within the ordinary

education system. Examples of homeland educations covered by the 'fast track' that are complemented within the ordinary educational system upon arrival in Sweden are doctor, nurse, dentist, pharmacist, social welfare worker and teacher.

6.2 Comparison of participation in programme measures

Comparison of the use of programme measures during the integration period across the three countries reveal several patterns (see Figure 8 and Figure 9). Denmark has a very high share of refugees who participate in job-specific measures – especially unpaid job training. However, almost no one becomes involved in education above lower secondary level. In Sweden, by contrast, a high proportion of refugees participate in ordinary education – especially above lower secondary level – but hardly any participation in unpaid job-training. Norway is somewhat in-between Denmark and Sweden in usage of the three above-mentioned measures but has the highest share of participants in education at the elementary levels.

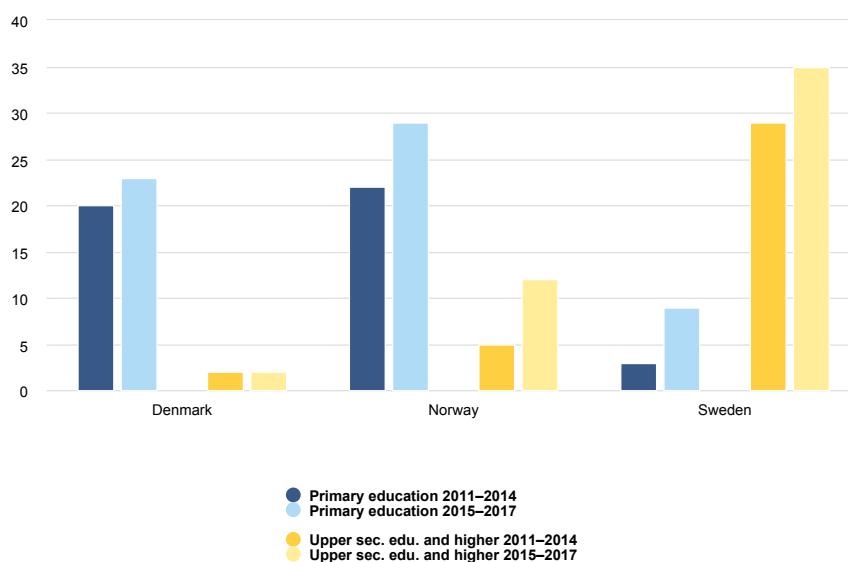


Figure 8: Percentage of refugees participating in ordinary education during the first three years in the host country, by country and cohorts

Figure 8 shows an increase in the percentage of refugees participating in education during their integration period in all three countries, when the 2011–2014 cohorts are compared to the 2015–2017 cohorts. In Denmark, however, this increase applies only to primary education.

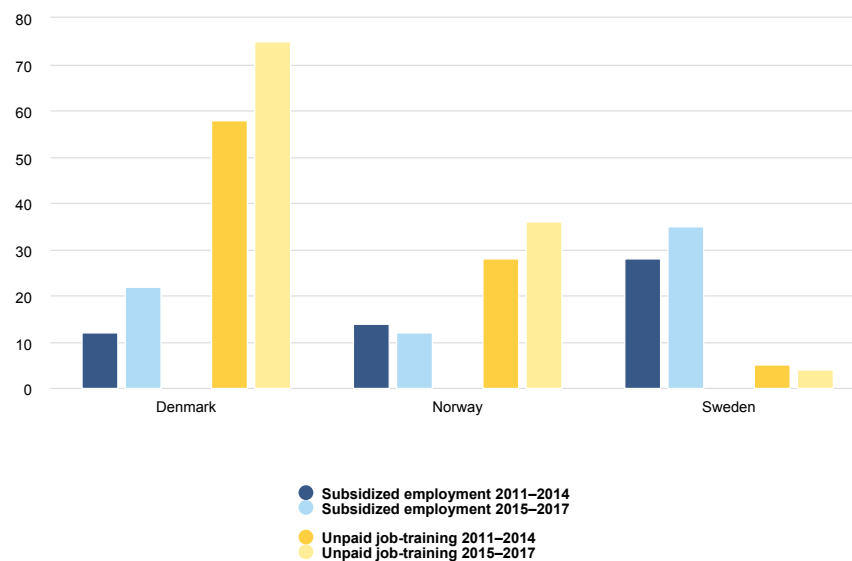


Figure 9: Percentage of refugees participating in job-specific programme measures during the first three years in the host country, by countries and cohorts.

From Figure 9 we see that also the use of job-specific programme measures is increasing in all three countries. In Denmark, the increase is large and significant for both unpaid job-training and subsidized employment; in Norway we see an increase only in the use of unpaid job-training; and in Sweden, an increase in subsidized employment.

6.3 Correlation between programme measures and employment and earning outcomes

How does participation in various programme measures correlate with employment and earnings during the fourth and sixth years after settlement? We present the results for each country separately, before comparing and discussing cross-national similarities and differences.

As we have information on programme measures starting only from the 2011 cohort in Sweden, these regressions have been estimated for the 2011–2017 cohorts (short-term outcomes) and the 2011–2014 cohorts (medium-term outcomes). Outcomes are then measured in 2014–2020 for Denmark and Norway and 2016–2019 for Sweden.¹¹ As all estimates stem from separate regressions where we control for one

11. In the Swedish data, 2019 is the last year we measure outcome, hence here the included cohorts are 2011–2014 and 2011–2016.

activity at a time, we have not accounted for how different activities are combined and interact with each other. We control for the same array of factors mentioned in the methods section: age, marital status, children, education level on arrival, country of origin, residence permit, centrality and the local unemployment rate measured in the outcome year.

Denmark

Table 11: Correlation between participation in various types of programme measures and employment during the fourth year for the cohorts 2011–2016, DENMARK

	Any type of employment (ILO definition)		High-wage employment (wage>NBA*3.5)	
	Women	Men	Women	Men
Lower education ISCED = 0–2	0.019*	-0.012	-0.002	-0.023***
	(0.009)	(0.009)	(0.002)	(0.005)
R-squared	0.043	0.083	0.008	0.023
Higher education >= ISCED 3	0.047	-0.100***	0.001	-0.052***
	(0.030)	(0.023)	(0.008)	(0.012)
R-squared	0.043	0.084	0.008	0.023
Education total	0.020*	-0.022*	-0.002	-0.026***
	(0.008)	(0.009)	(0.002)	(0.005)
R-squared	0.043	0.084	0.008	0.023
Subsidized employment	0.323***	0.238***	0.031***	0.103***
	(0.019)	(0.008)	(0.008)	(0.006)
R-squared	0.089	0.125	0.016	0.045
Unpaid job-training	0.083***	0.162***	0.002	0.022***
	(0.006)	(0.009)	(0.001)	(0.005)
R-squared	0.055	0.100	0.008	0.023
Observations (N)	12013	17895	10671	16800

Note: Each estimate is from a separate regression where YSS=3. Including covariate: age-group, year of arrival, gender, children 0–6 years, married, country of origin, refugee reason, unemployment rate in outcome year. Robust standard errors in parentheses. *** p<0,01; ** p<0,05; * p<0.1

From Table 11 we see that female refugees who attend ordinary education during the first three years in Denmark tend to experience greater employment probabilities during the fourth year. However, this relationship is significant only when the ILO definition of employment is used. The relationship appears to be driven by participation in low-level education. For male refugees, by contrast, the

relationship is negatively significant and strongest for participation in higher-level education.

Employment-specific measures during the integration period are associated with higher probabilities of employment during the fourth year for both genders. The relation is stronger for involvement in subsidized employment, and when employment is measured by the broader ILO definition of employment.

Table 12: Longer-term correlation between participation in various types of programme measures and employment during the sixth year, cohorts 2011–2014, DENMARK

	Any type of employment (ILO definition)		High-wage employment (wage>NBA*3.5)	
	Women	Men	Women	Men
Lower education ISCED = 0–2	0.093***	0.033**	0.019*	0.022*
	(0.013)	(0.010)	(0.008)	(0.011)
R-squared	0.048	0.076	0.021	0.033
Higher education >= ISCED 3	0.179***	-0.031	0.022	-0.028
	(0.047)	(0.027)	(0.029)	(0.026)
R-squared	0.043	0.076	0.019	0.033
Education total	0.096***	0.030**	0.021**	0.022*
	(0.013)	(0.010)	(0.008)	(0.010)
R-squared	0.048	0.076	0.022	0.033
Subsidized employment	0.228***	0.150***	0.022	0.110***
	(0.026)	(0.010)	(0.017)	(0.013)
R-squared	0.055	0.091	0.020	0.045
Unpaid job-training	0.097***	0.134***	0.009*	0.046***
	(0.009)	(0.010)	(0.004)	(0.009)
R-squared	0.053	0.088	0.020	0.036
Observations (N)	7461	13403	4476	7781

Note: Each estimate is from a separate regression where YSS=5. Including covariate: age-group, year of arrival, gender, children 0–6 years, married, country of origin, refugee reason, unemployment rate in outcome year. Robust standard errors in parentheses. *** p<0,01; ** p<0,05; * p<0,1

When measuring the relation between programme measures during the Danish integration programme and employment in the longer term (see Table 12), the low education–employment association becomes positive and significant for both genders. For women, also the correlation with higher education becomes positively significant, but not for men.

Norway

Table 13: Correlation between participation in various types of programme measures and employment during the fourth year, cohorts 2011–2016, NORWAY

	Any type of employment (ILO definition)		High-wage employment (wage>NBA*3.5)	
	Women	Men	Women	Men
Lower education ISCED = 0–2	-0.0483***	-0.0598***	-0.00649***	-0.0351***
	(0.00799)	(0.00784)	(0.00239)	(0.00453)
R-squared	0.0817	0.0478	0.0195	0.0286
Higher education >= ISCED 3	0.139***	0.0559***	-0.00808	-0.0252***
	(0.0167)	(0.0103)	(0.00511)	(0.00670)
R-squared	0.0852	0.0466	0.0193	0.0268
Education total	-0.0149*	-0.0341***	-0.00716***	-0.0385***
	(0.00785)	(0.00732)	(0.00247)	(0.00454)
R-squared	0.0798	0.0463	0.0197	0.0295
Subsidized employment	0.277***	0.167***	0.0331***	0.0883***
	(0.0140)	(0.00845)	(0.00660)	(0.00733)
R-squared	0.111	0.0601	0.0245	0.0385
Unpaid job-training	0.124***	0.0696***	0.0112***	0.0148***
	(0.00823)	(0.00672)	(0.00305)	(0.00457)
R-squared	0.0952	0.0498	0.0205	0.0267
Observations (N)	15165	23059	12434	18352

Note: Each estimate is from a separate regression where YSS=3. Including covariate: age-group, year of arrival, gender, children 0–6 years, married, country of origin, refugee reason, unemployment rate in outcome year. Robust standard errors in parentheses. *** p<0,01; ** p<0,05; * p<0,1

Table 13 shows that refugees who attend lower ordinary education during the first three years in Norway have lower probabilities of employment during the fourth year. The relationship is significant for both male and female refugees. However, attending education on a higher level than upper secondary schooling is positively and significantly correlated with the broad ILO definition of employment, although not with high-wage employment. Employment-specific measures are associated

with higher probabilities of employment during the fourth year for both genders. As in the Danish case, the relation is stronger for subsidized employment and when the broader ILO definition of employment is used.

Table 14: Longer-term correlation between participation in various types of programme measures and employment during the sixth year, cohorts 2011–2014, NORWAY

	Any type of employment (ILO definition)		High-wage employment (wage>NBA*3.5)	
	Women	Men	Women	Men
Lower education ISCED = 0-2	0.0444***	0.00973	-0.00388	-0.0203*
	(0.0121)	(0.0103)	(0.00598)	(0.0117)
R-squared	0.106	0.0656	0.0350	0.0359
Higher education >= ISCED 3	0.154***	0.0541***	0.0436**	0.00946
	(0.0246)	(0.0150)	(0.0187)	(0.0209)
R-squared	0.109	0.0664	0.0365	0.0356
Education total	0.0669***	0.0226**	0.00522	-0.0167
	(0.0117)	(0.00969)	(0.00629)	(0.0112)
R-squared	0.108	0.0659	0.0351	0.0358
Subsidized employment	0.178***	0.103***	0.0603***	0.104***
	(0.0165)	(0.0104)	(0.0119)	(0.0134)
R-squared	0.117	0.0724	0.0420	0.0441
Unpaid job-training	0.0974***	0.0529***	0.0210***	0.0539***
	(0.0114)	(0.00881)	(0.00670)	(0.0105)
R-squared	0.112	0.0683	0.0367	0.0389
Observations (N)	9390	12031	7127	8062

Note: Each estimate is from a separate regression where YSS=5. Including covariate: age-group, year of arrival, gender, children 0-6 years, married, country of origin, refugee reason, unemployment rate in outcome year. Robust standard errors in parentheses. *** p<0,01; ** p<0,05; * p<0,1

Table 14 shows that when the relation between programme measures and employment is measured in the longer term (the sixth year after settlement) in Norway, the relation between education and employment become positive for both genders. However, this positive relation is significant only for participation in education above lower secondary education and for women for lower education measures. For men, participation in lower education still has a significant negative association with high-wage employment in the sixth year after settlement.

Sweden

Table 15: Correlation between participation in various types of programme measures and employment during the fourth year, cohorts 2011–2016, SWEDEN

	Any type of employment (ILO definition)		High-wage employment (wage>NBA*3.5)	
	Women	Men	Women	Men
Lower education ISCED = 0-2	-0.0521***	-0.0658***	-0.0115***	-0.0655***
	(0.00944)	(0.00953)	(0.00388)	(0.00730)
R-squared	0.078	0.084	0.025	0.047
Higher education >= ISCED 3	0.129***	0.0448***	0.0190***	0.0276***
	(0.00533)	(0.00479)	(0.00221)	(0.00367)
R-squared	0.091	0.085	0.027	0.047
Education total	0.0967***	0.0269***	0.0133***	0.0129***
	(0.00502)	(0.00459)	(0.00208)	(0.00352)
R-squared	0.086	0.084	0.026	0.046
Subsidized employment	0.438***	0.271***	0.0594***	0.118***
	(0.00543)	(0.00406)	(0.00240)	(0.00320)
R-squared	0.212	0.154	0.040	0.069
Unpaid job-training	0.117***	0.0734***	0.0134***	0.0179***
	(0.0109)	(0.00897)	(0.00451)	(0.00688)
Observations	37,901	53,579	37,901	53,579
R-squared	0.080	0.085	0.025	0.046
Observations (N)	37,901	53,579	37,901	53,579

Note: Each estimate is from a separate regression where YSS=3. Including covariate: age-group, year of arrival, gender, children 0–6 years, married, country of origin, refugee reason, unemployment rate in outcome year. Robust standard errors in parentheses. *** p<0,01; ** p<0,05; * p<0.1

From Table 15 we see that – as was the case in Norway – refugees in Sweden who attend lower ordinary education during their integration period have lower employment rates during the fourth year. However, involvement in higher education and both employment measures are positive and significantly correlated with employment for both genders.

Table 16: Longer-term correlation between participation in various types of programme measures and employment during the sixth year, cohorts 2011–2014, SWEDEN

	Any type of employment (ILO definition)		High-wage employment (wage>NBA*3.5)	
	Women	Men	Women	Men
Lower education ISCED = 0-2	-0.00165	-0.00778	-0.00370	-0.0269*
(ISCED 0-2)	(0.0174)	(0.0170)	(0.0100)	(0.0161)
R-squared	0.088	0.059	0.045	0.060
Higher education (>= ISCED 3)	0.200***	0.105***	0.0871***	0.113***
(>= ISCED 3)	(0.00807)	(0.00673)	(0.00468)	(0.00637)
R-squared	0.116	0.067	0.062	0.071
Education total	0.176***	0.0955***	0.0776***	0.103***
	(0.00770)	(0.00655)	(0.00447)	(0.00620)
R-squared	0.112	0.066	0.060	0.069
Subsidized employment	0.169***	0.106***	0.0713***	0.0745***
	(0.00942)	(0.00593)	(0.00545)	(0.00564)
R-squared	0.103	0.070	0.054	0.066
Unpaid job-training	0.0596***	0.0656***	0.00339	0.0270**
	(0.0150)	(0.0122)	(0.00867)	(0.0116)
R-squared	0.089	0.060	0.045	0.060
Observations (N)	19,827	26,719	19,827	26,719

Note: Each estimate is from a separate regression where YSS=5. Including covariate: age-group, year of arrival, gender, children 0-6 years, married, country of origin, refugee reason, unemployment rate in outcome year. Robust standard errors in parentheses. *** p<0,01; ** p<0,05; * p<0,1

Table 16 shows that in the sixth year after settlement, the negative relationship between lower education and employment has disappeared and is no longer significant. Moreover, the positive relation between higher education and employment is even stronger when measured in the longer run. By contrast, the positive relation between employment-specific programme measures seems to fade when employment is measured during the sixth year in Sweden, more than two years after the end of the integration period.

6.4 Discussion of long-term effects and cross-national differences

In all three countries, we see the same tendency: attending formal education during the integration period is weakly or even negatively associated with employment in the short run, but not in the long run. Here we find a positive relation between education and employment (or, in a few cases, no relation). Where the correlation was positive already in the fourth year, it becomes stronger in the sixth year. In Norway and Sweden, the correlation with employment is stronger for higher education, whereas it is stronger for lower education in Denmark. Nonetheless, in Sweden the positive association between education and employment is already strong after three years: this might be a result of Sweden's special policy of collecting information on homeland education and dedicating education programmes to upgrading these to Swedish equivalents.

In all three countries, we see positive correlations between job-specific measures during the integration period and employment. These relations are stronger for participation in subsidized employment, but the positive correlations diminish in the longer run. It is interesting to note that the level of correlation between unpaid job-training is almost the same across the three countries, even though the participation rate is considerably higher in Denmark. However, if more capable refugees are attending job-training, then the positive relation between job-training and employment might be explained by the fact that such persons are more likely to get jobs (positive selection). It might be argued that this is the case in Norway, if we assume that the 35 per cent of refugees who attend unpaid job-training belong to the better half of the cohort. But if the measure is more widely applied, as seen in Denmark with 75 per cent attending, it is less likely that the relation is driven solely driven by the fact that more capable refugees are involved. Then, since the correlations are the same in all three countries despite very different levels of participation, it is also less likely that positive selection drives the result in Norway and Sweden.

7. Cross-national comparison of estimated trajectories for outcomes

Are there cross-national differences in employment and earning outcomes for certain subgroups in the three Scandinavian countries? For example, does one country have relatively better results for men than women than the other two countries, for those with high education levels on arrivals, or for younger age groups? Earlier research has found that integration policies may affect subgroups differently. While some policies may provide (at least short-term) positive effects on labour-market integration outcomes for one group, they may have no effects – or even negative side-effects – for other groups (Andersson Joona, 2020; Arendt, Dustmann, & Ku, 2022; Arendt, Ku, & Dustmann, 2021). Decomposing comparative analyses to examine differences between subgroups may reveal important insights into the dynamics of integration policies (Hernes et al., 2020).

Based on estimates from our regression analyses, we can draw estimated employment trajectories – controlling for all other variables in the model – that illustrate how employment evolves for different subgroups over time. In contrast to the figures in Chapter 5 with descriptive statistics of the dependent variables, the figures in this chapter are adjusted for observed characteristics and local unemployment rate. We conduct analyses for different sub-groups – by gender, age, and education level on arrival – in order to predict employment trajectories that are specific to these groups. Trajectories at higher years since settlement are based on fewer observations and therefore subject to greater uncertainty. This is particularly prevalent in the Danish data. In the figures in this chapter, we present only trajectories based on coefficients that proven significant in the regression analyses; that implies that some of the Danish trajectories are not presented for certain years of the period analysed.

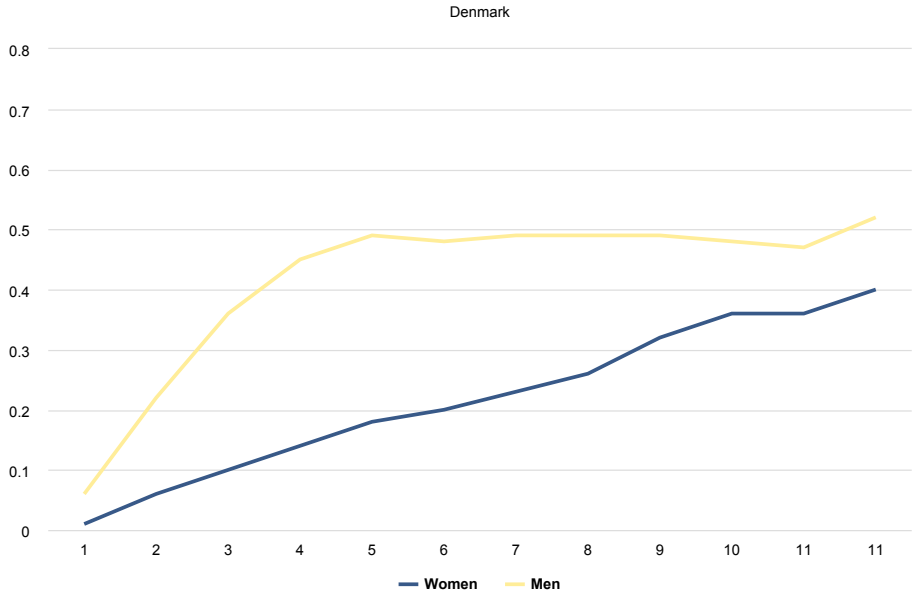
As shown in Chapter 5 on the descriptive statistics of the outcome variables, the ILO definition of employment (which measures one hour of employment a given reference week in November), and the lowest earnings threshold of 1.5 NBA, show rather similar levels. Both measures are relatively low thresholds for labour market attachment. To enable a discussion of potential changes in employment over time, we include the ILO definition, which was also used in the previous NORDIC-INTRO report. Additionally, we present estimates for earning levels 2.5 NBA and 3.5 NBA, to see if there are cross-national differences when outcomes for higher thresholds are compared. For the analysis of gender differences, we show both NBA measures. For analyses of different age groups and education levels on arrival, we include only the latter.

7.1 Gender differences

Earlier research has consistently shown major gender gaps between male and female refugees (Hernes et al., 2020; Joyce, 2019). Additionally, effect studies of national policies aimed at increasing labour-market participation often show a positive (at least short-term) effect for men but show no effect – and sometimes even negative side-effects – for women (Andersson Joona, 2020; Arendt, 2019; Arendt et al., 2022; Arendt et al., 2021). It often takes significantly longer time for newly arrived women to establish themselves on the labour market than for newly arrived men, and the employment rate among women often remains lower compared to men's over time. The relatively low labour-market attachment among women is a multifaceted problem, regarding the welfare state model, social marginalization, and mental health issues (Lönnsroos & Gustafsson, 2018).

The comparative analysis of gender differences in the previous NORDIC-INTRO report found that Norway had substantially higher predicted employment trajectories for women compared to Sweden, and especially to Denmark. Further, although there was a substantial employment gap between men and women in all three countries, this gap was significantly lower in Norway than in Sweden or Denmark: the average estimated employment gap between men and women for all years after settlement was 15 ppts in Norway, 21 in Sweden and as much as 29 in Denmark (Hernes et al. 2019). Are these patterns still apparent in the updated analyses that include newer cohorts and a longer timespan?

Below, we first present the estimated employment trajectories for the three measures (ILO, 2.5 NBA and 3.35 NBA), and describe differences in absolute levels and development over time with years since settlement. We then turn to the absolute and relative gender differences.



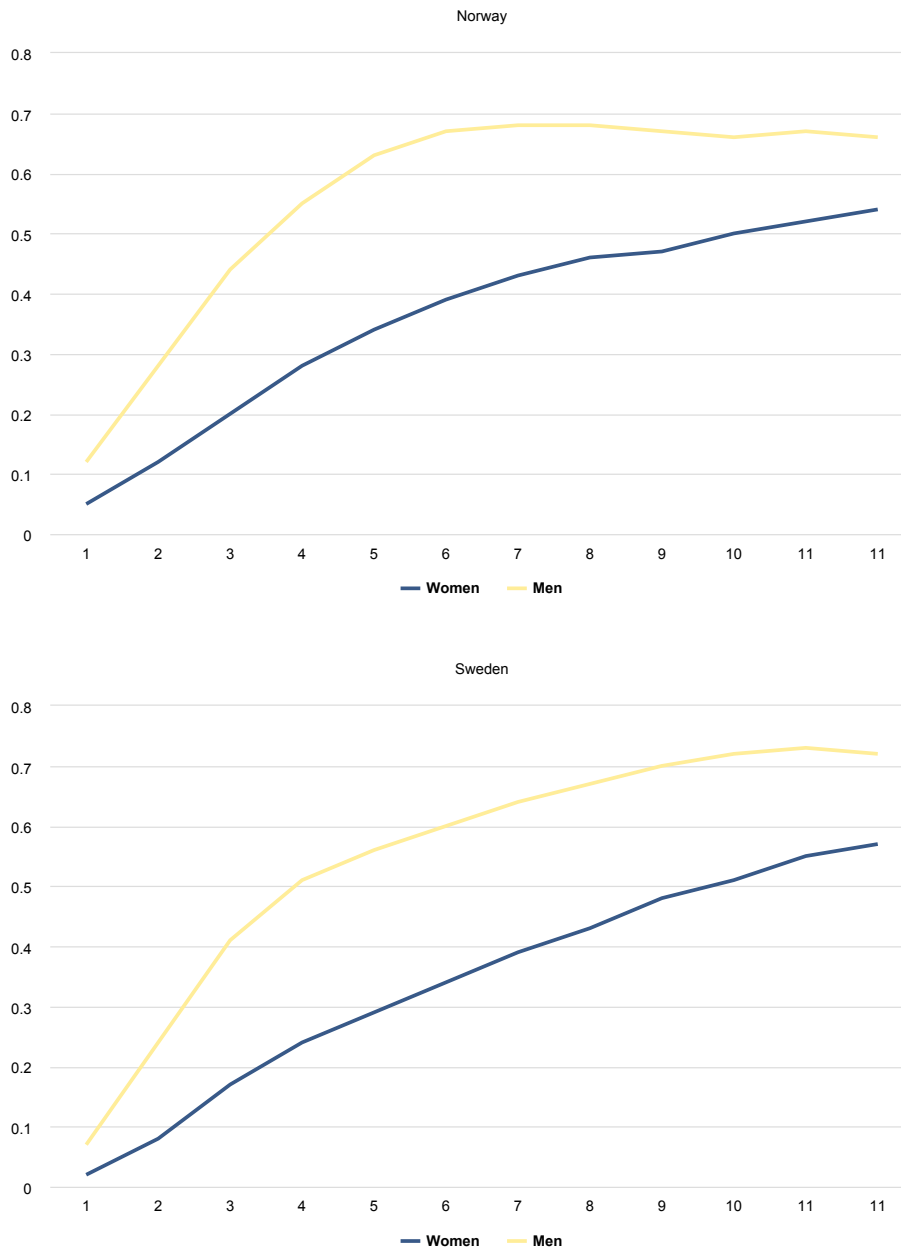
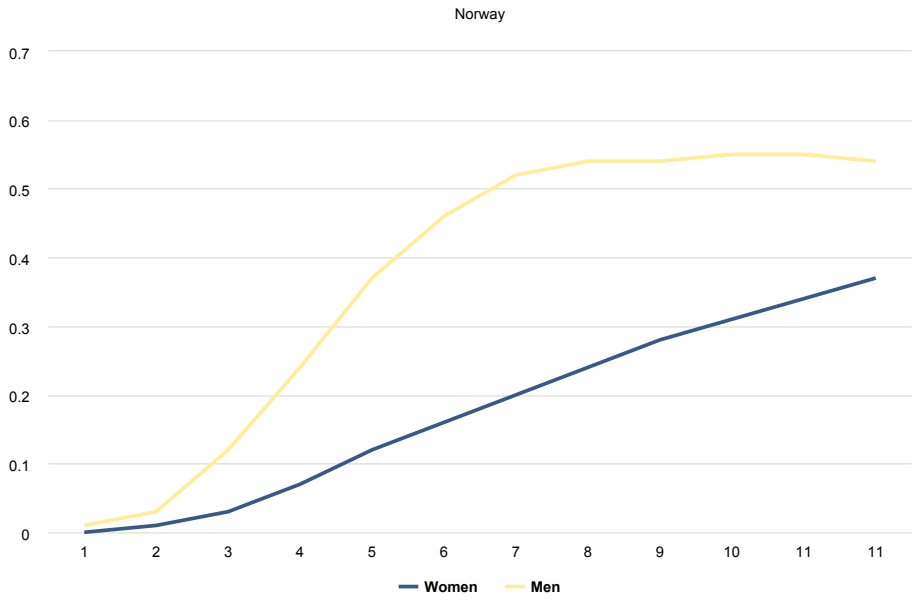
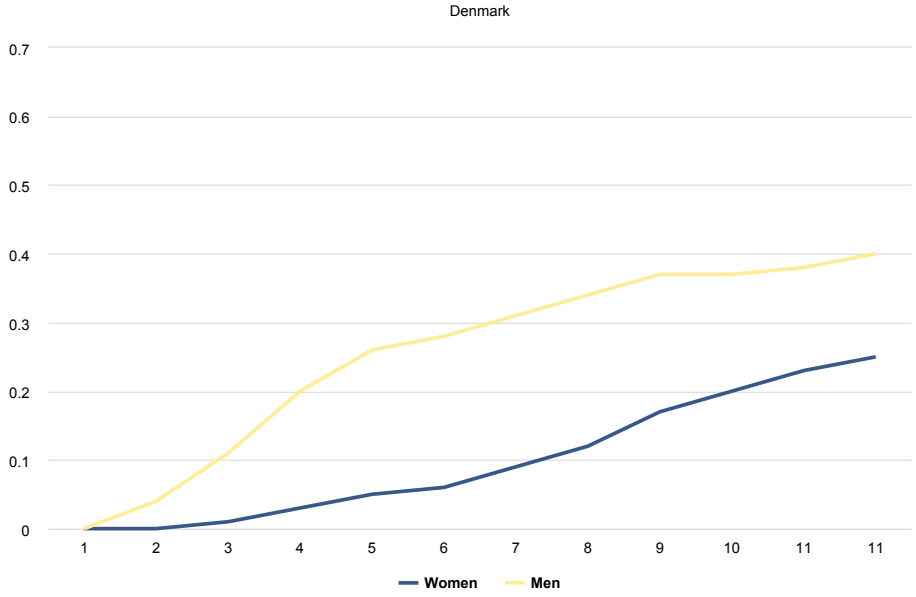


Figure 10: Predicted employment (ILO) trajectories for men and women by country, cohorts 2008–2019.

Figure 10 illustrates the employment gap between male and female participants with years since settlement. On main observation is that – in all three countries – there is a substantial gap between the employment levels for men and women. Further, we see that Denmark generally has lower employment levels than Norway and Sweden for both men and women. As to the development over time, in Denmark and Norway the gender gap increases sharply the first four to five years after settlement. After the fifth year, the male trajectories flatten, while the female trajectories continue to rise, narrowing the employment gap after several years'

residence. Sweden follows a rather similar pattern, but the flattening of the trajectory for male participants is not evident before the tenth year after settlement.



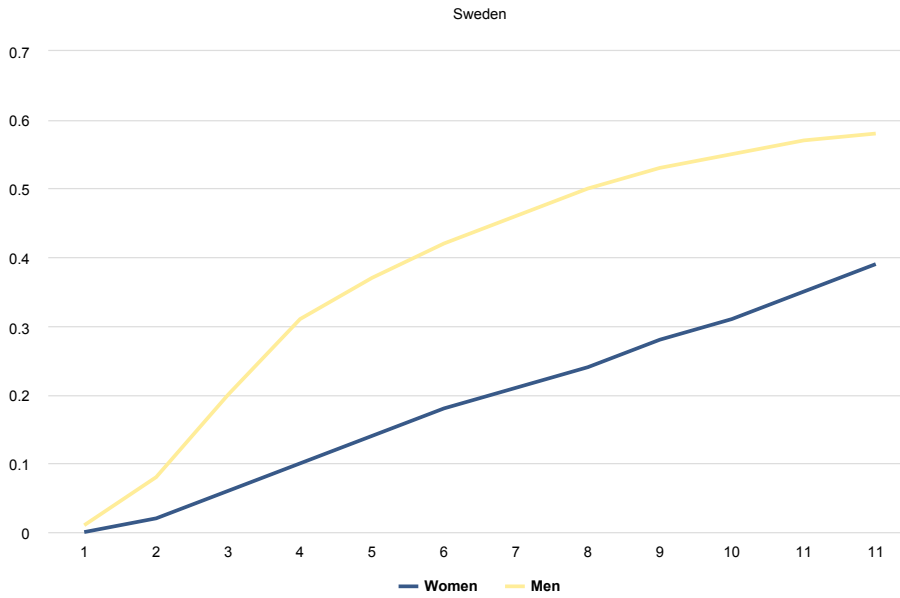
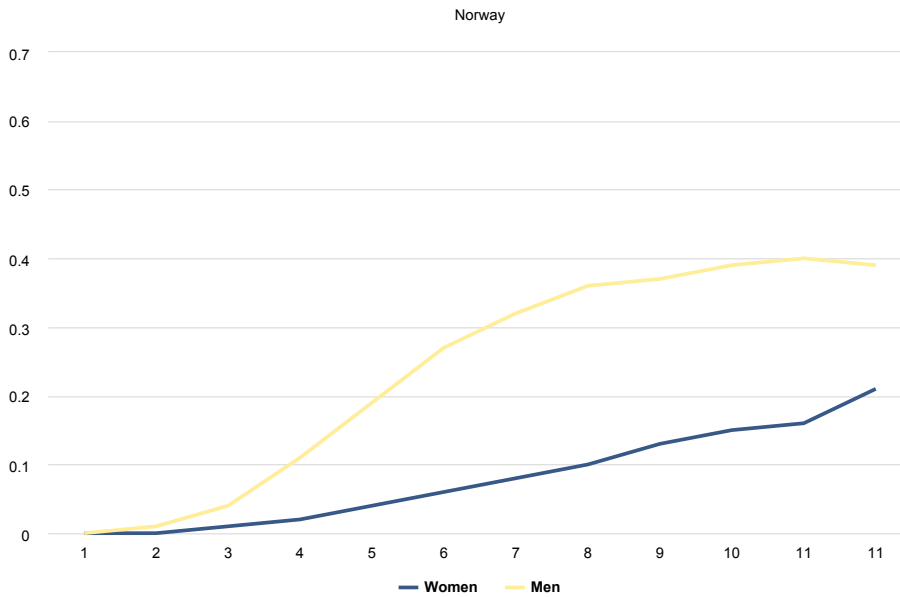


Figure 11: Predicted trajectories for earning level above NBA 2.5 for men and women by country, cohorts 2008–2019.



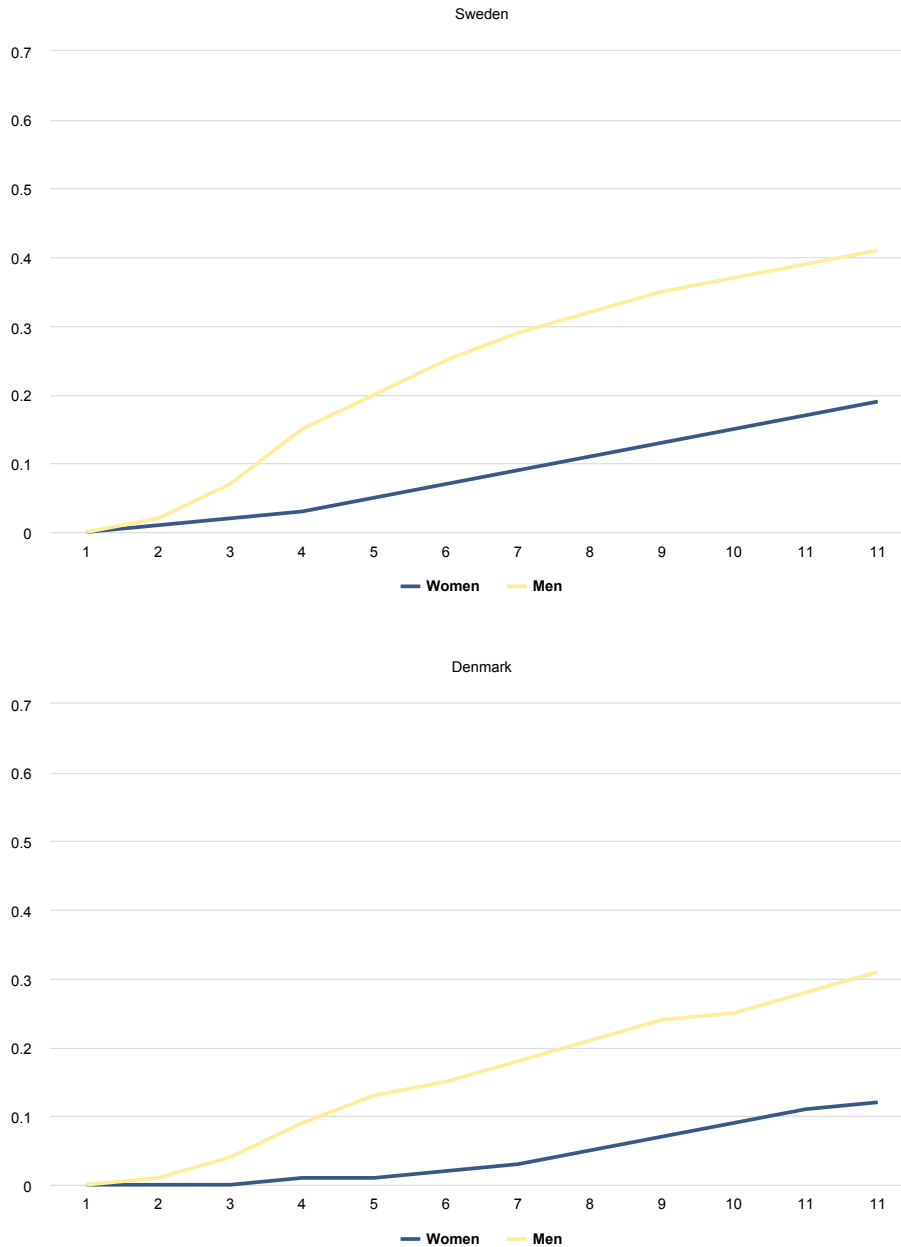


Figure 12: Predicted trajectories for earning level above NBA 3.5 for men and women by country, cohorts 2008–2019.

Figure 11 and Figure 12 show the gender gap between earnings levels at 2.5 NBA and 3.5 NBA, in terms of years since settlement. Again, there is a substantial gender gap when we measure the share of persons who reach different earning thresholds. In absolute levels, Denmark has a lower estimated share that reaches the two earnings levels, for both men and women, compared to Sweden and Norway. For men, Norway has a steeper trajectory than the other two countries in the initial years, but the curve flattens from the sixth (2.5 NBA) and ninth (3.5 NBA) year after settlement. Growth in Sweden, however, is less steep, but steady. Thus, at the end of

the period analysed, Sweden and Norway end up at similar levels. For women, we see rather similar patterns in all three countries, but Denmark has generally lower levels than Norway and Sweden. Only slightly above 10 per cent of the female refugees arriving in Denmark, as against about 20 per cent in Norway and Sweden, are predicted to reach the 3.5 NBA threshold – which is close to the median earning level – after 11 years in the country.

Table 17: Comparison of average absolute and relative differences between men and women’s estimated employment and earning trajectories in Denmark, Norway, and Sweden, 5 and 10 years after settlement.

			Denmark	Norway	Sweden
ILO	Absolute (men – women)	5 years	28 ppt.	28 ppt.	26 ppt.
		10 years	12 ppt.	14 ppt.	18 ppt.
	Relative (men/women)	5 years	2.4	1.7	1.8
		10 years	1.3	1.3	1.3
NBA 2–5	Absolute (men – women)	5 years	22 ppt.	29 ppt.	24 ppt.
		10 years	15 ppt.	21 ppt.	22 ppt.
	Relative (men/women)	5 years	4.7	2.9	2.3
		10 years	1.7	1.6	1.6
NBA 3–5	Absolute (men – women)	5 years	13 ppt.	20 ppt.	18 ppt.
		10 years	19 ppt.	23 ppt.	22 ppt.
	Relative (men/women)	5 years	7.5	4.6	3.6
		10 years	2.5	2.5	2.3

If we compare the size of the employment and earning threshold gaps between men and women, we see larger gender gaps when measured 5 years after settlement than when measured 10 years after settlement. The absolute employment (ILO) gap between men and women is approximately 27 percentage points (ppt) in all three countries after year 5 but drops to 12–18 percentage points after 10 years. Because the estimated employment levels in Denmark in general are lower for both men and women, the relative difference (calculated by dividing the employment levels for men and women) shows that the relative gender gap is higher in Denmark when measured after 5 years (2.4 times higher predicted employment among men than women) – but after 10 years, the relative differences are at the same level (1.3 in all three countries).

For the two earnings thresholds, we see the same pattern: after 5 years Denmark has a lower gender gap in percentage points, but in terms of relative employment gaps the difference is larger in Denmark. For the 2.5 NBA threshold, Denmark has on average a 22 percentage-point gap between men and women; this is 29 percentage

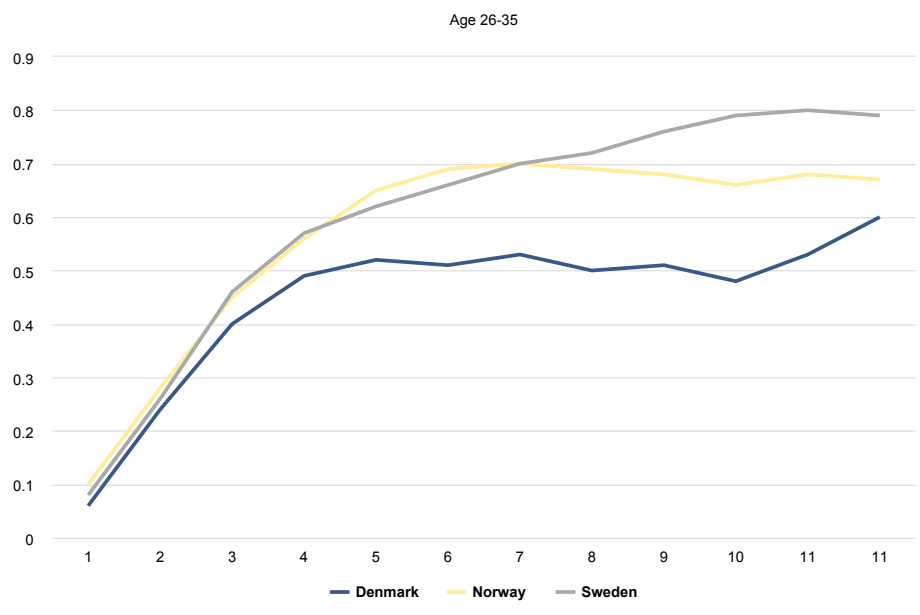
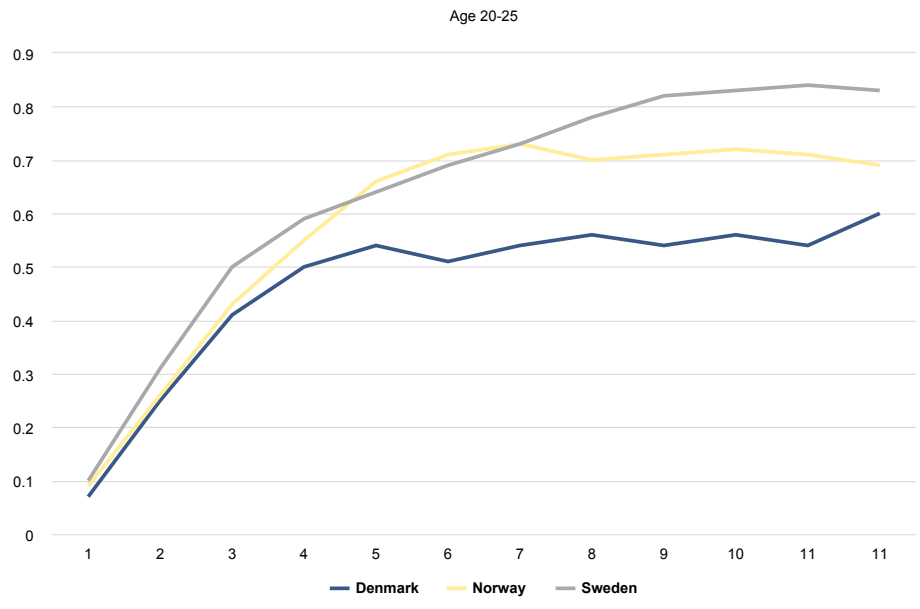
points in Norway, whereas the relative difference after 5 years is 4.7 in Denmark and 2.9 in Norway. When measured after 10 years, the relative gender difference has decreased in all three countries to a level where male refugees have about 1.6 times greater probability of employment at a wage-level above 2.5 NBA than female refugees.

For the highest wage threshold – 3.5 NBA – the gender gap in absolute terms is highest in Norway when measured after 5 years (20 ppt.), whereas the relative difference is highest in Denmark – 7.5, as against 3.6 in Sweden. When measured 10 years after settlement the relative difference has decreased in all three countries, to a common level of approximately 2.5. Accordingly, male refugees in Scandinavia are 2.5 times more likely to reach the 3.5 NBA threshold as are female refugees ten years after settlement in the host country.

In summary, refugees in Denmark experience relatively greater employment gaps during their first years after settlement; later, these high gaps decrease and come to a level similar to those in Sweden and Norway. Moreover, in all three countries the relative gender gap increases as the threshold becomes the higher. While the relative difference between men and women after 10 years is only 1.3 for the lowest definition of labour market attachment (using the ILO measurement), the relative gender gap is about 2.5, with the highest threshold of 3.5 NBA. Measured in the short run, we find as high as 7.5 times greater probabilities of reaching the 3.5 NBA threshold among Danish male refugees compared to female refugees.

7.2 Differences between age-groups

Studies have shown that the age on arrival in a new country affects the likelihood of labour market integration (Andersson Joona, 2020). The analysis of trajectories across different age-groups and countries in the previous NORDIC INTRO-report found that each of the three countries had the highest results for different age groups for male participants. Denmark had the best estimated outcomes for men aged 20–25, Norway for those aged 26–45, and Sweden for those aged 46–55. Although Norway generally showed better employment outcomes for women, Sweden also had higher estimated outcomes for female participants aged 46–55 (Hernes et al., 2019). Do we find similar patterns for different age-groups in the updated analyses that include newer cohorts and operate with a longer timespan?



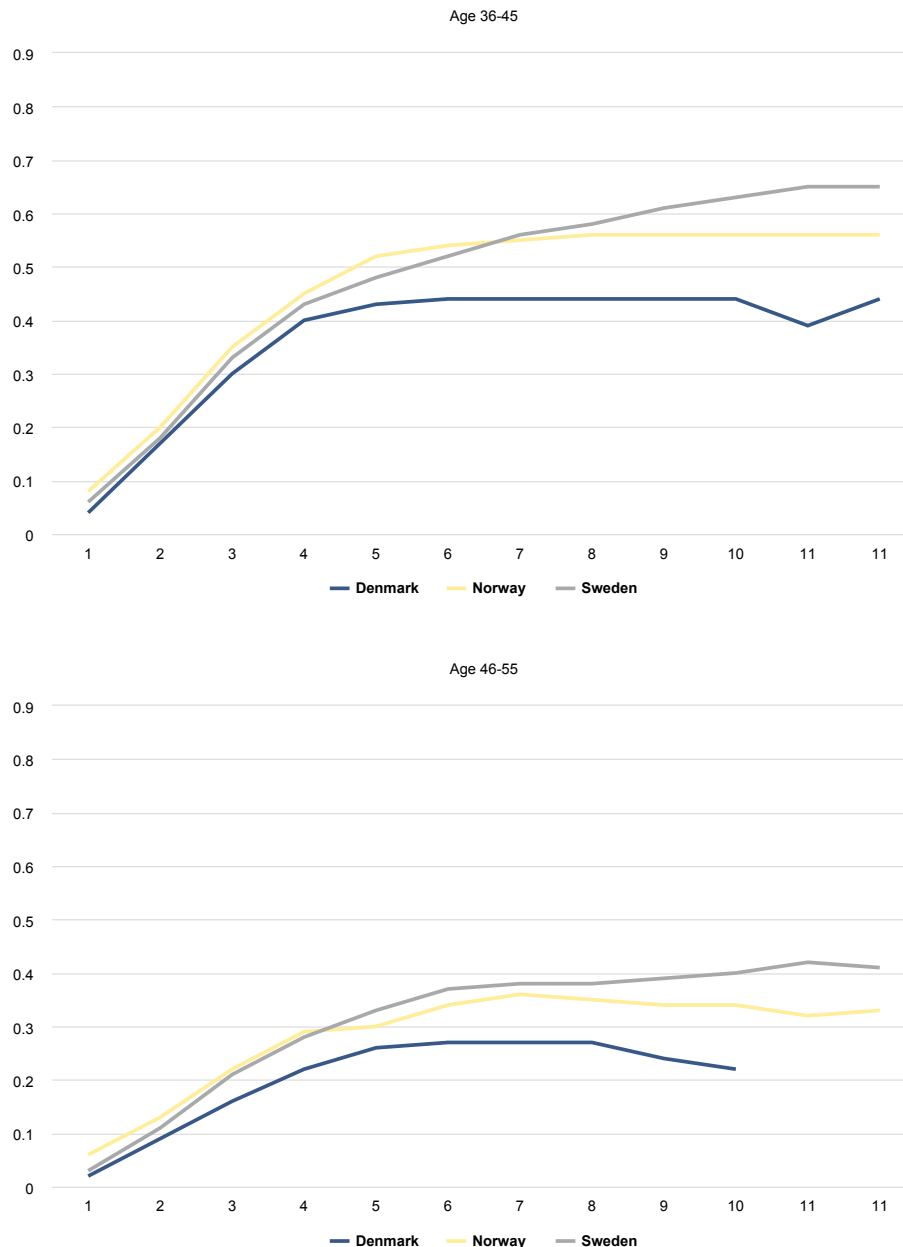
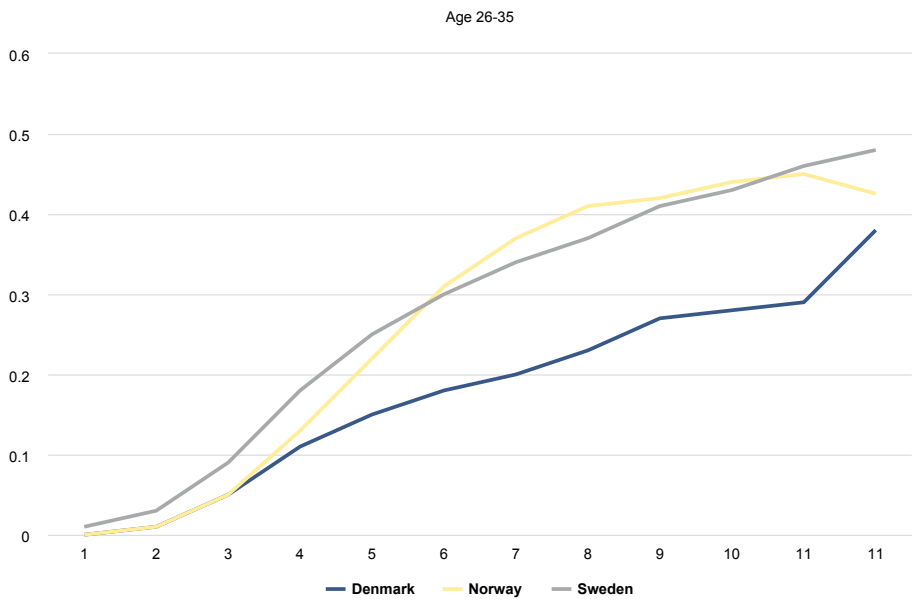
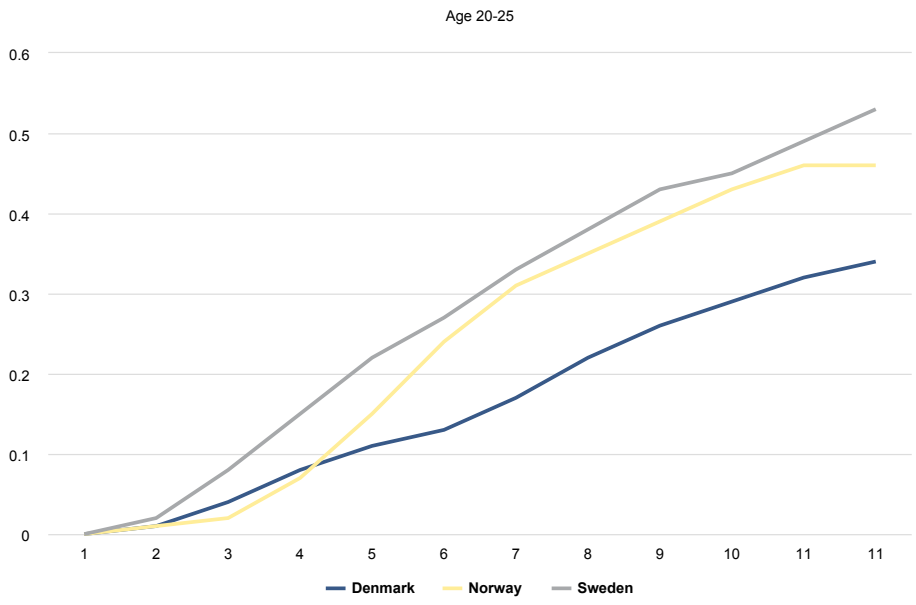


Figure 13: Estimated employment (ILO) trajectories for MEN with years since settlement, by age-groups (age at settlement)

Figure 13 shows that the three countries have rather similar estimated employment (ILO) trajectories in the initial years, for all age-groups. From the third year, Danish levels stagnate and are lower than Norwegian and Swedish levels. Sweden surpasses Norway from around the seventh year after settlement. In all three countries, the two youngest age groups – aged 20–35 – have very similar trajectories, at higher levels than the older age-groups. Refugees who were above 45 years at the time of settlement have significantly lower employment levels, and their employment trajectories rise at a much slower pace than the other groups. Thus, we do not see the same steep employment curve during the first three years of settlement that we saw for the other age-groups.



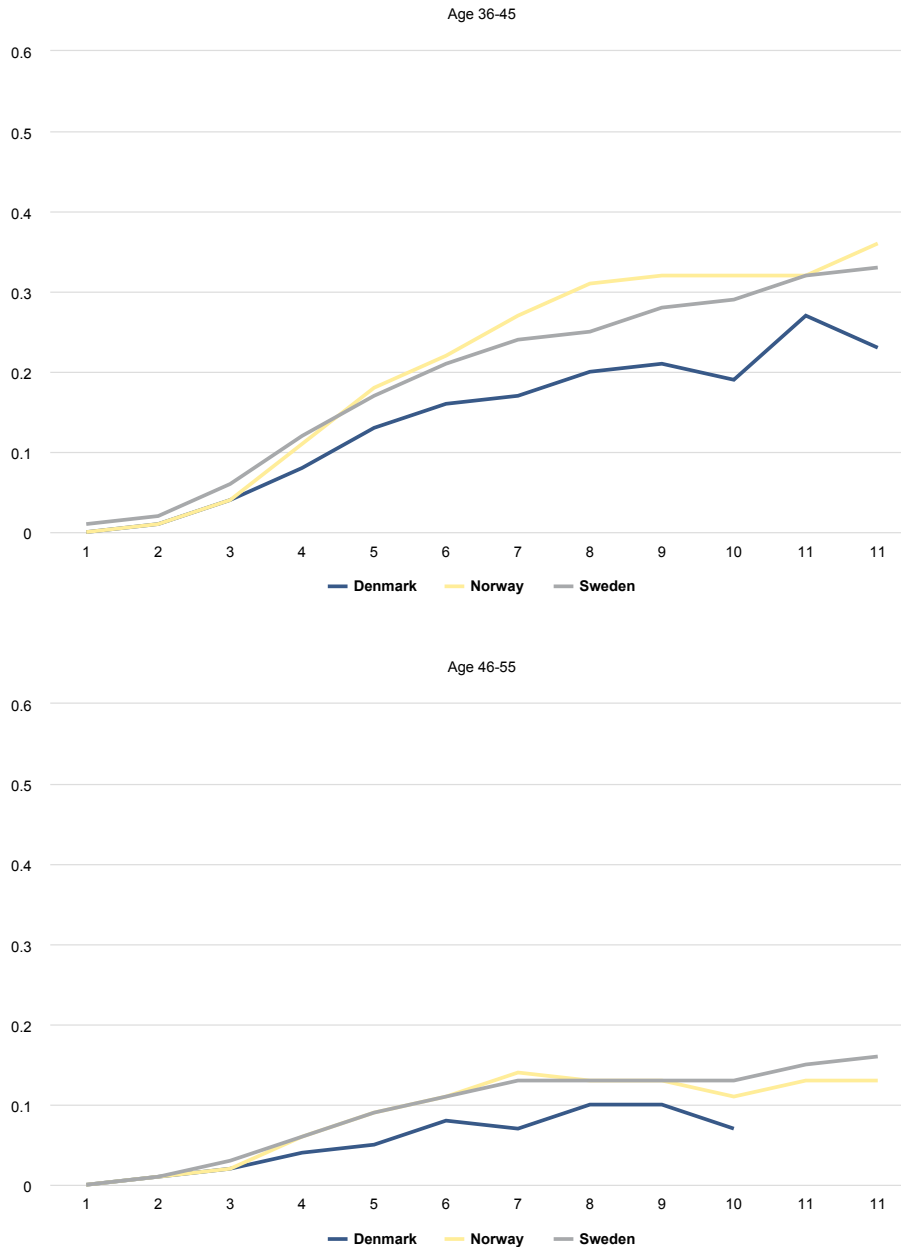
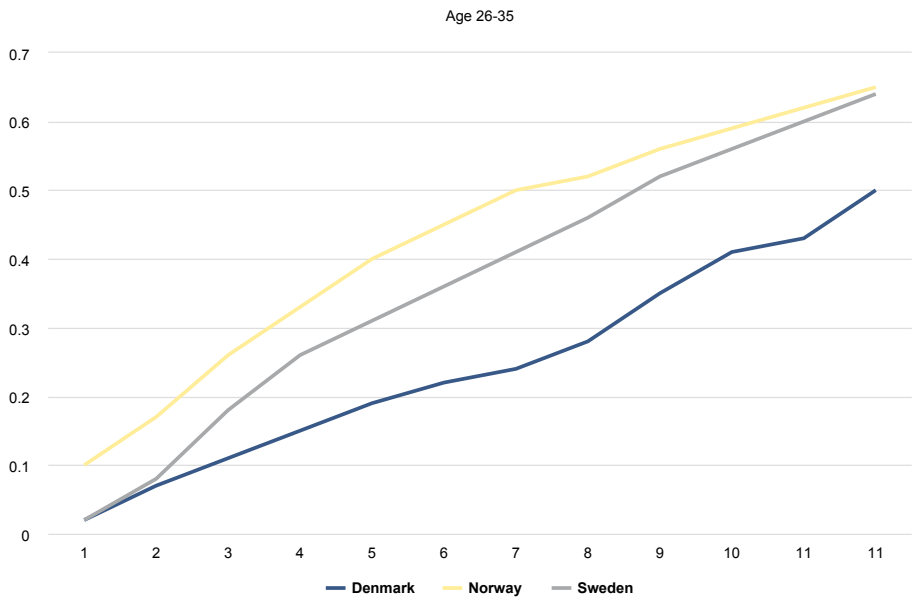
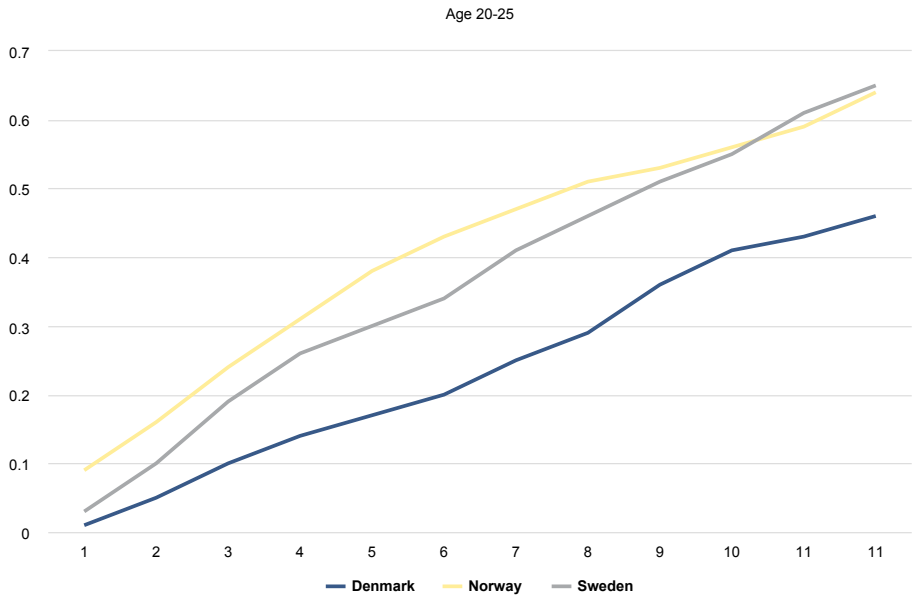


Figure 14: Estimated trajectories for reaching earnings above 3.5 NBA for MEN with years since settlement, by age-groups

Figure 14 shows that all three countries have significantly lower levels for all age-groups when we estimated the trajectories for reaching earning levels above 3.5 NBA for men. There are minor differences, but Norway and Sweden have relatively similar trajectories. Similar to the employment trajectories using the ILO definition presented in

Figure 13, Denmark generally has a lower share who reach an earning level of 3.5 NBA for all age-groups, but the difference is more pronounced for the two youngest age-groups.



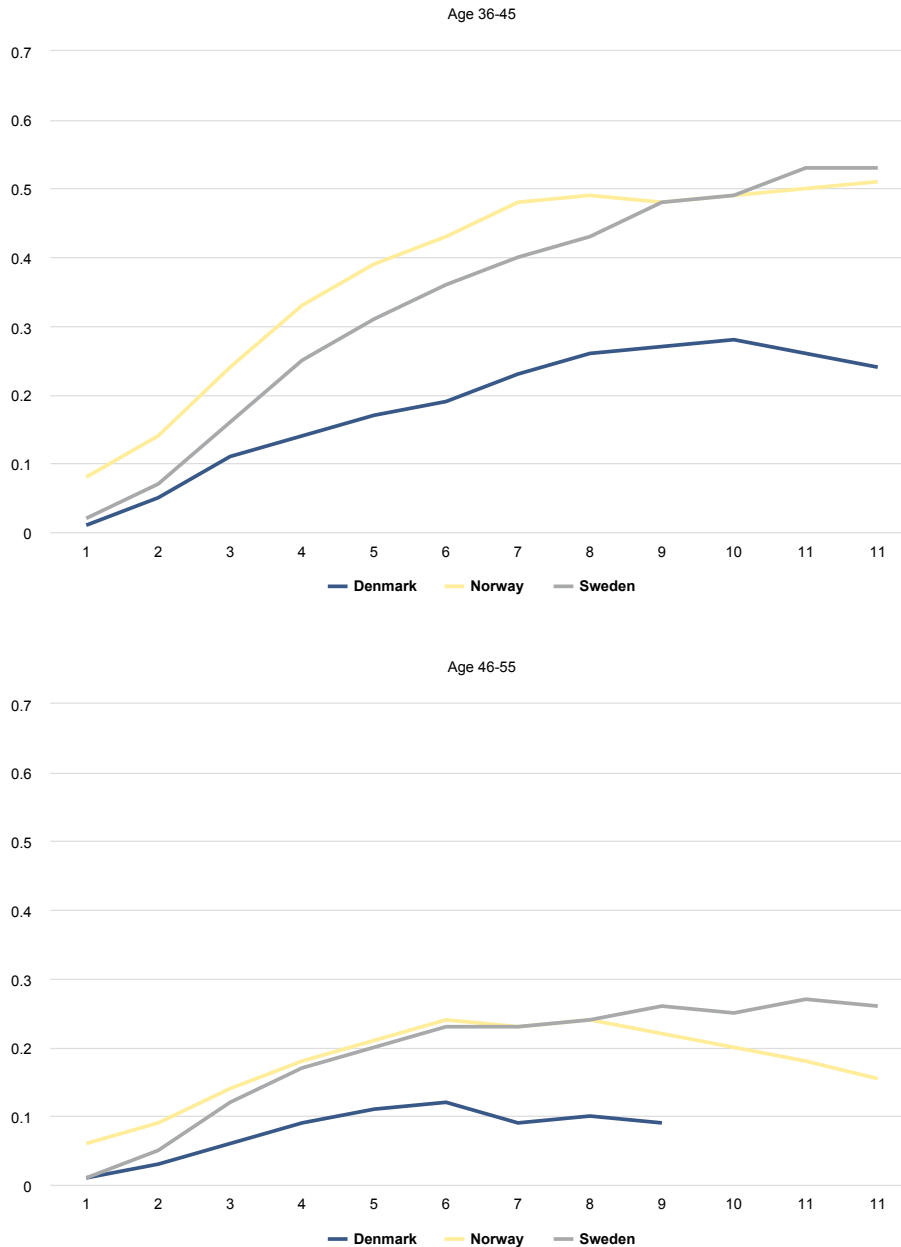
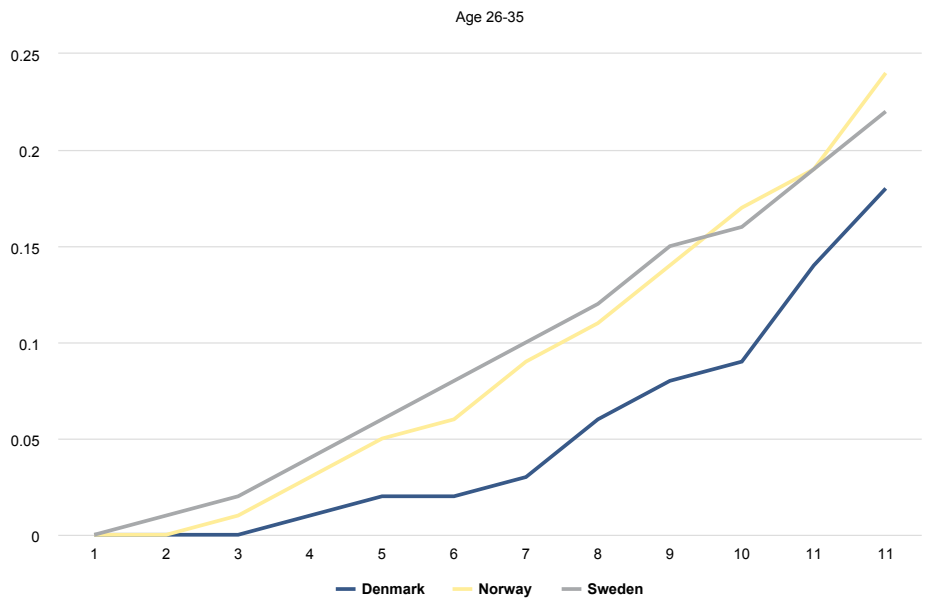
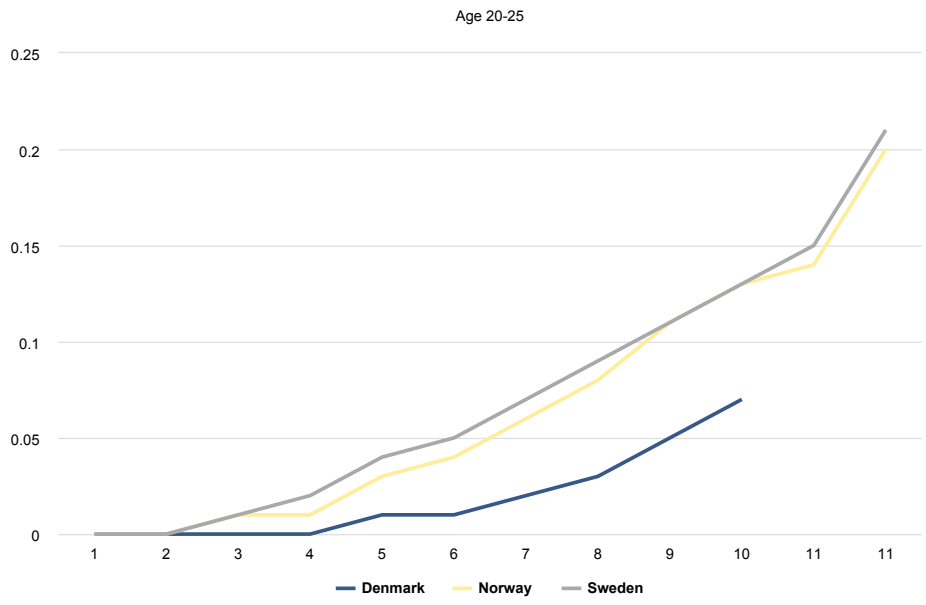


Figure 15: Estimated employment (ILO) trajectories for WOMEN, by years since settlement, by age-groups

Figure 15 shows that for women, Norway has slightly better employment trajectories than the two other countries during the first years after settlement for the three youngest age-groups, but that Sweden catches up, reaching Norwegian levels from about the eighth year after settlement. For persons over 45 years at the time of settlement, Norwegian and Swedish estimated levels are similar until the eighth year: then Norwegian levels drop, while Swedish levels surpass Norwegian levels. Again, Denmark has substantially lower levels than the two other countries for all age-groups. Moreover, for the two youngest age-groups (20–35 years), all three countries have rising estimated trajectories for the entire period analysed, but levels stagnate or drop for the two oldest age-groups, 6 to 7 years after settlement.



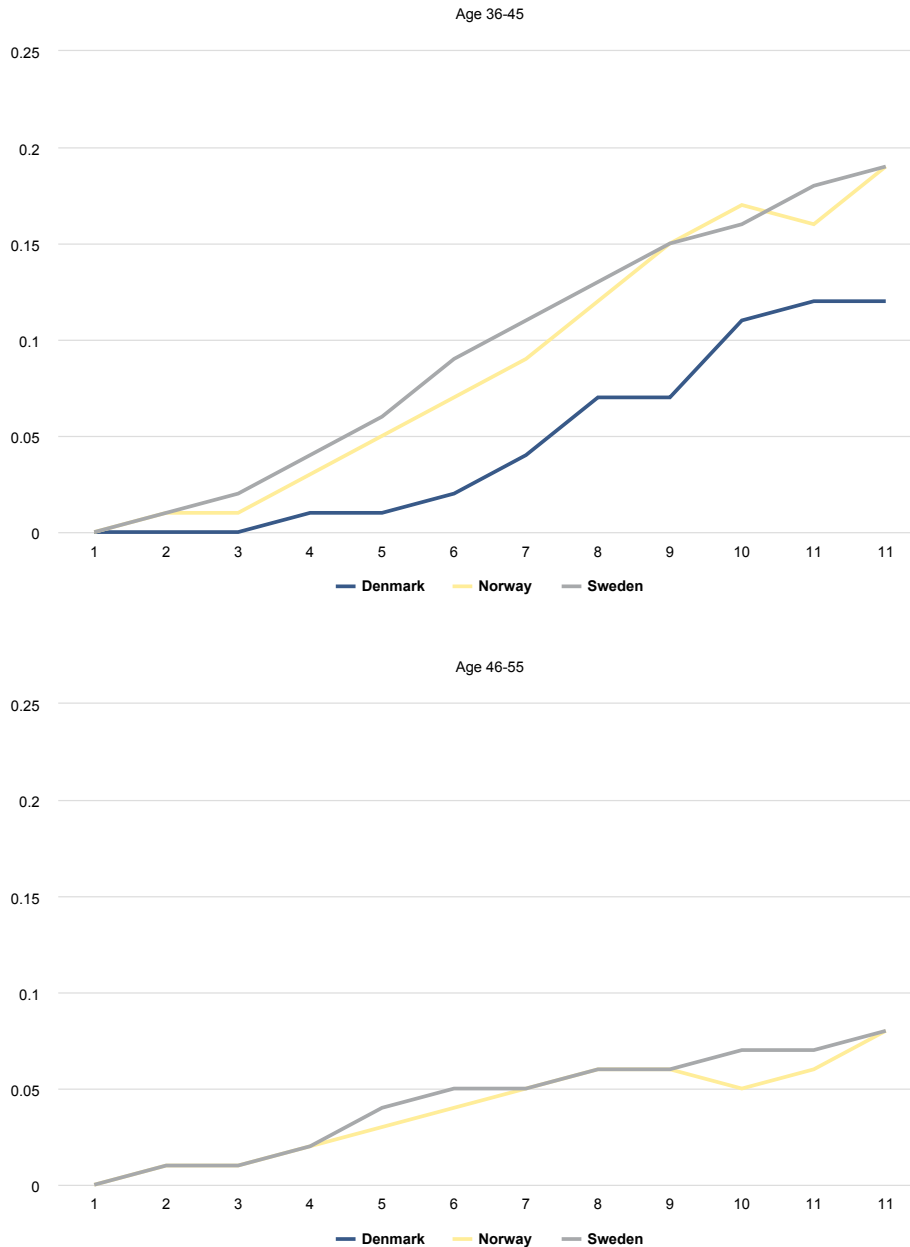


Figure 16: Estimated trajectories for reaching earnings above 3.5 NBA for WOMEN with years since settlement, by age-groups

Note: Because of few observations for female refugees above 45 years on arrival in Denmark, the estimated predicted trajectory has too much uncertainty to be presented.

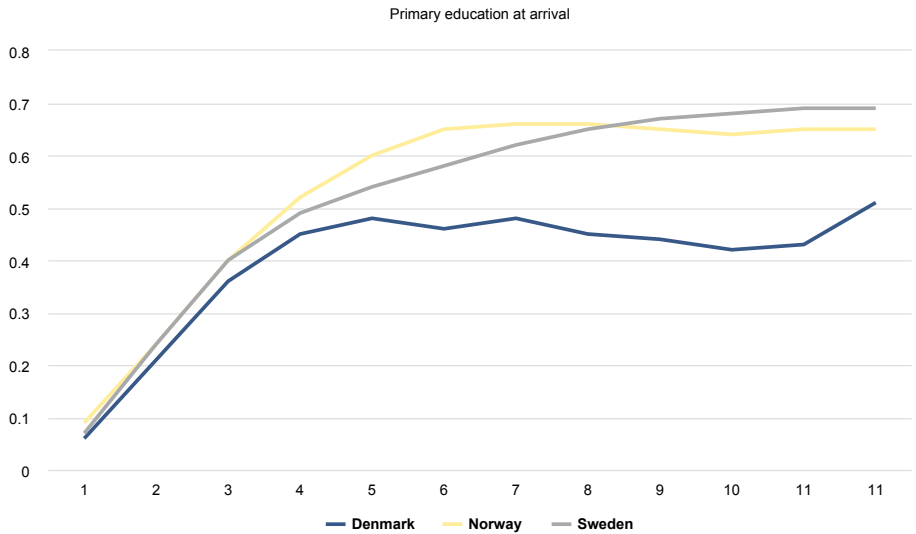
Figure 16 shows the estimated trajectories for women who achieve earnings above 3.5 NBA: all three countries have rising levels throughout the period analysed, but these levels are generally very low. Those between 26 and 35 years of age at the time of settlement reach the highest levels in all three countries, but still only one out of four female refugees (one out of five in Denmark) achieve earning levels just below the population median. For those above 45 years on arrival, only between 10–15 per

cent reach the threshold 10–11 years after settlement. Norway and Sweden have almost identical trajectories, whereas Denmark has generally lower levels for all age-groups for women.

7.3 Differences between education levels on arrival

The Scandinavian countries today have relatively few low-skilled jobs, and generally highly educated populations (Calmfors & Gassen, 2019). Several studies have found that refugees' education level on arrival affects the path to employment in the new country (Andersson Joona, 2020; Arendt, Ku, & Dustmann, 2021; Arendt, Pohl Nielsen, et al., 2016; Bratsberg et al., 2017). In the previous NORDIC INTRO-report, analysis of the trajectories of refugees with different education levels on arrival found that Denmark had rather good results for all education levels in the initial years, but that these levels stagnated and declined for those with secondary and tertiary education levels. Norway and Sweden started out at similar levels; then Norway surpassed Sweden after two or three years, and Sweden surpassed Norway by the eighth (and final) year of analysis (Hernes et al., 2019). With data covering a longer timespan and including newer cohorts, we may now see whether there are similar patterns for different education levels in the three countries.

In the following figures, primary education is defined as ISCED levels 0–2, up to lower secondary education. Secondary education is defined as ISCED levels 3–4, equivalent to upper secondary education. Tertiary education is defined as levels at ISCED 5 and above, and includes both short-term tertiary education and bachelor, master, and doctoral levels or equivalent.



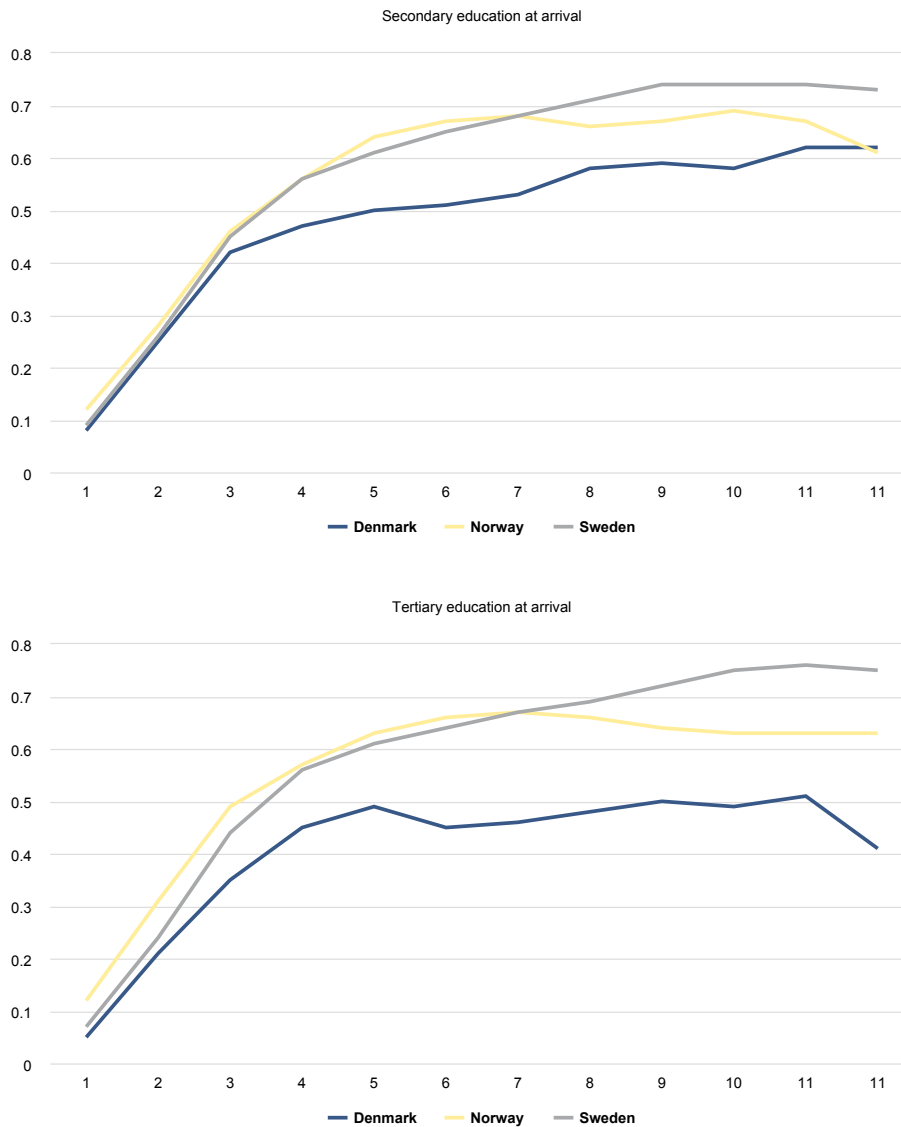
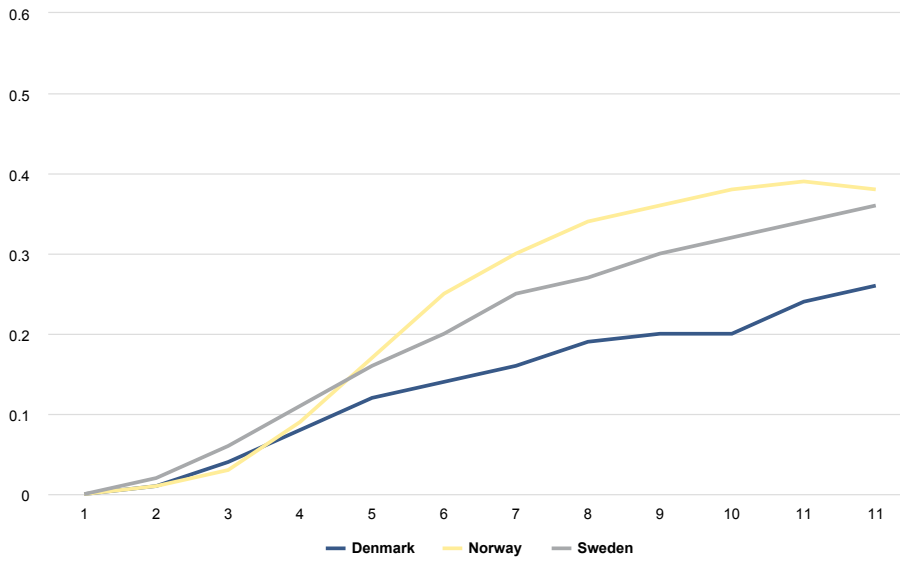


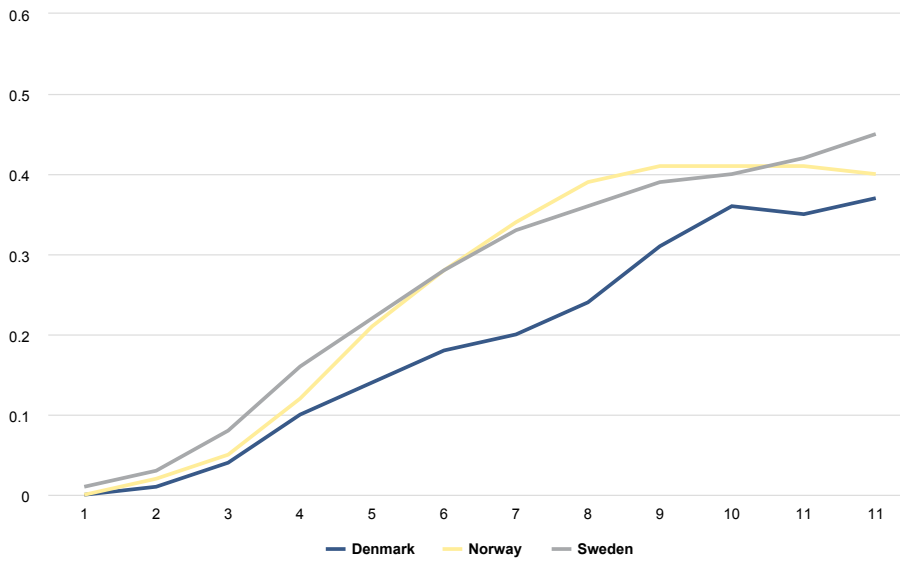
Figure 17: Estimated trajectories for employment (ILO) for MEN with years since settlement, by education level on arrival

Figure 17 shows estimated employment trajectories using the ILO definition for men, distinguishing between different education levels on arrival. We see that Denmark has higher employment trajectories for those with secondary education levels compared to those with primary and tertiary education levels. Norway has rather similar patterns for all three education levels, and Sweden has slightly better results for those with secondary and tertiary education levels compared to those with primary education levels. Sweden and Norway have rather similar trajectories for those with primary education on arrival, but Sweden does slightly better than Norway for those with secondary and, particularly, tertiary education levels, seven years after settlement. Denmark has lower estimated employment levels for all groups, but the difference is smaller for those with secondary education levels, particularly after 7–8 years since settlement.

Primary education at arrival



Secondary education at arrival



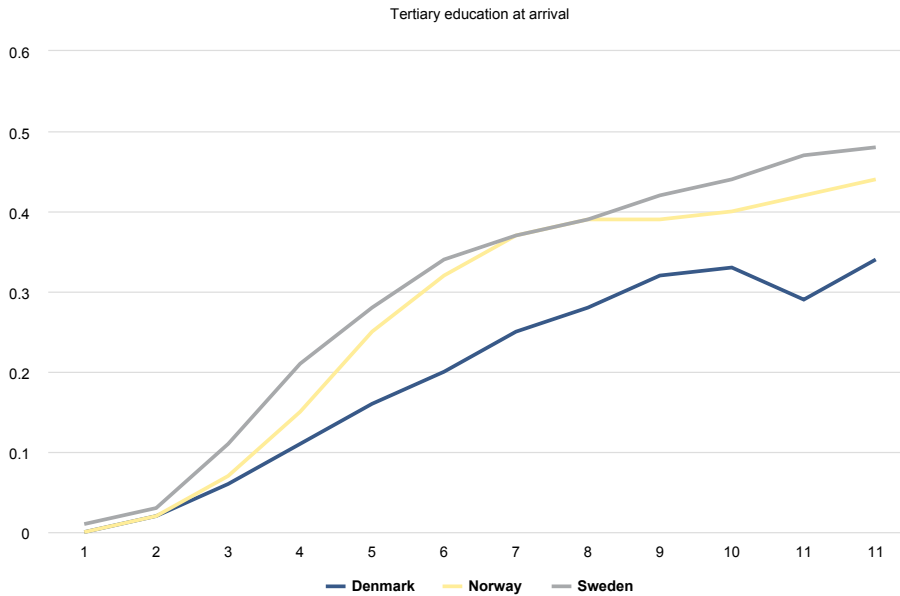
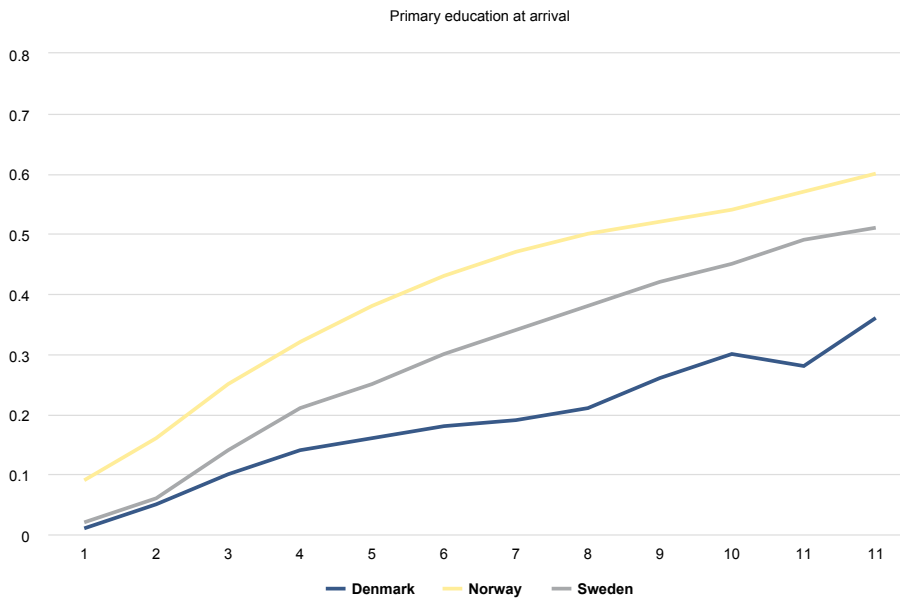


Figure 18: Estimated trajectories for earnings above NBA 3.5 for MEN with years since settlement, by education level on arrival

Figure 18 shows the estimated trajectories for men that reaches earning levels above 3.5 NBA, distinguishing between different education levels on arrival. The absolute levels are generally lower than for the employment trajectories in Figure 17, but the countries follow similar patterns. One exception is that a higher proportion of low-educated male Norwegian refugees reach the 3.5 NBA earning level compared to both Sweden and Denmark, although the gap between Sweden and Norway narrows in the last years.



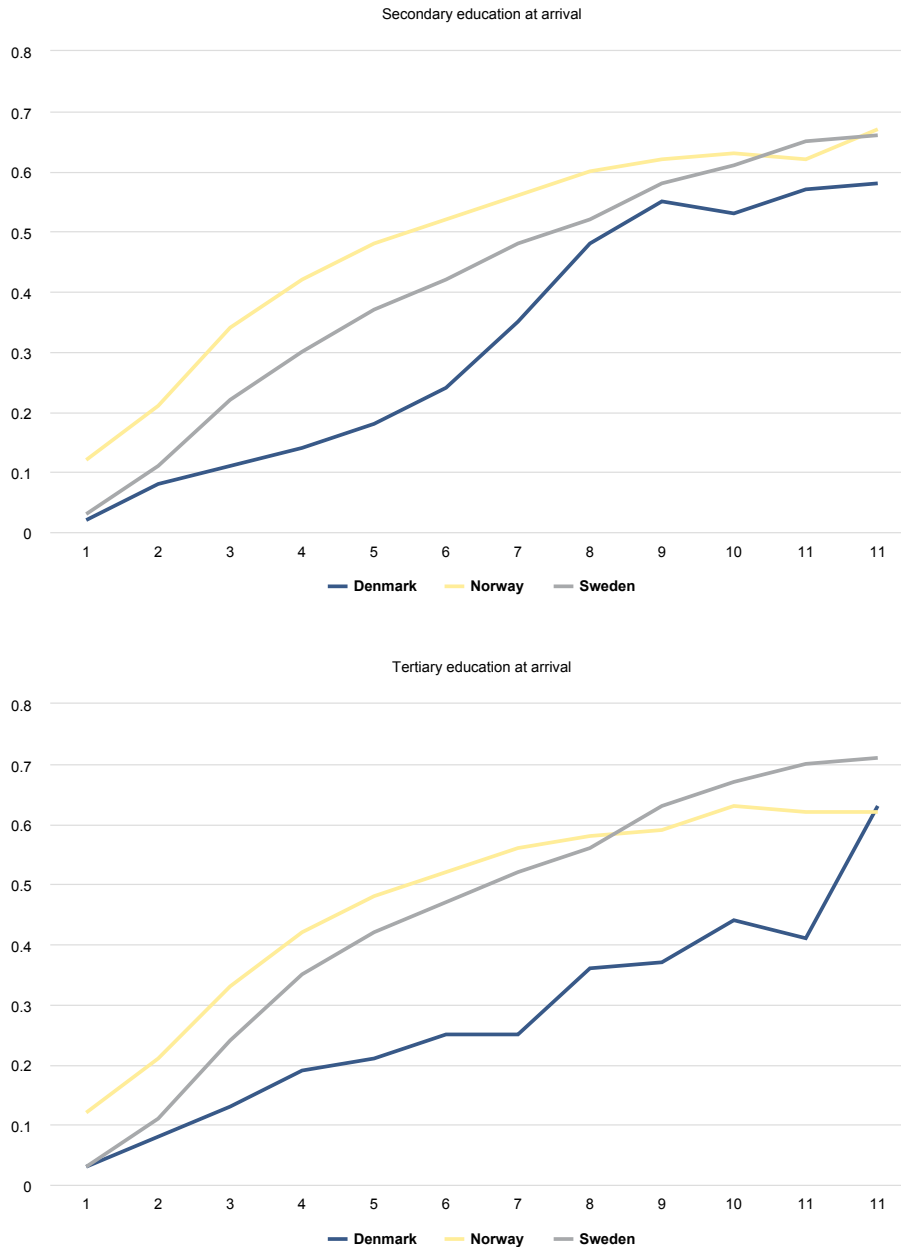
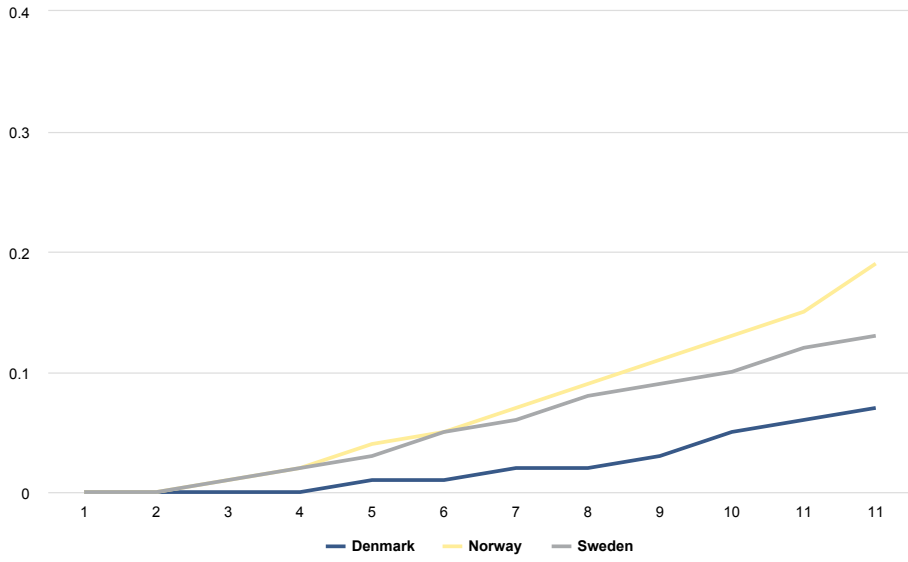


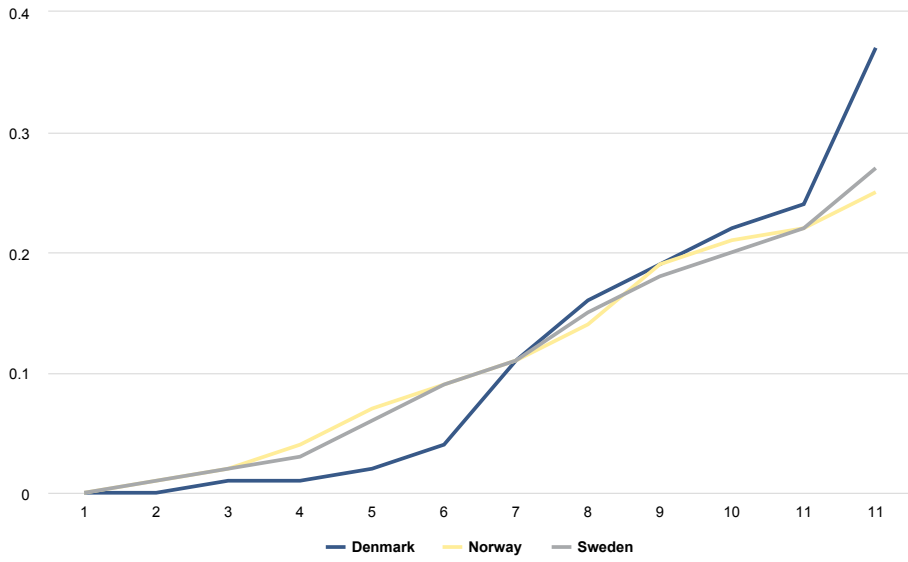
Figure 19: Estimated trajectories for employment (ILO) for WOMEN with years since settlement, by education level on arrival

Figure 19 illustrates the estimated employment trajectories using the ILO definition for women, distinguishing between different education levels on arrival. We see that Norway generally has higher employment rates for all education levels in the first 7 to 9 years after settlement. For those with primary education levels, this holds true for all years after settlement. Sweden catches up to Norwegian levels for those with secondary education levels and surpasses Norwegian levels for those with tertiary education in the final years after settlement. Denmark has substantially lower levels than both Norwegian and Swedish levels, but the gap is less pronounced for those with secondary education, particularly after 7 or 8 years in the country.

Primary education at arrival



Secondary education at arrival



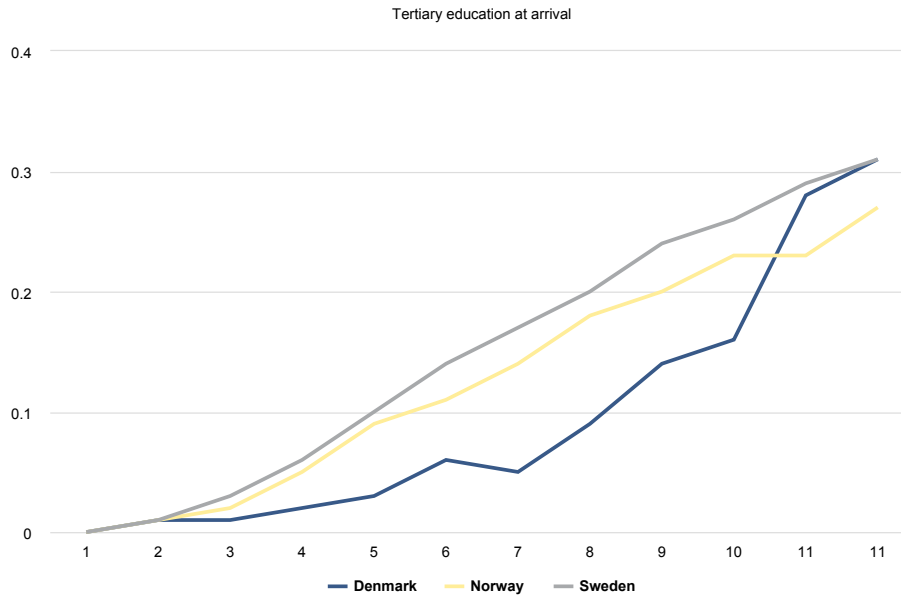


Figure 20: Estimated trajectories for reaching earnings above 3.5 NBA for WOMEN with years since settlement, by education level on arrival

Figure 20 illustrates the estimated trajectories for women that reaches earning levels above 3.5 NBA, distinguishing between different education levels on arrival. In all three countries, very few participants reach the earning threshold of 3.5 NBA. For those with primary education, only between 7 (Denmark), 13 (Sweden) and 19 per cent (Norway) have achieved this level 11 years after settlement. In all three countries, levels are generally higher for those with secondary and tertiary education, with up to 30 per cent reaching this higher earning level within 10 years after settlement. Denmark has lower levels for those with tertiary education levels on arrival but follows the same pattern as Norway and Sweden for those with secondary education. Sweden and Norway have relatively similar estimated trajectories; but after several years in the country, Norway scores slightly better than Sweden for those with primary education level on arrival, and Sweden does slightly better than Norway for those who arrive with tertiary education levels.

7.4 Summarizing discussion

In this chapter, we have explored if there are cross-national differences in employment and earning outcomes for different subgroups in the Scandinavian countries. We conducted separate regression analyses and compared estimated employment trajectories for men and women, various age-groups, and persons with primary, secondary, or tertiary education levels on arrival. Further, we have tested and compared employment levels based on employment (ILO) and on various minimum earning levels, to see whether some countries do better than others when 'labour market integration' as an outcome is operationalized differently.

Gender differences

Comparing outcomes for men and women, we find a large employment and earnings gap between men and women in all three countries. Generally, the employment and earnings trajectories tend to increase rapidly in the initial years and then flattens for men, but for women there is a slower but steady increase the entire period of analysis (up to 11 years after settlement). This indicates that the gender gaps for employment and earnings increase in the first years after settlement but narrow somewhat after several years in the country.

Comparison of the employment and earnings gender gaps in the three countries reveals differences between the absolute and relative gender gaps. Because Denmark generally has lower employment levels than Norway and Sweden, it shows either a similar or lower gender gap when we analyse the difference between men and women in absolute percentage points (male levels minus female levels) compared to Norway or Sweden. However, when we calculate the relative difference (male levels divided by female levels), Denmark's relative gender gaps for both employment and earnings is higher in Denmark their first years after settlement, but these high gaps decrease and come to a level similar to the two other Scandinavian countries after several years in the country. On the other hand, Sweden and Norway have very similar absolute and relative gender differences.

This analysis also enables comparison of whether different operationalizations of the dependent variable 'labour-market integration' supports, modifies, or alters the results from the NORDIC-INTRO report, and provides two new insights. First, in all three countries, the relative gender gaps increases as the threshold for labour market integration rises. The gender gap is smallest when the ILO definition of employment is used, implying a low threshold for employment. When higher earnings levels are applied to measure labour market integration, the relative difference between male and female increases. Second, comparing cross-national patterns for the different operationalizations, we see that the country trajectories are rather similar across analyses, but that absolute levels decrease when the threshold for earnings increases.

Age differences

For both men and women, the overall pattern is that the two youngest age groups (20–35 years) have higher levels than the two older groups, particularly compared to those over 45 years of age on arrival. Sweden and Norway have rather similar patterns; Denmark generally has lower employment and earnings levels compared to the other two. The analysis for men brings out one relevant nuance when we compare the trajectories for employment and higher earning level. In all three countries, the trajectories for employment (using the ILO definition) flatten over time. However, for the higher earning level, the trajectories rise, but fewer individuals reach higher earnings levels.

Differences between education levels

Comparing trajectories for men arriving with primary, secondary, and tertiary education levels, we see that Sweden and Norway have rather similar trajectories for those with primary education on arrival, whereas Sweden does better than

Norway for those with secondary and particularly tertiary education levels after several years in the country. Denmark has lower estimated employment levels for all groups, but the relative difference to the other two countries is less for those with secondary education levels, particularly several years after settlement. Despite the absolute levels, the cross-country differences between men are rather similar for the two operationalizations: employment and earnings at 3.5 NBA.

This latter conclusion, however, is not apparent for women when we compare employment and earning trajectories for different education levels. For women, the estimation of employment levels shows that Norway generally has higher employment rates for all education levels the first 7–9 years after settlement. Then Sweden catches up to Norwegian levels for those with secondary education levels and surpasses Norwegian levels for those with tertiary education in the final years after settlement. Denmark has substantially lower levels than either Norwegian or Swedish levels, but similar, to what we saw for male participants, the gap narrows (employment) or disappears (earnings) for those with secondary education, particularly after several years in the country.

Overall, our comparative analysis of education and earning levels for both men and women shows that Norway has relatively better outcomes for those with primary education for both genders, but that Sweden generally has better outcomes for those with tertiary education, at least after several years in the country. Denmark generally has lower employment and earning levels for all education groups, but the difference is smaller for those with secondary education.

8. Concluding discussion

8.1 Measuring 'labour market integration' outcomes – new insights when various measures are included?

'Labour-market integration' has been operationalized differently across a range of studies, including self-assessments of economic integration, hazard rates in employment, annual earning levels, social insurance reception or binary employment variables (Andersson Joonas et al., 2016; Bratsberg et al., 2017; Clausen et al., 2009; Goodman & Wright, 2015; Heinesen, Husted, & Rosholm, 2013; Sarvimäki, 2017; Schultz-Nielsen, 2017). In the previous NORDIC-INTRO report, we applied the ILO definition for labour-market integration, which documents if the individual is registered with minimum one hour of earnings during a given reference week in November.¹² This measurement has been criticized for giving a 'generous' measure of employment (Ruist, 2017). In this report, we have supplemented the ILO measure for employment with different earnings levels, to assess 1) the level of the overall labour market integration outcomes when a higher threshold is used, and 2) whether different thresholds change the overall conclusions about cross-national differences. For example, it might be that Norway showed better results if we used a low threshold for labour market integration, whereas Sweden or Denmark had better results when a higher threshold was used. Moreover, by defining employment based on annual earnings, we use a measure that is stronger correlated to economic independence. We base the earnings thresholds on the Nordic Base Amount (NBA), which is a year- and country-specific measure (see Chapter 3).

From the various analyses in this report, including descriptive statistics of the outcome variables (Chapter 5), regression analysis of programme measures (Chapter 6.3), and the estimated employment trajectories (Chapter 7), we find the following: First, when we compare trajectories for different employment definitions we find – not surprisingly – that the share that obtain the various thresholds decreases the higher the threshold for economic independence is set. The analysis for men also shows one relevant nuance when we compare the trajectories for employment at higher earnings level. In all three countries, the trajectories for ILO-employment flatten over time; however, for the higher earnings level, the trajectories rise throughout the period under analysis (although the absolute levels are significantly lower). Thus, the proportion who obtain higher levels of earnings rises very slowly, but steadily, with years since settlement.

Another nuance revealed by using multiple measurements is that the estimated trajectories comparing different outcomes for men and women show that the relative gender gap increases when the threshold for employment/economic independence rises. The gender gap is least for the ILO definition of employment, implying a low threshold for employment. When we apply higher earnings levels to measure labour market integration, the relative difference between men and women increases. A plausible explanation may be that men in general are more likely to get permanent jobs, which in the longer run can be expected to generate higher income from work. Women more often work part-time and are more at home with children

12. The ILO measure is based on a survey sample in order to get information on e.g., unemployment rates. We use register information for all refugees in each country. The employment measure we use is therefore based on earned income, not working hours, but is harmonized with the ILO in order to correspond to the proportion who work at least one hour a given week in November.

(Lönroos & Gustafsson, 2018), which could affect earnings levels, and consequently, less economic independent.

Second, we find that using different measurement of labour-market integration nuances the cross-country comparison. For men, we see the same comparative patterns between countries regardless of which employment measure we use, although the absolute levels depend on the applied threshold. In this sense, the new analyses function as a robust test of the overall conclusions about cross-country differences on how refugees fare in Scandinavian labour markets over time. For women, on the other hand, the different thresholds for labour-market integration modify this comparative pattern. When we apply the ILO definition, Norway emerges with a higher employment rate among women than the two other countries. However, when using different earning levels as threshold for employment, the gap between Sweden and Norway almost disappears, and the two countries exhibit very similar patterns. This finding implies that when a higher threshold is used for defining labour market integration, Norway does not do better than Sweden. An explanation for this difference might be that in general, a higher share of women work parttime in Norway (27 percent) than in Denmark (23 percent) and Sweden (17 percent)¹³.

8.2 Analyses including newer cohorts and long-term outcomes

Most refugees do not return to their home country but reside permanently in the host country;¹⁴ thus, long-term labour-market integration is vital. The previous NORDIC-INTRO report analysed individual outcomes up to 8 years from the start of the integration programme – now, with a longer follow-up period, we have data up to 11 years after settlement. We also have data that include more recent cohorts, which implies more observations for the analysis of the initial years after settlement. In the following summary, we compare our main findings of descriptive statistics and estimated analysis for subgroups with the main conclusions in the previous NORDIC-INTRO report, and discuss how our updated and expanded analyses support, modify, or alter earlier conclusions.

First, the previous report found that Denmark had the best initial employment levels – particularly for men – in the first years after settlement. Because employment rates in Denmark had a less steep growth, the other two countries caught up or surpassed Danish employment levels over time (Hernes et al. 2019). Our new analysis alters this finding. Our analysis – including observations from newer cohorts after 2015 – does not find that Denmark has higher labour-market outcomes in the initial years: the three countries have rather similar trajectories in the first years after settlement. Still, except for the first initial years for men, Denmark generally has lower average levels of employment (both based on ILO and earnings thresholds), for men and for women, throughout the period under analysis.¹⁵

Second, similarly to the previous report, we find that Norway generally has higher labour-market outcomes *after* the initial years for both men and women. However,

13. <https://data.oecd.org/emp/part-time-employment-rate.htm>

14. <https://www.unhcr.org/globaltrends2018/>

15. Besides inclusion of newer cohorts, the drop in the employment rate during the first year in Denmark might be a consequence of better data for this analysis. The new data enable us to identify the date of settlement in the municipality, whereas the settlement year in the Danish data in Hernes et al. (2019) was defined as the year of residence permit +1.

our updated analyses with newer cohorts and a longer timespan show interesting changes concerning Swedish outcomes. First, Sweden has substantially better results in the initial years. The previous report found that in Sweden, it took several years for male participants to approach (Norway) or surpass (Denmark) employment levels in the other two countries. Our updated descriptive analyses show that Sweden's labour market outcomes in the initial two to four years mirrors those in the other two countries.

Third, in the estimated trajectories, where we control for individual characteristics and unemployment levels (which may affect the probability of employment and earnings), we find that Sweden surpasses Norwegian levels for male participants, and that the two countries have almost identical trajectories for female participants throughout the period. This modifies the conclusion of the previous report that Norway has substantially higher outcomes for women compared to the other two countries. Fortunately, that Sweden and Norway now have more similar trajectories for women is the result of an increase in Swedish labour market outcomes, and not a decrease in Norwegian levels. This change in Swedish levels for women also moderates the conclusions for gender gaps in the previous report, which found that the employment gender gap was greater in Sweden than in Norway. Our new analyses show that Norway and Sweden have rather similar gender gaps for labour market integration, in absolute as well as relative terms. Results from Denmark, on the other hand, still show substantial higher gender gaps regardless of how economic independence is measured.

Fourth, the analysis of long-term outcomes up to 11 years provides a relevant nuance concerning differences between groups with different education levels. The previous report found that, for all education levels, Norway and Sweden started out at similar levels; then, refugees in Norway surpassed Sweden after 2–3 years. However, for refugees with secondary and tertiary education levels on arrival, Sweden caught up with Norwegian levels in the eighth year (which was the last year of analysis in the previous report). Our updated analysis, based on estimated employment and earning trajectories for both men and women, shows that Norway has relatively better outcomes for those with primary education (both genders), but that Sweden generally shows better outcomes for those with tertiary education when we include analysis up to eleven years after settlement. Denmark generally has lower employment and earning levels: but for those with secondary education, the difference is less pronounced. Additionally, when we examine employment at the highest earnings threshold (3.5 times NBA), the Danish trajectory is similar to the two other countries.

8.3 Changes in usage of programme measures for newer cohorts?

As shown in the policy analysis in Chapter 2, the 2015 refugee crisis resulted in several policy changes in the Scandinavian countries. Denmark intensified the employment focus, with shorter programmes with an intensified focus on employment measures, and less on upskilling through education. Sweden has in recent years developed several 'fast tracks' for refugees with prior educational qualifications, and also upskilling through education for those arriving with no, or

low, prior education. Norway made few formal changes immediately after the refugee crisis, but the political focus leading up to the 2021 Integration Act prioritized upskilling to ensure a stable labour market over time.

These policy differences are reflected in our comparative analysis of the type of programme measures experienced by refugees arriving before and after 2015 during their first three years after settlement. Denmark – which introduced a work-intensified policy – has sizable increase in the use of job-specific programme measures, for subsidised employment as well as unpaid job training. On the other hand, Denmark has had only a small increase in the usage of education the first three years after settlement, and then only in lower education. This latter finding is consistent with the revised Danish Integration Act from 2016, which explicitly states that although it opens up the possibility of using qualification and different education measures for participants, these measures should be used only if it is assessed that (rapid) employment is not deemed likely for the person in question. The law also emphasizes that lack of language skills or educational qualifications – or that the person may manage to get only unskilled work – is not sufficient for not prioritizing measures aimed at rapid employment.

In Sweden and Norway, we find an increase in persons who get regular education during the programme period, at both lower and higher education levels. Whereas Norway has most persons enrolled in lower education levels, Sweden has a considerable percentage enrolled in higher education levels (upper secondary or higher) during the first three years. The relatively high usage – rising in recent years – of upper secondary education in Sweden may (at least partly) be a result of implementation of the new *fast track (snabbspåret)* strategy from 2015. The target group was newly arrived refugees who already had a formal education or experience from specific industries; the aim was to build on and supplement these previous qualifications to enable refugees to obtain the qualifications necessary for entering Swedish labour markets. However, we do not have data on ‘fast track’ participation to confirm whether this explains Sweden's higher participation rate in education.

In Norway, there were no formal policy changes which intensified the focus on education measures before the implementation of the new Integration Act in January 2021 (which is beyond the scope of our data analysis here). However, the work leading up to the policy change, and the political debate around integration measures in recent years, have focused on ensuring a stable labour-market attachment over time, and on upskilling *formal* qualifications (Kunnskapsdepartementet, 2018; NOU 2017: 2, 2017).

We can also note a slightly increase in the usage of job-specific employment measures in Sweden and Norway, but not to the same degree as in Denmark. Norway has shown increased use of unpaid job-training; Sweden has had a similar increase in the use of subsidized employment.

8.4 Short and long-term effects of selected programme measures

In earlier research, two integration measures have consistently been shown to have a positive correlation with employment and earnings: regular (post-secondary) education acquired in the host country, and subsidised employment (Hernes and Tronstad 2014; Arendt et al. 2016; Bratsberg et al. 2017; Arendt 2018; Arendt et al. 2016a; Arendt and Pozzoli 2013; Card et al. 2017; Clausen et al. 2009). The previous NORDIC-INTRO report analysed the correlation between the use of various programme measures in the initial three years after settlement, with employment outcomes in the fourth year after settlement. With updated data and a longer timespan, we have now conduct identical analyses, with more recent data and larger set of observations, including newer cohorts. Further, we have studied and compared short as well as long-term outcomes: this is crucial because some measures – such as education – may have short-term lock-in effects but positive long-term outcomes.

Our analyses show that in all three countries, the same tendency emerges: educational measures show weaker or even negative associations with employment in the short run. This finding correlates with the lock-in hypothesis, that education is a timely investment and may postpone labour-market entry. However, our analysis of outcomes in the sixth year after settlement shows overall positive correlations between having participated in education measures and achieving employment with higher earnings. In cases where the correlation was already positive in the shorter run, it has become stronger. In Norway and Sweden, the correlation with employment is stronger for higher education, but stronger for lower education in Denmark.

In all three countries, we see positive correlations between job-specific measures during the integration period and employment. These relations are stronger for subsidized employment, but the positive correlations diminish somewhat in the longer run. Interestingly, the level of correlation between unpaid job-training is almost the same across the three countries, even though participation rates are considerably higher in Denmark. This might indicate that the relation is not driven solely by positive selection. Similarly, we see that Sweden has used subsidized employment to a much higher degree than Denmark – or particularly Norway (with around 30 per cent getting subsidized employment during the first three years). As in the previous report, we find that the positive correlations between the use of the measure and employment – in both the short and the long term – are just as high in Sweden as in Norway and Denmark and are even higher in the shorter term.

8.5 Synthesizing analysis – potential for cross-national learning, and future research

Research on policy outcomes investigates whether some policies achieve their goals better than others do. Linking public policies to outcomes is methodologically challenging (McConnell, 2017), because public policy is not implemented in a laboratory where one can isolate variables to identify causality with very high degrees of confidence (Parson, 2007). Moreover, defining policy 'success' or 'failure' is a contested and complex task, as policies may have multiple and conflicting goals, multiple target groups, and multiple timeframes (McConnell 2017). An important

limitation of our study is that it has not been designed as a stringent effect study of the outcomes of specific integration policies and implementation practices in the Scandinavian countries; neither are we evaluating the timing and mix of different integration policies. However, it is still relevant to synthesize findings across analyses, and explore possible interrelations that may provide an overall picture of different approaches to the integration process. Such an analysis may indicate where the potential for cross-national learning lies and identify prospects for future research.

Validation and investment in (supplementary) education in the host country

One consistent finding across all analyses (from the descriptive statistics, measures and their correlated outcomes, and the estimated outcome trajectories) is the Swedish focus on higher education, from start of the integration period. Already in the descriptive statistics, Sweden emerged with a greater share of participants with secondary and tertiary education at time of settlement. In Sweden, almost 50 per cent of the refugee population has secondary or tertiary education, 25 per cent in Norway and only 17 per cent in Denmark.

Although this could imply that Sweden simply has a higher share of refugees who have secondary and tertiary education on arrival, it might also be a consequence of Sweden being more effective in validating and registering refugees' homeland education. The Swedish register data has a low proportion of persons with lacking information on prior education (missing values), relative to the Norwegian and Danish register data. For only 12 per cent of the individuals in the Swedish register data, information on education is lacking, compared to 21 per cent in Denmark, and 43 per cent in Norway. Further, the percentage of missing values has dropped from 16 to 9 per cent when we compare participants from cohorts 2008–2014 with those from 2015–2019. In Denmark the proportion with missing information is rather stable. In Norway, however, it is almost doubled when we compare the same cohorts (from 21 per cent to 45 per cent). In this project, we have not been able to conduct an in-depth assessment of the reasons for such differences, but future studies should investigate whether Sweden actually has a higher share of persons with secondary and tertiary education, or if the Swedish authorities are simply better at assessing and validating those education levels at an early stage in the integration process.

Still, validating education and relevant work experience from the home country does not automatically imply that refugees will find relevant employment. Their education may not be directly transferable to the Scandinavian labour markets, or employers may be sceptical to the content and quality of education from 'unknown' countries. Arendt et al. (2016b) have explored this issue and find that pre-migration skills matter only indirectly: highly skilled immigrants have greater employment opportunities – not because of their homeland qualifications as such, but because they more often go on to acquire further education in the destination country. Generally, education acquired in the host country seems to raise employment rates and earnings levels, not only for those with prior education from their home country (Bratsberg et al. 2017), but for *all* refugees, irrespective of prior education; this holds particularly for female refugees (Arendt 2018).

In this regard, the analysis of programme measure usage is relevant. Our descriptive analysis of who gets which programme measures showed that in Sweden, between

55 and 61 per cent of those with tertiary education on arrival take further education during the first three years after settlement, while the corresponding figures are around 20 to 30 per cent in Norway and Denmark. For secondary education the difference is smaller, but Sweden provides education measures to 15 percentage points more participants than do Norway and Denmark. As seen from the descriptive statistics of background variables (described above), Sweden has a higher share of refugees who have registered as having secondary and tertiary education, which implies that Sweden offers education measures in the initial years to a substantially larger share and absolute number in these two groups than the other two countries.

Lastly, combining these insights with the estimated employment trajectories for different education levels, we see that Sweden does have better long-term employment outcomes for those with secondary and tertiary education on arrival.

To summarize, Sweden has very few missing values for education level on arrival compared to the two other countries and has a substantially larger share of refugees arriving with registered secondary and tertiary education. Our study relies solely on administrative register data. Thus, we cannot conclude whether Sweden generally has more highly educated participants in integration programmes compared to Denmark or Norway, or whether Sweden has a stronger focus on assessing and validating education from the home country early in the integration process. However, we do see that in Sweden, these two groups get more (supplementary) education during the first years after settlement as part of the integration programme, and that these groups achieve better long-term employment outcomes. Overall, our analyses indicate that Sweden has developed practices for validating and supplementing prior education for these two groups, which should indicate the potential for cross-national learning.

It is also relevant to highlight another finding regarding education in the host country. In Denmark, a very low share of participants get education at upper secondary or higher levels during the first three years after settlement. However, our descriptive analysis of education enrolment shows that many refugees are enrolled in education at the upper secondary (or higher) levels after several years in Denmark, steadily rising from the fourth year after settlement. Would it be more efficient if this could happen earlier in the integration process, as in Norway, and particularly Sweden? This could be a question of language skills; however, given the higher education enrolment levels in Norway and particularly Sweden, it may be a question of policies or practices that could ease a faster transition to get a Danish education above primary levels.

Lastly, the new Norwegian Integration act implemented in January 2021 (outside the timeframe and scope of this study), has the explicit goal of increasing the use of upper secondary education. It will be interesting to see whether this specific policy change can boost the use of higher education in the early stage of the integration process, and its long-term effects.

New insights on gender differences for employments and earning

The Scandinavian welfare states depend on high employment levels among both men and women. A main conclusion from the previous NORDIC-INTRO report was that compared to Sweden and Denmark, Norway had substantially higher

employment rates for women. The report also found that although there was a substantial employment gap between men and women in all three countries, it was considerably lower in Norway than in Sweden or Denmark: the average estimated employment gap between men and women for all years after settlement was 15 pts in Norway, 21 in Sweden and as much as 29 in Denmark (Hernes et al. 2019).

The updated analyses in this report have revealed some interesting new developments.

First, the analyses including newer cohorts show that Sweden has substantially better results for women compared to analyses in the previous report. As a result, Norway and Sweden now display relatively similar employment trajectories for women. Denmark, however, still has substantially lower employment rates for women.

Second, comparing outcomes for men and women, we still find a large employment and earnings gap between men and women in all three countries. This analysis, covering a longer timespan regarding years since settlement, provides new insights into the employment gender gaps. With data covering more years, we find that the employment and earning trajectories often speed up in the initial years. They then flatten out for men – but, for women, there is a slower but steady increase throughout the entire period of analysis (up to eleven years after settlement). These patterns indicate that the gender gaps for employment and earnings increase during the first years after settlement but narrow somewhat after several years' residence in the country. For example, the employment (ILO) gap between men and women is about 27 percentage points in all three countries after 5 years but drops to 12–18 percentage point after 10 years. Moreover, the relative gender gaps increase when the threshold for labour market integration rises. The gender gap is smallest when we apply the ILO definition of employment, implying a low threshold for employment. When higher earnings levels are applied to measure labour-market integration, however, the relative difference between males and females increases.

Third, our analysis offers new insights when employment gender gaps between countries are compared. We find that the relative employment gender gap (calculated by dividing the employment levels for men and women) is greater in Denmark than in Norway and Sweden after 5 years, but after 10 years the relative gender gap is at the same level in all three countries.

Overall, our analysis shows that female participants in Denmark have very low employment levels after several years in the country compared to Sweden and Norway. We also see considerable gender differences in the use of job-specific programme measures – in particular, subsidized employment, used by only 7 per cent of the women as opposed to 34 per cent of the men. Moreover, the main programme measure applied to female refugees in Denmark is unpaid job-training, as formal education is used only rarely. Unfortunately, recent effect analyses of Danish integration policies find positive (short-term) effects of job-training for men, but no positive effect for women (Arendt, 2019; Arendt et al., 2022). Perhaps the main focus on job-specific programme measures – where only a small fraction of female refugees receives subsidized employment as opposed to unpaid job-training – can explain why this group fares rather poorly in Denmark compared to male refugees and compared to female refugees in Sweden and Norway. Although gender inequality in Scandinavian in general is among the lowest in OECD, figures from the

OECD show that Denmark does marginally worse than Norway or Sweden regarding gender differences in employment rate among the low educated (see OECD 2018). The greater gender gaps among refugees in Denmark might (partially) reflect the generally greater gap among persons with low educational levels in the labour market.

Lastly, it should be mentioned that the use of subsidized employment might result in refugees attaining one of the broader employment thresholds solely by means of the earnings received during their time with subsidized employment. Thus, among the 45 per cent of male refugees in Sweden who reached the 1.5 NBA threshold three years after settlement, a significant proportion might manage this because of their participation in subsidized employment (45 per cent of male refugees participated in subsidized employment during the first three years). Viewed from the refugee perspective, the impression of being integrated in the labour market might be the same – but, from the view of the state (or municipality) the cost is clearly higher if integration in the labour market is based on subsidized employment. Moreover, if such subsidized employment fails to lead to ordinary employment, any labour-market integration will necessarily be short-lived. On the other hand, the large employment and earnings gap between male and female, rapidly increasing during the first years in the host country, might to some extent be explained by gender differences in the use of subsidized employment, at least in Denmark and Sweden.

Rapid versus long-term employment – an outdated contradiction?

In all three countries, goals of employment and self-sufficiency permeate the *raison d'être* of various integration acts. However, there is a notable difference concerning the balance between getting participants in employment (of whatever kind) as fast as possible, as opposed to investing in qualifications in the initial years in order to ensure stable, long-term labour market integration.

In Denmark, the goal of rapid employment and self-sufficiency permeates the Integration Act. It is explicitly stated in the preface to the Act that newly arrived immigrants are to become self-sufficient through employment 'as soon as possible'. Furthermore, although the Integration Act is open to employing qualification and various education measures, it is also explicitly stated that these measures should be used only if it is assessed that (rapid) employment is not deemed likely for the person in question. The law also emphasizes that lack of language skills or educational qualifications – or being able to retain only unskilled jobs – are not sufficient grounds for not prioritizing measures aimed at rapid employment.

Also, Norway's integration strategy from 2018 – which resulted in the new Integration Act implemented in January 2021 – promotes early integration into society and the labour market. However, it also emphasizes that that the integration programme should ensure 'formal qualifications and a stable labour-market attachment'. The new 2021 Integration Act introduces specific 'end objectives' that each participant should have regarding the programme; for many participants, completed or partially completed education at lower, secondary, and higher levels is indicated as possible programme objectives.

Similarly, the Swedish Establishment Act states that the goal is to 'facilitate and accelerate the establishment of newly arrived immigrants in working life and society'. Although some of the new Swedish initiatives focus on rapid employment

(such as the 'fast track'), a common denominator is the focus on getting programme participants into relevant jobs, particularly if they have prior qualifications of relevance to the Swedish labour market. In addition, the aim of the compulsory education initiative was to strengthen and improve immigrants' chances of meeting the demands of the labour market, as most jobs in Sweden today require relevant education/experience. Thus, whereas the Danish integration programme focuses on getting the participant a job – any kind of job – as quickly as possible, the Swedish initiatives – at least for participants with relevant prior qualifications – focus more on getting the participant a *relevant* job as soon as possible.

The different focus on rapid versus long-term employment is particularly relevant when we examine the results presented in this report as compared one of the main findings in the previous NORDIC-INTRO report. One main conclusion there (and in a follow-up article by Hernes et al. (2020)), was that Denmark was better at getting male integration programme participants employed quickly in the initial years, but that Sweden and particularly Norway were better at ensuring a higher share of participant employment in the longer run. Our updated analysis, which includes newer cohorts, does not show that Denmark has higher employment rates in the initial years: Denmark also has lower employment rates in the longer run. Thus, our analysis indicates that the focus on rapid employment fails to serve either short- or long-term goals of labour-market integration.

In conclusion then: Investing in upskilling and education is both time- and resource-consuming, as it often has short-term lock-in effects that delay labour-market integration and self-sufficiency. On the other hand, our overall results indicate that such investments may prove advantageous in the longer run, ensuring that a larger proportion of newcomers manage to establish stable connections to the labour markets in Scandinavia.

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